ROSS

CX PANEL

Hardware Setup Guide

Version 1.5

Thank You for Choosing Ross

You've made a great choice. We expect you will be very happy with your purchase of Ross Technology.

Our mission is to:

1. Provide a Superior Customer Experience
   - offer the best product quality and support
2. Make Cool Practical Technology
   - develop great products that customers love

Ross has become well known for the Ross Video Code of Ethics. It guides our interactions and empowers our employees. I hope you enjoy reading it below.

If anything at all with your Ross experience does not live up to your expectations be sure to reach out to us at *solutions@rossvideo.com*.

David Ross
CEO, Ross Video
dross@rossvideo.com

Ross Video Code of Ethics

Any company is the sum total of the people that make things happen. At Ross, our employees are a special group. Our employees truly care about doing a great job and delivering a high quality customer experience every day. This code of ethics hangs on the wall of all Ross Video locations to guide our behavior:

1. We will always act in our customers' best interest.
2. We will do our best to understand our customers' requirements.
3. We will not ship crap.
4. We will be great to work with.
5. We will do something extra for our customers, as an apology, when something big goes wrong and it's our fault.
6. We will keep our promises.
7. We will treat the competition with respect.
8. We will cooperate with and help other friendly companies.
9. We will go above and beyond in times of crisis. *If there's no one to authorize the required action in times of company or customer crisis - do what you know in your heart is right. (You may rent helicopters if necessary.)*

CX Panel · Hardware Setup Guide

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- Release Date: December 11, 2025. Printed in Canada.
- Software Issue: **1.5**

The information contained in this Guide is subject to change without notice or obligation.

Copyright

Patents

Patent numbers US 7,034,886; US 7,508,455; US 7,602,446; US 7,802,802 B2; US 7,834,886; US 7,914,332; US 8,307,284; US 8,407,374 B2; US 8,499,019 B2; US 8,519,949 B2; US 8,743,292 B2; GB 2,419,119 B; GB 2,447,380 B; and other patents pending.

Notice

The material in this manual is furnished for informational use only. It is subject to change without notice and should not be construed as commitment by Ross Video Limited. Ross Video Limited assumes no responsibility or liability for errors or inaccuracies that may appear in this manual.

Important Regulatory and Safety Notices to Service Personnel

Before using this product and any associated equipment, read all the Important Safety Instructions listed below so as to avoid personal injury and to prevent product damage.

The OverDrive system makes use of a number of individual component products to make up a complete turnkey system. The Important Safety Instructions section of this manual is intended to compliment individual OEM product manuals and the User must refer to, and heed, any safety instruction outline in these supplementary product manuals. Separate manuals are included for the following component products:

- Server PC(s)
- LCD Flat Screen Display(s) & Power Supply

This system may also require specific equipment, and /or installation procedures be carried out to satisfy certain other regulatory compliance requirements. Notices have been included in this publication to call attention to these specific requirements.

Symbol Meanings

Protective Earth — *This symbol identifies a Protective Earth (PE) terminal, which is provided for connection of the supply system's protective earth (green or green/yellow) conductor.*

This symbol on the equipment refers you to important operating and maintenance (servicing) instructions within the Product Manual Documentation. Failure to heed this information may present a major risk of damage or injury to persons or equipment.

Warning — *The symbol with the word "**Warning**" within the equipment manual indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.*

Caution — *The symbol with the word "**Caution**" within the equipment manual indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.*

Warning Hazardous Voltages — *This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons.*

ESD Susceptibility — *This symbol is used to alert the user that an electrical or electronic device or assembly is susceptible to damage from an ESD event.*

Important Safety Instructions

- Read these instructions.
- Keep these instructions.
- Heed all warning.
- Follow all instructions.

Warning The safe operation of this product requires that a protective earth connection be provided. A grounding conductor in the equipment's supply cord provides this protective earth. To reduce the risk of electrical shock to the operator and service personnel, this ground conductor must be connected to an earthed ground.

Use only power cords specified for this product and certified for the country of use. Refer to the Product Power Cord Requirement Section that follows.

Do not defeat safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit in to your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinching particularly at plugs, convenience receptacles, and point where they exit from the apparatus.

Warning Indoor Use: “WARNING – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE”

Do not use this apparatus near water.

Do not block any ventilation openings. Install in accordance with manufacturer’s instructions.

Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Only use attachments/accessories specified by the manufacturer.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Clean only with a dry cloth.

Warning Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug damage, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Caution To reduce the risk of fire, replacement fuses must be the same type and rating.

Warning This product contains safety critical parts, which if incorrectly replaced may present a risk of fire or electrical shock. Components contained within the product’s power supplies and power supply area, are not intended to be customer serviced and should be returned to the factory for repair

Product Power Cord Requirements

Warning **North American Line Voltages 100 - 120 Volt**

This product is supplied with certified 10A/125V SVT type supply cords.

Conductors are color coded white (neutral), black (line) and green or green/yellow (ground).

Operation of this equipment at line voltages exceeding 130V requires that alternative supply cords with appropriate voltage and current ratings be used.

Warning **International Line Voltages 200 - 240 Volt**

This product has been designed for use with certified IEC 320- C13 10A/250V - H03 VV-F3G 1.00mm2 type line cord.

International product orders are supplied with a certified 10A/250V line cords, utilizing a molded 3-pin IEC 320-C13 type connector at one end and stripped conductors on the other. One line cord is provided. Conductors are CEE color coded; blue (neutral), brown (line), and green/yellow (ground).

Installation by a qualified Electrician, of an appropriately approved A/C wall plug certified for the country of use, is required.

Alternatively, other IEC 320 C-13 type power cords may be used, provided that they meet the necessary safety certification requirements for the country in which they are to be used. Refer to the correctly specified line cord above.

EMC Notices

US FCC Part 15

This equipment has been tested and found to comply with the limits for a class A Digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a Commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Notice Changes or modifications to this equipment not expressly approved by Ross Video Ltd. could void the user's authority to operate this equipment.

CANADA

This Class "A" digital apparatus complies with Canadian **ICES-003**.

Cet appareil numerique de la classe "A" est conforme a la norme **NMB-003** du Canada.

EUROPE

This equipment is in compliance with the essential requirements and other relevant provisions of **CE Directive 93/68/EEC**.

INTERNATIONAL

This equipment has been tested to **CISPR 22:1997** along with amendments **A1:2000** and **A2:2002** and found to comply with the limits for a Class A Digital device.

Notice This is a Class A product. In domestic environments, this product may cause radio interference, in which case the user may have to take adequate measures.

Warranty and Repair Policy

The OverDrive Live and OverDrive News systems are backed by a comprehensive one-year warranty on all components.

Notice — *Changes or modifications to this equipment not expressly approved by Ross Video Limited could void the user's authority to operate this equipment.*

If an item becomes defective within the warranty period Ross will repair or replace the defective item, as determined solely by Ross.

Warranty repairs will be conducted at Ross, with all shipping FOB Ross dock. If repairs are conducted at the customer site, reasonable out-of-pocket charges will apply. At the discretion of Ross, and on a temporary loan basis, plug in circuit boards or other replacement parts may be supplied free of charge while defective items undergo repair. Return packing, shipping, and special handling costs are the responsibility of the customer.

This warranty is void if products are subjected to misuse, neglect, accident, improper installation or application, or unauthorized modification.

In no event shall Ross Video Limited be liable for direct, indirect, special, incidental, or consequential damages (including loss of profit). Implied warranties, including that of merchantability and fitness for a particular purpose, are expressly limited to the duration of this warranty.

This warranty is TRANSFERABLE to subsequent owners, subject to Ross' notification of change of ownership.

Extended Warranty

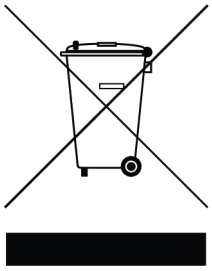
For customers that require a longer warranty period, Ross offers an extended warranty plan to extend the standard warranty period by one year increments. For more information about an extended warranty for your OverDrive system, contact your regional sales manager.

Environmental Information

The equipment that you purchased required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment.

To avoid the potential release of those substances into the environment and to diminish the need for the extraction of natural resources, Ross Video encourages you to use the appropriate take-back systems. These systems will reuse or recycle most of the materials from your end-of-life equipment in an environmentally friendly and health conscious manner.

The crossed-out wheeled bin symbol invites you to use these systems.



If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You can also contact Ross Video for more information on the environmental performances of our products.

Use of Hazardous Substances in Electrical and Electronic Products (China RoHS)

Ross Video Limited has reviewed all components and processes for compliance to:

“Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products” also known as China RoHS.

The “Environmentally Friendly Use Period” (EFUP) and Hazardous Substance Tables have been established for all products. We are currently updating all of our Product Manuals.

The Hazardous substances tables are available on our website at:

http://www.rossvideo.com/about-ross/company-profile/green-practices/china-rohs.html

电器电子产品中有害物质的使用

Ross Video Limited 按照以下的标准对所有组件和流程进行了审查：

“电器电子产品有害物质限制使用管理办法”也被称为中国RoHS。

所有产品都具有“环保使用期限”（EFUP）和有害物质表。目前，我们正在更新我们所有的产品手册。

有害物质表在我们的网站：

http://www.rossvideo.com/about-ross/company-profile/green-practices/china-rohs.html

Company Address

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Contents

Introduction

Thank you, and congratulations on choosing the CX Panel to control your devices. CX Panels offer control panels for those who prefer a dedicated control surface.

About This Guide

This guide covers the configuration of your CX Panel. The following chapters are included:

1. "**Introduction**" provides a summary of important terms, conventions, and features.
2. "**CX Panel Models**" provides an overview of the available CX Panel models.
3. "**Connection to the Network**" provides procedures for connect a CX Panel to your local network.
4. "**Connecting DashBoard™ to a CX Panel**" provides procedures for configuring a CX Panel through DashBoard.
5. "**Calibrating Controls**" provides procedures for calibrating CX Panel controls.
6. "**Updating a CX Panel**" provides procedures for updating CX Panel operating system or applications.
7. "**CX Director Panel OverDrive Setup**" provides procedures for setting up a CX Director Panel for OverDrive.
8. "**CX-3R Joystick Panel Setup**" provides procedures for setting up a CX-3R Joystick Panel.

