Instructions for Use

CuratOR®
Surgical Panel

Digital image and video viewing system

Important

Please read the safety information and all 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.

Use of EIZO products

⚠ **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.

EIZO GmbH
Carl-Benz-Straße 3
76761 Rülzheim
Germany

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1 Introduction

1.1 Contents of this document

This document explains the functions and proper use of the CuratOR Surgical Panel, which is available in a number of project-specific and standard versions:

All information provided applies to standard conditions, and may differ depending on the operating room and device configuration.

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

Note
• Refer to the service manual for information regarding installation and start-up of the CuratOR Surgical Panel. • The current electronic version of the instructions for use and the service manual can be found on the EIZO GmbH home page www.eizo-or.com.

1.2 Intended use

EIZO CuratOR Surgical Panels are digital image and video viewing systems and are intended for use in the OR or other medical environments. They are not suitable for direct contact with patients or for use in the vicinity of the patient.

CuratOR Surgical Panels are merely intended for displaying patient-related data, images and videos.

CuratOR Surgical Panels serve as central control platforms for video distribution, recording and buffer storage of patient-specific data, images and videos.

CuratOR Surgical Panels serve as the physical interface between the operating room and the IT infrastructure of a hospital.

1.3 User

User

In the following, healthcare personnel such as surgeons or medical technicians are referred to as the "user".

Service / service personnel

"Service" or "Service personnel" identifies authorized personnel with knowledge of medical imaging technology, local standards for image quality requirements, and safety of medical products, for example a hospital technician or manufacturer of medical devices.

Cleaning staff

"Cleaning staff" refers to personnel responsible for cleaning medical devices.

2 Safety information

2.1 General safety instructions

Careful operation is a prerequisite for correct and safe operation of the CuratOR Surgical Panels.

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 instructions for use

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 ground conductor

If the device is connected to the line power, the device must be connected to a protective ground 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 unit or signal output unit.
- Use of a safety isolating transformer.
- Use of the additional protective ground terminal.

⚠ DANGER

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

The device may only be opened by qualified personnel authorized by EIZO. Likewise, service or maintenance work may only be carried out by qualified personnel authorized by EIZO. 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 the line power, components in the device are subjected to high voltages. Touching the components may be fatal.

No contact between device and patients

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

Do not insert any objects into the housing

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

Avoid penetration of liquid

Liquids seeping into the device may result in electric shock or device failure.

CAUTION

Care of device / cleaning agents

- Remove water drops immediately.
- Only clean the surfaces using the cleaning agents referred to in the Instructions for Use.

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 device.
- After liquid seeps into the device.
- If the device does not function or if a fault cannot be eliminated using the Instructions for Use.
- If the device smells of burning or makes peculiar noises.

Be aware of the monitors aging

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

3 Description

3.1 General information

Each CuratOR Surgical Panel is adapted to the specific requirements of the operating room (OR). Consequently, the powder-coated stainless steel housing is available in a wide variety of sizes and colors, with the inner workings protected by an anti-reflective single-layer safety glass pane (ESG) or a front panel made of metal (whichever is used varies from design to design). The front can be fully disinfected and can be incorporated into the cleaning plan for the OR.
See also Cleaning [▸ 13].

The inner workings of the Surgical Panels, comprising a monitor system and IT and video management components, always correspond to the current state of the art.

By default, the Surgical Panel comes with a Microsoft Windows operating system. Follow the information in the corresponding documentation.

If you are using EIZO Caliop software, please follow the information in the software documentation.

Input devices include a medical silicone keypad with or without touch pad, which is fit into a purpose-built holder, and a medical silicone mouse. The tilt of the keypad holder and special mouse pad ensure ergonomic working conditions.

Various video and USB inputs as well as suitable accessories can be integrated into the front in addition to the main switch and system switch.

The following standard versions of the Surgical Panels are available:

Standard version	Description
CuratOR Surgical Panel SP1-24 CuratOR Surgical Panel SP1-24T	Nurse Station with 24" panel. Nurse Station with 24" Touchscreen.
CuratOR Surgical Panel SP1-49 CuratOR Surgical Panel SP1-49T	Viewing Station with 49" panel. Viewing Station with 49" Touchscreen.
CuratOR Surgical Panel SP2-24	HIS/PACS Station with two 24" panels.
CuratOR Surgical Panel SP2-24-49 CuratOR Surgical Panel SP2-24T-49	HIS/PACS Station with 24" panel and 49" panel. HIS/PACS Station with 24" Touchscreen and 49" Panel.

