## RF SYSTEM lab.





## Wireless Intraoral Camera Imaging System

Copernicus is the total imaging solution that you have been dreaming of. The system includes super high resolution wireless intraoral camera and multipurpose wireless 10.4" LCD monitor.

**USER GUIDE** 

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# Attention for the Safety Use

Please read this document carefully and use all the functions correctly. It is not only for your safety but also safety of people around you and to prevent lose of property.

Please refer below symbols and denotation.



This symbol means there is a high possibility of death or serious injury if you ignore the meaning of symbols and use the products wrong.



Warning

This symbol means there is a possibility of death or serious injury if you ignore the meaning of symbols and use the products wrong.



Attention

This symbol means there is a possibility of injury and damages of items if you ignore the meaning of symbols and use the products wrong.





Do not attempt to disassemble, repair or modify. There is a possibility of the electric shock or injury.



When items are broken by falling objects or accidentally dropped and inside parts are exposed, do not touch the exposed or broken parts. There is a possibility of the electric shock or injury.



Do not put any liquid on items. There is a possibility of the fire or electric shock.

# ■ Package Items

Before using the Copernicus, please verify that all the necessary items are included. If you find any part missing, defective, or damaged, please contact RF System lab.







Copernicus Monitor (×1)

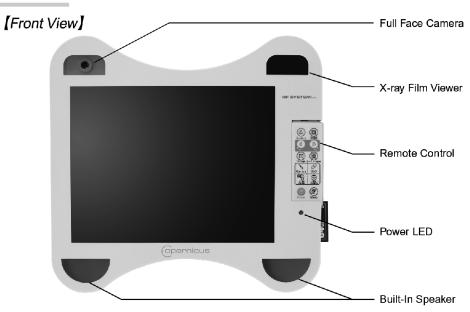
Remote Control  $(\times 1)$ 

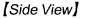
AC Adapter 12V3A(×1)

CF Card (×1)

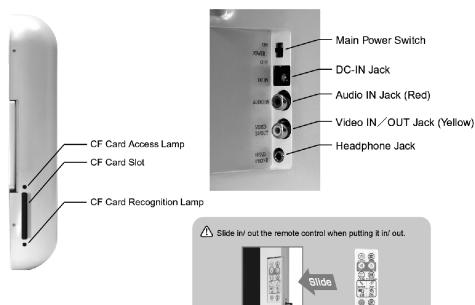
## Features

## **Monitor**

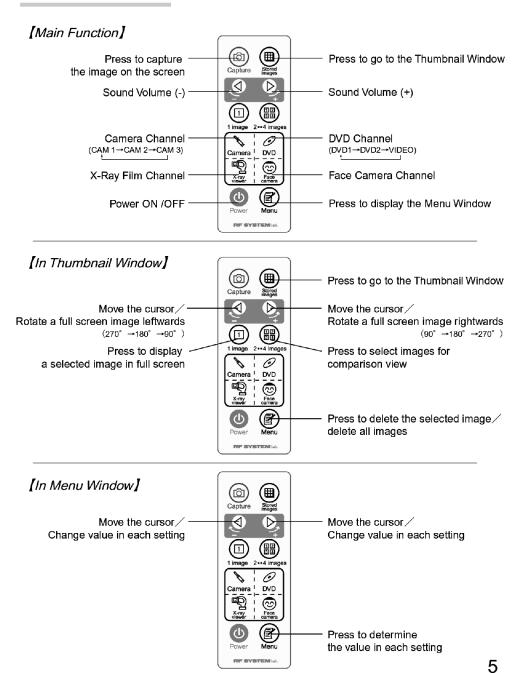




[Backside]



### Remote Control



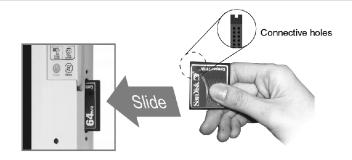
# Basic Usage

#### Turn on the Power (Monitor)

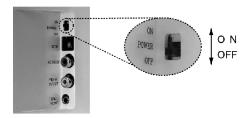
- ①Connect the AC Adapter to the DC IN Jack and the AC Outlet.
- ②Insert the attached CF Card to the CF Card Slot.



\*\*Main power of the monitor must be OFF when inserting / pulling out the CF Card to / from the monitor. It may cause malfunctioning or damage the stored images of the CF Card if the CF Card is removed or inserted when the main power is ON.



