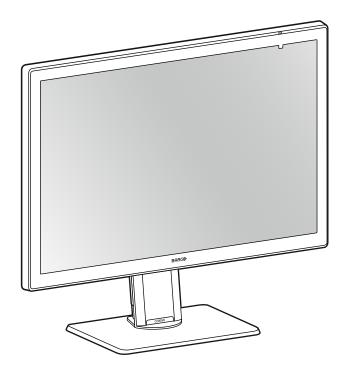
Coronis Fusion 4MP / 6MP



User guide

MDCC-4430 MDCC-6530



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Welcome!

1

1.1 What's in the box

Overview

- Coronis Fusion 4MP / 6MP display
- Printed user guide
- Documentation disc, containing different languages of this user guide and the Barco "Display Controller and Intuitive Workflow Tools" user guide
- System sheet
- · Cables for Mains, Video and USB

If you ordered a Barco MXRT display controller, it is also in the box together with its accessories. A dedicated user guide is available on the documentation disc.



Keep your original packaging. It is designed for this display and is the ideal protection during transport and storage.



The user guides are also available on www.barco.com/support



If your product arrived with shipping damage or missing parts, please refer to the instructions in our knowledge base article '3727' at www.barco.com/support/knowledge-base/3727 for further assistance.

1.2 At a glance

Product overview

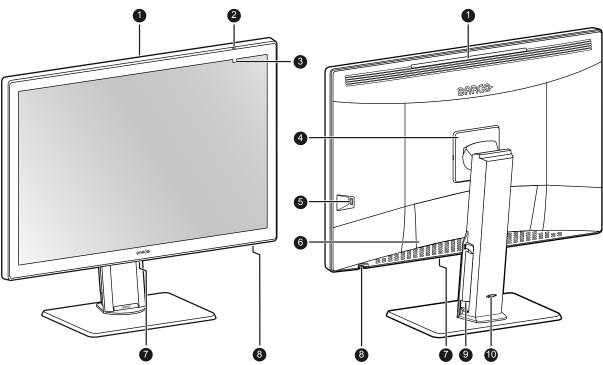
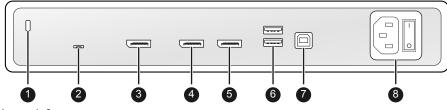


Image 1-1

- 1. SoftGlow Wall light
- 2. Ambient light sensor and Power status LED
 - Off: Display not powered (mains cable unplugged or power switch in OFF position), or display is in normal operation
 - Fast blinking amber: Display is entering DPMS mode

- · Slow blinking amber: Display is in DPMS mode
- Steady amber: Display manually switched off via the jog dial, or display in hibernate mode (requires DPMS and Hibernate to be enabled in the OSD menu)
- 3. Front sensor
- 4. VESA mount cover
- 5. USB-A 2.0 downstream connector with high-power charging functionality
- 6. Connector compartment cover
- 7. SoftGlow Task light
- 8. Jog dial
- 9. Cable routing channels
- 10. Stand locking mechanism

Connectors



- Image 1–2
- 1. Kensington security slot
- 2. Service port (for Barco service purposes only)
- 3. DisplayPort IN 2
- 4. DisplayPort OUT (covered with a plastic cap by default, remove the cap to use this connector)
- 5. DisplayPort IN 1
- 6. USB-A 2.0 downstream connectors (2x)
- 7. USB-B 2.0 upstream connector
- 8. 100-240 VAC mains power input and power switch

Welcome!

Installation

2

2.1 Display controller installation

About

Before you install your display and connect it with the workstation, make sure to have a suitable¹ display controller installed in the workstation.



The Coronis Fusion 4MP / 6MP display operates at its full specifications when driven by a Barco **MXRT display controller** and **MXRT driver** (which also includes the Barco **Intuitive Workflow Tools**). If you ordered a MXRT display controller, it is included in the box of your display. For more information and installation instructions, please check the Barco "Display Controller and Intuitive Workflow Tools" user guide at <u>www.barco.com/support</u>.

2.2 Display position adjustment

To adjust the display position

After unpacking, you can safely tilt and swivel the display to your preferred position.

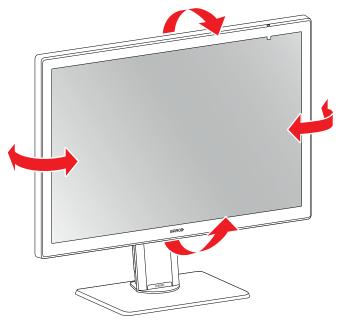
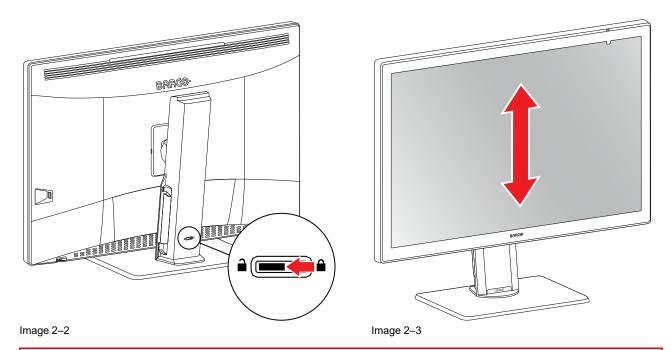


Image 2-1

To adjust the height of the display, first move the slider at the back of the stand to the **unlock** position. Then you can raise or lower the display as desired.

For a list of compatible display controllers, please refer to the compatibility matrix available at www.barco.com/mybarco/mysupport/ healthcare/compatibility-matrices





WARNING: The height can be locked only when the display is in the lowest position, even though the slider at the back of the stand can be moved to the lock position at any height of the display.

2.3 Cable connections

To connect the cables

1. Open the connector compartment. Do this by gently lifting the bottom of the connector compartment cover, after which it can be removed from the display.

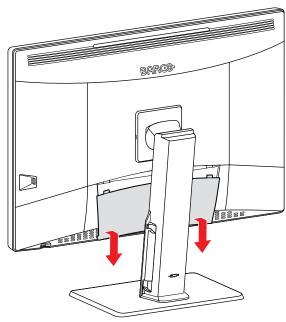


Image 2-4

2. Connect the video source(s) from your workstation(s) to the DisplayPort IN connector(s) of the display. **Important:** Do not connect any video source(s) to the DisplayPort OUT connector. Do not confuse this connector with the DisplayPort IN 1 and 2 connectors.

Note: The MDCC-4430, MDCC-6530 can have multiple video inputs connected at once, and switching between these inputs can be easily done in the OSD menu. See "Image source selection", page 34 for more info on how to configure the different video inputs on your display.

3. The DisplayPort OUT allows you to daisy chain your display and an external display using DisplayPort Multi-Stream Transport (MST).

Note: By default, the DisplayPort OUT is covered with a plastic cap which has to be removed before you can use this connector.

4. Connect the workstation's USB host to the USB upstream connector on the display if you want to make use of QAWeb or any of the display USB downstream connectors (e.g. to connect a keyboard, mouse, touchpad or another peripheral).

Note: When cables or other objects are left on a touchpad, these can be misinterpreted as fingers and may block DPMS activation. Barco recommends to always keep the touchpad clear of other objects.

5. Connect the supplied mains cable to the power input on the display.

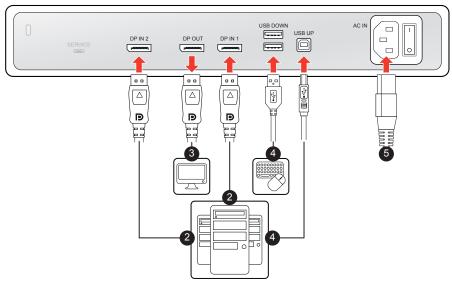


Image 2-5

- 6. Route all cables through the cable duct in the stand of your display. For better strain-relief and shielding of the cables, use the cable clips at the inside of the connector compartment.
- 7. Close the connector compartment. Slide the top of the connector compartment cover into position and then push the bottom of the cover.

Note: Make sure that the power switch (next to the power input) is the desired position before closing the connector compartment.

8. Connect the supplied mains cable to a **grounded** power outlet.

2.4 MXRT driver and Intuitive Workflow Tools installation

About

When you are using a Barco MXRT display controller, you can start up your Coronis Fusion 4MP / 6MP display system and install the **MXRT driver** and **Intuitive Workflow Tools**. Barco's Intuitive Workflow Tools are designed to increase visibility of subtle details, improve focus during reading sessions, and accelerate workflow.

To install the MXRT driver and Intuitive Workflow Tools

- 1. Switch on your Coronis Fusion 4MP / 6MP as described in "On/Off switching", page 21.
- Turn on the workstation connected to your display.
 Your display will be running in a basic video mode at a default refresh rate when first time starting up.
- 3. Download the latest MXRT driver and Intuitive Workflow Tools from www.barco.com/mxrt.

- 4. Install the **MXRT driver** and Barco's **Intuitive Workflow Tools** as described in the Barco "Display Controller and Intuitive Workflow Tools" user guide at www.barco.com/support.
- 5. When the drivers are completely installed, your display will automatically detect the connected video input signal(s) and apply the correct video mode and refresh rate.

2.5 QAWeb registration

About

QAWeb Enterprise helps you manage quality and assure compliance of your expanding healthcare enterprise with less effort, lower cost, and complete confidence. This fully automated and secure system supports a consistent image quality and uptime for all registered imaging display systems within your facility and across your enterprise. Learn more at www.barco.com/qaweb.

To register your display system to your QAWeb Enterprise organization, the QAWeb Enterprise Agent must be installed and running on your workstation and it must be able to communicate with the QAWeb Enterprise cloud service.

