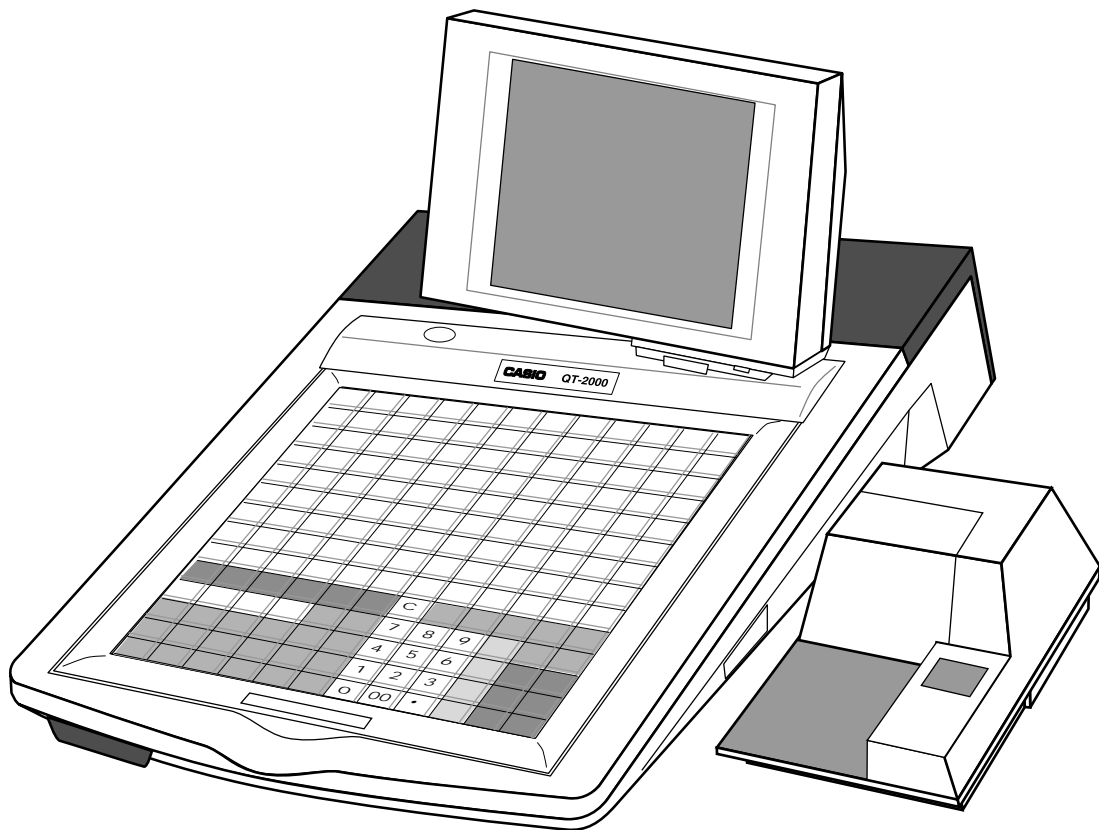# QT-2000

Versatile Intelligent Terminal

Reference Manual

Version 2.0.0 June 1998

CASIO

Preface

This manual is intended to be used as a reference to the QT-2000 system. It provides details to allow whole understanding of the system capabilities, its operation, and how it can be used to solve many problems within the retail outlet. This manual does not describe actual programming, which is covered in the QT-2000 programming manual.

This manual consists of the following chapters:

1. Introduction
   This chapter describes the concepts of development of the QT-2000 system.
2. Hardware configuration
   This chapter outlines the hardware, optional devices and configurations of QT-2000 system.
3. Application systems
   This chapter outlines the application system and overviews the function provided for the QT-2000 system.
4. Manager operation
   This chapter explains the manager operations to use QT-2000 system.
5. Registrations
   This chapter explains actual registration operations newly added to QT-2000 with example.
6. Refund mode operation
   This chapter explains registrations in the RF or REG– mode.
7. Read and reset
   This chapter explains detail of the read and reset operations and reports.
8. System down and recovery
   This chapter explains actions to take and recovery methods when the system goes down.
9. Appendices
   These chapters show the record format and descriptions of individual files, total calculation method, meaning of error messages, etc.

Note: Casio reserves the right to change equipment and specifications without obligation and notification. The terms used in this manual may be different from those used in other manuals of Casio's product.

Printing history

Manual version	Software version	
Version 1.0.0: May, 1997	First Edition: May, 1997	Version 1.00
		Version 1.01
		Version 1.02
Version 1.1.0: November, 1997	Second Edition: November, 1997	Version 1.10
Version 1.2.0: April, 1998	Third Edition: April, 1998	Version 1.20
Version 2.2.0: June, 1998	Forth Edition: June, 1998	Version 2.00

Revised points

Version 1.01

1. Display the last 5 registered items when sign-on clerk is designated again in clerk interrupt operation and when old check operation is performed.
2. Add graphic logo function.

Version 1.02

1. Add delete procedure of printer connection table.
2. Add a procedure to copy PLU 1st unit price to 2nd unit price.

Version 1.1

1. Add an option to print/not print quantity and unit price in multiplication operation.
2. Add a procedure to reprint receipts/reports/order when detecting printer error.
3. Print/display J-Memo report by consecutive No. or date order even if the terminal cannot find the appropriate data.
4. Add Canadian tax and Singapore tax, Singapore rounding.
5. Add <Tax exempt> function.
6. Add <Selective item Subtotal> function.
7. Add an option to cancel complete void/current only in <Cancel> key.
8. Add an option to print/not print taxable amount 1-5 individually.

Version 1.2

1. Item selection by number without YES key. This can be programmed in general machine feature.
2. 2nd@ PLU to be pull down when 2nd@ key is pressed prior to the list key or after press the list key.
3. List stays down till you press ESC key.
4. List has compulsory stay down instead of compulsory condiment.
5. Jump to another List before any items are registered.
6. One shot full escape or one step escape for set menu.
7. Up to 3rd level entry for Set menu and pull down link.
8. Set menu suspend and resume for beverages and sweets.(Post entry)
9. Re-entry child PLUs in set menu and pull down link when it was voided.
10. Item delete and Line delete
11. Round repeat.

Version 2.0

1. Add the Time & Attendance function. This function allows shop owners to control his/her employee's working conditions.
2. Add the Hourly Labor report function. This function is used to report each employee's hourly report and wages, and also analyze the working efficiency.
3. Add the IDC function. This function is used for capturing all the registered item data by the REG/REF/REG-modes.
4. Add the Store/Recall function. These functions are used for the driving through purchase.
5. Add the Eat-in/Take-out function. By using Take-out key, the items can be exempted from taxation.Introduction

Contents

Introduction

The QT-2000 is a versatile intelligent terminal developed in accordance with the following concepts.

1) System concept

Developing a high performance economical system by adopting the restaurant, bar system.

– Shared check tracking

The QT-2000 system has the capability of check tracking system.

– Shared printer system

All terminals in the cluster can share receipt/journal printer(s) and kitchen printer(s).

– Collection, consolidation, and auto-program functions

The QT-2000 system is equipped with these functions by utilizing high-speed in-line data transfer system.

– Versatile terminal

With the QT-2000 system, any terminal has the same function, and can be designated as the master terminal by programming.

2) Software concept

A flexible application system for development, adopting the following methods:

– Function classified application system

3) Design concept

Compact spill-proof body, multi-line LCD

In addition to the above, the QT-2000 is also a terminal following characteristics:

– Expandability

The QT-2000 system can be connected to various peripheral devices (slip printer, R/J printer, modem, a personal computer, etc.)

– Reliability

The QT-2000 is provided with a self-diagnosis program so that the terminal can check the hardware. When a malfunction occurs during processing, an error report is logged into the system memory so that the error can quickly be corrected.

Contents

Contents

1. Hardware configuration

This section outlines the hardware, optional devices, and configurations of the QT-2000 system.

1-1. General configuration

LCD panel

Rear display (option)

Main power switch (bottom)

Contrast control knob

Connector cover

Sheet opener key

Infrared communication port

Sheet holder

Sheet holder sensors
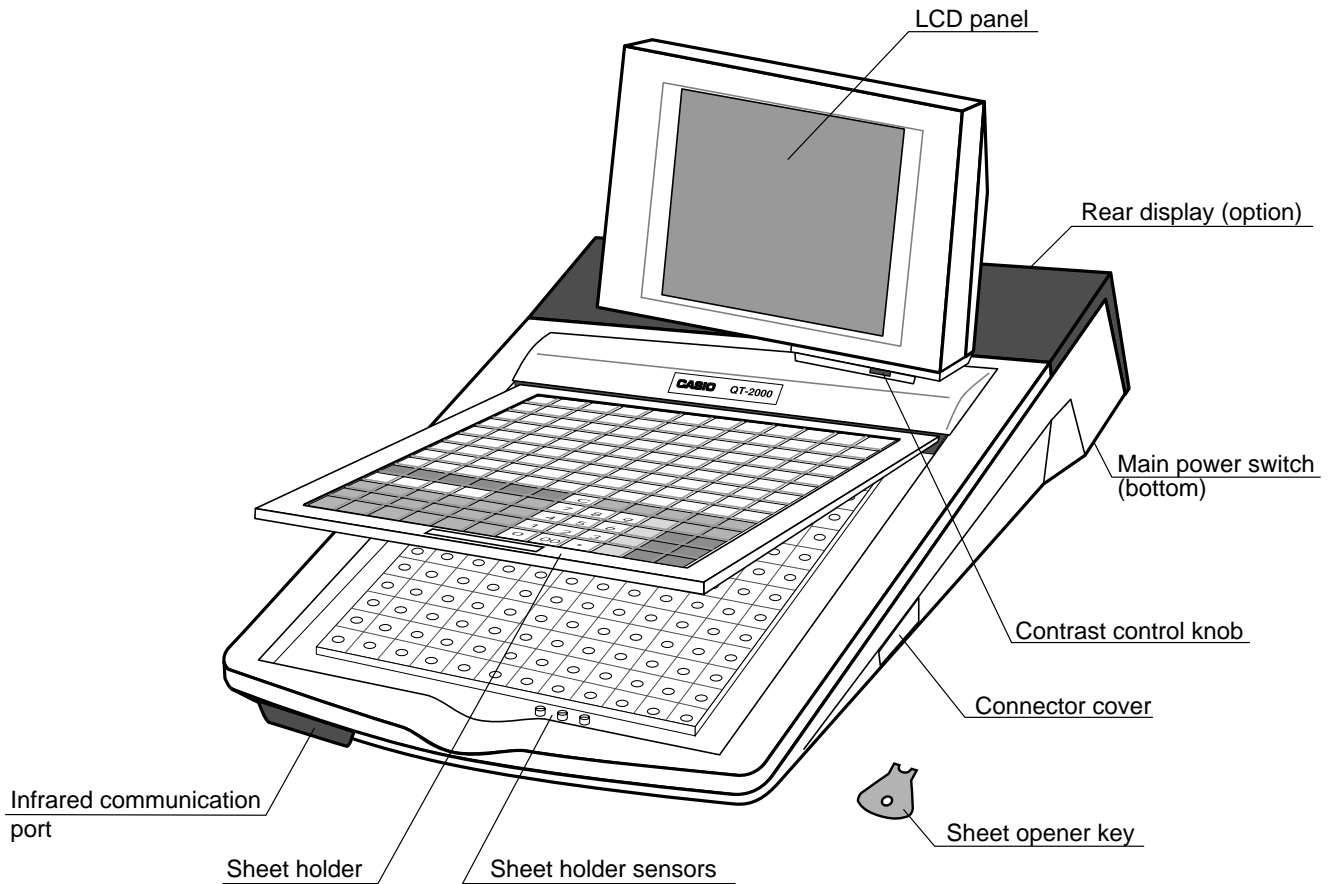
Front view

1-2. Hardware diagram

2nd LCD QT-2062D

Main LCD

Optional Sheet Holder (SH-KIT1)

Sheet Holder

Keyboard

Power supply

Rear disp. i/f

2nd LCD i/f

Remote disp. i/f

Rear display QT-2060D

CPU

ROM 128KB

Flash Memory 2MB

RAM 256KB

RAM 128KB

RAM 128KB

RAM RAM-610-10LL 512KB

Drawer 1 i/f

Drawer 2 i/f MDL-8

Slip printer i/f

KP inline

Inline

MCR i/f

RS-232C COM1

RS-232C COM2

Clerk key i/f

RS-232C COM3

Ir comm port

Remote display QT-2063D

QT-2061S

SA-1062S

Drawer

Drawer

MODEM or PC or Printer

SA-3087TM

Clerk key (Only for German model)

Clerk keys CLK-K17/-K18

R/J printer UP-350/SA-3015/TM-U300/ CBM-231/iDP-3541

Power supply PS-170/-150

Slip printer SP-1200/ SA-3015

Scanner HHS-9

or

R/J printer UP-350/SA-3015/TM-U300/ CBM-231/iDP-3541

Power supply PS-170/-150

Magnetic card reader QT-2046MC

Kitchen printer KP-200 KP-300

Kitchen printer KP-200 KP-300

Kitchen printer KP-200 KP-300

QT-2000

QT-2000

QT-2000

Note: Shadowed device and dot line indicate option devices.

QT-2000 Reference Manual

Hardware Configuration

1-3. Memory layout

		RAM 512KB Option
	Standard	
Memory capacity		
512kB	◯	
1MB (Max.)	◯	◯
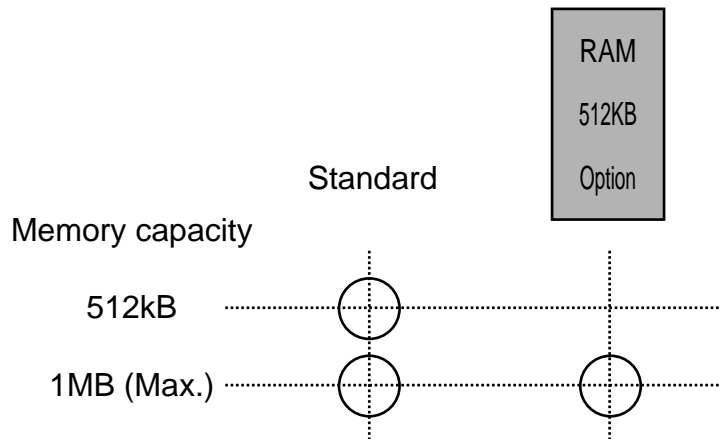
1-4. Keyboard

1-4-1. Standard keyboard

9	18	27	36	45	54	63	72	81	90	99	108
8	17	26	35	44	53	62	71	80	89	98	107
7	16	25	34	43	52	61	70	79	88	97	106
6	15	24	33	42	51	60	69	78	87	96	105
5	14	23	32	41	50	59	68	77	86	95	104
4	13	22	31	40	49	58	67	76	85	94	103
3	12	21	30	39	48	57	66	75	84	93	102
2	11	20	29	38	47	56	65	74	83	92	101
1	10	19	28	37	46	55	64	73	82	91	100
CLK# 5	REG. MODE	#/NS	MENU SHIFT	TABLE TRANS	NEW/OLD CHK	C	X	VOID	CANCEL	VAT	ESC/ SKIP
CLK# 4	X/Z MODE	ADD CHK	HOUSE BON	SEAT No.	COVERS	7	8	9	CH	RC	PD
CLK# 3	PGM. MODE	SEP CHK	NO	⇧	PAGE UP	4	5	6	CR	SUB TOTAL	
CLK# 2	DISP ON/OFF	SUBST.	⇦	HOME	⇨	1	2	3	CHK	CASH / AMT TEND	
CLK# 1	—	%—	YES	⇩	PAGE DOWN	0	00	•	GUEST RECEIPT	NB	

1-4-2. Hard key code of keyboard

14	30	46	62	78	94	110	126	142	158	174	190
13	29	45	61	77	93	109	125	141	157	173	189
12	28	44	60	76	92	108	124	140	156	172	188
11	27	43	59	75	91	107	123	139	155	171	187
10	26	42	58	74	90	106	122	138	154	170	186
9	25	41	57	73	89	105	121	137	153	169	185
8	24	40	56	73	88	104	120	136	152	168	184
7	23	39	55	71	87	103	119	135	151	167	183
6	22	38	54	70	86	102	118	134	150	166	182
5	21	37	53	69	85	101	117	133	149	165	181
4	20	36	52	68	84	100	116	132	148	164	180
3	19	35	51	67	83	99	115	131	147	163	179
2	18	34	50	66	82	98	114	130	146	162	178
1	17	33	49	65	81	97	113	129	145	161	177

Hardware Configuration

1-5. Display

1-5-1. Main display (First and second LCD)

Mode | Clerk | Date | Time | Consecutive number

```
REG  C 01      15-12-97 12:34     001234
     1  Spagetti              $20.00 T1 ↑
     1  Spagetti              $20.00 T1
     7.5%
     %-                        -1.50
     1  Coffee                 $8.00
     1  Hamburger              $2.00 T1
     15%
     %-                        -0.30
     1  Milk                   $2.00
     2  Apple Juice            $5.00
     1  Coffee                 $8.00 ↓
Coffee                      $8.00
🔲①2ⁿᵈ@ⓇA⊗  12 ST     $76.50
```

Transactions

Scroll area

Last transaction

Item sold

Subtotal/Total/Change

Status Icons

- Communication: ⌐L
- Receipt on: Ⓡ
- Menu sheet No.: ①
- Character shift: **A̲** : Capital, double   A̲ : Capital, standard
- 2nd unit price: 2ⁿᵈ@
- **a̲** : Small, double   a̲ : Small, standard
- Master/BM error: ⊗
- Cut off Master or BM: !

1-5-2. Customer display (Rear display: option)

Alphanumeric display (16 digits, 7 × 5 dot)

SIRLOIN STEAK

20.50

Numeric display (11 digits)

1-6.   Cash drawer

Medium size drawer is provided for the standard QT-2000.
This type of drawer is a close lock type.

When you want to set the QT-2000 terminal on the drawer, set and tighten two screws on
the bottom side to fix the terminal on the drawer.

1-7.   Security locks

Security locks provided include cash drawer lock key and clerk switch.
Normally, the mode switch and printer cover lock key are included in security locks, but
in QT-2000, the modes are controlled by mode control keys (such as "REG MODE", "X/
Z MODE", etc.) and the printers connected to QT-2000 system have no printer cover keys.

1-7-1.   Drawer lock key

This key is used to lock the cash drawer.

1-7-2.   Clerk switch (for German model only)

The clerk switch is provided only for German model, and is located on the right side of the
terminal. The clerk keys (for 6 clerks) are used enable/disable the register instead of the
clerk sign on/off operation. The clerk switch and clerk keys are optional items for other
countries.

1-8.   Input/output connectors
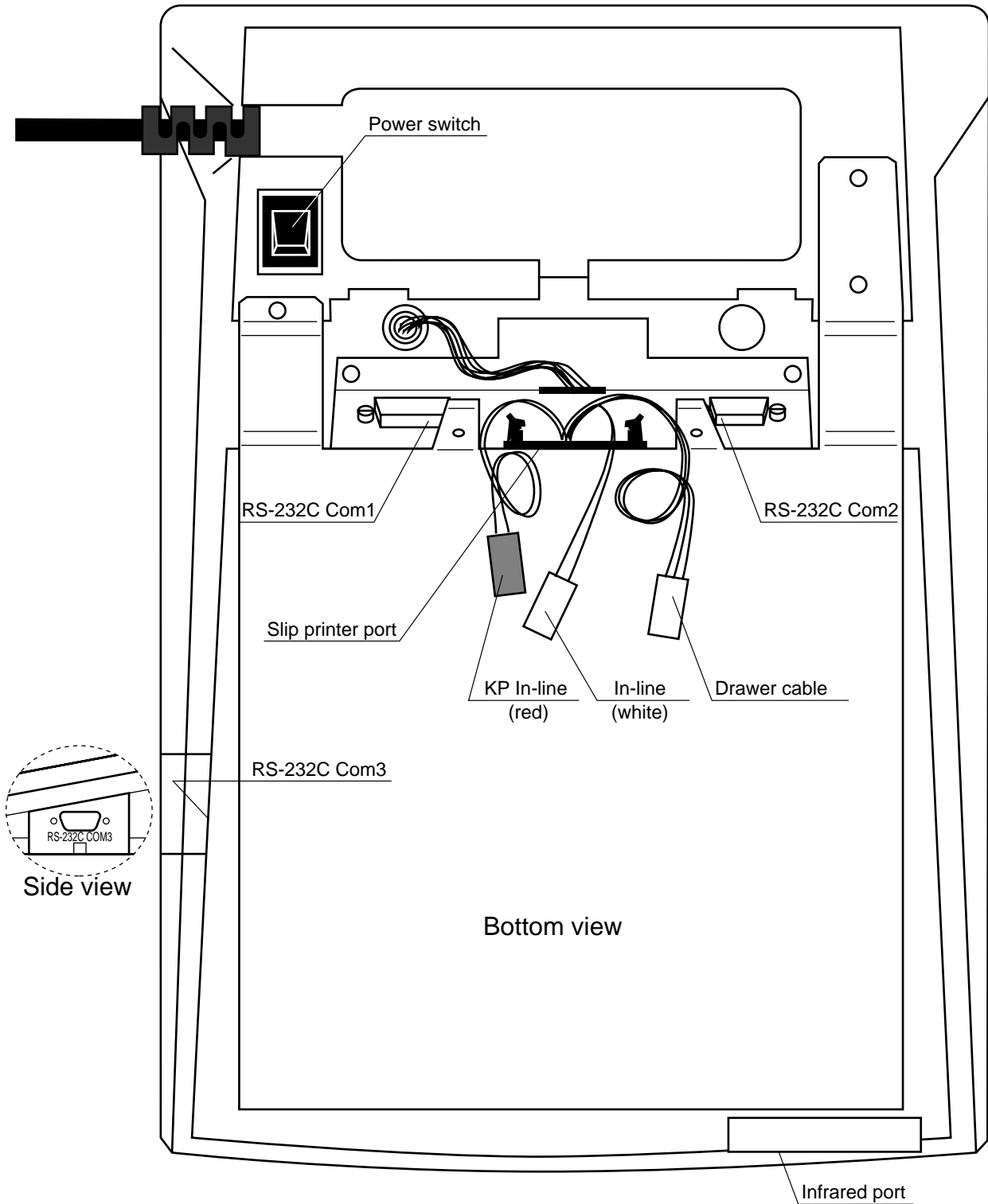
RS-232C Com 1 is for Hand held scanner (HHS-9) or Printer*.
RS-232C Com 2 is for Printer* or PC.
RS-232C Com 3 is for Modem or PC direct connection or Printer* or EFT (US only).

* Available printer list

TM-T85 (CASIO UP-350)
TM-U950 (CASIO SA-3015)
TM-U300 (EPSON)
CBM-231 (CITIZEN)
iDP-3541 (CITIZEN)

1-9. Optional peripherals

The following optional peripherals can be used by plugging them into the appropriate port.

1) Scanner: RS-232C Com1 port (future support)
   Hand-held scanner (HHS-9) (Matsushita)

2) Slip printer: Slip printer port
   SP-1200
   The slip printer is used for validations, detailed slips, and endorsement.

3) Receipt/journal printer: RS-232C Com2 port
   UP-350 or SA-3015
   The receipt/journal printer is used for receipts/journal/reports.

4) Personal computer/MODEM: RS-232C Com3 port

5) KP in-line and Kitchen printer: KP in-line port
   KP-200 or KP-300
   The kitchen printer is used for order receipt.

6) In-line and other QT-2000: In-line port

7) Drawer: drawer port

Hardware Configuration

1-10. System configuration

This section represents the system configuration of the QT-2000. The QT-2000 has three different system configurations, such as shared check tracking/floating clerk interrupt system, in-line collection/consolidation system and on-line collection/consolidation system.

Before detail explanation, we should define the words:

1) Check master:

Check master is the master server of shared check tracking system and floating clerk interrupt system. This terminal has check index and detail files and controls them.

2) Check backup master:

Check backup master is the backup server of shared check tracking system and floating clerk interrupt system. This terminal also has check index and detail files and update them at the same timing of master.

When the check master goes down, the backup master plays the role of check master.

3) Kitchen printer master:

Kitchen printer master is the master server of kitchen printer control.

This terminal outputs item data sent from terminals of the cluster to kitchen printer(s).

4) Kitchen printer backup master:

Kitchen printer backup master is the backup server of kitchen printer control.

When the KP master goes down, this terminal (KP backup master) plays the role of KP master.

5) Satellite:

The terminal which is not assigned to 1) ~ 4) above.

6) Remote printer:

Remote printer prints data sent from both its own QT-2000 terminal and other terminal of the cluster.

7) Local printer:

Local printer prints data sent from its own QT-2000 terminal.

1-10-1. Shared check tracking system/floating clerk interrupt system

Up to 4 QT-2000 terminals

3 terminals/cluster   **2 terminals/cluster**
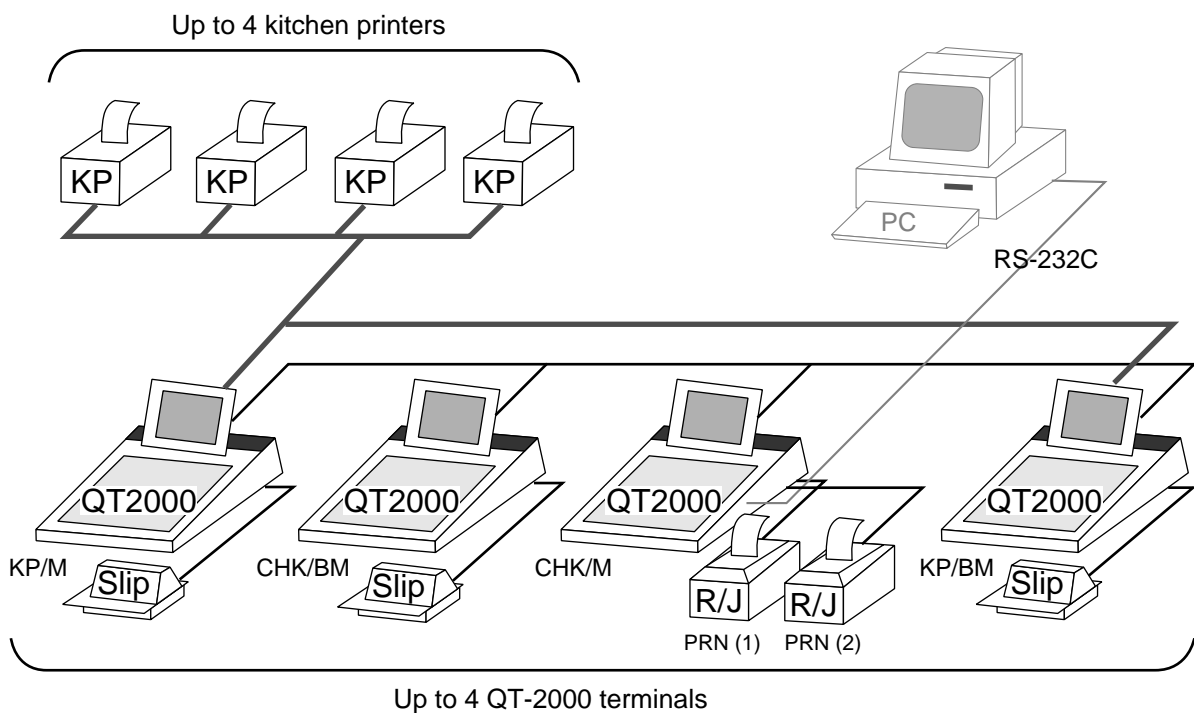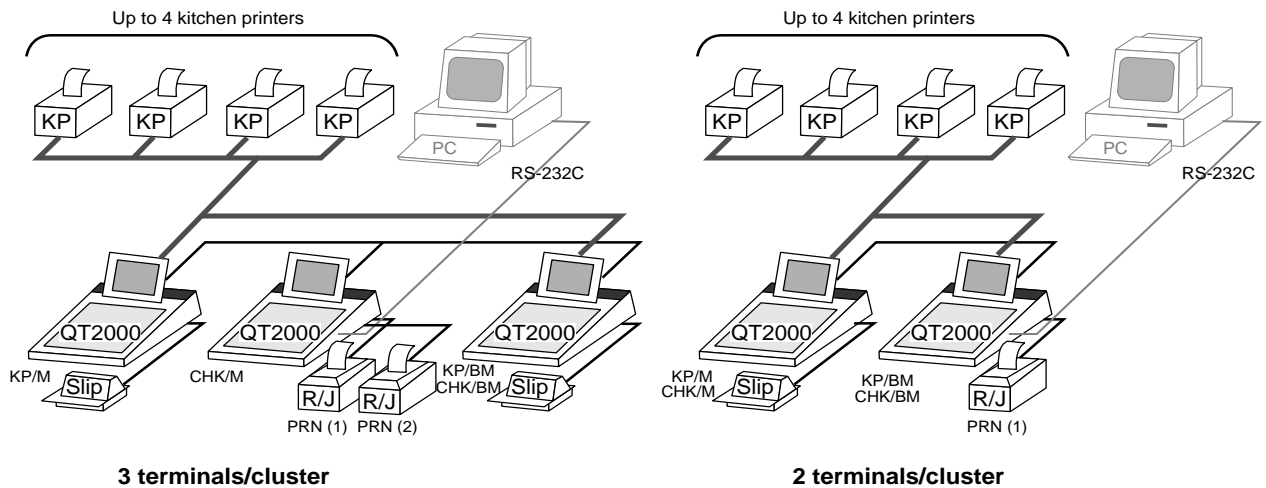
System Recommendation (in case of more than 2 QT-2000 terminals in the cluster)

Available peripherals versus ECR definition

ECR definition	Peripherals				
	Kitchen printer	Remote printer	Local printer	Slip printer	PC/ Infrared
Check master			✓	✓	✓
Check backup master			✓	✓	✓
KP master	✓		✓	✓	✓
KP backup master	✓	✓	✓	✓	✓
Satellite		✓	✓	✓	✓

✓: Available

Available combinations ECR definition

ECR definition	Check master	Check backup master	KP master	KP backup master	Terminal w/ remote printer
Check master					
Check backup master					
KP master					
KP backup master					✓
Terminal w/ remote printer				✓	

✓: Available

Note:

1) Please follow the system recommendation above. Otherwise the system performance may be slow down.

1-10-2. In-line collection/consolidation system

- In-line collection/consolidation and auto-programming for up to 32 QT-2000 terminals.

Note: When the cluster has more than 8 QT-2000 terminals,
all printer should be local printer.
When the cluster has less than or equal to 8 QT-2000
terminals, remote printer is allowable.
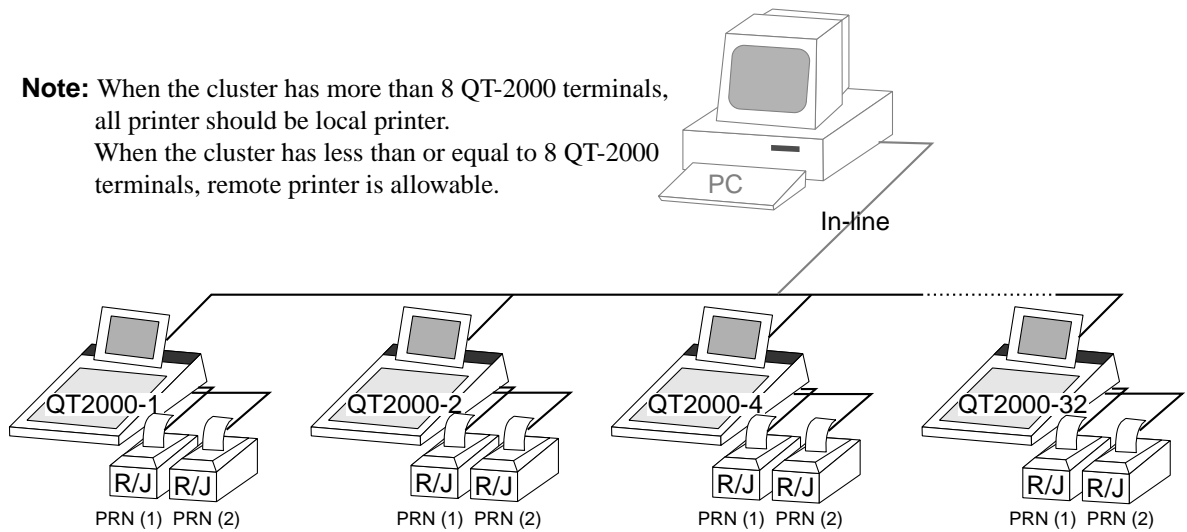
1-10-3. On-line collection/consolidation system

- On-line collection/consolidation and auto-programming for up to 32 QT-2000 terminals.
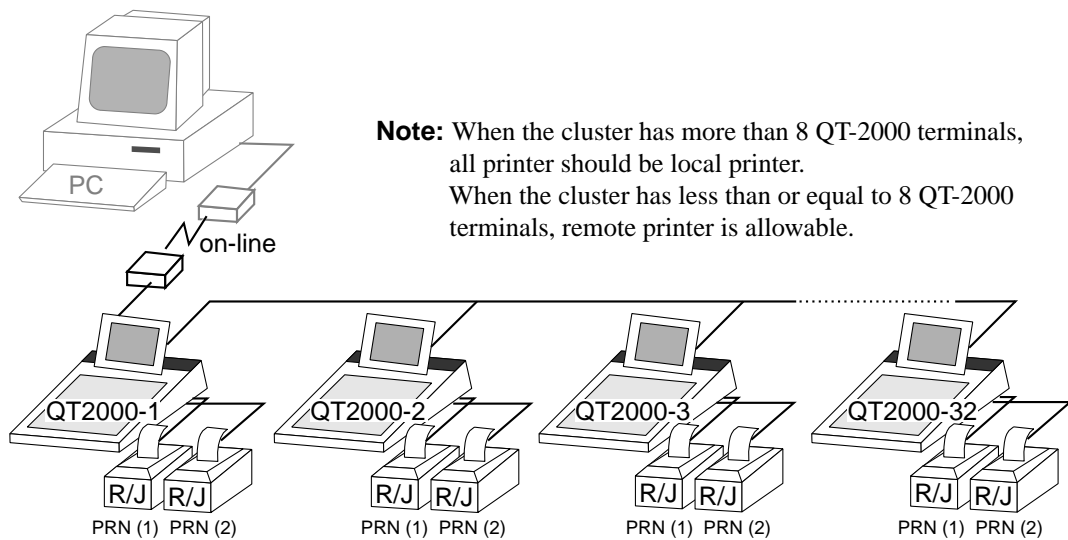
Note: When the cluster has more than 8 QT-2000 terminals,
all printer should be local printer.
When the cluster has less than or equal to 8 QT-2000
terminals, remote printer is allowable.

1-10-4. Connectable system configuration

In this section, you can see the six pattern of connectable RS-232C printer, modem (including the modem which connect to PC directly). Each ECR show below enables to connect two RS-232C printers.

Configuration 1: Two RS-232C printers / One Modem
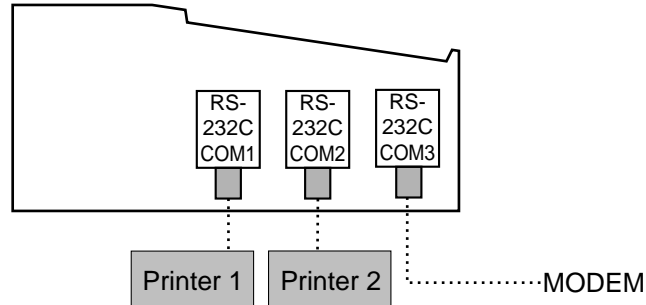
Configuration 2: Two RS-232C printers
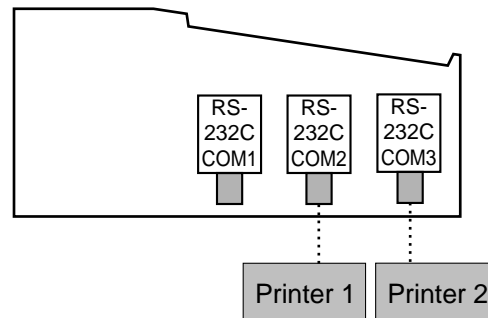
Configuration 3: One RS-232C printer / One Modem
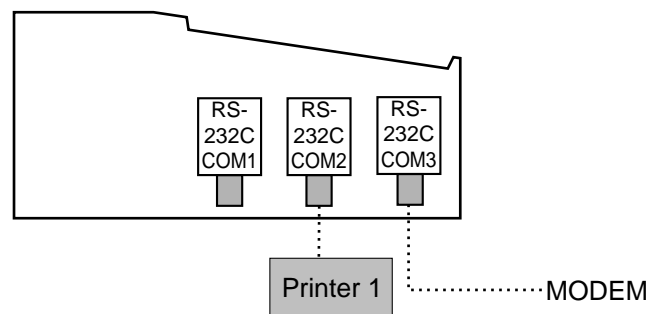
Configuration 4: One RS-232C printer
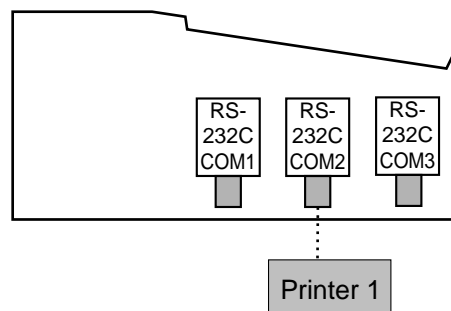
Configuration 5: One Modem
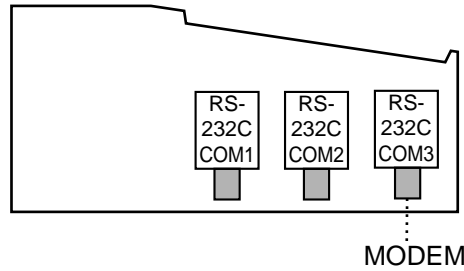
Configuration 6: One Modem
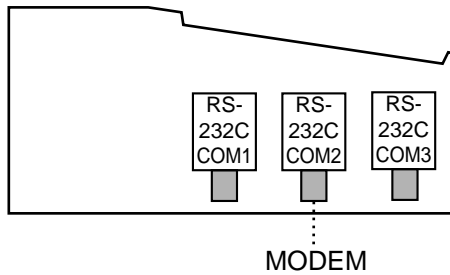
1-10-4-1 Assign for CPM port and device

O: Available to run
× : Not available to run

	COM 1	COM 2	COM 3
Printer	O	O	O
Connect to Modem or PC	×	O	O

Note:

1. Configuration 2~6 are available to connect to the Kitchen Printer when COM 1 is not used.
2. Two printers are available to connect to an ECR at the same time.
3. The maximum total capacity of Baud rate is 38400bps (except the baud rate of kitchen printer).
4. It is not available to use the modem and EFT at the same time even if they are connected to different port.
5. It is available to assign the two printers to the same port. In this case, assign these printers by the operation.

2. Application systems

This section describes the configuration of application system and their related setting with the QT-2000. Reading this section provides a general understanding of the overall system of the QT-2000.

2-1. General description of application system

2-1-1. File concept

Programming data for each function, as well as registration data, are assigned and handled in the RAM of the QT-2000 in data blocks called files. Each files identified by a 3-digit file number, and consists of multiple records that affect the length and data format of the file. The QT-2000 stores the location in RAM for each file in a work area, and specification of a data location for accessing is accomplished using the file number, record number and record format.

Memory management on a file basis allows flexibility memory allocation in accordance with the application of a specific terminal and its memory capacity. The number of records per file can be programmed, and a file can even be programmed for zero records.

There are three types of files:

– Terminal files:

Terminal files include system work files, daily total files, periodic total 1 and periodic total 2 files. Periodic total files have only totalizer field, and totalize the same data which is accumulated to terminal files at the same time. The periodic total 1 files have 100 order file numbers, and the periodic total 2 files have 200 order file numbers.

These files can be reset individually and separately from the terminal files. This provides access to weekly and monthly total data. The periodic total 1 files and 2 files have the same functions, and can accumulate data with different periods. The same number of records as the corresponding terminal file must be reserved for each periodic total files.

– Consolidation files:

Consolidation files are work files for consolidation of daily total, periodic 1 total and periodic 2 total data from each terminal, and have 300, 400 and 500 order file numbers, respectively. The same number of records as the corresponding terminal files must be reserved for each file, on the master terminal.

– Consolidation work files:

Consolidation work files are work files for collection/consolidation of daily, periodic 1/2 data from each terminal. The files have 600 order file numbers.

The file number of records as the corresponding terminal file must be reserved for each consolidation file.

Each file requires an internal work area, so calculation of actual file size can be performed using the following formula:

Record length × Number of records + Work area = Actual file size

The following table shows all the files available for QT-2000. See the Appendix A-3 of this manual for detail formats of individual files.

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribution	Allocatable	Back-up
System files								
901	System connection table	18	33	75		Program	No	Yes
902	I/O parameter	5	10	69		Program	No	Yes
903	Printer connection	27	99	81		Program	No	Yes
904	Consecutive number	3	1	69		Buffer	No	Yes
999	System error log	11	999	99		Buffer	No	Yes
Function and total files								
001	Fixed totalizer	26	59	81		Pgm/Sale	Yes	Yes
101	(periodic total 1)	10	59	75		Sales	Yes	Yes
201	(periodic total 2)	10	59	75		Sales	Yes	Yes
301	(daily consolidation)	10	59	75	for master	Sales	Yes	No
401	(periodic 1 consolidation)	10	59	75	for master	Sales	Yes	No
501	(periodic 2 consolidation)	10	59	75	for master	Sales	Yes	No
601	(consolidation work)	10	59	75	for master	Buffer	Yes	No
002	Free function	38	999	99		Pgm/Sale	Yes	Yes
102	(periodic total 1)	10	999	75		Sales	Yes	Yes
202	(periodic total 2)	10	999	75		Sales	Yes	Yes
302	(daily consolidation)	10	999	75	for master	Sales	Yes	No
402	(periodic 1 consolidation)	10	999	75	for master	Sales	Yes	No
502	(periodic 2 consolidation)	10	999	75	for master	Sales	Yes	No
602	(consolidation work)	10	999	75	for master	Buffer	Yes	No
003	Subdepaprtment	54	99	135		Pgm/Sale	Yes	Yes
103	(periodic total 1)	15	99	81		Sales	Yes	Yes
203	(periodic total 2)	15	99	81		Sales	Yes	Yes
303	(daily consolidation)	15	99	81	for master	Sales	Yes	No
403	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes	No
503	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes	No
603	(consolidation work)	15	99	81	for master	Buffer	Yes	No
004	PLU	92	9999	177		Pgm/Sale	Yes	Yes
005	Department	54	99	135		Pgm/Sale	Yes	Yes
105	(periodic total 1)	15	99	81		Sales	Yes	Yes
205	(periodic total 2)	15	99	81		Sales	Yes	Yes
305	(daily consolidation)	15	99	81	for master	Sales	Yes	No
405	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes	No
505	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes	No
605	(consolidation work)	15	99	81	for master	Buffer	Yes	No
006	Group	26	99	81		Pgm/Sale	Yes	Yes
106	(periodic total 1)	10	99	75		Sales	Yes	Yes
206	(periodic total 2)	10	99	75		Sales	Yes	Yes
306	(daily consolidation)	10	99	75	for master	Sales	Yes	No
406	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes	No
506	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes	No
606	(consolidation work)	10	99	75	for master	Buffer	Yes	No
009	Hourly sales	20	999	87		Pgm/Sale	Yes	Yes
109	(periodic total 1)	20	999	87		Sales	Yes	Yes
209	(periodic total 2)	20	999	87		Sales	Yes	Yes
309	(daily consolidation)	20	999	87	for master	Sales	Yes	No
409	(periodic 1 consolidation)	20	999	87	for master	Sales	Yes	No
509	(periodic 2 consolidation)	20	999	87	for master	Sales	Yes	No
609	(consolidation work)	20	999	87	for master	Buffer	Yes	No
010	Monthly sales	20	32	87		Pgm/Sale	Yes	Yes
110	(periodic total 1)	20	32	87		Sales	Yes	Yes
210	(periodic total 2)	20	32	87		Sales	Yes	Yes
310	(daily consolidation)	20	32	87	for master	Sales	Yes	No
410	(periodic 1 consolidation)	20	32	87	for measter	Sales	Yes	No
510	(periodic 2 consolidation)	20	32	87	for master	Sales	Yes	No

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribution	Allocatable	Back-up
610	(consolidation work)	20	32	87	for master	Buffer	Yes	No
012	Void reason	29	99	87		Pgm/Sale	Yes	Yes
112	(periodic total 1)	10	99	75		Sales	Yes	Yes
212	(periodic total 2)	10	99	75		Sales	Yes	Yes
312	(daily consolidation)	10	99	75	for master	Sales	Yes	No
412	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes	No
512	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes	No
612	(consolidation work)	10	99	75	for master	Buffer	Yes	No
018	Table analysis	32	9999	93		Pgm/Sale	Yes	Yes
118	(periodic total 1)	10	9999	75		Sales	Yes	Yes
218	(periodic total 2)	10	9999	75		Sales	Yes	Yes
318	(daily consolidation)	10	9999	75	for master	Sales	Yes	No
418	(periodic 1 consolidation)	10	9999	75	for master	Sales	Yes	No
518	(periodic 2 consolidation)	10	9999	75	for master	Sales	Yes	No
618	(consolidation work)	10	9999	75	for master	Buffer	Yes	No
020	Grand total	24	3	75		Pgm/Sale	Yes	Yes
120	(periodic total 1)	8	3	69		Sales	Yes	Yes
220	(periodic total 2)	8	3	69		Sales	Yes	Yes
320	(daily consolidation)	8	3	69	for master	Sales	Yes	No
420	(periodic 1 consolidation)	8	3	69	for master	Sales	Yes	No
520	(periodic 2 consolidation)	8	3	69	for master	Sales	Yes	No
620	(consolidation work)	8	3	69	for master	Buffer	Yes	No
Clerk								
007	Clerk	95	99	165		Program	Yes	Yes
030	Clerk detail link	4	120	75		Program	Yes	Yes
011	Clerk detail	10	99	75		Sales	Yes	Yes
111	(periodic total 1)	10	99	75		Sales	Yes	Yes
211	(periodic total 2)	10	99	75		Sales	Yes	Yes
311	(daily consolidation)	10	99	75	for master	Sales	Yes	No
411	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes	No
511	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes	No
611	(consolidation work)	10	99	75	for master	Buffer	Yes	No
Time & Attendance								
014	Hourly/Labor	26	96			Program	Yes	Yes
114	(periodic total 1)	26	96			Sales	Yes	Yes
214	(periodic total 2)	26	96			Sales	Yes	Yes
314	(daily consolidation)	26	96		for master	Sales	Yes	Yes
414	(periodic 1 consolidation)	26	96		for master	Sales	Yes	Yes
514	(periodic 2 consolidation)	26	96		for master	Sales	Yes	Yes
614	(consolidation work)	26	96		for master	Sales	Yes	Yes
019	Work Time	17	9999			Program	Yes	Yes
119	(periodic total 1)	17	9999			Sales	Yes	Yes
219	(periodic total 2)	17	9999			Sales	Yes	Yes
319	(daily consolidation)	17	9999		for master	Sales	Yes	Yes
419	(periodic 1 consolidation)	17	9999		for master	Sales	Yes	Yes
519	(periodic 2 consolidation)	17	9999		for master	Sales	Yes	Yes
619	(consolidation work)	17	9999		for master	Sales	Yes	Yes
800	Time Zone	6	24			Program	Yes	Yes
801	Employee	35	99			Program	Yes	Yes
802	Job code	22	50			Program	Yes	Yes
803	Schedule	11	999			Program	Yes	Yes
806	Time&Attendance work	1	99					
Check								
015	Check Index					Program	Yes	Yes
060	Check detail					Program	Yes	Yes
066	Check detail work					Sales	Yes	Yes

Application System

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able	Back-up
Hourly Item								
021	Hourly Item	10	1920			Program	Yes	Yes
121	(periodic total 1)	10	1920			Program	Yes	Yes
221	(periodic total 2)	10	1920			Program	Yes	Yes
321	(daily consolidation)	10	1920		for master	Program	Yes	Yes
421	(periodic 1 consolidation)	10	1920		for master	Program	Yes	Yes
521	(periodic 2 consolidation)	10	1920		for master	Program	Yes	Yes
621	(consolidation work)	10	1920		for master	Program	Yes	Yes
031	Hourly Item Link	4	480			Program	Yes	Yes
IDC								
057	IDC (1)	50	9999			Sales	Yes	Yes
357	(consolidation file)	50	9999		for master	Sales	Yes	Yes
657	(consolidation work)	50	9999		for master	Sales	Yes	Yes
058	IDC (2)	50	9999			Sales	Yes	Yes
358	(consolidation file)	50	9999		for master	Sales	Yes	Yes
658	(consolidation work)	50	9999		for master	Sales	Yes	Yes
059	IDC (3)	50	9999			Sales	Yes	Yes
359	(consolidation file)	50	9999		for master	Sales	Yes	Yes
659	(consolidation work)	50	9999		for master	Sales	Yes	Yes
063	IDC Buffer	50	9999			Buffer	Yes	Yes
804	IDC link	6	999			Program	Yes	Yes
Program/message/buffer								
022	General control	6	34	69		Program	No	Yes
023	Special character	16	28	69		Program	No	Yes
024	Report header	16	17	69		Program	No	Yes
025	Tax table	8	5	93		Program	Yes	Yes
026	Pulldown group	103	9999	189		Program	Yes	Yes
028	Set menu table	80	999	183		Program	Yes	Yes
029	Batch X/Z	9	10	69		Program	Yes	Yes
032	Receipt/slip message	40	47	69		Program	Yes	Yes
033	Endorse message	40	4	69		Program	Yes	Yes
035	Print buffer	77	999	69		Buffer	Yes	No
036	Registration buffer	70	400	69		Buffer	Yes	No
037	All void buffer	20	9999	69	DO NOT DELETE	Buffer	YES	No
039	Character recall	40	9999	69		Program	Yes	Yes
041	Check print	3	9	69		Program	Yes	Yes
043	Journal memory display buffer	40	999	69		Buffer	Yes	No
044	Display buffer	40	999	69		Buffer	Yes	No
047	Graphic logo	13	432	69		Program	Yes	Yes
048	Journal memory buffer	41	200	69		Buffer	Yes	No
054	PLU 2nd @	42	9999	99		Program	Yes	Yes
062	Scheduler	14	99	75		Program	Yes	Yes
065	Order character	16	99	69		Program	Yes	Yes
074	Key table	36	192	171		Program	No	Yes
Arrangement								
038	Arrange group (1)	24	9999	69		Program	Yes	Yes
138	Arrange group (2)	24	9999	69		Program	Yes	Yes
238	Arrange group (3)	24	9999	69		Program	Yes	Yes
338	Arrange group (4)	24	9999	69		Program	Yes	Yes
438	Arrange group (5)	24	9999	69		Program	Yes	Yes

2-1-2. Linkage of totalizers

Registered data is accumulated to totalizers which are reserved for each functions.
The QT-2000 has the following types of totalizers:

1) Fixed totalizers
   Registration data is accumulated for individual terminals.

2) Function key totalizers
   Data input by finalize or transaction keys is accumulated in totalizers for each key.
   Operation types, as well as data used in operation differ depending on the key.

3) Subdepartment totalizers
   Registration data is accumulated in totalizers for each subdepartment.

4) Department totalizers
   Registration data is accumulated in totalizers for each department.

5) Group totalizers
   Registration data is accumulated in totalizers for each group.

6) PLU totalizers
   Registration data is accumulated in totalizers for each PLU.

7) Clerk totalizers
   Registration data is accumulated for each relevant clerk. A clerk detail totalizer can be linked to a fix totalizer, finalize key, transaction key, or department totalizer, and accumulate data registered for the destination totalizer for each relevant clerk.

8) Other totalizer
   Functions for hourly sales and monthly sales also have totalizers.

Application System

Registration data flow

Registration

Calculation

| Fixed totalizer | Function key totalizer | PLU file | Subdept. file | Dept. file | Group file | Clerk detail file | Other file |
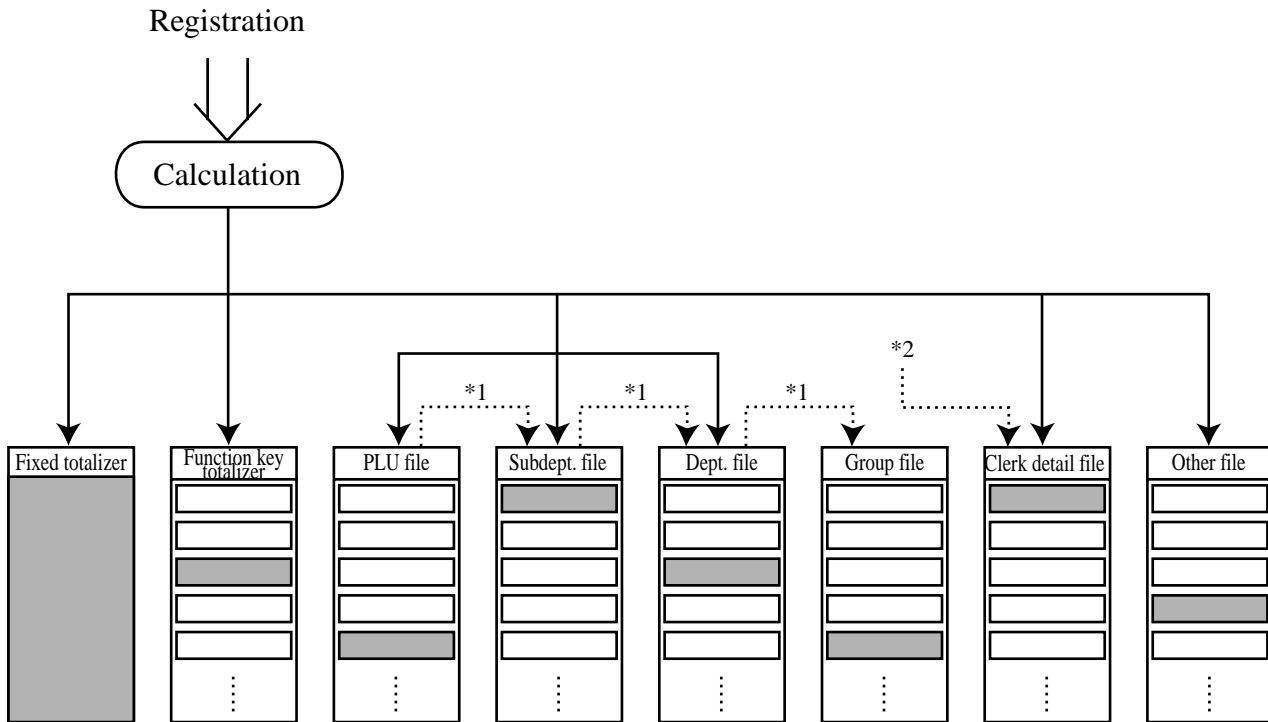
*1 Linking between PLUs, subdepartments, departments and groups can be programmed to meet the needs of the retail environment.