3.2 Design

The CuratOR Surgical Panel has the following components as standard:

- Monitor panel
- PC module
- Keyboard holder with or without mouse pad and palm rest
- Silicone keyboard and silicone mouse
- USB ports
- Main switch and system switch
- Input and output interfaces

Examples

Fig.: CuratOR Surgical Panel SP2-24-49 / SP2-24T-49

Fig.: CuratOR Surgical Panel SP1-49

4 Installation and start-up

The CuratOR Surgical Panel is suited to surface-mounted or flush-mounted installation depending on the individual design.

In addition to mounting on the wall or in a niche, installation includes connection to power and the IT network.

Start-up includes the first intended use of the CuratOR Surgical Panel.

⚠ **CAUTION**
Installation and start-up • The CuratOR Surgical Panel may only be installed and put into operation by EIZO employees or by personnel authorized by EIZO. • The CuratOR Surgical Panel must be installed in accordance with all applicable national directives and regulations currently in effect.

Note
Refer to the service manual for information regarding installation and start-up.

5 Operation

5.1 Switching on and off

Observe the device switching on sequence for devices with an integrated PC.

5.1.1 Switch on

1. Use the switch labeled “Power Switch” to turn on the system.


⇨ Operating voltage is turned on.

2. Wait until the border of the switch labeled “PC on/off” illuminates green.

⇨ The system is ready for operation after approx. 5 seconds.


3. Press the green-bordered switch labeled “PC on/off”.

⇨ The IT system boots.

4. Wait until the IT system has fully booted.

⇨ The system is fully operational after approx. 10 seconds.

5.1.2 Shutdown

✓ All work in progress with the system is ended, so that it can be shut down and, for example, important data is not lost.

1. To shut down the IT system press the green-bordered switch labeled “PC on/off”.

2. Wait until the green border of the switch labeled “PC on/off” goes off.
   ⇨ Make sure the system has shut down properly.
3. Use the blue-bordered switch labeled “Power Switch” to turn off the system.

4. All components are disconnected from the operating voltage.

NOTICE
Note the sequence during shutdown The blue-bordered switch labeled “Power Switch” may not be turned off until the border of the switch labeled “PC on/off” is off. Of necessity, any other sequence will cause the IT components to be abruptly disconnected from the power supply, which can result in hardware damage such as hard drive failure.

5.2 Avoiding 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 device when it is no longer needed.

5.3 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.

5.4 Interfaces

USB

Two USB ports are integrated in the front of the CuratOR Surgical Panel as standard. They are intended for connecting a mouse and a USB data medium.

Note
Data medium Use trusted data media only. Observe the facility's applicable security guidelines.

Video

Video interfaces are integrated into the front of the device depending on the customer-specific design. They are used to connect any devices (modalities) with suitable video signal output.

NOTICE
Connecting devices • During connection of devices, make sure the socket will not be damaged when inserting the connector. • All devices connected to the Surgical Panel have to meet the respective national safety standards.

6 Cleaning and Maintenance

6.1 Cleaning

Cleaning agent

External cleaning of the protective front pane and housing should be incorporated into the OR cleaning plan. Use a soft cloth for cleaning to prevent scratching painted parts and the protective front pane.

A more thorough cleaning may only be provided through wiping with a damp cloth. Make sure the liquids do not seep into the device near the operating elements or any other location. When cleaning only use agents that will not form explosive mixtures with oxygen during evaporation.

Do not use any cleaning agents containing the following ingredients:

Prohibited cleaning agents	
More than 10% alcohol	Gasoline mixtures containing benzene
Stain remover	Perchloroethylene
Trichloroethylene	Ethyl alcohol
Carbolic acid	Petroleum
White spirit	Carbon tetrachloride
More than 40% hydrogen peroxide in water	All phenols and phenol derivatives

Disinfectants

The responsible hospital hygiene officer should establish the requirements regarding disinfection of the device, disinfection interval, and the selection of agent and procedure, in a cleaning and disinfection plan (hygiene plan).