For more information and instructions, check the QAWeb Enterprise user guide on <u>www.barco.com/support/gaweb-enterprise</u>.



When still using the older MediCal QAWeb, visit <u>www.barco.com/support/medical-qaweb</u> to obtain the installation package and user documentation.

2.6 VESA-mount installation



CAUTION: Use suitable mounting apparatus to avoid risk of injury.



WARNING: Never move a display attached to an arm by pulling or pushing the display itself. Instead, make sure that the arm is equipped with a VESA compliant handle and use this to move the display.

Please refer to the instruction manual of the arm for more information and instructions.



CAUTION: Use a mount that is compliant with the VESA 100 mm standard.

Overview

The panel, standard attached to a stand, is compatible with the VESA 100 mm standard. Thus, it can be used with an arm that is approved by VESA. This chapter shows you how to release the panel from the stand and how to attach it to an arm. If you're not using an arm, you can skip this chapter.

1. Unlock the stand locking mechanism and put the display in the highest position.

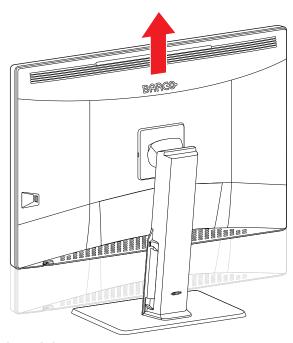


Image 2-6

- 2. Put the display face down on a clean and soft horizontal surface. Be careful not to damage the panel screen.
- 3. Push the VESA mount cover to the right and lift the cover on the right with your finger or a flathead screwdriver.

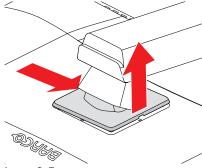


Image 2-7

4. Push the VESA mount cover to the left and release the cover on the left with a flathead screwdriver.

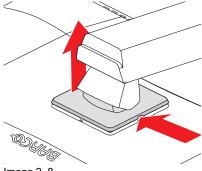
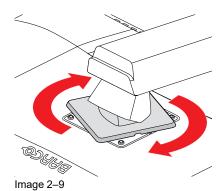
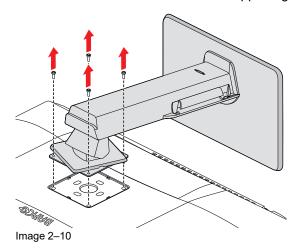


Image 2-8

5. Rotate the VESA mount cover to uncover the screws fixing the panel to the stand.



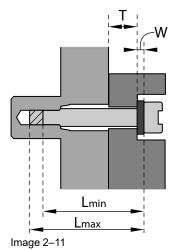
6. Unscrew the 4 fixation screws while supporting the stand.



7. Attach the panel **firmly** to the arm using 4 M4 screws.

Respect the following rule to select an appropriate screw length:

- $L_{min} = T + W + 6.5 \text{ mm}$
- $L_{max} = T + W + 10 \text{ mm}$



Installation

Daily operation

3

3.1 Recommendations for daily operation

Optimize the lifetime of your display

Enabling the Display Power Management System (DPMS) of your display will optimize its diagnostic lifetime by automatically switching off the backlight when the display is not used for a specified period of time. By default, DPMS is enabled on your display, but it also needs to be activated on your workstation. To do this, go to the "Power Options" of your workstation.



Barco recommends setting DPMS activation after 20 minutes of non-usage.

Use a screen saver to avoid image retention

Prolonged operation of an LCD with the same content on the same screen area may result in a form of image retention.

You can avoid or significantly reduce the occurrence of this phenomenon by using a screen saver. You can activate a screen saver in the "Display properties" window of your workstation.



Barco recommends setting screen saver activation after 5 minutes of non-usage. A good screen saver displays moving content.

In case you are working with the same image or an application with static image elements for several hours continuously (so that the screen saver is not activated), change the image content regularly to avoid image retention of the static elements.

Understand pixel technology

LCD displays use technology based on pixels. As a normal tolerance in the manufacturing of the LCD, a limited number of these pixels may remain either dark or permanently lit, without affecting the diagnostic performance of the product. To ensure optimal product quality, Barco applies strict selection criteria for its LCD panels.

Enhance user comfort

Every Barco multi-head display system is color matched to the tightest specifications in the market.



Barco recommends keeping color-matched displays together. Furthermore, it is important to use all displays of a multi-head configuration at the same rate to preserve color matching throughout the economic lifetime of the system.

Maximize quality assurance

QAWeb Enterprise helps you manage quality and assure compliance of your expanding healthcare enterprise with less effort, lower cost, and complete confidence. This fully automated and secure system supports a consistent image quality and uptime for all registered PACS display systems within your facility and across your enterprise.



Barco highly recommends to use QAWeb Enterprise. Learn more at www.barco.com/qaweb.

3.2 Shortcut bar

About the shortcut bar

The shortcut bar gives direct access to a number of OSD menu functions without having to browse the OSD menu:

"On/Off switching", page 21

- "SoftGlow light mode switching", page 21
- "OSD menu access and use", page 22



Image 3-1

To activate a shortcut bar function

- 1. During normal operation, press or turn the jog dial. The shortcut bar is activated.
- 2. Turn the jog dial left or right to select a function.
- 3. Press the jog dial to confirm your selection and to activate the function.

3.3 On/Off switching

To switch on your display

Press the jog dial to activate your display.



Make sure that the power switch next to the mains power input connector is in position "I" when switching on your display.

To switch off your display

- 1. Press or turn the jog dial to activate the shortcut bar.
- 2. Turn the jog dial and select the standby icon ($\mathbf{O}_{\mathbf{j}}$)
- 3. Press the jog dial to confirm your selection.
- 4. Press the jog dial again to switch off the display.

3.4 SoftGlow light mode switching

About the SoftGlow lights

The SoftGlow Task light sheds a light on the desktop, while the SoftGlow Wall light provides ambient lighting for the reading room to reduce eye fatigue. The brightness of each is adjustable.

To switch the SoftGlow light mode

- 1. Press or turn the jog dial to activate the shortcut bar. The SoftGlow lights icon () is selected by defaul when the KVM switch is disabled.
- 2. If not selected by default, turn the jog dial and select the SoftGlow lights icon.
- Press the jog dial repeatedly to cycle through the different SoftGlow light modes: SoftGlow Task light ON → SoftGlow Wall light ON → SoftGlow Task + SoftGlow Wall light ON → SoftGlow lights OFF→ ...



To adjust the brightness of the SoftGlow lights, please refer to "SoftGlow Task light", page 25 and "SoftGlow Wall light", page 25.



The SoftGlow lights can also be enabled and configured in the Intuitive Workflow Tools. See the Barco "Display Controller and Intuitive Workflow Tools" user guide on the included documentation CD, or at www.barco.com/support.

3.5 OSD menu access and use

About the OSD menu

The OSD menu allows you to configure different settings to make your Coronis Fusion 4MP / 6MP fit your needs within your working environment. Also, you can retrieve general information about your display and its current configuration settings through the OSD menu.

To access the OSD menu

- 1. Press or turn the jog dial to activate the shortcut bar.
- 2. Turn the jog dial and select the OSD menu icon ().
- 3. Press the jog dial to enter the OSD menu.
- 4. If the *OSD menu locked* message appears, turn and hold the jog dial **right for 5 seconds**, until the *OSD menu unlocked* message appears.

To navigate through the OSD menus

- Turn the jog dial left or right to scroll through the (sub)menus, to change values or to make selections.
- Press the jog dial to go into a submenu or confirm adjustments and selections.
- Press and hold the jog dial for approximately 3 seconds to cancel adjustments.
- Turn the jog dial left on a first (sub)menu item to exit the (sub)menu.

Advanced operation

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About

This section describes all settings available in the OSD menu and how to change and configure them.



Certain OSD menu settings affecting calibration can be managed by QAWeb. Manually changing these settings in the OSD menu is still possible but the changes will be overwritten at each sync with QAWeb. The OSD menu can also be locked/unlocked by QAWeb.

4.1 OSD menu language

About the OSD menu language

By default, the OSD menu comes up in English. However, there's a wide range of other languages available for the OSD menu of your Coronis Fusion 4MP / 6MP.

To change the language of the OSD menu:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > User Interface > Menu menu.
- 3. Enter the Language submenu.
- 4. Select one of the available languages and confirm.

4.2 OSD menu orientation

About orientation

The orientation of the OSD menu can be set to landscape, portrait or inverse portrait. This is useful when physically mounting your display in another orientation.

To adjust the orientation

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > User Interface > Menu menu.
- 3. Enter the Orientation submenu.
- 4. Select Landscape, Portrait or Inverse Portrait and confirm.

4.3 OSD menu automatic close function

About the OSD menu automatic close function

By default, the OSD menu will disappear automatically after approximately 90 seconds of inactivity. However, this function can be disabled so that the OSD menu remains on the screen until manually closed.

To enable/disable the OSD menu automatic close function:

- Bring up the OSD main menu.
- 2. Navigate to the Configuration > User Interface > Menu menu.
- 3. Enter the Automatic Close submenu.
- 4. Select Enabled/Disabled as desired and confirm.

4.4 Power lock function

About the power lock function

When the power lock function is enabled, it is no longer possible to switch off your display via the jog dial as described in "On/Off switching", page 21. DPMS mode is not affected by this setting.

To enable/disable the power lock function:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > User Interface > Controls menu.

- 3. Enter the Power Lock submenu.
- 4. Select Enabled/Disabled as desired and confirm.

4.5 SoftGlow Task light

About the SoftGlow Task light

The SoftGlow Task light sheds a light on the desktop. The brightness of the light is configurable.