PLUs can be programmed to link with subdepartments, departments or group, while subdepartment can be programmed to link with department or group, and department can be programmed to link with group.

When a PLU is programmed to link with a department, data registered for the PLU is also accumulated to the department. In addition, when the department is programmed to link with a group, data registered for the PLU is simultaneously reflected the department totalizer and group totalizer.

*2 When data is registered to a totalizer which is present in the clerk detail link table, the data is also accumulated to the clerk detail totalizer reserved for each relevant clerk.

2-1-3. Function keys

The keys on the keyboard can be assigned various functions that are used for registration as required for the terminal. For convenience sake, these functions are called by function keys.

There are two types of function keys:

1) System keys

There are function keys which have functions that are fixed by the system (Numeral keys, clear key, home position key, left/right/up/down cursor key, yes/no key, on/off key, mode selection key and ESC/SKIP key

2) Free Function keys

These function keys are used for finalize a transaction, to specify the functions for a registration or to specify the meaning of a entry. These function keys have programmable functions, which are set to the function key file.

Free function keys include finalize key, transaction key, department key and touch PLU key.

The list of all function keys provided for QT-2000 is shown on the next page. General descriptions of individual function keys are found in the chapter 2-2.

Function	Code	Initial character	Function	Code	Initial character
Add check	094	ADD CHK	Paid out	021	PD
Arrangement	044	ARG	Pick up	022	P.UP
Bill copy	047	BILL	Plus	029	+
Break-in/out	109	BREAK-IN/OUT	PLU	048	PLU#
Cancel	236	CANCEL	Post Entry	115	POST ENTRY
Cash amount tendered	001	CASH	Program mode	123	PGM MODE
Charge	002	CHARGE	Premium	030	%+
Check endorsement	039	CK.E	Price inquiry	008	PRCINQ
Check print	012	CHKP	Price	049	PRC
Check tender	003	CHECK	Quantity/For	083	QT
Clerk number	072	CLK#	Recall	131	RECALL
Clerk transfer	013	CLK TRANS	Receipt	038	RCT
Clock-in/out	108	CLOCK-IN/OUT	Receipt On/OFF	076	RCT ON/OFF
Coupon	023	COUPON	Received on account	020	RC
Coupon 2	036	CPN2	Refund	033	RF
Credit	004	CREDIT	Register mode	121	REG MODE
Cube	090	XXX	Round Repeat	116	R REPEAT
Currency exchange	045	CE	Seat number	119	SEAT#
Customer number	043	CT	Second unit price	070	2nd@
Decimal point	098	.	Selective item subtotal	085	SIST
Declaration (future)	061	DECLA	Separate check	095	SEP CHK
Department	051	DEPT	Slip back feed/Release	054	SB/R
Department number	135	DEPT#	Slip feed/Release	056	SF/R
Deposit	025	DEPOSIT	Slip print	055	SLIP
Discount	028	%−	Square	084	XX
Display mode	219	DISP MODE	Stock inquiry	009	STKINQ
Display On/Off	120	DISP ON/OFF	Store	130	STORE
Eat-in	128	EAT-IN	Subdepartment	133	SUBDEPT nn
Ent in/out (future)	105	ENT	Subdepartment number	134	SDPT#
Error correct/Void	034	VOID	Substitution	111	SUBST.
First unit price	069	1st@	Subtotal	075	SUBTOTAL
Flat PLU	063	PLU nnn	Table number	058	TBL#
Home position	218	HOME	Table transfer	014	TBL TRANS
House Bon	114	HOUSE BON	Take-out	129	TAKE-OUT
J-Memo Disp	207	JMEMO	Tax status shift	057	T/S
Ketten Bon	113	X/KETTEN	Taxable amount subtotal	077	TAST
List	136	LIST	Tax exempt	062	EXEMPT
List number	137	LIST#	Text print	011	PRT
Loan	019	LOAN	Text recall	010	CHAR
Lock out unused key	000	NOP	Three zero	0012201	000
Media change	118	MEDIA CHG	Two zero	0011201	00
Menu shift	064	MENU	Tip	015	TIP
Merchandise subtotal	080	MDST	Validation	037	VLD
Minus	027	−	VAT	046	VAT
Multiplication	082	X	X/Z mode	122	X/Z MODE
New balance	006	NB	Numeric key	000n201	n=1~9, "0"= 10
New check	091	NEW CHK	Clear	202	
New/Old check	093	NEW/OLD	Escape/Skip	211	
Normal receipt	016	NRMRCT	Yes	212	
No sale	042	NS	No	213	
Non-add	040	#	Left arrow	214	
Non-add/No sale	041	#/NS	Right arrow	215	
Old check	092	OLD CHK	Up arrow	216	
Open	067	OPEN	Down arrow	217	
Open2	068	OPEN2	Reverse Disp	206	REVERSE DSP
Open Check	117	OPEN CHK	Page up	221	PAGE UP
Operator number	078	OPE#	Page down	220	PAGE DOWN
Operator read/reset	073	OPE X/Z			

2-1-4. Keyboard layout

Normally, the keyboard is assigned functions which are required for registration of transactions. The keyboard is also used for character input when entering descriptors or names during programming.

The QT-2000 automatically switches the keyboard to its character input function when it determines that character input is required for the operation sequence you are performing. This means that you can input characters without having to worry about manually changing the keyboard input mode.

The function key layout is fully programmable to meet the specific needs of each terminal. The actual programming of key layouts can be performed in the PGM4 mode, and programmed data is written onto the key conversion table (file 074).

The allocation can also be programmed when programming each function file for programming function keys such as finalize keys, transaction keys, department keys, and touch PLU keys.

Standard function key layout

9	18	27	36	45	54	63	72	81	90	99	108
8	17	26	35	44	53	62	71	80	89	98	107
7	16	25	34	43	52	61	70	79	88	97	106
6	15	24	33	42	51	60	69	78	87	96	105
5	14	23	32	41	50	59	68	77	86	95	104
4	13	22	31	40	49	58	67	76	85	94	103
3	12	21	30	39	48	57	66	75	84	93	102
2	11	20	29	38	47	56	65	74	83	92	101
1	10	19	28	37	46	55	64	73	82	91	100
CLK# 5	REG. MODE	#/NS	MENU SHIFT	TABLE TRANS	NEW/OLD CHK	C	X	VOID	CANCEL	VAT	ESC/ SKIP
CLK# 4	X/Z MODE	ADD CHK	HOUSE BON	SEAT No.	COVERS	7	8	9	CH	RC	PD
CLK# 3	PGM. MODE	SEP CHK	NO	⇧	PAGE UP	4	5	6	CR	SUB TOTAL	
CLK# 2	DISP ON/OFF	SUBST.	⇦	HOME	⇨	1	2	3	CHK	CASH/AMT TEND	
CLK# 1	—	%−	YES	⇩	PAGE DOWN	0	00	•	GUEST RECEIPT	NB	

Alphanumeric key layout

Â/â	Ô/ô	Û/û	Î/î	Ê/ê	Ç/ç	Þ/þ	Ø/ø	£	×	ƒ	¿
Á/á	Ó/ó	Ú/ú	Í/í	É/é	Å/å	Ã/ã	/ÿ	a	o	Ω	i
À/à	Ò/ò	Ù/ù	Ì/ì	È/è	Æ/æ	Ÿ/ỹ	ɪ/¬	ð	Đ/½	ß/¼	±/
Ä/ä	Ö/ö	Ü/ü	Ï/ï	Ë/ë	Ñ/ñ	Õ/õ	«/¢	»/¤		'	–
1/!	2/@	3/#	4/$	5/%	6/^	7/&	8/*	9/(	0/)	–/_	=/+
Q/q	W/w	E/e	R/r	T/t	Y/y	U/u	I/i	O/o	P/p	[/{	]/}
A/a	S/s	D/d	F/f	G/g	H/h	J/j	K/k	L/l	;/:	'/"	`/~
Z/z	X/x	C/c	V/v	B/b	N/n	M/m	,/<	./>	//?	\/	•/¥
CAP	SHIFT								INS	DEL	DBL

FOR ALL DEVICES (R/J) (SLIP) (K_P) (REAR)

* R/J ONLY (R/J) (SLIP) (K_P) (REAR)

INS INSERT AB → A_B

DEL DELETE ABC → AC

DBL DOUBLE LETTER Aa → A

CAP CAPITAL LETTER Aa → A

SHIFT small letter Aa → a

Keys: C, 7, 8, 9, NO, ↑, PAGE UP, 4, 5, 6, ESC/SKIP, ←, HOME, →, 1, 2, 3, #-2, YES, ↓, PAGE DOWN, 0, A, B, #-1

2-1-5. Mode control

With the QT-2000, each clerk can be programmed to enable or disable operations in the following modes:

– RF mode
– REG– mode
– REG mode
– X/Z mode
– Program 1 ~ 7 mode
– Manager mode
– In-line X/Z mode
– Infrared mode

Also, each clerk can be programmed to enable or disable operations of every function key. Though the QT-2000 has no REG 2 mode, on the page 64 in the Clerk Control function chapter, the manager control procedure is described.

Arrangement execution mode programmed in the arrangement key ignores the mode control program by the clerk.

Please note that if a clerk want to operate an arrangement, he/she should allow to operate arrangement function.

2-1-6. Operation prompt and error messages

The QT-2000 displays or prints messages to indicate the status of the terminal being operated or programmed. These messages help to determine the status of the terminal or the required subsequent action.

2-1-6-1. Operation prompt

All prompt messages, together with descriptors and symbol characters for printing on receipts, slips or reports are contained in the list below. These messages cannot be added, modified or deleted.

Prompt message	Meaning
`Data cannot be printed out.` `Do you want to display?`	Request to check the data which cannot be printed out.
`Do you want to clear data?`	Confirmation to reset displayed report.
`Cancel OK?`	Confirmation of all void operation.
`Please wait.`	Please wait. ECR now processing.
`Item Consolidation Mode.`	In the item consolidation mode.
`Non Consolidation Mode.`	Not in the item consolidation mode.
`REG Mode`	Mode change : REG mode
`REFUND Mode`	Mode change : RF mode
`REG− Mode`	Mode change : REG– mode
`REG2 Mode`	Mode change : REG 2 mode
`Training`	Training operator
`Please Sign on.`	Sign off
`Enter Check/Table Number.`	CHK# compulsory
`Enter Table Number.`	TBL# compulsory
`Enter Number of covers.`	Covers compulsory
`Enter Seat Number`	Seat# compulsory
`Perform Slip Printing`	Slip compulsory
`Issue Guest Receipt.`	GUEST RCT compulsory
`Perform Validation Printing.`	VLD compulsory
`Perform Check Printing.`	CHK-PRT compulsory
`Perform Check Endorsement.`	CHK-END compulsory
`Operation Code?`	Secret No entry for REG 2 mode.

`The terminal losts system con-`
`figuration. Execute reconfigu-`
`ration procedure as soon as`
`possible. OK ?`
	Requirement for system re-configuration.

`This procedure stops system`
`maximum 60 sec.`
`OK ?`
	Alert before flash memory clear.

2-1-6-2. Error messages

Error messages are displayed to indicate that an error has occurred and a compulsory operation must be performed. All error messages cannot be added, modified or deleted.

Prompt message	Meaning
Operator mistake	Operation error
E001 Wrong Mode	Check tracking (Open mode error)
E003 Wrong operator	Error clerk/Error clerk in CHK tracking
E005 Insufficient memory	Memory allocation over
E011 Close the drawer	Drawer compulsory
E012 Change journal roll	Journal paper near end
E013 Change receipt roll	Receipt/order paper near end
E016 Change back to REG mode	Prohibit plural operation in RF mode
E017 Enter Check/TBL number	Check # compulsory
E018 Enter Table No.	Table # compulsory
E019 Enter Number of covers	Cover compulsory
E020 Enter Seat number	Seat number compulsory
E023 Stock running short	Alarm when any item drops below its programmed minimum stock quantity during registration.
E024 No stock is available	Error when actual stock value for a registration items is a negative value.
E026 Stay down compulsory ERR. Enter Item(s).	Stay down compulsory
E027 Cancel buffer full. Please finalize the transaction	All void buffer full
E029 No registration is possible while you are in the tender operation.	Attempted registration whilst partial tender operation is being done.
E031 Press ST key before Finalization	ST compulsory
E033 Enter tendered amount	Amount tender compulsory
E035 Change amount exceeds the limit.	Change amount exceeds the limit.
E036 Remove money from the drawer.	Contents of the drawer exceed the programmed limit — Sentinel function.
E037 Digit or Amount Limitation Over	H.D.L., H.A.L.O error
E038 Perform Money Declaration	Money declaration compulsory
E040 Issue Guest Receipt	Guest receipt compulsory
E041 Print Validation	Validation compulsory
E042 Insert VLD Paper and retry	Alarm when no paper is inserted.
E043 Remove VLDed paper or check VLD sensor	Alarm when the paper is left in the validation stage of the printer.
E044 Print Cheque	CHK-PRT compulsory
E045 Print Check-Endorsement	CHK-END compulsory
E046 REG Buffer Full. Please Finalize or NB.	Registration buffer full
E047 Print bill	Slip compulsory
E048 Insert Slip Paper and retry.	Alarm when no paper is inserted in the Slip.
E049 CHECK memory full	CHK tracking index full/near end
E050 Detail memory Full.	CHK tracking memory full/near end
E051 CHK/TBL No. is occupied.	Attempt is made to use the New Check key to open a new check using a number that is already used for an existing check tracking memory.
E052 CHK/TBL No. is busy.	Attempt to use the same check number whillst the specified number is being used in the other terminal.

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Prompt message	Meaning
E053 CHK/TBL No. is not opened.	CHK# not found
E054 Out of CHK/TBL No. Range	CHK# range over
E056 Store range full.	All check # are occpied in range.
E057 No item exists in detail.	Round Repeat cannot be found in detail.
E058 Enter post entry item.	Post Entry item exists in detail.
E059 Press Eat-in or Take-out key.	Press Eat-in or Take-out key.
********** E060 Printer offline.	Printer offline. "****" means ECR logical ID or KP1 ~ KP4.
********** E061 Printer error	Printer downed. "****" means ECR logical ID or KP1 ~ KP4.
********** E061 Printer error YES:Retry to print NO :Show on the screen ESC:Discard data	
********** E062 Printer paper end	Paper near-end/end "****" means ECR logical ID or KP1 ~ KP4.
********** E062 Printer paper end YES:Retry to print NO :Show on the screen ESC:Discard data	
E064 Printer buffer full YES:Retry to print NO :Show on the screen ESC:Discard data	Print buffer full at sender side
E067 KP Master down. KP is not available for the backup. YES:Retry to print NO :Show on the screen ESC:Discard data	KP printing is disabled.
********** E068 KP Master is removed from system.	KP master is removed from the system. "****" means ECR logical ID.
********** E069 Kitchen Printer Master down. Retry or Remove it from system? YES:Retry for connection. NO :Remove it from system.	KP control master down "****" means ECR logical ID.
********** E070 Terminal out of action. Cannot print.	Down at target ECR which has printer "****" means ECR logical ID.
********** E071 Target terminal printer BF full. YES:Retry to print NO :Show on the screen ESC:Discard data	Printer buffer full at target ECR which has printer "****" means ECR logical ID.
********** E072 Target printer terminal is busy. Retry?	Busy at target ECR which has printer "****" means ECR logical ID.
********** E073 Your receipt/order may not be issued.	Time out at ECR which has printer "****" means ECR logical ID.

Prompt message	Meaning
```**********``` **E073 Your receipt/order may not be** **issued.** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	Time out at ECR which has printer "```****```" means ECR logical ID.
E075 Negative Balance. **Cannot be finalized.**	Attempted finalization when balance is less than zero.
E080 Journal Memory Full **Please clear J-memo file.**	J-memo full
E081 Data not found in J-memo	Data cannot be found in journal memory.
E082 *** Illegal Data *******	Illegal J-memo data
E083 Cannot create J-memo file. **Check Flash memory.**	J-memo file cannot be created.
E085 Data exist in Consolida- **tion area.**	Data exists in consolidation area.

```**********```
E105 Check/TBL Tracking Master
    down. Retry or Remove it
    from system?
 YES:Retry for connection.
 NO :Remove it from system.
	CHK master down
	"```****```" means ECR logical ID.

```**********```
E106 Check/TBL Tracking Backup
    master down. Retry or Remove it
    from system?
 YES:Retry for connection.
 NO :Remove it from system.
	CHK BM down
	"```****```" means ECR logical ID.

```**********```
E107 Both Master&Backup master
    down. CHK/TBL tracking or
    Clerk interrupt is not
    available.
	CHK M/BM down
	"```****```" means ECR logical ID.

```**********``` **E108 CHK/TBL Master is removed** **from system.**	Master down then take it off from system "```****```" means ECR logical ID.
```**********``` **E109 CHK/TBL Backup master is** **removed from system.**	Backup master down then take it off from system "```****```" means ECR logical ID.
E110 CHK data mismatch between **Master&Backup master.**	Data mismatch has occurred.
E130 Middle of Pick up or Loan **Press Cancel Key.**	During picking up
E131 Middle of <Bill Copy> **Press Cancel key**	During Bill copy
E132 Middle of Money Declarat- **ion. Press Cancel key**	During Money declaration
E133 Middle of <Media Change> **Press Cancel key**	During Media CHG
E134 Middle of Clerk Transfer **Press Cancel key**	During CLK Trans
E136 Middle of <Separate Check> **Press ESC key**	During SEP CHK

Application System

Prompt message	Meaning
E138 Items are consolidated. Change display mode and perform VOID operation.	Void operation is prohibited because of entering quantity.
E139 Not allowed to be negative by Minus/Coupon key.	Credit balance error
E140 Wrong menu.	This sheet holder is prohibited by PGM.
E145 Arrangement syntax error.	Arrangement syntax error
E150 Incorrect value entry.	Incorrect entry for PGM
E151 Incorrect key Pressed.	Linking is incorrect.
E152 PGM File or Record number does not Exist.	No such file, no such record
E160 Flash memory full	Flash memory full
E161 No backup data in Flash Memory	No data is backuped in Flash memory.
E164 Empoloyee No. is not Found in the Employee File.	Employee No. is not set in the Employee File.
E165 Employee No. is not Clocking-in	Employee has not done CLOCK-IN operation yet.
E166 Employee No. is Occupied	Employee who has done CLOCK-IN operation attempts to operate CLOCK-IN again.
E167 Incorrect JOB code	Employee attempts to operate CLOCK-IN with incorrect JOB code.
E168 Your Operation is out of Schedule. Please Call Manager.	Employees operate CLOCK-OUT in not allowance time.
E169 Work Hours Exceeded. Please Call Manager.	Overtime work.
E170 No Shift Reminds in the Schedule. You cannnot Clock-in.	There is no empty shift left.
E171 Please Break-out and Retry.	Employee attempts to operate CLOCK-OUT whilst he/she is in a break time.
E172 Break Hours Exceeded.	Break hours are exceeded.
E173 This employee is at work now.	Employee is at work without break.
E174 This employee is taking a break now.	Employee who has not done BREAK-OUT operation attempts to operate BREAK-IN.
********** E175 Time&Attendance terminal is down.	The master totalizer terminal for Time & Attendance is down when an employee signs in. "****" means ECR logical ID.
E176 You cannot Clock-in. Please reset Employee Report.	Impossible to clock-in because of not resetting Employee Report.
E177 Time&Attendance Data Communication Error. Please Call Manager.	Time&Attendance Data communication error.
E180 IDC FILE (1) memory full. Please clear IDC data.	IDC FILE (1) memory is full of items.
E181 IDC FILE (2) memory full. Please clear IDC data.	IDC FILE (2) memory is full of items.
E182 IDC FILE (3) memory full. Please clear IDC data.	IDC FILE (3) memory is full of items.

2-1-7. Printing control system

The following describes the control system for printing of receipts, the journal, validation, slips and X/Z reports.

2-1-7-1. Receipt/journal print control during normal registration

Normally, the receipt and journal are printed to reflect the details of a registration as it is performed, with the receipt being issued with the finalize operation. By using the Receipt On/Off key, the receipt issuance status can be turned off to suspend printing and issuance of receipts when so desired. Pressing the Receipt On/Off key turns the receipt issuance status on or off, and when the receipt issuance status is On, the icon "Receipt On" appears. Switching receipt printing Off does not affect printing of the journal.

The following programming can be performed for receipt and journal printing:

Description	Programming location
Receipt "Item consolidation"	PGM3; Machine Control3 in General Feature
Receipt "Sort by group, department"	PGM3; Machine Control3 in General Feature
Print consecutive number on the receipt	PGM3; Machine Control3 in General Feature
Print date/time on the receipt/journal	PGM3; Machine Control3 in General Feature
Vertical double character for UP-350	PGM3; Machine Control3 in General Feature
Set menu detail on Guest/Slip	PGM3; Print Control in General Feature
Print PLU number	PGM3; Print Control in General Feature
Print finalized total	PGM3; Print Control in General Feature
Print taxable amount	PGM3; Print Control in General Feature
Print taxable status	PGM3; Print Control in General Feature
Print total number of item sold	PGM3; Print Control in General Feature
Print customer number	PGM3; Print Control in General Feature
One line feed after finalization	PGM3; Print Control in General Feature
Time format (24H/12H)	PGM3; Print Control in General Feature

2-1-7-2. Validation print control

The QT-2000 allows use of the receipt/journal printer (SA-3015) or the slip printer (SP-1200) for validation printing of item registrations, function registrations and sales totals. To perform validation printing, insert the validation paper into the validation slot of the receipt/journal printer or into the slip printer, and then press the <Validation> key (function code 037).
The following shows the print format for validation performed using either the receipt/journal printer or the slip printer.

There are three general types of validation printing:
1) Finalization validation
2) Transaction validation
3) Item validation

Finalization validation is performed following finalization operations with finalize keys. When a validation is performed following receipt issuance, the sales total is printed, while partial tendering, the tendered amount for the specified medium is printed.

Transaction validation is valid for the following function keys:
– Received on account, Paid out, Pick up, Loan, Check cashing, Minus, Plus, Discount, Premium, Void keys

You can program the allowable number of validation printings or multiple validation printing status for the above listed keys.
Also these keys can be programmed as validation compulsory, this means that registration is not permitted until the validation of the former registration has been performed.

Item validation is performed directly following an item registration listed below.
– Departments
– Subdepartments
– PLUs

You can program the multiple validation printing status and validation compulsory status for above items.

2-1-7-3. Slip print control

Connection of an optional receipt/journal printer (SA-3015) or an optional slip printer (SP-1200) to the QT-2000 makes it possible to print transaction details on a slip.
To print a slip, insert a slip paper into the printer, and adjust paper position by pressing the <Slip feed/release> key (function code 056) or the <Slip back feed/release> key (function code 054) and then press the <Slip batch print> key (function code 055).
After printing a slip, the paper is automatically released.
If the paper is not released for some reasons, press <Slip feed/release> or <Slip back feed/release> to release the paper.

The followings are the programs to control slip printing format:

2-1-7-4. Endorsement message print control

The QT-2000 allows printing of endorsement messages on the slip printer (SA-3015 or SP-1200) for check, charge and credit registrations. To perform endorsement message printing, insert the paper into the slip printer following finalization using the <Check>, <Charge> or <Credit> key or check cashing transaction using the <Check> key, and press the following key:

– Endorsement key (function code 039)

The above tender keys and check cashing key can be programmed for compulsory endorsement print. The endorsement message contents should be programmed into the endorsement message file (file 033).

2-1-7-5. Check printing print control

The QT-2000 allows printing check tendered amount in letters and numbers on a check inserted into the slip printer. To perform check printing, insert the paper into the slip printer following check finalization using the <Check> key or check cashing transaction using the <Check> key, and press the following key:

– Check print key (function code 012)

Check key can be programmed for compulsory check print. The check printing format is controlled by the check print message file (file 041).

2-1-7-6. X/Z report print control

The QT-2000 can output a report in the read (X) or reset (Z) mode that contains the total data in each file. The following shows the programming for X/Z print controls:

Description	Programming location
Items on the fixed totalizer report	PGM3; Report Control1 in General Feature
Items zero skip	PGM3; Report Control2 in General Feature
Average spend/item on monthly report	PGM3; Report Control2 in General Feature
PLU order (memory/random code)	PGM3; Report Control2 in General Feature
Print/Non print PLU No. on PLU report	PGM3; Report Control2 in General Feature
Print/Non print Sales ratio	PGM3; Report Control2 in General Feature
Print/Non print Z counter	PGM3; Report Control2 in General Feature
Print/Non print Item discount totalizer	PGM3; Report Control2 in General Feature
Print GT	PGM3; Report Control2 in General Feature

Application System

2-2. General description of individual function keys

This section describes individual function key that can be assigned to the keys on the keyboard of QT-2000.

2-2-1. System keys

The system key consist on a non-programmable function key.
The following system keys are available.

1) Numeric keys (0, 1 ~ 9)

These keys are used for inputting numerical data such as PLU codes, amounts, quantities, etc. These keys must be allocated on the keyboard.

2) Clear key

This key is used for clearing numerical values after they have been input, and after incorrect function keys have been pressed. This key also can be used to clear errors. This key must be allocated on the keyboard.

3) Home position key

This key is used for returning cursor to the home position.

4) Left, right, up, down arrow keys

These keys are used for moving the cursor.

5) Yes key

This key is used for consenting the selection and proceeding steps.

6) No key

This key is used for cancelling the selection and proceeding steps.

7) Mode selection keys (REG MODE, X/Z MODE, PGM MODE)

REG MODE key; This key is used for selecting the REG, REF, REG– modes.
X/Z MODE key; This key is used for selecting the X/Z, MGR, In-line X/Z modes (collection/consolidation), Auto PGM (program upload/download), Infrared (Ir port communication).
PGM MODE key: This key is used for selecting modes the PGM1, PGM2, PGM3, PGM4, PGM5, PGM6, PGM7 modes.

8) ESC/SKIP key

This key is used for terminating a programming sequence, X/Z sequence, and return the primary status. This key is also used to terminate a report being issued in PGM, X, and Z mode.

9) Reverse display key

This key is used for changing the LCD as a blue line on white ground/white line on blue ground.

10) Page up key

This key is used for turning the window forwards.

11) Page down key

This key is used for turning the window backwards.

2-2-2.　Finalize keys

This section covers the general description of each finalize key, with its respective options. Finalize keys have programmable functions which may be used as required.

1)　Tender key

This key is used for finalizing transactions. Up to four media in drawer totalizers are reserved in the fixed totalizer file, and Cash key is linked to Cash in drawer, Charge key to Charge in drawer, Check key to Check in drawer and Credit key to Credit in drawer. When this key is pressed, the total amount of the transaction is calculated. Normally, a receipt is issued and the drawer opens at the same time. The total amount is added to the appropriate totalizers and counters, with consecutive numbers being incremented by one. When an amount exceeding the sales amount is received, the change is calculated, displayed and printed on the receipt.

This key can also be used in combination with other finalize keys for partial tender and can also be used to specify the type of media during loan, pick up or media change operation.

This key has the following programmable functions:
– Key location
– Function code (Cash = 001, Charge = 002, Credit = 003, Check = 004)
– Sixteen character descriptor
– High amount lock out (subtotal/tender)
– Change due to high amount lock out
– Maximum number of validation print
– Compulsory validation status
– Restriction (to 00, 25, 50, 75) on the last two digits for amount tendered (cash only)
– Compulsory batch slip printing
– Compulsory check endorsement (check only)
– Compulsory check print (check only)
– Prohibit entry of a partial payment
– Prohibit the entry of the amount tendered
– Amount tendered compulsory
– Print VAT breakdown
– Check cashing commission (Use an amount/Use a rate)
– Validation amount (Print subtotal amount/Print amount tendered)

2)　New balance key

This key is used for adding the latest registered total amount to the previous balance to obtain a new balance.

When this key is pressed, the total amount of the transaction is calculated. Normally, a receipt is issued. The total amount is added to the appropriate totalizers and counters, with consecutive numbers being incremented by one.

This key has the following programmable functions:
– Key location
– Function code (New balance = 006)
– Sixteen character descriptor
– Maximum number of validation print
– Compulsory validation status
– Compulsory batch slip printing
– Open cash drawer
– Print VAT breakdown
– Service charge (Use an amount/Use a rate)

Application System

2-2-3. Transaction keys

Each of the transaction keys have programmable functions which may be used as required. Programmable functions that are common to all transaction keys are listed below.
- Key location
- Sixteen character descriptor

The general description of each transaction key, with individual options, is outlined on the following pages.

1) Price inquiry key (Function code 008)

This key is used to confirm the price and descriptors of PLU without registering.

2) Stock inquiry key (Function code 009)

This key is used to confirm the stock quantity and descriptors of PLU without registering.

3) Text recall key (Function code 010)

This key is used to recall characters. In addition to the common programming, this key has the following options:
- Allow mode change after pressing this key as first transaction.
- Print/Non print this registration on post receipt/slip/guest receipt.
- Record No. designation of the Text recall file.
- Printing color on kitchen printer (black/red).
- Output order printer selection.

4) Text print key (Function code 011)

This key is used to recall characters. In addition to the common programming, this key has the following options:
- Allow mode change after pressing this key as first transaction.
- Print/Non print this registration on post receipt/slip/guest receipt.
- Record No. designation of the Text recall file.
- Printing color on kitchen printer (black/red)
- Output order printer selection.

5) Check print key (Function code 012)

This key is used to print the check on the slip printer (incl. SA-3015). Pressing this key allows the selection from the following list to print on a check.
1. Check amount in Arabic numerals (normal size/double size)
2. Date (normal size/double size)
3. Check print message

This item noted above can be arranged into a check print format according to the needs of the store. Check printing using this key is valid only for the following operation of the Check key. In addition to the common programming, this key has the following option:
- Number of back feed lines before check printing.

6) Clerk transfer key (Function code 013)

This key is used to transfer opened checks to another clerk.
In addition to the common programming, this key has the following option:
- Assigning clerk number (Use memory number/Use clerk secret number)

7) Table transfer key (Function code 014)

This key is used to transfer the contents of a check to another check.
In addition to the common programming, this key has the following options:
- Allow to add in checks while table transferring
- Transfer the customer number

8) Tip key (Function code 015)

This key is used to register tips. In addition to the common programming, this key has the following options:
– High digit lock out
– Multiple validation

9) Normal receipt key (Function code 016)

This key is used to change the order status from Bon to normal.

10) Loan key (Function code 019)

This key inputs the amount of money provided for making change. This operation affects media totals, rather than sales totals.

Loans are made for all types of money which can be specified by finalize keys. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

11) Received on account key (Function code 020)

This key is used to register amounts received for purposes other than sales transactions. This transaction affects media totals, rather than sales totals. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

12) Paid out key (Function code 021)

This key is used to register amounts of paid outs from the register. This transaction affects media totals, rather than sales totals. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

13) Pick up key (Function code 022)

When sales receipts are removed from the drawer or when the amount in-drawer exceeds the limit value (sentinel function), the manager performs a pick up operation. This key is used for this function. This operation affects media totals, rather than sales totals.

Pick ups are made for all types of money which can be specified by finalize keys. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

14) Coupon key (Function code 023)

This key is used for registering coupons. This operation affects the coupon amount in the coupon totalizers. The registered coupon amounts is not deducted from the department, PLU or gross totalizers, but from the net totalizers only. (GROSS specification)

In addition to the common programming, this key has the following options:
– Multiple validation
– Taxable status
– Allow credit balance
– Allow key operation after Subtotal
– Allow key operation after Item registration
– High digit lock out
– Commission status

15) Deposit key (Function code 025)

This key is used to register deposits. In addition to the common programming, this key has the following options:
– Key attribution (Deposit +/Deposit –)
– Maximum number of validation
– Compulsory validation
– Open cash drawer
– Media definition (Cash/Charge/Check/Credit)
– High amount lock out

16) Minus key (Function code 027)

This key is used to register subtraction. This operation affects the subtraction amount in the minus key totalizers. The registered amounts is not deducted from the department, PLU or gross totalizers, but from the net totalizers only. (GROSS specification)
In addition to the common programming, this key has the following options:
– Multiple validation
– Taxable status
– Allow credit balance
– Allow key operation after Subtotal
– Allow key operation after Item registration
– High digit lock out
– Commission status

17) Discount key (Function code 028)

This key applies a preset % or manual input % to obtain the discount amount for the last registered item or subtotal. In addition to the common programming, this key has the following options:
– Discount rate
– Multiple validation
– Taxable status
– Allow manual rate override
– Allow key operation after Subtotal
– Allow key operation after Item registration
– Result rounding (Round off/Cut off/Round up)
– Commission status

18) Plus key (Function code 029)

This key is used for registering surcharge. This operation affects the surcharge amount in the plus key totalizers. The registered amounts is not added to the department, PLU or gross totalizers, but from the net totalizers only. (GROSS specification)
In addition to the common programming, this key has the following options:
– Multiple validation
– Taxable status
– Allow key operation after Subtotal
– Allow key operation after Item registration
– High digit lock out
– Commission status

19) Premium key (Function code 030)

This key applies a preset % or manual input % to obtain the premium amount for the last registered item or subtotal. In addition to the common programming, this key has the following options:
– Premium rate
– Multiple validation
– Taxable status
– Allow manual rate override
– Allow key operation after Subtotal
– Allow key operation after Item registration
– Result rounding (Round off/Cut off/Round up)
– Commission status

20) Refund key (Function code 033)

This key declares next input for a return money.

21) Error correct/Void key (Function code 034)

This key is used to correct the last registered item, discount, premium, amount tendered, etc. This key also invalidates proceeding data registered for departments, PLUs or set menus only.

In addition to the common programming, this key has the following option:
– Select void reason

22) Coupon 2 key (Function code 036)

This key is used to register coupons. This operation affects the coupon amount in the coupon 2 totalizers. The registered coupon amounts is deducted from the department, PLU or gross totalizers and the net totalizers.

23) Validation key (Function code 037)

This key validates item or transaction amounts on slips. Validation can be made compulsory for certain function keys. Multiple validation can be prohibited for certain function keys.

24) Receipt key (Function code 038)

This key issues a receipt for the last transaction (post-finalization receipt) when the original receipt is not issued. This key also issues a guest receipt.

In addition to the common programming, this key has the following options:
– Maximum number of post receipts
– Post/Guest receipt format (Print out/Display)
– Print current time on guest receipt
– Reset the finalized check
– Line numbers of the guest bottom message

25) Check endorsement key (Function code 039)

This key is used to print a preset check endorsement message, charge endorsement message using the slip printer.

In addition to the common programming, this key has the following option:
– Line number of auto back feed before printing

26) Non add key (Function code 040)

This key prints reference numbers (personal check number, card number etc.) In addition to the common programming, this key has the following options:
– Allow mode change after non add registration as first transaction
– Order character record number
– Printing color on kitchen printer (black/red)
– Selection of order printer number (1 ~ 7)

27) Non add/No sale key (Function code 041)

This key prints reference numbers (personal check number, card number etc.)
This key also opens the drawer between transaction.
In addition to the common programming, this key has the following options:
– Allow mode change after non add registration as first transaction
– Order character record number
– Printing color on kitchen printer (black/red)
– Selection of order printer number (1 ~ 8)

28) No sale key (Function code 042)

This key opens the drawer between transaction.

29) Customer number key (Function code 043)

This key registers the number of customers.
In addition to the common programming, this key has the following option:
– Prohibit replacement/allow replacement/Add enter value

30) Arrangement key (Function code 044)

This key is used to activate an arrangement program programmed in the arrangement file. Any operation that can be performed from the keyboard, as well as mode, can be programmed in an arrangement program, and can be performed merely by pressing this key. In addition, one numeric entry can be included in an arrangement program. In this case, input the number and press this key.
The mode control function of this key can be programmed for all modes except for the OFF mode.

31) Currency exchange key (Function code 045)

This key converts foreign currency to local currency or vice versa using the exchange rate preset for the key and displays the result.
This key is used for conversions of a home currency subtotal or merchandise subtotal to equivalent of another country's currency.
This key is also used for conversion of another country's currency payment to the equivalent of the home currency.
This key is used for conversions of another country's currency to the equivalent of the home currency.
In addition to the common programming, this key has the following options:
– Amount symbol definition
– Foreign currency totalizer definition
– Result rounding (Round off/Cut off/Round up)
– Monetary mode
– Monetary symbols (Decimal, Separator)
– Drawer assignment (1, 2)

32) VAT key (Function code 046)

This key is used to print VAT breakdowns.

33) Bill copy key (Function code 047)

This key is used to issue bill copy.

34) PLU key (Function code 048)

This key is used to enter PLU numbers.

35) Price key (Function code 049)

This key is used in the following transactions to enter a unit price.
– Department registration using the Department number key
– Subdepartment registration using the Subdepartment number key
– Open PLU registration
In case of the department or subdepartment registration mentioned above, the Price key is pressed after entering the unit price to override a unit price preset to the department or subdepartment. If the preset price is to be registered as it is, simply press the Price key.

36) Department key (Function code 051)

This key is used to register items for a department.

In addition to the common programming, department key has the following options:

– Single item, Bon, taxable, commission, hash status
– Multiple validation
– Zero unit price, negative price
– H.A.L.O. (High amount lock out), L.D.L. (Low digit limitation)
– Link group

37) Slip back feed/Release key (Function code 054)

This key is used to back feed slips inserted into the slip printer. This is done by specifying the number of feed lines. This key is also used to release the slip paper holder if numbers are not entered.

38) Slip print key (Function code 055)

This key is used to execute a slip batch printing on the slip printer. Pressing this key prints the sales details. Actual printing is performed following receipt issuance.

In addition to the common programming, this key has the following options:

– Compulsory slip printing
– Print time. (effective under compulsory only)
– Clear finalized check.

39) Slip Feed/Release key (Function code 056)

This key is used to feed slips inserted into the slip printer. This is done by specifying the number of feed lines. This key is also used to release the slip paper holder if numbers are not entered.

40) Tax status shift key (Function code 057)

This key activates tax table which is specified by the tax status programmed for this key. The tax status is programmed for the Departments, Subdepartments, PLUs, Minus, Plus, Discount and Premium keys. Pressing this key during registration converts taxable item to non taxable, and non taxable item to taxable. In addition to the common programming, this key has the following option:

– Tax status

41) Table number key (Function code 058)

This key is used to input table numbers.

42) Tax exempt key (Function code 062)

This key is used to change taxable amounts to non-taxable amounts. This key works adding on a tax system only. In addition to the common programming, this key has the following option:

– Tax status

43) Flat PLU key (Function code 063)

This key is used to register items to Flat PLU.

In addition to the common programming, flat PLU key has the following options:

– Single item, Bon, taxable, commission, hash status
– Condiment/preparation status, double bon status
– Multiple validation
– Zero unit price, negative price
– L.D.L (Low digit limitation)
– Random code, Unit/Minimum stock
– Set menu/Order character/Pulldown group link
– Subdepartment link, department link, group link

44) Menu shift key (Function code 064)

This key is used to shift Flat PLU key to the n-th (n=1 ~ 8) menu.

In addition to the common programming, this key has the following option:

Menu sheet number to shift

45) Open key (Function code 067)

This key is used to release the maximum amount limit or low digit limit for an amount which exceeds the limit.

46) Open 2 key (Function code 068)

This key is used to suspend the compulsory specifications listed below.
In addition to the common programming, this key has the following options:
– Release customer number compulsory
– Release table number compulsory
– Release check number compulsory
– Release credit balance (ST < or = 0) error
– Release guest receipt compulsory
– Release validation compulsory
– Release check endorsement compulsory
– Release check print compulsory
– Release slip auto batch print compulsory
– Release slip manual batch print compulsory
– Release seat number compulsory

47) First unit price key (Function code 069)

This key is used to register a specific item at the first unit price.

48) Second unit price key (Function code 070)

This key is used to register a specific item at the second unit price.

49) Clerk number key (Function code 072)

This key is used to assign a clerk's secret number.
In addition to the common programming, this key has the following options:
– Target LCD number definition
– Clerk secret number (Clerk keys for all clerks)

50) Operator X/Z key (Function code 073)

This key is used to issue a clerk's individual X/Z report.
In addition to the common programming, this key has the following options:
– Issue stand-alone report/Issue consolidation report
– Display report/Print report

51) Subtotal key (Function code 075)

This key is used to obtain subtotal amount with add-on tax and previous balance.
In addition to the common programming, this key has the following options:
– Multiple validation
– Include add-on tax
– Print when key is pressed

52) Receipt On/Off key (Function code 076)

This key is used to change the status "Receipt issue" or "No receipt."

53) Taxable amount subtotal key (Function code 077)

This key is used to obtain taxable amount subtotal. In addition to the common programming, this key has the following option:
– Tax status

54) Operator number key (Function code 078)

This key is used to enter a clerk number during clerk transfer.

55) Merchandise subtotal key (Function code 080)

This key is used to obtain subtotal excluding the add-on tax amount and the previous balance. This function can be used to calculate a premium or discount for subtotals, or on the additional sales amount.

In addition to the common programming, this key has the following options:
– Multiple validation
– Print when key is pressed.

56) Multiplication key (Function code 082)

This key is used to enter quantities for multiplication. The maximum quantity that can be registered with this key is 4 integer and 3 decimals. An error occurs if the result exceeds 8 digits, including the minus sign.

The date and time can be displayed by pressing this key. The date and time are cleared by pressing the Clear key.

In addition to the common programming, this key has the following options:
– Rounding the result
– Entering order (quantity × @ or @ × quantity)

57) Quantity/For key (Function code 083)

(future) This key provides the same functions as the Multiplication key. In addition, this key also has a split pricing function. The function is used to calculate the price per unit for particular items, which are sold in bulk in order to obtain the total amount for the number of units purchased.

In addition to the common programming, this key has the following option:
– Rounding the result

58) Square key (Function code 084)

This key provides the same functions as the Multiplication key. In addition, this key also has a square multiplication function.

In addition to the common programming, this key has the following option:
– Rounding the result

59) Selective item subtotal key (Function code 085)

This key is used to obtain the selective item 1/2 of the subtotal amount. In addition to the common programming, this key has the following option:
– Selective item status 1/2

60) Cube key (Function code 090)

This key provides the same functions as the Multiplication key. In addition, this key also has a cube multiplication function.

In addition to the common programming, this key has the following option:
– Rounding the result

61) New check key (Function code 091)

This key is used in a check tracking system to input a new check number in order to open a new check under that number.

62) Old check key (Function code 092)

This key is used in a check tracking system to input the number of an existing check (previously created by the New check key) whose details are stored in the check tracking memory. Existing checks are reopened to perform further registration or to finalize them.

63) New/Old check key (Function code 093)

This key is used in a check tracking system to input check numbers in order to open new checks and to reopen existing checks. When the clerk inputs a check number, the register checks to see if that number already exists in the check tracking memory. If there is no matching number in the memory, a new check is opened under the input number. If the check number input matches a number already stored in the memory, that check is reopened for further registration or finalization.

64) Add check key (Function code 094)

> This key is used in a check tracking system to combine the details of more than one check into a single check.

65) Separate check key (Function code 095)

> This key is used in a check tracking system to separate selected items from one check to another check.

66) Clock-in/out key (Function code 108)

> This key is used to register the time when employees start/finish their job.

67) Break-in/out key (Function code 109)

> This key is used to register the starting/finishing time when employees have a recess.

69) Substitution key (Function code 111)

> Replaces group PLU with a PLU not preset in the set menu.

70) Ketten Bon key (Function code 113)

> This key is used to enter quantities for multiplication. Multiplication by this key issues singular order prints.
>
> In addition to the common programming, this key has the following options:
> – Result rounding
> – Entering order (quantity $\times$ @ or @ $\times$ quantity)

71) House Bon key (Function code 114)

> This key is used to register items for in-store use.
>
> In addition to the common programming, this key has the following option:
> – Status/stay down

72) Post Entry key (Function code 115)

> This key is used to indicate the reserved item of Set Menu and register it as a fixed item later on.
> – Enter Post Entry
>   Press this key while the window is opened, the key descriptor appears on the screen and it is registered as a reserved item.
> – Fix Post Entry
>   After finishing the Set Menu registration, move the cursor on to the reserved item, press this key again, then the appropriate window will be opened to fix it.

73) Round Repeat key (Function code 116)

> This key is used to register the same items which were ordered just before.

74) Open check key (Function code 117)

> This key is used to issue an open check report of an assigned clerk.
>
> In addition to the common programming, this key has the following option:
> – Print/Display open check

75) Media change key (Function code 118)

> This key is used to change media in drawer amounts. Pressing this key enters media change operation.

76) Seat number key (Function code 119)

> This key is used to enter and print seat number.

77) Display on/off key (Function code 120)

> This key is used to turn on/off the QT-2000 terminal.

78) Eat-in key (Function code 128)

> This key is used to specify if the customer eats in the restaurant. Before closing a transaction press this key.

79) Take-out key (Function code 129)

This key is used to specify if the customer takes out items. Before total a transaction. Press this key for the tax exemption.

80) Store key (Function code 130)

This key is used for storing the check number of the registered items. Program this key in the transaction at the drive-through entrance. When this key is pressed, registered item data will be stored, and then these data will transfer to the youngest check number.

81) Recall key (Function code 131)

This key is used for recalling the transferred check number by the store key. When you press this key, the check number will appear in order of the oldest record.

82) Subdepartment key (Function code 133)

This key is used to register items for the subdepartment.
In addition to the common programming, subdepartment key has the following options:
– Single item, taxable, commission, hash status
– Multiple validation
– Zero unit price, negative price
– H.A.L.O. (High amount lock out), L.D.L (Low digit limitation)
– Link department, link group

83) Subdepartment number key (Function code 134)

This key is used to enter subdepartment numbers.

84) Department number key (Function code 135)

This key is used to enter department numbers.

85) List key (Function code 136)

This key is used to display menu lists.
In addition to the common programming, this key has the following option:
– Record No. of the pull-down group

86) List number key (Function code 137)

This key is used to designate list number.

87) Journal memory display key (Function code 207)

This key is used to display journal on the second display.
It is necessary to install the second LCD and assign this display to use as journal memory.

88) Display mode key (Function code 219)

This key is used to change display modes (normal mode/item consolidation mode).

89) Cancel key (Function code 236)

Invalidates all preceding data registered for departments, PLUs and set menus within a transaction. This key must be pressed before the transaction involving the data to be invalidated is finalized. It is also effective even after calculation of subtotal amount.

Application System

2-3. Kitchen printer control

This system requires a kitchen printer control master (and backup master) for kitchen printer control. Up to four printers for printing kitchen orders.

2-3-1. Kitchen printer system configuration

Up to 4 kitchen printers

Up to 4 QT-2000 terminals
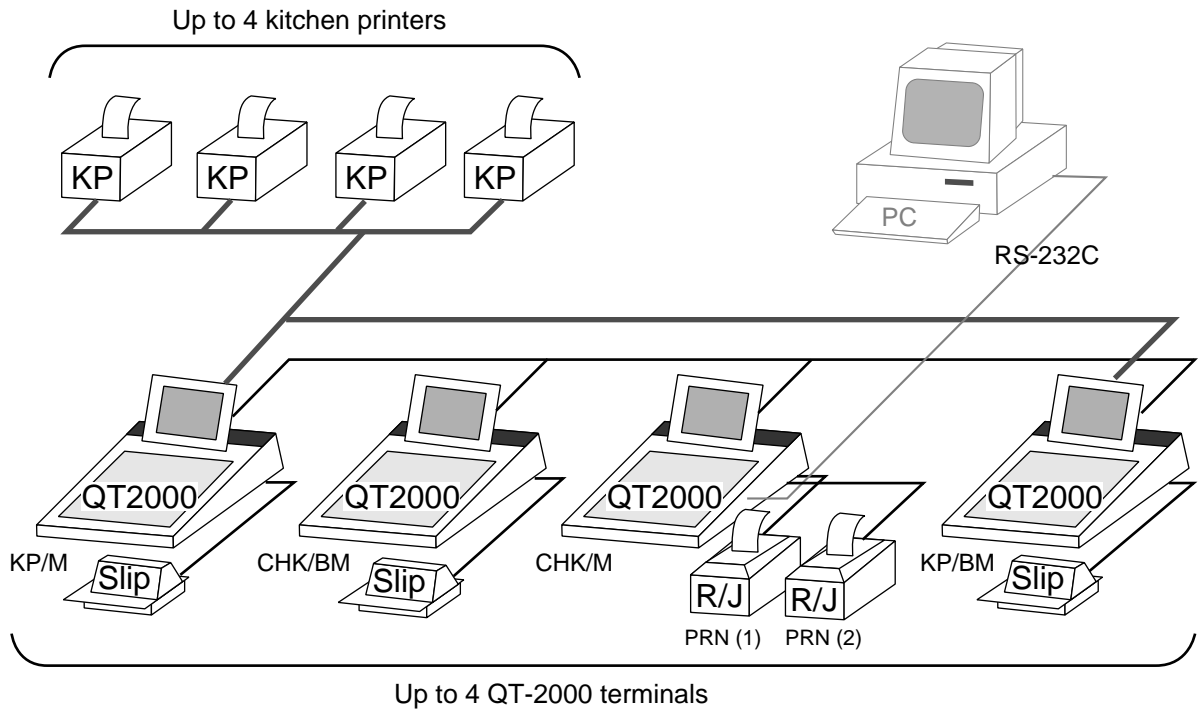
Please refer to page 18 for the system configuration.
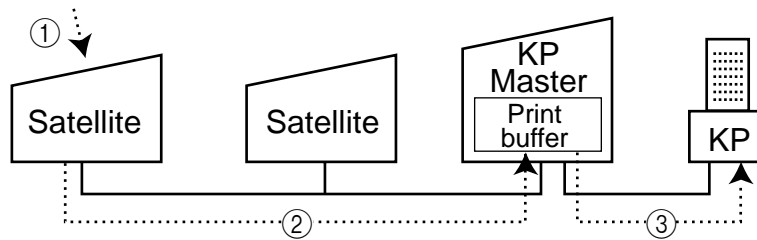
The printing processing of the kitchen printer is performed as shown in the figure above.

① A transaction is made at a terminal (satellite/master).

② The terminal sends printing data to the kitchen printer master.

③ The kitchen printer master sends data to the appropriate kitchen printer.

2-3-2. Kitchen printer control setting

Kitchen printer settings:

As with the former version, the kitchen printer machine number and baud rate must be specified using the DIP switches on each printer. After changing the DIP switch configuration, kitchen printer initialization (power on by pressing the "LF" key) is necessary.

KP-200 Bottom view

SW No.	Function	Factory setting
1	Machine number	OFF
2		OFF
3		OFF
4		OFF
5	Baud rate	ON
6		ON
7		OFF
8		OFF

Machine number setting

Kitchen printer machine number	DIP SW No.			
	1	2	3	4
1	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF
3	OFF	ON	OFF	OFF
4	ON	ON	OFF	OFF

Baud rate setting

Baud rate	DIP SW No.				
	5	6	7	8	
600	OFF	OFF	OFF	OFF	not used
1200	ON	OFF	OFF	OFF	
2400	OFF	ON	OFF	OFF	
4800	ON	ON	OFF	OFF	
9600	OFF	OFF	ON	OFF	not used

KP-300 Bottom view

SW No.	Function	Factory setting
1	Machine number	OFF
2		OFF
3		OFF
4		OFF
5	Baud rate	ON
6		ON
7		OFF
8		OFF

Machine number setting

Kitchen printer machine number	DIP SW No.			
	1	2	3	4
1	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF
3	OFF	ON	OFF	OFF
4	ON	ON	OFF	OFF

Baud rate setting

Baud rate	DIP SW No.				
	5	6	7	8	
600	OFF	OFF	OFF	OFF	not used
1200	ON	OFF	OFF	OFF	
2400	OFF	ON	OFF	OFF	
4800	ON	ON	OFF	OFF	
9600	OFF	OFF	ON	OFF	not used

Memory allocation of files required when kitchen printers are connected

- Registration buffer (file 036)
- Printer buffer (file 035)

The area reserved for the kitchen printer detail buffer should be equal to at least the maximum number of lines in a single transaction plus 100 (for backup).

Other new setting

- General machine features

2-3-3. Kitchen printer output control

The following print items are controlled by programming.
- 0 to 9 line feed above and below printing
- Dashed line print control
- Kitchen printer auto cut control (KP-300 only)
- Paper near end printing control
- Data communication speed
- Backup kitchen printer specification
- Print color (black/red) control
- Output kitchen printer number
- Kitchen printer output in training mode
- Item amount printing
- Alert when KP is down

2-3-4. Kitchen printer backup processes

Kitchen printer error or kitchen printer master error

Kitchen printer error:
The master terminal detects the kitchen printer abnormality and simultaneously alerts all of the QT-2000 terminals in the system.
When the backup kitchen printer is assigned, the kitchen printer cross backup (see the next section) is made. In case of no backup kitchen printer is assigned or the backup printer is also downed, the data will be able to display on the terminal LCD.

Kitchen printer master error:
When the satellite terminal detects the kitchen printer master terminal abnormality, you can choose the options "Retry communication or Remove the master." on the satellite display. If you select "Remove", the satellite terminal sends the master down flag to all of the QT-2000 terminals in the system.
After this operation, the backup master terminal controls kitchen printer(s).

Kitchen printer cross backup

When there is more than one kitchen printer in the system, a setting can be made on the master to enable kitchen printer cross backup.
Cross backup (example):

Kitchen Printer 1 backup → Kitchen Printer 2
Kitchen Printer 2 backup → Kitchen Printer 3

Note that kitchen printer backup extends a single level only. If kitchen printer 1 goes down in the above example, kitchen printer 2 performs backup printing. If kitchen printer 2 now goes down, kitchen printer 3 does not take over backup printing. Backup printing can, however, be performed manually.

