



OWNER'S MANUAL

Flat Panel Digital X-ray Detector

Please read this manual carefully before operating your set and retain it for future reference.

17HQ901G-B

CE0123

www.lg.com

Copyright © 2022 LG Electronics Inc. All Rights Reserved.

CONTENTS

OPEN SOURCE SOFTWARE NOTICE INFORMATION	3
ON CLEANING	3
GENERAL DESCRIPTION	4
NAMES AND FUNCTIONS OF COMPONENTS	7
ASSEMBLING BATTERY	15
REMOVING BATTERY	16
HOW TO USE MAIN CABLE HOLDER	18
SPECIFICATION AND DIMENSION OF EACH PART	19
ENVIRONMENTAL REQUIREMENT	23
INSTALLING CALIBRATION SOFTWARE	24
CONNECTION TYPE	25

OPEN SOURCE SOFTWARE NOTICE INFORMATION ON CLEANING

To obtain the source code that is contained in this product, under GPL, LGPL, MPL, and other open source licenses that have the obligation to disclose source code, and to access all referred license terms, copyright notices and other relevant documents, please visit <https://opensource.lge.com>.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com.

This offer is valid to anyone in receipt of this information for a period of three years after our last shipment of this product.

Recommended Cleaning Chemicals

- Isopropanol 70 %
- Ethanol 70 %
- 0.9 % NaCl solution
- Biospot 500 ppm

How to Use Cleaner

- Prior to cleaning, turn off the Detector and remove the power cable.
- Soak a soft cloth in a recommended cleaner, then lightly rub the screen with no more than 1 N of force.
- The cleaner could cause serious damage if it leaks inside the Detector while cleaning.
- Do not use benzene, thinner, acids or alkaline cleaners or other such solvents.
- Cleaning guidelines for Detector must only be carried out by medical professionals (doctors or nurses) and must not be handled by patients.

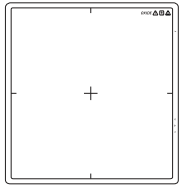
GENERAL DESCRIPTION

Overview

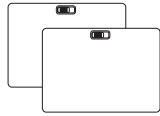
This model is an x-ray imaging device, a system that can acquire and process X-ray images as digital images. It utilizes amorphous silicon and a high-performance scintillator to ensure sharp high-definition image quality with the resolution of 3.6 lp/mm and the pixel pitches of 140 μm . This device is a flat panel based X-ray image acquisition device. This device must be used in conjunction with an operating PC and an X-ray generator. This device can be used for digitizing and transferring X-ray images for radiological diagnosis. The data transmission between the detector and PC can be enabled with a wired (cable) or wireless connection.

Product Components

Basic Accessories



Detector



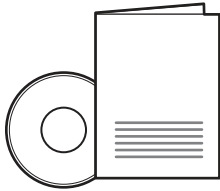
Battery 2 EA



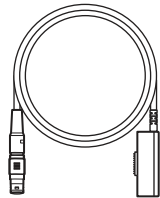
AC Power Cord for the AC Power Adapter



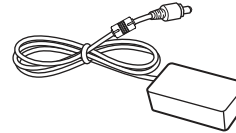
Inspection Report



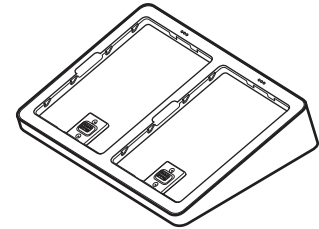
Owner's Manual/Regulatory Manual/Calibration Software



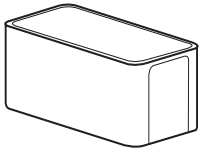
Main Cable



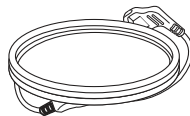
AC Power Adapter for Charger



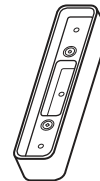
Battery Charger



Control Box

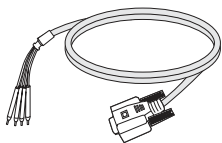


AC Power Cord for the Control Box

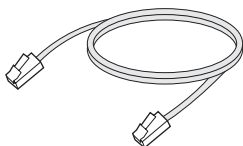


Main Cable Holder

Optional Accessories



Trigger Cable



LAN Cable

- Some models may not include optional accessories.

CAUTION

- You must use the authorised components as per the specification below. Unauthorised components may cause damage and/or cause the product to malfunction.