To enable/disable the SoftGlow Task light

- 1. Bring up the OSD main menu.
- 2. Navigate to the *Configuration > Lights* menu.
- 3. Enter the SoftGlow Task Light submenu.
- 4. Select Enabled/Disabled as desired and confirm.



The SoftGlow lights can also be enabled more quickly via the shortcut bar. See "SoftGlow light mode switching", page 21.



The SoftGlow lights can also be enabled and configured in the Intuitive Workflow Tools. See the Barco "Display Controller and Intuitive Workflow Tools" user guide on the included documentation CD, or at www.barco.com/support.

To adjust the SoftGlow Task light brightness

- 1. Bring up the OSD main menu.
- Navigate to the Configuration > Lights menu.
- 3. Enter the SoftGlow Task Light brightness submenu.
- 4. Set a SoftGlow Task Light brightness value as desired and confirm.



The SoftGlow lights can also be enabled and configured in the Intuitive Workflow Tools. See the Barco "Display Controller and Intuitive Workflow Tools" user guide on the included documentation CD, or at www.barco.com/support.

4.6 SoftGlow Wall light

About the SoftGlow Wall light

The SoftGlow Wall light provides ambient lighting for the reading room to reduce eye fatigue. The brightness of the light is configurable.

To enable/disable the SoftGlow Wall light

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Lights menu.
- 3. Enter the SoftGlow Wall Light submenu.
- 4. Select Enabled/Disabled as desired and confirm.



The SoftGlow lights can also be enabled more quickly via the shortcut bar. See "SoftGlow light mode switching", page 21.



The SoftGlow lights can also be enabled and configured in the Intuitive Workflow Tools. See the Barco "Display Controller and Intuitive Workflow Tools" user guide on the included documentation CD, or at www.barco.com/support.

To adjust the SoftGlow Wall light brightness

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Lights menu.
- 3. Enter the SoftGlow Wall Light brightness submenu.
- 4. Set a SoftGlow Wall Light brightness value as desired and confirm.



The SoftGlow lights can also be enabled and configured in the Intuitive Workflow Tools. See the Barco "Display Controller and Intuitive Workflow Tools" user guide on the included documentation CD, or at www.barco.com/support.

4.7 DPMS mode

About DPMS mode

Enabling the Display Power Management System (DPMS) mode on your display will optimize its diagnostic lifetime by automatically switching off the backlight when the display is not used for a specified period of time. By default, DPMS mode is enabled on your display, but it also needs to be activated on your workstation. To do this, go to the "Power options" of your workstation.



Barco recommends setting DPMS activation after 20 minutes of non-usage.



When DPMS mode is enabled, an additional power saving function becomes available: hibernate. See "Hibernate", page 26 for more information.

To enable/disable DPMS mode on your display:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Power Management menu.
- 3. Enter the DPMS Mode submenu.
- 4. Select Enabled/Disabled as desired and confirm.

4.8 Hibernate

About hibernate

When hibernate is enabled, not only the backlight, but also other functions will be disabled to reduce power consumption to a minimum. This happens after an adjustable period of time.



DPMS mode must be enabled before hibernate can be enabled. See "DPMS mode", page 26.



Connect your keyboard, mouse, touchpad, etc. directly with your workstation (and not with the display) to be able to awake your workstation and display from hibernate.

To enable/disable hibernate

1. Bring up the OSD main menu.

- 2. Navigate to the Configuration > Power Management menu.
- 3. Enter the Hibernate submenu.
- 4. Select Enabled/Disabled as desired and confirm.

To adjust the hibernate time-out

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Power Management menu.
- 3. Enter the *Hibernate Timeout* submenu.
- 4. Set the time-out value as desired and confirm.

4.9 Luminance target

About the luminance target

The luminance target of your Coronis Fusion 4MP / 6MP is adjustable over a predefined range. When you change the luminance target, the display will adjust its backlight to reach the target.

To set the luminance target:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration menu.
- 3. Enter the *Luminance Target* submenu.
- 4. Set a luminance target value as desired and confirm.



The default, factory calibrated luminance value is available in the technical specifications table. The guaranteed backlight lifetime is valid for this setting.

4.10 Color presets

About color presets

The available color preset settings for your display are:

- Clearbase: Simulation of the clearbase film color temperature
- Bluebase: Simulation of the bluebase film color temperature
- User: When selecting the User color preset, you will be able to manually define:
 - Color temperature (Kelvin)
 - Color coordinates (x, y)
- **6500K**: Corresponds to a color temperature of 6500 Kelvin (D65)
- Native White: The native, unmodified color temperature of the LCD panel

To select a color preset:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Color Settings menu.
- 3. Enter the Color Presets submenu.
- 4. Select one of the available color presets and confirm.

4.10.1 Color temperature

About color temperature:

It is possible to change the color temperature of your display.



Color temperature can only be changed when the Color preset is set to *User*.

To change the color temperature:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Color Settings > Color Presets menu.
- 3. Select User and confirm.
- 4. Enter the Color Definition submenu, select Color Temperature and confirm.
- 5. Enter the Color Temperature submenu, set the value as desired and confirm.

4.10.2 Color coordinates

About color coordinates:

It is possible to change the color coordinates of your display.



Color coordinates can only be changed when the Color preset is set to *User*.

To change the color coordinates:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Color Settings > Color Presets menu.
- 3. Select *User* and confirm.
- 4. Enter the Color Definition submenu, select Color Coordinates and confirm.
- 5. Enter the *x* and *y* submenus, set the values as desired and confirm.

4.11 Color space

About color space

The available color space settings for your display are:

- sRGB (standard Red Green Blue): To match typical home and office viewing conditions. Note: This setting does not fully set your display to the sRGB color space. Refer to "sRGB", page 30 to do this.
- Native: The native, unmodified color space of the LCD panel.
- PrePriAS (Preserve Primaries And Secondaries): To change the white (color) point (as explained in "Color presets", page 27) without reducing red, green and blue primary colors and cyan, magenta and yellow secondary colors of the display's native color gamut.

To select a color space

- Bring up the OSD main menu.
- 2. Navigate to the *Configuration > Calibration* menu.
- 3. Enter the Color Space submenu.
- 4. Select one of the available color space settings and confirm.

4.12 Viewing modes

About viewing modes

The Coronis Fusion 4MP / 6MP can be used in 2 viewing modes:

- Diagnostic: This mode provides the full calibrated luminance and is intended for using the display for diagnostic purposes.
- Text: In this mode, the luminance is reduced to approximately half of the luminance. This is intended for
 using the display with office applications such as word processing.

Please note that text mode is not persistent, once powered off, the unit will restart in diagnostic mode.



The diagnostic mode should always be selected when the Coronis Fusion 4MP / 6MP is intended to be used in a diagnostic environment.

To select a viewing mode:

- 1. Bring up the OSD main menu.
- 2. Navigate to the *Configuration* > *Calibration* menu.
- 3. Enter the Viewing Mode submenu.
- 4. Select Diagnostic/Text as desired and confirm.

4.13 Display functions

About display functions

Native, uncorrected panels will display all grayscale/color levels with luminance increments that are not optimal for crucial diagnostic information. Studies have shown however, that in medical images certain grayscale/color parts contain more diagnostic information then others. To respond to these conclusions, display functions have been defined. These functions emphasize on these parts containing crucial diagnostic information by correcting the native panel behavior.

The available display functions for your display are:

- Native: The native display panel behavior will not be corrected.
- **Dynamic Gamma 1.8** or **2.2**: These are gamma functions that are shifted to take into account the non-zero luminance of an LCD panel when driven with a "black" signal. They are especially useful in CT applications to improve the perception of low Hounsfield values.
- DICOM: DICOM (Digital Imaging and Communications in Medicine) is an international standard that was
 developed to improve the quality and communication of digital images in radiology. In short, the DICOM
 display function results in more visible grayscales in the images. Barco recommends selecting the DICOM
 display function for most medical viewing applications.
- sRGB: The sRGB color space combines a display function, color space and white point selection, and is
 designed to match typical home and office viewing conditions. It is widely used in most computer
 applications. Note: This setting does not fully set your display to the sRGB color space. Refer to "sRGB",
 page 30 to do this.
- User: This display function will be automatically selected when display functions are defined by QAWeb.
- **Gamma 1.8** or **2.2**: Select one of these display functions in case the display is to replace a CRT display with a gamma of 1.8 or 2.2 respectively.
- Test: For Barco service purposes only.



The settings of the display must be adapted to suit the requirements of the visualization software. In case of doubt, please contact the vendor of the visualization software.

To select a display function:

- 1. Bring up the OSD main menu.
- 2. Navigate to the *Configuration > Calibration* menu.
- 3. Enter the Display Function submenu.
- 4. Select one of the available display functions and confirm.

4.14 sRGB

About sRGB

When sRGB is enabled, the display is set to an sRGB color space with the following settings:

- Color preset: 6500K. See "Color presets", page 27 for more info.
- Color space: sRGB. See "Color space", page 28 for more info.
- Display function: sRGB. See "Display functions", page 29 for more info.

To enable sRGB:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration menu.
- 3. Select sRGB and confirm.

4.15 Ambient Light Compensation (ALC)

About ALC



Ambient Light Compensation (ALC) can only be enabled on your display when the display function is set to DICOM. Please refer to "Display functions", page 29.

When ALC is enabled, the DICOM display function will be recalculated taking a preset ambient light correction value into account. This value is determined by the selected reading room. Therefore, it is also important to select a realistic reading room when enabling ALC. This can be done by following the instructions in "Reading rooms", page 30.

To enable/disable ALC:

- Bring up the OSD main menu.
- Navigate to the Configuration > Calibration > Ambient Light menu.
- 3. Enter the Ambient Light Compensation submenu.
- 4. Select Enabled/Disabled as desired and confirm.

