Instruction for Use

RadiForce®
LX300W
4MP 29.8" LCD Monitor

Important

Please read the Safety Information and the information delivered with the product carefully to familiarize yourself with safe and effective usage.

EIZO®

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER
indicates that death or severe personal injury will result if proper precautions are not taken.

⚠ WARNING
indicates that death or severe personal injury may result if proper precautions are not taken.

⚠ CAUTION
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that material damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified personnel

The product/system described in this documentation may be operated only by personnel qualified for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of EIZO products

Note the following:

⚠ WARNING
EIZO products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by EIZO. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of their respective owners. Please refer to the trademarks listed in the appendix. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Table of contents

1 Introduction

1.1 Contents of this document

This document explains the functionality and the approved use of the RadiForce LX300W. To ensure clarity, it does not contain all detailed information on this product.

The contents of this document are neither part of a previous or existing agreement, commitment or legal relationship, nor does it modify such.

Note
This documentation is available in electronic format only. It is loaded on the CD-ROM that has been provided and can be downloaded from the www.eizo.com web site.

1.2 Correct usage

The RadiForce® LX300W has been specifically designed for medical imaging, with the exception of mammography.

The LX300W is intended to be used by health care professionals to display the video sources from various commercially-available devices (with the exception of mammography) commonly used in a medical environment on a single video monitor.

The LX300W monitor can replace up to three single monitors of modality applications in ceiling suspensions.

The modality application requires monitors with internal factory preset Look Up Tables in order to adapt the monitors to the human visual system. These monitors do not have to be calibrated on site.

The LX300W has five internal factory preset Look Up Tables.

1.3 User

User

In the following, health personnel such as radiologists or MTAs are referred to as the "user".

Service/service personnel

The terms "service" or "service personnel" denote specially trained and authorized personnel, e.g. hospital technicians, medical device manufacturers.

2 Safety notes

Ensure that all necessary measures are taken to avoid injuries or incorrect diagnoses.

No zero error rate

LCD monitors do not have a zero error rate Therefore the image parameters can change over time, e.g. luminance or changing/fading colors.

Note
Image quality To maintain constant image quality, EIZO recommends cleaning the monitor on a regular basis and checking image properties in accordance with all applicable local regulations.

2.1 General safety notes

Correct transport, professional storage, installation and connection, as well as careful operation and maintenance, are required to ensure that the EIZO devices operate safely and correctly.

The devices may only be used for applications for which they are commonly used.

For safety reasons, the following precautions must be observed:

⚠ DANGER

Please observe all warning information present on the device and in the Instruction Manual.

There is a danger to life if warnings are not obeyed. Severe personal injury or damage to property may occur.

Observe the safety requirements of EN 60601-1 (IEC 60601-1)

To prevent injury to patients and users, connect the electrical system in accordance with the safety requirements of EN 60601-1 (IEC 60601-1) for "Safety requirements for medical electrical systems".

Connecting the protective earth conductor

If the device is connected to line power, the device must be connected to a protective conductor. This is the only way to ensure that the touch leakage current in a first fault event does not exceed 500 µA.
The interruption of the device's protective conductor is considered a first fault event in accordance with EN 60601-1.

Use the following measures to ensure that the leakage currents remain below the specified limits:

- Separators for signal input or signal output unit
- Use of a safety isolating transformer
- Use of the additional protective conductor terminal

Mounting of the monitor: The monitor's suspension arm must have its own protective conductor. This protective conductor, together with the protective conductor of the monitor, ensures that the housing leakage current always remains less than 500 µA, even in the event of a first fault event.

No unauthorized opening of the device / no unauthorized service or maintenance work

The device may only be opened by qualified personnel. Likewise, service or maintenance work may only be carried out by qualified personnel. There is a risk of electric shock.

No liability is accepted for death and injury to persons or damage to property resulting from work carried out by non-qualified personnel.

Do not touch components in the device

If the device is connected to line power, components in the device are subject to high voltages. Touching the components may be fatal.

No contact between device and patients

The device is not suitable for direct contact with patients. Device and patient must never be touched simultaneously. Otherwise there is a danger to life and limb.

⚠ DANGER

Please observe all warning information present on the device and in the Instruction Manual.

There is a danger to life if warnings are not obeyed. Severe personal injury or damage to property may occur.

Never use defective power cables

If a damaged or unsuitable power cable is used, it could result in a fire or electric shock. Only use power cables with PE contacts approved by the manufacturer.

Disconnect the power cable correctly

When disconnecting the power cable, always do so by holding the plug. Ensure that your hands are dry. There is a risk of electric shock.

Do not insert any objects into the enclosure

Objects inserted into the housing may result in an electric shock or damage to the device.

Do not place any objects on top of the device

If you place objects on top of the device, this can lead to overheating and fire.

Avoid penetration of liquid

Liquids penetrating into the device may result in an electric shock or failure of the device.

⚠ CAUTION

Extensive damage to property may result if the device is not connected correctly

That is why you should observe the warning information:

Connection must be carried out by specialists

Please ensure that all steps are taken to avoid injuries or incorrect diagnoses.

- Only use the video cables specified by the manufacturer for the connection.
- Only use power cables with PE contacts.
- Only use power outlets with PE contacts.
- Do not connect too many devices to a power outlet or extension cable.
- Observe the information provided by the respective manufacturer.
- If required by the application or local regulations, QA software must be used for quality control and documentation.

Connection in the USA and Canada

Molded power supply plugs must comply with the requirements for "hospital grade attachments" CSA Std. C22.2 No. 21 and UL 498.

Connection in China

Only use power cables approved for China. These power cables are identified by the labels "CCC" or "CQC".

Observe the country-specific regulations

Observe all regulations of the country in which the device is used.

NOTICE

Extensive damage to property may result if the device is not connected correctly

That is why you should observe the warning information:

- Desktop installation:
  Place the device on a solid and level surface. The installed stand as well as the mounting surface have to be suitable for the weight of the unit.
- For mounting on a wall or ceiling suspension:
  The mount unit must be suitable for the weight of the device.
- For installation in a mounting frame:
  Observe the installation sequence, and provide ventilation for the device.

Provide adequate air circulation

When installing the device, ensure that there is adequate air circulation for operation. The permissible ambient temperature range must not be violated. Otherwise the device could be destroyed by overheating.

Avoid sources of heat

Do not install the display in the vicinity of sources of heat, e.g. radiators, heating appliances or other devices which can generate or emit heat.

Do not subject the device to jolting or shocks

The device contains sensitive electronic components that could be damaged by jolting or shocks.

Only switch on a cold device following acclimation to room temperature

If the device is brought into a room with a higher or rising temperature, condensed water will form in and on the device. Do not switch on the device until the condensed water has evaporated. Otherwise the device could be damaged.

NOTICE

Extensive damage to property may result if the device is not connected correctly

That is why you should observe the warning information:

Transportation only in original packaging

Use the original packaging for transportation, and transport in the correct shipping position. Be sure particularly to protect the monitor LCD module from shocks.

Care of display / Cleaning agents

- Remove water drops immediately; extended contact with water discolors the surface.
- Only clean the surfaces using the cleaning agents referred to in the Instruction Manual.
- Monitor: The screen is extremely sensitive to mechanical damage. Absolutely avoid scratches, shocks, etc.

What to do if the device is faulty

If the following conditions exist, the device must be disconnected from line power and checked by qualified personnel:

- Damage to the plug or power cable.
- Following the entry of liquid into the device.
- If the device has been exposed to moisture.
- If the device does not function or if a fault cannot be corrected using the instruction manual.
- If the device has been dropped and/or the housing damaged.
- If the device smells of burning or produces peculiar noises.

Be aware of the aging of monitors

Note that monitors can fail as a result of aging, and that image properties such as brightness, contrast, and color value can change.

Do not touch the monitor screen

Due to mechanical pressure or electrostatic discharging, touching the screen can result in brief disturbances to the image.

2.2 Product-specific safety instructions

NOTICE

Medical System

Do not connect devices which are not part of the medical system.

NOTICE

Opening the device

The device must only be opened by trained service personnel.

- Disconnect the power supply plugs before opening the device

NOTICE

Radio interference

This is a class A device.

The device may cause radio interference or interfere with the operation of other devices in close proximity. In this case the user is encouraged to perform appropriate measures to correct the interference.

⚠ **CAUTION**

Careful stand installation

If the monitor is mounted on a stand, the tilt, position, and height of the monitor can be changed. Note the following to prevent injuries or damage during installation:

- Make sure that hands and other body parts are not pinched during setup.
- Make sure the monitor does not strike the table or other objects, which could result in damage.

⚠ **CAUTION**

Ensure monitor stability

Ensure that the monitor is stable after the stand is installed. An unstable stand could cause the monitor to tip over, resulting in injuries or damage. To ensure stand stability:

- Use only the height-adjustable stand recommended by EIZO. Monitor stability has been tested with this stand.
- The screw insertion depth into the monitor must be between 8 and 11 mm.

NOTICE

Subsequent mounting of a stand

If the monitor is subsequently mounted on a stand, the stand must meet the EN 60601 standard so that the system comprising the monitor and stand meets the EN 60601 standard.

3 Description

3.1 Scope of delivery

The device and various components are part of the scope of delivery. After unpacking, check the delivery for correctness and completeness.

Note
Keep the packaging material for subsequent transport of the device.