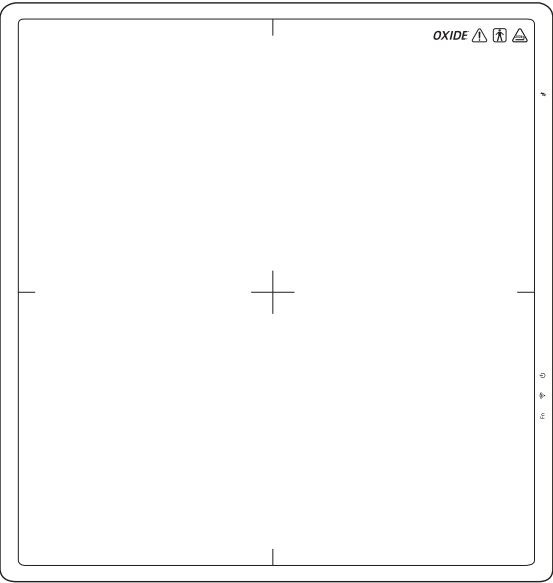
Component	Standard
LAN Cable	More than CAT5E Standard
Power Cord	US – Approved Medical grade regulation Others – Approved country safety regulation

- The AC/DC adapters etc. that are being used, with the exception of the upper components, must be supplied by the manufacturer.

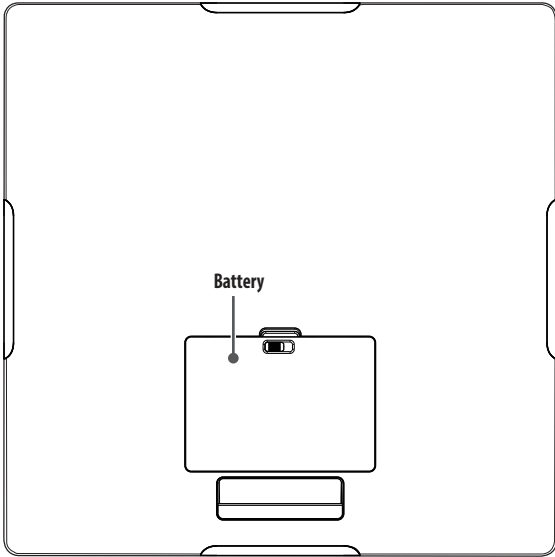
NAMES AND FUNCTIONS OF COMPONENTS

Detector

Front





Back





Side



1	Connection to Main Cable
2	 <ul style="list-style-type: none">• Power LED Indicator• Power button
3	 <ul style="list-style-type: none">• Wired/Wireless LED Indicator• Wired/Wireless Connection Button
4	Fn <ul style="list-style-type: none">• Function Switch LED Indicator• Function Switch Button
5	OLED Indicator



Button Information

Button	Description
 (Power button)	Press the Power button to turn the power on or off. <ul style="list-style-type: none"> – On: Press and hold for 1 sec or longer – Off: Press and hold for 5 sec or longer
 (Wired/Wireless Connection button)	Press this button for at least one second to switch between the following connection modes, in respective order: Ethernet/Station/AP mode.
Fn (Function Switch button)	Press this button for at least one second to switch between the following menus, in respective order: Check connection mode, video acquisition, image auto save. The menu is shown on the OLED indicator. <ul style="list-style-type: none"> – Press and hold the Fn button for at least three seconds to change the on/off settings for each function.



NOTE

- Press and hold the  and **Fn** buttons at the same time for at least ten seconds to restore to factory settings.

LED Indicator










LED	Description	
 (Power LED Indicator)	Displays the power and battery status of the detector.	
	Off	Power off
	White	Power on
	Orange	The battery level is greater than 10 % and less than 30%.
	Orange(blinking)	The battery level is less than 10%.
 (Wired/Wireless LED Indicator)	Displays the connection mode status of the detector.	
	Green	Ethernet connected
	Green(blinking)	Ethernet disconnected
	White	Wireless(Station/AP) connected
	White(blinking)	Wireless(Station/AP) disconnected
Fn (LED Indicator for Function Switch)	Briefly lights up in green when the Function Switch button is used to change the on/off settings.	