A suitable disinfectant and procedure in accordance with the disinfectant list of the German Society for Hygiene and Microbiology (DGHM) should be used to disinfect the device.

We recommended an aldehyde mixture for disinfection.

For disinfection, rub surfaces with slight pressure and a suitable quantity of disinfectant (wet wiping).

6.2 Maintenance

⚠WARNING

Maintenance

- Maintenance may only be performed by EIZO or personnel authorized by EIZO.
- Maintenance may not take place in the presence of patients.
- Information on maintenance can be found in the service manual.

Note

- Perform maintenance and inspection at least once per year, including the protective conductor test.
- Perform a visual inspection every four weeks, for example for paint chips.
- Individual service and maintenance contracts can be negotiated. For detailed information, please contact your EIZO partner.
  www.eizo-or.com/de/eizo-gmbh/kontakt/

7 Technical specifications

Note
Technical specifications / product information • Specifications regarding the CuratOR Surgical Panel such as data on the housing, panel, as well as dimensions of the standard versions can be found on our website www.eizo-or.com. • The product brochures with additional information can also be found on our website.

7.1 Power supply

Line voltage	100 to 240 V
Line frequency	50 to 60 Hz
Current consumption	4 to 2 A

7.2 Mechanical design

Housing components	Powder-coated stainless steel and protective glass pane
Ventilation openings	No fan, thermal output through housing
Degree of protection according to EN 60529	IPX4 up to IP65

7.3 Climatic conditions

In operation	
Temperature range	+5 °C to +40 °C ambient temperature
Temperature gradient	Max. 10 K/h, no condensation
Humidity	10 to 90 %, non-condensing, at 25 °C
Air pressure	700 to 1060 hPa

During transport and storage (packed)	
Temperature range	-20 °C to +60 °C ambient temperature
Temperature gradient	Max. 20 K/h, no condensation
Humidity	10 to 90 %, non-condensing, at 25 °C
Air pressure	200 to 1060 hPa

7.4 CE marking

CE

This product has been assigned a CE marking in compliance with the stipulations of EU directives 2014/30/EU, 2014/35/EU, and 2011/65/EU.

Conformity	
Safety standards	IEC 60950:2005/AMD1:2009/AMD2:2013 EN 60950:2006+A11:2009 +A1:2010 + A12:2011 +A2:2013 EN 62368:2014 CAN/CSA-C22.2 No.60950-1:2007/A2:2014-10
Protection class	Protection class I

7.5 Electromagnetic compatibility

Electromagnetic compatibility	
Interference immunity/interference emissions	• IEC 60601-1-2:2014, EN 60601-1-2:2015 • EN 55032:2015 Class A • RCM – CISPR32:2015, Class A – EN55022:2010+AC:2011, Class A – IEC 61000-3-2:2009, EN 61000-3-2:2014 • VCCI/JEITA – CISPR32:2015, Class A – EN 55032:2015, Class A – IEC 61000-3-2:2009, EN 61000-3-2:2014
Electrostatic discharge on housing parts (ESD)	IEC 61000-4-2 Ed.2.0 (2008) EN 61000-4-2:2009-03 Nominal voltage 240 V/50 Hz 1/60 nsec Contact 2, 4, 6, 8 kV (direct and indirect discharge), air 2, 4, 6, 8, 15 kV (direct)
HF radiation	IEC 61000-4-3 Ed.3.2 (2010-04) EN 61000-4-3/A2:2010-07 80 MHz - 2700 MHz 10 V/m 80 % AM with 1 kHz
Burst on power cables	IEC 61000-4-4:2012, EN 61000-4-4:2012 Testing with 100 V/60 Hz and 240 V/50 Hz nominal voltage 2, 3 kV, 5/50 nsec; coupling to power supply cables
Burst on signal line	IEC 61000-4-4:2012, EN 61000-4-4:2012 ± 2 kV on signal lines