Device

The RadiForce® LX300W is a 4MP 29.8" LCD Monitor for installation in a ceiling or wall-mounted holder or for mounting in a stand. Version RadiForce® LX300W-P has protective glass and version RadiForce® LX300W-S has a stand. Otherwise, the versions are identical.

Product	Order No.	Description
RadiForce® LX300W	6GF6200-5LA01	Without stand, without protective glass
RadiForce LX300W-P	6GF6200-5LA02	Without stand, with protective glass
RadiForce LX300W-S	6GF6200-5LA03	With stand, without protective glass

Components

The following components are included in the scope of delivery:

- Power cable (country-specific versions may differ); only for the following versions only RadiForce® LX300W-S
  - European power cable
  - US power cable
  - Japanese power cable
- Signal cable; for the following versions only RadiForce® LX300W-S
  - 2 DVI dual link cables, 2 m
- CD-ROM with documentation

3.2 Monitor performance features

The RadiForce LX300W has the following features that permit a wide range of applications:

LED backlight

The LX300W is equipped with a white LED backlight. This means that a long service life can be achieved even with high luminance.

Perfect picture reproduction thanks to LCD technology

Distortions in the image geometry do not occur with LCD technology.

The LX300W provides a flicker-free picture even with low refresh rates. The monitor thus fulfills even the strictest ergonomic requirements.

The monitor has a TFT monitor module with a very wide viewing angle. The use of state-of-the-art LCD technology allows a high luminance.

Fully Automated Stability

The LX300W has an integrated stability system (ISS). The ISS ensures constant luminance using a built-in light sensor in the center of the backlight.

Intelligent Cooling System (ICS)

The controlled flow of air in operating rooms ensures that the air is as germfree and clean as possible and it is supported by additional fans in the room. To disrupt the flow of air as little as possible, the LX300W has a new cooling system, the "Intelligent Cooling System" (ICS).

ICS automatically measures the interior temperature of the monitor. Depending on where it is used, the monitor can be operated with regulated fans or entirely without ventilation. During this, the fans will either run in the low temperature range with minimal output or not at all. To prevent overheating in high temperatures, depending on the mode that was selected the fans will either start up as needed or the brightness of the monitor will be reduced.

Communication interface

The communication interface is routed via the DVI or USB connection. The operating states of the monitor can be read and switched via the interface, e.g. in Power Safe Mode. In particular, the monitor functionality can be queried using the interface.

Flexible connection and operating options

The LX300W has flexible options for connection and operation:

- Two DVI-D inputs, one of which can process dual link and single link signals, and the other that processes single link signals.
- One Display Port 1.1 input.
- Rotation function for operating in portrait or landscape format.

Preset Look Up Tables

The LX300W is precalibrated at the factory. A total of five reality-based Look Up Tables (LUTs) have been defined. The LUTs simplify installation and maintenance, and the monitor can be adapted to the local lighting conditions with a click of the mouse. Graphics settings are also retained, for example after changing the graphics card or PC, and the monitor does not have to be calibrated.

Fail-safe function

Using a separate DVI input (HDMI plug), a video signal with increased priority can be activated, for example, directly from a radiography system (live image).

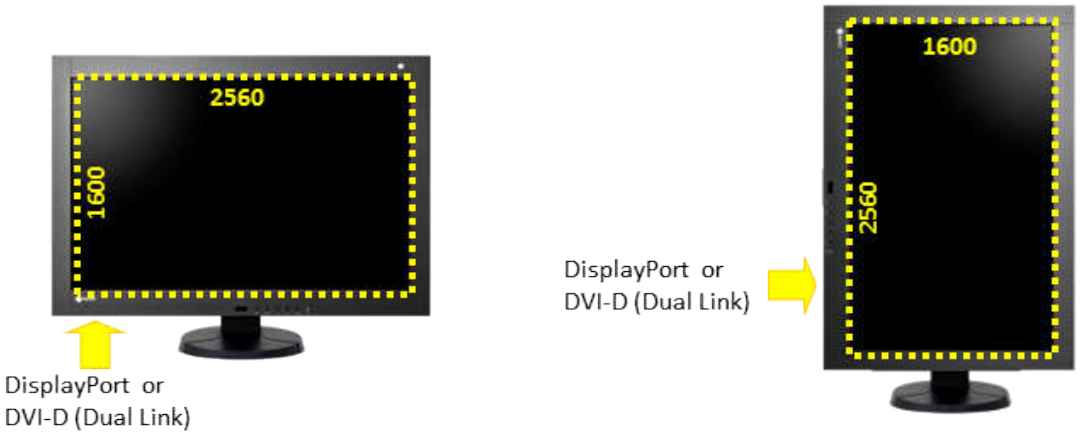
This ensures that the attending physician always has an image on the monitor, even when there are errors or interruptions in the video transmission and processing path.

When there is an error the monitor receives an emergency signal, which is displayed in the upper left corner of the monitor. The operation in progress can thus continue uninterrupted.

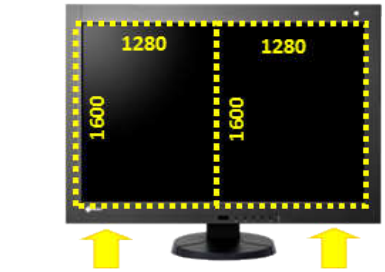
3.3 Monitor operating modes

The following presents the screen layouts that can be selected in the OSD menu, with specification of the maximum resolution and possible connections.

Screen layout for one video source

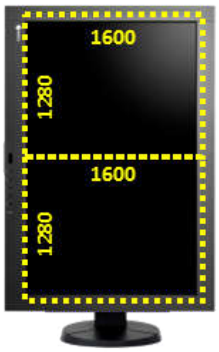


Screen layout for two video sources (PaP)



DisplayPort or DVI-D (Dual/Single Link)

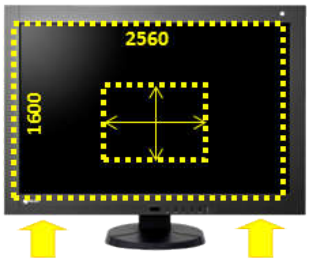
DVI-D (Single Link)



DisplayPort or DVI-D (Dual/Single Link)

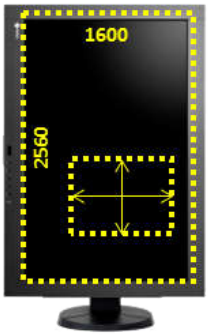
DVI-D (Single Link)

Screen layout for two video sources (PiP)



DisplayPort or DVI-D (Dual/Single Link)

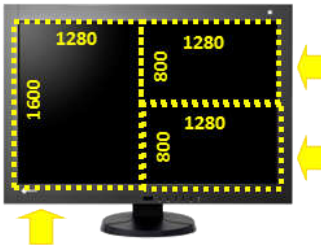
DVI-D (Single Link)



DisplayPort or DVI-D (Dual/Single Link)

DVI-D (Single Link)

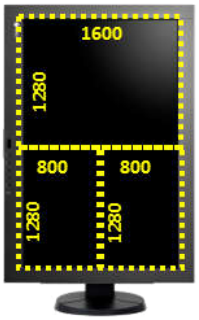
Screen layout for three video sources



DVI-D (SingleLink)

HDMI

DisplayPort or DVI-D (Dual/Single Link)

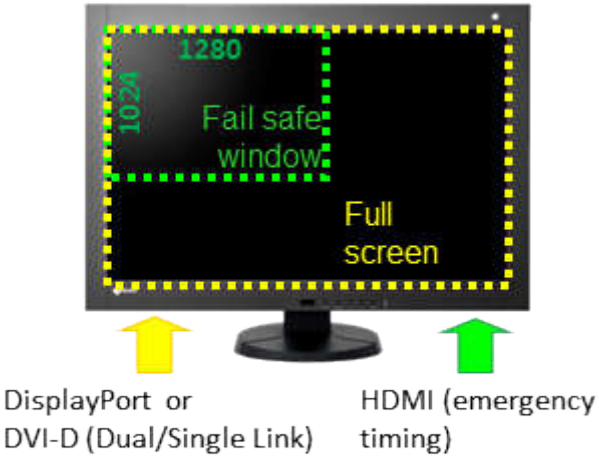


DisplayPort or DVI-D (Dual/Single Link)

HDMI

DVI-D (SingleLink)

Screen layout with fail-safe function



4 Setup and installation

⚠ CAUTION
Changes to device Do not make any mechanical or electric changes to the device. EIZO GmbH will not be held liable if changes are made to the device.

4.1 Installation site

The following conditions must be met at the location where the monitor is to be set up.

NOTICE
The power switch and connections must be accessible at all times When installing and connecting the monitor, ensure that the power switch and the connections are accessible at all times.

NOTICE
Condensation If the device is brought into a warm environment from a cold one, condensation may form in the device. This could result in a short circuit when switching on the device, damaging it. • Wait until the condensed water has evaporated, including that inside the device, before you switch it on. This can take several hours.

Sufficient ventilation

Ventilation holes are located on the rear of the housing.

If the ventilation holes are covered or blocked, the heat generated in the monitor will not dissipate sufficiently.

- Do not cover the ventilation holes.
- Do not close the ventilation holes.
- The distance from the back and sides of the monitor to the wall must be at least 10 cm, and the monitor must be at least 15 cm away other devices.

Avoid dusty environments

The monitor has been designed for use in the clean medical diagnostic environment. Dust could get in through the ventilation holes in the back of the monitor if it is used in a dusty environment. In extreme cases, deposits may occur; these appear as dark spots in a white image and can degrade the luminance.