4.16 Reading rooms

About reading rooms



Reading rooms can only be selected on your display when the display function is set to DICOM. Please refer to "Display functions", page 29

The American Association of Physicists in Medicine (AAPM) composed a list of pre-defined reading rooms. Each of these reading rooms are defined by following parameters:

- the maximum light allowed in this type of room
- · the preset ambient light correction value for this reading room

These parameters are stored in your display and determine the preset ambient light correction value to take into account to recalculate the DICOM display function when Ambient Light Compensation (ALC) is enabled. Please refer to "Ambient Light Compensation (ALC)", page 30 to enable ALC.

The available reading rooms for your Coronis Fusion 4MP / 6MP are:

- CR/DR/ MAMMO: Corresponds to light conditions in diagnostic reading rooms for computed radiology, digital radiology or mammography. This setting has the lowest maximum ambient light.
- CT/MR/NM: Corresponds to light conditions in diagnostic reading rooms for computed tomography, magnetic resonance or nuclear medicine scans.

- Staff Office: Corresponds to light conditions in office rooms.
- Clinical Viewing Room: Corresponds to light conditions in diagnostic reading rooms for clinical viewing.
- Emergency Room: Corresponds to light conditions in emergency rooms.
- Operating Room: Corresponds to light conditions in operating rooms. This setting has the highest maximum ambient light.

To select a reading room:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Ambient Light menu.
- **3.** Enter the *Reading Room* submenu.
- 4. Select one of the available reading rooms and confirm.

4.17 Continuous Ambient Light Compensation (ALC)

About Continuous ALC

Enabling continuous ALC will continuously recalculate the DICOM display function taking the averaged ambient light, as measured by the integrated ambient light sensor, into account.



Continuous ALC can only be enabled on your display when the display function is set to DICOM. Please refer to "Display functions", page 29.

To select continuous ALC:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Ambient Light menu.
- 3. Enter the Continuous ALC submenu.
- 4. Select Enabled/Disabled as desired and confirm.

4.18 Embedded QA

4.18.1 About Embedded QA

About

Embedded QA allows you to run a display calibration or compliance test directly from the display using the OSD menus described in the next sections. Embedded QA will use the front sensor / I-Guard to measure the necessary luminance levels for either a calibration or compliance test. Various settings for both actions can be selected from the display's OSD menu. The last results of both actions can be consulted from the OSD.

Embedded QA or QAWeb?

Embedded QA is not a replacement for the Barco QAWeb solution.

Although Embedded QA is a reliable option to perform a simple calibration or compliance test, Barco still highly recommends QAWeb as the solution of choice for calibration and QA. QAWeb brings many benefits such as centralized asset management, the ability to schedule tasks, remote management, automated reporting, alerting and specific support of regional QA standards such as DIN 6868-57, JESRA and AAPM TG18. That's why QAWeb Agent acts as the master for all supported displays from the moment it is installed and running. QAWeb Agent will take over from Embedded QA and overwrite any settings which were applied by Embedded QA.

4.18.2 DICOM status report

About DICOM status report

Following information is available:

DICOM Compliance Status (status since last compliance check)

- Compliance status: Shows if the current DICOM curve is compliant or not.
- Maximum error: Shows the maximum error of the current DICOM curve. This is the deviation compared to a perfect DICOM.
- **Error threshold:** Shows the error threshold. This is the maximum error allowed before a DICOM calibration is required.
- Time elapsed since latest compliance check: Shows the backlight runtime since last compliance check.
- Display Function: Shows the current display function.
- Ambient light compensation: Shows the ambient light compensation status.
- Reading Room: Shows the selected reading room.
- **Luminance:** Shows the measured luminance.
- Black luminance: Shows the measured black luminance.

DICOM Calibration Status

- No calibration executed yet: No other information is visible
- Calibration executed: When the calibration is executed, the following extra information is shown: Time elapsed since latest calibration, Display Function, Ambient Light Compensation and Reading Room.

Current DICOM Settings

- Display Function: Shows the current display function.
- · Ambient Light Compensation: Shows the ambient light compensation status.
- Reading room: Shows the selected reading room.

To retrieve the DICOM status report:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Embedded QA menu.
- 3. Select DICOM Status Report to make the information visible on the screen.

4.18.3 DICOM compliance check

About DICOM compliance check

The DICOM compliance check will measure the DICOM curve of your display in different steps. After measurement, the DICOM status report is shown.

To start DICOM compliance check:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Embedded QA menu.
- 3. Select *DICOM Compliance Check* to start the compliance check.



Warning: Pressing a key during the compliance check will abort the check.

4.18.4 DICOM calibration

About DICOM calibration

The DICOM calibration will add a correction to the current DICOM curve to approach the perfect DICOM curve as well as possible.

To start DICOM calibration:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Embedded QA menu.
- 3. Select *DICOM calibration* to start the calibration.



Warning: Pressing a key during calibration will abort the calibration, previous values will be restored.



Note: After calibration, the compliance check will start automatically.

4.18.5 Reset DICOM calibration

About reset DICOM calibration

It is possible to restore the original (factory default) DICOM curve.

To reset the DICOM calibration:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Embedded QA menu.
- 3. Enter the DICOM Preferences submenu.
- 4. Select Reset DICOM Calibration to restore the original (not corrected) DICOM curve.

4.18.6 DICOM error threshold

About DICOM error threshold

The threshold to define the DICOM compliance can be modified in steps of 5% starting from 5 to 30%. When the maximum deviation is not bigger than the selected threshold, the compliance check will be OK.

To set the DICOM error threshold:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Calibration > Embedded QA menu.
- 3. Enter the DICOM Preferences submenu.
- 4. Set Error Threshold as desired and confirm.

4.19 Image scaling

About image scaling

Enabling image scaling will copy each individual pixel to one or more adjacent pixels so that the size of the displayed image will be a multiple of the original image source video input signal.



Image scaling is only possible when the resolution of your display's video input signal is less than or equal to half the maximum resolution of the display.

To enable/disable image scaling:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Image Source menu.
- 3. Enter the Scaling submenu.
- 4. Select Enabled/Disabled as desired and confirm.

4.20 Image source selection

About image source selection

By default, your Coronis Fusion 4MP / 6MP automatically detects the connected image sources and attaches them to the correct side of the screen. You can also manually select the image sources and control on which side of the screen they must be displayed.

To automatically select image sources:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Image Sources menu.
- Enter the Image Source Selection submenu.
- 4. Select the Automatic image source selection mode and confirm.

To manually select image sources:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Image Sources menu.
- 3. Enter the Image Source Selection submenu.
- **4.** Select one of the following image source selection modes and confirm:
 - One Image Source: Allows to select one image source to display.
 - Two Image Sources: Displays DisplayPort IN 1 on the left side and DisplayPort IN 2 on the right side of the screen.
 - **Expert mode:** Allows to select for the left and right side of the screen which image source to display: DisplayPort IN 1, DisplayPort IN 2 or None.

4.21 Grayscale conversion modes



Your Coronis Fusion 4MP / 6MP automatically detects the connected video input signals and applies the correct grayscale conversion settings. Manually selecting a grayscale conversion mode is possible, but then your display's image source selection mode should be set to allow this. Refer to "Image source selection", page 34 to do this.

About grayscale conversion modes

Grayscale conversion modes specify how color generated on the display controller is converted to grayscale in your display.

The available grayscale conversion modes are:

- No conversion
- Use Red Channel: This mode is intended for grayscale displays where gray is sent over the red channel.
- Use Green Channel: This mode is intended for grayscale displays where gray is sent over the green channel
- Use Blue Channel: This mode is intended for grayscale displays where gray is sent over the blue channel.

To manually select a grayscale conversion mode:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Image Sources > Input Settings > DisplayPort 1/2 menu.
- 3. Enter the *Grayscale Conversion* submenu.
- 4. Select one of the available color conversion modes and confirm.

4.22 DisplayPort standard version

About DisplayPort standard version

The Coronis Fusion 4MP / 6MP supports 2 DisplayPort standard versions: DP V1.1 and DP V1.2, the latter providing a higher video bandwidth.

To select the DisplayPort standard version

- 1. Bring up the OSD main menu.
- 2. Navigate to the Configuration > Image Sources > Input Settings > DisplayPort 1/2 menu.
- 3. Enter the Input Interface Standard Version submenu.
- 4. Select one of the available versions and confirm.



To obtain full resolution and full refresh rate, DP V1.2 should be selected and two DisplayPort video input cables must be connected to the display.

4.23 EDID timings

About EDID timings

Following EDID timings are available for your Coronis Fusion 4MP / 6MP:

- Resolution: Allows to manually modify the resolution of the image source video input signal.
- Refresh Rate: Allows to manually select the refresh rate of the image source video input signal depending
 on the maximum refresh rate of the display controller connected to your display.
- Color Depth: Allows to change the color depth to 8 or to 10 bit.

To manually set EDID timings:

- 1. Bring up the OSD main menu.
- Navigate to the Configuration > Image Sources > Input Settings > DisplayPort 1/2 menu.
- 3. Enter the EDID submenu.
- 4. Select one of the available settings and confirm.

4.24 Display info

About display info

Your display serial number, native resolution, firmware versions, etc. are available in a dedicated submenu of the OSD menu.

To retrieve info about your display:

- 1. Bring up the OSD main menu.
- Navigate to the About this Display menu to make the information visible on the screen.

4.25 Display status

About display status

The Status submenu of the OSD menu provides info on the current status of your display (runtimes, temperatures, etc.), the status of the connected image sources (video encoding mode, timings, etc.) and the current calibration status of your display (display function, luminance, ALC, etc.).