If, at any time, you have a question pertaining to the installation or operation of your CX Panel, please contact us at the numbers listed in the section "**Contacting Technical Support**" on page 2–2. Our technical staff are always available for consultation, training or service.

Documentation Conventions

Special text formats are used in this guide to identify parts of the user interface, text that a user must enter, or a sequence of menus and sub-menus that must be followed to reach a particular command.

Interface Elements

Bold text is used to identify a user interface element such as a dialog box, menu item, or button. For example:

In the **RundownControl** section, click **Install License**.

User Entered Text

Courier text is used to identify text that a user must enter. For example:

1. In the **Open** box, enter the following application name:

   ```
   services.msc
   ```

Referenced Guides

Italic text is used to identify the titles of referenced guides, manuals, or documents. For example:

- using **RapidRestore** to archive and backup OverDrive rundowns and settings, refer to the chapter "**RapidRestore™**" on page 16–1 in the ***OverDrive User Guide***.

Menu Sequences

Menu arrows are used in procedures to identify a sequence of menu items that you must follow. For example, if a step reads "**File** > **Exit**," you would click the **File** menu and then click **Exit**.

Important Instructions

Star icons are used to identify important instructions or features. For example:

- After installing Caprica Server software, licenses must be obtained from Ross Video Technical Support before using the Caprica Server.

Getting Help

The OverDrive Online Help system can be accessed from any of the components of OverDrive. Online Help opens in a Microsoft Internet Explorer® window.

The OverDrive Online Help system displays, by default, the **Contents** pane. To access the **Search** or **Glossary** panes, click the **Search** or **Glossary** button on the top toolbar in the Online Help system.

Contacting Technical Support

Technical Support is staffed by a team of experienced specialists ready to assist you with any question or technical issue.

Ross Video has technical support specialists strategically located around the globe to ensure a prompt response to technical inquiries. Our primary technical support center is located in Ottawa, Ontario, Canada. In addition, we have offices in The United Kingdom (London), Australia (Sydney), and Singapore with satellite locations in New York City, The Netherlands, and China. As we expand our presence globally, we are constantly evaluating other key locations to have a local technical support specialist in order to better service our customers.

North America

Our North America center located in Ottawa, Ontario, Canada and is open Monday to Friday 8:30 a.m. to 6:00 p.m. EST, with 24/7/365 on-call service after hours.

Our telephone number is: +1-613-686-1557

Toll free within North America: +1 833-859-0499

EMEA

Our EMEA center is open Monday to Friday 8:30 a.m. to 5:00 p.m. GMT. After hours support is provided by our North America location.

International toll free: +800 3540 3545

If the local support specialist is not available, your call will be transferred automatically to our North America center.

Australia

Our Sydney, Australia office is located in Alexandria, NSW.

Our local support telephone number is: 1300 007 677

If the local support specialist is not available, your call will be transferred automatically to our North America center.

Online

E-mail: techsupport@rossvideo.com

Website: open a support request using the link https://support.rossvideo.com/ to open a support request.

CX Panel Models

The CX Panel is available in the following models to fit your requirements to control devices connected to Ross Video systems:

- **Director** — this model has control buttons and audio faders for Ross Video OverDrive control.
- **Everything** — this model has control buttons, audio faders, a joystick, and rollers for Ross Video OverDrive control.
- **CX-3R Joystick** — this model has joysticks and buttons that can be used with Ross Video SmartShell to control robotic cameras.

The following topics are discussed in this chapter:

- CX Director Panel
- CX Everything Panel
- CX-3R Joystick Panel

CX Director Panel

The CX Director Panel is an optional companion control panel for users who prefer a dedicated control surface to run Custom Controls from Caprica and control audio channel faders. A CX Director Panel contains the following OverDrive controls:

- **Audio Faders** — 10 audio channel faders that work in conjunction with DirectControl to control the faders in the On-Air Audio view.
- **Button Pad** — 32 multi-color LCD buttons that enable to access 32 pages that each contain 32 buttons to which you can assign a Custom Control. Pressing a CX Director Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system.

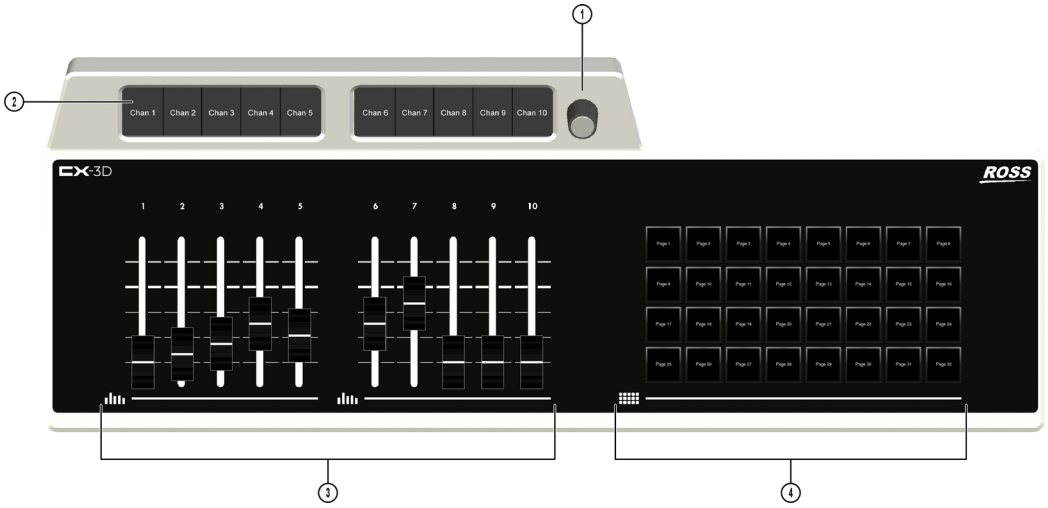


Figure 3.1 CX Director Panel

1) Menu Button	2) Main Menu or Channel Mnemonics
3) Current Audio Faders	4) Page or Custom Control Buttons

1. Menu Button

Press this button to display the CX Director Panel Main menu in the display to the left of the button. Tap the display to select a Main menu function.

2. Main Menu or Channel Mnemonics

A two segment display that displays the CX Director Panel Main menu or the name of the channel controlled by the fader directly beneath it. Channel names are retrieved from the Caprica Server.

3. Current Audio Faders

The current audio faders mirror and control the audio levels in the On-Air Audio view of the DirectControl. The first ten enabled channels in the On-Air Audio view can be controlled by the CX Director Panel audio faders.

4. Page or Custom Control Buttons

You can configure the 32 multi-color LCD buttons to run a selected Custom Control or run a Custom Control and then open a new page of Custom Controls when pressed.

Panel Setup

Refer to the following chapters to setup your CX Director Panel:

- "**Connection to the Network**" on page 4–1
- "**Connecting DashBoard™ to a CX Panel**" on page 5–1
- "**Calibrating Controls**" on page 6–1
- "**CX Director Panel OverDrive Setup**" on page 8–1

CX Everything Panel

The CX Everything Panel is an optional companion control panel for users who prefer a dedicated control surface to run Custom Controls from Caprica, control audio channel faders, and control cameras. A CX Everything Panel contains the following controls for OverDrive:

- **Audio Faders** — 10 audio channel faders that work in conjunction with DirectControl to control the faders in the On-Air Audio view.
- **Left Button Pad** — 15 multi-color LCD buttons that enable to access 15 pages that each contain 15 buttons to which you can assign a Custom Control. Pressing a CX Director Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system.
- **Right Button Pad** — 15 multi-color LCD buttons that enable to access 15 pages that each contain 15 buttons to which you can assign a Custom Control. Pressing a CX Director Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system.
- **Joystick** —
- **Roller** —

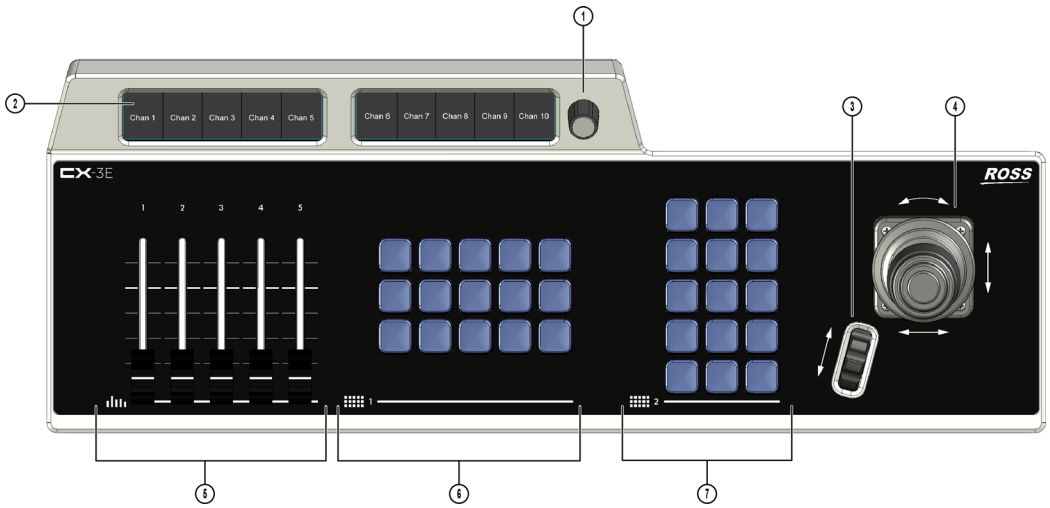


Figure 3.2 CX Director Panel

1) Menu Button	2) Main Menu or Channel Mnemonics
3) Roller	4) Joystick
5) Current Audio Faders	6) Button Pad 1
7) Button Pad 2	

1. Menu Button

Press this button to display the CX Director Panel Main menu in the display to the left of the button. Tap the display to select a Main menu function.