- Protect the monitor from dust, e.g. during construction projects at the installation site.
- During transport, use the original packaging or service packaging.

Comply with the permissible ambient temperature

The ambient temperature must be in the range of +5°C ... +40°C.

Avoid reflections on the screen

The monitor has an anti-glare surface which is only effective if the screen is clean and grease-free.

- Comply with the information regarding cleaning.
- Position the monitor to avoid reflections on the screen.
  The reflections can be caused by lights, windows, furniture with shiny surfaces, or light-colored walls.
- To prevent glare on the monitor, use only anti-glare ceiling lighting.

Avoid shocks and impacts

The monitor is sensitive to mechanical influences. Impacts on the panel surface can lead to failure of the device.

- Avoid such mechanical influences at all costs.

Movable installation

If the monitor is installed with the ability to be moved, make sure that persons or objects in the facility are not endangered by the monitor's range of movement.

4.2 Installing the monitor

The monitor has a VESA 100x100 adapter and a VESA 100x200 adapter.

Note the following during installation :

- The maximum torque for attaching to the holder in 3 Nm.
- The screws used for attaching to the holder must meet the following requirements:

Number	4
Thread	M4
Strength	8.8 in accordance with ISO 898-1
Insertion depth	8 ... 11 mm

- Holders must be tested and approved by the manufacturer for the weight to be supported.
- An installed stand must be sufficiently stable such that tilting up to 10° does not result in the monitor toppling.

5 Connecting

5.1 Safety information for connection

All safety information and warnings for the device must be observed to ensure danger-free operation.

⚠CAUTION

Changes to device

Do not make any mechanical or electric changes to the device.

EIZO GmbH will not be held liable if changes are made to the device.

⚠CAUTION

Shielding measures

Follow all shielding measures according to the country-specific EMC Directive. If these guidelines are not observed, device malfunction may result.

⚠CAUTION

Excessive currents, short circuits, and ground faults

In accordance with national standards and regulations, protection against excessive currents, short circuits, and ground faults must be incorporated into the building installation.

NOTICE

Changes to device settings

Device settings may only be adjusted by trained service personnel. Otherwise, the warranty is void.

NOTICE

Disconnecting from line power

Always set the power switch to "Off" before disconnecting the device from power. Otherwise the device could be destroyed.

NOTICE

Cable installation

Please note the following:

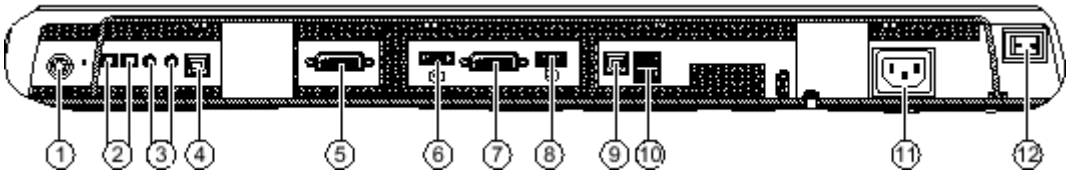
- Only shielded cables are to be used for all signal connections.
- If the relevant facility is available on the connector, all plug connections must be screwed tight or locked.
- Do not route signal cables and power cords next to one another. Otherwise, line power subject to heavy interference could result in reversible pixel errors.
- The device must not share a power supply with motors or valves (interference!).
- Externally connected cables can represent a trip hazard. Make sure that all incoming cables are safely routed.
- If the device includes cable grips, please use them to prevent unintended loosening of connected cables.

5.2 Device connections

⚠CAUTION

Opening the connector panel cover

Only service may open the connector panel cover. Patients must not be present when the cover is open.



①	Photometer connection (service connection, for authorized service locations only)	⑦	DVI - dual link connection (DVI 1)
②	2 DC 5 V / 1 A outputs	⑧	HDMI connector (DVI 3, for fail-safe signal)
③	2 stereo jack connectors, 3.5 mm	⑨	1 USB (upstream)
④	1 USB upstream connection (service connection)	⑩	2 USBs (downstream)
⑤	DVI - single link connection (DVI 2)	⑪	Power connection
⑥	Display port connection	⑫	Power switch

5 V connections

The monitor has two 5 V outputs which can be used to supply external devices.

Display port

The monitor has a display port 1.1 connector. Digital signals can be processed using this connector.

DVI connectors

The monitor has two DVI connectors (1 and 2) See also DVI connection [▸ 23].

Grounding screw

The additional protective conductor is connected to the grounding screw.

HDMI connector

The HDMI connector transmits a DVI signal. If the Fail Safe function is active in the OSD of the LX300W, the DVI signal is the emergency signal of the connected system. The emergency signal is a video signal with increased priority and is activated directly, for example from a radiography system.

The emergency signal is transmitted when the system experiences an error or interruption on the image transmission and processing path. This is indicated in the upper left corner of the monitor. This ensures that the treating physician only sees one picture on the monitor at all times. The operation in progress can continue uninterrupted.

Kensington Lock opening

The Kensington Lock opening is used to secure the monitor where it is installed. The opening is located at the lower left corner on the back of the monitor.

Power connection

The device's power supply is connected using an appliance plug. See also Power connector [▸ 22].

Serial interface for photometer

The serial interface is freely accessible under the right fan.

NOTICE
Connecting a photometer • Only service can connect or disconnect a photometer. • Only photometers tested for calibrating the monitor may be connected to the serial interface. • A photometer must not be connected in the presence of the patient.

Service connection

The service connection is used by Service for software updates.

Stereo jack connection

The two stereo jack connections are event inputs. For example, a footswitch that triggers a specific event in the device (toggle source, etc.) can be connected to the stereo jack connections. This is a future function. For this reason, the two connections are not active at this time.

USB downstream connections

The USB downstream connections enable communication with external devices.

USB upstream connections

The USB upstream connections enable communication between the monitor and a connected PC.

The USB upstream socket ④ next to the stereo jack connection is used for service purposes.

5.2.1 Power connector

The device power connector is located within the connector panel under a cover on the rear of the device. The power supply is connected using an appliance plug.

Please note the following.

⚠CAUTION

Connecting to line power

The device is designed for line power with a grounded neutral conductor.

- To avoid risk of electric shock, this device must only be connected to line power with a protective conductor
- Contact the responsible building technician or a qualified electrician if you are uncertain whether the line power is equipped with a protective conductor.

⚠CAUTION

Risk of damage to the device

- Only use the power cord supplied with the device , or a connection cable with a protective conductor and an appliance plug in accordance with DIN 49 49547, IEC 60320 (max. length 3 m, cable e.g. H05VV-F 3x1.0 mm^2). The cable must comply with the safety regulations of the respective country.
- Device fuses may only be replaced by authorized repair centers. The failure of a device fuse may result in a defect in the device. Do not use any other fuse.

Note

Installations in the USA and Canada

Molded power supply plugs must comply with the requirements for "hospital grade attachments" CSA Std. C22.2 No. 21 and UL 498.

Note

Installations in China

Power cables, power supply plugs and appliance plugs must be CCC-certified.

NOTICE
Line voltage and frequency Before connecting the device, make sure the line voltage and frequency correspond to the specifications on the name plate.

See also

Power supply [▷ 43]

5.2.2 DVI connection

The monitor can process digital DVI input signals. There are two DVI connections (1 and 2) available for this.

- DVI 1 can process both dual link and single link signals.
- DVI 2 can only process single link signals.
- Only use the dual link DVI cables specified by EIZO or the transmission links supplied by EIZO.
  The picture quality, interference resistance, and electromagnetic interference of the entire system depend on the length and quality of the cables.

NOTICE
Video source settings The monitor sends the correct settings to the video source via the DDC interface. If these settings are changed, the images will not be displayed correctly.

NOTICE
Do not kink the cables The cables must not be kinked. The minimum bending radius of the cable is 30 mm.

5.3 Description of connection procedure

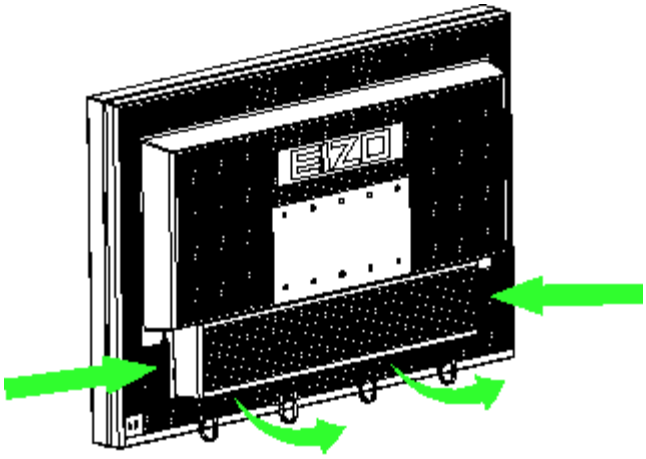
⚠CAUTION
Opening the connector panel cover Only service may open the connector panel cover. Patients must not be present when the cover is open.

⚠CAUTION
Connector Connectors may only be plugged in or removed by Service when the device is switched off.

Prerequisite

The monitor must be mounted in the ceiling suspension unit, wall mount, or on a stand.

Procedure



1. Remove the cover from the connector panel by pressing on the cover from the sides and pulling the cover toward you. The cover is firmly attached.
2. Connect the IEC plug to the monitor's power connection.