③Slide the Main Power Switch up to turn on the power.



### Light Indicator



#### Adjust the Channel Setting

\*Adjust the channel setting before the first use.



①Press [Menu] Button. The Menu window appears.





②Select CHANNEL with 4 Buttons and press ( [Menu].





③Set the channel in correspondence with your intraoral camera with Buttons and press ( (Menu).





(4) Press Camera | Camera | Button to enter the camera mode.

⑤Turn on the power of the Camera by sliding down the Operating Button and holding for approximately 3 seconds. Confirm that the image from the Camera is displayed on the Monitor.



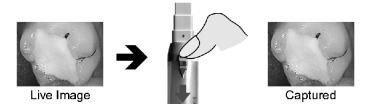


Live Image



#### Capture Images with Camera

Slide down and release the Operating Button on the Camera. The image on the monitor will freeze with a shutter sound, and be saved on the CF Card. \*\*The shutter sound may not be heard if the volume is OFF.



### View Images Stored in CF Card

①Press (III) [Stored Image] Button. The Thumbnail Window appears.



\*If there is no image stored in CF Card, a message "NO IMAGE" appears.





③Press ① [1 Image] Button to display the selected image in full screen.
(Press ① [1 Image] Button again when you do not wish to show the date and time)



④Press (Ⅲ)[Stored Images] Button to go back to Thumbnail Window.

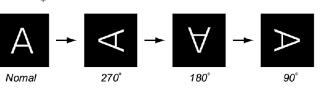


#### Rotate Stored Images

①When displaying an image in full screen, press ② Button to rotate the image.



②Press Dutton to rotate the image.



#### Comparison View

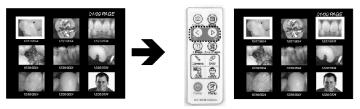
Select up to 4 images and display them in one screen.

①Press (III) [Stored Images] Button to display the Thumbnail Window.

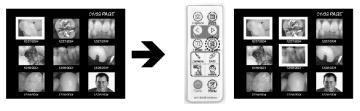


Live Image

②Move the green cursor by pressing 5 Button to the first image for comparison.

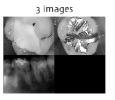


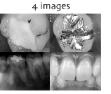
③Press (□□ [2⇔4 Images] Button. The frame of the selected image goes red. (When the cursor is on the selected image, the color of the frame goes green.)



④Go over the procedure ②—③ to select up to 4 images. When you wish to display only 2 or 3 images, press ( [Capture] Button when you finish selecting. 4-image-display appears automatically after you have selected the fourth image.







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### Delete Images in CF Card

[Delete One Image]

- ①Press (III) [Stored Images] Button to display the Thumbnail Window.
- ②Press Button to move the blue cursor to the image you wish to delete, and press (Menu] Button.



③Confirm that the cursor is on DELETE, and press (②)[Menu] Button.



Press Button to delete the selected image and button to cancel the action.

#### Delete Images in CF Card

[Delete ALL]

- ①Press (III) [Stored Images] Button and display the Thumbnail Window.
- ②Press ( [Menu] Button



③Select DELETE ALL and press [Menu] Button again.



### **⚠** CAUTION

※All stored images will be deleted from the CF memory Card.※It may take a few minutes to delete a large number of images.

#### Capture and Store Images with Remote Control

- ①Show the image you wish to capture (ie: X-ray film, Full face.)
- ②Press ( [Capture] Button. The image on the monitor freezes with a shutter sound.
  - \* There is no shutter sound when the channel is set at DVD, or the volume is OFF.









Live Image

Live image

Display Face Camera Image

Press [Face Camera] Button to display the image from the Face Camera. (Focus of the Face Camera can be adjusted)

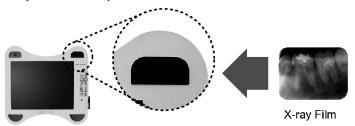
**FACE Camera** 





### Display X-ray Film Image

①Set an X-ray Film to the X-ray Film Viewer.



②Press [X-ray Viewer] Button. The LED lamp on the viewer lights up, and the X-ray film image will be displayed on the monitor.





#### Watch DVD with Hertz or Hertz-L

①Press DVD [DVD] Button and adjust it to the Hertz or Hertz-L channel.