2. Main Menu or Channel Mnemonics

A two segment display that displays the CX Director Panel Main menu or the name of the channel controlled by the fader directly beneath it. Channel names are retrieved from the Caprica Server.

3. Roller

When you select a camera, you can use the roller to focus or control the iris.

4. Joystick

When you select a camera, you can use the joystick to control pan, tilt, and zoom.

5. Current Audio Faders

The current audio faders mirror and control the audio levels in the On-Air Audio view of the DirectControl. The first ten enabled channels in the On-Air Audio view can be controlled by the CX Director Panel audio faders.

6. Button Pad 1

You can configure the 15 multi-color LCD buttons to run a selected Custom Control or run a Custom Control and then open a new page of Custom Controls when pressed.

7. Button Pad 2

You can configure the 15 multi-color LCD buttons to run a selected Custom Control or run a Custom Control and then open a new page of Custom Controls when pressed.

Panel Setup

Refer to the following chapters to setup your CX Director Panel:

- "**Connection to the Network**" on page 4–1
- "**Connecting DashBoard™ to a CX Panel**" on page 5–1
- "**Calibrating Controls**" on page 6–1
- "**CX Everything Panel OverDrive Setup**" on page 9–1

CX-3R Joystick Panel

The CX-3R Joystick Panel is a control panel used for robotics control.
A CX-3R Joystick Panel contains 30 multi-color LCD buttons that can be used for camera selection and control.

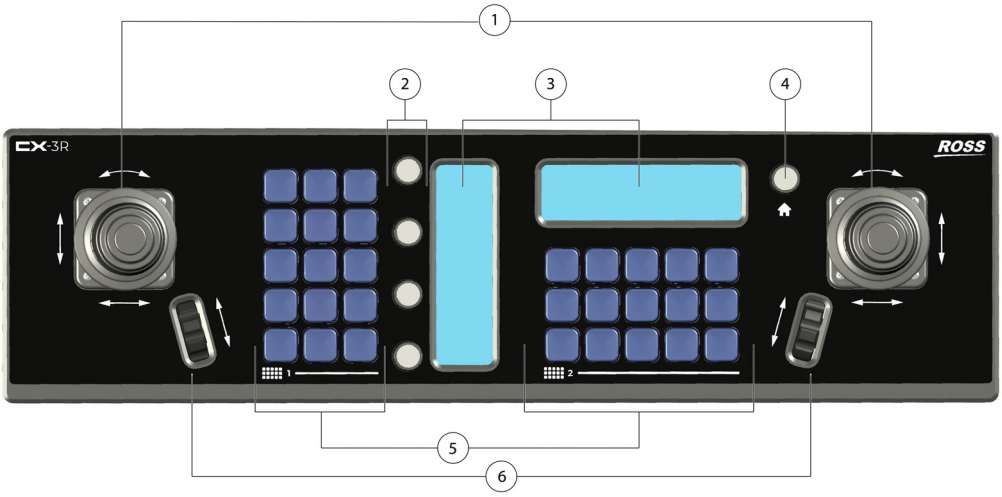


Figure 3.3 CX-3R Joystick Panel

1) Joysticks	2) Control Knobs
3) Display Screens	4) Home Knob
5) Button Panels	6) Rollers

1. Joysticks

Controls X and Y movement, lift height of the robotic pedestal, pan, tilt, and zoom.

2. Control Knobs

Adjustments like iris settings in SmartShell to control lens brightness, or the execution time of a preset or movement.

3. Display Screens

Used for network setup, panel connectivity status, and knob assignments and display of information during operation.

4. Home Knob

Currently used as a button to switch between configuration mode and operation mode.

5. Button Panels

Camera selection, preset and move execution, and other robotic commands (e.g., Cue, Cut, and Run).

6. Rollers

Adjustments like image sharpness, and duration of a move after execution.

Panel Setup

Refer to the following chapters to setup your CX-3R Joystick Panel:

- "**Connection to the Network**" on page 4–1
- "**Connecting DashBoard™ to a CX Panel**" on page 5–1
- "**Calibrating Controls**" on page 6–1
- "**CX-3R Joystick Panel Setup**" on page 10–1

Connection to the Network

To control devices, the CX Panel must be connected to your local area network. Connecting to your local area network requires that you cable your CX Panel and then set an IP address for it.

The following topics are discussed in this chapter:

- Connecting a CX Panel to the Network
- Ports

Connecting a CX Panel to the Network

Connecting your CX Panel to your local area network requires that you cable your panel and then set an IP address for it.

Cabling a CX Panel

In an OverDrive system for a CX Director Panel, or a SmartShell System for a CX-3R Joystick Panel, a CX Panel connects to the system through your local area network. A CX Panel has connectors for a primary (PS1) and a secondary (PS2) power supply, and one Ethernet port on the back of the panel.

Note: The connections on both the CX Director Panel and CX-3R Joystick Panel are the same.

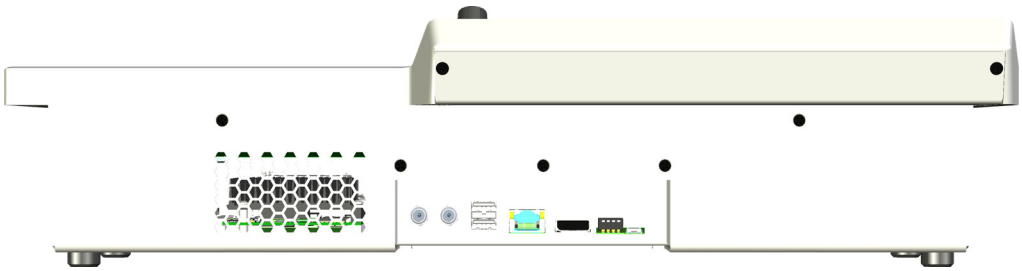


Figure 4.1 CX Director Panel Cable Connections

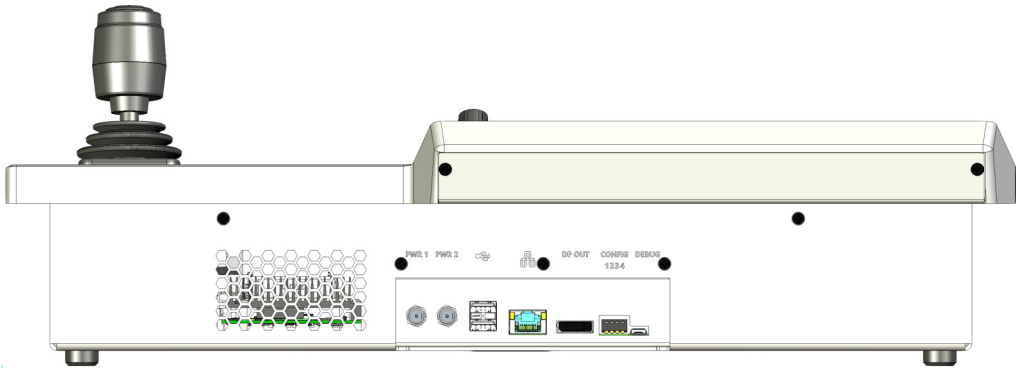


Figure 4.2 CX Everything Panel Cable Connections

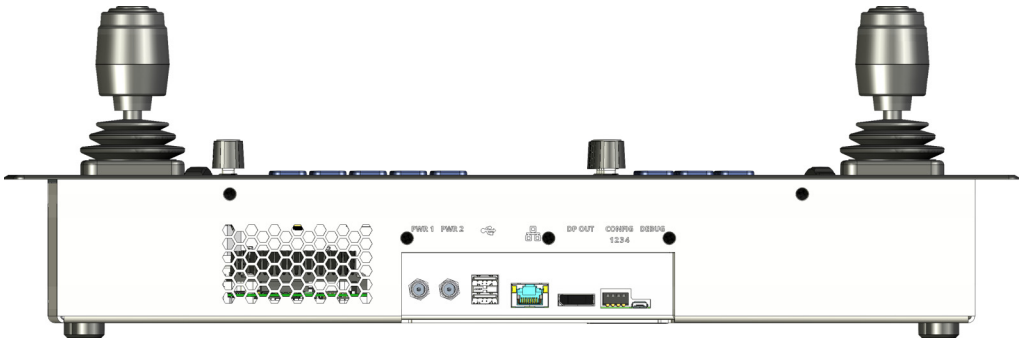


Figure 4.3 CX-3R Joystick Panel Cable Connections

To cable a CX Panel

1. Connect and secure one of the supplied 12V DC power supplies to the **PWR 1** connector on the back of the CX Panel before connecting the power supply to the AC mains power.

✶ Connecting the power supply to the AC mains power before connecting to the CX Panel could damage the panel.

2. Connect the power supply to the AC mains power.
3. Use an **Ethernet** cable to connect the CX Panel **Ethernet** port to your local area network.

For More Information on...

- installing a CX Panel, refer to the ***Ross CX Panel Installation Caprica Device Setup Sheet***.

Setting the CX Panel IP Address

After you physically connect a CX Panel to your network, you must set the panel IP address to enable it to communicate with the OverDrive Server (for the CX Director Panel and CX Everything Panel) or the SmartShell Server (for CX-3R Joystick Panel), and to configure the panel using DashBoard software.

✶ The IP address that you set for your CX Panel should not be used by any other device in your network.

The panel IP address setup is the same on the CX Director Panel, CX Everything Panel, and CX-3R Joystick Panel. The IP address is set using the right-most display of each panel.