   Follow the information in section Power connector.
3. Connect the video signal cable to the monitor.
4. Screw-tighten the video signal cable.
5. Connect the USB cable to the upstream and downstream USB connections of the monitor as needed.
6. Place the cover on the connector panel again:
   - First insert the latch of the upper side of the cover on the monitor.
   - Then press in the latches from the side.
7. If necessary, secure the device with a Kensington lock on the Kensington lock slot.

6 Commissioning

Note
Factory settings All monitors are optimally preset in the factory, meaning that changes are not usually required.

6.1 Switching on the monitor and PC

The monitor and PC can be switched on in any order.

Requirement

- The PC and monitor are connected to one another via DVI-I cable.
- TO obtain the best possible results, graphics cards and drivers should support communication via the Display Data Channel (DDC).

Switch on monitor before PC

1. Switch on the monitor.

   The operation LED lights up yellow.

2. Switch on the PC.

   If the connected signal can be displayed on the monitor, the operation LED will light green.

Switch on PC before the monitor

1. Switch on the PC.
2. Switch on the monitor.

   If the connected signal can be displayed on the monitor, the operation LED will light green.

Note
Operation LED does not light green? If the operation LED does not light green after the equipment has been switched on and a video signal has been applied, check the system for basic connection and operating errors before contacting service personnel.

6.2 Avoidance of image sticking

Image sticking may occur with LCD monitors. Image sticking is an effect whereby a faint image of the previous screen contents can be seen after the display contents have changed.

The following measures can reduce or prevent image sticking:

- Use a screen saver with regularly changing images
- Switch off the monitor when it is no longer needed.
- The monitor has an energy saving mode:
  If the application in use supports the energy saving mode, activate it.

Note
Power management settings Observe the instructions of the operating system manufacturer regarding the power management settings. The monitor supports the DVI DMPM mode (Digital Monitor Power Management), which can be used to save energy. By means of DVI DMPM, the monitor can be switched off automatically, e.g. after 20 minutes.

6.3 Check for pixel defects

Pixel defects (small bright or dark dots) can occur in LCD monitors. During the manufacturing process, all monitors are checked for the permitted number of defective pixels.

Defective pixels cannot be corrected.

6.4 Graphics controller settings

When switching on the PC, the properties of the monitor are read and the graphics card initializes accordingly.

For this to occur, the graphics card must support communication via the Data Display Channel (DDC). The monitor's EDID data (Extended Display Identification Data) is transmitted via the DVI or DisplayPort connections, enabling Windows to detect the monitor as a "plug and play" device.

Operating the monitor with the desired resolution

1. To operate the monitor with the desired resolution, a driver must be installed that is designed specifically for the graphics card in use.
2. Once the driver has been installed successfully, the resolution can be configured using the driver- or operating system settings.

Note
Installation and parameterization of the graphics card Please refer to the graphics controller manufacturer’s manual for detailed information about installation and configuration of the graphics controller.

7 Operation

Once installed, operating the monitor consists mainly of switching the power on and off.

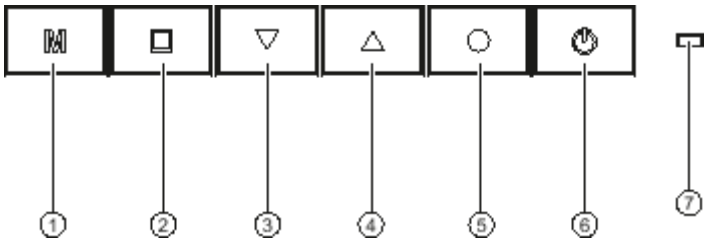
After switching on the monitor, the operation LED is lit green continuously. If the LED lights up with another color, the monitor is not operating within normal parameters.

Note
Switching off the monitor The counter for the warm-up period is reset whenever the monitor is switched off. To ensure lamp stability, a warm-up period of 20 to 30 minutes is recommended, even if the monitor is only switched off briefly.

Measures in the event of a failure

Note
Device malfunction in operation If the device is not working properly, check the system for incorrect connection or operation before contacting Service.

7.1 Operator controls



① Mode
② Menu
③ Down (down arrow)
④ Up (up arrow)
⑤ Enter
⑥ Power
⑦ Operation LED

Control panel

The LX300W has a touch-sensitive control panel. The keys are located on the front of the monitor, centered at the bottom.

Key functions

The keys have the following functions:

Key	Action
Mode	• Start CAL-Switch • Select LUT
Menu	• Opens the main menu • Returns to the higher-level menu and closes the top OSD menu. • Jumps to the element on the left
Down ↓ (down arrow)	• Scroll down in the menu • Decrement the selected entry
Up ↑ (up arrow)	• Scroll up in the menu • Increment the selected entry
Enter	• Opens the next submenu • Jumps to the element on the right • Performs the selected function
Power	Switches the unit into and out of standby mode

7.2 Locking or unlocking the OSD menu

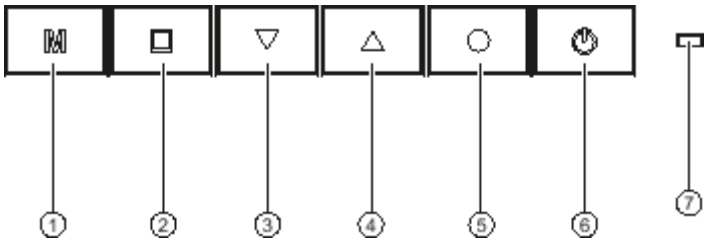
⚠CAUTION

Locking and unlocking the OSD menu

Only authorized service personnel may lock or unlock the OSD menu.
The OSD has to be locked if inappropriate operation by the user can impact the intended use of the monitor.

The OSD in unlocked when delivered.

To lock or unlock the OSD menu, proceed as follows:



1. Press the "Enter" key ⑤ [▷ 27] once.
2. The press the "Down" key ③ [▷ 27] three times.

   The LED display brightness changes when the keys are pressed as feedback.

The OSD menu is now locked or unlocked, depending on its initial state.

7.3 Description of OSD menu

The OSD menu is used to make settings for operation of the monitor with up to three video sources.

The layout of the OSD menu is shown in the following figure.