Kitchen printer print sample

1) Order printing (Normal receipt printing with amount)

```
        *Soft Drinks*            ── Order character
Check No.123456        Machine #1  ── Check number/Machine ID
REG C01        15-12-97 12:34   001234  ── Mode/Clerk/Date/Time/Consecutive No.

   1   Lemon Tea            •1.00      ── Order with amount
   2   Coffee               •2.00

----------------------------------------  ── Cut or print dot line
```

2) Order printing (Single bon/double bon)

```
        *Soft Drinks*            ── Single Bon
Check No.123456        Machine #1
REG C01        15-12-97 12:34   001234

   1 Lemon Tea

----------------------------------------  ── Cut or print dot line

        *Soft Drinks*            ── Double Bon
Check No.123456        Machine #1
REG C01        15-12-97 12:34   001234

   2 Coffee

----------------------------------------

        *STUB*                   ── Double bon message
        *Soft Drinks*            ── Order character
Check No.123456        Machine #1  ── Check number/Machine ID
REG C01        15-12-97 12:34   001234  ── Mode/Clerk/Date/Time/Consecutive No.

   2 Coffee

----------------------------------------
```

3)   Order printing (Normal receipt printing without amount)

```
        *Soft Drinks*        ─── Single Bon
Check No.123456       Machine #1
REG C01         15-12-97 12:34   001234

   1  Lemon Tea
   2  Coffee
   2  Coffee
----------------------------------------
```

4)   Order printing (Set menu/preparation/condiment)

```
Check No.123456          Machine #1
REG C01          15-12-97 12:34   001234

   2  Steak Set          ─── Set menu
       Medium            ─── Detail item (without quantity)
       Salad

   2  Steak Set          ─── Set menu
   1   Medium            ─── Detail item (with quantity)
   1   Salad

   1  Pizza              ─── Main item
       Soft              ─── Preparation (without quantity)
       Cheese            ─── Condiment (without quantity)
       Tomato

   1  Pizza              ─── Main item
      #123456            ─── Main item PLU No.
   1   Soft              ─── Preparation (with quantity/PLU No.)
       #00001
   1   Cheese            ─── Condiment (with quantity/PLU No.)
       #00002
   1   Tomato
       #00003
```

2-4. Check tracking system

2-4-1. Shared check tracking system

With this shared check tracking system, there is no PC for the master terminal, but a master and a backup master terminal act shared check tracking master/backup master. Up to 4 terminals can be included in the system and check tracking can be performed for multiple terminals connected to in-line. This means that any terminal can be used to recall a temporary closed check for additional registration or finalization.

System configuration

Up to 4 kitchen printers

Up to 4 QT-2000 terminals
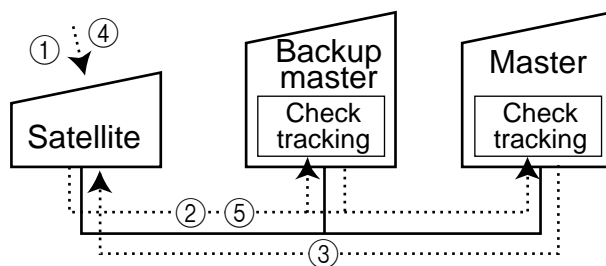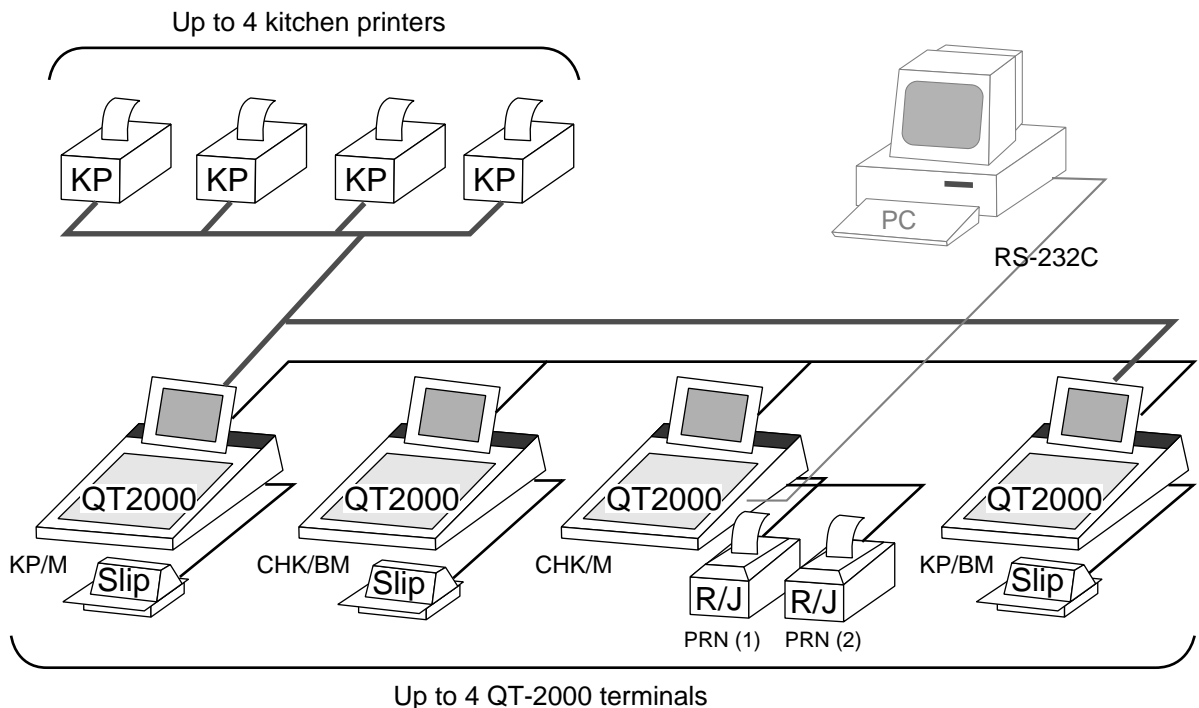
Shared check tracking processing is performed as shown in the figure shown above.

① A shared check operation (such as "new check" or "old check" etc.) is made at a terminal.

② The terminal sends the check number to the check tracking master and a backup master.

③ The master and backup master sends back the check data (if the check number exists) or opens a new check number.

④ A shared check transaction is finalized (by "new balance" or other finalize key).

⑤ The terminal sends the check data to the master and the backup master. And the master/ backup master clears the busy status of the check number.

2-4-2.   Shared check tracking requirement

The following programming are required in each terminal before you can perform shared check tracking.

- Check tracking index file (file 015)
  A minimum one record for satellite, records of number of open checks for master must be reserved.
- Check tracking detail file (file 060)
  The number of records reserved for satellite should be the minimum number of items/ functions registered +1 for each check. The number of records reserved for master should be to multiply the number of open checks by the number of item/functions per check +1.
  The best way to calculate the number of records required for each check for stand-alone is to multiply the number of open checks by the number of items/functions per check +1 when the master goes down.

Warning for memory near end and memory end error
See the page 234 of this manual (A-5. Error messages).

2-4-3.   Data backup when the master goes down

When the system has the backup master for the check tracking system, registered check tracking data are stored both master and backup master automatically.
As soon as the system detects master down, the backup master roles as master for the check tracking system.
(It is necessary to switch to backup master manually. See the "System down & Recovery" chapter on page 14 of QT-2000 Installation & Down Recovery manual.)

When the system has no backup master for the check tracking system or both master and backup master become down, no more check tracking operation and clerk interrupt operation can be made.

2-5. Other check tracking system control

2-5-1. The timing to clear check detail and index file after finalization

There are two timings to clear detail and index files.

1. The check is cleared after printing finalized data on slip or guest check receipt, or the check is also cleared when the new or old check operation is made on the terminal finalized the transaction.
2. The check is cleared after printing finalized data on slip or guest check receipt, or check is also cleared when the same finalized check number is assigned in new check operation.

This option is set on the page 52 of the programming manual.

2-5-2. Table transfer

This function is used for transferring the contents of a check to another check.
There are two cases depends on the status of the transferring check.

1. If the transfer check is not used.
   The entered check number is overwritten.
2. The check number is already used.
   Add the contents to the existing contents.

This option is set on the page 118 of the programming manual.

2-5-3. Store and Recall

These functions are used for the driving through purchase.

2-5-3-1 Store

This function is used for storing the CHK No. of the registered items. The Detail/Index at the drive-through entrance record the registered items and store it's CHK No., and then print out the temporary receipt. A customer recieve this temporary receipt, and drive up to the exit with this to receive the ordered item. The stored data transfer to the Check Tracking Master/Backup Master.

2-5-3-1 Recall

This function is used for recalling the transferred CHK No. to total the sum. The totalizer at the drive-through exit recall transferring CHK No. in order of the oldest record. A customer can recieve the ordered items, and pay for them.

Application System

Store
Entrance for order <A>

Recall
Exit for payment <B>

QT2000-1

Temporary receipt

R/J R/J
PRN (1) PRN (2)

QT2000-32

R/J R/J
PRN (1) PRN (2)

Press the <Store> key →

CHK No.100
Hamburger
French Fries
Hot Coffee

CHK No.101
Cheese Burger
Orange Juice

Press the <Store> key →

Press the <Recall> key →

CHK No.100
Hamburger
French Fries
Hot Coffee

Press the <Recall> key →

CHK No.101
Cheese Burger
Orange Juice
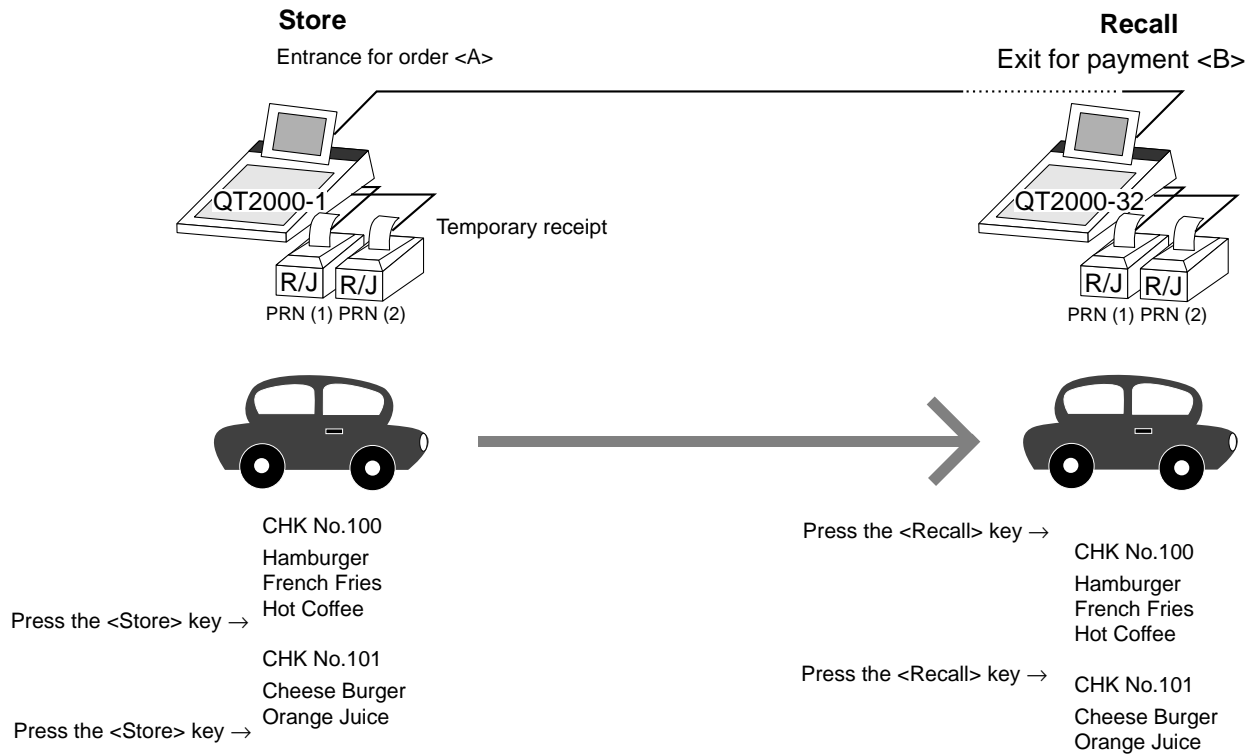
1. Press the <STORE> key <A> to sub-total the registered items. The CHK No. of these CHK No. transfer to the Check Tracking Master/Backup Master.

2. Press the <RECALL> key to recall.

Important

- A six-digit CHK number should be start from "99".
- When OPEN CHK Z (ALL) report is printed out, the CHK No. range will be reset. After this operation, the next CHK No. by using Store function will be the range start.
- This function works with the option "Clearing CHK/TBL No. by using the same number again" only. (Refer to page 52 of Programming Manual)

2-6. Clerk control function

2-6-1. Clerk interrupt

The register can be programmed to allow the clerk interrupt function, which makes it possible for multiple clerk to simultaneously use the same register. If a clerk starts registration of a transaction, another can be interrupt the original registration and begin a new one. The original clerk can later resume the interrupted original registration.

Clerk 1 | Clerk 2 | Clerk 3

Registration

Sign on clerk 2 (clerk 1 registration put on hold)

Registration

Sign on clerk 3 (clerk 2 registration put on hold)

Registration

Sign on clerk 1, clerk 1 is printed on the receipt/journal.
Displays subtotal amount without add-on tax for clerk 1.

Registration
Finalization

Sign on clerk 2, clerk 2 is printed on the receipt/journal.
Displays subtotal amount without add-on tax for clerk 2.

Registration
Finalization

Sign on clerk 3, clerk 3 is printed on the receipt/journal.
Displays subtotal amount without add-on tax for clerk 3.

Registration
Finalization

Sign on clerk 1

Guest
receipt issuance

Sign on clerk 2

Guest
receipt issuance

Sign on clerk 3

Guest
receipt issuance

Notes

1) Error correct operation

   The error correct operation cannot be performed for registrations made before a clerk change. The error correct operation should be performed before clerk change.

2) Validation print operation

   The validation print operation can be performed following clerk change.

3) Guest receipt

   A guest receipt can be issued following clerk change, and receipts can be issued separately for each clerk.

4) Cancel operation

   The cancel operation can be performed not the all receipt but only the same transaction.

5) Mode

   While any clerk's registration is on hold, the mode cannot be changed.

2-6-2. Clerk detail memory

The register can total any daily total memory (such as fixed totalizer, department PLU, etc.) clerk by clerk.

After initialization, clerks have 10 detail memories which are assigned to gross, net, and 4 media in drawers. If you want to set more detail memories to clerks, allocate clerk detail memory and detail link memory at the same time.

Clerk detail memory: File 011/111/211/311/411/511/611
Clerk detail link: File 030

2-6-3. Clerk training

Clerk training can be performed when employing new clerks or retraining clerks.
Training is normally performed during working hours, and the QT-2000 has the following training functions.

1) It is not necessary to remove one terminal from the system for training purpose during working hours.
2) Programming options, etc., are controlled exactly the same way as a working clerk.
3) Receipts are different from those normally used. The "TRAINING" message is printed at the top and bottom of the receipt. And the training receipts are filled with training filler ("*" default.)
4) Only the REG/RF/REG– mode can be used for training.
5) The totalizers and counters that are updated in the training mode are just the clerk memory which is programmed to training clerk. (programmable option)
   Stock counter is updated in the training mode. (programmable option).
   Other totalizer and counters are not updated.

2-6-4. Manager mode control

There is no REG 2 mode on the QT-2000, but you can control some functions (you want) under manager control.

Preparation for this function:

1) Set "NO" to any functions you want to disable for CLERKS in the Allowed function 1 ~ 4 list in the clerk programming. (See page 83 ~ 86 of the programming manual.)
2) Set the type of operator to "Manager" for the manager. (See page 78 of the programming manual.)

Operation for this function:

```
REG  C01      15-12-97 12:34     000001
   1  PLU0001              •10.00
   1  PLU0002              •20.00
   1  PLU0003              •30.00
     ┌─────────────────────────┐
     │      Operator Error      │
     └─────────────────────────┘




 PLU0003              •30.00
          3    ST  •60.00
```

1. When the transaction is prohibited, the register displays error message and the clerk calls the manager.

```
REG  C01      15-12-97 12:34    000001
  1  PLU0001              •10.00
  1  PLU0002              •20.00
  1  PLU0003              •30.00




                          - - - -
            3   ST •60.00
```

2. The manager enters "2" and press the <REG mode> key.

```
REG  C01      15-12-97 12:34    000001
  1  PLU0001              •10.00
  1  PLU0002              •20.00
  1  PLU0003              •30.00
       REG2  Mode



                           0.00
            3   ST •60.00
```

3. The manager enters his/her secret code and press the <YES> key. After this operation, the prohibited transaction can be registered.

```
REG  C01      15-12-97 12:34    000001
  1  PLU0001              •10.00
  1  PLU0002              •20.00



PLU0003             -30.00
            2   ST •30.00
```

4. Perform manager operation (in this example; void operation).

```
REG  C01      15-12-97 12:34    000001
  1  PLU0001              •10.00
  1  PLU0002              •20.00
       REG  Mode



                           0.00
            2   ST •30.00
```

5. Pressing the <REG mode> key is required, when the manager returns his/her office.

2-7. Arrangement key function and scheduler

The arrangement key function provides a macro command function for the QT-2000 system. Any operation that can be performed using the keyboard of the QT-2000 can be programmed to the arrangement file (file 038 ~ 438). Any operation programmed to the arrangement file can be performed by pressing the arrangement key (function code 044). Multi operations can be programmed into one arrangement program, and also entry of a numeric parameter can be included anywhere in the arrangement program.

For example, when an arrangement program is programmed for executing fixed totalizer Z consolidation for all terminal and the program is linked to an arrangement key, that operation can be executed simply by pressing the arrangement key.

The scheduler function is provided for scheduled execution of arrangement key operation. Execution of every specified time, as well as scheduled execution, can be performed using this function.

The scheduler file (file 062) must be reserved to use the scheduler function.

2-7-1. Arrangement key function

The arrangement file and arrangement keys must be reserved for the QT-2000 to use the arrangement key function.

The arrangement file is used to store the arrangement programs. An arrangement file record is 24 bytes long, and a maximum of 999 records can be reserved. Arrangement programs are programmed using character data, and multiple arrangement programs can be programmed in the arrangement file.

Multiple arrangement keys can be preset on the keyboard, and each key can be linked to an arrangement program. The linked arrangement program is then called and executed by pressing the arrangement key.

The following table shows the command parameters of the arrangement key function that can be interpreted and executed by the QT-2000.

Command parameters can only be separated by spaces.

Note that spaces cannot be included within the command parameter.

Details of command parameters and their functions are explained next.

1) Number input

There are two methods to enter a number in an arrangement program.

– Constant number input
  Preset a fixed number (constant value) enclosed in parentheses in the arrangement program.
  Example: To enter "1234" → preset **(1234)**

– Input of a single number when the arrangement program is executed
  A single number can be entered using the arrangement key. The number entered can be used at any position and any time in the arrangement program.
  Generally, an input number is temporarily stored in the work area (number entry buffer) reserved for data processing, and is cleared after the processing is performed. With the arrangement key function, a parameter save buffer is provided for saving the contents of the number entry buffer. When a "**%GET**" command is encountered in an arrangement program during processing, the data in the number entry buffer is saved to the parameter save buffer. Set "**%PUT**" command to use the data saved in the parameter buffer. The "**%PUT**" command can be used to load the data saved in the parameter save buffer into the numeric entry buffer. These commands may be included as often as necessary. The data in the parameter save buffer is changed only when a "**%GET**" command is processed.

Note:
- Set a "**%GET**" command, first, to use the number entered by the arrangement key later.
- When the "**%GET**" is programmed following constant number input, the constant number is saved to the parameter save buffer.
- Numbers input using a "**%PUT**" command or by "(**[number]**)" are entered to the number entry buffer in the same way as numbers input using the 10-key pad.

2) Key function specification

Any function key can be specified for an arrangement key function. :
[function code]:[record number] →   Used for ordinary function keys
The numbers can be specified for zero suppression.

Note:
The arrangement key itself, cannot be programmed for in an arrangement program.

3) Mode setting

Any mode key can be specified for an arrangement key function. :
[function code]:[mode definition]→   Used for mode keys

Note:
121:01	: REG mode
121:02	: RF mode
121:03	: REG– mode
122:01	: X/Z mode:
122:02	: MGR mode:
122:03	: Collection/Consolidation mode:
122:04	: Auto-program mode:
122:05	: Ir mode:
123:01	: PGM1 mode:
123:02	: PGM2 mode:
123:03	: PGM3 mode:
123:04	: PGM4 mode:
123:05	: PGM5 mode:
123:06	: PGM6 mode:
123:07	: PGM7 mode:

4) Display control

There are eight commands for controlling the display:

DON1	: Switch the main LCD on.
DOFF1	: Switch the main LCD off.
DON2	: Switch the second LCD on.
DOFF2	: Switch the second LCD off.
ON1	: Update the main LCD.
OFF1	: Not update the main LCD.
ON2	: Update the second LCD.
OFF2	: Not update the second LCD.

5) R/J print control

There are two commands for controlling the R/J printer:

PON : Power the R/J switch on.
POFF : Power the R/J switch off.

6) Controlling the flow of arrangement command execution

There are five commands for controlling the flow of arrangement command execution:

:Snnnn : This is a start mark of an arrangement. "nnnn" (4-digits code) are used for arrangement table number set to each arrangement key.

:[label] : Preset the label (name of specific position) to specify the jump destination point in the arrangement file. The actual data for labels can be freely designated.
Example: To specify "LABEL-1" as label → :LABEL-1

G:[label] : This is an absolute jump command. If the system encounters this command, command execution flow unconditionally jumps and continues from the point preset by the label.

I > ([number]):[label] : This is a conditional jump command. If the system encounters this commands, the value in the number entry buffer compared with the specific number. If the value in the buffer is larger than the specified number, the command execution flow jumps and continues from the point preset by the label. If a condition is not match with the above-mentioned condition, the step advances to the next command.

I < ([number]):[label] : This is a conditional jump command. If the value in the number entry buffer is less than the specified number, the command execution flow jumps to the point preset by the label. If a condition is not match with the above-mentioned condition, the step advances to the next command.

I – ([number]):[label] : This is a conditional jump command. If the system encounters this command, the value in the numeric entry buffer is compared with the specific number. If the value in the buffer is equal to the specific number, the command execution flow jumps and continues from the point preset by the label. If a condition is not match with the above-mentioned condition, the step advances the next command.

KNO1 : This is a command to enter the <#-1> key.

KNO2 : This is a command to enter the <#-2> key.

NE : This is a command to wait for numeric entry. After entering numerics, press the <Arrangement> key to continue the arrangement program.

B:nn : This is a command to sound buzzer for nn (nn = 01 ~ 99) seconds.

| **?** | : Force to execute the arrangement even if an error occurred during the arrangement. |

BKPGM	: Backup program data to Flash memory.
BKXZ	: Backup X/Z data to Flash memory.
BKALL	: Backup all data to Flash memory.

| **JCL** | : Clear J-memo older half data |
| **JCLA** | : Clear all J-memo data |

| **CLPn** | : Set the default @ menu sheet number to "n" (n = 0 ~ 2) and "stay down @ menu sheet assignment" of all clerk. |
| **CLMn** | : Set the default menu sheet number to "n" (n = 0 ~ 8) and "stay down menu sheet assignment" of all clerk. |

211:	: Press the "ESC" key.
212:	: Press the "Yes" key.
213:	: Press the "No" key.

7) End of the arrangement programs

The end command "**E**" must be included at the end (exit) point of an arrangement program.

2-7-2. Arrangement program example

This section shows examples of arrangement programs.
The following example shows an arrangement program that executes X consolidation of the file set in the batch 1 ~ 9 files for all terminals.

Example:

Programming the following operation for the arrangement table 12
– Set the mode to In-line X/Z.
– Enter operation code "1111100000000".
– Wait for the numeric entries (batch number).
– Enter the <#-2> key.
– Enter the <ESC> key.

:S0012	;Designate the table number (mandatory)
122:03	;Set the mode to In-line X/Z.
NE	;Wait for the batch number
I<(0):ERR1	;If the input number is less than 1, the process jumps to the ERR1.
I>(9):ERR1	;If the input number is larger than 10, the process jumps to the ERR1.
%GET	;Save the entered number to the parameter save area.
202:0031	;Press "Clear" button.
(1111100000000)	;Input the operation code for system command
%PUT	;Pick up the entered number from the parameter save area.
KNO2	;Specify the <#-2> key for entering the operation code.
211:0045	;Specify the <ESC> key to execute this operation.
:ERR1	;When the input number is not 1 to 9, the following commands are processed.
E	;End the program (mandatory).

2-7-3. Scheduled execution of arrangement key function

An arrangement key function can be executed on a scheduled basis. In order to execute an arrangement key function on a scheduled basis, it is necessary to make appropriate settings in the scheduler file (file 062).

There are two functions for execution on a scheduled basis:

1) Execute an arrangement key function at the specified time every other day.
2) Interval execution of an arrangement key function by setting start time, ending time, and the interval.

2-8. Making graphic logo

A graphic logo can be printed on UP-350 receipt. This graphic logo is stored in the grapic logo file (file 047), and printed at the top of the receipt instead of a normal logo message. This graphic logo data cannot be made by the terminal program, it can be made only by PC and downloaded from PC.

2-8-1. About graphic logo

Graphic logo size: 432×104 dots
Printing sample:

```
      *********************************
      *      CASIO QT-2000 TERMINAL      *
      *          GRAPHIC LOGO AREA       *
      *********************************

      ******COMMERCIAL MESSAGE LINE 1*********
      ******COMMERCIAL MESSAGE LINE 2*********
      ******COMMERCIAL MESSAGE LINE 3*********
      ******COMMERCIAL MESSAGE LINE 4*********
```

2-8-2. Making graphic logo procedure

Before following this procedure please allocate "Graphic logo" file (file 047) on the terminal.

1. Making a bit-map image file (432×104 pixel; 1-bit color).
2. Convert this bit-map file to the internal file by executing "T85conv.exe."
3. Send the converted data from the PC to the terminal via in/on-line.
4. Select "Print Graphic" option in the message control of the general feature in the PGM 3 mode.
5. Turn off and on the terminal by the <ON/OFF> button.

Note: After recovering power failure, flag clear and INIT2, re-send the graphic logo file to the printer. Otherwise the graphic logo is not printed on the receipt.

2-9. Hourly Item

This function enables to memorize the detailed data of quantity, amount and price of each item dealt hourly.

It is possible to calculate the proceeds and record the hourly item in any totalizer, and also it is possible to print out as an Hourly Item report.

2-9-1. Programming necessary files before using hourly item function.

Hourly Item function requires the following files to function properly, so they must be programmed before using it. See the programming manual for the details on format of individual files.

– Time Zone file

This file is used to specify the time zone for the detail items individualy. You can enter the starting time and the ending time of the time zone, moreover specify the cycle time that indicates an unit of the appropriate intervals.

– Hourly Item Link file

This file is used to record the Hourly Item which links with the appropriate time zone. You can also specify the particular totalizer for each time zone.

– Hourly Item

This file is used to store the contents of the quantity, amount, and price of each item. Specify a particular totalizer for each Hourly Item Link file. The following seven files enable to link the data for Hourly Item Link file: Fixed totalizer, Function, Sub-Department, PLUDepartment, Pull Down Group, Table analysis.

Hourly Item Report Example

```
08:00→09:00

Hamburger              3          $2.00
French Fries           3          $1.50
----------------------------------------
09:00→10:00

Cheese Burger          2          $3.00
Hot Coffee             2          $0.50
----------------------------------------
                       •
                       •
                       •
11:00→12:00

Apple Pie              1          $1.00
Hot Milk               1          $1.00
----------------------------------------
 13:00→13:15
                       •
                       •
                       •
 13:15→13:30
```

Time Zone File

Start Time	End Time	Cycle
08:00	12:00	01:00
13:00	14:00	00:15
•	•	•
•	•	•

Zone

Hourly Item Link

REC No.	File No.
0001	004
0011	001
•	•
•	•
•	•
•	•
•	•

20 files

0005	012
0008	030
•	•
•	•
•	•
•	•

20 files

A maximum of 20 records corresponds to each Time Zone.

2-10. Time and Attendance

This function allows shop owners to control his/her employees' working condition. Time & Attendance require the following files.

– Employee file

This file is used to regulate the labor conditions.
You can program the type of job, the maximum work of hours in a week / in a day per employee.

– Job Code file

This file is used to classify the types of job. You can program the general work pay and the over-time pay ratio per job file.

– Schedule file

This file is used to administrate the employees' schedule. You can assign a Starting and an Ending time, break minutes allowed, and the default job code for the shift. (If the default code for the shift selection is not made, the system reverts back to the default job code in the employee file) and the grace period. It is possible to record maximum 21 shifts (3 shifts / day × 7 days) per employee for the Schedule file.

GRACE PERIOD-this is a period of time in minutes which allows an employee to clock-in/out before their scheduled times. Grace period works in conjunction with the schedule. If the scheduler is not being utilized then the Grace period inputs indicated below become inactive.

Grace period before Start Time- this input indicates how many minutes an employee may clock-in before the scheduled clock-in time programmed in Time & Attendance mode (See "4-1-15 Programming Time & Attendance" for programming manual.)

Grace period after Start Time- this input indicates how many minutes an employee may clock-in after the scheduled clock-in time programmed in Time & Attendance mode.

Grace period after End Time- this input indicates how many minutes an employee may clock-out after the scheduled clock-out time programmed in Time & Attendance mode.

Grace period before End Time- this input indicates how many minutes an employee may clock-out before the scheduled clock-out time programmed in Time & Attendance mode.

		Job Code	Start Time	End Time	Break Time	Grace Before Start	Grace After Start	Grace Before End	Grace After End
First day	Shift	1	9:00	12:00	00:15	10	10	5	15
	Shift	5	9:00	12:00	00:15	10	10	5	15
	Shift	2	9:00	12:00	00:15	10	10	5	15
Second day	Shift	3	9:00	12:00	00:15	10	10	5	15
	Shift	2	9:00	12:00	00:15	10	10	5	15
	Shift	4	9:00	12:00	00:15	10	10	5	15
Seventh day		•	•	•	•	•	•	•	•

Each employee can have 3 shifts per day. The schedule file can hold 7 days schedule. So, totally 21 files can be registered in this file.

Application System

– Work Time file

> This file is used to administrate each employees' weekly hourly wages, work hours, and proceeds. If some employees have a common job, divide the job code individually in case their pay ratio is different.

– Time Zone file

> This file is used to administrate the cycle time. You can specify the length of time zone.

2-10-1. Corresponding relations of the file

Employees' job assign

> This function is used to assign a job to each employee. Before assigning the job, be sure to program the details of the jobs. Every employee file can link to some job code files (maximum 3 jobs shift per day), so some employees may link to the same job code file. But be sure to make individual job files if the emplyees work under different hourly wages.
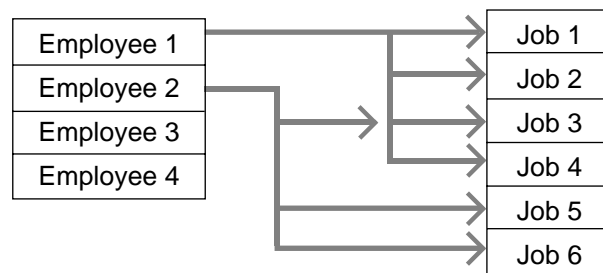
Employee's Schedule and total business results per week

Employee 1	Monday	Shift 1
Employee 1	Monday	Shift 2
Employee 1	Monday	Shift 3
Employee 1	Tuesday	Shift 1
.		
.		
Employee 1	Sunday	Shift 3
Employee 2	Monday	Shift 1
Employee 2	Monday	Shift 2
Employee 3	Monday	Shift 3
.		
.		

Employee 1
Employee 2
Employee 3
Employee 4

Employee 1	First week	Monday	Shift 1
Employee 1	First week	Monday	Shift 2
Employee 1	First week	Monday	Shift 3
Employee 1	First week	Tuesday	Shift 1
	.		
	.		
Employee 1	First week	Monday	Shift 3
Employee 1	Second week	Monday	Shift 1
Employee 1	Second week	Monday	Shift 2
Employee 1	Second week	Monday	Shift 3
	.		
	.		
Employee 1	Second week	Sunday	Shift 3
Employee 2	First week	Monday	Shift 1
Employee 2	First week	Monday	Shift 2
Employee 2	First week	Monday	Shift 3
Employee 2	First week	Tuesday	Shift 1
	.		
	.		
Employee 2	First week	Monday	Shift 3
Employee 2	Second week	Monday	Shift 1
Employee 2	Second week	Monday	Shift 2
Employee 2	Second week	Monday	Shift 3

Calculating the total wages of the employees per hour

Zone 1 Cycle 1	→	Totalizer 1
Zone 1 Cycle 2	→	Totalizer 2
Zone 1 Cycle 3	→	Totalizer 3
Zone 2 Cycle 1	→	Totalizer 4
Zone 2 Cycle 2	→	Totalizer 5
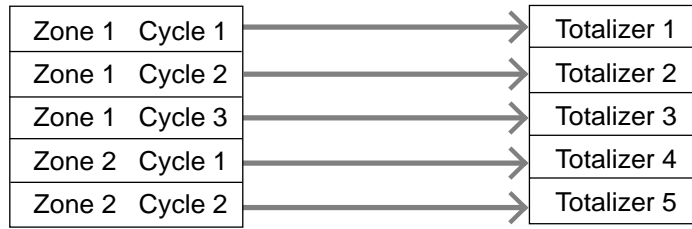
Flow of Time & Attendance operation

The following flow shows the order of time & Attendance function by pressing the specified keys: It is possible to specify one key as both <CLOCK-IN> and <CLOCK-OUT> function, or specify two keys separately. (Refer to "4-3-7-33 Worksheet for clock-in/clock-out" in Programming Manual for details.)

CLOCK-IN	→	BREAK-IN	→	BREAK-OUT	→	CLOCK-OUT
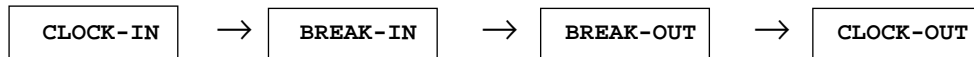
2-10-2. CLOCK-IN Operation

This function is used to register the Starting work time. An employee can operate clock-in under CLOCK-IN compulsory.

2-10-2-1. CLOCK-IN operation (1)

Program: Not using the window and impossible to specify Job Code.
Allow to specify Job Code = NO, Display Job Code window = NO
(Refer to Programming Manual, page 72.)

Operation

```
REG            12-31-97 11:59 AM 001234



    GLENN DEAL           11:59  AM

          Clock-in OK?




                            0.00

```

1. XXXXXX <CLOCK-IN>
   When you press the <NO> key, the Sign On display will appear.

XXXXXX
|_____|
Employee No.

2-10-2-2. CLOCK-IN operation (2)

Program type:

Allow to specify Job Code = YES, Display Job Code window = NO
(Refer to Programming Manual, page 72.)

Operation

```
┌────────────────────────────────┐
│REG          12-31-97 11:59 AM 001234│
│                                │
│                                │
│  ┌──────────────────────────┐  │
│  │ GLENN DEAL       11:59  AM│  │
│  │       Clock-in OK?       │  │
│  └──────────────────────────┘  │
│                                │
│                        0.00    │
│                                │
└────────────────────────────────┘
```

1. XXXXXX . YY <CLOCK-IN>

When this message appears, press the <YES> key to register
the start of working hours.

When you press the <NO> key, the Sign On display will
appear. Enter the Employee No. (within 6 digits), "."(decimal
point), and the Job Code (2 digits).

XXXXXX . YY <CLOCK-IN>

Employee No.   Job Code

2-10-2-3. CLOCK-IN operation (3)

Program type:

Display Job Code Window = YES
Allow to Clock-in with Non-Preset Job-Code = NO
(Refer to Programming Manual, page 72.)

Operation

```
┌────────────────────────────────┐
│REG          12-31-97 11:59 AM 001234│
│                                │
│  ┌──────────────────────────┐  │
│  │        CLOCK-IN          │  │
│  │ 1.Cashier                │  │
│  │ 2.Cook                   │  │
│  │ 3.Dish Washer            │  │
│  │ 4.Cleaning               │  │
│  └──────────────────────────┘  │
│                                │
│                        0.00    │
│                                │
└────────────────────────────────┘
```

1. XXXXXX <CLOCK-IN>
2. Choose the appropriate Job Code from the CLOCK-IN menu,
and press the <YES> key to register the start of working
hours.

→ Job codes that are programmed in Employee file are displayed.

2-10-2-4. CLOCK-IN operation (4)

Program type: Display Job Code Window = YES
                            Allow to Clock-in with Non-Preset Job Code = NO
                            (Refer to Programming Manual, page 72.)

Operation

```
REG            12-31-97 11:59 AM 001234

          CLOCK-IN
   1.Cashier
   2.Cook
   3.Dish Washer
   4.Cleaning
   5.JOB A
   6.JOB B
   7.JOB C
   8.JOB D


                            0.00

```

1. XXXXXX <CLOCK-IN>
2. Choose the Job Code from the pulldown menu, and press the
   <YES> key to record the attendance time.
→ All Job Codes that are programmed in Job Code file are displayed.

Receipt sample

```
REG              12-31-97 11:59 AM 001234   — Header

    Harrison                                — Employee character (16 digits)
      CLOCK-IN                   11:59 AM   — Special character (REC #29), time
      JOB            Dish Washier           — Special character (REC #33), JOB character
```

According to the programming special characters (Programming Manual: page 132), a
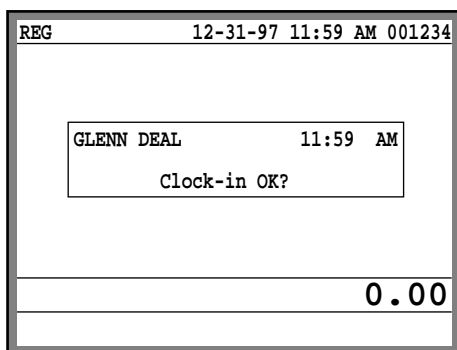receipt for each employee is printed out.

2-10-3. CLOCK-OUT Operation

This function is used to register the Ending work time. An employee can operate CLOCK-OUT under clock-in compulsory.

2-10-3-1. CLOCK-OUT operation (1)

Operation

```
┌─────────────────────────────────────┐
│ REG          12-31-97 01:59 PM 001234│
│                                      │
│                                      │
│  ┌────────────────────────────────┐  │
│  │ GLENN DEAL         01:59  PM    │  │
│  │       Clock-out OK?             │  │
│  └────────────────────────────────┘  │
│                                      │
│                                      │
│                           0.00       │
│                                      │
└─────────────────────────────────────┘
```

1. XXXXXX <CLOCK-OUT>.
2. When this message appears, press the <YES> key to register the end of working hours.

2-10-3-2. CLOCK-OUT operation (2)

Program: Tip Declaration Compulsory (Refer to Programming Manual, page 71.)

Operation

```
┌─────────────────────────────────────┐
│ REG          12-31-97 01:59 PM 001234│
│                                      │
│                                      │
│  ┌────────────────────────────────┐  │
│  │ Enter cash tip amount and       │  │
│  │ press <YES> key.                │  │
│  └────────────────────────────────┘  │
│                                      │
│                                      │
│                           0.00       │
│                                      │
└─────────────────────────────────────┘
```

1. XXXXXX <CLOCK-OUT>.
2. When this message appears, the employee should enter the cash tip amount, if not, it is impossible to close the accounts

Receipt sample

```
┌─────────────────────────────────────────────┐
│ REG              12-31-97 11:59 AM 001234     │ ── Header
│                                               │
│    Harrison                                   │ ── Employee character (16 digits)
│      CLOCK-IN                  11:59 AM        │ ── Special character (REC #29), time
│      JOB               Dish Washier            │ ── Special character (REC #33), JOB character
│      CLOCK-OUT                 01:59 PM         │ ── Special character (REC #30), time
│                                               │
│      WORK TIME                 02:45           │ ── Special character (REC #34), working hours
│      BREAK TIME                00:45           │ ── Special character (REC #35), recess
└─────────────────────────────────────────────┘
```

According to the programming special characters (Programming Manual: page 132), the receipt for above operations' details are printed out.

Application System

2-10-3-3. BREAK-IN Operation

This function is used for the employees to register a recess.

Operation

```
REG            12-31-97 11:59 AM 001234



  GLENN DEAL           11:59  AM

        Break-in OK?


                        0.00

```

1. XXXXXX <BREAK-IN>.
2. When this message appears, press the <YES> key to register the recess.
   The receipt is not printed out, except J-memo.

2-10-3-4. BREAK-OUT Operation

This function is used for the employees to register the end of a recess.

Operation

```
REG            12-31-97 11:59 AM 001234



  GLENN DEAL           11:59  AM

       Break-out OK?


                        0.00

```

1. XXXXXX <BREAK-OUT>.
2. When this message appears, press the <YES> key to register the end of a recess.
   The receipt is not printed out, except J-memo.

2-10-3-5. Manager Operation

When the manager operate CLOCK-IN after signing in, the manager can operate and modify any employee's record despite of corresponding employee number.
Following operations are possible to operate by the manager:

Specify the Job Code/CLOCK-IN/ CLOCK-OUT/BREAK-IN/BREAK-OUT

Operating Flow

| Manager sign in | → | CLOCK-IN/OUT operation, BREAK-IN/OUT operation | → | Sign-off |
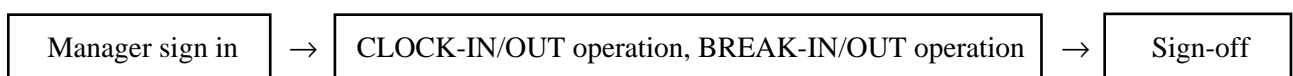
2-11. Sign-in control

This function is used to ban the sign-in operated by an employee who has not CLOCK-IN. The following conditions should be fixed.

- Use only one terminal (Master terminal) for the CLOCK-IN/OUT operation. This terminal should be connected in line to the satellite terminals.
- The clerk file's information should be common among all the terminals.
- Be sure there is a clerk who is specified as "Manager" in the clerk file. If no manager, it may be locked to operate.

2-11-1. Sign-in

1. When an employee normally operate CLOCK-IN/OUT, BREAK-IN/OUT, the employee's attendance information is sent from the main terminal to the satellite terminals.

Each CLK# information holds 2 BIT.

BIT1=0:Not CLOCK-IN
    1:CLOCK-IN
BIT2=0:In the middle of BREAK-IN
    1:Not in the middle of BREAK-IN
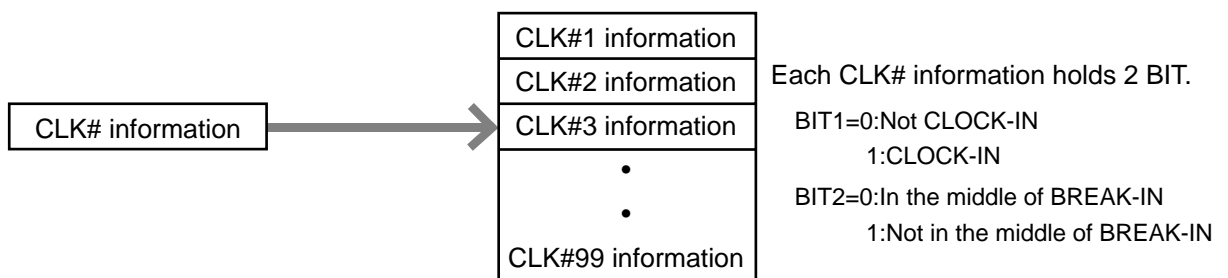
Flow of sign-in
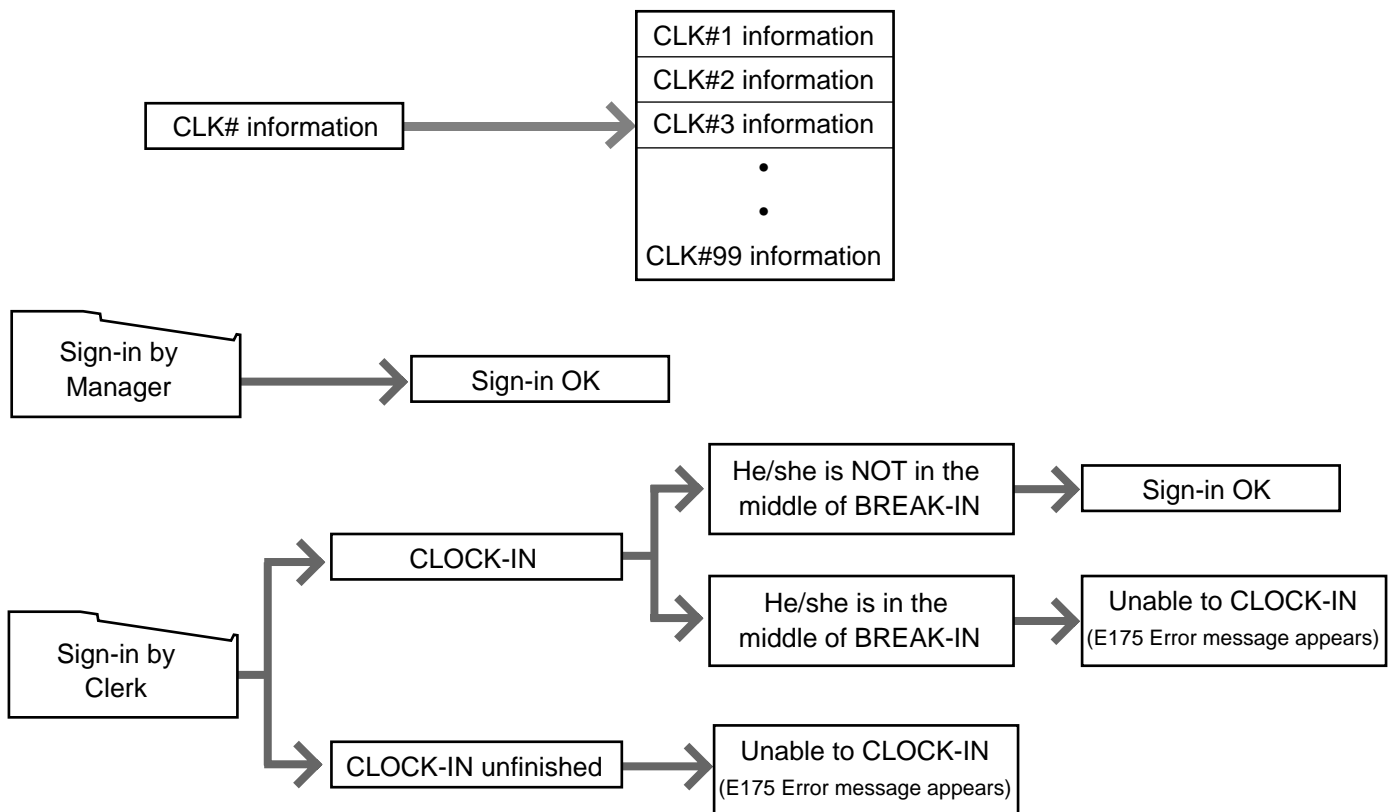
2-11-2. Solution to abnormality of master terminal

When the satellite terminals cannot receive any information from the master terminal, the master terminal shows the error message on the window and prints out the receipt with terminal IDs that failed to communicate the data.

```
REG            12-31-98 11:59 AM 001234
     Harrison
      CLOCK-IN                11:59 AM
      JOB               Dish Washier

    ┌─────────────────────────────────┐
    │ E177 Time&Attendance Data       │
    │      Communication Error.       │
    │      Please Call Manager.       │
    └─────────────────────────────────┘



                               0.00
   ─────────────────────────────────────
              Please Sign on.
```

Receipt image

```
REG                   12-31-98 11:59 AM 001234   ── Header

Communication Error                              ── Fixed flash message
                     MC#01          XXXX         ── Machine ID, Error code
                     MC#03          XXXX         ── Machine ID, Error code
```

- The error message and receipt will appear whenever the sign-in is failed. If you cannot solve the INLINE data communication problem, program the system connection again, and remove the uncommunicative terminal.

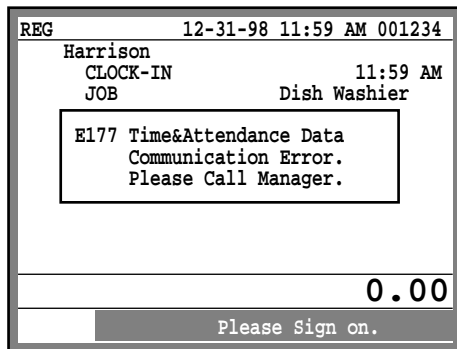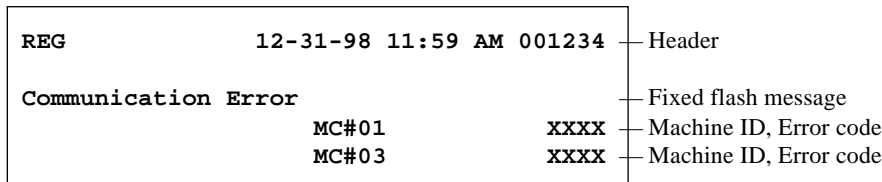## 2-11-3. Solution to abnormality of satellite terminal

- When the satellite terminal cannot receive any information from the main terminal, the default CLOCK-IN/OUT (always 0) information remain.
  In this case, only manager can sign-in.
- When the satellite terminal could receive the CLOCK-IN/OUT information from the master terminal a few times, but failed to receive after then, the CLOCK-IN/OUT information in all the satellite terminals leaves the last received information. In such case, the last received information control employees' sign-in/out. (Manager can always sign-in.)

2-11-4. Sign-in compulsory

When the satellite terminal cannot receive the information in spite of normal CLOCK-IN operation on the master terminal, an employee may not sign-in for some reason.
In such case, the manager needs the following operation.

1. Sign-in by the manager (Normal sign-in operation.)
2. 99xxxx <CLK#> (xxxx(4 digit):Enter the employee's secret code.)
3. The corresponding employee's program should be modified.

   BIT1=1:CLOCK-IN
   BIT2=1:Not in the middle of BREAK-IN

4. Sign-off by the manager or corresponding employee (Normal sign-off operation.)

Note:

When the error message appeared under the employee's CLOCK-IN operation, Manager should operate above steps.

2-12. IDC (Item Data Capture)

This function is used for capturing all the registered item data by the REG/REF/REG-modes. IDC file stores these captured items. Whenever the total is over, the records are appended to the IDC file.

2-12-1. Available Capturing Items

Select the appropriate items that should be captured, and program these items into the IDC LINK file. The available items and their contents are indicated below.

Items	Contents	File No.
PLU	• The report of the recent transaction. • The report of the items/functions, or all the detailed statement.	004
Sub-Department		003
Department		005
Function		002
Pull Down Group		026
Clerk	• The report of the recent transaction. • The report of the items/functions, or all the detailed statements.	007

IDC function file

	Function		Code			Function		Code			Function		Code	
	NOP		000	-		BILL		047	-		SUBST.		111	-
●	CASH		001	O		PLU#	*7	048	O		K/KETTEN	*1	113	O
●	CHARGE		002	O		PRC		049	-		HOUSE BON	*1	114	O
●	CHECK		003	O	●	DEPT01		051	O		POST ENTRY		115	-
●	CREDIT		004	O		SB/R		054	-		R REPEAT		116	-
●	NB		006	O		SLIP		055	-		OPEN CHK		117	-
	PRCINQ		008	-		SF/R		056	-	●	MEDIA CHG		118	O
	STKINQ		009	-		T/S	*1	057	O		SEAT#	*1	119	O
●	CHAR		010	O		TBL#	*5	058	O		DISP ON/OFF		120	-
●	PRT		011	O	●	EXEMPT		062	O		REG MODE	*5	121	O
	CHKP		012	-	●	PLU0001		063	O		X/Z MODE		122	-
	CLK TRANS		013	-		MENU		064	-		PGM MODE		123	-
●	TBL TRANS		014	O		OPEN		067	-	●	EAT-IN		128	O
●	TIP		015	O		OPEN2		068	-		TAKE-OUT		129	O
	NRMRCT	*1	016	O		1st@	*7	069	O		STORE		130	-
●	LOAN		019	O		2nd@	*7	070	O		RECALL		131	-
●	RC		020	O		CLK#		072	O	●	SUBDEPT01	*7	133	O
●	RD		021	O		OPE X/Z		073	-		SDPT#	*7	134	O
●	P.UP		022	O	●	SUBTOTAL	*8	075	O		DEPT#	*7	135	O
●	COUPON		023	O		RCT ON/OFF		076	-		LIST	*7	136	O
●	DEPOSIT		025	O		TAST		077	-		LIST#	*7	137	O
●	-		027	O		OPE#		078	-		0, 1, 2. 3, 4, 5, 6, 7, 8, 9		201	-
●	%-	*2	028	O		MDST	*1	080	O		CLEAR		202	-
●	+		029	O		X	*1	082	O		REVERSE DSP		206	-
●	%+	*2	030	O		QT	*1	083	O		JMEMO		207	-
	RF	*1	033	O		XX	*1	084	O		ESC		211	-
●	VOID	*3	034	O		SIST	*2	085	O		YES		212	-
	CPN	*1	036	O		XXX	*1	090	O		NO		213	-
	VLD		037	-		NEW CHK	*1	091	-		←		214	-
	RCT		038	-		OLD CHK	*1	092	-		→		215	-
	CK.E		039	-		NEW/OLD	*1	093	-		↑		216	-
●	#		040	O		ADD CHK	*9	094	-		↓		217	-
●	#/NS	*4	041	O		SEP CHK	*9	095	-		HOME		218	-
	NS		042	-		00		096	-		DISP MODE		219	-
●	CT	*5	043	O		000		097	-		PAGE DOWN		220	-
	ARG	*6	044	O		.		098	-		PAGE UP		221	-
	CE	*1	045	O		CLOCK-IN/OUT		108	-	●	CANCEL		236	O
	VAT	*5	046	O		BREAK-IN/OUT		109	-					

●: Available items to be programmed as target for IDC.