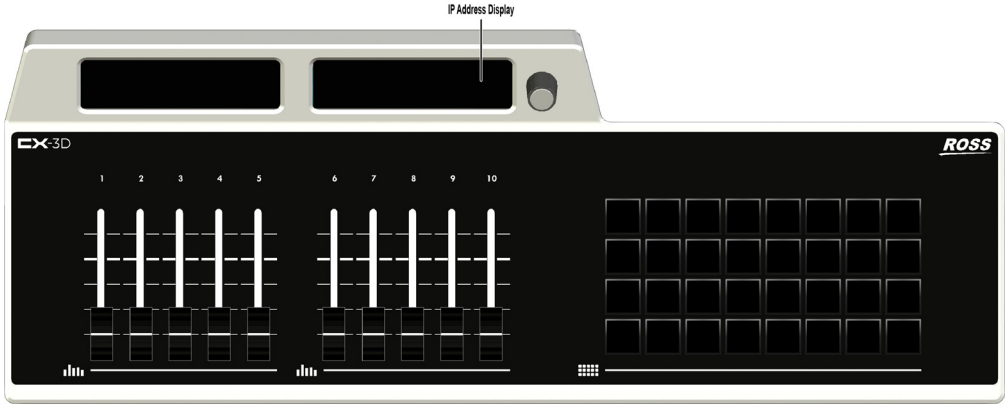


Figure 4.4 CX Director Panel Display to Set the IP Address

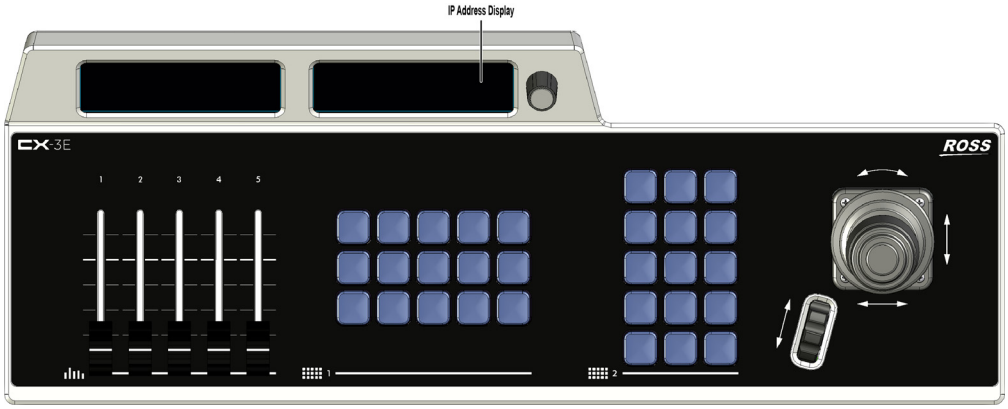


Figure 4.5 CX Everything Panel Display to Set the IP Address

Figure 4.6 CX-3R Joystick Panel Display to Set the IP Address

To set the CX Panel IP address

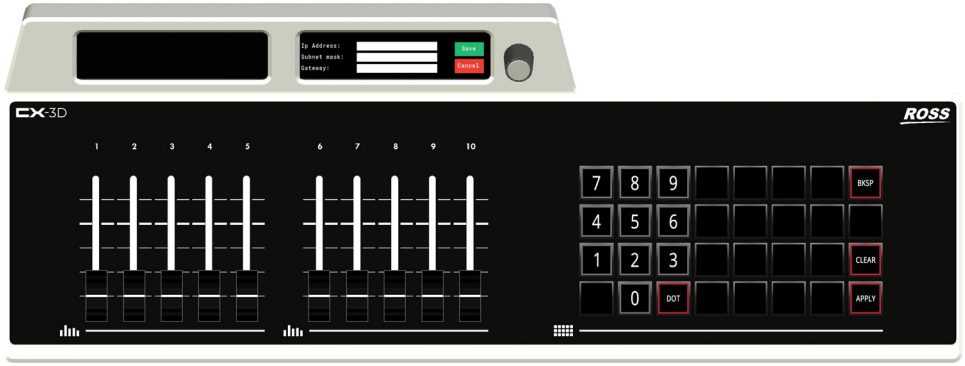
1. Turn on your CX Panel. The CX Panel stays dark for about a minute while it starts up. The right CX Panel screen displays the Ross logo when the panel is ready to use.

2. On the right CX Panel screen, tap the **Ross** logo.

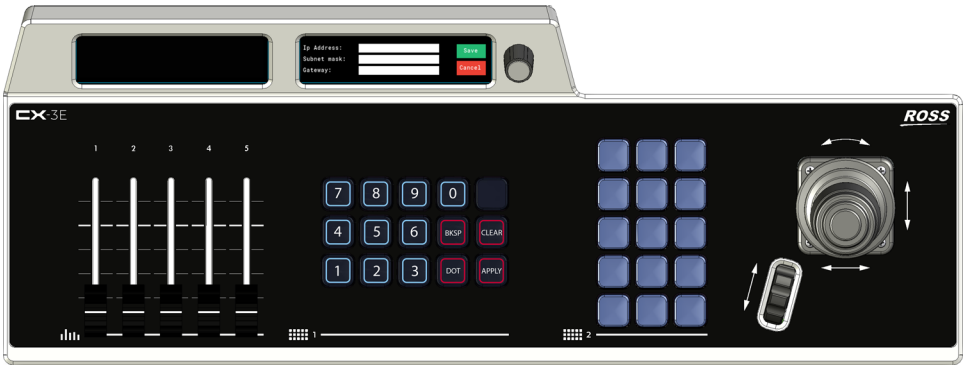
   The **Network Setting** screen displays.

3. In the **Network Settings** screen, tap the **IP Address** box.

   CX Director Panel **IP Address** box and **keypad** buttons activate.



   CX Everything Panel **IP Address** box and **keypad** buttons activate.



   CX Robotics Panel **IP Address** box and **keypad** buttons activate.

4. Use the **keypad** to enter a static IP address for your CX Panel.
5. Tap the **Subnet Mask** box.
6. Use the **keypad** to enter the subnet mask for your CX Panel.
7. Tap the **Gateway** box.
8. Use the **keypad** to enter the IP address of the default gateway for your CX Panel.
9. Tap **Save**.

   The CX Panel saves the entered network settings and then displays the **Main** menu.

Ports

The information provided in the following table lists the default ports used by CX Panels:

Table 4.1 OverDrive Ports

Port	Protocol	Can be Disabled?	Disabled Function
52543	OGP JSON	No	
80	HTTP	n	
22	SSH	No	Service is disabled by default. Can be enabled using a configured USB key.

Connecting DashBoard™ to a CX Panel

The Ross Video DashBoard Control System application enables you to connect to and configure your CX Panel hardware.

The following topics are discussed in this chapter:

- Installing DashBoard
- Connecting Dashboard to a CX Panel
- Connection Status
- Connecting a CX Panel to a Client
- Collecting System Logs
- Viewing Software Licenses
- Setting Time

Installing DashBoard

To connect to and configure a CX Panel, you need to use the DashBoard Control System application on a computer that has connectivity to the CX Panel. You can download the DashBoard application installer from the Ross Video website.

When installing DashBoard for the sole purpose of configuring a CX Panel, complete the following recommended component selections on the **Choose Components** screen of the DashBoard application installer:

- Select the **DashBoard Framework** box.

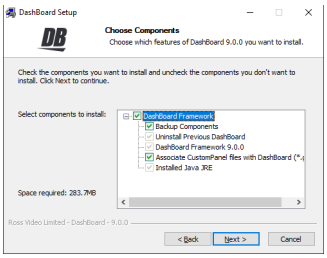


Figure 5.1 DashBoard Application Installer

For More Information on...

- DashBoard application installation or uninstall, refer to the ***DashBoard Control System User Manual*** and the ***DashBoard Online Help*** system.
- DashBoard plug-in updates, refer to the ***DashBoard Control System User Manual*** and the ***DashBoard Online Help*** system.
- where to download the Dashboard application installer, refer to the **Terminal Equipment | openGear | Control & Monitoring | DashBoard** section of the Ross Video website.

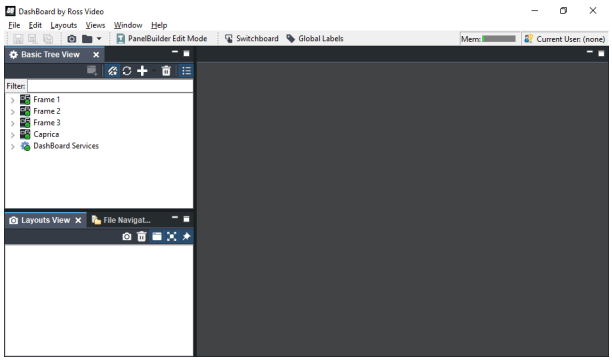
Connecting Dashboard to a CX Panel

Now that you know the IP address of your CX Panel, you can connect DashBoard with the panel to enable you to configure the panel using DashBoard software.

1. On a computer connected to the same subnetwork as your CX Panel, use one of the following methods to launch the current version of **DashBoard** software:

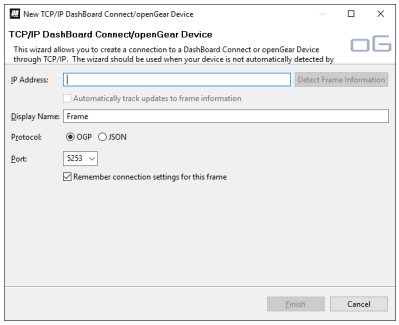
   - Double-click the **DashBoard** icon on the desktop.
   - Use the Start menu to select **All Programs > DashBoard > DashBoard**.

   DashBoard opens.



2. Use the **File** menu to select **New > TCP/IP DashBoard Connect or openGear Device**.

   The **TCP/IP DashBoard Connect/openGear Device** dialog box opens.