To retrieve the status of your display:

- 1. Bring up the OSD main menu.
- 2. Navigate to the Status menu.
- 3. Enter the Display, Image Sources or Calibration submenu as desired.

4.26 SteadyColor™

About SteadyColor

Barco's SteadyColor technology was created to achieve consistency and perceptual linearity in the display of color images. With multiple internal sensors, the display parameters are constantly monitored and adjusted to ensure that the perceptual difference between colors is proportional with their Digital Driving Level (DDL) difference.

To enable SteadyColor

SteadyColor is controlled via Barco's QAWeb Enterprise software (or the older MediCal QAWeb).

To register to QAWeb Enterprise (or to install the older MediCal QAWeb), see "QAWeb registration", page 15. The QAWeb Enterprise user guide describes how to enable and configure SteadyColor on your display.

4.27 Maximum luminance demo

About maximum luminance demo

The maximum luminance demo sets the luminance of the LCD panel to its maximum value for 60 seconds, or until the demo is manually cancelled. The actually measured luminance is shown on-screen.



While activated, the maximum luminance demo disables the display's uniformity correction and sets the *Color Preset* to *Native White*. When the maximum luminance demo is cancelled, the original settings are restored.

To activate the maximum luminance demo

- 1. Bring up the OSD main menu.
- 2. Navigate to Enable Service mode.
- 3. Enter the keycode: 9-0-0-1.
- 4. Enter the Service menu.
- Navigate to the Maximum Luminance demo submenu and confirm. The maximum luminance demo is activated.
- **6.** Press the jog dial to manually cancel the maximum luminance demo, or wait for 60 seconds after which the demo is automatically cancelled.

Cleaning the display

5

5.1 Cleaning instructions



CAUTION: Read and follow all instructions on the label of the cleaning product.



CAUTION: Take care not to damage or scratch the front glass or LCD. Do not use abrasive cleaning material (e.g., abrasive sponge or cloth) for cleaning the protective cover of the display. Be careful with rings or other jewelry and do not apply excessive pressure on the front glass or LCD.

To clean the display

Apply a cleaning/disinfecting product to a soft lint-free cloth, such as a microfiber or gauze and rub the display surface thoroughly. In order to be effective, all surfaces must be cleaned for a certain amount of time (ranging from 30 seconds to 2 minutes).

Use a cleaning/disinfecting product that is alcohol-, alkali-, water- or chlorine-based. Common examples are:

- Isopropanol 100%
- Ethanol 70%
- 0.5% Chlorehexidine in 70% ethanol/isopropanol
- Ortho-Phthalaldehyde (OPA) 0.55%
- · Haemo-sol, 1% in water
- · 250 ppm Chlorine solution
- 1.0% lodine in 70% ethanol
- 1.6% aqueous ammonia
- "Green soap" (USP)
- 0.5% Chlorehexidine in 70% isopropyl alcohol
- · Products similar to optical cleaning liquid
- Bacillol AF
- Flux
- Sodium hypochlorite 10%

When selecting an alternative cleaning/disinfecting product, it is recommended to always identify the active ingredients. In case of doubt about a certain cleaning product, use plain water.

Do not use any of the following products:

- Alcohol in concentrations > 70%
- Strong alkalis lye, strong solvents
- Acetone
- Toluene
- Acids
- · Detergents containing fluoride
- Detergents containing ammonia
- · Detergents containing abrasives
- Steel wool
- · Sponge with abrasives
- Steel blades
- Cloths with steel thread
- Paper-based cloths (e.g. paper towels, facial tissues, toilet paper)



CAUTION: Do not apply or spray liquid directly to the display as excess liquid may cause damage to internal electronics. Instead, apply the liquid to a cleaning cloth.

Repackaging instructions

6.1 Repackaging instructions

To repack your display

1. Put the display in the lowest position and lock the stand locking mechanism.

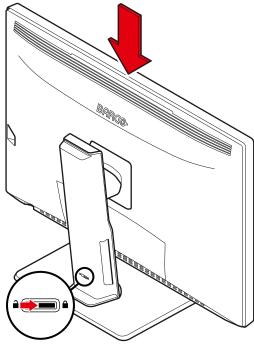


Image 6-1

2. Place the display in the bottom buffer on a stable surface. **Caution:** It takes 2 persons to safely execute this action.

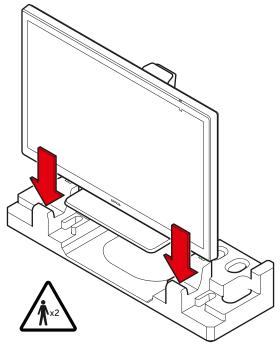


Image 6–2

3. Insert the rear buffer in the bottom buffer.

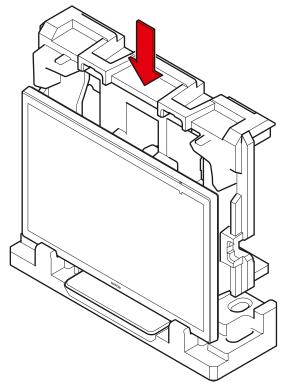


Image 6–3

4. Position the front buffer.

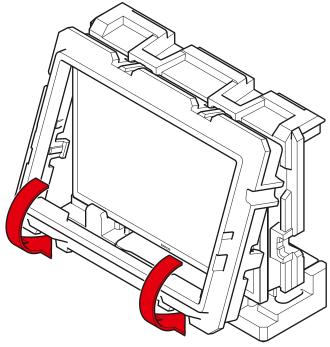


Image 6-4

5. Slide the accessory box(es) and all cables in the dedicated cavities.

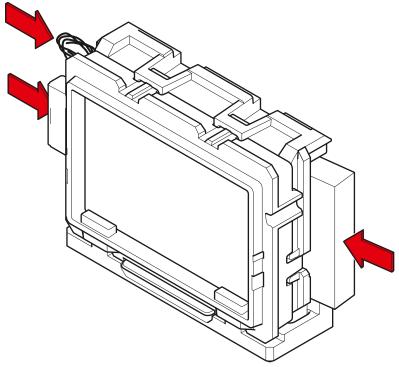


Image 6–5

6. Slide the display and the accessories in the box.

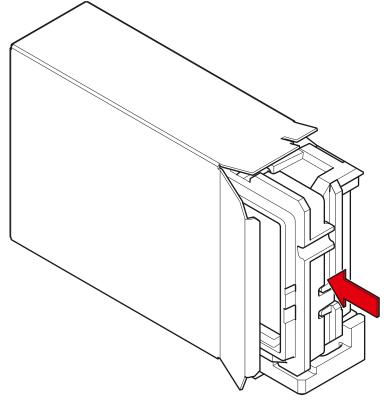


Image 6–6

7. Close and seal the box.

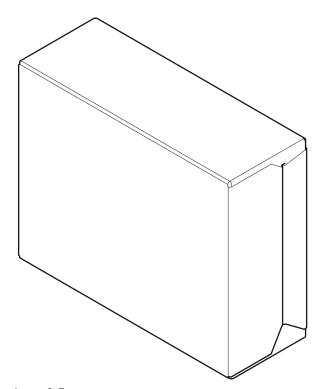


Image 6-7

Repackaging instructions

Important information

7.1 Safety information

General recommendations

Read the safety and operating instructions before operating the device.

Retain safety and operating instructions for future reference.

Adhere to all warnings on the device and in the operating instructions manual.

Follow all instructions for operation and use.

Electrical shock or fire hazard

To prevent electric shock or fire hazard, do not remove cover.

No serviceable parts inside. Refer servicing to qualified personnel.

Do not expose this apparatus to rain or moisture.

Modifications to the unit

Do not modify this equipment without authorization of the manufacturer.

Type of protection (Electrical)

Equipment with internal power supply: Class I equipment

Degree of safety (flammable anesthetic mixture)

Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

Non-patient care equipment

Equipment primarily for use in a health care facility that is intended for use where contact with a patient is unlikely (no applied part).

The equipment shall not be used with life support equipment.

The user should not touch the equipment, nor its signal input ports (SIP)/signal output ports (SOP) and the patient at the same time.

Child safety

Equipment not suitable for use in locations where children are likely to be present.

Power connection – Equipment with internal power supply

- This equipment must be earthed.
- Power requirements: The equipment must be powered by the AC mains voltage.
- The equipment should be installed near an easily accessible outlet.
- The equipment is intended for continuous operation.

Transient over-voltage

If the device is not used for a long time, disconnect it from the AC inlet to avoid damage by transient overvoltage.

To fully disengage the power to the device, please disconnect the power cord from the AC inlet.

High magnetic environment

- The device shall not be used in the high magnetic environment of an MRI scanner.
- The installer shall assess the magnetic environment before installation or use of the device.

Power cords

- Do not overload wall outlets and extension cords as this may result in fire or electric shock.
- Mains lead protection (U.S.: Power cord): Power cords should be routed so that they are not likely to be
 walked upon or pinched by items placed upon or against them, paying particular attention to cords at plugs
 and receptacles.
- Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.
- Korea: Use KC certified products; Plug: 250 V~, 16 A; Power cord: 60227 IEC 53, 3G0.75 mm² / 60227 IEC 53, 3G1.0 mm²; Connector: 250 V~, 10 A

Water and moisture

Never expose the device to rain or moisture.

Never use the device near water - e.g. near a bathtub, washbasin, swimming pool, kitchen sink, laundry tub or in a wet basement.

Ventilation

Do not cover or block any ventilation openings in the cover of the set. When installing the device in a cupboard or another enclosed location, heed the necessary space between the set and the sides of the cupboard.

Installation

Place the device on a flat, solid and stable surface that can support the weight of at least 3 devices. If you use an unstable cart or stand, the device may fall, causing serious injury to a child or adult, and serious damage to the device.