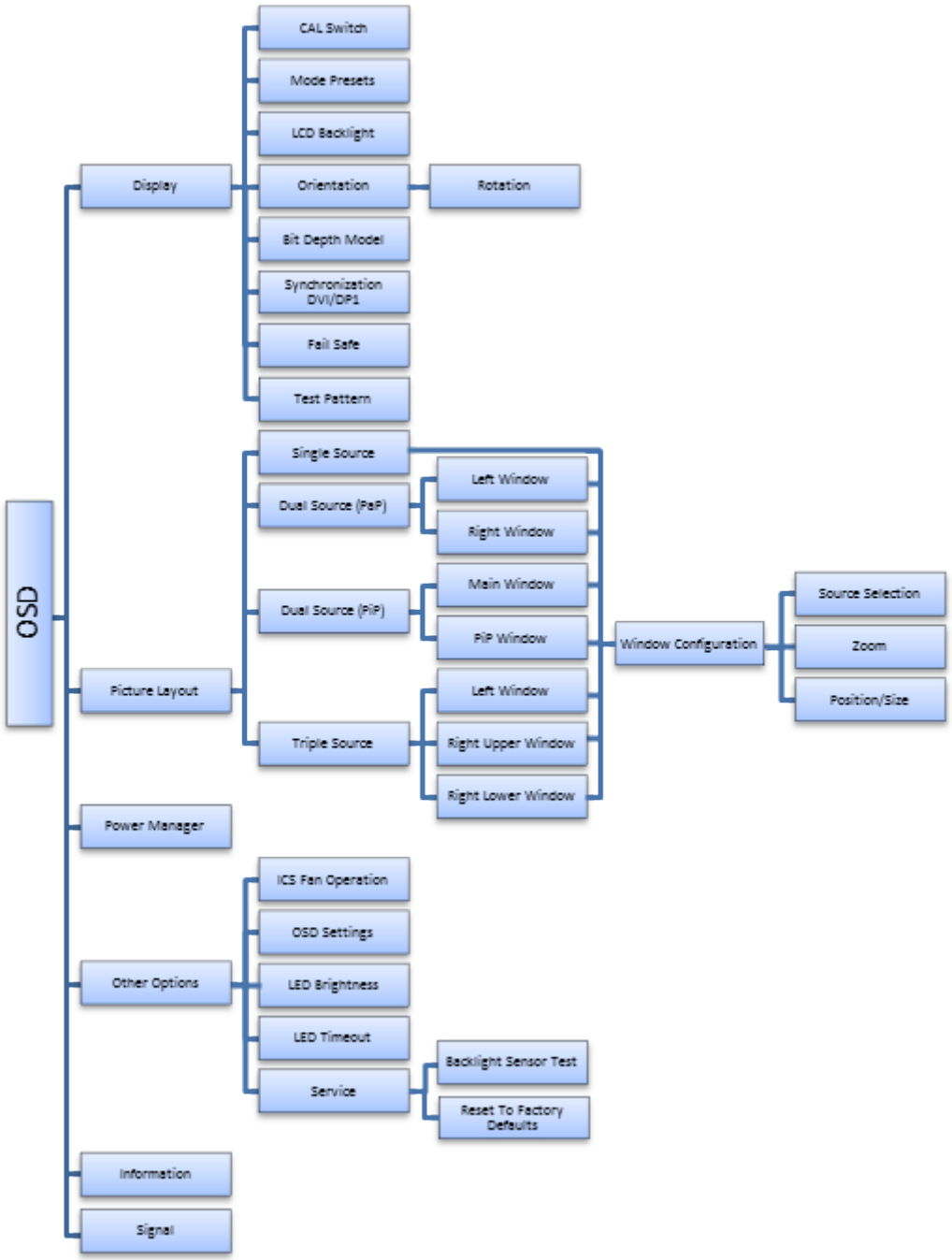


Fig. 1: OSD menu layout

7.3.1 "Display" main menu

Function	Adjustment / setting range	Description
CAL Switch	DICOM 1 DICOM 2 DICOM 3 DICOM 4 PAS 1054 *Default: DICOM 1*	**Selecting the Look Up Table (LUT)** The LUT determines the monitor's gamma curve. By using a different LUT for example, you can high light specific gray scale levels. **Note:** Select a DICOM LUT to view radiographic images.
Mode Presets	DICOM 1: "0" or "1" DICOM 2: "0" or "1" DICOM 3: "0" or "1" DICOM 4: "0" or "1" PAS 1054: "0" or "1" *Default: 1 for all*	**Setting the Mode Preset** This function enables you to make any LUT settings in the "CAL Switch" function selectable (1) or unselectable (0). The names of the selectable LUT settings are taken from the CAL Switch function. **Note:** An active LUT setting cannot be replaced.
LCD Backlight	LUT BL Command Active *Default: Active*	**Backlight Command Control** If the command is marked, the brightness control based on the gamma curve is active. This means the maximum value of the gamma curve calibrated at the factory is set as the default. This ensures that the maximum brightness fits with the gamma curve.
	Backlight 0 - 1023 *Default: 800*	**Change the brightness of the backlight** You change the backlight brightness here. If you adjust brightness, the gay scale values no longer correspond to the set DICOM curve. The calibrated values therefore cannot be guaranteed.

Function	Adjustment / setting range	Description
Orientation	Rotation: Disabled/Right/ Left *Default: Disabled*	**Setting rotation** You toggle the monitor operating mode between portrait and landscape format here. • Disabled: Monitor operates in landscape format. • Right: The monitor image turns from portrait to landscape format in clockwise direction. • Left: The monitor image turns from portrait to landscape format in counterclockwise direction. **Note:** The graphics card used in the video source has to support portrait format. A list of operating modes is available in Monitor characteristics [▷ 43]. **Note:** If a PC is used as a video source, it has to be restarted after changing the operating mode.
Bit Depth Model	Display port 1	**Setting the color hue** You can set an 8 or 10-bit color hue here for the display port connection. 8 bit is the default.
Synchronization (DVI/ DP1)	Double Buffer Auto Off Status (display only) *Default: Auto*	**Setting the synchronization** • Double Buffer: Synchronization to the input signal so that tearing and image rolling does not occur. The picture is delayed one frame. • Auto: Automatically sets synchronization to "Line Buffer", "Double Buffer", or "Off". Line buffer is synchronization to an input signal, for which no tearing or image rolling occurs. The image delay is minimal and almost 0. • Off: No synchronization to the input signal. As a result, tearing and image rolling can occur with video images. The picture is delayed up to one frame. • Status: Shows the active synchronization.

Function	Adjustment / setting range	Description
Fail Safe	On/Off *Default: Off*	**Activate / deactivate Fail Safe** The Fail Safe function can be switched on here for the DVI3 input. As a result, in case of error the monitor receives an emergency signal, whereupon the video signal of the DVI 3 input is displayed in the upper left corner. **Note:** Fail Safe can be switched on only when Single Source or Dual Source (PaP) is set in Picture Layout.
Test Pattern	None TG18-OIQ Grayramp Special QC White 50% Gray Black *Default: None*	**Select and display integrated test patterns** The monitor contains an internal test pattern generator to enable visual checks of the device without software. **Note:** A selected test pattern remains visible until you select "None" again.

7.3.2 "Picture Layout" main menu

With the LX300W you can simultaneously display up to three different video sources on the monitor.

Note
Display Port 1 and DVI 1 cannot be displayed simultaneously.

Establish the number of windows

Function	Adjustment / setting range	Description
Single Source		**A single video source is displayed full screen** By default, the video source connected to DVI 1 is displayed. Open the "Window Configuration" menu to change the video source or display size.

Function	Adjustment / setting range	Description
Dual Source (PaP)	Left Window (Upper Window) Right Window (Lower Window) **Note:** The entries in parentheses are displayed when the monitor is in portrait format.	**Display in two windows of equal size next to one another** Two video sources are displayed in two windows of equal size next to one another. By default, the "Left Window" ("Upper Window") displays the DVI 1 input and "Right Window" ("Lower Window") displays the DVI 2 input. Open the "Window Configuration" menu for the respective window to change the video source or display size.
Note: If Fail Safe is active, the Dual Source (PiP) or Triple Source function cannot be selected. Deactivate Fail Safe in the "Display" OSD menu.		
Dual Source (PiP)	Main Window PiP Window	**Display in two windows, one on top of the other** Two video sources are displayed in two windows, one on top of the other. By default, the "Main Window" displays the DVI 1 input and "PiP Window" displays the DVI 2 input. Open the "Window Configuration" menu for the respective window to change the video source or display size.
Triple Source	Left Window (Upper Window) Right Window (Right Lower Window) Right Window (Left Lower Window) **Note:** The entries in parentheses are displayed when the monitor is in portrait format.	**Display in three adjacent windows** Three video sources are displayed in three windows. One window takes one half of the monitor, and two windows of equal size are displayed, one above the other, in the other half of the menu. By default, the "Left Window" displays the DVI 1 input, "Right Upper Window" displays the DVI 2 input, and "Right Lower Window" displays the DVI 3 input. Open the "Window Configuration" menu for the respective window to change the video source or display size.

"Window Configuration" menu

In the "Window Configuration" menu, the video source and display size are assigned to every window in the selected window arrangement.

Function	Adjustment / setting range	Description
Source Selection	DVI1 DVI2 Display port 1 DVI 3 (HDMI) Auto Search *Default: Auto Search*	**Selecting the video source** Here you set which video source should be displayed in the selected window. The video source is set automatically if you select "Auto Search". The setting remains even if you shut down and switch on the system again. **Note:** Display Port 1 and DVI 1 cannot be displayed simultaneously.
Zoom	1:1 Set To Aspect Fill All (PiP only) *Default: 1:1*	**Establishing the image display** • 1:1 : The picture is displayed in the window in its original size. • Set To Aspect: The picture is zoomed to the maximum window area with retention of the aspect ratio. • Fill All: The image fills the entire area of the PiP window. The aspect ratio is changed.
Position / Size (PiP)	H-Position *Default: 64* V-Position *Default: 64* H-Size *Default: 96* V-Size *Default: 80*	**Establishing the PiP display** You set the position and size of the picture-in-picture display here. The zero position is the upper left corner of the window.

7.3.3 "Power Manager" main menu

Function	Adjustment / setting range	Description
DMPM …	DMPM Lamp Dimmed DMPM Lamp Off DMPM Disabled *Default: DMPM Lamp Dimmed*	**Setting the DMPM mode** • Lamp Dimmed: Backlight brightness is reduced to a minimum. This saves energy and the lamp only requires a short warm-up time after being reactivated. In this mode, the energy saving mode time counts toward the operating hours. • Lamp Off: The backlight is shut down completely. The energy saving mode is increased compared to "Backlight Dimmed". Prior to diagnosing radiographic images however, the lamp requires a warm-up time after reactivation. • Disabled: DMPM signals are ignored. The monitor does not change to energy saving mode.

7.3.4 "Other Options" main menu

Function	Adjustment / setting range	Description
ICS Fan Operation	Standard Operating Room *Default: Standard*	**Fan control** • In standard mode, the fans run at half speed. Above a specific ambient temperature, the fans run at full speed. • The fans are switched off in Operating Room mode. Above a specific ambient temperature, brightness is reduced by half.
OSD Settings	Horizontal 0 ... 139 *Default: 75* Vertical 0 ... 41 *Default: 16* Transparency 0 ... 255 *Default: 255*	**Setting the position and transparency of the OSD menu** Horizontal and vertical coordinates establish the position of the OSD menu. **Note:** The OSD menu cannot overlap a PiP window or an image from the Fail-Safe function. Corresponding entries are suppressed or the OSD menu position is corrected automatically. Use "Transparency" to change the transparency of the OSD background.

Function	Adjustment / setting range	Description
LED Brightness	Bright Dimmed *Default: Dimmed*	**Setting the brightness of the operation LED** You can lower the brightness of the operation LED to prevent interfering stray light. **Note:** The brightness of the operation LED will increase automatically to indicate a monitor error when one occurs. The color of the operation LED indicates a possible cause of the error. [▷ 41]
LED Timeout	No Timeout Timeout (min) 1 *Default: No Timeout*	**Setting the operation LED timeout** The operation LED can be switched off after a set wait time (in minutes) to prevent interfering stray light. **Note:** The operation LED switches on automatically to indicate a monitor error when one occurs. The color of the operation LED indicates a possible cause of the error. [▷ 41]
Service	Backlight Sensor Test Reset To Factory Default	**Backlight Sensor Test** When you select this function, a series of brightness settings is checked using the internal sensor. • These values differ from the defaults, the message "Check with QA SW" is displayed. You can recalibrate the sensor using the QA software. • If the values do not differ from the defaults, "Normal" status is displayed. **Reset To Factory Defaults** Selecting this function opens a dialog box where you can reset the device to the factory settings.