Electromagnetic compatibility	
Surge on power cables	IEC 61000-4-5:2014, EN 61000-4-5:2014 Testing with 100V/60 Hz and 240 V/50 Hz nominal voltage Hybrid generator values: 1.2/50-8/20 µsec. 0.5, 1, 2 kV symmetrical; 0,5, 1, 2, 3 kV asymmetrical at 0, 90, 180, 270 degrees Input on power supply lines
Magnetic fields	IEC 61000-4-8 (2009-09) EN 61000-4-8 Edition 2010-02
Alternating fields	Nominal voltage 100 V/50 Hz and 60 Hz Standard: 30 A/m 10 A/m at 100 V/60 Hz 10 A/m at 240 V/50 Hz
Voltage fluctuations	IEC 61000-4-11:2017, EN 61000-4-11:2017 a) Nominal voltage 240 V/50 Hz b) Nominal voltage 100 V/60 Hz Requirements according to IEC standard Dips at nominal voltage 240V / 50Hz, each • 70% for 25 periods of malfunction criterion B • 0% for 0.5 periods, malfunction criterion B at 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315° • 0% for 1 periods of malfunction criterion C • 0% for 250 periods (5 sec.) of malfunction criterion C. Dips at nominal voltage 100V / 60Hz, each • 70% for 30 periods of malfunction criterion B • 0% for 0.5 periods, malfunction criterion B at 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315° • 0% for 1 periods of malfunction criterion C • 0% for 300 periods (5 sec.) of malfunction criterion C. Recovery time > 1 s each
Line reaction to harmonics	IEC 61000-3-2:2009, EN 61000-3-2:2014 Nominal voltage 240 V/50 Hz (-30 %); measurement according to Class D GB17625.1
Line reaction to voltage fluctuations	IEC 61000-3-3:2013, EN 61000-3-3:2014 Nominal voltage 240 V/50 Hz (-30 %)

8 Appendix

8.1 Information on electromagnetic compatibility (EMC)

CuratOR Surgical Panel is a digital image and video viewing system and is intended for use in the OR or other medical environments.

NOTICE
Special EMC provisions are required for use of the CuratOR Surgical Panel. Installation, assembly, and use must take place in compliance with the following instructions: • Do not position any portable or mobile RF communication devices in the immediate vicinity of the CuratOR Surgical Panel. Otherwise, problem-free function of the device cannot be guaranteed. • The CuratOR Surgical Panel should not be positioned or used in the immediate vicinity of other devices. If devices have to be operated in the immediate vicinity of one another, the Surgical Panel must be monitored to ensure proper operation for the defined configuration. • Persons connecting additional devices to the signal input or output for configuring a medical system are responsible for ensuring compliance with standard IEC/ EN 60601-1-2.

Electromagnetic radiation		
The CuratOR Surgical Panel is intended for use in the electromagnetic environments noted below. Customers and users of the CuratOR Surgical Panel have to ensure that the device is used in such an environment.		
Radiation test	**Conformity**	**Information regarding the electromagnetic environment**
RF radiation CISPR11/EN 55011	Group 1	The CuratOR Surgical Panel uses RF radiation for internal operation only. For this reason, the RF radiation is very low and is therefore unlikely that the device will cause interference in electronic devices in the immediate vicinity.
RF radiation CISPR11/EN 55011 GB9254	Class B	The CuratOR Surgical Panel is approved for use in a number of environments. This includes residential areas and areas connected directly to the public low-voltage grid, such as private homes.
Harmonic currents IEC/EN 61000-3-2 GB17625.1	Class D	
Voltage fluctuations / flicker IEC/EN 61000-3-3	fulfilled	