Malfunctions

Disconnect the equipment's power cord from the AC inlet and refer servicing to qualified service technicians under the following conditions:

- If the power cord or plug is damaged or frayed.
- If liquid has been spilled into the equipment.
- If the equipment has been exposed to rain or water.
- If the equipment does not operate normally when the operating instructions are followed. Adjust only those
 controls that are covered by the operating instructions since improper adjustment of other controls may
 result in damage and will often require extensive work by a qualified technician to restore the product to
 normal operation.
- If the equipment has been dropped or the cabinet has been damaged.
- If the product exhibits a distinct change in performance, indicating a need for service.

Medical electrical equipment

Medical - General medical equipment. As to electrical shock, fire and mechanical hazards only. In accordance with: AAMI ES60601-1 (2005) + AMD 1 (2012) + AMD 2 (2021) and CAN/CSA-C22.2 No. 60601-1:14 (Reaffirmed 2022).

National Scandinavian Deviations for CL. 1.7.2

Finland: "Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan"

Norway: "Apparatet må tilkoples jordet stikkontakt" Sweden: "Apparaten skall anslutas till jordat uttag"

7.2 Cybersecurity

Security objectives

The Coronis Fusion 4MP / 6MP will be used for displaying and viewing digital images. Therefore, ensuring the availability of the digital images has been identified as the primary security objective of this product.

Nevertheless, the availability, integrity, and confidentiality of information processed by the product relies on the non-mandatory security recommendations described below.

The lack of storage or processing of patient or personal information, combined with the limited (network) connectivity, results in the Coronis Fusion 4MP / 6MP entailing a low cybersecurity risk profile.

Security recommendations

The security measures listed below should be considered as a non-exhaustive list of possible security controls for the operating environment. The operating environment must not hinder the application of security measures on the product or force the device to operate in a lower security setting.

The operator shall maintain the necessary state-of-the-art policies, processes, standards and other security controls to incorporate, support and protect the product. This shall include the application of risk management (e.g. by implementing relevant standards).

The operating environment should provide physical security via security measures such as:

- Regulated and authenticated physical access enforced via suitable technical measures (e.g. badges)
- · Physical security policy defining roles and access rights, including for physical access to the product
- Use of segregated, secure areas with appropriate access controls

The operating environment should include appropriate security controls such as:

- User access management (credentials for accessing software applications or devices, user access policy, etc.)
- · Antivirus / anti-malware software
- Firewall
- · Application whitelisting / system hardening
- · Exclusive use of genuine software and ban of all illegitimate software and applications
- Session management measures (e.g. session timeouts)

The operating environment should provide control and security of network traffic via appropriate measures, such as:

- Network segmentation & network access control
- Traffic filtering
- · Encrypted communication

Specifically for workstations connected to the product, appropriate security measures include:

- · Operating system hardening and application whitelisting
- · Use of strong passwords
- Install only software necessary for the intended use of the operating environment.

To ensure that the security posture of the operating environment and of the product itself remain at a suitable level, appropriate provisions regarding patch management should be in place, such as:

- · The operating environment should support patching without compromising interoperability/compatibility
- The operator should have appropriate patch management processes to ensure that security patches for the product are deployed in a timely manner
- The operator should have appropriate patch management processes to ensure that the operating environment (e.g. operating systems, applications) is up-to-date in terms of security

7.3 Environmental information

Disposal Information



Waste Electrical and Electronic Equipment (WEEE)

This symbol on the product indicates that, under the European Directive 2012/19/EU governing waste from electrical and electronic equipment, this product must not be disposed of with other municipal waste. Please dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information about recycling of this product, please contact your local city office or your municipal waste disposal service. For details, please visit the Barco website at: https://www.barco.com/about/sustainability/waste-of-electronic-equipment-customers

Turkey RoHS compliance



Türkiye Cumhuriyeti: AEEE Yönetmeliğine Uygundur.

[Republic of Turkey: In conformity with the WEEE Regulation]

中国大陆 RoHS

Chinese Mainland RoHS

根据中国大陆《电器电子产品有害物质限制使用管理办法》(也称为中国大陆RoHS),以下部分列出了Barco产品中可能包含的有毒和/或有害物质的名称和含量。中国大陆RoHS指令包含在中国信息产业部MCV标准:"电子信息产品中有毒物质的限量要求"中。

According to the "Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products" (Also called RoHS of Chinese Mainland), the table below lists the names and contents of toxic and/or hazardous substances that Barco's product may contain. The RoHS of Chinese Mainland is included in the MCV standard of the Ministry of Information Industry of China, in the section "Limit Requirements of toxic substances in Electronic Information Products".

零件项目(名称) 有毒有害物质或元素							
Component name	Hazard	Hazardous substances and elements					
	铅	汞	镉	六 价铬	多溴联苯	多溴二苯醚	
	Pb	Hg	Cd	Cr6+	PBB	PBDE	
印制电路配件	Х	0	0	0	0	0	
Printed Circuit Assemblies							
	X	0	0	0	0	0	
LCD panel							
外接电(线)缆	Х	0	0	0	0	0	
External Cables							
内部线路	0	0	0	0	0	0	
Internal wiring							
金属外壳	0	0	0	0	0	0	
Metal enclosure							
塑胶外壳	0	0	0	0	0	0	
Plastic enclosure							
散热片(器)	0	0	0	0	0	0	
Heatsinks							
风扇	0	0	0	0	0	0	
Fan							
电源供应器	Х	0	0	0	0	0	

零件项目(名称)	有毒有害物质或元素					
Component name	Hazard	Hazardous substances and elements				
	铅	汞	镉	六 价铬	多溴联苯	多溴二苯醚
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Power Supply Unit						
文件说明书	0	0	0	0	0	0
Paper Manuals						
光盘说明书	0	0	0	0	0	0
CD manual						

本表格依据SJ/T 11364的规定编制

This table is prepared in accordance with the provisions of SJ/T 11364.

- 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 GB/T 26572 标准规定的限量要求以下.
- O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in GB/T 26572.
- 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 GB/T 26572 标准规定的限量要求.
- 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 GB/T 26572.

在中国大陆销售的相应电子信息产品(EIP)都必须遵照中国大陆《电子电气产品有害物质限制使用标识要求》标准贴上环保使用期限(EFUP)标签。Barco产品所采用的EFUP标签(请参阅实例,徽标内部的编号使用于指定产品)基于中国大陆的《电子信息产品环保使用期限通则》标准。

All Electronic Information Products (EIP) that are sold within Chinese Mainland must comply with the "Marking for the restriction of the use of hazardous substances in electrical and electronic product" of Chinese Mainland, marked with the Environmental Friendly Use Period (EFUP) logo. The number inside the EFUP logo that Barco uses (please refer to the photo) is based on the "General guidelines of environment-friendly use period of electronic information products" of Chinese Mainland.



中国RoHS自我声明符合性标志 / China RoHS – SDoC mark

本产品符合《电器电子产品有害物质限制使用管理办法》和《电器电子产品有害物质限制使用达标管理目录》的要求。

This product meets the requirements of the "Management Rule on the Use Restriction of Hazardous Substances in Electrical and Electronic Products" and the "Management Catalogue for the Use Restriction of Hazardous Substances in Electrical and Electronic Products".



绿色自我声明符合性标志可参见电子档文件

The green SDoC mark is visible in the digital version of this document.

7.4 Regulatory compliance information

Indications for use

The display is intended to be used for displaying and viewing digital images (excluding digital mammography) for review and analysis by trained medical practitioners.

Intended usage environment

- The display is not in contact with patients.
- The display is not in the same environment as the patient.

The display is intended to be used in a dedicated diagnostic reading room.

Caution (USA): Federal law restricts this device to sale by or on the order of a physician. (Details & exemptions are in the Code of Federal Regulations Title 21, 801 Part D).

Contra-indications

The device is not intended for digital mammography.

Intended users

Barco diagnostic displays are intended to be used for primary diagnosis by trained medical practitioners. The device is initially set up by trained integrators or medical IT staff.

Notice to the user and/or patient

Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

Factory addresses

- Barco NV, President Kennedypark 35, 8500 Kortrijk, Belgium
- Fimi S.r.I., Via Saul Banfi 1, 21047 Saronno, VA, Italy
- 巴可 (苏州) 医疗科技有限公司, 苏州工业园区苏桐路111号 Barco (Suzhou) Healthcare Technology Co., Ltd., No.111, Sutong Road, Suzhou Industrial Park, 215021 Suzhou China

Manufacturing country

The manufacturing country of the product is indicated on the product label ("Made in ...").

Importers contact information

To find your local importer, contact one of Barco's regional offices via the contact information provided on our website (www.barco.com).

FCC class B

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC responsible: Barco Inc., 3059 Premiere Parkway Suite 400, 30097 Duluth GA, United States, Tel: +1 678 475 8000

Canadian notice

CAN ICES-001(B) / NMB-001(B)

Brazilian local representative

Barco Ltda, Av. Ibirapuera, 2332 - Andar 8 - Bloco 2 - Conj 82, Bairro:Ibirapuera, Distrito:Moema, 4028-002, São Paulo, Brasil

7.5 EMC notice

General information

This device is for use in professional healthcare facility environments only.

With the installation of the device, use only the delivered external cables and power supply or a spare part provided by the legal manufacturer. Using another can result in a decrease of the immunity level of the device.



WARNING: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.



WARNING: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.



WARNING: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Coronis Fusion 4MP / 6MP, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Electromagnetic emissions

Emissions test	Compliance
RF emissions (CISPR 11)	Group 1
RF emissions (CISPR 11)	Class B
Harmonic emissions (IEC 61000-3-2)	Class D
Voltage fluctuations/ flicker emissions (IEC 61000-3-3)	Complies

This Coronis Fusion 4MP / 6MP complies with appropriate medical EMC standards on emissions to, and interference from surrounding equipment. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Interference can be determined by turning the equipment off and on.