O: IDC target

- : Out of target

*1   This function itself is not an IDC target. However it is logged into IDC file with target items or functions of IDC.

*2   In case of Subtotal %- or Subtotal %+, Subtotal is also logged into IDC file.
In case of selective item subtotal %- or selective item subtotal %+
In case of selective item subtotal is also logged into IDC file

*3   1.Error correct is not logged into IDC file.
2.This function itself is not an IDC target. However it is logged into IDC file with voided items.
3.Void reason is also target if it is used with void key.

*4   # is an IDC target , not NS.

*5   This function itself is not an IDC target. However it is stored into INDEX file. Therefore it appears in IDC data as one of header information or finalize information.

*6   This function itself is not an IDC target . However the functions that are executed by arrangement is an IDC target.

*7   This function is not an IDC target. However registered item is an IDC target.

*8   If D5 = 4 (print when key is pressed), then it is logged into IDC file.

*9   Transferd items by the add check and the separate check are not captured.

2-12-2. Set Up the IDC Start/End

Specify IDC Start or IDC End in Manager Mode. IDC does not start if you not allocate necessary files for IDC.

- When IDC function is stopped, you can restart IDC by performing FC or INIT 2("1-3 How to flag clear QT-2000 terminal" Programming Manual, page 14).

Operation

```
┌─────────────────────────────────────┐
│           Item Data Capture          │
├─────────────────────────────────────┤
│ Item Data Capture              NO    │
│                                      │
│                                      │
│                                      │
│                                      │
│                                      │
│                                   0  │
│                                      │
└─────────────────────────────────────┘
```

Note:

1. If you stop the IDC when the IDC file is full of items, you can stop the error sound without clearing any registered data.
2. The necessary files for IDC
   - File 036 (REG buffer)
   - File 063 (IDC buffer)
   - File 057~059 (IDC file)
   - File 804 (IDC Link file)

3. You can stop the IDC full error without reset all IDC data by using END option.

2-12-3. How to memorize the Captured Items

Flow of the transferring data

1. Program: Store data = Whole transaction (Refer to Programming Manual, page 76.)
When an appropriate item is selected, this item and the header will be memorized into the IDC file (see the illustration below).
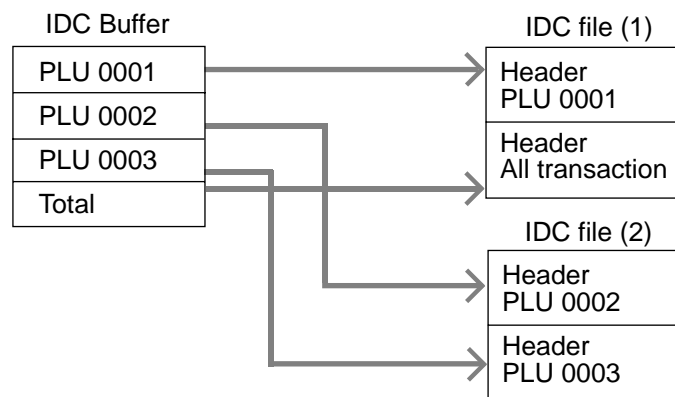
Example

PLU 0001———Memorized into IDC file (1)
PLU 0002———Memorized into IDC file (2)
PLU 0003———Memorized into IDC file (2)

2. Program: Store data = Item only (Refer to Programming Manual, page 76.)
Before totalizing all the transactions, the whole IDC Buffer and the header <B> will be memorized into the IDC file.

Example

PLU 0002——Memorize all the transaction into the IDC file.

IDC Buffer		IDC file (1)
PLU 0001	→	Header PLU 0001
PLU 0002		Header All transaction
PLU 0003		
Total		

	IDC file (2)
	Header PLU 0002
	Header PLU 0003

Header

Header (Whole Index)
First Record

Field	Offset
MC ID	0 1 2
01	
CHK #	2 … 8
Consecutive No.	8 … 11
MODE	11 13
CLK #	13 16
Date	16 19
Time	19 21
Number of purchsed item	21 26
NET AMT	26 31
ST	31 36
ST TTL	36 41
Not Used	41 50

Item

Item (PLU/SUB-Department, Department)

Field	Offset
MC ID	0 1 2
03	
TYPE	2 3
FILE #	3 5
REC #	5 7
TAX STATUS	7 9
ITEM STATUS	9 11
Reason REC of Colecting	11 13
QTY	13 18
AMT	18 23
@	23 28
PDGP REC #	28 30
Not Used	30 50

Function
Cash, Charge, Check, Credit

Field	Offset
MC ID	0 1 2
03	
TYPE	2 3
FILE #	3 5
REC #	5 7
CE KEY REC #	7 9
Foreign No.	9 14
Your Country No.	14 19
Total Amount	19 24
Change Amount	24 29
Totaling Type	29 30
Not Used	30 50

NB charge

Field	Offset
MC ID	0 1 2
03	
TYPE	2 3
FILE #	3 5
REC #	5 7
NB FEE	7 12
Not Used	12 50

NB

Field	Offset
MC ID	0 1 2
03	
TYPE	2 3
FILE #	3 5
REC #	5 7
GROSS QTY	7 12
GROSS AMT	12 17
Not Used	17 50

CHAR/PRT

Field	Offset
MC ID	0 1 2
03	
TYPE	2 3
FILE #	3 5
REC #	5 7
CHARACTER	7 47
Not Used	47 50

TBL TRANS

Offset	Field
0	MC ID
1	03
3	TYPE
5	FILE #
7	REC #
12	ST
18	EX-CHK #
24	NEW CHK #
50	Not used

TIP

Offset	Field
0	MC ID
1	03
3	TYPE
5	FILE #
7	REC #
12	AMT
50	Not used

LOAN/P/UP

Offset	Field
0	MC ID
1	03
3	TYPE
5	FILE #
7	REC #
12	AMT
50	Not used

RC/PD/DEPOSIT

Offset	Field
0	MC ID
1	03
3	TYPE
5	FILE #
7	REC #
12	AMT
50	Not used

+/- COUPON

Offset	Field
0	MC ID
1	03
3	TYPE
5	FILE #
7	REC #
9	TAX STATUS
11	ITEM STATUS
13	Reason REC of Collection No.
18	AMT
23	PRICE
28	Not Used
50	

%+/%-

Offset	Field
0	MC ID
1	03
3	TYPE
5	FILE #
7	REC #
9	TAX STATUS
10	ITEM STATUS
13	Reason REC of Collection No.
18	AMT
23	RATE
28	MAIN TYPE
29	MAIN AMT
33	Not Used
50	

%+/%- after SIST

Offset	Field
0	MC ID
1	03
2	TYPE
3	FILE #
5	REC #
7	SIST No.
9	Not Used
16	AMT
21	RATE
26	MAIN TYPE
27	MAIN AMT
32	Not Used
50	

#Printing of #, #/NS

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
Number	7
Figures	12
Not used	14
	50

EXEMPT

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
TAX STATUS	7
TA. 1	9
TA. 2	14
TA. 3	19
TA. 4	24
TA. 5	29
TA. 6	34
TA. 7	39
Not Used	44
	50

ST/MDST

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
ST	7
PRINT ST	12
CE ST	17
CE REC #	22
Not Used	26
	50

MEDIA CHG

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
AMT	7
Not Used	12
	50

STORE

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
ST	7
Not Used	12
CHK #	18
Not Used	24
	50

EAT-IN/TAKE-OUT

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
AMT	7
Not Used	12
	50

CANCEL

Field	Offset
MC ID	0
03	1
TYPE	2
FILE #	3
REC #	5
AMT	7
Not Used	12
	50

2-12-5. IDC data type

Type of data	Amount	Capture item
DTLTYPE_NULL	0	Not used (unavailable)
DTLTYPE_SDEPT	10	Main item : Sub department
DTLTYPE_DEPT	15	Main item : Department
DTLTYPE_PLU	20	Main item : PLU
DTLTYPE_SET_FIX	25	Dependent item : Setmenu/child (fixed)
DTLTYPE_SET_SEL	30	Dependent item : Setmenu/child (option)
DTLTYPE_COND	35	Dependent item : Condiment
DTLTYPE_PREP	40	Dependent item : Preparation
DTLTYPE_ITEM_PLUS	60	Dependent item (discount) : A separate item +
DTLTYPE_ITEM_MINUS	61	Dependent item (discount) : A separate item -
DTLTYPE_ITEM_CPN	62	Dependent item (discount) : A separate item CPN
DTLTYPE_ITEM_P_PLUS	63	Dependent item (discount) : A separate item %+
DTLTYPE_ITEM_P_MINUS	64	Dependent item (discount) : A separate item %-
DTLTYPE_CASH	71	Finalize : Cash
DTLTYPE_CHARGE	72	Finalize : Charge
DTLTYPE_CHECK	73	Finalize : Check
DTLTYPE_CREDIT	74	Finalize : Credit
DTLTYPE_NBCHKTRC	80	NB (check tracking) operation
DTLTYPE_NBTBLTR	82	Table transferring operation
DTLTYPE_CANCEL	85	Cancel
DTLTYPE_TBLTR	86	Table transfer
DTLTYPE_NBFEE	87	NB charge
DTLTYPE_ST_PLUS	100	ST +
DTLTYPE_ST_MINUS	101	ST -
DTLTYPE_ST_CPN	102	ST CPN
DTLTYPE_ST_P_PLUS	103	ST %+
DTLTYPE_ST_P_MINUS	104	ST %-
DTLTYPE_SIST_PERCENT_PLUS	105	SIST %+
DTLTYPE_SIST_PERCENT_MINUS	106	SIST %-
DTLTYPE_ST	111	ST
DTLTYPE_MDST	112	MDST
DTLTYPE_PLT_CHAR	113	PRINT CHAR
DTLTYPE_PLT_MSG	113	PRINT MESSAGE (CHAR RECALL)
DTLTYPE_SHARP	115	# Print
DTLTYPE_TIP	116	Tip
DTLTYPE_DEPO	117	Deposit
DTLTYPE_TXEX	118	Tax exempt
DTLTYPE_RC	150	RC
DTLTYPE_PD	151	PD
DTLTYPE_MEDIA_CHG	152	Medial change
DTLTYPE_GET_MONEY	153	Media change (get)
DTLTYPE_PUT_MONEY	154	Media change (put)
DTLTYPE_LOAN	155	Loan
DTLTYPE_PICKUP	156	Pick up
DTLTYPE_FIN_LOANPICKUP	157	Finalize loan/pick up
DTLTYPE_AMOUNT_EXCHANGE	158	Currency exchange
DTLTYPE_CASH_IN_CHECK	159	Cashing a check
DTLTYPE_FILLER	255	for REGLOG

2-12-6. Transferring IDC

It is possible to do collection of IDC files through in-line system. Refer to the terminal structure as below.
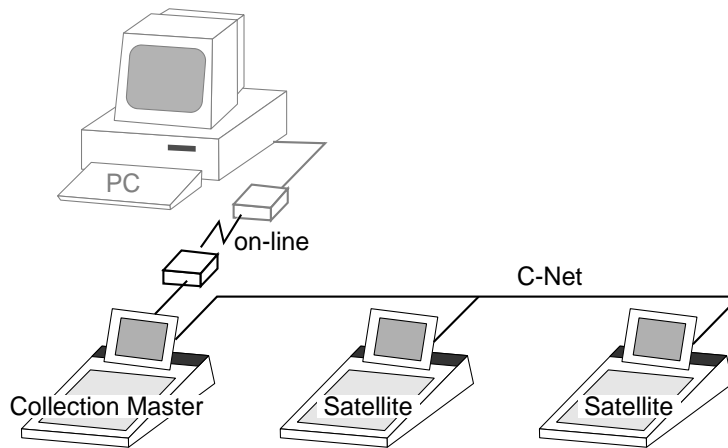

Flow of the IDC

PC sends Z-lock command by using JOB command to collection master.

1. PC enables to check the Z-lock confirmation.
2. PC sends the collection command by using JVp command to collect IDC files from all satellite terminales.
3. Collection master receives the IDC data from each satellite in order.
   PC enables to check whether the collection master has finished the JOB.
4. PC sends the Z-command or X-command to the collection master.
5. PC receives the collection data from consolidation file. If the Z-command has issued at 4, consolidation file in the collection master are all reset.

2-13-7. Data Transferring Flow

IDC data in each terminal totalizer is appended to the consolidation file individualy

Consolidation file (in Collection Master)
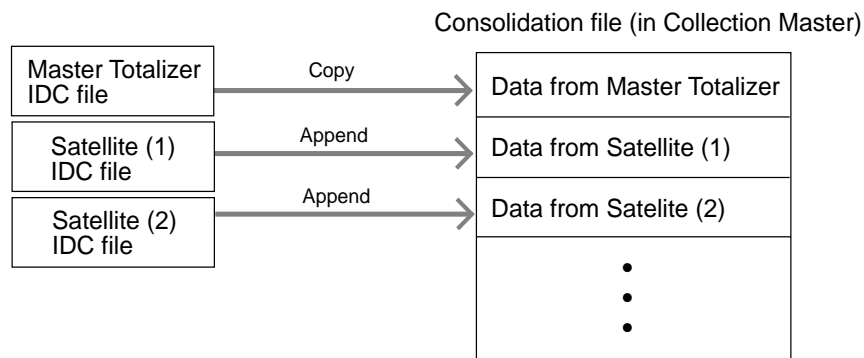
Notes:

- Just after IDC starts, the total file is cleared to receive new data.
- Just after the receiving is over, the data is remained in the consolidation file. To clear this data, send the Z-command or the file-clear command to the collection master from the PC.
- In case of collection Z, all of the IDC files in the satellite terminals are cleared.

Operation

```
REG  GLENN       02-19-98 11:59AM 123456

        Data Communication
          Please Wait.




                          0.00

```

1. Z-lock window appers on the screen if Z-lock command is issued.

J-Memo in Collection Master

```
                        MC #02
X/Z  CLAPTON      12-31-97 11:59 AM 001234
X      000029    EMPLOYEE          * 1234    ──Z counter
Inline                              11110
Collection                             67    ──X/Z code (67, 68, 69)
MC #01             20:05             1234    ──Machine ID/Time/Z counter
MC #02             20:05             1234
MC #03             20:05             1234
MC #04             Error End         ****    ──Error occurs (****is an error code.)
```

X/Z code: 67 = IDC (1), 68 = IDC (2), 69 = IDC (3)

J-Memo in Sattelite

```
                        MC #01
REG  HARRISON     02-19-98 20:05    123456
```

Note:

- No receipt is issued. No journal printing.

3. Manager operation

This section describes manager operations (such as machine initialization, IPL, manager functions etc.) of QT-2000.

3-1. Machine initialization

There are four different types of initialization such as INIT, FC, INIT2 and Restore from flash memory.
INIT; Machine initialization, all program and total data are reset.
FC; Flag clear, all program and total data are remained, only the current transaction data are reset.
INIT2; Machine initialization 2, all program data are remained, only total data are reset.
Restore from flash memory; the data backed up in the flash memory are restored.
The procedures of machine initialization are described in the chapter 1 of the QT-2000 programming manual. The required passwords are listed below.

Operation		Password	Digit meaning
Normal operation	Init	10000	For Eu/Di
		20000	For U.S.
	Flag clear	No need	
	Init 2	8888888888	
	Restore from Flash	0000000000	
Flash reset	Init	88810000	For Eu/Di, nn = Machine ID
		88820000	For U.S., nn = Machine ID
Define machine ID	Init	nn00010000	For Eu/Di, nn = Machine ID
		nn00020000	For U.S., nn = Machine ID

See following steps for details of programming these last 3 digits (D1~D3).

Step 1   Do you want to use Kitchen Printer (KP)?

If you are...	Then enter....			Meaning of D1~D3	Go to....
YES or you want to assign a printer to COM1 port,	D3 •	D2 •	D1 0	COM3 = • COM2 = • COM1 = Not used	Step 2
NO, but you want to assign a printer to COM1 port,	D3 •	D2 •	D1 2	COM3 = • COM2 = • COM1 = Printer-1	Step 2
NO, and you want to assign neither a printer to COM1 port nor KP,	D3 •	D2 •	D1 •	COM3 = • COM2 = • COM1 = •	Step 2

Step 2   Do you want to use X-MODEM (PC)?

If you are...	Then enter....			Meaning of D1~D3	Go to....
YES, and you have already assigned KP only,	D3 0	D2 •	D1 0	COM3 = PC COM2 = • COM1 = Not used	Step 3
YES, and you have assigned a printer to COM1 port only,	D3 0	D2 •	D1 2	COM3 = PC COM2 = • COM1 = Printer-1	Step 3
YES, and you have not assigned any devices yet,	D3 0	D2 •	D1 •	COM3 = PC COM2 = • COM1 = •	Step 3
NO					Step 3

Step 3 **Do you want to use Slip printer of SA-3015?**
(If you say YES here, then SA-3015 is assigned as Printer-1)

If you are...	Then enter....			Meaning of D1~D3	Go to....
	D3	D2	D1		
YES, and you have already assigned KP and PC,	0	2	0	COM3 = PC COM2 = SA-3015 COM1 = Not used	**Enter your INIT code**
YES, and you have already assigned PC only,	0	2	•	COM3 = PC COM2 = SA-3015 COM1 = •	**Step 5**
YES, and you have not assigned any devices yet,	•	2	0	COM3 = • COM2 = SA-3015 COM1 = Not used	**Step 5**
NO					**Step 4**

Step 4 **Do you want to use 1st printer?**

If you are...	Then enter....			Meaning of D1~D3	Go to....
	D3	D2	D1		
YES, and you have already assigned KP and PC,	0	2	0	COM3 = PC COM2 = Printer-1 COM1 = Not used	**Enter your INIT code**
YES, and you have already assigned KP only,	•	2	0	COM3 = • COM2 = Printer-1 COM1 = Not used	**Step 5**
YES, and you have not assigned any devices yet,	•	2	0	COM3 = • COM2 = Printer-1 COM1 = Not used	**Step 5**
No					**Step 5**

Step 5 **Do you use 2nd printer?**

If you are...	Then enter....			Meaning of D1~D3	Go to....
	D3	D2	D1		
YES, and you have already assigned a printer to COM1 and PC,	0	2	2	COM3 = PC COM2 = Printer-1 COM1 = Printer-2	**Enter your INIT code**
YES, and you have already assigned PC and SA-3015,	0	2	2	COM3 = PC COM2 = SA-3015 COM1 = Printer-2	**Enter your INIT code**
YES, and you assign KP and Printer-1,	2	2	0	COM3 = Printer-2 COM2 = Printer-1 COM1 = Not used	**Enter your INIT code**
YES, and you assign Printer-1 only,	2	2	0	COM3 = Printer-2 COM2 = Printer-1 COM1 = Not used	**Enter your INIT code**
NO, and you have already assigned a printer to COM1 and PC,	0	2	0	COM3 = PC COM2 = Printer-1 COM1 = Not used	**Enter your INIT code**
NO, and you have already assigned PC and SA-3015,	0	2	0	COM3 = PC COM2 = SA-3015 COM1 = Not used	**Enter your INIT code**
NO, and you have already assigned KP and Printer-1,	0	2	0	COM3 = PC COM2 = Printer-1 COM1 = Not used	**Enter your INIT code**
NO, and you have not assigned any devices yet,	0	0	0	COM3 = PC COM2 = Printer-1 COM1 = Not used	**Enter your INIT code**

After IPL MAC, code is fixed as 10000.

Manager Operation

3-1-1. INIT

Initialization process is as follows:

```
Start → Input pass word (see above) → Hardware reset All RAM reset → Inline ID definition
      → File creation 1 → Initialization operation Input date/time, ID etc. → File creation 2
      → Revise terminal connection table → Receiving program from other terminal → Initialization result to J-Memo → End
```
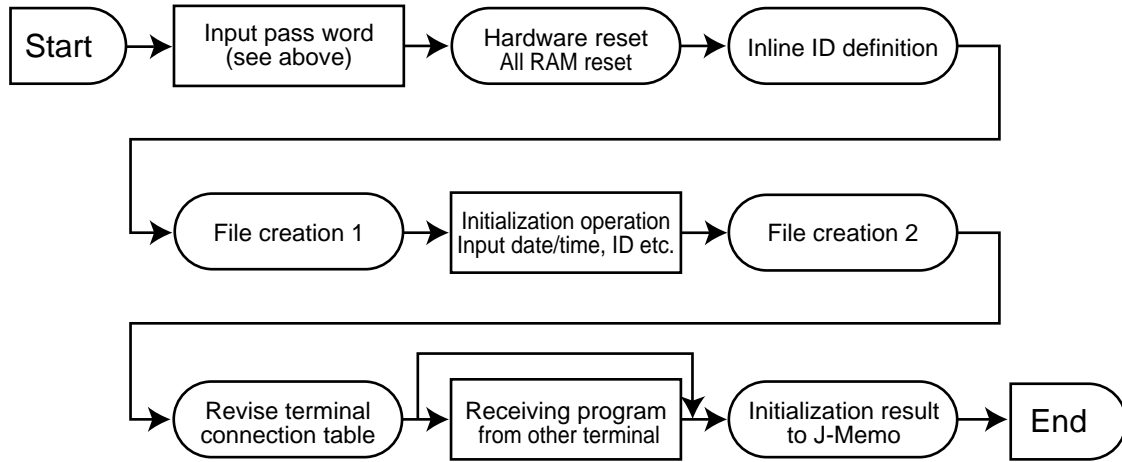
3-1-2. Flag clear

Flag clear process is as follows:

```
Start → Hardware reset Initialize work area/buffers/flags → Menu selection FC/Init2/Restore → Initialization result to J-Memo → End
                                                                                            → Init 2
                                                                                            → Restore from flash
```
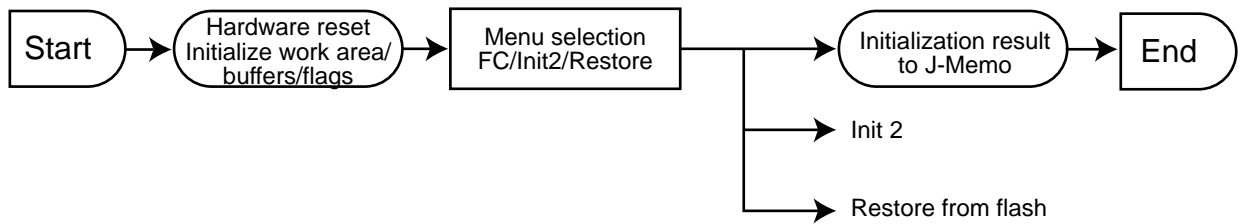
3-1-3. INIT 2

Initialization 2 process is as follows:

```
Start → Hardware reset Initialize work area/buffers/flags → Menu selection FC/Init2/Restore → All totoalizer reset Initialization result to J-Memo → End
                                                                                            → Flag clear
                                                                                            → Restore from flash
```
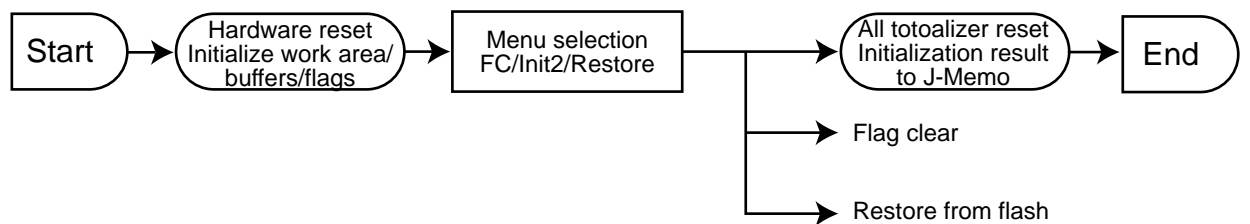
3-1-4. Restore from flash memory

Restore from flash memory process is as follows:

```
┌─────────┐   ┌──────────────────────┐
│  Start  │──▶│  Hardware reset       │
└─────────┘   │  Initialize work area/│
              │  buffers/flags        │
              └──────────────────────┘
                         │
   ┌─────────────────────┘
   │
   ▼
┌──────────────────┐   ┌────────────────────┐   ┌────────────────────┐   ┌─────┐
│ Menu selection   │──▶│ Download all data  │──▶│ Initialization     │──▶│ End │
│ FC/Init2/Restore │   │ from Flash memory  │   │ result to J-Memo   │   └─────┘
└──────────────────┘   └────────────────────┘   └────────────────────┘
        │
        ├──────▶ Flag clear
        │
        └──────▶ Init 2
```
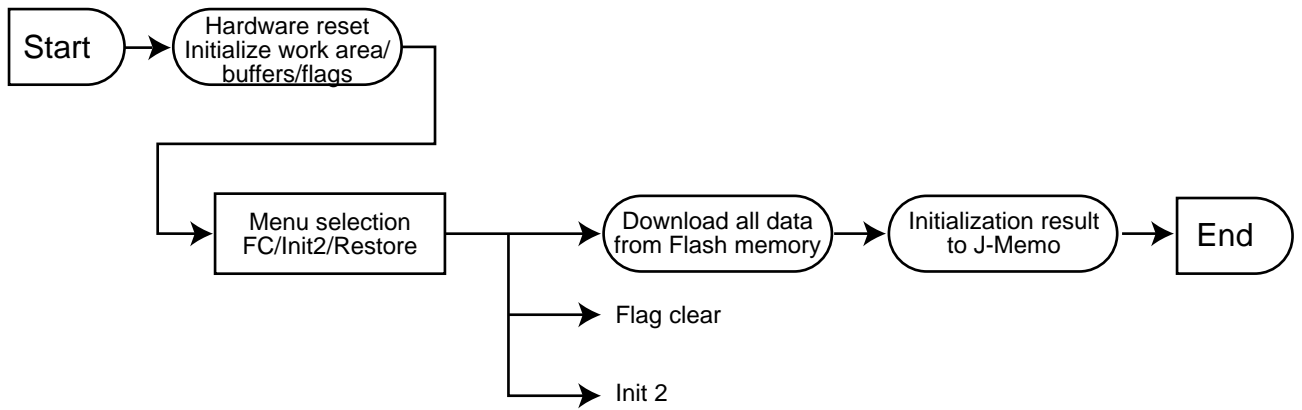
3-2. IPL (Initial Program Loading)

IPL should be made before initializing when the application software has been modified.

3-2-1. IPL

Initial program loading process is as follows:

```
┌─────────┐   ┌────────────┐   ┌────────────────┐   ┌────────────┐
│  Start  │──▶│ ROM check  │──▶│ Communication  │──▶│ Baud rate  │
└─────────┘   └────────────┘   │ port selection │   │ selection  │
                               └────────────────┘   └────────────┘
                                                            │
   ┌────────────────────────────────────────────────────────┘
   │
   ▼
┌────────────┐   ┌────────────────┐   ┌────────────┐   ┌──────────┐
│ Waiting for│──▶│ Store the      │──▶│ Waiting for│──▶│ Continue │
│ IPL        │   │ receiving      │   │ INIT       │   │ to INIT  │
│            │   │ data to Flash  │   │ operation  │   │          │
└────────────┘   └────────────────┘   └────────────┘   └──────────┘
```
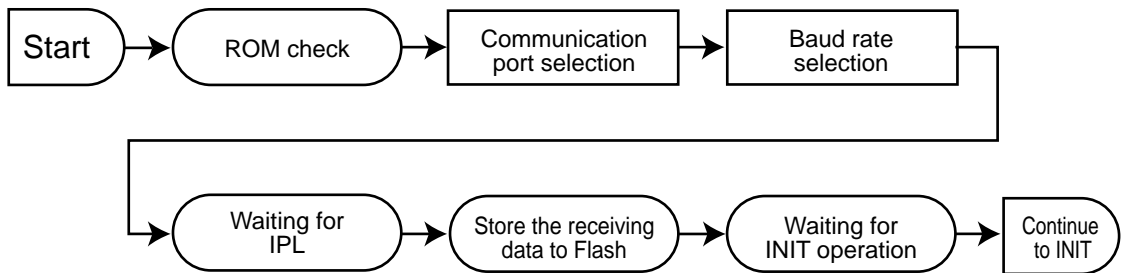
3-2-2.   System configuration before IPL operation

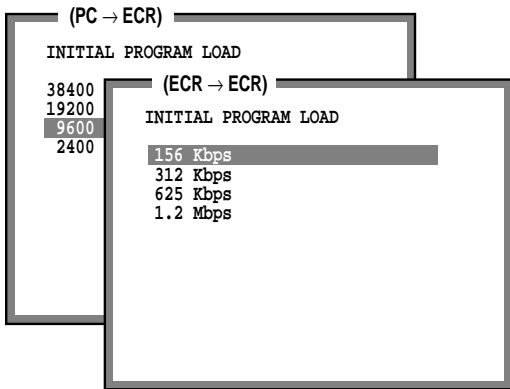Connect source terminal (PC) and target terminals.
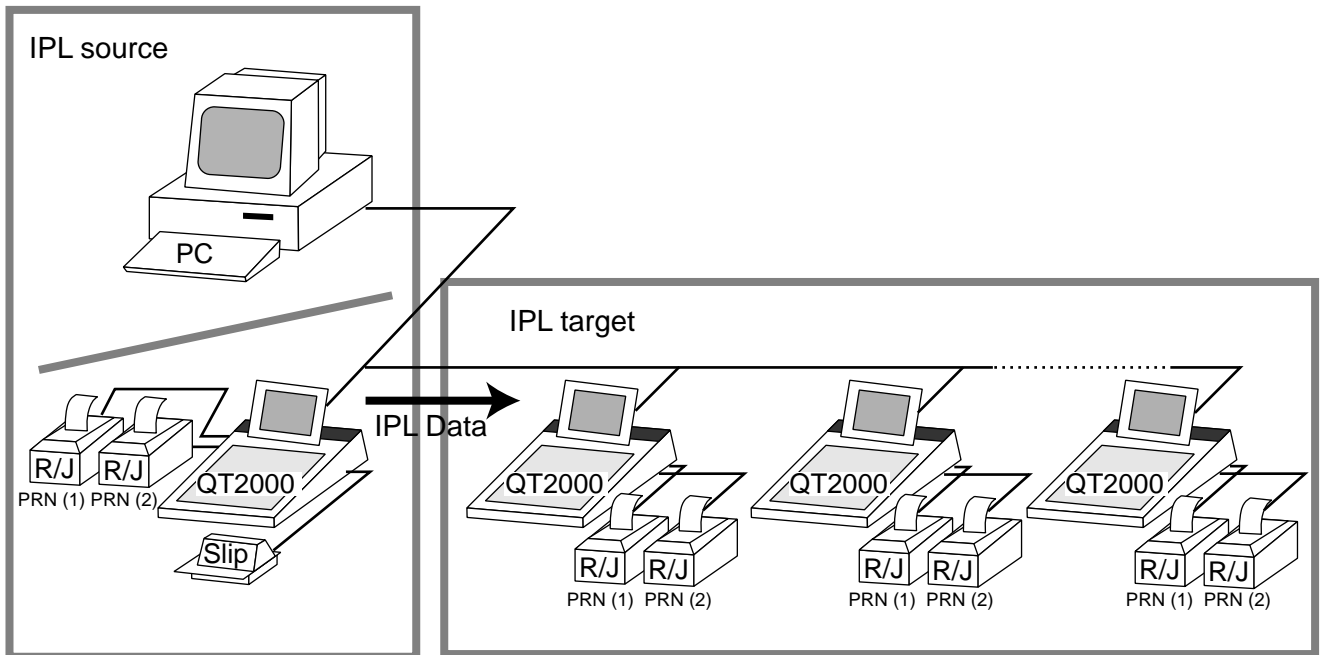
INIT/IPL code

Description	Choice	Program code
Logical ID (01~32)-----Ommisible	Significant number	D_{10} D_9
000 : General (not clear the J-MEMO & Backup)------Ommisible 888 : Clear the J-MEMO & Backup	Significant number	D_8 D_7 D_6
The destination codes 1 : General exportion 2 : US	Significant number	D_5
Fix 0	Enter 0	D_4
COM 3 0 : Use the XMODEM, 1: Use the XMODEM (same as 0), 2 : Use the printer	Significant number	D_3
COM 2 0 : Use the printer, 1: Use the XMODEM, 2 : Use the printer (same as 0)	Significant number	D_2
COM 1 0 : Use the KP (not using COM 1), 1: Use the scanner, 2 : Use the printer	Significant number	D_1

```
┌─(PC → ECR)──────────────┐
│ INITIAL PROGRAM LOAD    │
│ 38400  ┌─(ECR → ECR)──────────────┐
│ 19200  │  INITIAL PROGRAM LOAD    │
│  9600  │                          │
│  2400  │  ▓156 Kbps▓              │
│        │   312 Kbps               │
│        │   625 Kbps               │
│        │   1.2 Mbps               │
│        │                          │
│        │                          │
│        │                          │
│        │                          │
│        │                          │
└────────│                          │
         │                          │
         └──────────────────────────┘
```

6. Select baud rate.

```
┌──────────────────────────┐
│  INITIAL PROGRAM LOAD    │
│                          │
│  ▓START IPL▓             │
│                          │
│                          │
│                          │
│                          │
│                          │
│                          │
│                          │
│                          │
└──────────────────────────┘
```
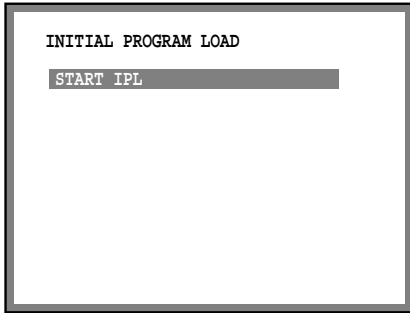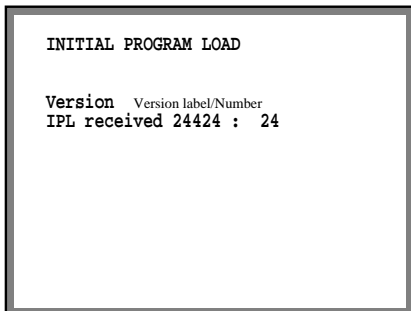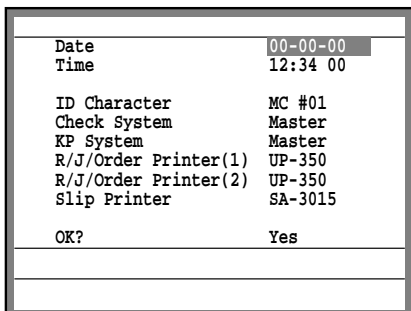
7. Press the <YES> key to proceed, in case of downloading via
   in-line, ID definition is made by this timing. So press the
   <YES> key terminal by terminal.

```
┌─(PC → ECR)───────────────┐
│  INITIAL PROGRAM LOAD    │
│                          │
│  Waiting IPL data. COM=3 │
│                          │
│                          │
│                          │
│                          │
│                          │
│                          │
│                          │
│                          │
└──────────────────────────┘
```
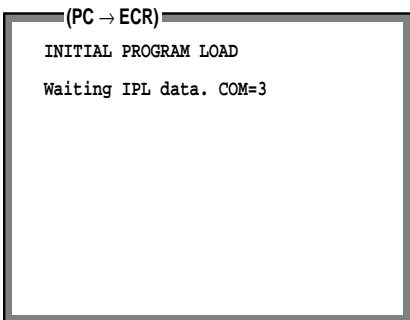
8. Send IPL data from other terminal or PC.
   **About the operation of the IPL data sending terminal,
   refer to the Auto-program section in the Manage Opera-
   tion chapter of this manual.**

```
┌──────────────────────────┐
│  INITIAL PROGRAM LOAD    │
│                          │
│                          │
│  Version   Version label/Number
│  IPL received 24424 :  24│
│                          │
│                          │
│                          │
│                          │
│                          │
└──────────────────────────┘
```

9. During receiving IPL data.

```
┌──────────────────────────┐
│  Date            ▓00-00-00▓
│  Time            12:34 00 │
│                          │
│  ID Character    MC #01   │
│  Check System    Master   │
│  KP System       Master   │
│  R/J/Order Printer(1)  UP-350
│  R/J/Order Printer(2)  UP-350
│  Slip Printer    SA-3015  │
│                          │
│  OK?             Yes      │
│                          │
└──────────────────────────┘
```

10. After finishing IPL, the initialization operation should be
    done.

3-3. Manager function

Using the manager function makes it possible to control the terminal conditions. The contents of the manager function are as follows:

1. System connection check
2. Remote on
3. Remote off
4. Busy reset
5. Stock maintenance
6. Drawer for clerk
7. CHK# (Clerk interrupt)
8. Order ID change
9. Error log print
10. System re-configuration
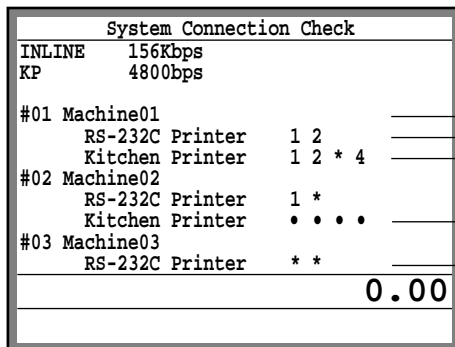11. Receipt on/off control

3-3-1. System connection check

This command shows the connection status of terminals, R/J printers and kitchen printers.

```
MGR  C01      15-12-97 12:34    000000

          Manager Mode
  1.System Connection Check
  2.Remote On
  3.Remote Off
  4.Busy Reset
  5.Stock Maintenance
  6.Drawer for Clerk
  7.CHK#(CLK Interrupt)
  8.Order ID Change         v

                          0.00

```
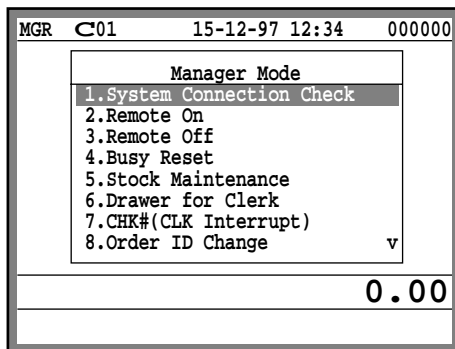
1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "1.System Connection Check" and press the <YES> key.

```
        System Connection Check
INLINE     156Kbps
KP         4800bps

#01 Machine01
      RS-232C Printer    1 2
      Kitchen Printer    1 2 * 4
#02 Machine02
      RS-232C Printer    1 *
      Kitchen Printer    • • • •
#03 Machine03
      RS-232C Printer    * *
                          0.00

```

— Physical ID, Logical ID
— RS-232C printer recognition (1:printer (1), 2:printer (2))
— Kitchen printer recognition (KP Master Terminal only)

— Kitchen printer recognition (KP Back up Master Terminal only)

— Un recognized RS-232C printer

4. After checking the system connection, press the <ESC> key to return the previous menu.

Note:

If there is unrecognized terminal there it shows "*" as below.
e.g.) #04 ************

3-3-2. Remote on

This command is used to power on the terminals connected with the same in-line.

```
MGR  C01       15-12-97 12:34      000000
        ┌─────────────────────────────┐
        │        Manager Mode         │
        │ 1.System Connection Check   │
        │ 2.Remote On                 │
        │ 3.Remote Off                │
        │ 4.Busy Reset                │
        │ 5.Stock Maintenance         │
        │ 6.Drawer for Clerk          │
        │ 7.CHK#(CLK Interrupt)       │
        │ 8.Order ID Change         v │
        └─────────────────────────────┘
                               0.00
```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "2.Remote On" and press the <YES> key.

```
┌─────────────────────────────────────┐
│            Remote On                 │
│                                      │
│  Terminal           All              │
│                                      │
│  OK?                YES              │
│                                      │
│                                      │
│                                      │
│                                      │
│                               0.00   │
│                                      │
└─────────────────────────────────────┘
```

4. Select all terminals or individual terminal, select "YES" to execute this command.

3-3-3. Remote off

This command is used to power off the terminals connected with the same in-line.

```
MGR  C01       15-12-97 12:34      000000
        ┌─────────────────────────────┐
        │        Manager Mode         │
        │ 1.System Connection Check   │
        │ 2.Remote On                 │
        │ 3.Remote Off                │
        │ 4.Busy Reset                │
        │ 5.Stock Maintenance         │
        │ 6.Drawer for Clerk          │
        │ 7.CHK#(CLK Interrupt)       │
        │ 8.Order ID Change         v │
        └─────────────────────────────┘
                               0.00
```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "2.Remote Off" and press the <YES> key.

```
┌─────────────────────────────────────┐
│            Remote Off                │
│                                      │
│  Terminal           All              │
│                                      │
│  OK?                YES              │
│                                      │
│                                      │
│                                      │
│                                      │
│                               0.00   │
│                                      │
└─────────────────────────────────────┘
```

4. Select all terminals or individual terminal, select "YES" to execute this command.

Note: In case of waking up a terminal manually, enter **9999999999** and press the <YES> key.

Manager Operation

3-3-4. Busy reset

This command is used to release the busy flag of the check used by other dead terminal. Executing this command always releases this flag, so please be careful to perform this operation.

```
MGR  C01      15-12-97 12:34    000000
        ┌─────────────────────────┐
        │      Manager Mode       │
        │ 1.System Connection Check│
        │ 2.Remote On             │
        │ 3.Remote Off            │
        │ 4.Busy Reset            │
        │ 5.Stock Maintenance     │
        │ 6.Drawer for Clerk      │
        │ 7.CHK#(CLK Interrupt)   │
        │ 8.Order ID Change      v│
        └─────────────────────────┘
                            0.00
```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "4.Busy Reset" and press the <YES> key.

```
            Busy Reset

   Check No.           12

   OK?                YES




                            0.00
```

4. Enter the appropriate check number, and then select "YES" to execute this command.

```
            Busy Reset

   Check No.           12

   OK?                YES

             Normal End



                            0.00
```

3-3-5. Stock maintenance

This command is used to update PLU stock quantities brought by purchasing or inventory processing.

```
MGR  C01      15-12-97 12:34    000000

         Manager Mode
  1.System Connection Check
  2.Remote On
  3.Remote Off
  4.Busy Reset
  5.Stock Maintenance
  6.Drawer for Clerk
  7.CHK#(CLK Interrupt)
  8.Order ID Change          v

                       0.00

```
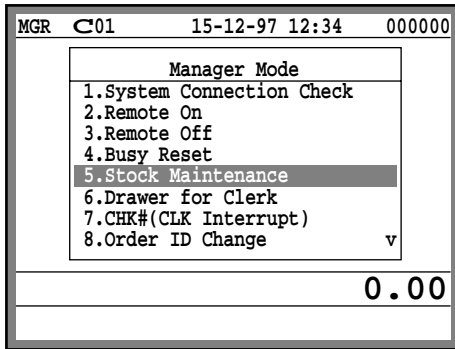
1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.
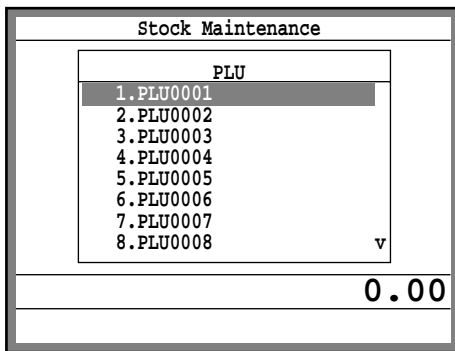
3. Select "5.Stock Maintenance" and press the <YES> key.

```
        Stock Maintenance

             PLU
  1.PLU0001
  2.PLU0002
  3.PLU0003
  4.PLU0004
  5.PLU0005
  6.PLU0006
  7.PLU0007
  8.PLU0008             v

                       0.00

```
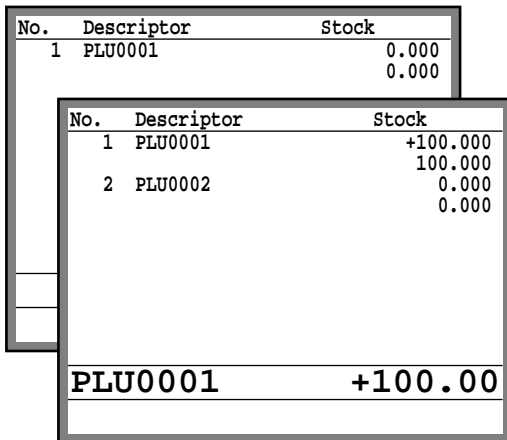
4. Select the appropriate PLU and press the <YES> key.

```
No.  Descriptor      Stock
  1  PLU0001              0.000
                         0.000

No.  Descriptor      Stock
  1  PLU0001           +100.000
                       100.000
  2  PLU0002             0.000
                         0.000




PLU0001          +100.00

```

5. Enter adjustment (adding) stock value and press the <YES> key. If you want to decrease stock value, press the <RF> key before entering the stock value.
   The next PLU appears on the screen.

6. Press the <ESC> key to return to the previous menu.

3-3-6. Drawer for clerk

This command is used to designate the drawer 1 or 2.

```
MGR  C01        15-12-97 12:34      000000
          Manager Mode
      1.System Connection Check
      2.Remote On
      3.Remote Off
      4.Busy Reset
      5.Stock Maintenance
      6.Drawer for Clerk
      7.CHK#(CLK Interrupt)
      8.Order ID Change          v

                         0.00

```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "6.Drawer for Clerk" and press the <YES> key.

```
          Drawer for Clerk
      C01                        0
      C02                        0
      C03                        0
      C04                        0
      C05                        0
      C06                        0




                         0.00

```

4. Enter the appropriate drawer number (1 or 2, "0" means drawer 1), and press the <YES> key.

5. Press the <ESC> key to return to the previous menu.

3-3-7. CHK# (Clerk interrupt)

This command is used to designate the check number for clerk interrupt to each clerk.

```
MGR  C01        15-12-97 12:34      000000
          Manager Mode
      1.System Connection Check
      2.Remote On
      3.Remote Off
      4.Busy Reset
      5.Stock Maintenance
      6.Drawer for Clerk
      7.CHK#(CLK Interrupt)
      8.Order ID Change          v

                         0.00

```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "7.CHK#(CLK Interrupt)" and press the <YES> key.

```
        CHK#(CLK Interrupt)
      C01                   000001
      C02                   000002
      C03                   000003
      C04                   000004
      C05                   000005
      C06                   000006




                         0.00

```

4. Enter the appropriate check number, and press the <YES> key.

5. Press the <ESC> key to return the previous menu.

3-3-8. Order ID change

This command is used to change the target printer of order temporarily.

```
MGR  C01      15-12-97 12:34     000000
        Manager Mode
    1.System Connection Check
    2.Remote On
    3.Remote Off
    4.Busy Reset
    5.Stock Maintenance
    6.Drawer for Clerk
    7.CHK#(CLK Interrupt)
    8.Order ID Change              v

                              0.00

```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "8.Order ID Change" and press the <YES> key.

```
        Order ID Change
Definition Enable              YES

 1.Order1                      103
 2.Order2                      002
 3.Order3                      003
 4.Order4                      104
 5.Order5                      000
 6.Order6                      000
 7.Order7                      000

    OK?                        YES
                              0.00

```

D$_3$ D$_2$ D$_1$

4. Select "YES" of the Definition Enable field, and enter an appropriate ID number of each order printer and press the <YES> key. Select "YES" of the last line execute this command.

5. Press the <ESC> key to return to the previous menu.

Note: D$_3$ D$_2$ D$_1$

In case of D$_3$=0, D$_2$ & D$_1$ is ID number of KP (01~04).
In case of D$_3$=1, D$_2$ & D$_1$ is ECR phisical ID that connect to printer-1.
In case of D$_3$=2, D$_2$ & D$_1$ is ECR phisical ID that connect to printer-2.

Manager Operation

3-3-9. Error log print

This command is used to display/print out the error log file.

```
MGR  C01       15-12-97 12:34      000000
        Manager Mode
  3.Remote off                    ^
  4.Busy Reset
  5.Stock Maintenance
  6.Drawer for Clerk
  7.CHK#(CLK Interrupt)
  8.Order ID Change
  9.Error Log Print
 10.System Re-configuration

                            0.00
```
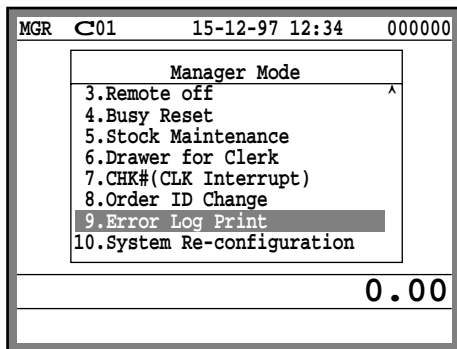
1. Sign on a clerk (if necessary).
2. Press the <X/Z MODE> key repeatedly to assign Manager Mode.
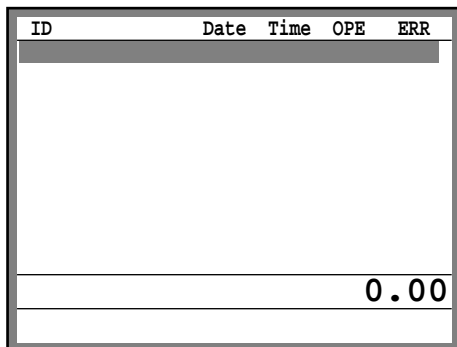
3. Select "9.Error Log Print" and press the <YES> key.

```
 ID           Date  Time  OPE   ERR




                            0.00
```
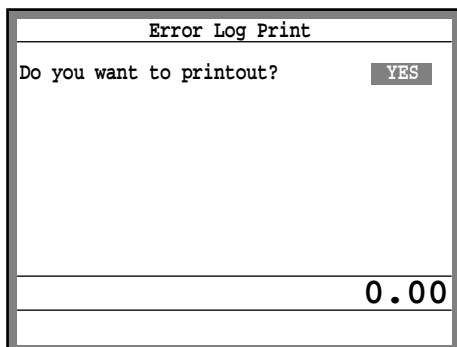
4. The display shows current error log.
   Then press the <ESC> key.

```
        Error Log Print

Do you want to printout?        YES




                            0.00
```

5. Press the <YES> key if you want to print error log.
   If you do not want to print error log, press the <ESC> key.

3-3-10. System re-configuration

This command is one procedure of down recovery. It backs the contents of the system configuration file to the original value.

It should be executed under these conditions:

1) After issuing "Open check report."
2) All ECRs are connected and work normally (Check by System Connection Check)
3) No ECRs are during registration, collection, consolidation, sending/receiving programs.
4) Activate "System re-configuration" command at the terminal on which the "System re-configuration" icon is lit.

```
MGR  C01      15-12-97 12:34      000000
          Manager Mode
    3.Remote off                 ^
    4.Busy Reset
    5.Stock Maintenance
    6.Drawer for Clerk
    7.CHK#(CLK Interrupt)
    8.Order ID Change
    9.Error Log Print
   10.System Re-configuration
                              0.00
                 ⊘
```

Re-configuration require icon

```
       System Re-configuration

System Re-configuration          NO

    OK?                          YES




                              0.00
```
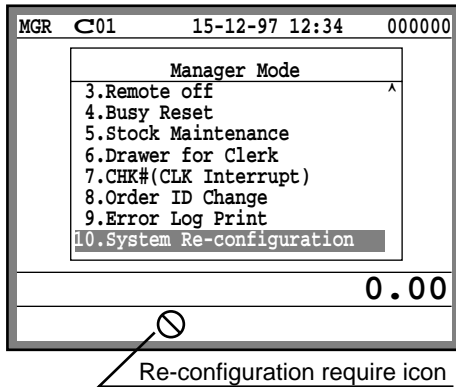
1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select "10.System Re-configuration" and press the <YES> key.
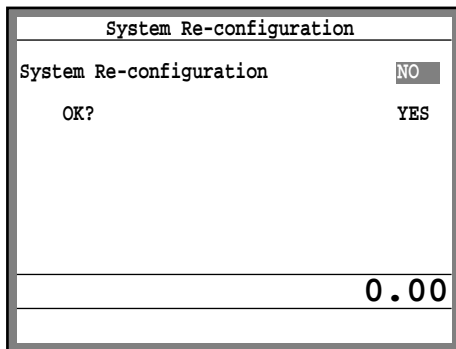
4. Choose the option "YES (Perform system re-configuration)/ NO (Abort this procedure)" and press the <YES> key.

3-3-11. Changing receipt on/off status

Even if no <Receipt on/off> key is on the keyboard, you can change the receipt on/off status (on → off, off → on) by the operation described below.

```
MGR   C01      15-12-97 12:34      000000

              Manager Mode
        1.System Connection Check
        2.Remote On
        3.Remote Off
        4.Busy Reset
        5.Stock Maintenance
        6.Drawer for Clerk
        7.CHK#(CLK Interrupt)
        8.Order ID Change          v

               99999999.99

```
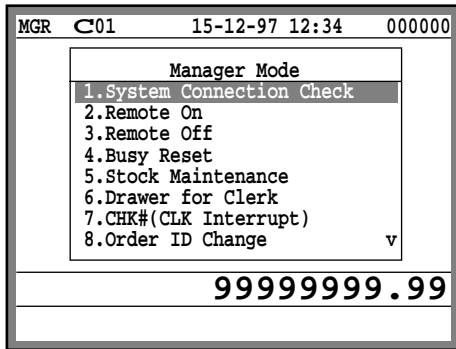
1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Enter "9999999999" and press the <ESC> key.
   If the status turns on, the "Receipt on" icon is lit.
   If the status turns off, the "Receipt on" icon is gone.

```
MGR   C01      15-12-96 12:34      000000

              Manager Mode
        1.System Connection Check
        2.Remote On
        3.Remote Off
        4.Busy Reset
        5.Stock Maintenance
        6.Drawer for Clerk
        7.CHK#(CLK Interrupt)
        8.Order ID Change          v

                     0.00
             R
```
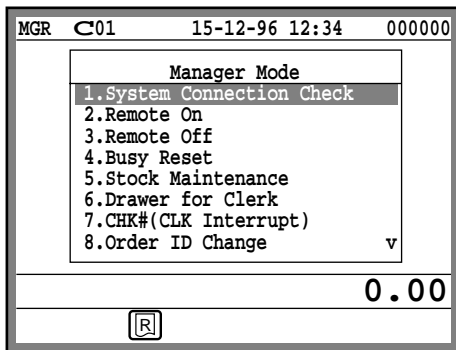
3-4. System command execution

System command functions are provided to perform nonregistration operations, such as collection/consolidation system control, backup/restore operation of files in the terminals, and remote power on/off control.