Electromagnetic interference immunity			
The CuratOR Surgical Panel was tested with the following compliance levels in accordance with the test requirements for professional healthcare facilities, as established in IEC/EN 6061-1-2. Customers and users of the device have to ensure that the device is used in such an environment.			
Interference immunity test	**Measurement level**	**Compliance level**	**Information regarding the electromagnetic environment**
Electrostatic discharge (ESD) IEC/EN 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	As described in the CuratOR Surgical Panel service manual, the device is suited to surface mounting or flush mounting depending on the individual version. In addition to mounting on the wall or in a niche, installation includes connection to power and the IT network inside of the device.
Fast transient electric disturbances (bursts) IEC/EN 61000-4-4	±2 kV power lines ±1 kV input / output lines	±3 kV power lines ±2 kV input / output lines	The power supply quality has to correspond to that of typical industrial environments or hospitals.
Surge voltage IEC/EN 61000-4-5	±1 kV line against line ±2 kV line against ground	±2 kV line against line ±4 kV line against ground	The power supply quality has to correspond to that of typical industrial environments or hospitals.
Voltage dips, brief interruptions, and fluctuations of power supply lines IEC/EN 61000-4-11	0 % V_T for 0.5 periods and 1 period 70 % V_T for 25 / 30 periods at 50 / 60 Hz 0 % V_T for 250 / 300 periods at 50 / 60Hz	0 % V_T for 0.5 periods and 1 period 70 % V_T for 25 periods at 50 Hz 0 % V_T for 250 periods at 50 Hz	The power supply quality has to correspond to that of typical industrial environments or hospitals. If the device has to continue operation even if the power supply is interrupted, it is recommended to connect the device to an uninterruptible power supply or battery.
Magnetic fields with energy technology frequencies IEC/EN 61000-4-8	30 A/m (50 / 60 Hz)	30 A/m (50 Hz)	The magnetic fields with energy technology frequencies must be in an area that is representative of a typical location in a typical industrial environment or hospitals. This product should be used at least 15 cm away from the source of magnetic fields with energy technology frequencies.
Note: V_T is the alternating current voltage before application of the measurement level.			

<table>
<tr><th colspan="4">Electromagnetic interference immunity</th></tr>
<tr><td colspan="4">The CuratOR Surgical Panel was tested with the following compliance levels in accordance with the test requirements for professional healthcare facilities, as established in IEC/EN 6061-1-2. Customers and users of the device have to ensure that the device is used in such an environment.</td></tr>
<tr><th>Interference immunity test</th><th>Measurement level</th><th>Compliance level</th><th>Information regarding the electromagnetic environment</th></tr>
<tr><td rowspan="2">Line-based disturbances caused by RF fields
IEC/EN 61000-4-6</td><td>3 V_{rms}
150 kHz to 80 MHz</td><td>6 V_{rms}</td><td rowspan="3">Portable and mobile RF communications devices may only be operated in the vicinity of the device and its components (including cables) when in compliance with the recommended minimum distance. It is determined using the formula for calculating the frequency of the transmitter.
Recommended minimum distance
d = 0.6 √P, 150 kHz to 80 MHz
d = 2 √P, ISM bands between 150 kHz and 80 MHz
d = 0.35 √P, 80 MHz to 800 MHz
d = 0.7 √P, 800 MHz to 2.7 GHz
In this case, “P” stands for the measured maximum nominal output power in watts (W) of the transmitter recommended by the transmitter manufacturer, and “d” for the recommended minimum distance in meters (m).
The field strengths of fixed transmitters according to electromagnetic location measurement[a)] have to be less than the compliance level in each individual frequency range.
Interference can occur when used in the vicinity of devices identified with the following symbol.
  </td></tr>
<tr><td>6 V_{rms}
ISM bands between 150 kHz and 80 MHz</td><td>6 V_{rms}</td></tr>
<tr><td>Electromagnetic RF fields
IEC/EN 61000-4-3</td><td>3 V/m
80 MHz to 2.7 GHz</td><td>10 V/m</td></tr>
<tr><td colspan="4">Note: The higher frequency range applies at 80 MHz and 800 MHz.
Note: Guidelines with respect to line-based interference due to RF fields or electromagnetic RF fields may not apply in all situations. Absorption and reflection by structures, objects, and people impact the propagation of electromagnetic waves. .</td></tr>
<tr><td colspan="4">[a)] The field strengths of fixed transmitters, for example the base station for cordless and mobile telephones, radio, land mobile radio, ham radio, and television cannot be determined precisely in advance. To evaluate the electromagnetic environment using fixed transmitters, an electromagnetic location measurement should be included. If the measured field strength in the environment where the device is used exceeds the applicable RF compliance level, observe the device to ensure its proper operation. If improper operation is observed, in some circumstances additional measures may be necessary, such as reorienting or repositioning the device.</td></tr>
</table>

Recommended minimum distance between portable or mobile RF communications devices and the CuratOR Surgical Panel

The CuratOR Surgical Panel is intended for use in an electromagnetic environment in which interference due to electromagnetic radiation is controlled. For other portable and mobile RF communication devices (transmitters), the recommended minimum distance between the portable and mobile RF communication devices (transmitters) and the device applies as listed below. This is based on the maximum output power of the communication device.