If this equipment does cause harmful interference to, or suffer from harmful interference of, surrounding equipment, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna or equipment.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced technician for help.

Electromagnetic immunity

Test	60601-1-2 Test level	Compliance level according TR 60601-4-2
Electrostatic discharge Immunity	± 8 kV contact	± 4 kV contact
(IEC 61000-4-2)	± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air	± 2 kV, ± 4 kV, ± 8 kV air
Electrical fast transient/burst	± 2 kV/100kHz (power)	±2kV (5kHz or 100kHz power)
Immunity (IEC 61000-4-4)	± 1 kV/100kHz (signal)	±0.5kV (5kHz or 100kHz signal)
	All cables >3m	All cables >3m

Test	60601-1-2 Test level	Compliance level according TR 60601-4-2
Surge Immunity (IEC61000-4-5)	±0,5kV, ±1kV line-to-line	±0,5kV, ±1kV line-to-line
	±0,5kV, ±1kV, 2kV line-to-ground	±0,5kV, ±1kV, 2kV line-to-ground
Voltage dips, short interruptions and voltage Variations Immunity (IEC 61000-4-11)	0% UT 0,5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT 1 cycle	0% UT 0,5 cycle at 0°, 180° 70% UT 25/30 cycles at 0°
(70% UT 25/30 cycles at 0° 0% UT 250/300 cycles	0% UT 250/300
Power frequency magnetic field Immunity (IEC 61000-4-8)	30 A/m 50Hz or 60Hz	3 A/m 50Hz or 60Hz
Immunity to conducted	3V/ 150kHz-80MHz	3V/ 150kHz-80MHz
disturbances induced by RF fields	6V in ISM bands	(ISM bands N.A.)
(IEC 61000-4-6)	80% AM 1kHz	80% AM 1kHz
	All cables >1m	All cables >3m
Radiated RF electromagnetic field	3V/m	3V/m
Immunity	80MHz-2,7GHz	80MHz-2,7GHz
(IEC 61000-4-3)	80% AM 1kHz	80% AM 1kHz
Immunity to proximity fields from	385 MHz 18Hz PM 27V/m	385 MHz 18Hz PM 6V/m
RF wireless communications equipment (IEC 61000-4-3)	450 MHz 1kHz FM 28V/m	450 MHz 1kHz FM 9V/m
	710 MHz 217Hz PM 9V/m	710 MHz 217Hz PM 3V/m
	745 MHz 217Hz PM 9V/m	745 MHz 217Hz PM 3V/m
	780 MHz 217Hz PM 9V/m	780 MHz 217Hz PM 3V/m
	810 MHz 18Hz PM 28V/m	810 MHz 18Hz PM 9V/m
	870 MHz 18Hz PM 28V/m	870 MHz 18Hz PM 9V/m
	930 MHz 18Hz PM 28V/m	930 MHz 18Hz PM 9V/m
	1720 MHz 217Hz PM 28V/m	1720 MHz 217Hz PM 9V/m
	1845 MHz 217Hz PM 28V/m	1845 MHz 217Hz PM 9V/m
	1970 MHz 217Hz PM 28V/m	1970 MHz 217Hz PM 9V/m
	2450 MHz 217Hz PM 28V/m	2450 MHz 217Hz PM 9V/m
	5240 MHz 217Hz PM 9V/m	5240 MHz 217Hz PM 6V/m
	5500 MHz 217Hz PM 9V/m	5500 MHz 217Hz PM 6V/m
	5785 MHz 217Hz PM 9V/m	5785 MHz 217Hz PM 6V/m

Immunity to RF wireless communications equipment

Test frequency (MHz)	Band (MHz)	Service	Modulation	Maximum power (W)	Distance (m)	Immunity test level (V/ m)
385	380 – 390	TETRA 400	Pulse modulation 18 Hz	1.8	0.3	27
450	430 – 470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.3	28
710	704 – 787	LTE Band	Pulse	0.2	0.3	9
745		13, 17	modulation 217 Hz			
780						
810	800 – 960	GSM 800/	Pulse	2	0.3	28
870		900, TETRA 800, iDEN	modulation 18 Hz			

Test frequency (MHz)	Band (MHz)	Service	Modulation	Maximum power (W)	Distance (m)	Immunity test level (V/ m)
930		820, CDMA 850, LTE Band 5				
1720	1700 – 1990	GSM 1800,	Pulse	2	0.3	28
1845		CDMA 1900, GSM 1900,	GDMA 1900, GSM 1900,			
1970		DECT, LTE Band 1/3/4/ 25, UMTS				
2450	2400 – 2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28
5240	5100 – 5800	5100 – 5800 W LAN 802.11 a/n	Pulse	0.2	0.2 0.3	9
5500			modulation 217 Hz			
5785						

7.6 Explanation of symbols

Symbols on the device

On the device or power supply, you may find the following symbols (nonrestrictive list):

C € 0123	Indicates the device meets the requirements of the applicable EC directives/ regulations.
F©	Indicates compliance with Part 15 of the FCC rules (Class A or Class B).
	Indicates the device is approved according to the UL regulations
C UL US	Indicates the device is approved according to the UL regulations for Canada and US
CERTIFIED SAFETY US-CA E352529	Indicates the device is approved according to the UL regulations for Canada and US
D	Indicates the device is approved according to the UL Demko regulations.

	Indicates the device is approved according to the CCC regulations.
VEI	Indicates the device is approved according to the VCCI regulations.
	Indicates the device is approved according to the KC regulations.
9	Indicates the device is approved according to the BSMI regulations.
PS	Indicates the device is approved according to the PSE regulations.
	Indicates the device is approved according to the RCM regulations.
EHE	Indicates the device is approved according to the EAC regulations.
$R_{ m only}$	Caution: Federal law (United Stated of America) restricts this device to sale by or on the order of a licensed healthcare practitioner.
IS 13252 (Part 1) IEC 60950-1 R-XXXXXXXX www.bis.gov.in	Indicates the device is approved according to the BIS regulations.
INMETRO	Indicates the device is approved according to the INMETRO regulations.
•	Indicates the USB connectors on the device.
D	Indicates the DisplayPort connectors on the device.
	Indicates the legal manufacturer.
	Indicates the manufacturing date.

	Indicates the entity importing the medical device into the locale.
хх	Indicates the temperature limitations ² for the device to safely operate within specs.
MD	Indicates that the device is a Medical Device.
SN	Indicates the device Serial Number.
REF	Indicates the device part number or catalogue number.
UDI	Indicates the Unique Device Identifier.
EC REP	Indicates the Authorised Representative for the European Union.
CH REP	Indicates the Authorised Representative for Switzerland.
4	Warning: dangerous voltage
<u></u>	Caution
i	Consult the Instructions For Use.
elFU indicator	Consult the Instruction For Use on the website address that is provided as eIFU indicator.
	Indicates this device must not be thrown in the trash but must be recycled, according to the European WEEE (Waste Electrical and Electronic Equipment) directive.
	Indicates Direct Current (DC).
\sim	Indicates Alternating Current (AC).
(h)	Stand-by

^{2.} Values for xx and yy can be found in the technical specifications paragraph.

	Equipotentiality
\Diamond	
or	Protective earth (ground)

Symbols on the box

On the box of the device, you may find the following symbols (nonrestrictive list):

T	Indicates a device that can be broken or damaged if not handled carefully when being stored.
*	Indicates a device that needs to be protected from moisture when being stored.
<u> </u>	Indicates the storage direction of the box. The box must be transported, handled and stored in such a way that the arrows always point upwards.
n or L	Indicates the maximum number of identical boxes which may be stacked on each other, where "n" is the limiting number.
	Indicates the weight of the box and that it should be carried with two persons.
*	Indicates that the box should not be cut with a knife, a cutter or any other sharp object.
- xx*C	Indicates the temperature limits ³ to which the device can be safely exposed when being stored.
	Indicates the range ³ of humidity to which the device can be safely exposed when being stored.
xx kPa	Indicates the range ³ of atmospheric pressure to which the device can be safely exposed when being stored.

7.7 Open source license information

Open source license information

This product contains software components released under an Open Source license. You acknowledge living up to the conditions of each separate Open Source Software license.

A list of the Open Source Software components used is available in the applicable EULA, through the "My Barco" section of the Barco website or through other (online) means.

^{3.} Values for xx and yy can be found in the technical specifications paragraph.

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With respect to GPL, LGPL or similar licenses with regard to corresponding source code access and automatic license terms applicability:

- You acknowledge living up to the conditions of each such specific applicable Open Source Software
 license. You are responsible for your own additions, changes or modifications without any recourse or
 claim towards Barco whatsoever. You further acknowledge that any such additions, changes or
 modifications may impair the ability of Barco at Barco's sole discretion to continue to provide service,
 warranties, software updates, fixes, maintenance, access or such similar abilities, without any recourse or
 claim towards Barco whatsoever.
- Barco offers to provide the corresponding source code, and shall make the corresponding source code
 available to you via email or download link, except where the applicable license entitles you to require
 Barco to provide you the corresponding source code on a tangible medium, in which case Barco will
 charge you for the actual costs of performing such distribution, such as the cost of media, shipping and
 handling. You may exercise this option upon written request to Barco N.V, attn. legal department,
 Beneluxpark 21, 8500 Kortrijk (Belgium). This offer is valid for a period of three (3) years from the date of
 the distribution of this product by Barco.