3-4-1. X/Z reporting

X/Z command execution

1. Issuing flash report
X/Z mode → <X>   or <X/FOR>, <XX>, <XXX>, <X/KETTEN>

2. Issuing other reports
X/Z mode → $D_7 D_6 D_5 D_4 D_3 D_2 D_1$ <#-1>

Meaning of the command data

Digit	Value	Meaning
D_7	0	No edition
	1	Editing by group
	2	Editing by department
	3	Editing by subdepartment
	4	Editing by order character
D_6	0	No extraction
	1	Inactive (Zero sales)
	4	Out of stock
D_5	0	No classification
	3	CLERK
	4	TOTAL ONLY (open check report)
D_4	0	Execution in X mode
	1	Execution in Z mode
D_3	0	Issuing daily area
	1	Issuing periodic 1 area
	2	Issuing periodic 2 area
	3	Issuing daily consolidation area
	4	Issuing periodic 1 consolidation area
	5	Issuing periodic 2 consolidation area
$D_2 D_1$	00 ~ 09	Batch report 1 ~ 10
	11	Fixed totalizer
	12	Free function
	14	PLU
	64	PLU stock
	13	Subdepartment
	15	Department
	16	Group
	17	Clerk
	19	Time zone
	20	Monthly
	25	Open check
	28	Table analysis
	58	Journal memory
	22	Void reason
	81 ~ 88	Menu sheet 1 ~ 8
	71	Flash
	24	Hourly/Labor
	29	Employee
	29	Employee activity
	31	Hourly item
	67	IDC (1) clear
	68	IDC (2) clear
	69	IDC (3) clear

3-4-2. X/Z collection/consolidation

X/Z collection/consolidation execution

$$\text{In-line X/Z mode} \rightarrow D_{14}D_{13}D_{12}D_{11}D_{10}D_9D_8D_7D_6D_5D_4D_3D_2D_1 \; \langle \#\text{-}2 \rangle \rightarrow \langle ESC \rangle$$

Meaning of the command data

Digit	Value	Meaning
$D_{14} \sim D_{10}$	11110	Collection
	11111	Consolidation
	11112	Collection/Consolidation
D_9D_8	00	Fixed
D_7	0	No edition
	1	Editing by group
	2	Editing by department
	3	Editing by subdepartment
	4	Editing by order character
D_6	0	No extraction
	1	Inactive (Zero sales)
	4	Out of stock
D_5	0	No classification
	3	CLERK
D_4	0	Execution in X mode
	1	Execution in Z mode
D_3	0	Issuing daily area
	1	Issuing periodic 1 area
	2	Issuing periodic 2 area
D_2D_1	00 ~ 09	Batch report 1 ~ 10
	11	Fixed totalizer
	12	Free function
	14	PLU
	64	PLU stock
	13	Subdepartment
	15	Department
	16	Group
	17	Clerk
	19	Time zone
	20	Monthly
	22	Void reason
	28	Table analysis
	58	Journal memory
	31	Hourly item
	51	Mix&Match

3-4-3. Backup/restore the program data

Backup/restore the program data execution

$$\text{Auto-program mode} \rightarrow D_{14}D_{13}D_{12}D_{11}D_{10}D_9D_8D_7D_6D_5D_4D_3D_2D_1 <\text{\#-2}>$$

Meaning of the command data

Digit	Value	Meaning
D_{14}~D_{10}	00050	Program send
	00051	Program receive
D_9D_8	00	All terminal
	01 ~ 32	Terminal ID of individual terminal
D_7~D_5	000	Fixed value
D_4~D_1	0nnn	nnn: File No.
	0090	All files with file allocation data
	0092	All files without file allocation data
	1004	PLU unit price
	1054	PLU 2nd unit price

3-4-4. Remote power control

Remote power control execution

$$\text{Manager mode} \rightarrow D_4D_3D_2D_1 <\text{\#-2}>$$

Meaning of the command data

Digit	Value	Meaning
D_4D_3	00	All terminal
	01 ~ 32	Terminal ID of individual terminal
D_2D_1	10	Remote power on
	11	Remote power off

3-5. Data Communication System

The following details the in-line and on-line data communication functions available with the QT-2000 system.

3-5-1. In/on-line connectors

With the QT-2000, there are the following in/on-line connectors in the bottom side and right side of the body.

In-line	(Standard)	
KP-in-line	(Standard)	
RS-232C Com1	(Standard)	For Hand held scanner (HHS-9)
RS-232C Com2	(Standard)	For R/J printer (UP-350/SA-3015)
RS-232C Com3	(Standard)	For MODEM or PC direct connection
Infrared port	(Standard)	

RS-232C Com1

RS-232C Com2

Slip printer port

KP In-line
(red)

In-line
(white)

Drawer cable

RS-232C Com3

RS-232C COM3

Side view

Bottom view

Infrared port
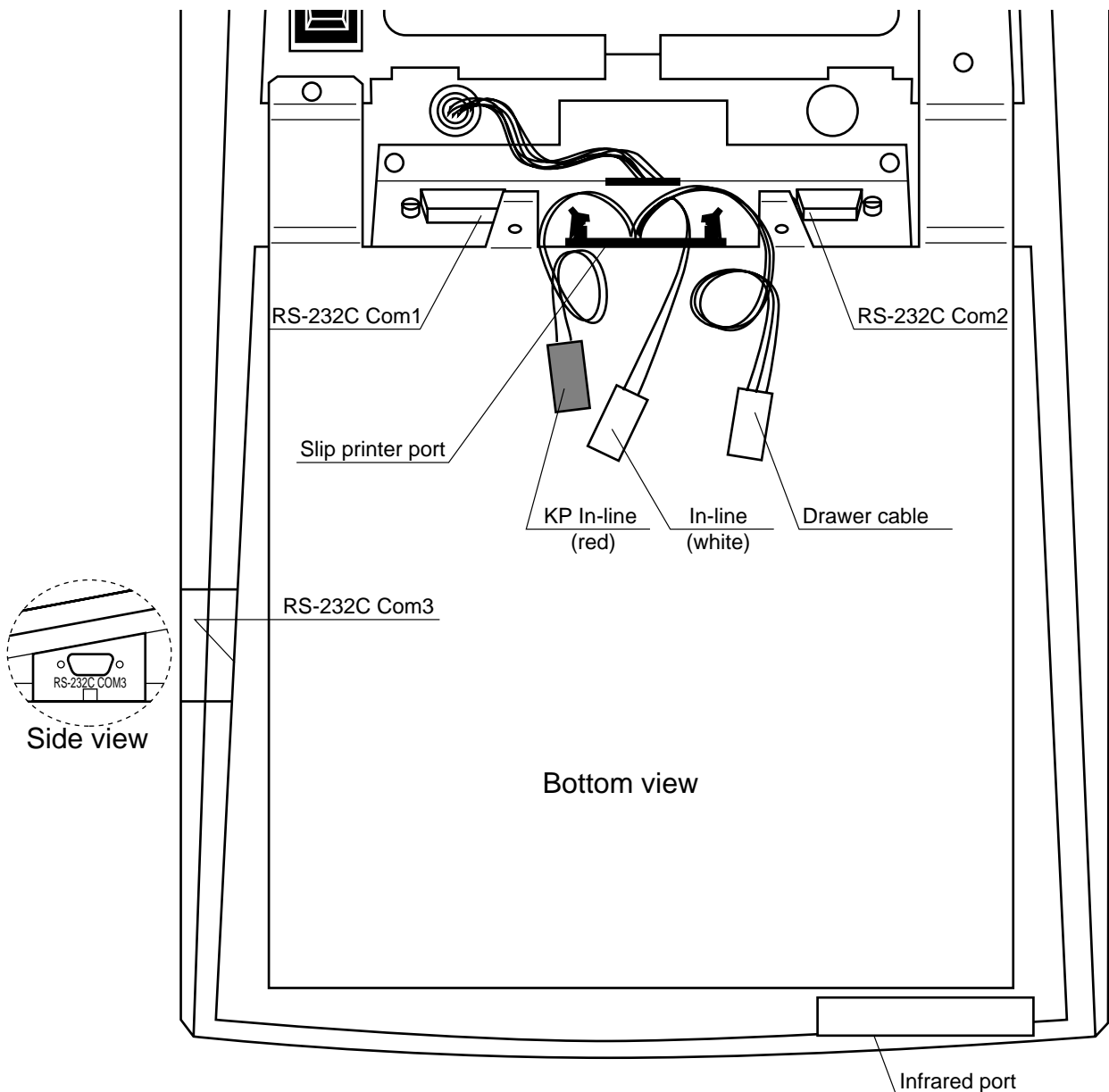
3-5-2. Hardware interface

With the QT-2000, there are the following in/on-line connectors in the bottom side and right side of the body.

3-5-2-1. In-line interface

1) In-line connection diagram
The maximum in-line cable length and the maximum connection unit will be varied by the in-line communication speed as shown below list.
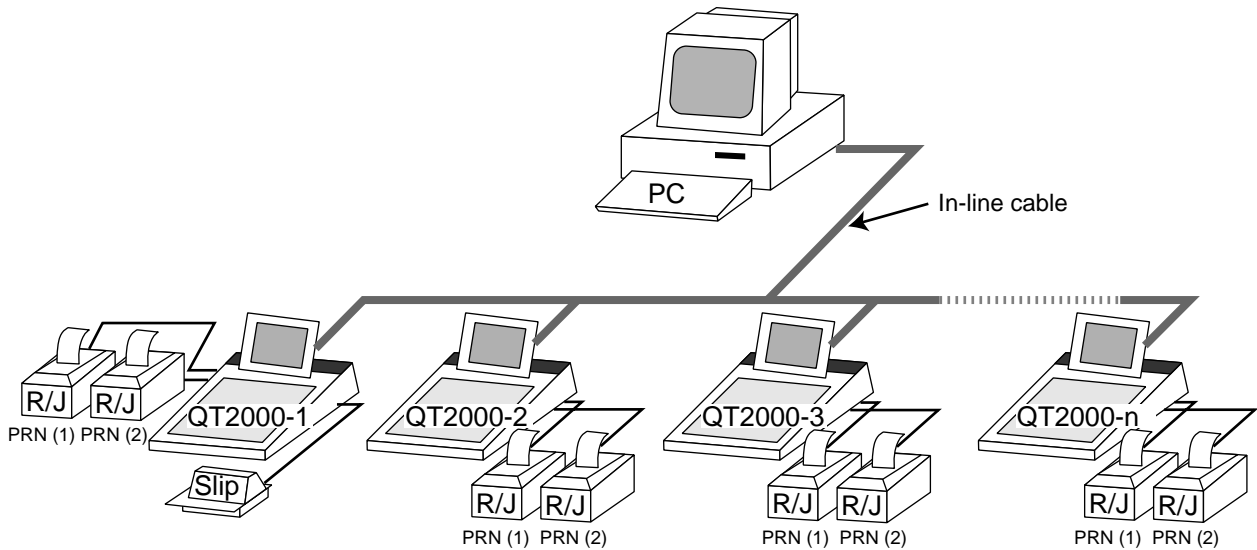
In-line communication speed (baud rate)	Maximum connection unit	Maximum cable length
1.25 M bps	8	86
625 k bps	12	200
312.5 k bps	20	430
156.25 k bps	32	890

2) Connection
Multi drop

3-5-2-2. On-line interface

Only the RS-232C Com3 port can be connected with a modem or personal computer.

1) Specification of RS-232C Com3 port
   Communication method: Half duplex communication
   Configuration of connection: Point-to point
   Line type: Public lines/exclusive lines
   Starting method: Center (host computer) based start up
   Protocol: Async.
   Communication speed: 1200/2400/4800/9600/19200 bps
   Error control: CRC-128 or CRC-1024
   Text length: 128 or 1024 bytes

2) The cable diagram between QT-2000 and MODEM

QT-2000 (Com3)			MODEM	
Pin No.	Signal name		Signal name	Pin No.
3	SD/TXD	———	SD	2
2	RD/RXD	———	RD	3
7	RS/RTS	———	RS	4
8	CS/CTS	———	CS	5
1	CD/DCD	———	CD	8
4	ER/DTR	———	ER	20
6	DR/DSR	———	DR	6
9	CI/RI	———	CI	22
5	GND	———	GND	7
				(DSUB25)

3) The cable diagram between QT-2000 and PC

QT-2000 (Com3)			PC		
Pin No.	Signal name		Signal name	Pin No.	Pin No.
3	SD/TXD		SD	3	2
2	RD/RXD		RD	2	3
7	RS/RTS		RS	7	4
8	CS/CTS		CS	8	5
1	CD/DCD		CD	1	8
4	ER/DTR		ER	4	20
6	DR/DSR		DR	6	6
9	CI/RI		CI		22
5	GND	———	GND	5	7
				(DSUB9)	
					(DSUB25)
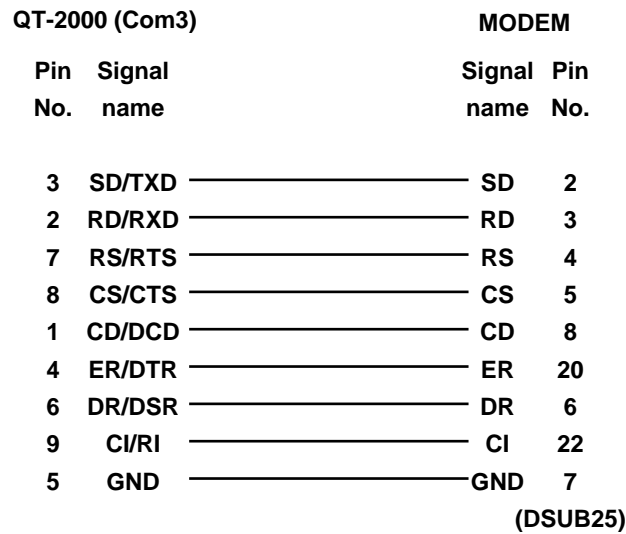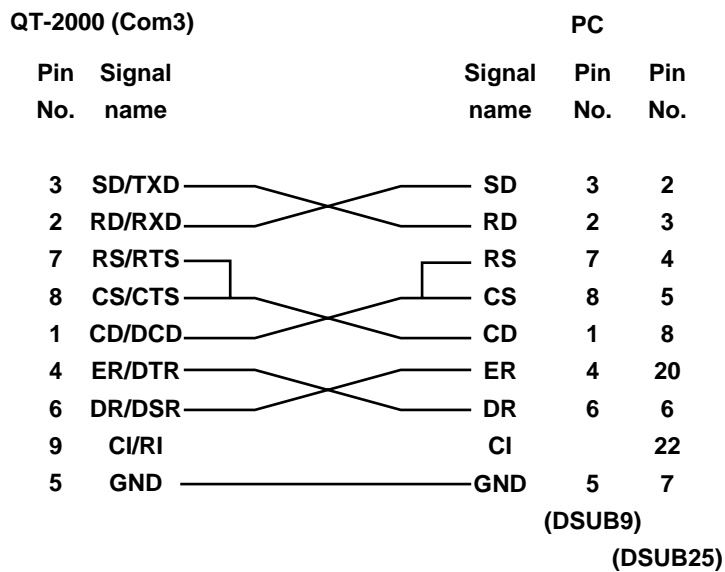
3-5-3. In/On-line functions

3-5-3-1. In-line functions

The list below shows the main functions available with the QT-2000 system. Power on/off is automatically performed for terminals whose mode is in the OFF mode when those functions are performed.

1) X/Z data collection for each terminal
2) X/Z data consolidation for each terminal
3) X/Z data collection/consolidation for each terminal
4) Program data copy and upload between terminals (auto-program function)

Functions 1), 2) and 3) can only be performed from a terminal that is programmed as master in which consolidation files are allocated.

3-5-3-2. On-line functions

The QT-2000 can be controlled from the personal computer by connecting it to RS-232C port 3 (Com3).
Power on/off is automatically performed for terminals whose mode is in the OFF mode when those functions are performed.

3-6. Collection/Consolidation system

This section provides the general description of the data collection/consolidation system of the QT-2000. The collection/consolidation system is managed by the master/satellite system using in-line network. Installation of any special hardware devices is not required for collection/consolidation as in-line interfaces are standard feature. Communication is possible with the connection of in-line cable.

In this section, the term "master" means a terminal which collects or consolidates data registered on each terminal (called "satellite") connected the in-line.

The differences between collection and consolidation are as follows.

– Collection

Outputs the data of the master and individual satellite terminals from the master terminal. If the master's receipt/journal printer is specified as a report printer, the data is printed out by each specified terminal. The total values for the data of each terminal are not output.

– Consolidation

Totals data from the master and satellites, and then output it to a specific device. Output for individual terminals is not performed when consolidation is specified.

Types of totalizer files

There are following seven types of totalizer files:

– Daily total files

Daily total files accumulate registered data.

– Periodic total 1 files

These files accumulate registered data, and can be reset separately from the daily total files. Therefore, the total data within specific period can be accessed by using these files.

– Periodic total 2 files

These files have same functions as the periodic total 1 files, but can accumulate the periodic total data within different period.

– Daily consolidation files

These are files to consolidate the daily data.

– Periodic total 1 consolidation files

These are files to consolidate the periodic 1 data.

– Periodic total 2 consolidation files

These are files to consolidate the periodic 2 data.

– Consolidation work files

These files are work files to consolidate the data of daily total, periodic total 1 or periodic total 2 files.

The daily consolidation files, periodic total 1 consolidation files, periodic total 2 consolidation files and consolidation work files must be reserved as work files at the master terminal during collection/consolidation operations.

NOTE:

Only a file with the same number of records as the records of corresponding files need to be reserved. For example, if the number of department is 50, then the same number, 50 records, should be reserved for department of other types.

File description and number list

File description	Terminal files			Consolidation files			Consolidation work
	Daily total	Periodic 1 total	Periodic 2 total	Daily consolidation	Periodic 1 consolidation	Periodic 2 consolidation	
Fixed totalizer	001	101	201	301	401	501	601
Transaction key	002	102	202	302	402	502	602
Subdepartment	003	103	203	303	403	503	603
PLU	004	104	204	304	404	504	604
Department	005	105	205	305	405	505	605
Group	006	106	206	306	406	506	606
Clerk detail	011	111	211	311	411	511	611
Hourly sales	009	109	209	309	409	509	609
Monthly sales	010	110	210	310	410	510	610
Void table	012	112	212	312	412	512	612
Table analysis	018	118	218	318	418	518	618
Grand total	020	120	220	320	420	520	620

3-6-1. X/Z collection

This is used when it is desirable to obtain the counters and totals of the individual terminals. Normally, collection, rather than consolidation should be used for Z (reset).

For collection results (normal end or error end), the satellite does not print it out on the receipt/journal during X collection. But the results of the Z collection are printed out in the journal during Z collection.

Details can be printed out on the receipt/journal of any terminal, as well as the master terminal, in accordance with the program.

3-6-1-1. X collection processing
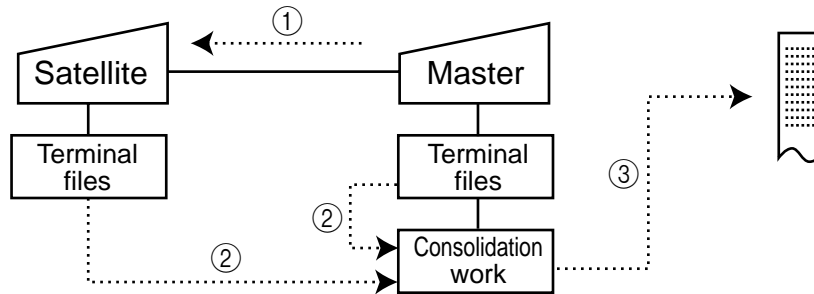

X collection processing is performed as the figure shown below.

① An X collection command is started up from the master terminal.

② The terminals send their report data to the consolidation work file of the master.

③ Report data from the satellite's terminal file are printed out on the master's R/J printer or displayed on the master terminal's LCD.

④ After the master terminal's processing completes, the same processes described in the item ① to ③ are executed for the other terminals. Data will be sent without the clerk noticing, even when the satellite in the process of registering.

3-6-1-2. Z collection processing

Z collection processing is performed as the figure shown below.
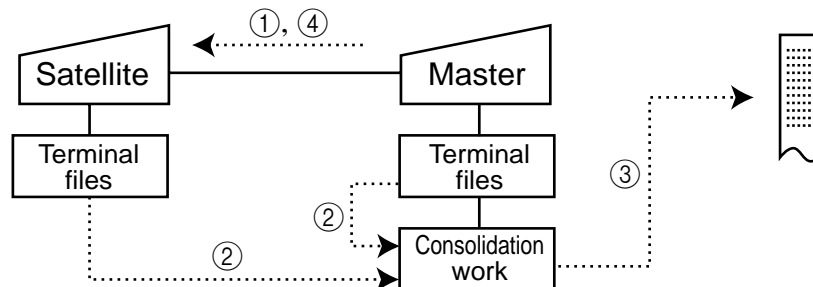
① When a Z collection command is started up from the master terminal, the master first locks an objected terminal.

② The reports are printed out on the satellite if programmed, and then the terminals send their report data to the consolidation work file of the master terminal.

③ Report data from the satellite's terminal file are printed out on the master's R/J printer or displayed on the master's LCD.

④ The data of satellite's terminal file are cleared, and then the Z lock of the satellite terminal is released.

⑤ After the master terminal's processing completes, the same processes described in the item ① to ④ are executed for the other terminal.

NOTE:

• When a Z collection is performed, the consolidation data cannot be output. If output of consolidation data is desired, perform "collection/consolidation" processing described later.

• Even if an error is occurred, or if the processing is terminated, the data to be collected remains as they are, and Z lock statuses are automatically released.

3-6-1-3. X/Z collection command execution

```
X/Z  C01      15-12-97 12:34     000000


           Inline X/Z
     1.Collection
     2.Consolidation
     3.Collection & Consolidation



                             0.00

```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign In-line X/Z.

3. Select "1.Collection" and press the <YES> key.

```
              Collection

            Collection
       1.Daily       X
       2.Periodic(1) X
         Collection

              Daily X
        1.Batch
        2.Cashier/Clerk
        3.Others

                             0.00

```

4. Select the types and kinds you want to collect.
   (Please refer to the X/Z report chapter about the report types
   and kinds.)

```
              Collection

          Target ECR
      1.All
      2.Terminal A    #01
      3.Terminal B    #02
      4.Terminal C    ---     ◄ Selected terminal
      5.Terminal D    #04
      6.Terminal E    #05
      7.Terminal F    #06
      8.Terminal G    #07

                             0.00

```

5. Select the target terminal(s).
   In case of selecting individual terminal(s), press the <ESC>
   key when you finish to designate terminal(s).

```
            Batch (1)
Inline                       11110
Collection                 0000000
MC #01         12:30
MC #02         12:32
MC #03         Error End      0001
MC #04         12:40




                             0.00

```

6. Press the <ESC> key twice to terminate this process.

3-6-2. X/Z consolidation

This is used when it is desirable to obtain the counters and totals of all terminals in the store. After consolidating data from all specified terminals, the master prints the details on the receipt/journal printer.

Regardless of whether they are in the process of registration, the satellite terminals send data and do not print out the reports, when X consolidation is performed. But, during the Z consolidation, satellites are locked from registrations, and reports can be printed out on the receipt/journal of a terminal in accordance with the program.

3-6-2-1. X consolidation processing
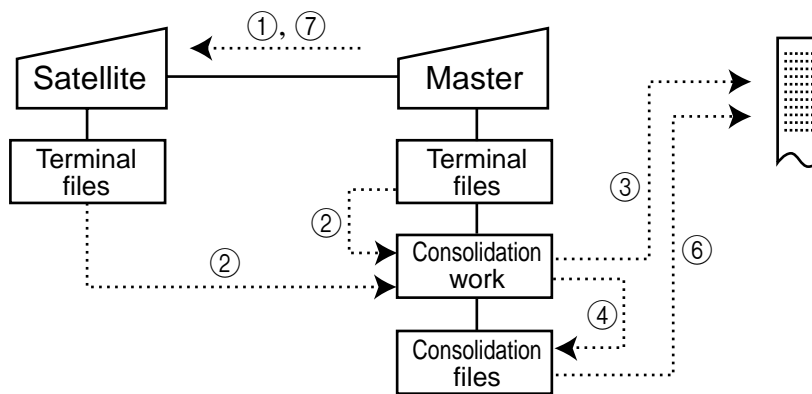
X consolidation processing is performed as the figure shown below.
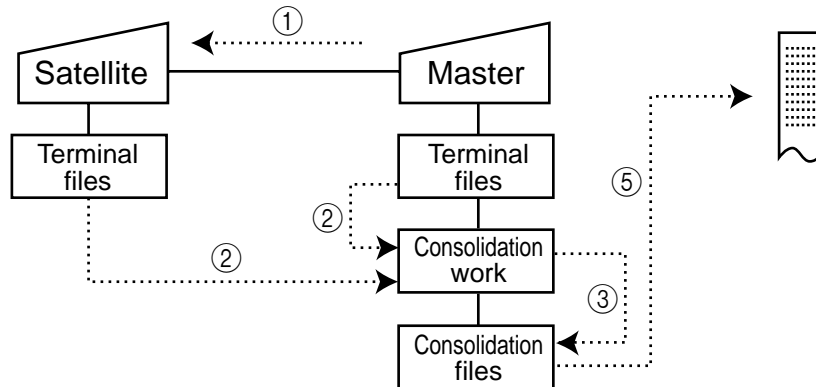
① An X consolidation command is started up from the master terminal.
② Data of the satellite's terminal file are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file is added to the consolidation file.
④ The same process described in item ① to ③ is executed for other terminal.
⑤ After the above collection processing is completed for all terminals, the data accumulated in the consolidation work file are reported on the master's R/J printer.

3-6-2-2. Z consolidation processing

Z consolidation processing is performed as the figure shown below.
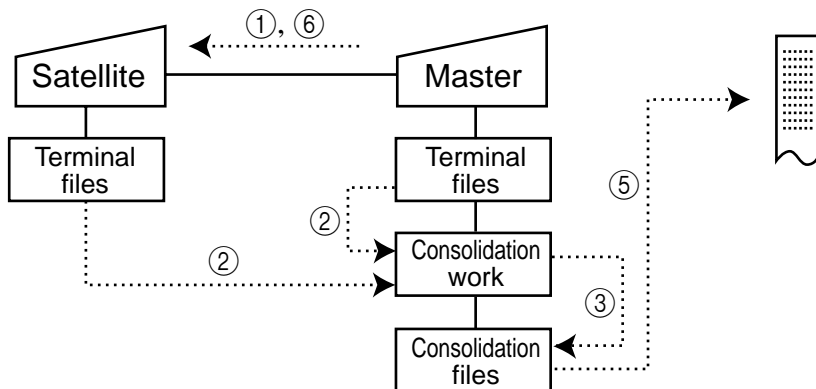
① A Z consolidation command is started up from the master terminal.
The master first locks an objected terminal. If reporting on the satellite is programmed, the reports are printed out on the satellite R/J printer.
② Data of the satellite's terminal files are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file is added to the consolidation file.
④ After the master terminal's processing completes, the same processes described in item ① to ③ are executed for all other terminal.
⑤ The data accumulated in the consolidation file are reported on the master's R/J printer.
⑥ After the above collection processing completes for all terminals, the files of all satellite terminals are cleared, and then satellite's Z lock statuses are released.

NOTE:

- Even if an error is occurred, or if the processing is terminated, the data to be collected remains as they are, and Z lock statuses are automatically released. Therefore, retrying the same operation can be performed.

3-6-2-3. X/Z consolidation command execution

```
X/Z  C01      15-12-97 12:34      000000


            Inline X/Z
         1.Collection
         2.Consolidation
         3.Collection & Consolidation



                              0.00

```

1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign In-line X/Z.

3. Select "2.Consolidation" and press the <YES> key.

```
            Consolidation

            Consolidation
         1.Daily        X
         2.Periodic(1)  X
       Consolidation


            Daily X
         1.Batch
         2.Cashier/Clerk
         3.Others


                              0.00
```

4. Select the types and kinds you want to collect.
   (Please refer to the X/Z report chapter about the report types and kinds.)

```
            Consolidation

            Target ECR
         1.All
         2.Terminal A    #01
         3.Terminal B    #02
         4.Terminal C    ---    ← Selected terminal
         5.Terminal D    #04
         6.Terminal E    #05
         7.Terminal F    #06
         8.Terminal G    #07

                              0.00
```

5. Select the target terminal.
   In case of selecting individual terminal(s), press the <ESC> key when you finish to designate terminal(s).

```
            Batch (1)
Inline                      11111
Consolidation             0000000
MC #01          12:30
MC #02          12:32
MC #03          Error End     0001
MC #04          12:40




                              0.00
```

6. Press the <ESC> key twice to terminate this process.

3-6-3. X/Z collection/consolidation

This is used when it is desirable to obtain the counters and totals of the individual terminals (collection) and of all terminals in the store (consolidation) by one procedure. After printing reports of all specified terminals on the master's receipt/journal printer, the master prints the consolidation report. Regardless whether they are in the process of registration, the satellite terminals are send data and do not print out the reports, when X/Z collection/consolidation is performed. But, during the Z collection/consolidation, satellites are locked from registrations, and reports can be printed out on the receipt/journal of a terminal in accordance with the program.

After consolidating data from all specified terminals, the master prints the details on the receipt/journal printer.

3-6-2-1. X collection/consolidation processing

X collection/consolidation processing is performed as the figure shown below.
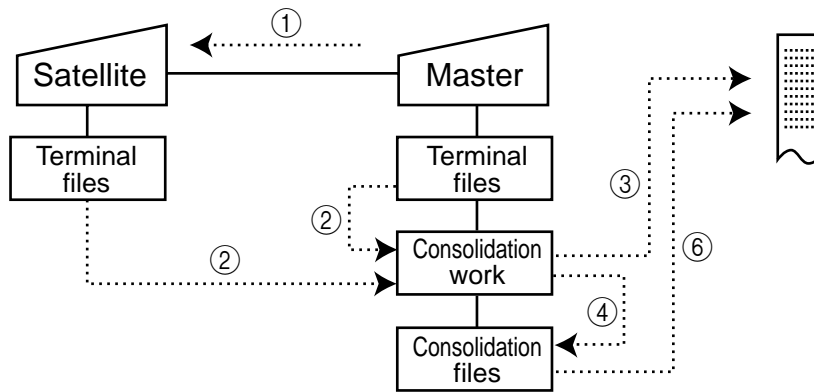
① An X collection/consolidation command is started up from the master terminal.
② Data of the satellite's terminal file are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file is reported on the master's R/J printer.
④ The data in the consolidation work file is added to the consolidation file.
⑤ The same process described in item ① to ④ is executed for other terminal.
⑥ After the above collection processing is completed for all terminals, the data accumulated in the consolidation file are reported on the master's R/J printer.

3-6-3-2. Z collection/consolidation processing

Z collection/consolidation processing is performed as the figure shown below.

① A Z collection/consolidation command is started up from the master terminal.
   The master first locks an objected terminal.
   The satellite send their report data to the master, and the data are printed out on the master's R/J printer.
② Data of the satellite's terminal file are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file are reported on the master's R/J printer.
④ The data in the consolidation work file is added to the consolidation file.
⑤ After the master terminal's processing completes, the same processes described in item ① to ④ are executed for all other terminal.
⑥ The data accumulated in the consolidation file are reported on the master's R/J printer.
⑦ After the above collection processing completes for all terminals, the files of all satellite terminals are cleared, and then satellite's Z lock statuses are released.

NOTE:

- Even if an error is occurred, or if the processing is terminated, the data to be collected remains as they are, and Z lock statuses are automatically released. Therefore, retrying the same operation can be performed.

3-6-2-3. X/Z collection/consolidation command execution

```
X/Z  C01      15-12-97 12:34      000000



         Inline X/Z
  1.Collection
  2.Consolidation
  3.Collection & Consolidation




                         0.00

```

1. Sign on a clerk (if necessary).
2. Press the <X/Z MODE> key repeatedly to assign In-line X/Z.

3. Select "3.Collection & Consolidation" and press the <YES> key.

```
       Collection&Consolidation

       Collection&Consolidation
    1.Daily        X
    2.Periodic(1) X
    Collection&Consolidation


             Daily X
    1.Batch
    2.Cashier/Clerk
    3.Others


                         0.00
```

4. Select the types and kinds you want to collect.
   (Please refer to the X/Z report chapter about the report types and kinds.)

```
       Collection&Consolidation

           Target ECR
    1.All
    2.Terminal A     #01
    3.Terminal B     #02
    4.Terminal C     ---      ← Selected terminal
    5.Terminal D     #04
    6.Terminal E     #05
    7.Terminal F     #06
    8.Terminal G     #07

                         0.00
```

5. Select the target terminal.
   In case of selecting individual terminal(s), press the <ESC> key when you finish to designate terminal(s).

```
            Batch (1)
 Inline                    11112
 Collection&Consl         0000000
 MC #01         12:30
 MC #02         12:32
 MC #03         Error End     0001
 MC #04         12:40




                         0.00
```

6. Press the <ESC> key twice to terminate this process.

3-7. Auto-programming function

Using the auto programming function makes it possible to save and load the terminal program files. Methods available for saving the terminal program are as follows:

1) Saving another terminal connected through in-line.
2) Saving onto a personal computer connected through on-line or by Ir port.

To ensure quick recovery from a corrupted file resulting from user error or system failure, it is recommended that you maintain back up copies of current terminal programs on a file basis.
Terminal program files can be loaded using procedures opposite to those used for saving.

Note:

Data except for program data, such as data in totalizers, counters, and work area, cannot be saved by the auto programming function.

3-7-1. Auto programming functions

The QT-2000 terminal is capable of saving and loading terminal program files. The terminal program file has the following transfer functions:

1) Copy all terminal files
   (send: activation by source terminal/receive: activation by target terminal)
   This function copies all terminal files (except system work files and terminal ID) with counters and totalizers. When a file is not reserved on the target terminal, the processing for that file is skipped.
2) Copy all terminal program files (send/receive)
   This function copies all terminal files (except system work files and terminal ID) without counters and totalizers. When a file is not reserved on the target terminal, the processing for that file is skipped.
3) Copy individual terminal program files (send/receive)
   This function copies the specific terminal program file (except system work files) without counters and totalizers.
4) Copy unit price field of particular files (send/receive)
   This function copies the unit price field of specific files (i.e. PLU, PLU 2nd@).
5) Copy application programs to flash memory: IPL ([†]send)
   This function copies the application programs to flash memory.
[†] The target terminal should be in the IPL mode. (refer to page 99)

3-7-2. Auto program operation

The procedures of auto program function

```
X/Z  ⊂01      15-12-97 12:34    000000


            AUTO PGM
     1.Send
     2.Receive



                            0.00
```
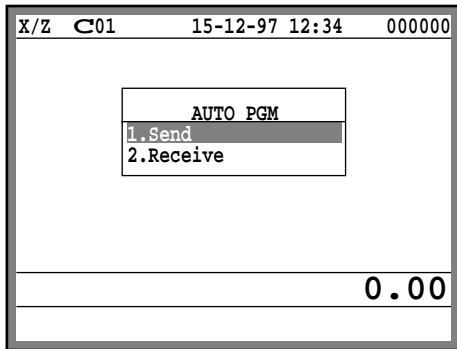
1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign "AUTO PGM."

3. Select the appropriate menu you want by following the guidance. The hierarchy of the AUTO PGM menus are described below.

Auto-program menu hierarchy

Send			Receive		
Copy All	All Data		Copy All	All Data	
	All PGM			All PGM	
Unit Price only	PLU		Unit Price only	PLU	
	PLU 2nd@			PLU 2nd@	
Range	PLU		Range	PLU	
	PLU 2nd@			PLU 2nd@	
Individual Files	Fixed Totalizer		Individual Files	Fixed Totalizer	
	Free Function			Free Function	
	Sub Department			Sub Department	
	PLU			PLU	
	Department			Department	
	Group Character			Group Character	
	Cashier/Clerk			Cashier/Clerk	
	Void			Void	
	Table Analysis			Table Analysis	
	GT Character			GT Character	
	General Feature			General Feature	
	Special Character			Special Character	
	Report Header			Report Header	
	Tax Table			Tax Table	
	Pulldown Group			Pulldown Group	
	Set Menu Table			Set Menu Table	
	Batch X/Z			Batch X/Z	
	Clerk Detail			Clerk Detail	
	Hourly Item Link			Hourly Item Link	
	Receipt/SLIP Msg			Receipt/SLIP Msg	
	ARG GP1			ARG GP1	
	ARG GP2			ARG GP2	
	ARG GP3			ARG GP3	
	ARG GP4			ARG GP4	
	ARG GP5			ARG GP5	
	Text Recall			Text Recall	
	Check Print			Check Print	
	Graphic Logo			Graphic Logo	
	PLU 2nd@			PLU 2nd@	
	Scheduler			Scheduler	
	Order Char Link			Order Char Link	
	Keyboard			Keyboard	
	Time Zone			Time Zone	
	Employee			Employee	
	Job Code			Job Code	
	Schedule			Schedule	
	IDC Link			IDC Link	
	System Connection			System Connection	
	I/O Parameter			I/O Parameter	
	Printer Connection			Printer Connection	
IPL					

3-8. Command receive function

This menu is used for receiving commands from PC (IBM ThinkPad™) via Ir port.
Executing this menu activates Ir port to receive command (for program uploading/downloading, X/Z collecting).

3-8-1.   Command receiving procedure

```
X/Z  C01      15-12-97 12:34     000000




            Command Receive
     1.Command wait




                           0.00

```
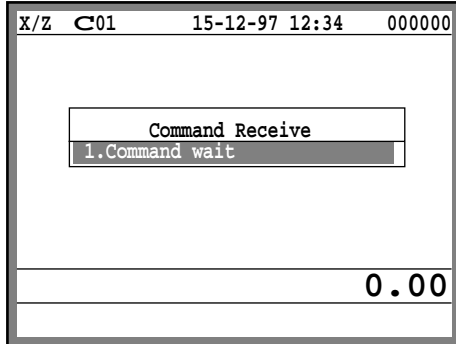
1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign "Command Receive."

3. Press the <YES> key to proceed the step.

```
            Command Receive

     Ready?                   YES






```
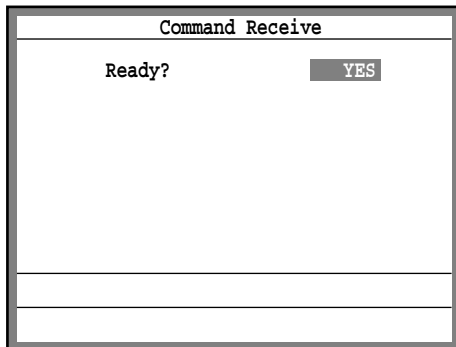
4. Bring Ir port of PC closely to the Ir port of QT-2000 and press the <YES> key to proceed.
5. Run PC application and wait. (the communication icon flashing).

4. Registrations

This section describes characteristic registrations of the QT-2000.

4-1. Clerk sign on/off operation

The following examples illustrate the clerk sign on/off operation. When a clerk ID number is programmed for the clerk key, sign on operation can be performed by merely pressing the clerk key.

It is the same procedure that even clerks are assigned as "clerk", "cashier" or "manager."

1) Clerk sign on operation (Clerk key has the clerk number setting.)

```
┌──────────────────────────────────┐
│ REG  C01    15-12-97 12:34  000001│
│                                   │
│                                   │
│        ┌──────────────────┐       │
│        │    REG  Mode      │       │
│        └──────────────────┘       │
│                                   │
│                                   │
│ C01                              │
│                                   │
└──────────────────────────────────┘
```

```
┌──────────────────────────────────┐
│ REG       15-12-97 12:34  000001  │
│                                   │
│                                   │
│                                   │
│                                   │
│                                   │
│                             0.00  │
│       Please Sign on.             │
└──────────────────────────────────┘
```
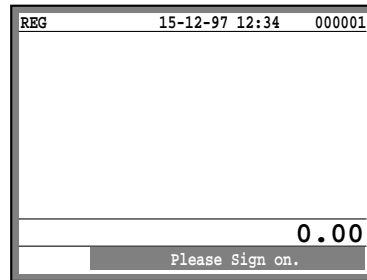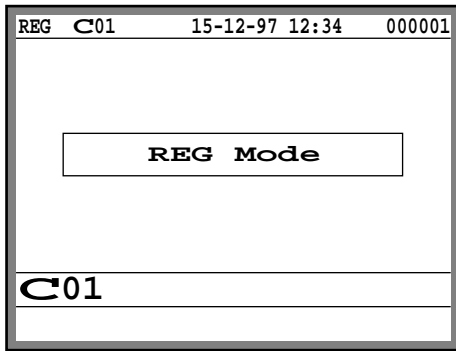
1. Just press the appropriate <CLERK> key.

2) Clerk sign on operation (Clerk key has no clerk number setting.)

In case of the store has many clerks to control, you need not allocate all clerk keys on the keyboard but allocate a few clerk key and program no clerk number one of the clerk key.

```
┌──────────────────────────────────┐
│ REG       15-12-97 12:34  000001  │
│                                   │
│                                   │
│                                   │
│                                   │
│                                   │
│ CLK#                    ----      │
│       Please Sign on.             │
└──────────────────────────────────┘
```

1. Press the <CLERK> key, if you want to display no clerk number entries.

```
┌──────────────────────────────────┐
│ REG       15-12-97 12:34  000001  │
│                                   │
│                                   │
│                                   │
│                                   │
│                                   │
│ CLK#                    --**      │
│       Please Sign on.             │
└──────────────────────────────────┘
```

2. Enter the appropriate clerk number and press the <CLERK> key.

3) Clerk sign off operation

```
REG  C01      15-12-97 12:34      000001




                                    0.00
            Please Sign on.
```

1. Enter "0" and press the <CLERK> key.

4-2. Voiding the last registered item (<VOID> key operation)

Use the <VOID> key to cancel a data that has just been registered using a function key. The <VOID> key can be used to cancel data registered using departments, subdepartments, PLUs, partial tenders, or the <PRICE>, <+>, <–>, <%+>, <%–>, <LOAN> or <PICKUP> key. You can only use the <VOID> key to cancel a registration if you have not yet started registration of the next item.

```
REG  C01      15-12-97 12:34      000001
  1  PLU0001              •1.00
     10%
     %-                   -0.10








%-                        -0.10
      1    ST            •0.90
```

1. Wrong registration is made.

```
REG  C01      15-12-97 12:34      000001
  1  PLU0001              •1.00







VOID                      •0.10
      1    ST            •1.00
```

2. Press the <VOID> key to cancel the data and reregister the transaction.

4-3. Voiding the previous registered item (<VOID> key operation)

If data has been registered using a function key and registration of the next item has begun, use the <VOID> key to cancel previous registered data. Entries using departments, subdepartments or PLUs can be cancelled using the <VOID> key.

```
REG  C01      15-12-97 12:34    000001
   1  PLU0001                  •1.00
   1  PLU0002                  •2.00
   3  PLU0003                  •9.00
   1  PLU0004                  •4.00




PLU0004                  •4.00
          6    ST     •16.00
```

1. Wrong registration is made.

```
REG  C01      15-12-97 12:34    000001
   1  PLU0001                  •1.00
   1  PLU0002                  •2.00
   3  PLU0003                  •9.00
   1  PLU0004                  •4.00




PLU0004                  •4.00
          6    ST     •16.00
```

2. Press the upper/lower arrow key to designate the item registration.

```
REG  C01      15-12-97 12:34    000001
   1  PLU0001                  •1.00
   1  PLU0002                  •2.00
   1  PLU0004                  •4.00




PLU0003                 −9.00
          3    ST      •7.00
```

3. Press the <VOID> key to cancel the item and reregister the transaction.

4-4. Cancelling of all data registered during the transaction

Press the <CANCEL> key to cancel all data registered (except partial tendering) during the transaction. This operation lets you clear registered data and restart from the beginning. The cancel operation must be performed before the transaction is finalized.

```
REG  C01      15-12-97 12:34    000001
   1  PLU0001                  •1.00
   1  PLU0002                  •2.00
   3  PLU0003                  •9.00
   1  PLU0004                  •4.00




PLU0004                  •4.00
          6    ST     •16.00
```

1. Wrong registration is made.

```
┌─────────────────────────────────┐
│ REG  C01    15-12-97 12:34   000001 │
│   1  PLU0001              •1.00  │
│   1  PLU0002              •2.00  │
│   3  PLU0003              •9.00  │
│   1  ┌─────────────────────┐    │
│      │    Cancel OK?       │    │
│      └─────────────────────┘    │
│                                 │
│                                 │
│                                 │
│ PLU0004             •4.00       │
│          6   ST    •16.00       │
└─────────────────────────────────┘
```

2. Press the <CANCEL> key.

```
┌─────────────────────────────────┐
│ REG  C01    15-12-97 12:34   000001 │
│   1  PLU0001              •1.00  │
│   1  PLU0002              •2.00  │
│   3  PLU0003              •9.00  │
│   1  PLU0004              •4.00  │
│      CANCEL        •••••••••••••  │
│                                 │
│                                 │
│                                 │
│ CANCEL               0.00       │
│         Please Sign on.         │
└─────────────────────────────────┘
```

3. Press the <YES> key to cancel the transaction.

Registration

4-5. Using the LIST function

```
<List> or No. <List-#>
        ↓
  ┌─────────────────┐
  │   PLU 1    ←┼── Select one of these
  │   PLU 2    ←┤
  │   PLU 3    ←┤
  └─────────────────┘
```
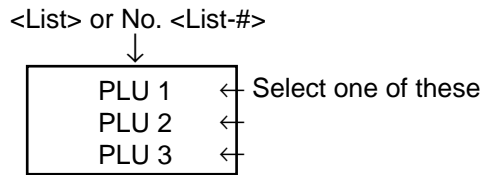
Before using the LIST function, the following programs are necessary to use this function.

1) Allocating the <LIST> key or the <LIST-#> key (page 24 of the programming manual)
   In case of using the <LIST> key, <LIST> key(s) should be allocated on the keyboard before step 2.
2) Programming pulldown group (page 32 of the programming manual)
3) Programming item price (page 151 of the programming manual)

Normal registration by using the <LIST> and <LIST-#> key

```
REG  C01      15-12-97 12:34    000001

           ┌─────────────────────┐
           │       LIST01        │
           │1.PLU0001            │
           │2.PLU0002            │
           │3.PLU0003            │
           │4.PLU0004            │
           └─────────────────────┘


                          0.01
```
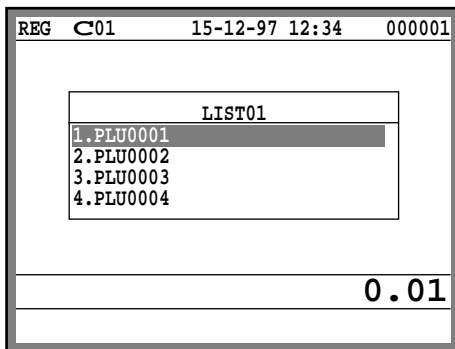
1. Press the <LIST> key or enter the list No. and press the <LIST-#> key.

```
REG   C01      15-12-97 12:34    000001
  1  PLU0001                  •10.00







PLU0001                     •10.00
            1    ST •10.00
```
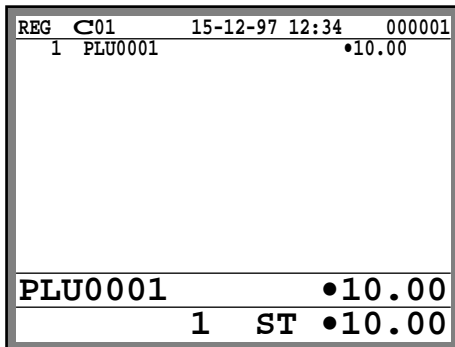
2. Select the appropriate item and press the <YES> key.

Direct selection by using the <LIST> key

```
REG   C01      15-12-97 12:34    000001
  1  PLU0001                  •10.00







PLU0001                     •10.00
            1    ST •10.00
```
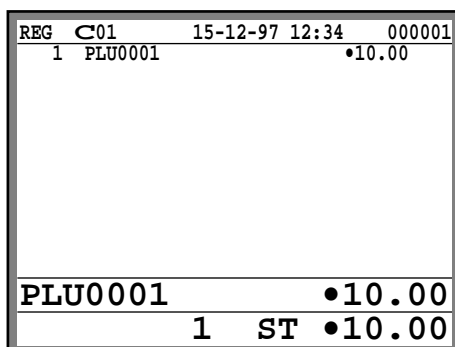
1. Press the appropriate record number and press the <LIST> key brings direct selection of the item.

4-6. Using the Set Menu function and Pulldown group function

4-6-1. Using the Set Menu function

Before using the set menu function, the following programs are necessary to use this function.

1) Programming set menu table (page 34 of the programming manual)
2) Programming PLU "Set menu table linking" (page 106 of the programming manual)
3) Programming item prices (page 151 of the programming manual)

```
REG  C01      15-12-97 12:34     000001
  1  PLU0001                  •10.00
     PLU0002 ⎤
     PLU0003 ⎬ Set Menu linked to PLU0001
     PLU0004 ⎦




PLU0001                    •10.00
              1   ST  •10.00
```

1. Registering a PLU linked to a set menu.

4-6-2. Using the Pulldown group function

PLU (Parent) registration
↓

```
Child PLU 1  ← Select one of these
Child PLU 2  ←
Child PLU 3  ←
```
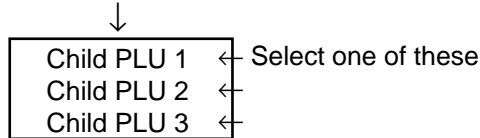
Before using the pulldown group function, the following programs are necessary to use this function.

1) Programming pulldown group table (page 32 of the programming manual)
2) Programming PLU "List Link No." (page 106 of the programming manual)
3) Programming item prices (page 151 of the programming manual)

```
REG  C01      15-12-97 12:34     000001
  1  PLU0001                  •10.00

         ┌──────────────────┐
         │      LIST01       │
         │1.PLU0010          │
         │2.PLU0011          │
         │3.PLU0012          │
         │4.PLU0013          │
         └──────────────────┘

PLU0001                    •10.00
              1   ST  •10.00
```

```
REG  C01      15-12-97 12:34     000001
  1  PLU0001                  •10.00
     PLU0012                   •1.00




PLU0012                     •1.00
              2   ST  •11.00
```

```
REG  C01      15-12-97 12:34     000001
  1  PLU0001                  •10.00
     PLU0012                   •1.00
     PLU0012




PLU0012                     •1.00
              2   ST  •11.00
```

1. Register the parent (main) PLU. The list linked appears.
2. Select the appropriate (child/grandchild) PLU and press the <YES> key.

Registration

4-6-3.   Using the Set menu and Pulldown group function

Before using the set menu and pulldown group function, the following programs are necessary to use this function.

1) Programming set menu table (page 34 of the programming manual)
2) Programming pulldown group table (page 32 of the programming manual)
3) Allocate the pulldown menu key, if you want to use. (page 24 of the programming manual)
4) Programming PLU "Set menu table linking" and "List Link No." (page 106 of the programming manual)
5) Programming item prices (page151 of the programming manual)

```
REG  C01        15-12-97 12:34    000001
  1  PLU0001                  •10.00
     PLU0002  < Set Menu linked to PLU0001

             ┌─────────────────────────┐
             │          LIST01          │
             │ 1.PLU0010                │
             │ 2.PLU0011                │
             │ 3.PLU0012                │
             │ 4.PLU0013                │
             │                          │
             └─────────────────────────┘


 PLU0001                  •10.00
              1    ST   •10.00
```
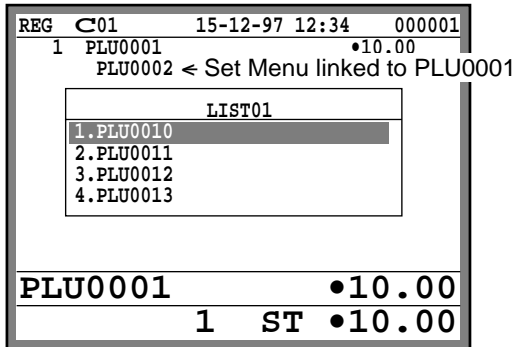
1.Registering a PLU linked to a set menu and pulldown group.

```
REG  C01        15-12-97 12:34    000001
  1  PLU0001                  •10.00
     PLU0002 ┐
     PLU0003 } Set Menu linked to PLU0001
     PLU0004 ┘
      PLU0005<Condiment/Preparation linked to PLU0004
     PLU0010 <Selected in the LIST01




 PLU0010                   •1.00
              2    ST   •11.00
```
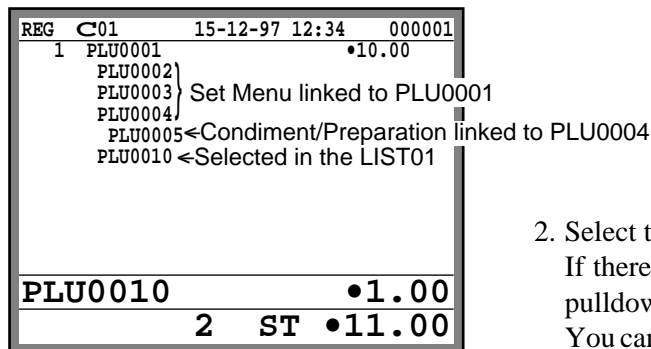
2. Select the appropriate item and press the <YES> key.
   If there are more pulldown groups linked to the PLU, next pulldown group or a PLU appears on the screen.
   You can also select items directly by using the pulldown key.