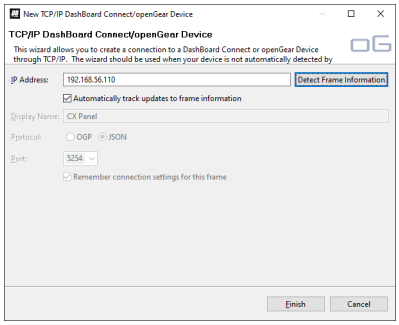


3. In the **IP Address** box, enter the IP address of the CX Panel.

   Your Network Administrator can provide you with the IP address of your CX Panel.

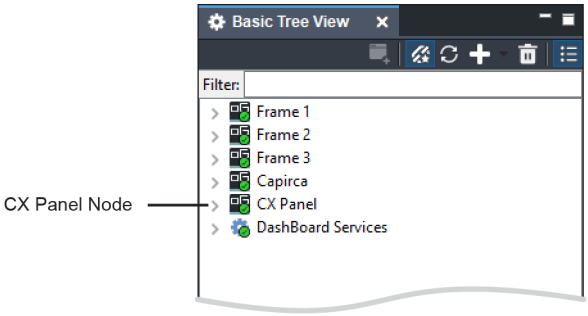
4. Click **Detect Frame Information**.

   DashBoard uses the information it detected from your CX Panel to configure the remaining settings in the **TCP/IP DashBoard Connect/openGear Device** dialog box.



5. Click **Finish**.

   The **DashBoard Tree View** displays a node for the new CX Panel.

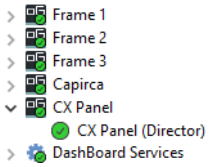


6. Hover the mouse over the **CX Panel** node to view the following information about the panel:

   - IP address of the CX Panel
   - Client to CX Panel connection status

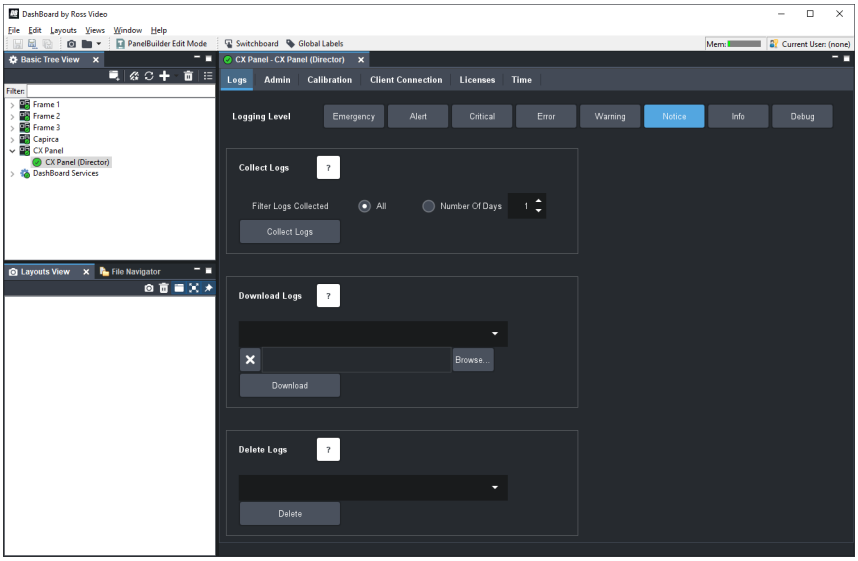
7. In the **DashBoard Tree View**, expand the new **CX Panel** node you added to DashBoard.

   The **CX Panel** node displays the **CX Panel** node, which is used to configure the CX Panel.



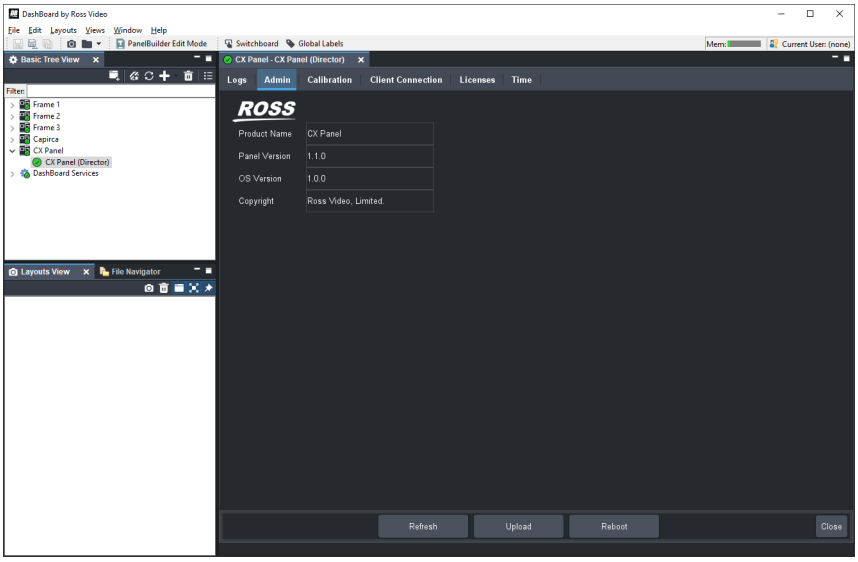
8. Double-click the **CX Panel (Director** or **CX-3R Joystick)** node.

   Configuration settings for the selected CX Panel open in the **Device View**.



9. Click the **Admin** tab.

   The **Admin** tab opens and displays the connected CX Panel hardware, software version, and copyright information.



10. To refresh the information displayed in the **Admin** tab, click **Refresh** at the bottom of the tab.

11. To close the **Admin** tab, click **Close** at the bottom of the tab.

Connection Status

The LED in the lower right corner of a CX Panel node indicates the current connection status between DashBoard and the CX Panel. The LED reports the following connection states:

Table 5.1 CX Panel Connection Status

LED	Status
	A connection exists between DashBoard the CX Panel.
	DashBoard is trying to establish a connection with the CX Panel, but there may be a connectivity problem.
	There is no connection between DashBoard the CX Panel. Verify that the CX Panel is turned on and running.

Connecting a CX Panel to a Client

Connecting the CX Panel to a client in your system enables the CX Panel to receive and display information from the client. The CX Panel Client Connection tab contains the settings to configure your CX Panel to connect with the client in your system. The client to which you connect your CX Panel depends on the panel type as follows:

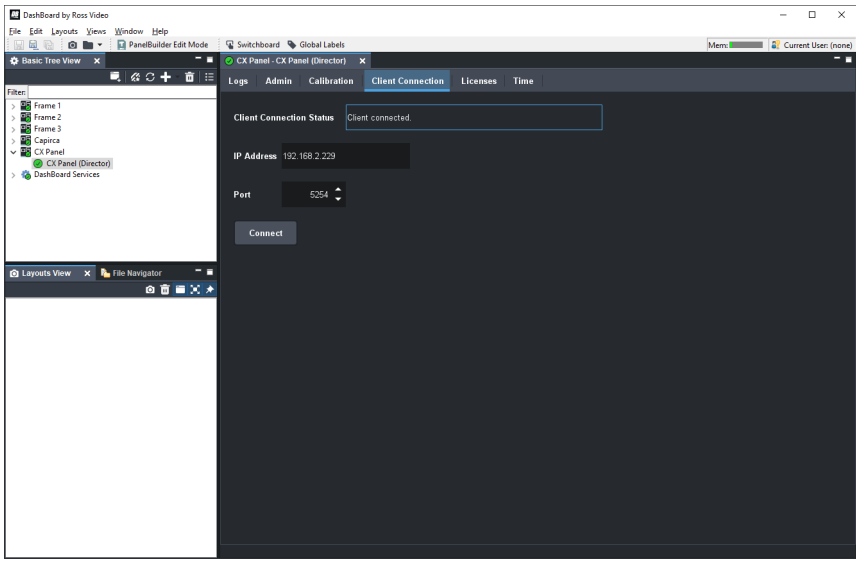
- **CX Director Panel** — Caprica Server
- **CX Everything Panel** — Caprica Server
- **CX-3R Joystick Panel** — SmartShell

To connect a CX Panel to a client

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel (Director** or **CX-3R Joystick)** node.

   The **Device View** opens.
3. Click the **Client Connection** tab.

   The **Client Connection** tab opens.



4. In the **IP Address** box, enter the IP address of the **Caprica Server** or **SmartShell** in your system.
5. In the **Port** box, enter or select the port number used by the CX Panel to communicate with the **Client**.
   Note: For use with SmartShell, the default port is **14011**.
6. Click **Connect**.

   The **Client Connection Status** field displays the connection status between your CX Panel and the Client.

Collecting System Logs

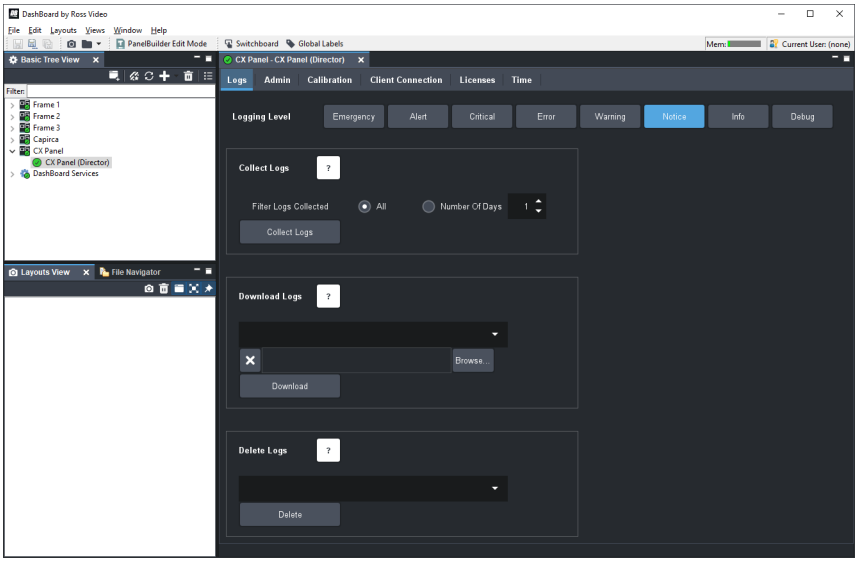
Logs from your CX Panel can be used to trouble shoot panel problems. In DashBoard, the CX Panel Logs tab enables you to gather CX Panel logs into a single file that you can download to your computer.