7.8 Technical specifications

MDCC-4430

Screen technology	IPS		
Active screen size (diagonal)	772 mm (30.4")		
Active screen size (H x V)	655 x 410 mm (25.8 x 16.1")		
Aspect ratio (H:V)	16:10		
Resolution	Native 4MP (2560 x 1600 pixels) Configurable to 2 x 2MP+ (1280 x 1600 pixels) Configurable to 2 x 2MP (1200 x 1600 pixels)		
Pixel pitch	0.256 mm		
Color imaging	Yes		
Gray imaging	Yes		
Bit depth	30 bit		
Viewing angle (H, V)	178°		
Uniformity correction	Color PPU		
SteadyColor	Yes, when used as system with MXRT-x600 display controller or later, using Barco MXRT driver 10.171.1.0 or later and with QAWeb Enterprise 2.2 or later.		
Ambient light presets	Yes, reading room selection		

Ambient light sensor	Yes		
Front sensor	Yes, I-Guard (Coronis)		
Maximum luminance (panel typical)	1050 cd/m ²		
DICOM calibrated luminance	600 cd/m ²		
Contrast ratio (panel typical)	2000:1		
Response time ((Tr + Tf)/2) (typical)	18 ms		
Housing color	Black / White		
Video input signals	2x DisplayPort 1.2		
Video output signals	1x DisplayPort (MST)		
USB ports	1x USB 2.0 upstream (endpoint) 2x USB 2.0 downstream 1x USB 2.0 downstream with high-power charging functionality		
Power rating	100-240 Vac, 50/60 Hz, 3.6-1.6 A		
Power consumption	75 W (nominal) @ calibrated luminance of 600 cd/m² < 0.5 W (hibernate) < 0.5 W (standby)		
Dimensions with stand (W x H x D)	714 x 524~624 x 240 mm		
Dimensions w/o stand (W x H x D)	714 x 478 x 74 mm		
Dimensions packaged (W x H x D)	800 x 650 x 295 mm		
Net weight with stand	MDCC-4430: 17.7 kg MDCC-4430 NC: 16.3 kg		
Net weight w/o stand	MDCC-4430: 13.1 kg MDCC-4430 NC: 11.7 kg		
Net weight packaged	MDCC-4430: 22.3 kg (without optional accessories) MDCC-4430 NC: 20.9 kg (without optional accessories)		
Tilt	-5° to +25°		
Swivel	-30° to +30°		
Pivot	N/A		
Height adjustment range	100 mm		
Mounting standard	VESA (100 mm)		
Screen protection	MDCC-4430: Protective, anti-reflective glass cover MDCC-4430 NC: No glass cover		
Recommended modalities	All digital images, except digital mammography		
Certifications	FDA 510(k) K191845 CE0123 (Medical Device) CCC (China)		

INMETRO (Brazil - Product numbers K9301626B(1X), K9301628B(1X) KC (Korea)		T		
Documentation disc System sheet Video cables Mains cables USB cable Optional accessories Graphics board Touch pad QA web Warranty 5 years, including 40000 hrs backlight warranty Operating temperature 0 °C to 35 °C (10 °C to 30 °C within specs) Storage temperature -20 °C to 60 °C Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)		KC (Korea) BIS (India) EAC (Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan) Safety specific: IEC 60950-1:2005 + A1:2009+A2:2013 EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + A2:2013 IEC 62368-1:2018 EN IEC 62368-1:2020 + A11:2020 IEC 60601-1:2005 + A1:2012+A2:2020 EN 60601-1:2006 + A1:2013 + A12:2014+A2:2021 AAMI ES 60601-1:2005 + A1:2012+A2:2021 CAN/CSA C22.2 No. 60601-1:2014 (Reaffirmed 2022) EMI specific: IEC 60601-1-2:2014+A1:2020 (ed.4.1) EN 60601-1-2:2015+A1:2021 (ed.4.1) FCC part 15 Class B ICES-001 Level B VCCI (Japan) Environmental: EU RoHS China RoHS REACH Canada Health WEEE		
Touch pad QA software QAWeb Warranty 5 years, including 40000 hrs backlight warranty Operating temperature 0 °C to 35 °C (10 °C to 30 °C within specs) Storage temperature -20 °C to 60 °C Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)	Supplied accessories	Documentation disc System sheet Video cables Mains cables		
Touch pad QA software QAWeb Warranty 5 years, including 40000 hrs backlight warranty Operating temperature 0 °C to 35 °C (10 °C to 30 °C within specs) Storage temperature -20 °C to 60 °C Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)	Optional accessories	Graphics board		
Warranty 5 years, including 40000 hrs backlight warranty Operating temperature 0 °C to 35 °C (10 °C to 30 °C within specs) Storage temperature -20 °C to 60 °C Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)				
Operating temperature 0 °C to 35 °C (10 °C to 30 °C within specs) Storage temperature -20 °C to 60 °C Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)	QA software	QAWeb		
Storage temperature -20 °C to 60 °C Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)	Warranty	5 years, including 40000 hrs backlight warranty		
Operating humidity 20% to 85% (non-condensing) Storage humidity 20% to 85% (non-condensing)	Operating temperature	0 °C to 35 °C (10 °C to 30 °C within specs)		
Storage humidity 20% to 85% (non-condensing)	Storage temperature	-20 °C to 60 °C		
	Operating humidity	20% to 85% (non-condensing)		
Operating pressure 70 kPa minimum	Storage humidity	20% to 85% (non-condensing)		
70 Ki a minimum	Operating pressure	70 kPa minimum		
Storage pressure 50 to 106 kPa	Storage pressure	50 to 106 kPa		

MDCC-6530

	,				
Screen technology	IPS				
Active screen size (diagonal)	772 mm (30.4")				
Active screen size (H x V)	654 x 409 mm (25.8 x 16.1")				
Aspect ratio (H:V)	16:10				
Resolution	Native 6MP (3280 x 2048 pixels) Configurable to 2 x 3MP+ (1640 x 2048 pixels) Configurable to 2 x 3MP (1536 x 2048 pixels)				
Pixel pitch	0.1995 mm				
Color imaging	Yes				
Gray imaging	Yes				
Bit depth	30 bit				
Viewing angle (H, V)	178°				
Uniformity correction	Color PPU				
SteadyColor	Yes, when used as system with MXRT-x600 display controller or later, using Barco MXRT driver 10.171.1.0 or later and with QAWeb Enterprise 2.2 or later.				
Ambient light presets	Yes, reading room selection				
Ambient light sensor	Yes				
Front sensor	Yes, I-Guard				
Maximum luminance (panel typical)	1050 cd/m²				
DICOM calibrated luminance	600 cd/m²				
Contrast ratio (panel typical)	2000:1				
Response time ((Tr + Tf)/2) (typical)	18 ms				
Housing color	Black / White				
Video input signals	2x DisplayPort 1.2				
Video output signals	1x DisplayPort (MST)				
USB ports	1x USB 2.0 upstream (endpoint) 2x USB 2.0 downstream 1x USB 2.0 downstream with high-power charging functionality				
Power rating	100-240 Vac, 50/60 Hz, 3.6-1.6 A				
Power consumption	80 W (nominal) @ calibrated luminance of 600 cd/m² < 0.5 W (hibernate) < 0.5 W (standby)				
Dimensions with stand (W x H x D)	714 x 524~624 x 240 mm				

Dimensions w/o stand (W x H x D)	714 x 478 x 74 mm			
Dimensions packaged (W x H x D)	800 x 650 x 295 mm			
Net weight with stand	MDCC-6530:17.7 kg MDCC-6530 NC: 16.3 kg			
Net weight w/o stand	MDCC-6530: 13.1 kg MDCC-6530 NC: 11.7 kg			
Net weight packaged	MDCC-6530: 22.3 kg (without optional accessories) MDCC-6530 NC: 20.9 kg (without optional accessories)			
Tilt	-5° to +25°			
Swivel	-30° to +30°			
Pivot	N/A			
Height adjustment range	100 mm			
Mounting standard	VESA (100 mm)			
Screen protection	MDCC-6530: Protective, anti-reflective glass cover MDCC-6530 NC: No glass cover			
Recommended modalities	All digital images, except digital mammography			
Certifications	FDA 510(k) K191845 CE0123 (Medical Device) CCC (China) INMETRO (Brazil - Prodcut numbers K9301636B(1X), K9301638B(1X) KC (Korea) BIS (India) EAC (Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan) Safety specific: IEC 60950-1:2005 + A1:2009+A2:2013 EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + A2:2013 IEC 62368-1:2018 EN IEC 62368-1:2020 + A11:2020 IEC 60601-1:2005+A1:2012+A2:2020 EN 60601-1:2005+A1:2012+A2:2020 EN 60601-1:2005 + A1:2013 + A12:2014+A2:2021 AAMI ES 60601-1:2005 + A1:2012+A2:2021 CAN/CSA C22.2 No. 60601-1:2014 (Reaffirmed 2022) EMI specific: IEC 60601-1-2:2014+A1:2020 (ed.4.1) EN 60601-1-2:2015+A1:2021 (ed.4.1) FCC part 15 Class B ICES-001 Level B VCCI (Japan) Environmental: EU RoHS China RoHS REACH Canada Health WEEE			

	Packaging Directive		
Supplied accessories	User guide Documentation disc System sheet Video cables Mains cables USB cable		
Optional accessories	Graphics board Touch pad		
QA software	QAWeb		
Warranty	5 years, including 40000 hrs backlight warranty		
Operating temperature	0 °C to 35 °C (10 °C to 30 °C within specs)		
Storage temperature	-20 °C to 60 °C		
Operating humidity	20% to 85% (non-condensing)		
Storage humidity	20% to 85% (non-condensing)		
Operating pressure	70 kPa minimum		
Storage pressure	50 to 106 kPa		

Important information







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