4-6-4.   Using the Substitution key

Normally, you can select item(s) in a pulldown group. If the customer requires to take an item from the pulldown group, the <Substitution> key should be used.

```
REG  C01        15-12-97 12:34    000001
  1  PLU0020                  •10.00
  1  PLU0021                  •20.00

             ┌─────────────────────────┐
             │          LIST01          │
             │ 1.PLU0001                │
             │ 2.PLU0002                │
             │ 3.PLU0003                │
             │ 4.PLU0004                │
             │                          │
             └─────────────────────────┘


                          0.01
```
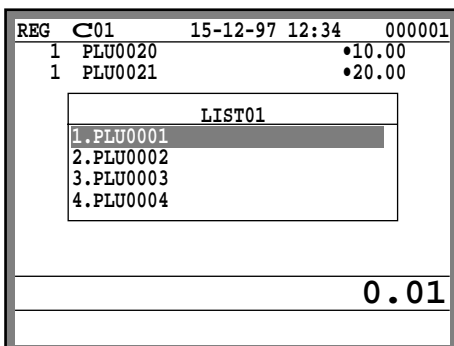
1. A PLU linked to a pulldown group is registered, but no items in the list cannot be selected.

```
┌─────────────────────────────────┐
│REG  C01     15-12-97 12:34   000001│
│  1  PLU0020              •10.00    │
│  1  PLU0021              •20.00    │
│                                   │
│                                   │
│                                   │
│                                   │
│                                   │
│                                   │
│                           0.00    │
│                                   │
└─────────────────────────────────┘
```

2. Press the <Substitution> key.

```
┌─────────────────────────────────┐
│REG  C01     15-12-97 12:34   000001│
│  1  PLU0020              •10.00    │
│  1  PLU0021              •20.00    │
│  1  PLU0050              •50.00    │
│                                   │
│                                   │
│                                   │
│                                   │
│PLU0050                  •50.00    │
│           3   ST        •80.00    │
└─────────────────────────────────┘
```

3. Register the appropriate item.

4-6-5.　Inner multiplication

Normally, the quantity of list linked PLU or set menu child PLU follows the same quantity as main PLU. But it is possible to register a different number of list linked PLU or child PLU from the number of main PLU.

Before using the inner multiplication, the following program is necessary in addition to the Pulldown Group or Set Menu Table to use this function.

1) Programming "Set Menu/Condiment" program (page 51 of the programming manual)

```
┌─────────────────────────────────┐
│REG  C01     15-12-97 12:34   000001│
│  3  PLU0001              •30.00    │
│     ┌───────────────────┐          │
│     │       LIST01      │          │
│     │1.PLU0010          │          │
│     │2.PLU0011          │          │
│     │3.PLU0012          │          │
│     │4.PLU0013          │          │
│     └───────────────────┘          │
│                                   │
│PLU0001                  •30.00    │
│           3   ST        •30.00    │
└─────────────────────────────────┘
```

1. An multiplication of a PLU is made.

```
┌─────────────────────────────────┐
│REG  C01     15-12-97 12:34   000001│
│  3  PLU0001              •30.00    │
│     ┌───────────────────┐          │
│     │       LIST01      │          │
│     │1.PLU0010          │          │
│     │2.PLU0011          │          │
│     │3.PLU0012          │          │
│     │4.PLU0013          │          │
│     └───────────────────┘          │
│                                   │
│X                             2    │
│           3   ST        •30.00    │
└─────────────────────────────────┘
```

2. Enter appropriate quantity and press the <X> key, after that, select the appropriate PLU (in case of pulldown group.)

```
REG   C01      15-12-97 12:34    000001
  3   PLU0001               •30.00
  2   PLU0010               •2.00
        ┌──────────────────┐
        │      LIST01       │
        │1.PLU0010          │
        │2.PLU0011          │
        │3.PLU0012          │
        │4.PLU0013          │
        └──────────────────┘

┌─────────────────────────────────┐
│PLU0010              •2.00        │
│         5   ST   •32.00          │
└─────────────────────────────────┘
```

3. Enter appropriate quantity and press the <X> key, after that, select the appropriate PLU (in case of pulldown group.)

4-7.   Separate check

Separate check is used to transfer the registered items in the original check to the other check or pick up the registered items in the original check to finalize them.

```
REG   C01      15-12-97 12:34    000001
CHECH No.222222




┌─────────────────────────────────┐
│NEW/OLD             222222        │
│                                  │
└─────────────────────────────────┘
```

1. Enter the check number to which the registered items are transferred and press the <NEW/OLD CHK> key.

```
          SEP CHK
CHECH No.123456          1CT
  1   PLU0001              •1.00
  1   PLU0002              •2.00
  1   PLU0003              •3.00
  1   PLU0004              •4.00
  1   PLU0005              •5.00



┌─────────────────────────────────┐
│                    0.00          │
│         5  ST    15.00           │
└─────────────────────────────────┘
```

2.   Enter the original check number and press the <Separate check> key.

```
          SEP CHK
CHECH No.123456          1CT
  1   PLU0001              •1.00
  1   PLU0002              •2.00
  1   PLU0003              •3.00
  1   PLU0004              •4.00
  1   PLU0005              •5.00



┌─────────────────────────────────┐
│                    0.00          │
│         5  ST    15.00           │
└─────────────────────────────────┘
```

3. Select the transferring items and press the <YES> key.

```
REG   C01       15-12-97 12:34    000001
CHECH No.222222
   1  PLU0004              •4.00
   1  PLU0005              •5.00
      ST                   •9.00




                            0.00
                 2 ST    •9.00
```

4. After selecting items, press the <ESC> key to terminate. The selected items are transferred to other check.

4-8.   Open check

To display or print out the opened check report of the signed on operator.

```
REG   C01       15-12-97 12:34    000001






                            0.01

```

1. Enter the signed on clerk record number.
2. Press the <OPEN CHK> key.
3. The open check report is issued or displayed (depends on the program).

```
REG   C01     15-12-97 12:34     000001
X    0020025  OPEN CHK            123

                         Machine#0001
REG   C01     15-12-97 10:04     001029
Check No.001245        12CT #000121
                       •100.35
                         Machine#0002
REG   C04     15-12-97 12:31     001186
Check No.001328         2CT #000226
                       •123.35
                            0.01

```

Registration

4-9.   Media Change

This key is used to change media in drawer amounts. Pressing this key begins media change operation.

```
REG  C01      15-12-97 12:34      000001




MEDIA CHG
```

1. First press the <Media Change> key.

```
REG  C01      15-12-97 12:34      000001
     MEDIA CHG        ••••••••••••
     CASH                  -10.00




CASH              -10.00
            ST    •10.00
```

2. Enter the in drawer amount to be changed and press the media key to be changed.

```
REG  C01      15-12-97 12:34      000001
     MEDIA CHG        ••••••••••••
     CASH                  -10.00
     CHECK                  •2.00




CHECK              •2.00
            ST     •8.00
```

3. Enter the amount to change and press the media to change, until the change amount equals to the changed amount.

```
REG  C01      15-12-97 12:34      000001
     MEDIA CHG        ••••••••••••
     CASH                  -10.00
     CHECK                  •2.00
     CREDIT                 •8.00




CREDIT             •8.00
```

4-10. Eat-in/Take-out

This function is used for specifying if the customer eat in the restaurant or take-out.
When the <EAT-IN> and <Take-out> keys are pressed before counting the sum total, the Eat-in/Take-out compulsory run, and the tax exemption will be applied.
After pressing these keys, it is impossible to total the sum except void, cancel, sub-total, change and part payment (including sub-total according to the currency conversion.) If you want to clear the compulsory, press the <OPEN 2> key.
Be sure to program before using this function.

Example of receipt image

```
    1    Hamburger      $2.00
    1    French fries   $1.50
    1    Coffee         $1.00
         TAKE-OUT
```

5. Refund mode operation

The general procedure for entering the RF or REG– mode is as follows.

5-1. Selecting RF or REG– Mode

After sign on operation, pressing the <REG. MODE> key turns the mode to RF Mode and REG– Mode.

Refund registration or register minus (REG–) registration starts with this operation.

```
┌─────────────────────────────────────┐
│ REG  C01      15-12-97 12:34   000001│
│                                      │
│                                      │
│        ┌──────────────────┐          │
│        │    REG Mode       │         │
│        └──────────────────┘          │
│                                      │
│                                      │
│ C01                                  │
│                                      │
└─────────────────────────────────────┘
```

```
┌─────────────────────────────────────┐
│ RF C01       15-12-97 12:34    000001│
│                                      │
│                                      │
│        ┌──────────────────┐          │
│        │   REFUND Mode     │         │
│        └──────────────────┘          │
│                                      │
│                                      │
│ C01                                  │
│                                      │
└─────────────────────────────────────┘
```

```
┌─────────────────────────────────────┐
│ R- C01       15-12-97 12:34    000001│
│                                      │
│                                      │
│        ┌──────────────────┐          │
│        │    REG- Mode      │         │
│        └──────────────────┘          │
│                                      │
│                                      │
│ C01                                  │
│                                      │
└─────────────────────────────────────┘
```
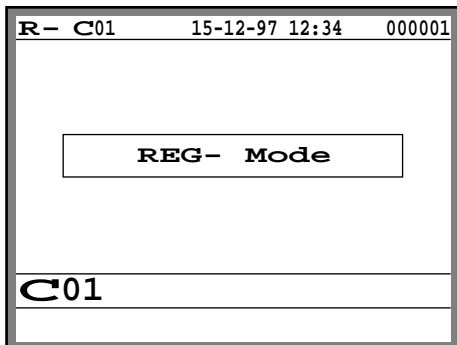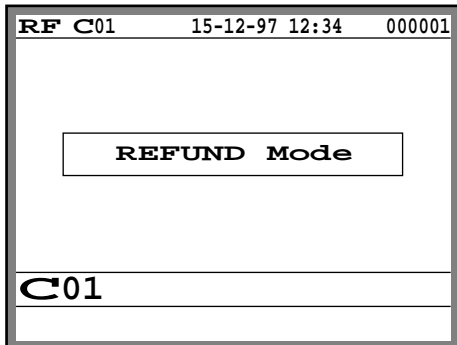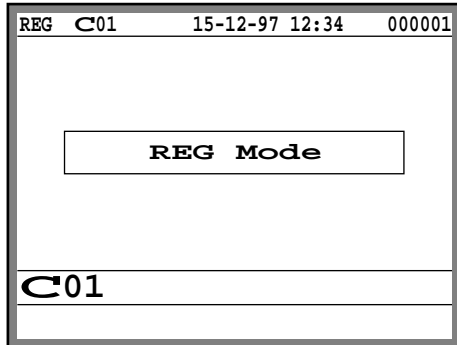
Note: Key operations are similar to that in the register mode.

To avoid miss-registration in the RF or REG– mode, return the mode to the former one immediately.

6. Read and reset operations

By setting the mode to the X or Z, the contents of totalizers and counters are enabled to read. The X mode allows report at any time during business hours. The Z mode is only performed at the end of the business day, since it clears the data stored to the totalizers and counters.

6-1. The procedures of reading or resetting

```
X/Z  C01      15-12-96 12:34      000000


          X/Z Report
1.Daily        X
2.Periodic(1) X
3.Periodic(2) X
4.Daily        Z
5.Periodic(1) Z
6.Periodic(2) Z


                          0.00

```
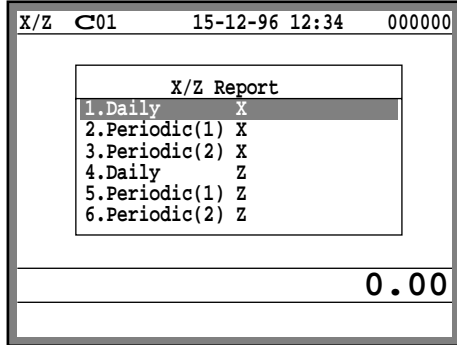
1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> to assign X/Z report.

3. Select the appropriate menu you want by following the guidances. The hierarchy of the X/Z menus are described below.

```
X/Z Report ── Daily X ──── Cashier/Clerk ─┬ Individual
             │                            └ All
             │            ── Open Check ──┬ Individual
             │                            ├ Clerk
             │                            ├ All
             │                            └ Only total
             │            ── Batch ──────── Batch 1 ~ n (n = 1 ~ 10) ┄┄┄ (n: allocated batch number)
             │            ── J-MEMO ──────┬ All
             │                            └ Date & Consecutive number
             │            ── Others ──────┬ Individual key ┄┄┄┄┄┄┄ (Daily X/Z only)
             │                            ├ Flash ┄┄┄┄┄┄┄┄┄┄ (Daily X only)
             │                            ├ Fixed totalizer
             │                            ├ Free Function
             │                            ├ PLU
             │                            ├ PLU stock ┄┄┄┄┄┄┄ (Daily X/Z only)
             │                            ├ Subdepartment
             │                            ├ Department
             │                            ├ Group
             │                            ├ Hourly sales
             │                            ├ Monthly sales
             │                            ├ Table analysis
             │                            ├ Void
             │                            ├ Hourly item
             │                            ├ IDC (1) clear (Z only)
             │                            ├ IDC (2) clear (Z only)
             │                            └ IDC (3) clear (Z only)
             ─ Periodic 1 X ─┬ Cashier/Clerk ┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Daily X
             │               ├ Batch ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Daily X
             │               └ Others ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Daily X
             ─ Periodic 2 X ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Periodic 1 X
             ─ Daily Z ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Daily X
             ─ Periodic 1 Z ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Periodic 1 X
             ─ Periodic 2 Z ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄ Same as Periodic 2 X
             ─ Time & Attendance ──┬─── Employee activity
                                   ├─── Employee
                                   ├─── Employee edit
                                   └─── Hourly/Labor
```

6-2. Report sample

Cashier/clerk report

```
Z      0020017  CASHIER/CLERK        123   ─┤ Mode/Report code/Report title/Z No. (Z only)

⊂01                  ........................1   ─┤ Clerk name/Clerk No.
GROSS                    35         •38.00   ─┤ Gross sales title/Gross counter/Gross totalizer
NET           No         10         •38.00   ─┤ Net sales title/Net counter/Net totalizer
CAID                                •35.00   ─┤ Cash in drawer title/Cash in drawer
CHID                                 •3.00   ─┤ Charge in drawer title/Charge in drawer
CKID                                 •0.00   ─┤ Check in drawer title/Check in drawer
CRID                                 •0.00   ─┤ Credit in drawer title/Charge in drawer
CASH          No         10         •35.00   ─┤ Cash key descriptor/Counter/Totalizer
```

Individual key

```
X      0000095                             ─┤ Mode/Report code
CASH          No         11         •38.00   ─┤ Function key descriptor/Counter/Totalizer
CHECK         No          0          •0.00
CREDIT        No          1         •12.00
ADD CHK       No          0
---------------------------------------
TL                       12         •50.00   ─┤ TL descriptor/Counter/Totalizer
```

Flash

```
X      0000071  FLASH                      ─┤ Mode/Report code/Report title

NET           No         11         •38.00   ─┤ Net sales title/Net counter/Net totalizer
CAID                                •35.00   ─┤ Cash in drawer title/Cash in drawer
CHID                                 •0.00   ─┤ Charge in drawer title/Charge in drawer
CKID                                 •0.00   ─┤ Check in drawer title/Check in drawer
CRID                                 •0.00   ─┤ Credit in drawer title/Charge in drawer
```

Fixed totalizer

```
Z      0000011  FIXED TTL            123   ─┤ Mode/Report code/Report title/Z No. (Z only)

GROSS                    35         •38.00   ─┤ Gross sales title/Gross counter/Gross totalizer
NET           No         11         •38.00   ─┤ Net sales title/Net counter/Net totalizer
CAID                                •35.00   ─┤ Cash in drawer title/Cash in drawer
CHID                                 •0.00   ─┤ Charge in drawer title/Charge in drawer
CKID                                 •0.00   ─┤ Check in drawer title/Check in drawer
CRID                                 •0.00   ─┤ Credit in drawer title/Credit in drawer
RF            No          2          •8.00   ─┤ Refund mode descriptor/Counter/Totalizer
COVER         CT          2                  ─┤ Customer count descriptor/Counter
TA1                                  •0.00   ─┤ Taxable amount 1 descriptor/Taxable amount 1
TX1                                  •0.00   ─┤ Tax 1 descriptor/Tax 1 amount
TA2                                  •0.00   ─┤ Taxable amount 2 descriptor/Taxable amount 2
TX2                                  •0.00   ─┤ Tax 2 descriptor/Tax 2 amount
TA3                                  •0.00   ─┤ Taxable amount 3 descriptor/Taxable amount 3
TX3                                  •0.00   ─┤ Tax 3 descriptor/Tax 3 amount
```

Free function

```
Z      0000012   FREE FUNCTION        123    ── Mode/Report code/Report title/Z No. (Z only)

CASH            No    11        •38.00    ── Function key descriptor/Counter/Amount
RC              No     2         •8.00
PD              No     1         •1.00
```

PLU

```
Z      0000014   PLU                  123    ── Mode/Report code/Report title/Z No. (Z only)

PLU0001               50        •682.55   ── PLU descriptor/Counter/Amount
   DISCOUNT                      •1.00    ── Discount total (can be skipped)
   #0001    68.25%                        ── PLU No. (can be skipped)/Sales ratio (can be skipped)
PLU0002               25         •32.00
   DISCOUNT                      •5.00
   #0002     3.2%
----------------------------------------
TL                    75        •714.55
   DISCOUNT                      •6.00
           71.45%
```

PLU (by range)

```
X      0010074   PLU                          ── Mode/Report code/Report title/Z No. (Z only)
#0001-#0002                                   ── PLU range

PLU0001               50        •682.55   ── PLU descriptor/Counter/Amount
   DISCOUNT                      •1.00    ── Discount total (can be skipped)
   #0001    68.25%                        ── PLU No. (can be skipped)/Sales ratio (can be skipped)
PLU0002               25         •32.00
   DISCOUNT                      •5.00
   #0002     3.2%
----------------------------------------
TL                    75        •714.55
   DISCOUNT                      •6.00
           71.45%
```

PLU (by group/dept/subdept)

```
X      1000014   PLU                          ── Mode/Report code/Report title/Z No. (Z only)

GROUP01          ....................01   ── Group (dept/subdept) title
PLU0001               50        •682.55   ── PLU descriptor/Counter/Amount
   DISCOUNT                      •1.00    ── Discount total (can be skipped)
   #0001    68.25%                        ── PLU No. (can be skipped)/Sales ratio (can be skipped)
PLU0002               25         •32.00
   DISCOUNT                      •5.00
   #0002     3.2%
----------------------------------------
TL                    75        •714.55   ── Total by group (dept/subdept)/Counter/Amount
   DISCOUNT                      •6.00
           71.45%

GROUP02          ....................02
```
```
..............................00   ── Non Group (dept/subdept) link title
PLU0005                1         •2.00
```

```
   DISCOUNT                        •0.00
   #0005    0.2%
-------------------------------------
TL                      1          •2.00
   DISCOUNT                        •0.00
             0.2%
```

PLU (by order character)

```
X    4000014  PLU                          ── Mode/Report code/Report title/Z No. (Z only)

ORDER01           ......................01  ── Order title
PLU0001                50          •682.55  ── PLU descriptor/Counter/Amount
   DISCOUNT                        •1.00    ── Discount total (can be skipped)
   #0001    68.25%                          ── PLU No. (can be skipped)/Sales ratio (can be skipped)
PLU0002                25          •32.00
   DISCOUNT                        •5.00
   #0002    3.2%
-------------------------------------
TL                     75          •714.55  ── Total by order/Counter/Amount
   DISCOUNT                        •6.00
             71.45%

ORDER02           ......................02
```

```
..................................00       ── Non order character link title
PLU0005                 1          •2.00
   DISCOUNT                        •0.00
   #0005    0.2%
-------------------------------------
TL                      1          •2.00
   DISCOUNT                        •0.00
             0.2%
```

PLU zero sales

```
X    0100014  PLU                          ── Mode/Report code/Report title

PLU0001                 0          •0.00    ── PLU descriptor/Counter/Amount
   DISCOUNT                        •0.00
   #001     0%
PLU0002                 0          •0.00
```

```
-------------------------------------
TL                      0          •0.00
```

PLU zero sales (by group/dept/subdept/order)

```
X     1100074  PLU                          ── Mode/Report code/Report title

GROUP01              .....................01 ── Group (dept/subdept/order character) title
PLU0001                0            •0.00    ── PLU descriptor/Counter/Amount
  DISCOUNT                          •0.00
  #001        0%
PLU0002                0            •0.00
                       :


GROUP02              .....................02

------------------------------------------
TL                     0            •0.00
```

PLU (by menu level)

```
X     0000081  PLU                          ── Mode/Report code/Report title

PLU0001              50            •682.55   ── PLU descriptor/Counter/Amount
  DISCOUNT                          •1.00    ── Discount total (can be skipped)
  #0001     68.25%                           ── PLU No. (can be skipped)/Sales ratio (can be skipped)
PLU0002              25             •32.00
  DISCOUNT                          •5.00
  #0002      3.2%
------------------------------------------
TL                   75            •714.55   ── Total by menu/Counter/Amount
  DISCOUNT                          •6.00
            71.45%
```

PLU stock

```
X     0000064  PLU STOCK                     ── Mode/Report code/Report title/Z No. (Z only)

PLU0001              10             123.45   ── PLU descriptor/Optimum stock level/Current stock
PLU0002              25 *               20   ── * short stock
PLU0003               1              100
```

PLU stock (by range)

```
X     0010064  PLU STOCK                     ── Mode/Report code/Report title/Z No. (Z only)
#0001-#0002                                  ── Range

PLU0001              10             123.45   ── PLU descriptor/Optimum stock level/Current stock
PLU0002              25 *               20   ── * short stock
PLU0003               1              100
```

PLU stock (by group/dept/subdept/order)

```
X     2000064  PLU STOCK                    ── Mode/Report code/Report title/Z No. (Z only)

GROUP01              ....................01  ── Link group (dept/subdept/order) title
PLU0001                10          123.45    ── PLU descriptor/Optimum stock level/Current stock
PLU0002                25 *         20       ── * short stock
PLU0003                 1          100

         ...............................00
PLU0296                12           20
```

PLU less stock

```
X      0400064  PLU STOCK                    ── Mode/Report code/Report title

PLU0001                10 *         0.45     ── PLU descriptor/Optimum stock level/Current stock
PLU0002                25 *          20        * short stock
PLU0003                12 *          10
```

PLU less stock (by range)

```
X      1400064  PLU STOCK          123       ── Mode/Report code/Report title
#0001-#0002                                  ── Range

PLU0001                10 *         0.45     ── PLU descriptor/Optimum stock level/Current stock
PLU0002                25 *          20        * short stock
PLU0003                 1 *        -100
```

PLU less stock (by group/dept/subdept/order)

```
X      1400064  PLU STOCK          123       ── Mode/Report code/Report title

GROUP01              ....................01  ── Link group (dept/subdept/order) title
PLU0001                10 *       -123.45    ── PLU descriptor/Optimum stock level/Current stock
PLU0002                25 *          20        * short stock
PLU0003                 1 *        -100

         ...............................00
PLU0296                12 *           2
```

Subdepartment (all)

```
Z     0000013  SUB DEPT              123      — Mode/Report code/Report title/Z No. (Z only)

SUBDEPT01            24        •82.55          — Subdepartment descriptor/Counter/Amount
  DISCOUNT                     •1.00          — Discount total (can be skipped)
  70.82%                                      — Sales ratio (can be skipped)
SUBDEPT02            25        •32.00
  DISCOUNT                     •2.00
  27.45%
```
```
----------------------------------------
TL                 151       •156.55
  DISCOUNT                     •3.00
  100.00%
```

Subdepartment (by range)

```
X     0010013  SUB DEPT                       — Mode/Report code/Report title/Z No. (Z only)
#0001-#0002                                   — Range

SUBDEPT01            24        •82.55          — Subdepartment descriptor/Counter/Amount
  DISCOUNT                     •1.00          — Discount total (can be skipped)
  70.82%                                      — Sales ratio (can be skipped)
SUBDEPT02            25        •32.00
  DISCOUNT                     •2.00
  27.45%
----------------------------------------
TL                  49       •114.55
  DISCOUNT                     •3.00
  98.27%
```

Subdepartment (by group/dept)

```
X     1000013  SUB DEPT                       — Mode/Report code/Report title/Z No. (Z only)

GROUP01         ....................01        — Group descriptor
SUBDEPT01            24        •82.55          — Subdepartment descriptor/Counter/Amount
  DISCOUNT                     •1.00          — Discount total (can be skipped)
  70.82%                                      — Sales ratio (can be skipped)
SUBDEPT02            25        •32.00
  DISCOUNT                     •2.00
  27.45%
----------------------------------------
TL                  49       •114.55
  DISCOUNT                     •3.00
  98.27%
```
```
.................................00          — No group link
SUBDEPT04             1         •1.00
  DISCOUNT                     •0.00
  0.87%
----------------------------------------
TL                   1         •1.00
  DISCOUNT                     •0.00
  0.87%
```

Subdepartment zero sales

```
X     0100013  SUB DEPT                    ── Mode/Report code/Report title

SUBDEPT03             0          •0.00     ── Subdepartment descriptor/Counter/Amount
  DISCOUNT                       •0.00     ── Discount total (can be skipped)
   0%                                      ── Sales ratio (can be skipped)
SUBDEPT04             0          •0.00
  DISCOUNT                       •2.00
   0%

----------------------------------------
TL                    0          •0.00
  DISCOUNT                       •0.00
   0%
```

Subdepartment zero sales (by group/dept)

```
X     1100013  SUB DEPT                    ── Mode/Report code/Report title

GROUP01         ....................01     ── Group descriptor
SUBDEPT03             0          •0.00     ── Subdepartment descriptor/Counter/Amount
  DISCOUNT                       •0.00     ── Discount total (can be skipped)
   0%                                      ── Sales ratio (can be skipped)
SUBDEPT04             0          •0.00
  DISCOUNT                       •2.00
   0%
----------------------------------------
TL                    0          •0.00


................................00     ── No group link
SUBDEPT08             0          •0.00
  DISCOUNT                       •2.00
   0%
----------------------------------------
TL                    0          •0.00
  DISCOUNT                       •0.00
   0%
```

Department (all)

```
X     0000015  DEPT               123     ── Mode/Report code/Report title/Z No. (Z only)

DEPT01               24         •82.55     ── Department descriptor/Counter/Amount
  DISCOUNT                       •1.00     ── Discount total (can be skipped)
  70.82%                                   ── Sales ratio (can be skipped)
DEPT02               25         •32.00
  DISCOUNT                       •2.00
  27.45%

----------------------------------------
TL                  151        •156.55
  DISCOUNT                       •3.00
 100.00%
```

Department (by range)

```
X     0000015   DEPT                          ── Mode/Report code/Report title/Z No. (Z only)
#0001-#0002                                   ── Range

DEPT01               24           •82.55      ── Department descriptor/Counter/Amount
  DISCOUNT                         •1.00       ── Discount total (can be skipped)
  70.82%                                       ── Sales ratio (can be skipped)
DEPT02               25           •32.00
  DISCOUNT                         •2.00
  27.45%
----------------------------------------
TL                   49          •114.55
  DISCOUNT                         •3.00
  98.27%
```

Department (by group)

```
X     1000015   DEPT                  123     ── Mode/Report code/Report title/Z No. (Z only)

GROUP01         ....................01        ── Group descriptor
DEPT01               24           •82.55      ── Department descriptor/Counter/Amount
  DISCOUNT                         •1.00       ── Discount total (can be skipped)
  70.82%                                       ── Sales ratio (can be skipped)
DEPT02               25           •32.00
  DISCOUNT                         •2.00
  27.45%
----------------------------------------
TL                   49          •114.55
  DISCOUNT                         •3.00
  98.27%

................................00            ── No group link
DEPT04                1            •1.00
  DISCOUNT                         •0.00
  0.87%
----------------------------------------
TL                    1            •1.00
  DISCOUNT                         •0.00
  0.87%
```

Department zero sales

```
X     0100015   DEPT                          ── Mode/Report code/Report title

DEPT03                0            •0.00       ── Department descriptor/Counter/Amount
  DISCOUNT                         •0.00       ── Discount total (can be skipped)
  0.00%                                        ── Sales ratio (can be skipped)
DEPT02                0            •0.00
  DISCOUNT                         •0.00
  0.00%
----------------------------------------
TL                    0            •0.00
  DISCOUNT                         •0.00
  0.00%
```

Department zero sales (by group)

```
X     1100015  DEPT                          ── Mode/Report code/Report title

GROUP01              ....................01  ── Group descriptor
DEPT01                  0           •0.00    ── Department descriptor/Counter/Amount
  DISCOUNT                          •0.00    ── Discount total (can be skipped)
    0%                                       ── Sales ratio (can be skipped)
DEPT02                  0           •0.00
  DISCOUNT                          •0.00
    0%
----------------------------------------
TL                      0           •0.00



              ........................00     ── No group link
DEPT04                  0           •0.00
  DISCOUNT                          •0.00
    0%
----------------------------------------
TL                      0           •0.00
  DISCOUNT                          •0.00
    0%
```

Group

```
X     0000016  GROUP                         ── Mode/Report code/Report title/Z No. (Z only)

GROUP01                 6         •163.54    ── Group descriptor/Counter/Amount
    1.63%                                    ── Sales ratio (can be skipped)
GROUP02                 2           •2.55
    0.02%
----------------------------------------
TL                      8         •166.09
    1.65%
```

Hourly sales

```
Z     0000019  HOURLY              123        ── Mode/Report code/Report title/Z No. (Z only)

09:00->10:00            1          •63.54    ── Time zone/Net counter/Net amount
    1.63%                                    ── Sales ratio (can be skipped)
                 CT     1          •63.54    ── Gross counter/Gross amount
10:00->11:00            2         •122.55
    3.52%
                 CT     2         •122.55
```

Monthly sales

```
Z     0000020   MONTHLY              123  ─┤ Mode/Report code/Report title/Z No. (Z only)

  7 ......                              ─┤ Day of the month
GROSS              52         •680.57    ─┤ Gross counter/Gross amount
NET          No    12         •680.50    ─┤ Net counter/Net amount
  8 ......
GROSS              78       •1,034.59
NET          No    37       •1,034.57
----------------------------------------
TL
GROSS             130       •1,715.16
                              •13.19     ─┤ Average gross sales
NET                49       •1,715.07
                              •35.00     ─┤ Average net sales
```

Table analysis

```
Z     0000028   TABLE ANALYSIS       123  ─┤ Mode/Report code/Report title/Z No.

TBL0001        CT    12       •680.57     ─┤ Table No./Customer count/Net amount
  50.12%                                  ─┤ Sales ratio (can be skipped)
TBL0002        CT     5       •279.56

----------------------------------------
TL             CT    28     •1,267.97
```

Void reason

```
Z     0000022   VOID REASON          123  ─┤ Mode/Report code/Report title/Z No. (Z only)

OPE ERR        No    12        •80.50     ─┤ Void reason/Counter/Amount
OUT OF DATE    No    10        •40.42
               No     0         •0.00
```

Open check

```
Z     0020025   OPEN CHK             123  ─┤ Mode/Report code/Report title/Z No. (Z only)

                         Machine#0001     ─┤ Latest machine No.
REG  C01    07-01-97  12:34   001029      ─┤ Mode/Clerk/Date/Time/Consecutive No.
Check No.001245       12CT #000121        ─┤ Check No./Cover No./Table No.
                         •100.35          ─┤ Subtotal amount

                         Machine#0002
REG  C04    07-01-97  14:31   001186
Check No.001328        2CT #000226
                         •100.35

----------------------------------------
TL             No    23     •2,957.75
```

Journal Memory (J-MEMO)

```
REG  C01       07-11-97  16:34    001029  ── Mode/Clerk/Date/Time/Consecutive No.
   1  PLU0055                    •100.00
      0.12%
      %-                           -0.12
      TL              •99.88
      CASH                        •99.88
                                  MC #03
P1 C01         07-11-97  16:35    001030  ── Some program are made in Program 1 mode.
                                  MC #03
X/Z  C01       07-11-97  16:37    001031
X     0100015  DEPT                        ── Report issued
                                  MC #03
REG  C04       07-11-97  17:11    001032
                         <---------         ── Data received
                                  MC #03
```

Note:

1. All journal memory report prints from the oldest data, and displays from the newest data stored in the journal memory.

2. Journal memory report by date and consecutive number prints from the designated receipt and displays the designated receipt only. If there is no designated data in the memory, prints or displays all journal memory report.

3. Journal memory is reset by "Journal memory clear operation" in the PGM 7 mode (refer to the QT-2000 Programming manual) or execute arrangement which is included journal memory clear command (refer to the Application system chapter of this manual) by manual or by scheduler.

   All journal memory is reset

   ---- By Manual operation in PGM7.

   ---- By executing arrangement (journal memory command included).

   The older half is reset

   ---- By executing arrangement (journal memory command included).

Employee Activity

```
                              MC #02
X/Z   CLAPTON    12-31-97 11:59 AM 001234    ─┤Header

X      000029   EMPLOYEE              1234    ─┤Mode/Report code/Report title

#HARRISON                      1111111111     ─┤Employee No./Employee character/Social Security
#BAKER                         2222222222
#PEABODY                       3333333333
#JOHONSON                      4444444444
                    •
                    •
                    •
                    •
```

Employee Report (Daily)

```
                              MC #02
X/Z   CLAPTON     12-31-97 11:59 AM 001234   ─┤Header

X       000029   EMPLOYEE            * 1234   ─┤Mode, Report code/Report title/Overflow flag"*"/Z counter

#123456   HARRISON            0123456789      ─┤Employee No./Employee character/Social Security No.

MONDAY                          12-20-97      ─┤Day of the week/Date
IN    OUT     BRK    JOB#    TIP     WORK      ─┤Special character (file 023, Rec. 39 & 40)
08:00-10:00  00:15  12    $12.34   01:45       ─┤Shift 1: Clock-in, Clock-out/Break/Job code, Tip, Work time
12:00-**:**  00:10  01    $0.00    **:**       ─┤Shift 2: Clock-out shift *1
**:**-**:**                                    ─┤Shift 3: Clock-in shift *2
-------------------------------------------
TL           00:25          $12.34   **:**     ─┤Special character (rec 028)/Break total/ Tip total/ Work time total *3

JOB# 12   01:45                                ─┤Job summary (Special character (rec 039)/Job code/Work time) *4
JOB# 01   **:**                                ─┤Job summary *5
REGULAR TIME        99:99                       ─┤Special character (rec 037)/Regular work hours
OVER TIME           99:99                       ─┤Special character (rec 038)/Overtime work hours
TL                  9999:99         $1,234.45   ─┤Special character (rec 028)/Total of work hours/Pay
```

*1 If employee is not clocked-out the shift, then "**:**" is printed on OUT & WORK.
*2 If employee is not clocked-in the shift, then "**:**-**:**" is printed on IN&OUT.
*3 If employee is not clocked-out the shift yet, then "**:**" is printed on WORK.
*4 JOB summary is printed in order to clock-in the shift.
   If there is the same JOB code, then it will add to the JOB that was found before.
*5 If employee is not clocked-out the shift, then "**:**" is printed. No JOB # is printed,
   if employee is not clocked-in the shift.

Employee Report (Weekly/Bi-weekly)

```
                              MC #02
X/Z   CLAPTON    12-31-97 11:59 AM 001234

X      000029    EMPLOYEE             1234

#123456                        0123456789

MONDAY                            12-21-97    — Day of the week/Date *2
IN++  OUT+    BRK+    JOB#   TIP+     WORK
08:00-10:00  00:15   12   $12.34    01:45    — Shift 1
12:00-15:00  00:10   01    $0.00    02:50    — Shift 2
**:**-**:**                                  — Shift 3
----------------------------------------
TL           00:25          $12.34   04:35

TUESDAY                           12-22-97
IN++  OUT+    BRK+    JOB#   TIP+     WORK
08:00-10:00  00:15   12   $12.34    01:45
12:00-15:00  00:10   01    $0.00    02:50
**:**-**:**
----------------------------------------
TL           00:25          $12.34   04:35

WEDNESDAY                         12-23-97
IN++  OUT+    BLK+  JOB#   TIP+      WORK
**:**-**:**
**:**-**:**
**:**-**:**
----------------------------------------
TL           00:00           $0.00   00:00


SUNDAY
IN++  OUT+    BLK+  JOB#   TIP+      WORK



----------------------------------------
TL           00:00           $0.00   00:00

JOB# 12  01:45                               — Job summary
JOB# 01  02:00
JOB# 05  02:00
JOB# 10  02:08
REGULAR TIME     99:99                       — Special character/Regular work hours
OVER TIME        99:99                       — Special character/Overtime work hours
TL              9999:99        $1,234.45      — Special character/Total of work hours/Pay
```

*1 If all shift in one day of the week is zero (no data), then that day of the week is not printed on the report.

*2 The report always starts from Monday.

Read and Reset

Hourly Item

```
                              MC #02
X/Z   CLAPTON     01-14-98 11:59 AM 001234      ──Header

Z    0001031     HOURLY PRODUCT      * 1234     ──Mode/Report code/Report title/Overflow flag"*"/Z counter

09:00→ 09:30                                     ──Cycle
GROSS             123456.789     1,234.56
           9999.99%
NET               No123456  $12,345,678.90       ──Totalizer character/QTY/Amount
           5%                                     ──Sales ratio A (% is fixed)
PLU0001           123456.789    $1,234.56
           9999.99%
----------------------------------------
           10%                   $1,234.45        ──Sales ratio B (% is fixed)/Total Amount in Time zone
09:30→ 10:00                                     ──Cycle
GROSS             123456.789    $1,234.56
           9999.99%
NET               No123456  $12,345,678.90
PLU0001           123456.789    $1,234.56
           9999.99%
----------------------------------------
           10%                   $1,234.45        ──Sales ratio B (% is fixed)/Total Proceeds in Time zone
                    •
                    •
                    •
19:30→ 20:00                                     ──Cycle
GROSS             123456.789    $1,234.56
           9999.99%
NET               No123456  $12,345,678.90
           5%
PLU0001           123456.789    $1,234.56
           9999.99%
----------------------------------------
           10%                   $1,234.45        ──Sales ratio B (% is fixed)/Total Amount in Time zone

TL                               $1,234.45        ──Special character/Total Amount in all Time zone
```

Sales ratio A = (Sum of each totalizer in one Time zone/Total Amount in its Time Zone) × 100
Sales ratio B = (Total Amount in one zone/Total Amount in all Time zone) × 100

Hourly/Labor report

```
                              MC #02
X/Z   CLAPTON     12-31-98 11:59 AM 001234      ──Header

Z    0000024     HOURLY LABOR         1234       ──Mode/Report code/Report title/Overflow flag "*"/Z counter

09:00→ 09:30    No999999  $12,345,378.90         ──Cycle/NET counter/NET Amount
   99.99%                                         ──NET ratio
COST              9999:99 $12,345,678.90          ──Special character/Work time/Pay
   99.99%                                         ──Pay ratio
NET SALES/HOUR            $12,345,678.90          ──Proceeds per work time
COST/TRANSACTION         $12,345,678.90          ──Wages per transaction

09:00→ 09:45    No999999  $12,345,378.90
   99.99%
COST              9999:99 $12,345,678.90
   99.99%
NET SALES/HOUR            $12,345,678.90
COST/TRANSACTION         $12,345,678.90
```

IDC Clear

```
                          MC #02
X/Z   CLAPTON      01-14-98 11:59 AM 001234  ──Header

Z     0001067    IDC(1) CLEAR         1234  ──Mode/Report code/Report title/Z counter
                   Normal End                 (from Flash Rom)
```

1. If the report is finished by error, then print error code.
2. This report is stored into J-MEMO.

Function key list

A-1. Function key list

Function	Code	Initial character	Function	Code	Initial character
Add check	094	ADD CHK	Paid out	021	PD
Arrangement	044	ARG	Pick up	022	P.UP
Bill copy	047	BILL	Plus	029	+
Break-in/out	109	BREAK-IN/OUT	PLU	048	PLU#
Cancel	236	CANCEL	Post Entry	115	POST ENTRY
Cash amount tendered	001	CASH	Program mode	123	PGM MODE
Charge	002	CHARGE	Premium	030	%+
Check endorsement	039	CK.E	Price inquiry	008	PRCINQ
Check print	012	CHKP	Price	049	PRC
Check tender	003	CHECK	Quantity/For	083	QT
Clerk number	072	CLK#	Recall	131	RECALL
Clerk transfer	013	CLK TRANS	Receipt	038	RCT
Clock-in/out	108	CLOCK-IN/OUT	Receipt On/OFF	076	RCT ON/OFF
Coupon	023	COUPON	Received on account	020	RC
Coupon 2	036	CPN2	Refund	033	RF
Credit	004	CREDIT	Register mode	121	REG MODE
Cube	090	XXX	Round Repeat	116	R REPEAT
Currency exchange	045	CE	Seat number	119	SEAT#
Customer number	043	CT	Second unit price	070	2nd@
Decimal point	098	.	Selective item subtotal	085	SIST
Declaration (future)	061	DECLA	Separate check	095	SEP CHK
Department	051	DEPT	Slip back feed/Release	054	SB/R
Department number	135	DEPT#	Slip feed/Release	056	SF/R
Deposit	025	DEPOSIT	Slip print	055	SLIP
Discount	028	%-	Square	084	XX
Display mode	219	DISP MODE	Stock inquiry	009	STKINQ
Display On/Off	120	DISP ON/OFF	Store	130	STORE
Eat-in	128	EAT-IN	Subdepartment	133	SUBDEPT nn
Ent in/out (future)	105	ENT	Subdepartment number	134	SDPT#
Error correct/Void	034	VOID	Substitution	111	SUBST.
First unit price	069	1st@	Subtotal	075	SUBTOTAL
Flat PLU	063	PLU nnn	Table number	058	TBL#
Home position	218	HOME	Table transfer	014	TBL TRANS
House Bon	114	HOUSE BON	Take-out	129	TAKE-OUT
J-Memo Disp	207	JMEMO	Tax status shift	057	T/S
Ketten Bon	113	X/KETTEN	Taxable amount subtotal	077	TAST
List	136	LIST	Tax exempt	062	EXEMPT
List number	137	LIST#	Text print	011	PRT
Loan	019	LOAN	Text recall	010	CHAR
Lock out unused key	000	NOP	Three zero	0012201	000
Media change	118	MEDIA CHG	Two zero	0011201	00
Menu shift	064	MENU	Tip	015	TIP
Merchandise subtotal	080	MDST	Validation	037	VLD
Minus	027	-	VAT	046	VAT
Multiplication	082	X	X/Z mode	122	X/Z MODE
New balance	006	NB	Numeric key	000n201	n=1~9, "0"= 10
New check	091	NEW CHK	Clear	202	
New/Old check	093	NEW/OLD	Escape/Skip	211	
Normal receipt	016	NRMRCT	Yes	212	
No sale	042	NS	No	213	
Non-add	040	#	Left arrow	214	
Non-add/No sale	041	#/NS	Right arrow	215	
Old check	092	OLD CHK	Up arrow	216	
Open	067	OPEN	Down arrow	217	
Open2	068	OPEN2	Reverse Disp	206	REVERSE DSP
Open Check	117	OPEN CHK	Page up	221	PAGE UP
Operator number	078	OPE#	Page down	220	PAGE DOWN
Operator read/reset	073	OPE X/Z			

A-2. File list

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribution	Allocatable	Backup
System files								
901	System connection table	18	33	75		Program	No	Yes
902	I/O parameter	5	10	69		Program	No	Yes
903	Printer connection	27	99	81		Program	No	Yes
904	Consecutive number	3	1	69		Buffer	No	Yes
999	System error log	11	999	99		Buffer	No	Yes
Function and total files								
001	Fixed totalizer	26	59	81		Pgm/Sale	Yes	Yes
101	(periodic total 1)	10	59	75		Sales	Yes	Yes
201	(periodic total 2)	10	59	75		Sales	Yes	Yes
301	(daily consolidation)	10	59	75	for master	Sales	Yes	No
401	(periodic 1 consolidation)	10	59	75	for master	Sales	Yes	No
501	(periodic 2 consolidation)	10	59	75	for master	Sales	Yes	No
601	(consolidation work)	10	59	75	for master	Buffer	Yes	No
002	Free function	38	999	99		Pgm/Sale	Yes	Yes
102	(periodic total 1)	10	999	75		Sales	Yes	Yes
202	(periodic total 2)	10	999	75		Sales	Yes	Yes
302	(daily consolidation)	10	999	75	for master	Sales	Yes	No
402	(periodic 1 consolidation)	10	999	75	for master	Sales	Yes	No
502	(periodic 2 consolidation)	10	999	75	for master	Sales	Yes	No
602	(consolidation work)	10	999	75	for master	Buffer	Yes	No
003	Subdepaprtment	54	99	135		Pgm/Sale	Yes	Yes
103	(periodic total 1)	15	99	81		Sales	Yes	Yes
203	(periodic total 2)	15	99	81		Sales	Yes	Yes
303	(daily consolidation)	15	99	81	for master	Sales	Yes	No
403	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes	No
503	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes	No
603	(consolidation work)	15	99	81	for master	Buffer	Yes	No
004	PLU	92	9999	177		Pgm/Sale	Yes	Yes
005	Department	54	99	135		Pgm/Sale	Yes	Yes
105	(periodic total 1)	15	99	81		Sales	Yes	Yes
205	(periodic total 2)	15	99	81		Sales	Yes	Yes
305	(daily consolidation)	15	99	81	for master	Sales	Yes	No
405	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes	No
505	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes	No
605	(consolidation work)	15	99	81	for master	Buffer	Yes	No
006	Group	26	99	81		Pgm/Sale	Yes	Yes
106	(periodic total 1)	10	99	75		Sales	Yes	Yes
206	(periodic total 2)	10	99	75		Sales	Yes	Yes
306	(daily consolidation)	10	99	75	for master	Sales	Yes	No
406	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes	No
506	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes	No
606	(consolidation work)	10	99	75	for master	Buffer	Yes	No
009	Hourly sales	20	999	87		Pgm/Sale	Yes	Yes
109	(periodic total 1)	20	999	87		Sales	Yes	Yes
209	(periodic total 2)	20	999	87		Sales	Yes	Yes
309	(daily consolidation)	20	999	87	for master	Sales	Yes	No
409	(periodic 1 consolidation)	20	999	87	for master	Sales	Yes	No
509	(periodic 2 consolidation)	20	999	87	for master	Sales	Yes	No
609	(consolidation work)	20	999	87	for master	Buffer	Yes	No
010	Monthly sales	20	32	87		Pgm/Sale	Yes	Yes
110	(periodic total 1)	20	32	87		Sales	Yes	Yes
210	(periodic total 2)	20	32	87		Sales	Yes	Yes
310	(daily consolidation)	20	32	87	for master	Sales	Yes	No
410	(periodic 1 consolidation)	20	32	87	for master	Sales	Yes	No
510	(periodic 2 consolidation)	20	32	87	for master	Sales	Yes	No

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able	Back-up
610	(consolidation work)	20	32	87	for master	Buffer	Yes	No
012	Void reason	29	99	87		Pgm/Sale	Yes	Yes
112	(periodic total 1)	10	99	75		Sales	Yes	Yes
212	(periodic total 2)	10	99	75		Sales	Yes	Yes
312	(daily consolidation)	10	99	75	for master	Sales	Yes	No
412	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes	No
512	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes	No
612	(consolidation work)	10	99	75	for master	Buffer	Yes	No
018	Table analysis	32	9999	93		Pgm/Sale	Yes	Yes
118	(periodic total 1)	10	9999	75		Sales	Yes	Yes
218	(periodic total 2)	10	9999	75		Sales	Yes	Yes
318	(daily consolidation)	10	9999	75	for master	Sales	Yes	No
418	(periodic 1 consolidation)	10	9999	75	for master	Sales	Yes	No
518	(periodic 2 consolidation)	10	9999	75	for master	Sales	Yes	No
618	(consolidation work)	10	9999	75	for master	Buffer	Yes	No
020	Grand total	24	3	75		Pgm/Sale	Yes	Yes
120	(periodic total 1)	8	3	69		Sales	Yes	Yes
220	(periodic total 2)	8	3	69		Sales	Yes	Yes
320	(daily consolidation)	8	3	69	for master	Sales	Yes	No
420	(periodic 1 consolidation)	8	3	69	for master	Sales	Yes	No
520	(periodic 2 consolidation)	8	3	69	for master	Sales	Yes	No
620	(consolidation work)	8	3	69	for master	Buffer	Yes	No
Clerk								
007	Clerk	95	99	165		Program	Yes	Yes
030	Clerk detail link	4	120	75		Program	Yes	Yes
011	Clerk detail	10	99	75		Sales	Yes	Yes
111	(periodic total 1)	10	99	75		Sales	Yes	Yes
211	(periodic total 2)	10	99	75		Sales	Yes	Yes
311	(daily consolidation)	10	99	75	for master	Sales	Yes	No
411	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes	No
511	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes	No
611	(consolidation work)	10	99	75	for master	Buffer	Yes	No
Time & Attendance								
014	Hourly/Labor	26	96			Program	Yes	Yes
114	(periodic total 1)	26	96			Sales	Yes	Yes
214	(periodic total 2)	26	96			Sales	Yes	Yes
314	(daily consolidation)	26	96		for master	Sales	Yes	Yes
414	(periodic 1 consolidation)	26	96		for master	Sales	Yes	Yes
514	(periodic 2 consolidation)	26	96		for master	Sales	Yes	Yes
614	(consolidation work)	26	96		for master	Sales	Yes	Yes
019	Work Time	17	9999			Program	Yes	Yes
119	(periodic total 1)	17	9999			Sales	Yes	Yes
219	(periodic total 2)	17	9999			Sales	Yes	Yes
319	(daily consolidation)	17	9999		for master	Sales	Yes	Yes
419	(periodic 1 consolidation)	17	9999		for master	Sales	Yes	Yes
519	(periodic 2 consolidation)	17	9999		for master	Sales	Yes	Yes
619	(consolidation work)	17	9999		for master	Sales	Yes	Yes
800	Time Zone	6	24			Program	Yes	Yes
801	Employee	35	99			Program	Yes	Yes
802	Job code	22	50			Program	Yes	Yes
803	Schedule	11	999			Program	Yes	Yes
806	Time&Attendance work	1	99					
Check								
015	Check Index					Program	Yes	Yes
060	Check detail					Program	Yes	Yes
066	Check detail work					Sales	Yes	Yes

File list

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able	Back-up
Hourly Item								
021	Hourly Item	10	1920			Program	Yes	Yes
121	(periodic total 1)	10	1920			Program	Yes	Yes
221	(periodic total 2)	10	1920			Program	Yes	Yes
321	(daily consolidation)	10	1920		for master	Program	Yes	Yes
421	(periodic 1 consolidation)	10	1920		for master	Program	Yes	Yes
521	(periodic 2 consolidation)	10	1920		for master	Program	Yes	Yes
621	(consolidation work)	10	1920		for master	Program	Yes	Yes
031	Hourly Item Link	4	480			Program	Yes	Yes
IDC								
057	IDC (1)	50	9999			Sales	Yes	Yes
357	(consolidation file)	50	9999		for master	Sales	Yes	Yes
657	(consolidation work)	50	9999		for master	Sales	Yes	Yes
058	IDC (2)	50	9999			Sales	Yes	Yes
358	(consolidation file)	50	9999		for master	Sales	Yes	Yes
658	(consolidation work)	50	9999		for master	Sales	Yes	Yes
059	IDC (3)	50	9999			Sales	Yes	Yes
359	(consolidation file)	50	9999		for master	Sales	Yes	Yes
659	(consolidation work)	50	9999		for master	Sales	Yes	Yes
063	IDC Buffer	50	9999			Buffer	Yes	Yes
804	IDC link	6	999			Program	Yes	Yes
Program/message/buffer								
022	General control	6	34	69		Program	No	Yes
023	Special character	16	28	69		Program	No	Yes
024	Report header	16	17	69		Program	No	Yes
025	Tax table	8	5	93		Program	Yes	Yes
026	Pulldown group	103	9999	189		Program	Yes	Yes
028	Set menu table	80	999	183		Program	Yes	Yes
029	Batch X/Z	9	10	69		Program	Yes	Yes
032	Receipt/slip message	40	47	69		Program	Yes	Yes
033	Endorse message	40	4	69		Program	Yes	Yes
035	Print buffer	77	999	69		Buffer	Yes	No
036	Registration buffer	70	400	69		Buffer	Yes	No
037	All void buffer	20	9999	69	Do not delete	Buffer	Yes	No
039	Character recall	40	9999	69		Program	Yes	Yes
041	Check print	3	9	69		Program	Yes	Yes
043	Journal memory display buffer	40	999	69		Buffer	Yes	No
044	Display buffer	40	999	69		Buffer	Yes	No
047	Graphic logo	13	432	69		Program	Yes	Yes
048	Journal memory buffer	41	200	69		Buffer	Yes	No
054	PLU 2nd @	42	9999	99		Program	Yes	Yes
062	Scheduler	14	99	75		Program	Yes	Yes
065	Order character	16	99	69		Program	Yes	Yes
074	Key table	36	192	171		Program	No	Yes
Arrangement								
038	Arrange group (1)	24	9999	69		Program	Yes	Yes
138	Arrange group (2)	24	9999	69		Program	Yes	Yes
238	Arrange group (3)	24	9999	69		Program	Yes	Yes
338	Arrange group (4)	24	9999	69		Program	Yes	Yes
438	Arrange group (5)	24	9999	69		Program	Yes	Yes

The above files are available for the QT-2000.
The capacity consumed by each file is calculated by the formula:
Capacity = Record length × No. of records + Work size

File Format

A-3. File format

A-3-1. Fixed totalizer file

A-3-1-1 Fixed totalizer (daily)

File name: Fixed totalizer (daily)   File No.: 001   Max. allocatable records: 59 (fixed)

0	16	21	26
Character		Counter	Totalizer

A-3-1-2 Fixed totalizer (periodic/consolidation)

File name: Fixed totalizer (periodic 1)   File No.: 101   Max. allocatable records: 59 (fixed)
File name: Fixed totalizer (periodic 2)   File No.: 201   Max. allocatable records: 59 (fixed)
File name: Fixed totalizer (daily consolidation)   File No.: 301   Max. allocatable records: 59 (fixed)
File name: Fixed totalizer (periodic 1 consolidation)   File No.: 401   Max. allocatable records: 59 (fixed)
File name: Fixed totalizer (periodic 2 consolidation)   File No.: 501   Max. allocatable records: 59 (fixed)
File name: Fixed totalizer (consolidation work)   File No.: 601   Max. allocatable records: 59 (fixed)