To download CX Panel log files

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel (Director** or **CX-3R Joystick)** node.

   The **Device View** opens.
3. Click the **Logs** tab.

   The **Logs** tab opens.

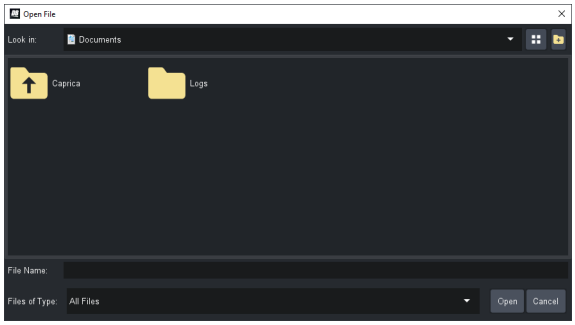


4. In the **Collect Logs** section, select one of the following options to set the number of days worth of logs to collect for a log file:
   - **All** — collect the logs from all days.
   - **Number Of Days** — collect the logs for a set number of days from the current date. When selecting this option, use the box to the right to enter or select the number of days worth of logs to collect.

5. In the **Logging Level** section, click the severity level to set for the gathered logs. The available severity levels are as follows:
   - **Emergency** — system is unusable.
   - **Alert** — action must be taken immediately.
   - **Critical** — critical conditions.
   - **Error** — error conditions.
   - **Warning** — warning conditions.
   - **Notice** — normal but significant conditions. This is the default severity level.
   - **Info** — informational messages.
   - **Debug** — debug messages.
6. In the **Collect Logs** section, click **Collect Logs**.

   The CX Panel creates a log file in its storage space for the selected number of days. The new log file is added to the lists in the **Download Logs** and **Delete Logs** sections.
7. In the **Download Logs** section, use the list to select the **log file** to download from the CX Panel to your computer.
8. Click **Browse**.

   The **Open File** dialog box opens.



9. Navigate to the **folder** where you want to save the selected log file.
10. In the **File Name** box, enter a file name for the log file.

    Because log files are text files, you should append `.txt` to the log file name.
11. Click **Open**.

    The **Open File** dialog box closes, and the **Download Logs** section displays the full pathname selected for the log file. If you want to clear the pathname, click the **X** to the left of the pathname.
12. Click **Download**.

    The selected log file downloads to your computer.

Deleting Log Files From the CX Panel

When you no longer require a log file, you can delete the log file from the CX Panel to save storage space.

To delete a log file from a CX Panel

1. In the **DashBoard Tree View**, expand the **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.
3. Click the **Logs** tab.

   The **Logs** tab opens.

4. In the **Delete Logs** section, use the list to select the **log file** to delete from the CX Panel.
5. Click **Delete**.

   The CX Panel deletes the selected log file from its storage space.

Viewing Software Licenses

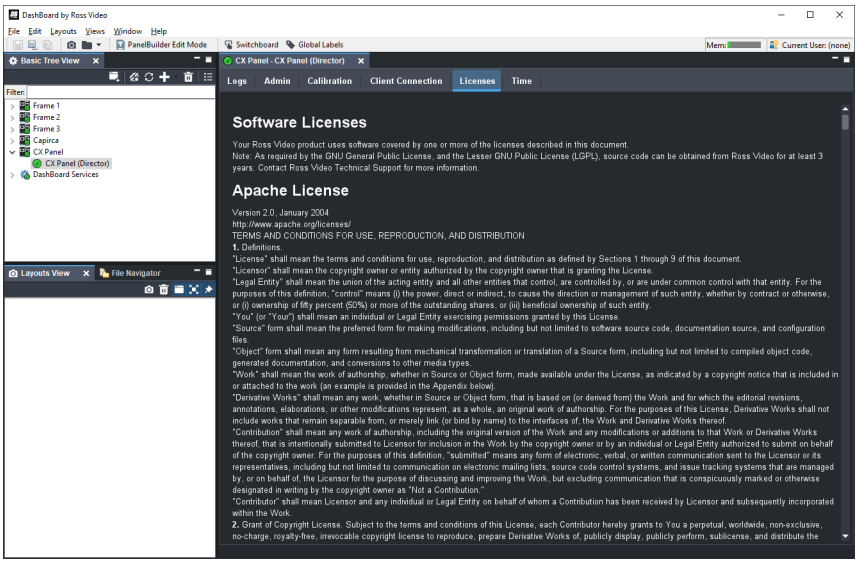
The CX panel uses software covered by the licenses described in the Licenses tab of the CX panel configuration settings.

To view software licenses

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.
3. Click the **Licenses** tab.

   The **Licenses** tab opens.



Setting Time

The date and time on a CX panel can be manually set by yourself or automatically set by a Network Time Protocol (NTP) server.

Manual Time Set

The Manual Time Configuration option enables you to manually set the date and time on your CX panel.

✶ You cannot set the date on your CX panel to a date before November 16, 2024.

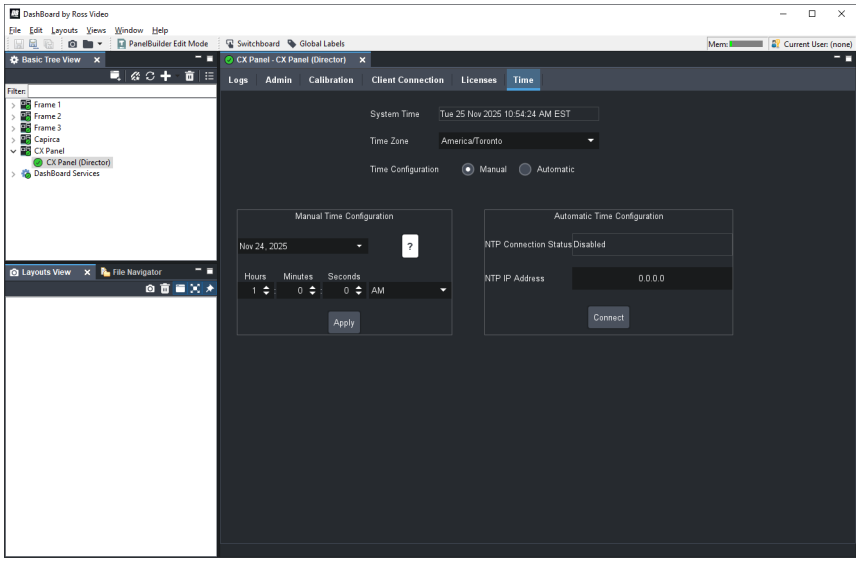
To manually set the date and time on a CX panel

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.

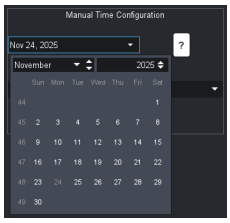
3. Click the **Time** tab.

   The **Time** tab opens.The **System Time** field displays the current date and time on your CX panel.



4. Use the **Time Zone** list to select the time zone which matches the physical location of the CX panel.
5. For the **Time Configuration** setting, select the **Manual** option.
6. In the **Manual Time Configuration** section, click the **Date** list.

   The **Calendar** tool opens.



   Use the **Calendar** tool as follows to set the current date and time for the CX Panel:

   a. Use the **Month** list to select the **current month**.

   b. Use the **Year** list to select the **current year**.

   The **Calendar** tool displays the days for the selected month and year.

   c. Click the **current day**.

   The **Calendar** tool closes, and the **Date** list displays the selected date.

   d. Use the **Hours**, **Minutes**, and **Seconds** lists to set the current time.

   The CX panel clock does not start until you click **Apply**.

   e. Click **Apply** to set the current date and time for the CX panel and start the CX panel clock.

Automatic Time Set

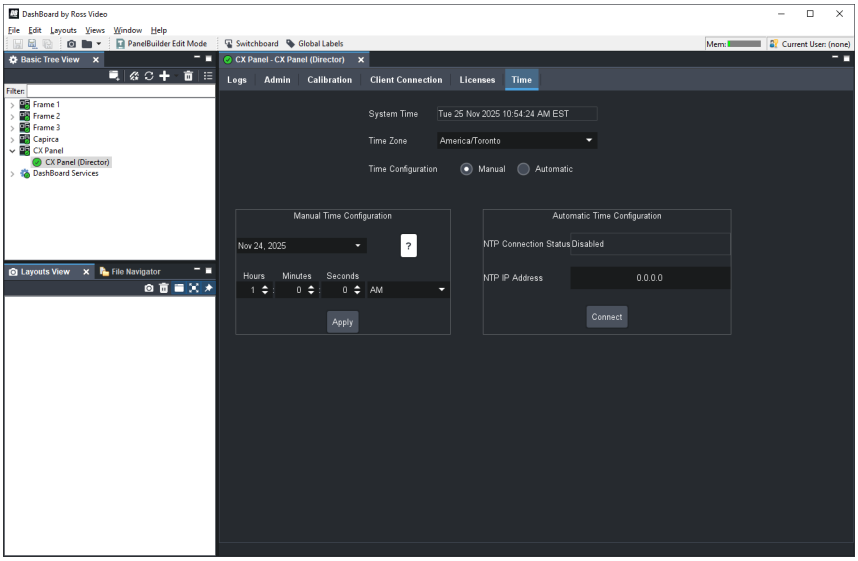
The Automatic Time Configuration option enables you to use a Network Time Protocol (NTP) server to automatically set the date and time on your CX panel.

To automatically set the date and time for a CX panel

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.
3. Click the **Time** tab.

   The **Time** tab opens.The **System Time** field displays the current date and time on your CX panel.