7.3.5 "Information" main menu

Function	Adjustment / setting range	Description
	S/N ######## AN ######## Working Hours ### Temperature (°C) ## Firmware ##### FPGA 1 ##### OSD Version #####	**Information** If this function is selected, the following information about the monitor displayed: • Serial number • Asset number • Installed firmware, FPGA, and OSD versions.

7.3.6 "Signal" main menu

Function	Adjustment / setting range	Description
	Input Width (Pixels) #### Height (Lines) ####	**Information** Selecting this function displays information regarding the video signals at the inputs. The inputs displayed by the monitor are highlighted in gray.

7.4 Messages during operation

The following messages can be displayed when operating the monitor:

Message	Description	Remedy
OSD locked	Attempts to open a locked OSD menu.	Locking or unlocking the OSD menu [▷ 28]
OSD unlocked	Unlocking the OSD menu was successful	-
Wrong OSD version	The wrong OSD version is installed in the monitor.	Contact service
Sensor status normal	Displayed after a successful backlight sensor test.	-
Check with QA SW	Displayed after a failed backlight sensor test.	Contact service
No signal	No valid video signal.	Check the video source connection.
Activate Fail Safe or PiP, Triple	Fail Safe and the picture layouts "Dual Source (PiP)" or "Triple Source" cannot operate simultaneously..	Deactivate Fail Safe or set the "Dual Source (PaP)" or "Single Source" picture layout.

8 Cleaning and Maintenance

8.1 Cleaning

Recommended cleaning and disinfection agents

NOTICE
Device maintenance, cleaning and disinfecting • Make sure liquids do not seep into the device. Liquids that seep into the device may result in an electric shock or failure of the device. • The screen is extremely sensitive to mechanical influences. Absolutely avoid scratches, shocks, etc. for this reason. • Clean the screen when dirty using a microfiber cloth and, if necessary, a recommended cleaning agent. Clean the housing parts with a recommended cleaning agent. • Use only tested disinfectants. • If a cleaning agent is sprayed directly onto the screen surface, use a microfiber cloth to remove drops which run down before they reach the edge of the panel. • Remove drops of liquid from the device immediately. Contact with liquids over a longer period can cause discoloration or allow calcium deposits to form on the surface.

Agent class	Tested cleaning agents and disinfectants	Further examples
Aldehyde	Melsitt	Aldasan 2000 Kohsolin Gigasept FF Cidex
Chlorine derivatives	Terralin	Quartamon Med
Disinfecting agents	Mikrozid liquid	TaskiDS5001 (Diverseyle-ver Labs) Morning Mist Surfanios Fraicheur Citron (Anios Labs)
Guanidine derivatives	Lysoformin	
Quaternary compounds	Incidur spray, undiluted	
Standard household washing-up liquid	such as	Fairy Ultra, Pril, Palmolive
Pyridine derivatives	Activ spray, undiluted	
Water	Tap water Distilled water	

Note
Information on cleaning or disinfection of other system components can be obtained from the respective instructions for use.

Impermissible cleaning and disinfection agents

The following cleaning agents and disinfectants can bleach the finish after prolonged exposure.

Agent class	Tested cleaning agents and disinfectants	Further examples
Alcohol	Ethyl alcohol, 96%	Hospiset cloth
Peroxide compounds	Perform	Dismozon pur
Petroleum spirit	Boiling range gasoline	Petroleum ether

8.2 Maintenance

⚠ **CAUTION**
Maintenance The monitor must not be serviced in the presence of patients.

Checking settings regularly

The picture quality of the monitor changes due to aging of the LCD unit and the backlight.

- Check the monitor settings regularly in compliance with the country-specific requirements.
- Correct the settings if necessary.

Checking image quality

All quality tests can be performed using the EIZO RadiCS program.

Changing the settings

The monitor's settings can be changed by using a photometer and the suitable software.

Checking and calibrating settings

The monitor's settings can be checked and calibrated if necessary by using a photometer and the suitable software.

Confirming the image quality visually after calibrating the monitor

After calibration, the monitor must be visually inspected to verify successful and correct completion of the calibration procedure. The following two test patterns are suitable for this:

- SMPTE image: The gray levels must be displayed correctly and visibly at both 5% and 95%.

- VeriLum image: Successful calibration can be verified if the small squares are displayed correctly in all gray shades.

9 Troubleshooting

The LED continuously lights up green when operating normally. In the event of a fault, the fault can be localized as follows by using the screen display and the operation LED.

1. Check the monitor for the possible causes listed in this table.
2. Carry out the remedial measures before contacting the service personnel.

No image

LED	Cause	Remedy
Green	Video signal detected, but the monitor or graphics card is set up incorrectly	• Select the OSD menu and check if the black test pattern is switched off. • Check the monitor settings (e.g. LUT, brightness, no test pattern, etc.). • Check and adapt the graphics card settings.
	Video signal detected, but device is defective	• Inform service personnel
Yellow	No fault, DVI-DMPM Power Management System active: Computer operating system switches the monitor to Power Save Mode, which also protects the backlight.	• Deactivate Power Save Mode
	No input signal	• DVI- / DisplayPort cable not connected
	Incorrect timing is set	• Correct the timing
Red	Internal error	• Inform service personnel
	Overtemperature threshold exceeded: The nominal value for the backlight control is cut in half. To lower the temperature and avoid possible damage, the brightness is reduced significantly.	• Switch off the monitor • Check the ventilation conditions and improve them if necessary • Set lower brightness for standard operation
Dark	The device is off	• Switch on power switch
	Power cable is not inserted or incorrectly inserted	• Check the power cable
	Power cable is defective	• Replace power cable
	Blown fuse	• Inform service personnel

Image displayed

LED	Cause	Remedy
Green	No error, correct operating status	-
Yellow	Lamp warm-up period: Setting is active, and the monitor is in the warm-up period.	• Wait for the warm-up period to expire. • The LED turns green when the lamp has reached the stabilized luminance level.

LED	Cause	Remedy
Yellow (flashing)	Lamp warm-up period: Setting is active, and the warm-up period has expired without the monitor having reached the stabilized luminance level.	• Inform service personnel
	Monitor has reached an initial critical temperature level.	• Set lower brightness for standard operation. • Check the ventilation and improve these conditions if necessary.
	Internal error	• Inform service personnel
Red	Overtemperature threshold exceeded: The nominal value for the backlight control is cut in half. To lower the temperature and avoid possible damage, the brightness is reduced significantly.	• Switch off the monitor • Check the ventilation conditions and improve them if necessary. • Set lower brightness for standard operation.
	Internal error	• Inform service personnel
Dark	"LED timeout" activated	• Without error • Switch off the "LED timeout" setting
	Operation LED is defective	• Inform service personnel

10 Technical specifications

Note
Validity of technical specifications All technical specifications are valid after a warming-up period of 30 minutes.

10.1 Monitor characteristics

Property	**Value**
Type	TFT, Dual Domain, IPS mode, amorphous silicon
Active Area	641.28 mm x 404.81 mm
Screen diagonal	29.8" (75.7 cm)
Resolution	2560 x 1600 pixels
Refresh rate	60 Hz
Pixel arrangement	RGB vertical stripes
Pixel spacing	0.2505 mm x 0.2505 mm
Contrast ratio	Typically 1100:1
Horizontal viewing angle	Typically 170°
Vertical viewing angle	Typically 170°
Backlighting	White LEDs
Screen brightness	Typically 750 cd/m² Min. 620 cd/m²

10.2 Power supply

Power connection	Non-heating appliance socket
Line voltage	AC 100 ... 240 V (± 10 %)
Line frequency	50 ... 60 Hz (± 5 %)
Current consumption	max. 1.5 A ... max. 0.7 A
Maximum current consumption	150 W
Energy saving mode	< 20 W
Standby mode	Typically 1 W

10.3 Inputs/Outputs

DVI 1	• 1 x dual link DVI-I socket (analog pins are not used) - 2560 x 1600 at 60 Hz • Service and communication over DDC channel of DVI socket
DVI 2	1 x single link DVI-I socket (analog pins are not used) - 1920 x 1200 at 60 Hz
DisplayPort 1	1 x DisplayPort – max. 2560 x 1600 at 60 Hz
HDMI connection (DVI 3)	1 x HDMI socket (transmits a DVI signal) – max. 1280 x 1024 at 60 Hz
4-pin mini-DIN socket (serial connection)	For connecting a photometer
2 x USB (downstream)	For connecting external USB devices
2 x USB (upstream)	For communicating with the PC and for service purposes
2 x DC 5 V/max. 1 A	For connecting external devices

10.4 Mechanical design

Housing components	Metal and plastic
Ventilation openings	In rear panel
Protection class	IP20 according to EN 60529
Connector panel	On rear panel, under cover
Weight (without stand)	RadiForce LX300W: 15.5 kg +/- 1 kg RadiForce LX300W-P: 18.5 kg +/- 1 kg RadiForce LX300W-S: 19.5 kg +/- 1 kg
Dimensions (W x H x D) in mm (without stand)	701.5 x 472.6 x 107.4

10.5 Climatic conditions

Operation	
Temperature range	+5°C ... +40°C Ambient temperature
Temperature gradient	Max. 5°C/h, without condensation
Air pressure	700 ... 1060 hPa

Transport and storage (packed)	
Temperature range	-20°C ... +60°C ambient temperature
Temperature gradient	Max. 5°C/h, without condensation
Humidity	10 ... 10 ... 90%, non-condensing, at 25°C
Air pressure	200 ... 1060 hPa

10.6 Safety regulations

CE

This product has been assigned a CE marking in compliance with the directives of guideline 93/42/EEC of June 14, 1993, concerning medical products.