0	5	10
Counter	Totalizer	

Rec No.	Descriptor	Rec No.	Descriptor
001	Gross sales total	031	Foreign currency cash in drawer 1
002	Net sales total	032	Foreign currency check in drawer 1
003	Cash in drawer	033	Foreign currency cash in drawer 2
004	Cash declared amount	034	Foreign currency check in drawer 2
005	Declared short cash amount	035	Foreign currency cash in drawer 3
006	Declared over cash amount	036	Foreign currency check in drawer 3
007	Charge in drawer	037	Reduction
008	Charge declared amount	038	Item return
009	Declared short charge amount	039	Clear counter
010	Declared over charge amount	040	Not used
011	Check in drawer	041	Rounding
012	Check declared amount	042	Not used
013	Declared short check amount	043	Not used
014	Declared over check amount	044	Not used
015	Credit in drawer	045	Taxable amount 1
016	Credit declared amount	046	Tax 1
017	Declared short credit amount	047	Not used
018	Declared over credit amount	048	Taxable amount 2
019	Not used	049	Tax 2
020	Not used	050	Not used
021	Not used	051	Taxable amount 3
022	Not used	052	Tax 3
023	Refund mode total	053	Not used
024	Customer count	054	Taxable amount 4
025	Average sales per customer	055	Tax 4
026	Check cashing service fee	056	Not used
027	New Balance fee	057	Taxable amount 5
028	Not used	058	Tax 5
029	Clerk commission 1 total	059	Not used
030	Clerk commission 2 total		

A-3-2. Transaction key file

A-3-2-1 Transaction key (daily)

File name: Transaction key (daily)   File No.: 002   Max. allocatable records: 999

Function code	Character	Program	@/Rate	Counter	Totalizer
0 2	18	24	28	33	38

A-3-2-2 Transaction key (periodic/consolidation)

File name: Transaction key (periodic 1)   File No.: 102   Max. allocatable records: 999
File name: Transaction key (periodic 2)   File No.: 202   Max. allocatable records: 999
File name: Transaction key (daily consolidation)   File No.: 302   Max. allocatable records: 999
File name: Transaction key (periodic 1 consolidation)
   File No.: 402   Max. allocatable records: 999
File name: Transaction key (periodic 2 consolidation)
   File No.: 502   Max. allocatable records: 999
File name: Transaction key (consolidation work)   File No.: 602   Max. allocatable records: 999

Counter	Totalizer
0 5	10

A-3-3. Subdepartment file

A-3-3-1 Subdepartment (daily)

File name: Subdepartment (daily)   File No.: 003   Max. allocatable records: 99

Character	Program	Link	@	HALO	Double Bon	Order char. link	Order	Pull-down Group	Counter	Totalizer	Discount Totalizer
0 16	22	25	28	31	32	33	35	39	44	49	54

A-3-3-2 Subdepartment (periodic/consolidation)

File name: Subdepartment (periodic 1)   File No.: 103   Max. allocatable records: 99
File name: Subdepartment (periodic 2)   File No.: 203   Max. allocatable records: 99
File name: Subdepartment (daily consolidation)   File No.: 303   Max. allocatable records: 99
File name: Subdepartment (periodic 1 consolidation) File No.: 403   Max. allocatable records: 99
File name: Subdepartment (periodic 2 consolidation) File No.: 503   Max. allocatable records: 99
File name: Subdepartment (consolidation work)   File No.: 603   Max. allocatable records: 99

Counter	Totalizer	Discount Totalizer
0 5	10	15

A-3-4.   PLU file

A-3-4-1   PLU (daily)

File name: PLU   File No.: 004   Max. allocatable records: 9999

Character	PGM	LINK	@	Random Code	Unit Stock	Minimum Stock	Set Menu Link	HALO	Double Bon	Order Character Link	Order	Pulldown Group Link
	24	30	33	36	39	42	45	47	50	51	52	54	58

STOCK	QTY	Amount	Discount	Not Used	Not Used
63	68	73	78	83	88

A-3-4-2   PLU (periodic/consolidation)

File name: PLU (periodic 1)   File No.: 104   Max. allocatable records: 9999
File name: PLU (periodic 2)   File No.: 204   Max. allocatable records: 9999
File name: PLU (daily consolidation)   File No.: 304   Max. allocatable records: 9999
File name: PLU (periodic 1 consolidation)   File No.: 404   Max. allocatable records: 9999
File name: PLU (periodic 2 consolidation)   File No.: 504   Max. allocatable records: 9999
File name: PLU (consolidation work)   File No.: 604   Max. allocatable records: 9999

Stock quantity	Counter	Totalizer	Discount Totalizer	Future use	Future use
0	5	10	15	20	25	30

A-3-4-3   PLU 2nd@

File name: PLU 2nd@   File No.: 054   Max. allocatable records: 9999

Character	PGM	LINK	2nd @	2nd QTY	Unit Stock
0	24	30	33	36	39	42

File Format

A-3-5.   Department file

A-3-5-1   Department (daily)

File name: Department (daily)   File No.: 005   Max. allocatable records: 99

0	16	22	25	28	31	32	33	35	39	44	49	54
Character	Program	Link	@	HALO	Double Bon	Order char. link	Order	Pull-down Group	Counter	Totalizer	Discount Totalizer

A-3-5-2   Department (periodic/consolidation)

File name: Department (periodic 1)   File No.: 105   Max. allocatable records: 99
File name: Department (periodic 2)   File No.: 205   Max. allocatable records: 99
File name: Department (daily consolidation)   File No.: 305   Max. allocatable records: 99
File name: Department (periodic 1 consolidation) File No.: 405   Max. allocatable records: 99
File name: Department (periodic 2 consolidation) File No.: 505   Max. allocatable records: 99
File name: Department (consolidation work)   File No.: 605   Max. allocatable records: 99

0	5	10	15
Counter	Totalizer	Discount Totalizer

Progrm field for PLU, department, subdepartment, PLU 2nd@

Description		Choice	Program code
Single item control: (Not effective for PLU 2nd@) Normal receipt = 0, Single item receipt = 3		Significant number	☐ D_{12}
Selective item status 1 (Not effective for PLU 2nd@)	a	No = 0 Yes = 1	☐ (a+b) D_{11}
Selective item status 2 (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Normal/condiment/preparation (Only effective for PLU) Normal item = 0, Condiment = 1, Preparation = 2		Significant number	☐ D_{10}
Always "0"			**0** D_9
Eu/Di: Taxable status 1 ~ 5		Significant number	☐ (a+b+c) D_8
U.S., Singapore: Taxable status 1	a	No = 0 Yes = 1	
Taxable status 2	b	No = 0 Yes = 2	
Taxable status 3	c	No = 0 Yes = 4	
Canada: Taxable 1 = 1, Taxable 2 = 2, Taxable 3 = 3, Taxable 4 = 4 Taxable 1 & 2 = 4, Taxable 1 & 3 = 5, Taxable 1 & 4 = 6 All taxable = 7, Non taxable = 0		Significant number	
Multiple validation (Not effective for PLU 2nd@) (If "No", only one validation is possible.)	a	Yes = 0 No = 1	☐ (a+b) D_7
Open PLU (Only effective for PLU)	b	No = 0 Yes = 4	
Enable 0 unit price.	a	No = 0 Yes = 1	☐ (a+b+c) D_6
Enable negative price. (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Hash (Not effective for PLU 2nd@)	c	No = 0 Yes = 4	
Always "0"			**0** D_5
Low digit limitation (LDL) for manually entered unit price. (Not effective for PLU 2nd@)		Significant number	☐ D_4
Always "0"			**0** D_3
Commission 1 (Not effective for PLU 2nd@)	a	No = 0 Yes = 1	☐ (a+b) D_2
Commission 2 (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Always "0"			**0** D_1

Link field (for PLU, subdepartment, department), PLU 2nd@)

Description	Choice	Program code
Link subdepatment record number (for PLU and PLU 2nd@)	Significant numbers	D_6 D_5
Link depatment record number (for PLU PLU 2nd@ and subdepartment)	Significant numbers	D_4 D_3
Link group record number	Significant numbers	D_2 D_1

Random code field (for PLU)

Description	Choice	Program code
PLU random code (only for PLU)	Significant numbers	D_6 D_5 ~ D_2 D_1

Set menu link field (for PLU)

Description	Choice	Program code
Set menu table number (only for PLU)	Significant numbers	D_4 D_3 D_2 D_1

Unit/Minimum stock filed (for PLU)

Description	Choice	Program code
Unit stock quantity (0.001 ~ 99.999) Enter with decimal point. (If "0", treats as "1".) (for PLU and PLU 2nd@)	Significant numbers	D_{12} D_{11} ~ D_9 D_8
Always "0"		**0** D_7
Optimum stock quantity (0.001 ~ 99.999) Enter with decimal point. (for PLU and PLU 2nd@)	Significant numbers	D_6 D_5 ~ D_3 D_2
Always "0"		**0** D_1

HALO field (for subdepartment, department)

Description	Choice	Program code
High amount limit for entering unit price manually. (not for PLU 2nd@)	Significant numbers	D_6 D_5 ~ D_2 D_1

Order character link field (for PLU)

Description	Choice	Program code
Order character record number (00 ~ 99) (not for PLU 2nd@)	Significant numbers	D_2 D_1

Double bon field (for PLU)

Description	Choice	Program code
Number of Bon receipts (1 ~ 9) (If "0", no Bon is issued.) (not for PLU 2nd@)	Significant number	D_1

Order character link field (for PLU)

Description		Choice	Program code
Order printing color (only effective for KP) (not for PLU 2nd@)		Black = 0 Red = 1	D_4
Print out to order printer #1. (not for PLU 2nd@)	a	No = 0 Yes = 1	(a+b+c) D_3
Print out to order printer #2. (not for PLU 2nd@)	b	No = 0 Yes = 2	
Print out to order printer #3. (not for PLU 2nd@)	c	No = 0 Yes = 4	
Print out to order printer #4. (not for PLU 2nd@)	a	No = 0 Yes = 1	(a+b+c) D_2
Print out to order printer #5. (not for PLU 2nd@)	b	No = 0 Yes = 2	
Print out to order printer #6. (not for PLU 2nd@)	c	No = 0 Yes = 4	
Print out to order printer #7. (not for PLU 2nd@)		No = 0 Yes = 1	D_1

Pulldown group field (for PLU)

Description	Choice	Program code
Pulldown group record number (1) (not for PLU 2nd@)	Significant numbers	D_8 D_7
Pulldown group record number (2) (not for PLU 2nd@)	Significant numbers	D_6 D_5
Pulldown group record number (3) (not for PLU 2nd@)	Significant numbers	D_4 D_3
Pulldown group record number (4) (not for PLU 2nd@)	Significant numbers	D_2 D_1

A-3-6. Group file

A-3-6-1 Group (daily)

File name: Group (daily)   File No.: 006   Max. allocatable records: 99

0	16	21	26
Character	Counter	Totalizer	

A-3-6-2 Group (periodic/consolidation)

File name: Group (periodic 1)	File No.: 106	Max. allocatable records: 99
File name: Group (periodic 2)	File No.: 206	Max. allocatable records: 99
File name: Group (daily consolidation)	File No.: 306	Max. allocatable records: 99
File name: Group (periodic 1 consolidation)	File No.: 406	Max. allocatable records: 99
File name: Group (periodic 2 consolidation)	File No.: 506	Max. allocatable records: 99
File name: Group (consolidation work)	File No.: 606	Max. allocatable records: 99

0	5	10
Counter	Totalizer	

A-3-7. Clerk file

A-3-7-1 Clerk (programming)

File name: Clerk (programming)   File No.: 007   Max. allocatable records: 99

0 Character	16 Clerk initial check #	19 Drawer #	20 Clerk #	22 Clerk control	27 Commission rate	31 Table # range	37 Menu/@ control	42 Mode control	47 Function control (1) 53

59 Function control (2)	65 Function control (3)	71 Function control (4)	77 Function control (5)	83 Arrangement control	89 Report control	95 Manager control

A-3-7-1-1 Commission rate

Description	Choice	Program code
Commission rate 1 (0.01 ~ 99.99%)	Significant number (w/ decimal)	D_8 D_7 D_6 D_5
Commission rate 2 (0.01 ~ 99.99%)	Significant number (w/ decimal)	D_4 D_3 D_2 D_1

A-3-7-1-2 Table range

Description	Choice	Program code
Minimum value for table range (1 ~ 999999) ("0" means no programming.)	Significant number	D_{12} D_{11} ~ D_8 D_7
Maximum value for table range (1 ~ 999999) ("0" means no programming.)	Significant number	D_6 D_5 ~ D_2 D_1

File Format

A-3-7-1-3   Clerk control

Description		Choice	Program code
Check number compulsory		No = 0 Yes = 4	☐ D_{10}
Table number compulsory	a	No = 0 Yes = 1	☐ (a+b+c) D_9
Number of customer compulsory	b	No = 0 Yes = 2	
Guest receipt compulsory (at finalization)	c	No = 0 Yes = 4	
Guest receipt compulsory (at new balance)	a	No = 0 Yes = 1	☐ (a+b+c) D_8
Slip auto-batch print compulsory (at finalization)	b	No = 0 Yes = 2	
Slip auto-batch print compulsory (at new balance)	c	No = 0 Yes = 4	
Clerk attribution: Cashier = 0, Clerk = 1, Manager = 2		Significant number	☐ D_7
Training clerk		No = 0 Yes = 1	☐ D_6
Enable to open check created by other clerk	a	No = 0 Yes = 1	☐ (a+b+c) D_5
Disable to sign on	b	No = 0 Yes = 2	
Sign off at finalization	c	No = 0 Yes = 4	
LCD designation; Use 1st LCD = 1, Use 2nd LCD = 2, No definition = 0		Significant number	☐ D_4
Seat number compulsory	a	No = 0 Yes = 1	☐ (a+b) D_3
Eat-in/Take-out compulsory	b	No = 0 Yes = 2	
Always "0"			0 D_2
Void operation: Complete void = 0, Current transaction = 1, Not allowed = 2		Significant number	☐ D_1

A-3-7-1-4　　Menu/@ control

Description		Choice	Program code
Enable to use 1st menu sheet.	a	Yes = 0 No = 1	
Enable to use 2nd menu sheet.	b	Yes = 0 No = 2	$\square$ (a+b+c) D_{10}
Enable to use 3rd menu sheet.	c	Yes = 0 No = 4	
Enable to use 4th menu sheet.	a	Yes = 0 No = 1	
Enable to use 5th menu sheet.	b	Yes = 0 No = 2	$\square$ (a+b+c) D_9
Enable to use 6th menu sheet.	c	Yes = 0 No = 4	
Enable to use 7th menu sheet.	a	Yes = 0 No = 1	$\square$ (a+b) D_8
Enable to use 8th menu sheet.	b	Yes = 0 No = 2	
Always "0"			$\boxed{0}\ \boxed{0}$ D_7 D_6
Always "0"			$\boxed{0}\ \boxed{0}$ D_5 D_4
Default menu sheet number after sign on. (0 ~ 8) (Do not set the disabled sheet No., "0" means maintaining previous menu sheet.)		Significant number	$\square$ D_3
Default @ menu sheet number after sign on. (0 ~ 2) (Do not set the disabled sheet No., "0" means maintaining previous menu sheet.)		Significant number	$\square$ D_2
Status/Stay down menu sheet assignment	a	Status = 0 Stay down = 1	$\square$ (a+b) D_1
Status/Stay down @ menu sheet assignment	b	Status = 0 Stay down = 2	

File Format

A-3-7-1-5   Mode control

Description		Choice	Program code
Enable to operate in REG mode.	a	Yes = 0 No = 1	
Enable to operate in REF mode.	b	Yes = 0 No = 2	☐ (a+b+c) D_{10}
Enable to operate in REG– mode.	c	Yes = 0 No = 4	
Always "0"			$\boxed{0}$ D_9
Enable to operate in PGM1 mode.	a	Yes = 0 No = 1	
Enable to operate in PGM2 mode.	b	Yes = 0 No = 2	☐ (a+b+c) D_8
Enable to operate in PGM3 mode.	c	Yes = 0 No = 4	
Enable to operate in PGM4 mode.	a	Yes = 0 No = 1	
Enable to operate in PGM5 mode.	b	Yes = 0 No = 2	☐ (a+b+c) D_7
Enable to operate in PGM6 mode.	c	Yes = 0 No = 4	
Enable to operate in PGM7 mode.		Yes = 0 No = 1	☐ D_6
Enable to oprate in X/Z mode.	a	Yes = 0 No = 1	
Enable to operate in Manager mode.	b	Yes = 0 No = 2	☐ (a+b+c) D_5
Enable to operate in correction/consolidation mode.	c	Yes = 0 No = 4	
Enable to ooperate in Auto-PGM mode	a	Yes = 0 No = 1	
Enable to operate in Ir mode	b	Yes = 0 No = 2	☐ (a+b) D_4
Always "0"			$\boxed{0}$ $\boxed{0}$ D_3 D_2
Default mode after sign on: REG = 0, PGM1 = 1, X/Z = 2		Significant number	☐ D_1

A-3-7-1-6　　Function control 1

Description		Choice	Program code
Enable to operate cash.	a	Yes = 0 No = 1	
Enable to operate charge.	b	Yes = 0 No = 2	(a+b+c) D_{12}
Enable to operate check.	c	Yes = 0 No = 4	
Enable to operate credit.	a	Yes = 0 No = 1	
Enable to operate new balance.	b	Yes = 0 No = 4	(a+b) D_{11}
Enable to operate price inquiry.	a	Yes = 0 No = 2	
Enable to operate stock inquiry.	b	Yes = 0 No = 4	(a+b) D_{10}
Enable to operate character recall.	a	Yes = 0 No = 1	
Enable to operate character print.	b	Yes = 0 No = 2	(a+b+c) D_9
Enable to operate check print.	c	Yes = 0 No = 4	
Enable to operate clerk transfer.	a	Yes = 0 No = 1	
Enable to operate table transfer.	b	Yes = 0 No = 2	(a+b+c) D_8
Enable to operate tip.	c	Yes = 0 No = 4	
Enable to oprate normal receipt.		Yes = 0 No = 1	D_7
Enable to operate loan.	a	Yes = 0 No = 1	
Enable to operate received on account.	b	Yes = 0 No = 2	(a+b+c) D_6
Enable to operate paid out.	c	Yes = 0 No = 4	
Enable to operate pick up.	a	Yes = 0 No = 1	
Enable to operate coupon.	b	Yes = 0 No = 2	(a+b) D_5
Enable to operate deposit.	a	Yes = 0 No = 1	
Enable to operate minus.	b	Yes = 0 No = 4	(a+b) D_4
Enable to operate percent minus.	a	Yes = 0 No = 1	
Enable to operate plus.	b	Yes = 0 No = 2	(a+b+c) D_3
Enable to operate percent plus.	c	Yes = 0 No = 4	
Enable to operate refund.		Yes = 0 No = 4	D_2
Enable to operate coupon 2.		Yes = 0 No = 4	D_1

A-3-7-1-7 Function control 2

Description		Choice	Program code
Enable to operate validation.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to operate receipt.	b	Yes = 0 No = 2	
Enable to operate check endorse.	c	Yes = 0 No = 4	
Enable to operate non add.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Enable to operate non add/no sale.	b	Yes = 0 No = 2	
Enable to operate no sale.	c	Yes = 0 No = 4	
Enable to operate No. of customer	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to operate arrangement.	b	Yes = 0 No = 2	
Enable to operate currency exchange.	c	Yes = 0 No = 4	
Enable to operate VAT.	a	Yes = 0 No = 1	□ (a+b) D_9
Enable to operate bill copy.	b	Yes = 0 No = 2	
Always "0".			0 D_8
Enable to operate slip back feed/release.		Yes = 0 No = 4	□ D_7
Enable to operate slip print.	a	Yes = 0 No = 1	□ (a+b+c) D_6
Enable to operate slip feed/release.	b	Yes = 0 No = 2	
Enable to operate tax shift.	c	Yes = 0 No = 4	
Enable to operate table number.		Yes = 0 No = 4	□ D_5
Enable to operate money declaration.	a	Yes = 0 No = 1	□ (a+b) D_4
Enable to operate tax exempt.	b	Yes = 0 No = 2	
Enable to operate menu shift.		Yes = 0 No = 1	□ D_3
Enable to operate LC open.	a	Yes = 0 No = 1	□ (a+b+c) D_2
Enable to operate preset open.	b	Yes = 0 No = 2	
Enable to operate 1st@.	c	Yes = 0 No = 4	
Enable to operate 2nd@.	a	Yes = 0 No = 1	□ (a+b) D_1
Enable to operate clerk No.	b	Yes = 0 No = 4	

A-3-7-1-8   Function control 3

Description		Choice	Program code
Enable to operate operator X/Z.	a	Yes = 0 No = 1	□ (a+b) D_{13}
Enable to operate subtotal.	b	Yes = 0 No = 4	
Enable to operate receipt on/off.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to operate TA/ST.	b	Yes = 0 No = 2	
Enable to operate operator No.	c	Yes = 0 No = 4	
Enable to operate MD/ST.		Yes = 0 No = 2	□ D_{11}
Enable to operate X.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to operate X/For.	b	Yes = 0 No = 2	
Enable to operate X/XX.	c	Yes = 0 No = 4	
Enable to operate X/XXX.	a	Yes = 0 No = 1	□ (a+b) D_9
Enable to operate Ketten Bon.	b	Yes = 0 No = 2	
Enable to operate selective item ST.		Yes = 0 No = 1	□ D_8
Always "0"			0 0 D_7 D_6
Enable to operate new check.	a	Yes = 0 No = 1	□ (a+b+c) D_5
Enable to operate old check.	b	Yes = 0 No = 2	
Enable to operate new/old check.	c	Yes = 0 No = 4	
Enable to operate add check.	a	Yes = 0 No = 1	□ (a+b) D_4
Enable to operate separate check.	b	Yes = 0 No = 2	
Always "0"			0 0 D_3 D_2
Enable to operate clock-in/out.	a	Yes = 0 No = 1	□ (a+b) D_1
Enable to operate break-in/out.	b	Yes = 0 No = 2	

File Format

A-3-7-1-9 Function control 4

Description		Choice	Program code
Enable to operate substitution.	a	Yes = 0 No = 1	☐ (a+b+c) D_{12}
Enable to operate KP print.	b	Yes = 0 No = 2	
Enable to operate House Bon.	c	Yes = 0 No = 4	
Always "0"			**0** D_{11}
Enable to operate operator open check.	a	Yes = 0 No = 1	☐ (a+b+c) D_{10}
Enable to operate media change.	b	Yes = 0 No = 2	
Enable to operate seat number.	c	Yes = 0 No = 4	
Enable to operate display on/off.	a	Yes = 0 No = 1	☐ (a+b+c) D_9
Enable to operate REG mode.	b	Yes = 0 No = 2	
Enable to operate X/Z mode	c	Yes = 0 No = 4	
Enable to operate PGM mode.		Yes = 0 No = 1	☐ D_8
Enable to operate post entry.	a	Yes = 0 No = 1	☐ (a+b+c) D_7
Enable to operate round repeat.	b	Yes = 0 No = 2	
Enable to operate eat-in.	c	Yes = 0 No = 4	
Enable to operate take-out.	a	Yes = 0 No = 1	☐ (a+b+c) D_6
Enable to operate store.	b	Yes = 0 No = 2	
Enable to operate recall.	c	Yes = 0 No = 4	
Enable to operate reverse display.	a	Yes = 0 No = 1	☐ (a+b) D_5
Enable to operate J-MEMO.	b	Yes = 2 No = 0	
Enable to operate home position.	a	Yes = 0 No = 1	☐ (a+b) D_4
Enable to operate display mode change.	b	Yes = 0 No = 2	
Always "0"			**0** D_3
Enable to operate all void of this transaction.		Yes = 0 No = 4	☐ D_2
Enable to operate all void from the top of this receipt.		Yes = 0 No = 1	☐ D_1

A-3-7-1-10 Function control 5

Description		Choice	Program code
Enable to operate price.	a	Yes = 0 No = 1	
Enable to operate PLU No.	b	Yes = 0 No = 2	$\square$ (a+b+c) D_{12}
Enable to operate subdepartment No.	c	Yes = 0 No = 4	
Enable to operate department No.	a	Yes = 0 No = 1	$\square$ (a+b) D_{11}
Enable to operate list No.	b	Yes = 0 No = 2	
Enable to operate touch PLU.	a	Yes = 0 No = 1	
Enable to operate touch department.	b	Yes = 0 No = 2	$\square$ (a+b+c) D_{10}
Enable to operate touch subdepartment.	c	Yes = 0 No = 4	
Enable to operate touch list.		Yes = 0 No = 1	$\square$ D_9
Always "0"			0 0 0 0 D_8 D_7 D_6 D_5
Always "0"			0 0 0 0 D_4 D_3 D_2 D_1

A-3-7-1-11   Arrangement control

Description		Choice	Program code
Enable to operate arrange group 1.	a	Yes = 0 No = 1	
Enable to operate arrange group 2.	b	Yes = 0 No = 2	□ (a+b+c) D_{12}
Enable to operate arrange group 3.	c	Yes = 0 No = 4	
Enable to operate arrange group 4.	a	Yes = 0 No = 1	
Enable to operate arrange group 5.	b	Yes = 0 No = 2	□ (a+b+c) D_{11}
Enable to operate arrange group 6.	c	Yes = 0 No = 4	
Enable to operate arrange group 7.	a	Yes = 0 No = 1	
Enable to operate arrange group 8.	b	Yes = 0 No = 2	□ (a+b+c) D_{10}
Enable to operate arrange group 9.	c	Yes = 0 No = 4	
Enable to operate arrange group 10.		Yes = 0 No = 1	□ D_9
Always "0"			0 0 0 0 D_8 D_7 D_6 D_5
Always "0"			0 0 0 0 D_4 D_3 D_2 D_1

A-3-7-1-12   Report control

Description		Choice	Program code
Enable to issue daily X report.	a	Yes = 0 No = 1	$\square$ (a+b) D_{12}
Enable to issue daily Z report.	b	Yes = 0 No = 2	
Enable to issue periodic 1 X report.	a	Yes = 0 No = 1	$\square$ (a+b) D_{11}
Enable to issue periodic 1 Z report.	b	Yes = 0 No = 2	
Enable to issue periodic 2 X report.	a	Yes = 0 No = 1	$\square$ (a+b) D_{10}
Enable to issue periodic 2 Z report.	b	Yes = 0 No = 2	
Enable to issue consolidation file X report.	a	Yes = 0 No = 1	$\square$ (a+b) D_9
Enable to issue consolidation file Z report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 1 report.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_8
Enable to issue batch X/Z 2 report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 3 report.	c	Yes = 0 No = 4	
Enable to issue batch X/Z 4 report.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_7
Enable to issue batch X/Z 5 report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 6 report.	c	Yes = 0 No = 4	
Enable to issue batch X/Z 7 report.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_6
Enable to issue batch X/Z 8 report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 9 report.	c	Yes = 0 No = 4	
Enable to issue batch X/Z 10 report.		Yes = 0 No = 1	$\square$ D_5
Enable to issue operator X report.	a	Yes = 0 No = 1	$\square$ (a+b) D_4
Enable to issue operator Z report.	b	Yes = 0 No = 2	
Always "0"			$\boxed{0}\boxed{0}$ D_3 D_2
Enable to issue X/Z report by file.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_1
Enable to issue individual X/Z report.	b	Yes = 0 No = 2	
Enable to issue other individual X/Z report.	c	Yes = 0 No = 4	

A-3-7-1-13   Manager control

Description		Choice	Program code
Disable manager operation.		No = 0 Yes = 1	$\square$ D_{10}
Always "0"			$\boxed{0}\,\boxed{0}\,\boxed{0}$ D_9 D_8 D_7
Disable inline collection/consolidation	a	No = 0 Yes = 1	$\square$ D_6 (a+b+c)
Disable inline program data upload/download	b	No = 0 Yes = 2	
Disable inline check data sending	c	No = 0 Yes = 4	
Always "0"			$\boxed{0}\,\boxed{0}$ D_5 D_4
Always "0"			$\boxed{0}\,\boxed{0}\,\boxed{0}$ D_3 D_2 D_1

A-3-7-2   Clerk detail (daily, periodic/consolidation)

File name: Clerk detail (daily)   File No.: 011   Max. allocatable records: 99
File name: Clerk detail (periodic 1)   File No.: 111   Max. allocatable records: 99
File name: Clerk detail (periodic 2)   File No.: 211   Max. allocatable records: 99
File name: Clerk detail (daily consolidation)   File No.: 311   Max. allocatable records: 99
File name: Clerk detail (periodic 1 consolidation) File No.: 411   Max. allocatable records: 99
File name: Clerk detail (periodic 2 consolidation) File No.: 511   Max. allocatable records: 99
File name: Clerk detail (consolidation work)   File No.: 611   Max. allocatable records: 99

```
0       5       10
┌───────┬───────┐
│Counter│Totalizer│
│       │       │
└───────┴───────┘
```

A-3-7-3   Clerk detail link

File name: Clerk detail link   File No.: 030   Max. allocatable records: 120

```
0   2   4
┌───┬───┐
│Record No.│File No.│
└───┴───┘
```

A-3-8. Hourly sales file

A-3-8-1 Hourly sales (daily, periodic/consolidation)

File name: Hourly sales (daily)	File No.: 009	Max. allocatable records: 999
File name: Hourly sales (periodic 1)	File No.: 109	Max. allocatable records: 999
File name: Hourly sales (periodic 2)	File No.: 209	Max. allocatable records: 999
File name: Hourly sales (daily consolidation)	File No.: 309	Max. allocatable records: 999
File name: Hourly sales (periodic 1 consolidation)	File No.: 409	Max. allocatable records: 999
File name: Hourly sales (periodic 2 consolidation)	File No.: 509	Max. allocatable records: 999
File name: Hourly sales (consolidation work)	File No.: 609	Max. allocatable records: 999

```
0        5        10        15        20
┌────────┬─────────┬─────────┬───────────┐
│        │         │ No. of  │Merchandise│
│Counter │Totalizer│customer │ subtotal  │
└────────┴─────────┴─────────┴───────────┘
```

A-3-9. Monthly sales file

A-3-9-1 Monthly sales (daily, periodic/consolidation)

File name: Monthly sales (daily)	File No.: 010	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 1)	File No.: 110	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 2)	File No.: 210	Max. allocatable records: 32 (fixed)
File name: Monthly sales (daily consolidation)	File No.: 310	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 1 consolidation)	File No.: 410	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 2 consolidation)	File No.: 510	Max. allocatable records: 32 (fixed)
File name: Monthly sales (consolidation work)	File No.: 610	Max. allocatable records: 32 (fixed)

```
0        5        10        15        20
┌────────┬─────────┬─────────┬─────────┐
│Counter │Totalizer│Counter  │Totalizer│
│(Gross) │(Gross)  │(Net)    │(Net)    │
└────────┴─────────┴─────────┴─────────┘
```

A-3-10. Hourly item file

A-3-10-1 Hourly item

File name: Hourly Item (daily)   File No.: 021   Max. allocatable records: 1920
File name: Hourly Item (periodic 1)   File No.: 121   Max. allocatable records: 1920
File name: Hourly Item (periodic 2)   File No.: 221   Max. allocatable records: 1920
File name: Hourly Item (daily consolidation)   File No.: 321   Max. allocatable records: 1920
File name: Hourly Item (periodic 1 consolidation) File No.: 421   Max. allocatable records: 1920
File name: Hourly Item (periodic 2 consolidation) File No.: 521   Max. allocatable records: 1920
File name: Hourly Item (consolidation work)   File No.: 621   Max. allocatable records: 1920

0	5	10
QTY/No	Amount	

Description	Choice	Program code
Link record No.		$D_8\ D_7\ D_6\ D_5$
Always "0"		D_4
Link file No.		$D_3\ D_2\ D_1$

A-3-10-2 Hourly item link

File name: Hourly Item Link   File No.: 031   Max. allocatable records: 480

0	2	4
RECORD No.	FILE No.	

A-3-10-3 Hourly/Labor

File name: Hourly/Labor   File No.: 014   Max. allocatable records: 96

0	5	10	13	18	21	26
NET No.	NET Amount	Total Labor Hours (Fixed)	Total Labor Cost (Fixed)	Total Labor Hours (Not Fixed)	Total Labor Cost (Not Fixed)	

A-3-11. Work time file

File name: Work Time   File No.: 019   Max. allocatable records: 9999
File name: Work Time (periodic 1)   File No.: 119   Max. allocatable records: 9999
File name: Work Time (periodic 2)   File No.: 219   Max. allocatable records: 9999
File name: Work Time (daily consolidation)   File No.: 319   Max. allocatable records: 9999
File name: Work Time (periodic 1 consolidation)   File No.: 419   Max. allocatable records: 9999
File name: Work Time (periodic 2 consolidation)   File No.: 519   Max. allocatable records: 9999
File name: Work Time (consolidation work)   File No.: 619   Max. allocatable records: 9999

Mim. number of files to fix the work time: The number of employee $\times$ 7 days $\times$ 3 shift $\times$ 2weeks
Max. allocatable records: $99 \times 3 \times 7 \times 2 = 4158$

REC#001~#003: Correspond to Monday of Employee REC#001 (First week)
REC#004~#006: Correspond to Tuesday of Employee REC#001(First week)
REC#007~#009: Correspond to Wednesday of Employee REC#001 (First week)
REC#010~#012: Correspond to Thursday of Employee REC#001 (First week)
REC#013~#015: Correspond to Friday of Employee REC#001 (First week)
REC#016~#018: Correspond to Saturday of Employee REC#001 (First week)
REC#019~#021: Correspond to Sunday of Employee REC#001 (First week)
REC#020~#024: Correspond to Monday of Employee REC#001 (Second week)
REC#025~#027: Correspond to Tuesday of Employee REC#001 (Second week)
REC#028~#030: Correspond to Wednesday of Employee REC#001 (Second week)
REC#031~#033: Correspond to Thursday of Employee REC#001 (Second week)
REC#034~#036: Correspond to Friday of Employee REC#001 (Second week)
REC#037~#039: Correspond to Saturday of Employee REC#001 (Second week)
REC#040~#042: Correspond to Sunday of Employee REC#001 (Second week)

REC#043~#045: Correspond to Monday of Employee REC#002 (First week)
•
•
•

0	1	4	6	8	13	15	17
Job Code	CLOCK-IN Date	CLOCK-IN Time	CLOCK-OUT Time	Cash Tip Declare	WORK Time	BREAK Time	

A-3-13. IDC file

A-3-13-1 IDC file (1)

File name: IDC (1)   File No.: 057   Max. allocatable records: 9999
File name: IDC (1) (daily consolidation)   File No.: 357   Max. allocatable records: 9999

0   **50**

IDC Data
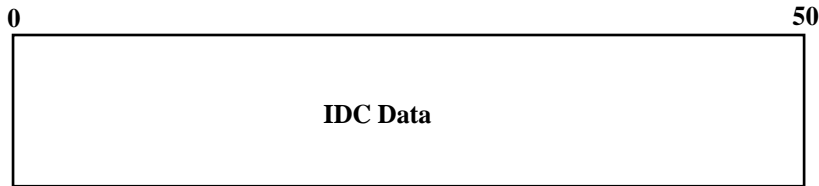
A-3-13-2 IDC file (2)

File name: IDC (2)   File No.: 058   Max. allocatable records: 9999
File name: IDC (2)   File No.: 358   Max. allocatable records: 9999
File structure is same as IDC file (1)

A-3-13-3 IDC file (3)

File name: IDC (3)   File No.: 059   Max. allocatable records: 9999
File name: IDC (3)   File No.: 359   Max. allocatable records: 9999
File structure is same as IDC file (1)

Description	Choice	Program code
Always "0"		**0** D_{12}
Specify IDC Link file No link=0, IDC(1)=1, IDC(2)=2, IDC(3)=3	Significant number	D_{11}
Always "0"		**0** D_{10}
Target for IDC: All transactions=0, Only item/function=1	Significant number	D_9
Record No. of the target for IDC	Significant number	D_8 D_7 D_6 D_5
Always "0"		**0** D_4
File No. of the target for IDC	Significant number	D_3 D_2 D_1

A-3-13-4 IDC buffer

File name: IDC Buffer   File No.: 063   Max. allocatable records: 9999

0   **50**

IDC Data
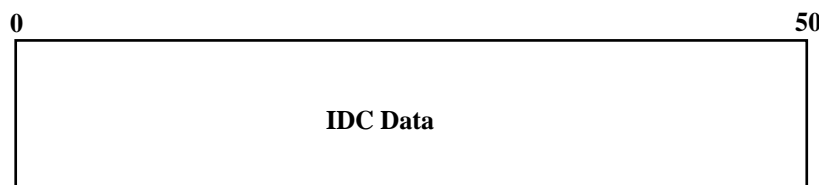
A-3-13-5 IDC link

File name: IDC link   File No.: 804   Max. allocatable records: 999

0   1   2   4   6

LINK	PGM	Record No.	File No.

A-3-14. Time zone file

File name: Time Zone   File No.: 800   Max. allocatable records: 24

Devide one day into some time zones, and assign the length of one sycle per zone.

0   2   4   6

START TIME	END TIME	CYCLE

Description	Choice	Program code
Zone Start Time (Hour)	00~23	$D_{12} D_{11}$
Zone Start Time (Minute) (00~59)	00~59	$D_{10} D_9$
Zone End Time (Hour) (00~23)	00~23	$D_8 D_7$
Zone End Time (Minute) (00~59)	00~59	$D_6 D_5$
Zone Cycle (Hour) (00~23)	00~23	$D_4 D_3$
Zone Cycle (Minute) (00, 15, 30, 45)	00, 15, 30, 45	$D_2 D_1$

A-3-15. Employee file

File name: Employee   File No.: 801   Max. allocatable records: 99

Description		Choice	Program code
Employee No. (within a 6-digits: 000000~999999) ("000000" means no select number) Reading "zero" is ignored. eg) 001234 → 1234		Significant number	D_{44} D_{43} D_{42} D_{41} D_{40} D_{39}
Character (16-degits)		Significant character	D_{38}~D_{23}
Social Security No. (within a 10-degits) Reading "zero" is not ignored. eg) 0001234567 → 0001234567		Significant number	D_{22}~D_{13}
Specify Job Code	a	No = 0 Yes = 1	(a+b+c) D_{12}
Clock-in without Job Code	b	No = 0 Yes = 2	
Use the Job Code window during Clock-in operation	c	No = 0 Yes = 4	
Minor employee		No = 0 Yes = 1	D_{11}
Job Code 1 (00~99) ("00" means no select number)		Significant number	D_{10} D_9
Job Code 2 (00~99) ("00" means no select number)		Significant number	D_8 D_7
Job Code 3 (00~99) ("00" means no select number)		Significant number	D_6 D_5
Job Code 4 (00~99) ("00" means no select number)		Significant number	D_4 D_3
Cashier/Clerk record number (00~99)		Significant number	D_2 D_1

A-3-16. Job code file

File name: Job code   File No.: 801   Max. allocatable records: 99

Description	Choice	Program code
Character (within a 16-digit) (No character means no setting.)	Significant character	$D_{28} \sim D_{13}$
Tip Declaration compulsory during Clock-out operation	No = 0 Yes = 1	D_{12}
Always "0"		0 D_{11}
Pay rate ($0.00~$9999.99)	Significant number	$D_{10} \sim D_5$
Overtime Pay ratio ($0.00~$99.99) ("$0.00" means "$1.00")	Significant number	D_4 D_3 D_2 D_1

A-3-17. Schedule file

File name: Schedule   File No.: 803   Max. allocatable records: 999

Mim. number of files to fix the work time: The number of employee $\times$ 7 days $\times$ 3 shift $\times$ 2weeks
Max. allocatable records: $99 \times 3 \times 7 \times 2 = 4158$

REC#001: Correspond to Monday Shift 1 of Employee REC#001
REC#002: Correspond to Monday Shift 2 of Employee REC#001
REC#003: Correspond to Monday Shift 3 of Employee REC#001

REC#004: Correspond to Tuesday Shift 1 of Employee REC#001
REC#005: Correspond to Tuesday Shift 2 of Employee REC#001
REC#006: Correspond to Tuesday Shift 3 of Employee REC#001
•
•
REC#021: Correspond to Sunday Shift 3 of Employee REC#001

REC#022: Correspond to Monday Shift 1 of Employee REC#002
REC#023: Correspond to Monday Shift 2 of Employee REC#002
REC#024: Correspond to Monday Shift 3 of Employee REC#002

REC#025: Correspond to Tuesday Shift 1 of Employee REC#002
REC#026: Correspond to Tuesday Shift 2 of Employee REC#002
REC#027: Correspond to Tuesday Shift 3 of Employee REC#002
* When 00 is entered, Grace Before/After Start/End time are recognized unlimitedly.

Description	Choice	Program code
Job Code (00~99) ("00" means no select number)	Significant number	D_{22} D_{21}
Start Time (hour) (00~23)	Significant number	D_{20} D_{19}
Start Time (minute) (00~59)	Significant number	D_{18} D_{17}
End Time (hour) (00~23)	Significant number	D_{16} D_{15}
End Time (minute) (00~59)	Significant number	D_{14} D_{13}
Break Time (hour) (00~23)	Significant number	D_{12} D_{11}
Break Time (minute) (00~59)	Significant number	D_{10} D_{9}
Grace Before Start (minute) (00~59)	Significant number	D_{8} D_{7}
Grace After Start (minute) (00~59)	Significant number	D_{6} D_{5}
Grace Before End (minute) (00~59)	Significant number	D_{4} D_{3}
Grace After End (minute) (00~59)	Significant number	D_{2} D_{1}

A-3-18. Void table file

A-3-18-1   Void table (daily)

File name: Monthly sales (daily)   File No.: 012   Max. allocatable records: 99

0		16	19	24	29
Character		**Program**	**Counter**	**Totalizer**	

A-3-18-2   Void table (periodic/consolidation)

File name: Monthly sales (periodic 1)	File No.: 112	Max. allocatable records: 99
File name: Monthly sales (periodic 2)	File No.: 212	Max. allocatable records: 99
File name: Monthly sales (daily consolidation)	File No.: 312	Max. allocatable records: 99
File name: Monthly sales (periodic 1 consolidation)	File No.: 412	Max. allocatable records: 99
File name: Monthly sales (periodic 2 consolidation)	File No.: 512	Max. allocatable records: 99
File name: Monthly sales (consolidation work)	File No.: 612	Max. allocatable records: 99

0	5	10
Counter	**Totalizer**	

Description	Choice	Program code
Return stock value.	Yes = 0 No = 1	D_1

A-3-19. Table analysis file

A-3-19-1 Table analysis (daily)

File name: Table analysis (daily)   File No.: 018   Max. allocatable records: 9999

Character	Min. check #	Max. check #	Counter	Totalizer
0	16	19	22	27	32

A-3-19-2 Table analysis (periodic/consolidation)

File name: Table analysis (periodic 1)	File No.: 118	Max. allocatable records: 9999
File name: Table analysis (periodic 2)	File No.: 218	Max. allocatable records: 9999
File name: Table analysis (daily consolidation)	File No.: 318	Max. allocatable records: 9999
File name: Table analysis (periodic 1 consolidation)	File No.: 418	Max. allocatable records: 9999
File name: Table analysis (periodic 2 consolidation)	File No.: 518	Max. allocatable records: 9999
File name: Table analysis (consolidation work)	File No.: 618	Max. allocatable records: 9999

Counter	Totalizer
0	5	10

A-3-20. Grand total file

A-3-20-1 Grand total (daily)

File name: Grand total (daily)   File No.: 020   Max. allocatable records: 3 (fixed)

Character	Totalizer
0	16	24

A-3-20-2 Grand total (consolidation)

File name: Grand total (periodic 1)	File No.: 120	Max. allocatable records: 3 (fixed)
File name: Grand total (periodic 2)	File No.: 220	Max. allocatable records: 3 (fixed)
File name: Grand total (daily consolidation)	File No.: 320	Max. allocatable records: 3 (fixed)
File name: Grand total (periodic 1 consolidation)	File No.: 420	Max. allocatable records: 3 (fixed)
File name: Grand total (periodic 2 consolidation)	File No.: 520	Max. allocatable records: 3 (fixed)
File name: Grand total (consolidation work)	File No.: 620	Max. allocatable records: 3 (fixed)

Totalizer
0	8

A-3-21. General control file

A-3-21-1 General control

File name: General control

File No.: 022   Max. allocatable records:34 (fixed)

```
0         6
┌─────────┐
│         │
│ Program │
│         │
└─────────┘
```
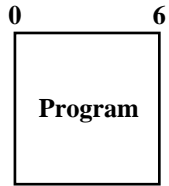
Rec No.	Contents
001	Date order, Monetary mode
002	Machine number
003	Consecutive number
004	Rounding, Tax system
005	Receipt control (1)
006	Calculation, Operation control
007	(future use)
008	Report control (1)
009	Report control (2)
010	Till timer
011	(future use)
012	Report control (3)
013	Communication control
014	Report control (4)
015	Report control (5)
016	Time frame
017	Receipt control (2), Money declaration
018	SLIP/Guest/KP print
019	Journal control
020	Message print control
021	Order control
022	(future use)
023	(future use)
024	(future use)
025	Set menu, Condiment
026	Check tracking
027	Clerk interrupt
028	Display control
029	Menu sheet number control (1)
030	Menu sheet number control (2) (future use)
031	Menu sheet number control (3)
032	Menu sheet number control (4)
033	Menu sheet number control (5)
034	Menu sheet number control (6)
035	Time & Attendance
036	Store/Recall range

File Format

A-3-21-1-1 Date order, monetary mode

Description	Choice	Program code
Date order: Year/Month/Day = 0/1, Day/Month/Year = 2, Month/Day/Year = 3	Significant number (0 ~ 3)	$\square$ D_{12}
Monetary mode: $\mathit{0}$ = 0, $\mathit{0.0}$ = 1, $\mathit{0.00}$ = 2, $\mathit{0.000}$ = 3	Significant number (0 ~ 3)	$\square$ D_{11}
Always "0"		0 0 0 0 D_{10} D_9 D_8 D_7
Always "0"		0 0 0 D_6 D_5 D_4
Always "0"		0 0 0 D_3 D_2 D_1

A-3-21-1-2 Machine number

Description	Choice	Program code
Machine number	Significant number	$\square$ $\square$ $\square$ $\square$ D_4 D_3 D_2 D_1

A-3-21-1-3 Rounding, Tax system

Description		Choice	Program code
Rounding: No rounding = 0, IF1 = 1, IF2 = 2, Denmark = 3, Norway = 4, Singapore = 5		Significant number (0 ~ 5)	$\square$ D_{10}
Tax system: VAT = 0, US = 1, Canada = 2, Singapore = 3		Significant number (0 ~ 3)	$\square$ D_9
Always "0"			0 D_8
Allow amount tender in RF/REG– mode operation.	a	Yes = 0 No = 2	$\square$ (a+b) D_7
Cash drawer opening: ① Immediately when the transaction is finalized. ② After validation compulsory is released.	b	① = 0 ② = 4	
Always "0"			0 0 D_6 D_5
High amount limit specification for money in drawer amount. (Sentinel function)		Maximum value (0 ~ 9)	$\square$ $\square$ D_4 D_3
		Number of zeros (0 ~ 9)	
Always "0"			0 0 D_2 D_1

A-3-21-1-4 Consecutive number

Description	Choice	Program code
Reset consecutive number after daily fixed totalizer reset report is issued.	Yes = 1 No = 0	☐ D_8
Always "0"		**0** D_7
Consecutive number start value:		☐☐☐ D_6 D_5 D_4 ☐☐☐ D_3 D_2 D_1

A-3-21-1-5 Receipt control (1)

Description		Choice	Program code
Print total line during finalization.	a	Yes = 0 No = 1	
Time sysmtem: ① 24 hour system, ② 12 hour system	b	① = 0 ② = 2	☐ (a+b+c) D_{10}
Feed one line after issuing receipt.	c	No = 0 Yes = 4	
Print taxable amount 1.	a	Yes = 0 No = 1	
Print taxable amount 2.	b	Yes = 0 No = 2	☐ (a+b+c) D_9
Print taxable amount 3.	c	Yes = 0 No = 4	
Print taxable amount 4.	a	Yes = 0 No = 1	
Print taxable amount 5.	b	Yes = 0 No = 2	☐ (a+b+c) D_8
Break-down set menu printing.	c	No = 0 Yes = 4	
Always "0"			**0** **0** **0** D_7 D_6 D_5
Print number of item sold.	a	No = 0 Yes = 1	
Print tax symbols.	b	Yes = 0 No = 2	☐ (a+b) D_4
Always "0"			**0** D_3
Print unit price on receipt.		No = 0 Yes = 4	☐ D_2
Print clear key operation.	a	No = 0 Yes = 1	
Print number of customers on header.	b	Yes = 0 No = 2	☐ (a+b+c) D_1
Print PLU No. on receipt.	c	No = 0 Yes = 4	

File Format

A-3-21-1-6　Calculations, Operation control

Description		Choice	Program code
Follow the taxable status and commission status of +/− to the previous item.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_{12}
Restrict 0 or 5 on the last digit.	b	No = 0 Yes = 2	
Display operator guidance.	c	Yes = 0 No = 4	
Always "0"			$\boxed{0}$ D_{11}
Force to declare the money in drawer.		No = 0 Yes = 4	$\square$ D_{10}
Force to press subtotal before finalization.	a	No = 0 Yes = 1	$\square$ (a+b+c) D_9
Allow credit balance while finalization.	b	Yes = 0 No = 2	
Allow multiple refund/register minus mode operation.	c	Yes = 0 No = 4	
Affect the result of +/−, %+/%− to the item.	a	No = 0 Yes = 1	$\square$ (a+b) D_8
Include add-on tax in net total.	b	Yes = 0 No = 2	
Include commission in net total.		Yes = 0 No = 2	$\square$ D_7
Sounds key catch tone.	a	Yes = 0 No = 2	$\square$ (a+b) D_6
Allow to issue post receipt, even if the original one is issued.	b	No = 0 Yes = 4	
Connect slit drawer.		No = 0 Yes = 4	$\square$ D_5
Prohibit registration when the stock quantity becomes negative.	a	No = 0 Yes = 2	$\square$ (a+b) D_4
Alert when the stock quantity becomes under minimum stock quantity.	b	No = 0 Yes = 4	
Affect to stock quantity even if the refund operation.	a	No = 0 Yes = 1	$\square$ (a+b+c) D_3
Merge refund/void item registration to the original one.	b	No = 0 Yes = 2	
Allow one registration of +/−, %+/%− per one transaction.	c	No = 0 Yes = 4	
Round on the least significant digit of %+/%− registration.	a	No = 0 Yes = 1	$\square$ (a+b) D_2
Display separator. (*future*)	b	Yes = 0 No = 2	
Allow numeric entry while compulsory drawer opening.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_1
Use YES key to select an item.	b	Yes = 0 No = 2	
PLU numbering: By memory No. (Sequential) = 0, By random code = 4	c	Significant number	

A-3-21-1-7   Report control (1)

Description		Choice	Program code
Print/Display fixed totalizer read report.	a	Print = 0 Display = 1	
Print/Display transaction read report.	b	Print = 0 Display = 2	(a+b+c) D_{12}
Print/Display department/subdepartment read report.	c	Print = 0 Display = 4	
Print/Display PLU/stock read report.	a	Print = 0 Display = 1	
Print/Display group read report.	b	Print = 0 Display = 4	(a+b) D_{11}
Print/Display clerk read report.	a	Print = 0 Display = 1	
Print/Display hourly/monthly read report.	b	Print = 0 Display = 2	(a+b+c) D_{10}
Print/Display open check read report.	c	Print = 0 Display = 4	
Print/Display table analysis read report.	a	Print = 0 Display = 1	
Print/Display journal memory read report.	b	Print = 0 Display = 4	(a+b) D_9
Print/Display hourly item read report.	a	Print = 0 Display = 1	
Print/Display employee read report.	b	Print = 0 Display = 2	(a+b+c) D_8
Print/Display hourly/labor read report.	c	Print = 0 Display = 4	
Print/Display fixed totalizer reset report.	a	Print = 0 Display = 1	
Print/Display transaction reset report.	b	Print = 0 Display = 2	(a+b+c) D_7
Print/Display department/subdepartment reset report.	c	Print = 0 Display = 4	
Print/Display PLU/stock reset report.	a	Print = 0 Display = 1	
Print/Display group reset report.	b	Print = 0 Display = 4	(a+b) D_6
Print/Display clerk reset report.	a	Print = 0 Display = 1	
Print/Display hourly/monthly reset report.	b	Print = 0 Display = 2	(a+b+c) D_5
Print/Display open check reset report.	c	Print = 0 Display = 4	
Print/Display table analysis reset report.	a	Print = 0 Display = 1	
Print/Display journal memory reset report.	b	Print = 0 Display = 4	(a+b) D_4
Print/Display table analysis read report.	a	Print = 0 Display = 1	
Print/Display journal memory read report.	b	Print = 0 Display = 4	(a+b) D_3
Print/Display hourly item read report.	a	Print = 0 Display = 1	
Print/Display employee read report.	b	Print = 0 Display = 2	(a+b+c) D_2
Print/Display hourly/labor read report.	c	Print = 0 Display = 4	
Print/Display employee activity read report.	a	Print = 0 Display = 2	(a+b+c) D_1
Print/Display financial report.	b	Print = 0 Display = 4	

A-3-21-1-8   Report control (2)

Description		Choice	Program code
Print taxable amount 1.	a	Yes = 0 No = 1	□ (a+b) D_{12}
Print tax 1.	b	Yes = 0 No = 2	
Print taxable amount 2.	a	Yes = 0 No = 1	□ (a+b) D_{11}
Print tax 2.	b	Yes = 0 No = 2	
Print taxable amount 3.	a	Yes = 0 No = 1	□ (a+b) D_{10}
Print tax 3.	b	Yes = 0 No = 2	
Print taxable amount 4.	a	Yes = 0 No = 1	□ (a+b) D_9
Print tax 4.	b	Yes = 0 No = 2	
Print taxable amount 5.	a	Yes = 0 No = 1	□ (a+b) D_8
Print tax 5.	b	Yes = 0 No = 2	
Always "0"			0 0 0 0 D_7 D_6 D_5 D_4
Always "0"			0 0 0 D_3 D_2 D_1

A-3-21-1-9   Till timer

Description	Choice	Program code
Till timer (00 ~ 59 minutes)	Significant numbers	☐☐ D_4 D_3
Till timer (00 ~ 59 seconds)	Significant numbers	☐☐ D_2 D_1

A-3-21-1-10   Report control (3)