4. Use the **Time Zone** list to select the time zone which matches the physical location of the CX panel.
5. For the **Time Configuration** setting, select the **Automatic** option.
6. In the **NTP IP Address** box of the **Automatic Time Configuration** section, enter the IP address of the NTP server with which to synchronize the CX panel date and time.
7. Click **Connect**.

   The **NTP Connection Status** field displays the current synchronization status between the selected NTP server and the CX Panel.

Calibrating Controls

The various CX Panel models contain controls that you can calibrate to your preference.

The following topics are discussed in this chapter:

- Calibrating Fader Ranges
- Setting Button Double Press Time
- Setting Button Debounce Time
- Adjusting Fader Touch Sensitivity
- Resetting Fader Touch Sensitivity Baseline
- Calibrating Joystick and Roller Ranges
- Adjusting Joystick Deadzones

Calibrating Fader Ranges

The range of motion for the faders on your CX Director or CX Everything Panel is unique. Through calibration, DashBoard can record the unique range of motion for each fader on a CX Director or CX Everything Panel.

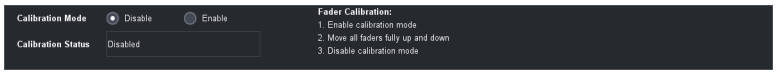
To calibrate the range of CX Director or CX Everything Panel faders

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

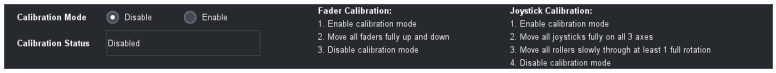
   The **Device View** opens.
3. Click the **Calibration** tab.

   The **Calibration** tab opens, displaying the **Calibration Settings** section.

   CX Director Panel



   CX Everything Panel



4. In the **Calibration Mode** setting, select the **Enable** option.

   The **Calibration Status** field displays **Enabled** to indicate that the CX Director or CX Everything Panel is ready for fader calibration.
5. On your CX Director or CX Everything Panel, firmly press on the first fader to engage touchsense.
6. Move the fader to the top position of the range that you want to use for the fader, and then move the fader to the bottom position of the range that you want to use for the fader.

   You can position faders a short distance from the top or bottom of the physical fader range to set a dead spot for the fader. A dead spot prevents bounce when a fader physically hits the top or bottom of the range and bounces back to a non-zero value.
7. Repeat step **5** and step **6** for the remaining faders on the CX Director or CX Everything Panel.
8. In the **Calibration Mode** setting, select the **Disable** option.

✶ The **Calibration Status** field displays **Disabled** to indicate that the CX Director Panel fader calibration is complete and the panel is ready to use with the newly calibrated fader ranges.

Setting Button Double Press Time

On your CX Everything Panel, you can set the maximum time allowed between two consecutive button presses for them to be recognized as a double press instead of two separate single presses.

To set the double press for CX Everything Panel buttons

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.

3. Click the **Calibration** tab.

   The **Calibration** tab opens, displaying the **Buttons** section.

4. The default button double press time is **250** milliseconds, and the recommended time range is **200** to **300** milliseconds. In the **Buttons** section, use one of the following methods to set the button double press time:

   - Drag the **Double Press Time** slider along the scale. The box to the right of the scale displays the set double press time in milliseconds.
   - In the box to the right of the **Double Press Time** scale, enter or select a button double press time in milliseconds.

✶ Always set the **Double Press Time** to be at least **150** milliseconds longer than the **Debounce Time**.

Setting Button Debounce Time

On your CX Director or CX Everything Panel, you can set the delay time applied to filter out false multiple signals caused by button mechanics. When a button is pressed or released, its contacts physically bounce for a few milliseconds before settling. Without a set debounce time, a single press could be detected as multiple presses.

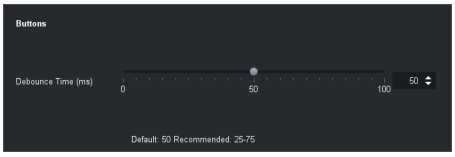
To set the debounce time for CX Director or CX Everything Panel buttons

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.
3. Click the **Calibration** tab.

   The **Calibration** tab opens, displaying the **Buttons** section.

   CX Director Panel



   CX Everything Panel

4. The default button debounce time is **50** milliseconds, and the recommended time range is **25** to **75** milliseconds. In the **Buttons** section, use one of the following methods to set the button debounce time:

   - Drag the **Debounce Time** slider along the scale. The box to the right of the scale displays the set debounce time in milliseconds.
   - In the box to the right of the **Debounce Time** scale, enter or select a button debounce time in milliseconds.

✶ For CX Everything Panels, always set the **Debounce Time** to be at least **150** milliseconds shorter than the **Double Press Time**.

Adjusting Fader Touch Sensitivity

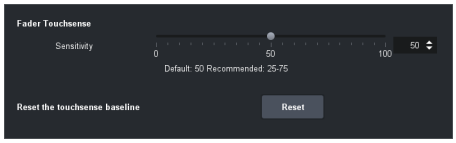
In most situations, you do not need to adjust the touch sensitivity of the faders on your CX Director or CX Everything Panel. The temperature and humidity of your working environment can cause fader touch sensitivity to behave in an unexpected way. You can adjust the sensitivity of CX Director or CX Everything Panel faders for your environment.

To adjust the touch sensitivity of CX Director or CX Everything Panel faders

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.
3. Click the **Calibration** tab.

   The **Calibration** tab opens, displaying the **Fader Touchsense** section.



4. The default sensitivity level is **50**, and the recommended sensitivity range is **25** to **75**. Higher sensitivity values increase fader touch sensitivity and lower values decrease it. In the **Fader Touchsense** section, use one of the following methods to adjust fader sensitivity:
   - Drag the **Sensitivity** slider along the scale. The box to the right of the scale displays the set sensitivity level.
   - In the box to the right of the **Sensitivity** scale, enter or select a sensitivity level.

Resetting Fader Touch Sensitivity Baseline

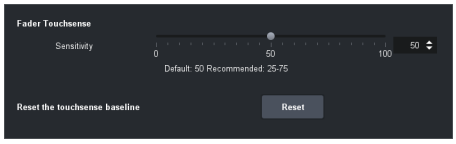
CX Director and CX Everything Panel faders use the touch sensitivity baseline to detect whether an operator is touching a fader. If the CX Director or CX Everything Panel is restarted while the operator is still touching a fader, it will not be able to detect fader touches since it would have set the sensitivity baseline improperly. Resetting the touch sensitivity baseline with no faders being touched will enable fader touch detection once again.

To reset the touch sensitivity baseline for CX Director or CX Everything Panel faders

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.
3. Click the **Calibration** tab.

   The **Calibration** tab opens, displaying the **Fader Touchsense** section.



4. Take your fingers off of any CX Panel faders.
5. In the **Reset the touchsense baseline** section, click **Reset**.

Calibrating Joystick and Roller Ranges

The range of motion for the joysticks and rollers on your CX Everything or CX-3R Joystick Panel is unique. Through calibration, DashBoard can record the unique range of motion for each joystick and roller on a CX Everything or CX-3R Joystick Panel.

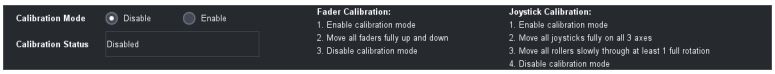
To calibrate the range of CX Everything or CX-3R Joystick Panel joysticks and rollers

1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

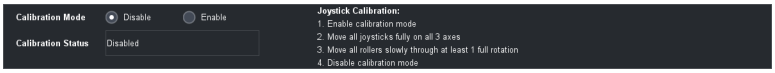
   The **Device View** opens.
3. Click the **Calibration** tab.

   The **Calibration** tab opens, displaying the **Calibration Settings** section.

   CX Everything Panel

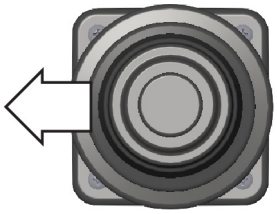


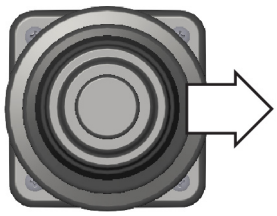
   CX-3R Joystick Panel

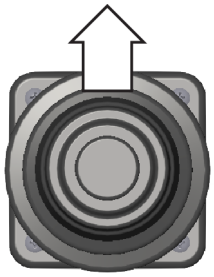


4. In the **Calibration Mode** setting, select the **Enable** option.

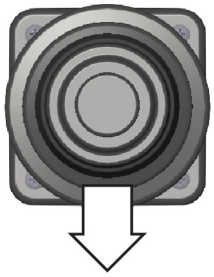
   The **Calibration Status** field displays **Enabled** to indicate that the CX Everything or CX-3R Joystick Panel is ready for joystick calibration.
5. On your CX Everything or CX-3R Joystick Panel, move the **right joystick** to the **Left** until it stops and then release the joystick.


6. Move the **joystick** to the **Right** until it stops and then release the joystick.

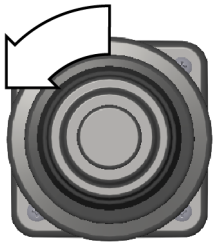

7. Move the **joystick** to the **Top** until it stops and then release the joystick.



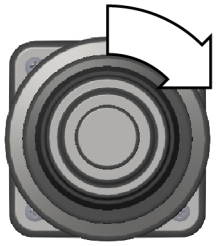
8. Move the **joystick** to the **Bottom** until it stops and then release the joystick.



9. Twist the top of the **joystick** to the **Left** until it stops and then release the joystick.



10. Twist the top of the **joystick** to the **Right** until it stops and then release the joystick.



11. Repeat step **5** to step **10** for the **left joystick** on your CX-3R Joystick Panel.
12. For each **roller** on your CX Everything or CX-3R Joystick Panel, slowly move the **roller** through one full rotation.
13. In the **Calibration Mode** setting, select the **Disable** option.

    The **Calibration Status** field displays **Disabled** to indicate that the joystick calibration is complete and the panel is ready to use with the newly calibrated joystick ranges.