NOTE

- If the LED indicators show the following behaviour, a system error may have occurred. Please contact the manufacturer.
 -  (White(blinking)) +  (Green(blinking)) + Fn (Green(blinking))

OLED Indicator

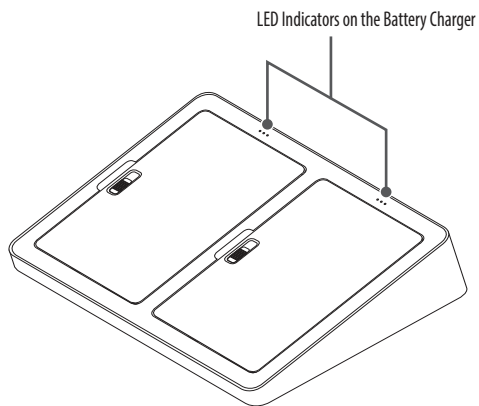
The OLED indicator displays the information below.





Connection Mode			Information
Ethernet	Station	AP	
999.999.999.999  Wired	999.999.999.999  STA SSID	999.999.999.999  AP AP SSID	Wired/STA/AP – Check Connection Mode (Ethernet/Station/AP).
Dynamic  On	Dynamic  On	Dynamic  On	Dynamic On/Off – Video Acquisition
Auto save  On (10/200)	Auto save  On (10/200)	Auto save  On (10/200)	Auto save On/Off (Up to 200 images) – Image Auto save

NOTE

- The information displayed on the OLED indicator will vary depending on the connection mode (Ethernet/Station/AP).
- If left idle for ten seconds after pressing the FN button, the OLED indicator turns off. When the OLED indicator is turned on again, the starting screen is displayed.

Battery and Battery Charger



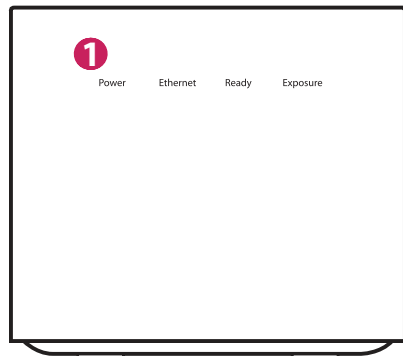
LED Indicators on the Battery Charger				
Remaining Battery Levels	0 ~ 30 %	30 ~ 70 %	70 ~ 99 %	100 %
Battery Status	On charging			Completion of charging

! NOTE

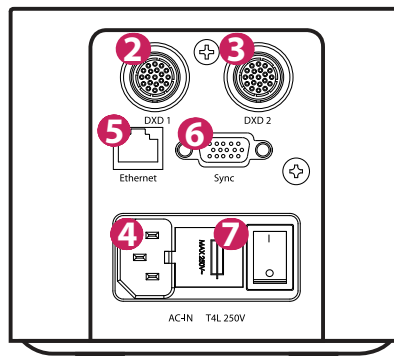
- Battery: Lithium ion polymer battery (charging time - Typ. 3 hours)
- Battery Charger: 2-port cradle type
- The remaining battery level and status for each battery can be checked through the LED indicators on the battery charger.
- If the LED indicator does not turn on when charging the battery, it may be a connection error. Please reinstall the battery.

Control Box

Front



Back



Number	LED Indicator	LED Colour	Description
1	Power	Green	Power normal operation
		Off	Power off (AC power cord no connection or Power error)
	Ethernet	Green	Ethernet normal operation
		Green(blinking)	On data communication
		Off	Ethernet disconnected
	Ready	Green	Ready signal from X-ray Generator is active
		Off	Ready signal from X-ray Generator is inactive
		Orange(blinking)	Power error
	Exposure	Orange	Exposure signal from X-ray Generator is active
		Off	Exposure signal from X-ray Generator is inactive
Orange(blinking)		Power error	

Number	Port	Description
2	DXD 1	Connects the Control Box to the Detector A. This connector supplies power (24 V --- 2.1 A) to the Detector and transmits the X-ray generator's sync signal and Ethernet image data.
3	DXD 2	Connects the Control Box to the Detector B. This connector supplies power (24 V --- 2.1 A) to the Detector and transmits the X-ray generator's sync signal and Ethernet image data. The Control Box supports connection to up to two detectors. One is for a bucky stand and the other is for a table (bed). Hospital X-ray examination rooms are typically equipped with both bucky stand and table type detectors. This makes it more convenient and efficient to use the detectors.
4	AC-IN	Connects the AC power cord.
5	Ethernet	An Ethernet port to transmit images/commands between the Detector and a PC.
6	Sync	Synchronizes the Detector and X-ray generator.
7	Fuse	Control box power fuses are 4 A, 250 V to Type T fuse. Power rating: T4L 250 V