Safety regulations	
Safety standards	• IEC/EN 60601-1 (Second Edition) • IEC/EN 60601-1 (Third Edition) • CAN/CSA - C 22.2 No. 60601-1-08 • GB4943.1 (non-tropical, altitude < 2000 m)
Protection class	Protection class I
Degree of protection	IP20
Conformity	CE according to MDD 93/42/EEC (Class I)

10.7 Mechanical requirements

In operation	
Vibrations	According to EN 60068-2-6 10 ... 57 Hz at ± 0.075 mm deflection 57 ... 500 Hz at 10 m/s², 8 cycles per axis
Shock	According to EN 60068-2-27 50 m/s² half-sine, 3 shocks per axis

Packaged unit	
Vibrations	According to EN 60068-2-64
Shock	According to EN 60068-2-27

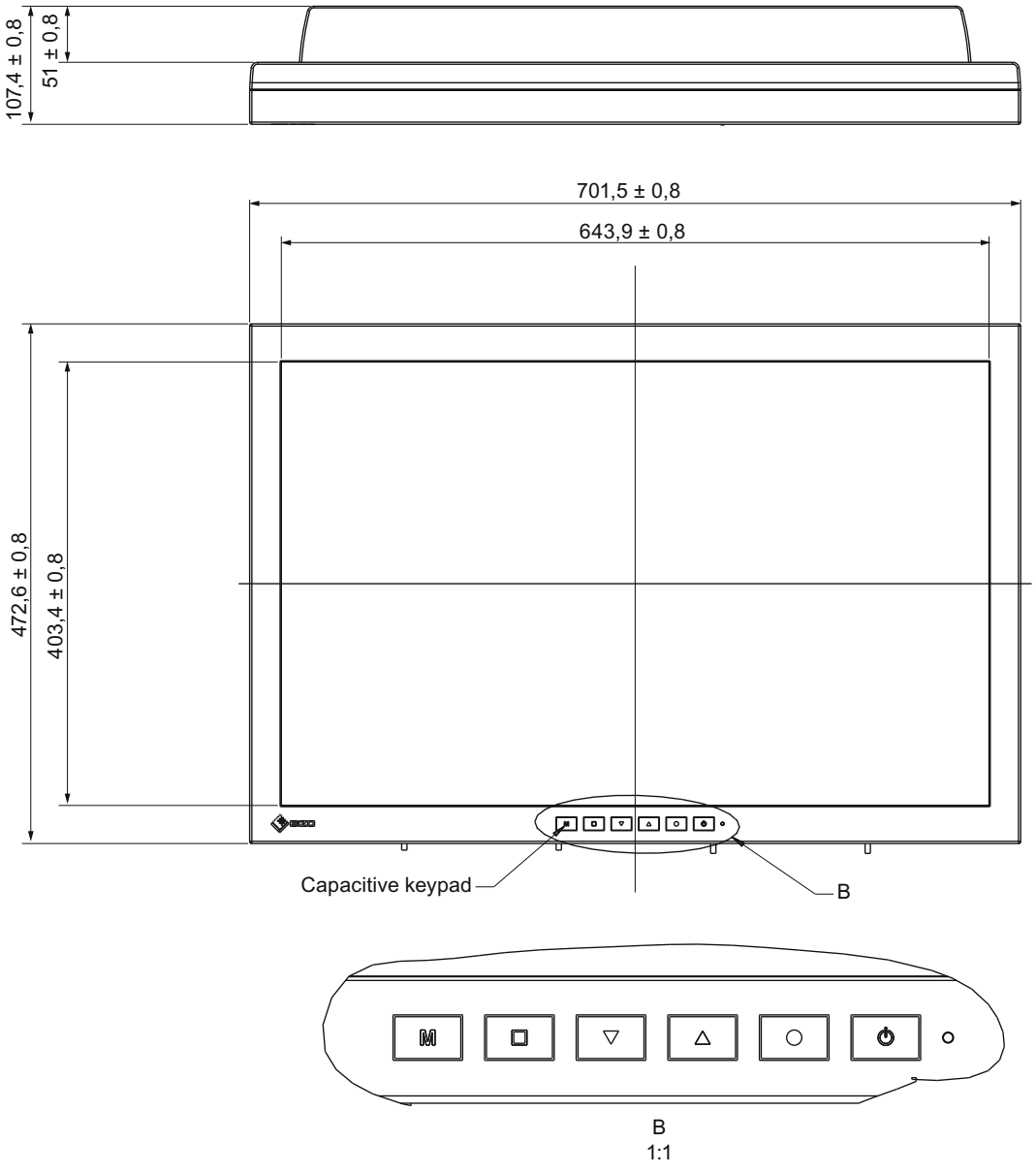
10.8 Electromagnetic compatibility

Electromagnetic compatibility	
Noise immunity/interference emissions	• EN 60601-1-2, 3rd Edition, 2007-12 • IEC 60601-1-2, 3rd Edition, 2007-03 • EN 55011:2009/A1:2010 • EN55022:2010+AC:2011 • Subpart B of Part 15 of FCC Rules Class B • C-Tick – CISPR22:2008, Class A – EN55022:2010+AC:2011, Class A – IEC 61000-3-2:2009 – EN 60601-3-2:2006 • VCCI/JEIDA – CISPR22:2008, Class B – EN55022:2010+AC:2011, Class A – IEC 61000-3-2:2009 – EN 60601-3-2:2006
Electrostatic discharge on casing parts (ESD)	EN 61000-4-2:2009-03 8 kV air, 6 kV contact
RF irradiation	EN 61000-4-3/A2:2010-07 80 MHz - 2500 MHz 3 V/m 80 % AM 1 kHz
Burst on power cables	EN 61000-4-4:2010-03 2 kV
Burst on signal lines	EN 61000-4-4:2010-03 1 kV
Surge on power cables	EN 61000-4-5:2006-11 1 kV symmetric, 2 kV asymmetric
Magnetic fields	EN 61000-4-8:2010-02
• Constant fields	4000 A/m (maximum)
• Alternating fields	1000 Aeff/m (maximum)
Voltage fluctuations	EN 61000-4-11 Edition 2010-08
Line reaction to harmonics	EN 61000-3-2 Edition 2009-04 GB17625.1
Line reaction to voltage fluctuations	EN 61000-3-3 Edition 2008-06
Limits of radio disturbance characteristics	GB9254