Maximum nominal output power of the transmitter (W)	**Recommended minimum distance according to the frequency of the transmitter (m)**		
	150 kHz to 80 MHz $d = 0.6 \sqrt{P}$	80 MHz to 800 MHz $d = 0.35 \sqrt{P}$	800 MHz to 2.7 GHz $d = 0.7 \sqrt{P}$
0.01	0.06	0.04	0.07
0.1	0.19	0.11	0.22
1	0.60	0.35	0.70
10	1.90	1.11	2.21
100	6.00	3.50	7.00

For transmitters whose maximum nominal output power is not shown above, the recommended minimum distance “d” in meters (m) can be determined using the formula for calculating the frequency of the transmitter. “P” here stands for the transmitter’s maximum measured nominal output power in watts (W), as recommended by the transmitter’s manufacturer.

Note: For 80 MHz and 800 MHz, the recommended minimum distance for the higher frequency range applies.
Note: This information may not be applicable in all situations. Absorption and reflection by structures, objects, and people impact the propagation of electromagnetic waves.

Recommended minimum distance between portable or mobile RF communications devices and the CuratOR Surgical Panel

The CuratOR Surgical Panel is intended for use in an electromagnetic environment in which interference due to electromagnetic radiation is controlled. The customer or user of the device can help prevent electromagnetic interference by maintaining the recommended minimum distance between portable and mobile RF communications devices (transmitters) and the device.
The interference immunity regarding adjacent fields has been confirmed for the following wireless RF communications devices:

Test frequency (MHz)	**Bandwidth[a] (MHz)**	**Service[a]**	**Modulation[b]**	**Maximum power (W)**	**Minimum distance (m)**	**Measurement level (V/m)**	**Compliance level (V/m)**
385	380 - 390	TETRA 400	Pulse modulation[b] 18 Hz	1.8	0.3	27	27
450	430 - 470	GMRS 460 FRS 460	FM ±5 kHz deviation 1 kHz sine	2	0.3	28	28
710 745 780	704 - 787	LTE band 13, 17	Pulse modulation[b] 217 Hz	0.2	0.3	9	9
810 870 930	800 - 960	GSM 800/900 TETRA 800 iDEN 820 CDMA 850 LTE band 5	Pulse modulation[b] 18 Hz	2	0.3	28	28
1720 1845 1970	1700 - 1990	GSM 1800; CDMA 1900 GSM 1900 DECT LTE band 1, 3, 4, 25 UMTS	Pulse modulation[b] 217 Hz	2	0.3	28	28
2450	2400 - 2570	Bluetooth WLAN 802.11 b/g/n RFID 2450 LTE band 7	Pulse modulation[b] 217 Hz	2	0.3	28	28
5240 5500 5785	5100 - 5800	WLAN 802.11 a/n	Pulse modulation[b] 217 Hz	0.2	0.3	9	9

[a] For some radio services, only the frequencies for the radio contact from the mobile communications device to the base station (uplink) is included in the table.
[b] The carrier is modulated by a square wave with 50% duty cycle.

8.2 Markings and symbols

The markings and symbols on the device indicate the following:

Marking / symbol	Meaning
	Caution symbol
	CE marking (EU conformity mark)
	Legal manufacturer
	WEEE marking: Product must be disposed of separately; materials may be recycled
	Fuse
	Protective ground
	Equipotential bonding connection
	USB port
	Main switch
	System switch
	Warning: Hazardous voltage
	Read the operating instructions

8.3 Environmental protection

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

8.4 Additional devices

Devices connected to the video inputs and USB ports of the CuratOR Surgical Panel have to meet the relevant national safety standards.

Additional accessories may be installed only in consultation with EIZO GmbH.

8.5 Contact

Support during installation and for technical questions

www.eizo-or.com

8.6 Trademarks

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EIZO GmbH
Carl-Benz-Straße 3
76761 Rülzheim
Germany

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