[DVD-1 (Press once) DVD-2 (Press twice)]

②Turn on the main power switch of Hertz or Hertz-L to play DVD.

(Please refer to the user guide of Hertz for detailed information)

### [Sound Volume Setting]

Press of to turn down the volume, and to turn up the volume.



#### Connect with other devices

① Connect RCA jack (Video and Audio) of Copernicus to the RCA output jack of your video device (VCR, TV, etc.) with an AV cable (AV cable is not included in the package).





# ■ Picture Quality Settings

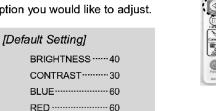


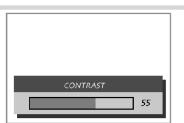
①Press [Menu] Button. The MENU Window appears.





②Move the cursor with Suttons and press Menul Button to select an option you would like to adjust.





③ Press Buttons to change the value. Press [Menu] to go back to MENU Window.

HUE -----70
SHARPNESS ---- 4





(4) Move the cursor with (5) Buttons and select EXIT. Press (EXIT) [Menu] Button to go back to the live image.



# ■ Date and Time Settings



①Press [Menu] Button to display MENU Window.





②Move the cursor with 
Buttons to select *Time*, and press 
Menul Button. *Date and Time* will be displayed.





③Adjust date and time with 4 Buttons.

Press [Menu] Button to go to the next section.





④ Each time you press (☑) [Menu] Button, the cursor will move to [Year→Month→Day→Hour→Minute]. When setting is finished, press [Menu] Button again to go back to MENU Window.





⑤ Move the cursor with ② ⑤ Buttons and select *EXIT*. Press ⑥ [Menu] Button to go back to the live image.

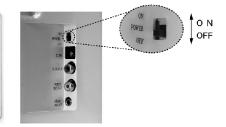


# **■** Turn Off the Power

### Turn Off the Power of the Monitor

%Press the [Power] Button. The power will be on by pressing the [Power] Button again.

\*\*The power can also be turned off by sliding the *Main Power Switch*, which is located on the back side of the monitor to the "OFF" position.



# Troubleshooting

Trouble	Answer		
Cannot turn on the power of the Monitor	Confirm if the AC Adapter is securely connected to AC Outlet and the DC IN Jack of the Monitor.		
Cannot display images in the CF Card.	Confirm if the CF Card is securely inserted into the CF Card Slot.		
3. Cannot read images in the CF Card.	Copernicus can only read and display images, which are supported by the Copernicus system. Copernicus maintains the files by date. If the file name is changed, the system cannot recognize the file. If you wish to change image file name, please copy the image to your computer prior to make the change. The images may not come up due to damages in the memory file. The file may be damaged when the CF Card is inserted or removed from the monitor with main power ON. If the files are damaged, the memory card needs to be reformatted.  1. Connect a CF memory card reader to your computer and insert the malfunctioniing card in there.  2. Double click on th "My computer" icon.  3. Right click on the "Removal Device" and click on the "Format".		
4. System is slow.	The system may slow down when you try to delete a large number of images at a time. When a large number of images are stored in a CF Card, it may take a few seconds to store the image, or to display the Thumbnail Window.		
5. Cannot turn on the power of the Camera	· Make sure the battery of the Camera is charged.		
6. The image are not in proper colors.	· Press on the "MENU" and adjust color. (Refer page 15)		

\*continue to next page

Trouble	Answer
7. Nothing is displayed on the screen.	Be sure the main power is ON. (Refer page 6)     Be sure the channel is set to the corresponding camera channel. (Refer page 7)
Images do not get saved to the CF Card.	- Be sure the card is inserted properly. (Refer page 6)

Due to the system structure, Copernicus can only store up to 891 images in a CF Card. The 892nd image cannot be saved in a CF Card.

## Image Memory Capacity

	CF card Memory Size				
Type of Image	32MB	64MB	128MB	256MB	
Intraoral					
DVD	213~320 images	426~640 images	852~891 images	891 images	
FACE					
FILM	400~640 images	800~891 images	891 images	891 images	

#### NOTE:

The maximum number of images Copernicus system can save into a memory card is 891 pictures regardless in its type or size. The number shown in the above is the estimation and it may differ depending on images.

Inspired by dreams **RF SYSTEM** lab.