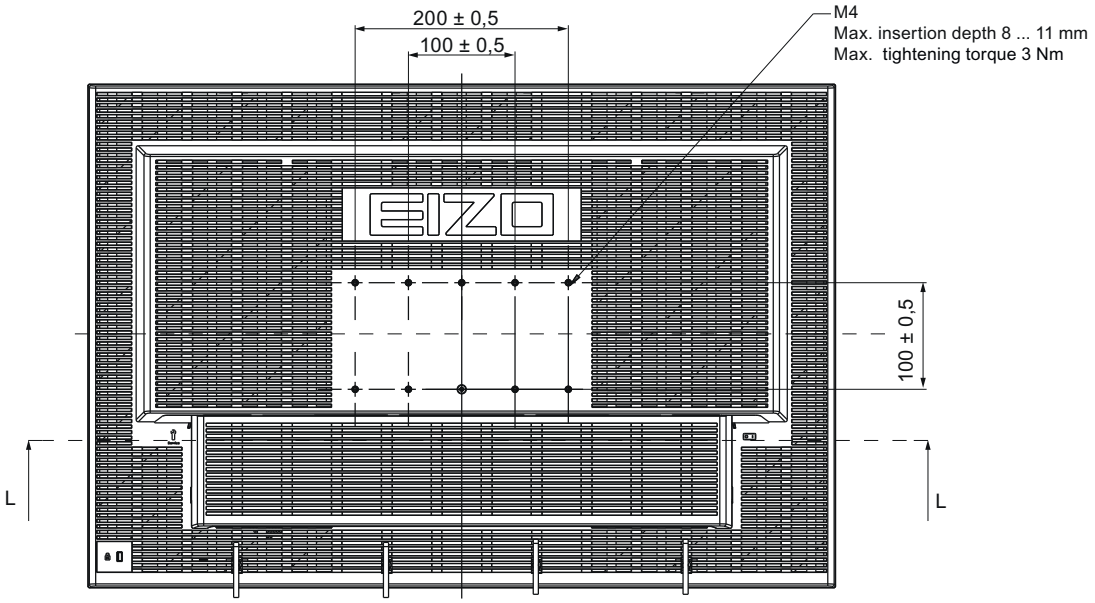
11 Dimensional drawings

All dimensions in mm

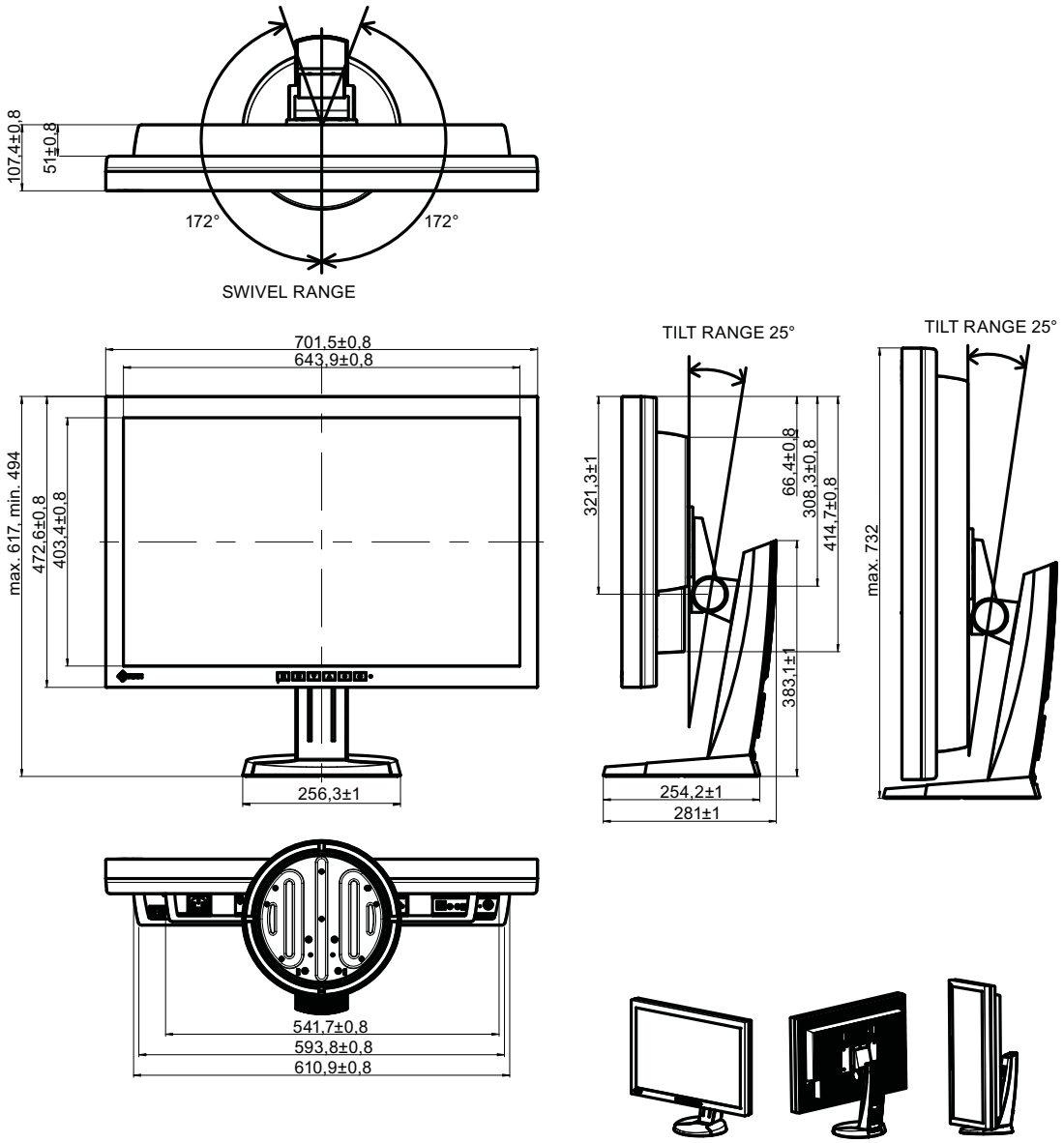
11.1 View from the front and above



11.2 View from behind, with cover



11.3 View with base



12 Spare parts / accessories

12.1 Accessories

DVI Transmission Link TDL3600

Using the digital transmission link, high-quality video data can be transmitted up to 36 meters with no loss of data. Transmission over Ethernet cables permits robust handling and easy installation. The cable can also be easily routed through small openings.
Order no.: 6GF6010-2DB36

DVI-D Dual Link signal cable

EIZO recommended DVI-D Dual Link signal cable, 2 m in length.
Order no.: 6GF6980-1TA10

13 Appendix

13.1 Guidance and manufacturer's declaration – electromagnetic emissions

The RadiForce® LX300W monitor is intended for use in the environment specified below. The user of the monitor should ensure that it is used in such an environment.

Interference emission measurements	**Compliance**	**Electromagnetic environment – guidance**
RF emissions CISPR 11	Group 1	The RadiForce® LX300W monitor uses RF energy only for its internal functioning. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The RadiForce® LX300W monitor is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

13.2 Markings and Symbols

The markings and symbols on the device have the following meanings:

Marking/symbol	Meaning (location on device)
	Symbol for "Caution, observe accompanying documents". (nameplate)
	CE marking (EU conformity mark). (nameplate)
Electrical Safety  E113208	MET marking, in accordance with U.S. and Canadian national regulations. (nameplate)
 11/2011	Symbol for date of manufacture for medical products. (nameplate)
	WEEE marking: Product must be disposed of separately; materials may be recycled. (nameplate)
	Marking according to ACPEIP (China-RoHS). (nameplate)
	"On" symbol (voltage). (power switch)
	"Off" symbol (voltage). (power switch)
	Input for service calls. (PS2 socket)
	Symbol for "Observe operating instructions". (device)
	Symbol for "Authorized service personnel only". (device)

13.3 Environmental protection

Please observe all local requirements and laws pertaining to the disposal of devices.

13.4 Accessory devices

Connected devices such as PCs must meet the relevant safety standards.

13.5 Contact

Support during installation and for technical questions

Medical Solutions (http://www.eizo.com)

13.6 Trademarks

EIZO Logo is a registered trademark of EIZO Corporation in Japan and other countries.

EIZO is a registered trademark of EIZO Corporation in Japan and other countries.

RadiForce is a registered trademark of EIZO Corporation in Japan and other countries.

RadiCS is a registered trademark of EIZO Corporation in Japan and other countries.

RadiNET is a registered trademark of EIZO Corporation in Japan and other countries.

ScreenManager is a registered trademark of EIZO Corporation in Japan and other countries.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Apple is a registered trademark of Apple Inc.

Macintosh is a registered trademark of Apple Inc.

Mac is a registered trademark of Apple Inc.

VESA is a registered trademark of Video Electronics Standards Association in the United States and other countries.

All other trademarks are the properties of their respective owners.

13.7 China RoHS (Restriction of Hazardous Substances)

LCD Monitor 液晶显示器
型号 Model: 6GF6200-5L$##

根据 SJ/T11364-2006《电子信息产品污染控制标识要求》特提供如下有关污染控制方面的信息。
The following product pollution control information is provided according to SJ/T11364-2006 Marking for Control of Pollution caused by Electronic Information Products.

电子信息产品污染控制标志说明 Explanation of Pollution Control Label

该标志表明本产品含有超过中国标准 SJ/T11363- 2006《电子信息产品中有毒有害物质的限量要求》中限量的有毒有害物质。标志中的数字为本产品的环保使用期，表明本产品在正常使用的条件下，有毒有害物质不会发生外泄或突变，用户使用本产品不会对环境造成严重污染或对其人身、财产造成严重损害的期限。单位为年。
为保证所申明的环保使用期限，应按产品手册中所规定的环境条件和方法进行正常使用，并严格遵守产品维修手册中规定的定期维修和保养要求。
产品中的消耗件和某些零部件可能有其单独的环保使用期限标志，并且其环保使用期限有可能比整个产品本身的环保使用期限短。应到期按产品维修程序更换那些消耗件和零部件，以保证所申明的整个产品的环保使用期限。
本产品在使用寿命结束时不可作为普通生活垃圾处理，应被单独收集妥善处理。
This symbol indicates the product contains hazardous materials in excess of the limits established by the Chinese standard SJ/T11363-2006 *Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products*. The number in the symbol is the Environment-friendly Use Period (EFUP), which indicates the period during which the toxic or hazardous substances or elements contained in electronic information products will not leak or mutate under normal operating conditions so that the use of such electronic information products will not result in any severe environmental pollution, any bodily injury or damage to any assets. The unit of the period is "Year".
In order to maintain the declared EFUP, the product shall be operated normally according to the instructions and environmental conditions as defined in the product manual, and periodic maintenance schedules specified in Product Maintenance Procedures shall be followed strictly.
Consumables or certain parts may have their own label with an EFUP value less than the product. Periodic replacement of those consumables or parts to maintain the declared EFUP shall be done in accordance with the Product Maintenance Procedures.
This product must not be disposed of as unsorted municipal waste, and must be collected separately and handled properly after decommissioning.

有毒有害物质或元素的名称及含量 Name and Concentration of Hazardous Substances

部件名称 Component Name	有毒有害物质或元素 Hazardous substances' name					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
液晶纯平屏幕 LCD Flat Screen	O	O	O	O	O	O
控制板 Controller Board	O	O	O	O	O	O
电源 Power Supply	X	O	O	O	O	O
其他 电路板 Other Circuit Boards	O	O	O	O	O	O
其他（电缆等） Others (cables, etc.)	O	O	O	O	O	O
机架、底盘 Housing, Chassis	O	O	O	O	O	O
附件（信号电缆、输电线等） Acessories (signal cable, power line, etc.)	O	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下
X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求

- 此表所列数据为发布时所能获得的最佳信息.
- 由于缺少经济上或技术上合理可行的替代物质或方案，此医疗设备运用以上一些有毒有害物质来实现设备的预期临床功能，或给人员或环境提供更好的保护效果。

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.
X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006

- Data listed in the table represents best information available at the time of publication.
- Applications of hazardous substances in this medical device are required to achieve its intended clinical uses, and/or to provide better protection to human beings and/or to environment, due to lack of reasonably (economically or technically) available substitutes.

产品中有毒有害物质或元素的名称及含量 Table of hazardous substances' name and concentration.

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Z

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Instruction for Use, 03/2014
RadiForce LX300W
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