Description		Choice	Program code
Print grand total 1 (periodic 1 & 2 report).	a	Yes = 0 No = 1	
Print grand total 2 (periodic 1 & 2 report).	b	Yes = 0 No = 2	□ (a+b+c) D_6
Print grand total 3 (periodic 1 & 2 report).	c	Yes = 0 No = 4	
Print grand total 1 (daily report).	a	Yes = 0 No = 1	
Print grand total 2 (daily report).	b	Yes = 0 No = 2	□ (a+b+c) D_5
Print grand total 3 (daily report).	c	Yes = 0 No = 4	
Always "0"			0 0 0 D_4 D_3 D_2
Print the average of the monthly report.		Yes = 0 No = 1	□ D_1

A-3-21-1-11   Communication control

Description		Choice	Program code
Broadcast the program data after completion of a program.		No = 0 Yes = 1	□ D_{12}
Always "0"			0 0 0 D_{10} D_9 D_8
Print Z collection/consolidation result.	a	Yes = 0 No = 1	
Reset Z collection/consolidation result.	b	Yes = 0 No = 2	□ (a+b+c) D_8
Copy stock quantity to master after Z consolidation.	c	No = 0 Yes = 4	
Retry to poll th the terminal which has not responded for the first polling.	a	Yes = 0 No = 2	□ (a+b) D_7
Allow in-line master operation.	b	Yes = 0 No = 4	
Print report before Z collection/consolidation.		Yes = 0 No = 4	□ D_6
Source file selection: ① Terminal file, ② Consolidation file	a	① = 0 ② = 1	□ (a+b) D_5
Add to the consolidation file after Z operation.	b	Yes = 0 No = 4	
Always "0"			0 0 0 0 D_4 D_3 D_2 D_1

File Format

A-3-21-1-12   Report control (4)

Description		Choice	Program code
Print/Display fixed totalizer read report.	a	Print = 0 Display = 1	$\square$ (a+b+c) D_{12}
Print/Display transaction read report.	b	Print = 0 Display = 2	
Print/Display department/subdepartment read report.	c	Print = 0 Display = 4	
Print/Display PLU/stock read report.	a	Print = 0 Display = 1	$\square$ (a+b) D_{11}
Print/Display group read report.	b	Print = 0 Display = 4	
Print/Display clerk read report.	a	Print = 0 Display = 1	$\square$ (a+b+c) D_{10}
Print/Display hourly/monthly read report.	b	Print = 0 Display = 2	
Print/Display open check read report.	c	Print = 0 Display = 4	
Print/Display table analysis read report.	a	Print = 0 Display = 1	$\square$ (a+b) D_9
Print/Display journal memory read report.	b	Print = 0 Display = 4	
Print/Display hourly item read report.	a	Print = 0 Display = 1	$\square$ (a+b+c) D_8
Print/Display employee read report.	b	Print = 0 Display = 2	
Print/Display hourly/labor read report.	c	Print = 0 Display = 4	
Print/Display fixed totalizer reset report.	a	Print = 0 Display = 1	$\square$ (a+b+c) D_7
Print/Display transaction reset report.	b	Print = 0 Display = 2	
Print/Display department/subdepartment reset report.	c	Print = 0 Display = 4	
Print/Display PLU/stock reset report.	a	Print = 0 Display = 1	$\square$ (a+b) D_6
Print/Display group reset report.	b	Print = 0 Display = 4	
Print/Display clerk reset report.	a	Print = 0 Display = 1	$\square$ (a+b+c) D_5
Print/Display hourly/monthly reset report.	b	Print = 0 Display = 2	
Print/Display open check reset report.	c	Print = 0 Display = 4	
Print/Display table analysis reset report.	a	Print = 0 Display = 1	$\square$ (a+b) D_4
Print/Display journal memory reset report.	b	Print = 0 Display = 4	
Print/Display table analysis read report.	a	Print = 0 Display = 1	$\square$ (a+b) D_3
Print/Display journal memory read report.	b	Print = 0 Display = 4	
Print/Display hourly item read report.	a	Print = 0 Display = 1	$\square$ (a+b+c) D_2
Print/Display employee read report.	b	Print = 0 Display = 2	
Print/Display hourly/labor read report.	c	Print = 0 Display = 4	
Print/Display employee activity read report.	a	Print = 0 Display = 2	$\square$ (a+b+c) D_1
Print/Display financial report.	b	Print = 0 Display = 4	

A-3-21-1-13 Report control (5)

Description		Choice	Program code
Zero-skip department/subdepartment report.	a	Yes = 0 No = 1	□ (a+b) D_{12}
Zero-skip clerk report.	b	Yes = 0 No = 2	
Zero-skip transaction report.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Zero-skip PLU report.	b	Yes = 0 No = 2	
Zero-skip hourly report.	c	Yes = 0 No = 4	
Zero-skip group report.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Zero-skip monthly report.	b	Yes = 0 No = 2	
Zero-skip table analysis report.	c	Yes = 0 No = 4	
Zero-skip hourly item report.	a	Yes = 0 No = 1	□ (a+b) D_9
Zero-skip hourly labor report.	b	Yes = 0 No = 2	
Always "0"			0 0 0 D_8 D_7 D_6
Print PLU No. on the PLU report.		No = 0 Yes = 1	□ D_5
Print sales ratio.	a	No = 0 Yes = 1	□ (a+b+c) D_4
Issue double Z report.	b	No = 0 Yes = 2	
Print the re-calculate amount of taxable amount and tax amount.	c	No = 0 Yes = 4	
Reset stock after batch reset report.		No = 0 Yes = 4	□ D_3
Print reset counter.	a	Yes = 0 No = 1	□ (a+b+c) D_2
Print item discount totalizer.	b	No = 0 Yes = 2	
Printing order of PLU report: ① Memory No. (sequential), ② Random code	c	① = 0 ② = 4	
Always "0"			0 D_1

A-3-21-1-14 Time frame

Description	Choice	Program code
Interval time of hourly report (00 ~ 23 hours)	Significant numbers	$D_8\ D_7\ D_6\ D_5$
Interval time of hourly report (00 ~ 59 minutes): ("0000" treats as 01:00.)		
Start time of hourly report (00 ~ 23 hours)	Significant numbers	$D_4\ D_3\ D_2\ D_1$
Start time of hourly report (00 ~ 59 seconds)		

A-3-21-1-15 Receipt control (2), Money declaration

Description		Choice	Program code
Money declaration compulsory (cash). (*future*)	a	No = 0 Yes = 1	(a+b+c) D_{10}
Money declaration compulsory (charge). (*future*)	b	No = 0 Yes = 2	
Money declaration compulsory (check). (*future*)	c	No = 0 Yes = 4	
Money declaration compulsory (credit). (*future*)	a	No = 0 Yes = 1	(a+b) D_9
Print double-hight characters in UP-350.	b	No = 0 Yes = 2	
Classify registered items by group in post receipt.	a	No = 0 Yes = 1	(a+b+c) D_8
Classify registered items by department in post receipt.	b	Yes = 0 No = 2	
Classified item printing format: ① Total, ② Detail	c	① = 0 ② = 4	
Include VAT amount in commission subtotal.		No = 0 Yes = 1	D_7
Rounding of commission: Round off = 0, cut off = 1, round up = 2		Significant number	D_6
Append two zeros in unit price programming.		No = 0 Yes = 1	D_5
Print date on receipt.	a	Yes = 0 No = 1	(a+b+c) D_4
Print date on journal.	b	Yes = 0 No = 2	
Print consecutive number on receipt/journal.	c	Yes = 0 No = 4	
Print time on receipt.	a	Yes = 0 No = 1	(a+b+c) D_3
Print time on journal.	b	Yes = 0 No = 2	
Merge the same department/PLU registration on receipt. (Item consolidation)	c	No = 0 Yes = 4	
Auto-cut receipt/report.		No = 0 Yes = 1	D_2

A-3-21-1-16   SLIP/Guest/KP print

Description		Choice	Program code
Maximum printing lines of slip (00 ~ 99)		Significant numbers	$\square\,\square$ D_{10} D_9
Classify registered items by group on slip & guest receipt.	a	No = 0 Yes = 1	$\square$ (a+b+c) D_8
Classify registered items by department on slip & guest receipt.	b	No = 0 Yes = 2	
Classified item printing format: ① Total, ② Detail	c	① = 0 ② = 4	
Always "0"			$\boxed{0}\,\boxed{0}$ D_7 D_6
Slip back feed after slip printing.	a	No = 0 Yes = 1	$\square$ (a+b+c) D_5
Slip back feed after validation printing.	b	No = 0 Yes = 2	
Slip back feed after check printing/check endorsement printing.	c	No = 0 Yes = 4	
Print date on slip & guest receipt.	a	Yes = 0 No = 1	$\square$ (a+b+c) D_4
Print time on slip & guest receipt.	b	Yes = 0 No = 2	
Print consecutive No. on slip & guest receipt.	c	Yes = 0 No = 4	
Slip print range: ① At the top of the transaction, ② This receipt	a	① = 0 ② = 1	$\square$ (a+b+c) D_3
Enable slip auto line find.	b	No = 0 Yes = 2	
Merge the same department/PLU registration on slip & guest receipt. (Item consolidation)	c	No = 0 Yes = 4	
Slip auto feed lines.		Significant numbers	$\square\,\square$ D_2 D_1

A-3-21-1-17   Journal control

Description	Choice	Program code
Record operations in training mode on journal (journal memory).	Yes = 0 No = 2	☐ D_2
Alert Journal memory near-end/full error.	Yes = 0 No = 1	☐ D_1

A-3-21-1-18   Message print control

Description		Choice	Program code
Print receipt logo message.	a	No = 0 Yes = 1	
Print receipt commercial message.	b	No = 0 Yes = 2	☐ (a+b+c) D_{12}
Print receipt bottom message.	c	No = 0 Yes = 4	
Print slip commercial message.	a	No = 0 Yes = 1	
Print slip bottom message.	b	No = 0 Yes = 2	☐ (a+b+c) D_{11}
Print slip intermediate message.	c	No = 0 Yes = 4	
Print bill top message.	a	No = 0 Yes = 1	
Print bill copy message.	b	No = 0 Yes = 2	☐ (a+b+c) D_{10}
Print bill bottom message.	c	No = 0 Yes = 4	
Receipt logo data: ① Character type, ② Graphic type		① = 0 ② = 1	☐ D_9
Always "0"			0 0 0 0 D_8 D_7 D_6 D_5
Always "0"			0 0 0 0 D_4 D_3 D_2 D_1

A-3-21-1-19 Order control

Description		Choice	Program code
Print order with order character.	a	No = 0 Yes = 1	□ (a+b) D_{12}
Print order with amount.	b	No = 0 Yes = 2	
Print double bon message.	a	No = 0 Yes = 1	□ (a+b) D_{11}
Breakdown set menu printing on order.	b	No = 0 Yes = 4	
Alert when the order printer is down.		Yes = 0 No = 1	□ D_{10}
Always "0"			0 D_9
Sound buzzer before printing on kitchen printer		No = 0 Yes = 4	□ D_8
Always "0"			0 0 0 D_7 D_6 D_5
Cut order.	a	No = 0 Yes = 2	□ (a+b) D_4
Print hyphens.	b	No = 0 Yes = 4	
Output orders during training.	a	No = 0 Yes = 2	□ (a+b) D_3
Merge the same department/PLU registration on order receipt. (Item consolidation)	b	No = 0 Yes = 4	
No. of feed lines before order printing. (0 ~ 9)		Significant number	□ D_2
No. of feed lines after order printing. (0 ~ 9)		Significant number	□ D_1

† Effective only for order master/backup master

File Format

A-3-21-1-20 Set menu, Condiment

Description	Choice	Program code
Calculate detail item prices in set menu. (If "No", calculate only quantity and stock.)	Yes = 0 No = 2	$\square$ D_2
Obey registration quantities of child PLU to its parent PLU.	Yes = 0 No = 2	$\square$ D_1

A-3-21-1-21 Check tracking

Description		Choice	Program code
Check tracking method: ① Check No., ② Table No.	a	① = 0 ② = 1	$\square$ (a+b+c) D_9
Perform auto new balance.	b	No = 0 Yes = 2	
Maximum digit of check No.: ① 6-digit, ② 12-digit	c	① = 0 ② = 4	
Tax calculation by new balance.		No = 0 Yes = 1	$\square$ D_8
Print previous balance, when registering old check.		Yes = 0 No = 2	$\square$ D_7
Always "0"			$\boxed{0\,0\,0}$ $D_6\ D_5\ D_4$
Merge the same department/PLU registration by old check. (Item consolidation)		No = 0 Yes = 4	$\square$ D_3
Always "0"			$\boxed{0}$ D_2
Capture the item data		No = 0 Yes = 1	$\square$ D_1

A-3-21-1-22 Clerk interrupt

Description	Choice	Program code
Enable clerk interrupt.	No = 0 Yes = 1	$\square$ D_{12}
Enable to register a clerk who has no clerk number.	No = 0 Yes = 4	$\square$ D_{11}
Always "0"		$\boxed{0\,0\,0\,0}$ $D_{10}\,D_9\,D_8\,D_7$
Always "0"		$\boxed{0\,0\,0\,0}$ $D_6\,D_5\,D_4\,D_3$
Auto sign-off timer. (00 ~ 99 seconds, "00" means no auto sign-off.)	Significant numbers	$\boxed{\ \ }$ $D_2\ D_1$

A-3-21-1-23 Display control

Description	Choice	Program code
Attribution of 2nd LCD: No 2nd LCD = 0, Signed on clerk exclusive = 1, Registered receipt alternative = 2, Customer display = 3, Journal display = 4	Significant number	$\square$ D_{12}
Enable to exchange the contents of 1st and 2nd LCD.	No = 0 Yes = 1	$\square$ D_{11}
Always "0"		$\boxed{0}\ \boxed{0}\ \boxed{0}\ \boxed{0}$ $D_{10}\ D_9\ D_8\ D_7$
Always "0"		$\boxed{0}\ \boxed{0}\ \boxed{0}\ \boxed{0}$ $D_6\ D_5\ D_4\ D_3$
Back light off timer (00 ~ 59 minutes, "00" means no turn off.)	Significant numbers	$\square\ \square$ $D_2\ D_1$

A-3-21-1-24   Menu sheet number control (1)

Description		Choice	Program code
Sheet No. of the 1st parent menu sheet.		Significant number	$\square$ D_{12}
Summed up menu sheet 1 to parent 1.	a	No = 0 Yes = 1	
Summed up menu sheet 2 to parent 1.	b	No = 0 Yes = 2	$\square$ (a+b+c) D_{11}
Summed up menu sheet 3 to parent 1.	c	No = 0 Yes = 4	
Summed up menu sheet 4 to parent 1.	a	No = 0 Yes = 1	
Summed up menu sheet 5 to parent 1.	b	No = 0 Yes = 2	$\square$ (a+b+c) D_{10}
Summed up menu sheet 6 to parent 1.	c	No = 0 Yes = 4	
Summed up menu sheet 7 to parent 1.	a	No = 0 Yes = 1	$\square$ (a+b) D_9
Summed up menu sheet 8 to parent 1.	b	No = 0 Yes = 2	
Sheet No. of the 2nd parent menu sheet.		Significant number	$\square$ D_8
Summed up menu sheet 1 to parent 2.	a	No = 0 Yes = 1	
Summed up menu sheet 2 to parent 2.	b	No = 0 Yes = 2	$\square$ (a+b+c) D_7
Summed up menu sheet 3 to parent 2.	c	No = 0 Yes = 4	
Summed up menu sheet 4 to parent 2.	a	No = 0 Yes = 1	
Summed up menu sheet 5 to parent 2.	b	No = 0 Yes = 2	$\square$ (a+b+c) D_6
Summed up menu sheet 6 to parent 2.	c	No = 0 Yes = 4	
Summed up menu sheet 7 to parent 2.	a	No = 0 Yes = 1	$\square$ (a+b) D_5
Summed up menu sheet 8 to parent 2.	b	No = 0 Yes = 2	
Always "0"			| 0 | 0 | 0 | D_4 D_3 D_2
Sum up manu sheets to one sheet.	a	No = 0 Yes = 1	$\square$ (a+b) D_1
Reset child menu sheets with parent menu sheet together.	b	No = 0 Yes = 2	

A-3-21-1-25 Menu sheet number control (3)

Description		Choice	Program code
Enable quantity extension of touch PLU.	a	No = 0 Yes = 1	☐ D_{12}
Enable quantity extension of touch subdepartment.	b	No = 0 Yes = 2	
Enable quantity extension of touch epartment.	c	No = 0 Yes = 4	
Always "0"			0 0 0 0 D_{11} D_{10} D_9 D_8
Always "0"			0 0 0 0 D_7 D_6 D_5 D_4
Always "0"			0 0 0 D_3 D_2 D_1

A-3-21-1-26 Menu sheet number control (4)

Description	Choice	Program code
Start PLU number of 1st menu sheet	Significant numbers	☐☐☐☐ D_{12} D_{11} D_{10} D_9
Start PLU number of 2nd menu sheet	Significant numbers	☐☐☐☐ D_8 D_7 D_6 D_5
Start PLU number of 3rd menu sheet	Significant numbers	☐☐☐☐ D_4 D_3 D_2 D_1

A-3-21-1-27 Menu sheet number control (5)

Description	Choice	Program code
Start PLU number of 4th menu sheet	Significant numbers	☐☐☐☐ D_{12} D_{11} D_{10} D_9
Start PLU number of 5th menu sheet	Significant numbers	☐☐☐☐ D_8 D_7 D_6 D_5
Start PLU number of 6th menu sheet	Significant numbers	☐☐☐☐ D_4 D_3 D_2 D_1

A-3-21-1-28 Menu sheet number control (6)

Description	Choice	Program code
Start PLU number of 7th menu sheet	Significant numbers	☐☐☐☐ D_{12} D_{11} D_{10} D_9
Start PLU number of 8th menu sheet	Significant numbers	☐☐☐☐ D_8 D_7 D_6 D_5
Always "0"		0 0 0 0 D_4 D_3 D_2 D_1

File Format

A-3-21-1-29 Time & Attendance

Description		Choice	Program code
Full aged employee: Weekly work time (hour)		00~99	D_{12} D_{11}
Weekly work time (minute)		00~59	D_{10} D_9
Minor employee: Weekly work time (hour)		00~99	D_8 D_7
Weekly work time (minute)		00~59	D_6 D_5
Allow EMPLOYEE Z even if employee are not clocked-out.	a	No = 0 Yes = 1	D_4
Use Weekly/Bi-Weekly	b	Weekly = 0 Bi-Weekly = 2	
Always "0"			D_3
Recognize Break time as Work time		No = 0 Yes = 1	D_2
Rounding of work hours* Not round = 0, Per 10 minutes = 1, Per 15 minutes = 2, Per 20 minutes = 3, Per 30 minutes = 4		Significant number	D_1

* **Rounding flaction of work hours:**
Per 10min.: 00~04 = 00, 05~09 = 10 (min.)
Per 15min.: 00~07 = 00, 08~14 = 15 (min.)
Per 20min.: 00~10 = 00 (min.)

A-3-21-1-30 Store/Recall range

Description	Choice	Program code
Always "0"		D_{12}
Always "0"		D_{11}
Always "0"		D_{10}
Reset the Store/Recall starting time	No = 0 Yes = 1	D_9
Store/Recall starting time (0000 = 0001) *		D_8 D_7 D_6 D_5
Store/Recall ending time (0000 = 9999) *		D_4 D_3 D_2 D_1

* Be sure that all terminals have common value.
* The starting time value should be smaller than the ending time value.
* If the starting time value is bigger than the ending time value, the ending time value is recognized
  to be same as the starting time value.

A-3-22. Special character file

A-3-22-1 Special character

File name: Special character   File No.: 023   Max. allocatable records:28 (fixed)

```
0                        16
┌────────────────────────┐
│                        │
│       Character         │
│                        │
└────────────────────────┘
```
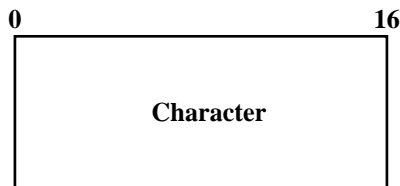
Rec. No.	Contents		Descriptor
001	Amount symbol (2), @(2), No (2), split pricing (1),	Others	● @No / *
	Training filler (1)	U.S.	$ @No / *
002	No. of item sold (2), Customer count (2)		NoCTX
003	Multiplication (6)	Others	X BUSY
	Recalling for a check (6)	U.S.	BUSY
004	Taxable symbol 1 (3 e.a.)		T1 T2 T3 T4 T5
005	Taxable symbol 2 (3 e.a.)		T12T13T14 T23
006	Taxable symbol 3 (3 e.a.)		T1
007	Foreign currency (2)/Selective item symbol (3)		* * * * ●
008	Mode symbol 1 (4) (4 e.a.)		REG RFR—MGR
009	Mode symbol 2 (4) (4 e.a.)		Pn†X/Z
010	Mode symbol 3 (4) (4 e.a.)		PGM TRG
011	Decimal: amount/q'ty, Delimiter (1 e.a.)		..,,
012	A.M., P.M. (3 e.a.)		AM PM
013	Slip continued (12), page (2)		CONTINUED P
014	Online password (8)		
015	Display subtotal symbol (ST key) (16)		ST
016	Subtotal symbol (16)		ST
017	Total symbol (16)		TL
018	Change symbol (16)		CG
019	Check cashing fee (16)		–
020	Check cashing amount (16)		CACG
021	Bon message (16)		** STUB **
022	Not used		
023	Check No. (12)		CHECK No.
024	Service total (16)		SRVC TL
025	Item discount total (16)		DISCOUNT
026	Not used		
027	Seat No. (16)		SEAT#
028	Total symbol (X/Z report) (16)		TL
029	Clock-in symbol (16)		CLOCK-IN
030	Clock-out symbol (16)		CLOCK-OUT
031	Break-in symbol (16)		BREAK-IN
032	Break-out symbol (16)		BREAK-OUT
033	Job code symbol (16)		JOB
034	Work time symbol (16)		WORK TIME
035	Break time symbol (16)		BREAK TIME
036	Tip declaration symbol (16)		CASH TIP
037	Regular work hours (Employee report) (16)		REGULAR TIME
038	Overtime work hours (Employee report) (16)		OVER TIME
039	Employee report (1) (4 e.a.)		IN OUT BRK JOB#
040	Employee report (2) (4 e.a.)		TIP WORK
041	Hourly labor pay (16)		COST
042	Hourly labor proceeds (16)		NET SALES/HOUR
043	Pay per transaction (16)		COST/TRANSACTION

File Format

A-3-23. Report header file

A-3-23-1 Report header

File name: Report header

```
0                              16
┌──────────────────────────────┐
│                              │
│          Character           │
│                              │
└──────────────────────────────┘
```
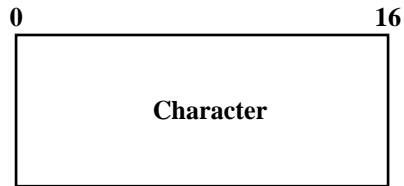
Rec. No.	Contents	Descriptor
001	Fixed totalizer report	FIXED TTL
002	Transaction key report	FREE FUNCTION
003	Subdepartment report	SUB DEPT
004	PLU report	PLU
005	Department report	DEPT
006	Group report	GROUP
007	Cashier/clerk report	CASHIER/CLERK
008	Not used	
009	Hourly sales report	HOURLY
010	Monthly sales report	MONTHLY
011	Flash (Financial) report	FLASH
012	Open check report	OPEN CHK
013	Table analysis report	TABLE ANALYSIS
014	PLU stock report	PLU STOCK
015	Void causal report	VOID REASON
016	Journal memory report	J-MEMORY
017	Time & Attendance	EMPLOYEE
018	Hourly labor	HOURLY LABOR
019	Hourly item	HOURLY PRODUCT

A-3-24. Tax table file

A-3-24-1 Tax table

File name: Tax table

File No.: 025   Max. allocatable records:5

	0	4	6	7	8	10	11	12	13	76
Rate										
Max. Table amount										
Rounding										
Singapore rounding										
Cal. type										
Cyclic pattern										
Cyclic value										
Non cyclic value										
Actual value										

A-3-25. Pulldown group file

A-3-25-1 Pulldown group

File name: Pulldown group

File No.: 026   Max. allocatable records:999

Character	0
Status	16 19
Record No. 1	21
File No. 1	23
Record No. 2	25
File No. 2	27
Record No. 3	29
File No. 3	31
Record No. 4	33
File No. 4	35
Record No. 5	37
File No. 5	39
Record No. 6	41
File No. 6	43
Record No. 7	45
File No. 7	47
Record No. 8	49
File No. 8	51
Record No. 9	53
File No. 9	55
Record No.10	57
File No.10	59
Record No.11	61
File No.11	63
Record No.12	65
File No.12	67
Record No.13	69
File No.13	71
Record No.14	73
File No.14	75
Record No.15	77
File No.15	79
Record No.16	81
File No.16	83
Record No.17	85
File No.17	87
Record No.18	89
File No.18	91
Record No.19	93
File No.19	95
Record No.20	97
File No.20	99

A-3-26. Set menu table file

A-3-26-1 Set menu table

File name: Set menu table

File No.: 028   Max. allocatable records:999

Record No. 1	0
File No. 1	2
Record No. 2	4
File No. 2	6
Record No. 3	8
File No. 3	10
Record No. 4	12
File No. 4	14
Record No. 5	16
File No. 5	18
Record No. 6	20
File No. 6	22
Record No. 7	24
File No. 7	26
Record No. 8	28
File No. 8	30
Record No. 9	32
File No. 9	34
Record No.10	36
File No.10	38
Record No.11	40
File No.11	42
Record No.12	44
File No.12	46
Record No.13	48
File No.13	50
Record No.14	52 54
File No.14	56
Record No.15	58
File No.15	60
Record No.16	62
File No.16	64
Record No.17	66
File No.17	68
Record No.18	70
File No.18	72
Record No.19	74
File No.19	76
Record No.20	78
File No.20	80

A-3-27. Batch X/Z file

A-3-27-1 Batch X/Z

File name: Batch X/Z   File No.: 029   Max. allocatable records:10

0 1 2 3 4 5 6 7 8 9

Mode	X/Z code (1)	X/Z code (2)	X/Z code (3)	X/Z code (4)	X/Z code (5)	X/Z code (6)	X/Z code (7)	X/Z code (8)

A-3-28. Receipt/Slip message file

A-3-28-1 Receipt/Slip message

File name: Receipt/Slip message   File No.: 032   Max. allocatable records:47

0   **40**

Character

Rec No.	Message
1 ~ 4	Receipt logo message
5 ~ 8	Receipt commercial message
9 ~ 12	Receipt bottom message
13 ~ 16	Bill top message
17 ~ 20	Bill copy message
21 ~ 24	Bill bottom message
25 ~ 28	Slip logo message
29 ~ 32	Slip intermediate message
33 ~ 36	Slip bottom message
37	Not used
38 ~ 47	Guest bottom message

A-3-29. Check endorsement message file

A-3-29-1 Check endorsement message

File name: Check endorsement message   File No.: 033   Max. allocatable records:4

0   **40**

Character

A-3-30. Arrangement file

A-3-30-1 Arrangement group (1) ~ (5)

File name: Arrangement group (1)	File No.: 038	Max. allocatable records:9999
File name: Arrangement group (2)	File No.: 138	Max. allocatable records:9999
File name: Arrangement group (3)	File No.: 238	Max. allocatable records:9999
File name: Arrangement group (4)	File No.: 338	Max. allocatable records:9999
File name: Arrangement group (5)	File No.: 438	Max. allocatable records:9999

```
0                                    24
┌──────────────────────────────────────┐
│                                        │
│              Arrange                   │
│            (character)                 │
│                                        │
└──────────────────────────────────────┘
```
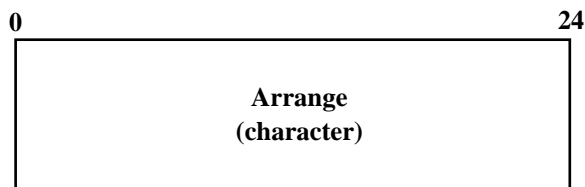
A-3-31. Character recall file

A-3-31-1 Character recall

File name: Character recall   File No.: 039   Max. allocatable records:9999

```
0                                        40
┌──────────────────────────────────────────┐
│                                            │
│                 Character                  │
│                                            │
└──────────────────────────────────────────┘
```
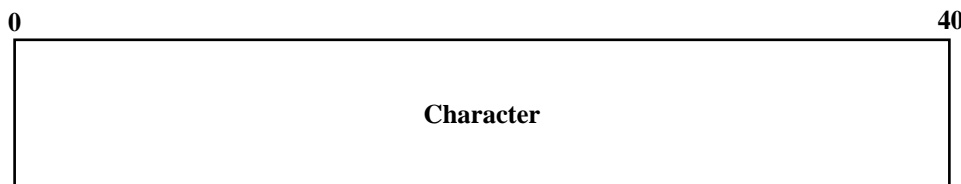
A-3-32. Check print file

A-3-32-1 Check print

File name: Check print   File No.: 041   Max. allocatable records:9

```
0     3
┌─────┐
│     │
│ Control │
│ data │
│     │
└─────┘
```

A-3-33. Graphic logo file

A-3-33-1 Graphic logo

File name: Graphic logo   File No.: 047   Max. allocatable records:432 (fixed)

```
0              13
┌───────────────┐
│               │
│  Bitmap data  │
│               │
└───────────────┘
```

File Format
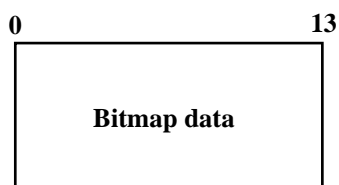
A-3-34. Scheduler file

A-3-34-1 Scheduler

File name: Scheduler   File No.: 062   Max. allocatable records:99

0	2	4	6	8	10	12	14

Start time	End time	Interval 1	Interval 2	Arrange tbl No.	Arrange file No.	Program

Description	Choice	Program code
Scheduler start time (00:00 ~ 23:59)	Significant numbers	$D_{28}\ D_{27}\ D_{26}\ D_{25}$
Scheduler end time (00:00 ~ 23:59)	Significant numbers	$D_{24}\ D_{23}\ D_{22}\ D_{21}$
Always "0"		0 D_{20}
Interval control 1: Daily = 0, Weekly = 1, Monthly = 2	Significant number	D_{19}
Interval control 2: Daily; No meaning Weekly; Define day of a week 00; Sunday, 01; Monday, 02; Tuesday, 03; Wednesday, 04; Thursday, 05; Friday, 06; Saturday Monthly; Define date, 01 ~ 31 99 means the end of the month	Significant numbers	$D_{18}\ D_{17}$
Interval time (00:00 ~ 23:59)	Significant numbers	$D_{16}\ D_{15}\ D_{14}\ D_{13}$
Always "0"		0 D_{12}
Arrangement table No.	Significant numbers	$D_{11}\ D_{10}\ D_{9}\ D_{8}$
Arrangement file No.	Significant numbers	$D_{7}\ D_{6}\ D_{5}$
Always "0"		0 0 0 0 $D_{4}\ D_{3}\ D_{2}\ D_{1}$

A-3-35. Order character file

A-3-35-1 Order character

File name: Order character   File No.: 065   Max. allocatable records:99

0	16

Order character
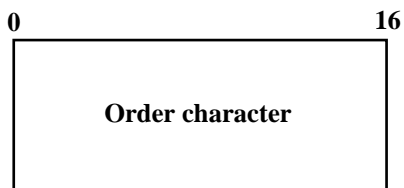
A-3-36. System files

A-3-36-1 Key table

File name: Key table   File No.: 074   Max. allocatable records:192 (fixed)

0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
1st Func code	1st Rec No.	2nd Func code	2nd Rec No.	3rd Func code	3rd Rec No.	4th Func code	4th Rec No.	5th Func code	5th Rec No.	6th Func code	6th Rec No.	7th Func code	7th Rec No.	8th Func code	8th Rec No.	PGM2 Char code 1	PGM2 Char code 2

A-3-36-2 System connection table

File name: System connection table   File No.: 901   Max. allocatable records:33

0												12	14	16	18
Logical ID												Distinct M/BM	CHK PGM Status	CHK PGM	Order PGM	Order Status	ECR Group

Description	Choice	Program code
Logical ID characters (within 12 characters)	Significant characters	$\square \sim \square$ D_{24} D_{13}
Terminal: Oneself = 02, Others = 01	Significant numbers	$\square\square$ D_{12} D_{11}
Check tracking master/backup master (program value): Master = 01, Backup master = 02, Satellite = 00	Significant numbers	$\square\square$ D_{10} D_{9}
Check tracking master/backup master (current value): Master = 01, Backup master = 02, Satellite = 00	Significant numbers	$\square\square$ D_{8} D_{7}
KP print master (program value): Master = 01, Backup master = 02, Satellite = 00	Significant numbers	$\square\square$ D_{6} D_{5}
KP print master (current value): Master = 01, Satellite = 00	Significant numbers	$\square\square$ D_{4} D_{3}
Always "0"		0 0 D_{2} D_{1}

A-3-36-3 I/O parameter table

File name: I/O parameter table   File No.: 902   Max. allocatable records:10

```
0         5
┌─────────┐
│         │
│         │
│ Program │
│         │
│         │
└─────────┘
```

A-3-36-4 Printer definition table

File name: Printer definition table   File No.: 903   Max. allocatable records:24

```
0 1                  13                25
┌┬──────────────────┬─────────────────┐
││                  │                 │
││  Master ECR ID   │ Backup master   │
││                  │     ECR ID      │
││                  │                 │
└┴──────────────────┴─────────────────┘
Distinct M/BM
```
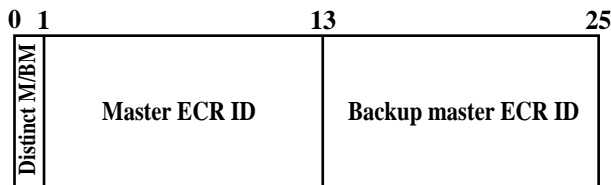
A-3-36-5 System error log

File name: System error log   File No.: 999   Max. allocatable records:999

```
0    2    4    6 7  9   11
┌────┬────┬────┬─┬──┬───┐
│    │    │    │ │  │   │
│Ter │Date│Time│O│Er│Err│
│min │    │    │p│ro│or │
│al  │    │    │e│r │fun│
│No. │    │    │r│co│cti│
│    │    │    │a│de│on │
│    │    │    │t│  │   │
│    │    │    │i│  │   │
│    │    │    │o│  │   │
│    │    │    │n│  │   │
└────┴────┴────┴─┴──┴───┘
```

Calculation method
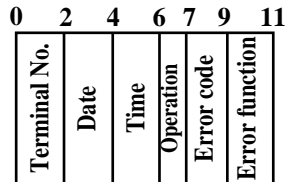
A-4. Counter and Totalizer calculation method

The following calculation methods of totalizer memories are explained in this chapter.

1) Calculations to totalizer memories belonging to the fixed totalizer file

All formulas in these explanations are calculated in the registration mode.
In the RF mode, the values in totalizers are calculated using the opposite sign.
In the REG– mode, the value in totalizers and counters are calculated using the opposite sign.

A-4-1   Fixed totalizer file

Total or Counter	Increments or Decrements by
Gross sales quantity	Number of products registered for Departments + Subdepartments + PLUs (non hash) {For Department, Subdepartment and PLUs Single items : +1 Multiplication : Input quantity Split price : Input quantity Square : Input quantity $\times$ Input quantity Cube : Input quantity $\times$ Input quantity $\times$ Input quantity} – Last item void – Return item – Previous item void – Cancel

Gross sales amount	Number of products registered for Departments + Subdepartments + PLUs (non hash)
	{For Department, Subdepartment and PLUs
	Single items : Preset or manually input prices
	Multiplication : Preset or manually input prices $\times$ Input quantity
	Split price : (Preset or manually input prices / Input unit quantity)
	                            $\times$ Input quantity
	Square : Preset or manually input prices $\times$ Input quantity
	                            $\times$ Input quantity
	Cube : Preset or manually input prices $\times$ Input quantity
	                            $\times$ Input quantity $\times$ Input quantity}
	– Last item void – Return item – Previous item void – Cancel

In gross/net calculation: 1) When gross calculation is specified	Adjust amounts in Minus, Plus, Discount (%–), Premium (%+), Coupon transactions are not reflected.
2) When net calculation is specified	Adjustment amounts in Minus, Plus, Discount (%–), Premium (%+) Coupon transactions are reflected.
Net sales quantity	+1 (When a transaction is finalised for sale. For REG– mode –1 is affected.)
Net sales amount	{Department + Subdepartment + PLU product registration amounts – Last item void amounts for the above – Item return amounts for the above – Previous item void amounts for the above – Cancel amounts for the above} + {Plus (+ key) + Premium (%+ key) – Error correction amounts – Cancel amounts} – {Minus (– key) + Discount(%– key) + Coupon – Error correction amounts – Cancel amounts} + {Manual tax – Error correction amounts *(delete)* – Cancel amounts} + Results of tax table calculations (add-on tax)

Total or Counter	Increments or Decrements by
Medium in drawer (Cash, charge, check, credit)	Sales total or tendered total by specified medium + Received on account total (Cash in drawer only) – Paid out (Cash in drawer only) + Loan totals (by selected medium) – Pick up totals (by selected medium) – Change amounts generated with the specific medium – Total of check cashing transaction (When specified as cash in drawer)
Declared short medium amount	Declared medium in drawer – Medium in drawer *(future)* (Only effective when the result of this formula becomes negative)
Declared over medium amount	Medium in drawer – Declared medium in drawer *(future)* (Only effective when the result of this formula becomes negative)
Number of RF mode items	+1 (When cash sales, charge sales, credit sales, and check sales transaction are finalized in the RF/REG– mode.)
RF mode amount	Absolute value of total sales amount for RF/REG– mode registrations.
Customer count	Entered number of covers
Average sales per customer	Net sales amount / Customer count
Check cashing service fee	+ Check amount $\times$ (1 – Service ratio) or + Service fee amount
New balance fee	+ MD/ST amount $\times$ (1 – Service charge ratio) or + Service charge fee amount
Clerk commission total	Item sales (commissionable) $\times$ Clerk commission rate
Foreign currency in drawer	Entered amount after calculating the subtotal amount in foreign currency.
Discount Amount	+ Registered amount of Minus key
Item return amount	+ Registered item amount by RF key
Clear count	+ 1 (REG, RF, REG– mode) (When Clear key is pressed.)
Rounding	+ Fraction amount by roundings (Roundings include IF1/2, Denmark, Scandinavian and Singapore.) *(future)*

Taxable amount	Subtotal of taxable amount at finalization of sale
	                (in case of add-on tax)
	Subtotal of taxable amount $\times$ VAT rate / (1 + VAT rate) at finalization of sale
	                (in case of add-in tax)

Tax amount	Result of calculation using tax table for taxable amount at finalization of sales
GT 1	Grand total of net sales totals
GT 2	Absolute value of {Registration amount (Department, Subdepartment, PLU) + Last item void amount + Previous item void amount + Refund amount} + {Plus, Minus, Premium, Discount, Coupon + Last item void amount}
GT 3	Net sales total – add-on tax – add-in tax

A-5. Error messages

A-5-1 Error messages

When an error occurs on a QT-2000 terminal, a buzzer sounds and the appropriate error message appears on the main display, indicating what action to take.
The following table lists the error messages and describes the action to take.

Prompt message	Meaning
Operator mistake	Operation error
E001 Wrong Mode	Check tracking (Open mode error)
E003 Wrong operator	Error clerk/Error clerk in CHK tracking
E005 Insufficient memory	Memory allocation over
E011 Close the drawer	Drawer compulsory
E012 Change journal roll	Journal paper near end
E013 Change receipt roll	Receipt/order paper near end
E016 Change back to REG mode	Prohibit plural operation in RF mode
E017 Enter Check/TBL number	Check # compulsory
E018 Enter Table No.	Table # compulsory
E019 Enter Number of covers	Cover compulsory
E020 Enter Seat number	Seat number compulsory
E023 Stock running short	Alarm when any item drops below its programmed minimum stock quantity during registration.
E024 No stock is available	Error when actual stock value for a registration items is a negative value.
E026 Stay down compulsory ERR. Enter Item(s).	Stay down compulsory
E027 Cancel buffer full. Please finalize the transaction	All void buffer full
E029 No registration is possible while you are in the tender operation.	Attempted registration whilst partial tender operation is being done.
E031 Press ST key before Finalization	ST compulsory
E033 Enter tendered amount	Amount tender compulsory
E035 Change amount exceeds the limit.	Change amount exceeds the limit.
E036 Remove money from the drawer.	Contents of the drawer exceed the programmed limit — Sentinel function.
E037 Digit or Amount Limitation Over	H.D.L., H.A.L.O error
E038 Perform Money Declaration	Money declaration compulsory
E040 Issue Guest Receipt	Guest receipt compulsory
E041 Print Validation	Validation compulsory
E042 Insert VLD Paper and retry	Alarm when no paper is inserted.
E043 Remove VLDed paper or check VLD sensor	Alarm when the paper is left in the validation stage of the printer.
E044 Print Cheque	CHK-PRT compulsory
E045 Print Check-Endorsement	CHK-END compulsory
E046 REG Buffer Full. Please Finalize or NB.	Registration buffer full
E047 Print bill	Slip compulsory
E048 Insert Slip Paper and retry.	Alarm when no paper is inserted in the Slip.
E049 CHECK memory full	CHK tracking index full/near end
E050 Detail memory Full.	CHK tracking memory full/near end
E051 CHK/TBL No. is occupied.	Attempt is made to use the New Check key to open a new check using a number that is already used for an existing check tracking memory.
E052 CHK/TBL No. is busy.	Attempt to use the same check number whillst the specified number is being used in the other terminal.

Prompt message	Meaning
E053 CHK/TBL No. is not opened.	CHK# not found
E054 Out of CHK/TBL No. Range	CHK# range over
E056 Store range full.	All check # are occpied in range.
E057 No item exists in detail.	Round Repeat cannot be found in detail.
E058 Enter post entry item.	Post Entry item exists in detail.
E059 Press Eat-in or Take-out key.	Press Eat-in or Take-out key.
********** E060 Printer offline.	Printer offline. "****" means ECR logical ID or KP1 ~ KP4.
********** E061 Printer error	Printer downed. "****" means ECR logical ID or KP1 ~ KP4.
********** E061 Printer error YES:Retry to print NO :Show on the screen ESC:Discard data	
********** E062 Printer paper end ********** E062 Printer paper end YES:Retry to print NO :Show on the screen ESC:Discard data	Paper near-end/end "****" means ECR logical ID or KP1 ~ KP4.
E064 Printer buffer full YES:Retry to print NO :Show on the screen ESC:Discard data	Print buffer full at sender side
E067 KP Master down. KP is not available for the backup. YES:Retry to print NO :Show on the screen ESC:Discard data	KP printing is disabled.
********** E068 KP Master is removed from system.	KP master is removed from the system. "****" means ECR logical ID.
********** E069 Kitchen Printer Master down. Retry or Remove it from system? YES:Retry for connection. NO :Remove it from system.	KP control master down "****" means ECR logical ID.
********** E070 Terminal out of action. Cannot print.	Down at target ECR which has printer "****" means ECR logical ID.
********** E071 Target terminal printer BF full. YES:Retry to print NO :Show on the screen ESC:Discard data	Printer buffer full at target ECR which has printer "****" means ECR logical ID.
********** E072 Target printer terminal is busy. Retry?	Busy at target ECR which has printer "****" means ECR logical ID.
********** E073 Your receipt/order may not be issued.	Time out at ECR which has printer "****" means ECR logical ID.

Error messages

Prompt message	Meaning
********** E073 Your receipt/order may not be issued. YES:Retry to print NO :Show on the screen ESC:Discard data	Time out at ECR which has printer "****" means ECR logical ID.
E075 Negative Balance. Cannot be finalized.	Attempted finalization when balance is less than zero.
E080 Journal Memory Full Please clear J-memo file.	J-memo full
E081 Data not found in J-memo	Data cannot be found in journal memory.
E082 ***** Illegal Data *****	Illegal J-memo data
E083 Cannot create J-memo file. Check Flash memory.	J-memo file cannot be created.
E085 Data exist in Consolida- tion area.	Data exists in consolidation area.

****
E105 Check/TBL Tracking Master
    down. Retry or Remove it
    from system?
 YES:Retry for connection.
 NO :Remove it from system.
	CHK master down
	"****" means ECR logical ID.

****
E106 Check/TBL Tracking Backup
    master down. Retry or Remove it
    from system?
 YES:Retry for connection.
 NO :Remove it from system.
	CHK BM down
	"****" means ECR logical ID.

****
E107 Both Master&Backup master
    down. CHK/TBL tracking or
    Clerk interrupt is not
    available.
	CHK M/BM down
	"****" means ECR logical ID.

********** E108 CHK/TBL Master is removed from system.	Master down then take it off from system "****" means ECR logical ID.
********** E109 CHK/TBL Backup master is removed from system.	Backup master down then take it off from system "****" means ECR logical ID.
E110 CHK data mismatch between Master&Backup master.	Data mismatch has occurred.
E130 Middle of Pick up or Loan Press Cancel Key.	During picking up
E131 Middle of <Bill Copy> Press Cancel key	During Bill copy
E132 Middle of Money Declarat- ion. Press Cancel key	During Money declaration
E133 Middle of <Media Change> Press Cancel key	During Media CHG
E134 Middle of Clerk Transfer Press Cancel key	During CLK Trans
E136 Middle of <Separate Check> Press ESC key	During SEP CHK

Prompt message	Meaning

E138 Items are consolidated.
    Change display mode and
    perform VOID operation.
	Void operation is prohibited because of entering quantity.

E139 Not allowed to be negative by Minus/Coupon key.	Credit balance error
E140 Wrong menu.	This sheet holder is prohibited by PGM.
E145 Arrangement syntax error.	Arrangement syntax error
E150 Incorrect value entry.	Incorrect entry for PGM
E151 Incorrect key Pressed.	Linking is incorrect.
E152 PGM File or Record number does not Exist.	No such file, no such record
E160 Flash memory full	Flash memory full
E161 No backup data in Flash Memory	No data is backuped in Flash memory.
E164 Empoloyee No. is not Found in the Employee File.	Employee No. is not set in the Employee File.
E165 Employee No. is not Clocking-in	Employee has not done CLOCK-IN operation yet.
E166 Employee No. is Occupied	Employee who has done CLOCK-IN operation attempts to operate CLOCK-IN again.
E167 Incorrect JOB code	Employee attempts to operate CLOCK-IN with incorrect JOB code.

E168 Your Operation is out of
    Schedule.
    Please Call Manager.
	Employees operate CLOCK-OUT in not allowance time.

E169 Work Hours Exceeded. Please Call Manager.	Overtime work.

E170 No Shift Reminds in the
    Schedule.
    You cannnot Clock-in.
	There is no empty shift left.

E171 Please Break-out and Retry.	Employee attempts to operate CLOCK-OUT whilst he/she is in a break time.
E172 Break Hours Exceeded.	Break hours are exceeded.
E173 This employee is at work now.	Employee is at work without break.
E174 This employee is taking a break now.	Employee who has not done BREAK-OUT operation attempts to operate BREAK-IN.
********** E175 Time&Attendance terminal is down.	The master totalizer terminal for Time & Attendance is down when an employee signs in. "****" means ECR logical ID.
E176 You cannot Clock-in. Please reset Employee Report.	Impossible to clock-in because of not resetting Employee Report.

E177 Time&Attendance Data
    Communication Error.
    Please Call Manager.
	Time&Attendance Data communication error.

E180 IDC FILE (1) memory full. Please clear IDC data.	IDC FILE (1) memory is full of items.
E181 IDC FILE (2) memory full. Please clear IDC data.	IDC FILE (2) memory is full of items.
E182 IDC FILE (3) memory full. Please clear IDC data.	IDC FILE (3) memory is full of items.

Error messages

A-5-2 Operation prompt

All prompt messages, together with descriptors and symbol characters for printing on receipts, slips or reports are contained in the list below. These messages cannot be added, modified or deleted.

Prompt message	Meaning
Data cannot be printed out. Do you want to display?	Request to check the data which cannot be printed out.
Do you want to clear data?	Confirmation to reset displayed report.
Cancel OK?	Confirmation of all void operation.
Please wait.	Please wait. ECR now processing.
Item Consolidation Mode.	In the item consolidation mode.
Non Consolidation Mode.	Not in the item consolidation mode.
REG Mode	Mode change : REG mode
REFUND Mode	Mode change : RF mode
REG— Mode	Mode change : REG– mode
REG2 Mode	Mode change : REG 2 mode
Training	Training operator
Please Sign on.	Sign off
Enter Check/Table Number.	CHK# compulsory
Enter Table Number.	TBL# compulsory
Enter Number of covers.	Covers compulsory
Enter Seat Number	Seat# compulsory
Perform Slip Printing	Slip compulsory
Issue Guest Receipt.	GUEST RCT compulsory
Perform Validation Printing.	VLD compulsory
Perform Check Printing.	CHK-PRT compulsory
Perform Check Endorsement.	CHK-END compulsory
Operation Code?	Secret No entry for REG 2 mode.
The terminal losts system con-figuration. Execute reconfigu-ration procedure as soon as possible. OK ?	Requirement for system re-configuration.
This procedure stops system maximum 60 sec. OK ?	Alert before flash memory clear.

A-5-3 System error code

All error codes are contained in the list below. These error codes are displayed or printed on error log report.

Error code	Meaning
0010	Handler access error (software)
0011	Cannot execute handler (system configuration)
0012	Break by PC
0013	Break by ECR
0014	DSR off before receiving command packet
0015	Receive illegal command number of command packet
0016	Receive illegal character
0017	Send error (hardware)
0018	Receive error (hardware)
0019	Receive illegal data packet
0020	No response error
0021	Cannot initialize or cannot get ID
0022	Received illegal packet
0023	CNET receive error
0024	Illegal termination by sender
0025	Received illegal packet during receiving other packets
0026	Not enough data packets received
0027	Flash erase error
0028	Flash write error
0040	No "H" information
0041	No "I" information
0042	No "F" information
0044	Illegal file name
0045	No file exists
0046	Illegal block
0047	Illegal command packet
0048	Illegal command No. (Not CMD)
0049	Illegal command No. (Not DATA)
0050	Sequence error
0051	Turn off DSR signal
0052	Received cancellation
0053	Retry over while waiting command
0054	Retry over while waiting EOT
0055	Retry over while waiting data
0056	Received EOT
0057	Retry over while waiting ACK
0058	Retry over while sending data
0059	Retry over while waiting "C"
0060	Retry over while sending response
0061	Retry over while excluding
0064	Break end
0065	Error during printing report header
0066	Error during printing report data
0067	Error during printing report data in work area
0068	Error during printing report data in consolidation area
0069	Work file clear error
0070	Consoloidation file clear error
0071	Z lock error
0072	Z clear error
0073	Z lock release error

Error messages

Error code	Meaning
0074	Error during accumulating to consolidation area
0075	Error during copying report data from terminal memory to work.
0076	Error during copying stock data to terminal memory
0077	Z lock error on satellite terminal
0078	Z clear error on satellite terminal
0079	Z lock release error on satellite terminal
0128	Parameter error to operating system
0129	Out of heap space
0130	Error drive
0132	In-line TP packet size error
0133	In-line retry over
0140	Calculation parameter error
0141	Out of file range
0144	Calculation overflow
0145	In-line open error
0146	In-line close error
0147	In-line bind error
0149	SYN signal not received
0150	Not connected in-line
0151	Not disconnected in-line
0152	Use illegal NCB
0153	In-line retry over
0155	In-line sequence error
0156	In-line no port exists
0158	In-line target port in use
0161	System resource is busy
0162	Polling semaphore NG
0170	Cannot rename
0171	No code is found while search/pick up
0173	File delete error (already opened)
0174	No file exists
0175	No relocatable information
0176	Not enough memory during file creation
0177	Record number error while reading/writing a file
0179	Double create error
0182	Flash write error
0184	Flash clear error
0190	No exist the object mail box
0191	No message arrived
0192	Error send message id
0193	Send message length over
0194	Too long message against slot
0195	No free file for mail box
0196	Not found the objected system params.
0197	Queue empty
0198	Time out
0202	No free FCB
0203	System DSA full
0204	NCB is in use
0205	No free file for SCB
0206	Link pointer broken
0207	Break PCB model
0208	Break PCB link

Error code	Meaning
0209	Out of range from PCB area
0210	Out of range from RCB area
0211	Out of range from queue area
0212	Out of range from queue area
0213	Out of range from SCB area
0214	Not found the queue header
0215	Not found the priority
0216	Check sum error
0217	Process status error
0235	In-line protocol error
0247	Stop in-line token

Error messages

Memory map

A-6. Memory map

This chapter shows the memory map of the QT-2000 terminal and their behaviors by initialization operations.

A-6-1   Memory map

EP-ROM	RAM	Flash memory

EP-ROM

This memory is used for starting procedure for IPL and to set up the network.   128k

Memory area (A)

RAM

Standard memory C drive   256k

Standard memory D drive   256k

Optional memory (2) D drive   512k

Memory area (B)

Flash memory

Contents
1. Operating system
2. Application for terminal
3. Prompt message
4. Standard program

1.38M

Memory area (C)

This memory is divided into two equal parts and totally dedicated for the electronlc journal and cannot be used for any other purpose.   128k

Memory area (D)

This memory is divided into two equal parts and totally dedicated for the electronlc journal and cannot be used for any other purpose.   128k
----
This memory is like built-in RAM card and it can be used for the folowing:
1. Storage for X/Z data
      or
2. All program data with memory allocation data
      or
3. All program data file by file.   384k

Memory area (E)

A-6-2   Memory behavior

Memory behavior under the following operations

Note: These operations are followed by the initialization operation (top left button).

1. 44449999<ST>
   Clears Memory area (B) and (C), and ready to load the IPL and user program from another terminal or standard program.
2. 10xxx/20xxx<ST>
   Clears Memory area (B) and ready to load the user program from another terminal or standard program.
3. NN10xxx/NN20xxx<ST>
   Set the selected machine ID "NN" and clears Memory area (B) and ready to load the user program from another terminal or standard program.
4. 88810xxx/88820xxx<ST>
   Clears Memory area (B), (D) and (E) and ready to load the user program from another terminal or standard program.

xxx: This part depends upon options. (Refer to page 98)

Memory map

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CASIO.