Adjusting Joystick Deadzones

After you calibrate the range of motion for the joysticks on your CX Everything or CX-3R Joystick Panel, you can configure the deadzones for each joystick. A deadzone is the distance that a joystick must move from the center before it starts to move the robotic camera it controls.

✶ When joystick axes are reconfigured, the output will reset to 0 for all joysticks until the joystick is moved again. If a configuration change occurs while the joystick is held, the operator must move the joystick slightly to resume operation.

To configure CX Everything or CX-3R Joystick Panel joystick deadzones

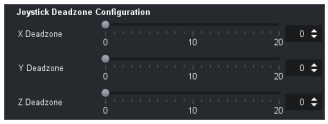
1. In the **DashBoard Tree View**, expand your **CX Panel** node.
2. Double-click the **CX Panel** node.

   The **Device View** opens.

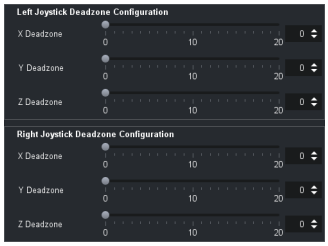
3. Click the **Calibration** tab.

   The **Calibration** tab opens. The **Joystick Deadzone Configuration** section displays for the CX Everything Panel, while the **Left Joystick Deadzone Configuration** and **Right Joystick Deadzone Configuration** sections display for the CX-3R Joystick Panel.

   CX Everything Panel



   CX-3R Joystick Panel



4. In the **Joystick Deadzone Configuration** or **Left Joystick Deadzone Configuration** section, use the **X DeadZone** setting to set the distance that the joystick must move left or right from the center before it starts to move a robotic camera. This setting stops left and right camera movement when the joystick returns to center. Use one of the following methods to set the **X DeadZone**:

   - Drag the **X DeadZone** slider along the scale. The box to the right of the scale displays the set X DeadZone distance.
   - In the box to the right of the **X DeadZone** scale, enter or select an X DeadZone distance.

5. Use the **Y DeadZone** setting to set the distance that the joystick must move up or down from the center before it starts to move a robotic camera. This setting stops up and down camera movement when the joystick returns to center. Use one of the following methods to set the **Y DeadZone**:

   - Drag the **Y DeadZone** slider along the scale. The box to the right of the scale displays the set Y DeadZone distance.
   - In the box to the right of the **Y DeadZone** scale, enter or select a Y DeadZone distance.

6. Use the **Z DeadZone** setting to set the distance that the joystick top must twist left or right from the center before it starts to move a robotic camera. This setting stops zoom, focus, or iris changes when the joystick returns to center. Use one of the following methods to set the **Z DeadZone**:

   - Drag the **Z DeadZone** slider along the scale. The box to the right of the scale displays the set Z DeadZone distance.
   - In the box to the right of the **Z DeadZone** scale, enter or select a Z DeadZone distance.

7. For the CX-3R Joystick Panel, repeat step **4** to step **6** in the **Right Joystick Deadzone Configuration** section to configure the deadzones for the **right joystick** on your CX-3R Joystick Panel.

Updating a CX Panel

When Ross Video releases updates for the CX Panel operating system or applications, you can use DashBoard to install the updates on your CX Panel hardware.

The following topics are discussed in this chapter:

- Updating the Operating System or Application
- Rebooting the CX Panel

Updating the Operating System or Application

When Ross Video releases updates for the CX Panel operating system or applications, you can use DashBoard to install the updates on your CX Panel hardware. CX Panel operating system and application updates are released as package files and installed using the DashBoard Upload Software Wizard.

✶ When CX Panel operating system and application updates are released together, you must install the operating system update before installing the application update.

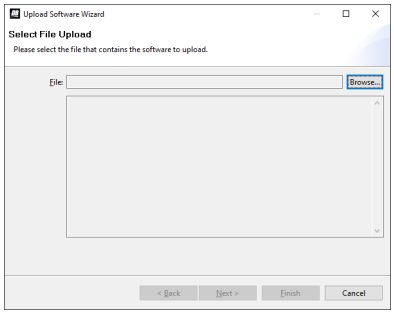
To update the CX Panel operating system or application

1. Contact Ross Video Technical Support to obtain the most recent CX Panel operating system and application package files.
2. On a computer connected to the same subnetwork as your CX Panel, launch the current version of **DashBoard** software.
3. In the **DashBoard Tree View**, expand your **CX Panel** node.
4. Double-click the **CX Panel (Director** or **CX-3R Joystick**) node.

   The **Device View** opens.
5. Click the **Admin** tab.

   The **Admin** tab opens.
6. At the bottom of the **Admin** tab, click **Upload**.

   The **Select File Upload** screen of the **Upload Software Wizard** opens.



7. To the right of the **File** box, click **Browse**.

   The **Open** dialog box opens.
8. Use the **Open** dialog box to locate and select the CX Panel operating system (`cx_panel_os-X.X.X.bin`) or application (`cx_panel_app-X.X.X.bin`) package file you downloaded from Ross Video Technical Support.
9. Click **Open**.

   The **Open** dialog box closes and the **File Summary** field in the **Select File Upload** screen displays information about the selected package file.
10. Click **Finish**.

    The **Upload Software Wizard** installs the selected CX Panel operating system or application update. The **Panel Version** or **OS Version** field in the **Admin** tab updates to display the version of the newly installed CX Panel operating system or application.

Rebooting the CX Panel

If your CX Panel requires rebooting, you can reboot the panel from Dashboard or by cycling the panel power.

Dashboard Reboot

In Dashboard, you can reboot a CX Panel from the CX Panel node Admin tab.

To reboot a CX Panel from Dashboard

1. On a computer connected to the same subnetwork as your CX Panel, launch the current version of **DashBoard** software.
2. In the **DashBoard Tree View**, expand your **CX Panel** node.
3. Double-click the **CX Panel (Director** or **CX-3R Joystick**) node.

   The **Device View** opens.
4. Click the **Admin** tab.

   The **Admin** tab opens.
5. At the bottom of the **Admin** tab, click **Reboot**.

   An **Alert** opens.
6. Click **Yes**.

   The CX Panel reboots.

Power Cycle Reboot

You can also reboot a CX Panel by cycling the panel power.

To reboot a CX Panel by cycling the panel power

1. Disconnect the CX Panel power supply from the AC mains power.
2. Wait five seconds to let all power drain from the CX Panel.
3. Connect the CX Panel power supply to the AC mains power.

   The CX Panel reboots.

CX Director Panel OverDrive Setup

In an OverDrive system that contains a Caprica Server, you can connect a CX Director Panel that contains physical control buttons and audio faders. CX Director Panels are optional OverDrive companion control panels for users who prefer a dedicated control surface. CX Director Panels work in conjunction with the OverDrive touch screen, keyboard, and mouse to offer you multiple interfaces to your OverDrive system.

✶ CX Director Panels only work with OverDrive systems that contain a Caprica Server.

The following topics are discussed in this chapter:

- Configuring CX Director Panel Buttons
- Selecting the Faders to Control

Configuring CX Director Panel Buttons

A CX Director Panel contains 32 multi-color LCD buttons that enable to access 32 pages that each contain 32 buttons to which you can assign a Custom Control. Pressing a CX Director Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system. You can also configure CX Director Panel buttons to open another button page after the assigned Custom Control finishes.

Assigning Custom Controls to CX Director Panel Buttons

You can assign a Custom Control to each CX Director Panel button in the accessible 32 button pages. Pressing a CX Director Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system. You can also add a page change after the assigned Custom Control finishes.

✶ Before you can assign Custom Controls to CX Director Panel buttons, you must create the required Custom Controls on your Caprica Server. Custom Controls must contain at least one command.

To assign Custom Controls to CX Director Panel buttons

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.
4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
5. Click the **Director** tab.

   The **Director** tab opens. Caprica automatically loads the assigned Custom Controls into the displayed buttons.

6. Use the **Button Pad Page** list on the **CX Director Panel** image to select the CX Director Panel **button page** to display in the CX Director Panel image.
7. On the **CX Director Panel** image, click the **CX Director Panel button** to assign a Custom Control.
8. Use the **Bank** list to select the **Bank** that contains the Custom Control to assign to the selected CX Director Panel button.

9. Use the **CC** list to select the **Custom Control** to assign to the selected CX Director Panel button.
10. Use the **Page** list to select the **Page** of CX Director Panel buttons to display on the CX Director Panel after the Custom Control assigned to the button starts. Select **None** to continue displaying the current page of CX Director Panel buttons.
11. Click **Apply**.

    The selected button updates on the CX Director Panel. The assigned Custom Control is only available for the selected **CX Director Panel button** on the selected **page**.

Customizing CX Director Panel Button Labels and Background Colors

You can customize the names of CX Director Panel buttons that open pages. For CX Director Panel buttons that run Custom Controls, you can customize the button names, name text style, and background color.

Page Buttons

The names of CX Director Panel buttons that open pages are set in the CX Director Panel tab of the CX Director Panel Configuration client.

To change the name of a CX Director Panel page button

1. At the bottom of the **Device View**, click **CX Director Panel Configuration**.

   The **CX Panel Configuration** client opens in the **Device View**.
2. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
3. Click the **CX Panel** tab.

   The **CX Director Panel** tab opens.
4. Click **Director**.

   The **Director** section opens. Caprica automatically loads the assigned Custom Controls into the displayed buttons.
5. Use the **Button Pad Page** list on the **CX Director Panel** image to select the page button to customize.

   The **CX Director Panel Configuration** client displays the configuration of the selected page.
6. Click **•••** to the right of the **Button Pad Page** list.

   The **Page Name** box displays below the **CX Director Panel** image.
7. In the **Page Name** box, enter a new name for the page.
8. Click **Apply**.

   The associated page button on the CX Director Panel displays the new page name.

Custom Control Buttons

The name, name text style, and background color specified for a Custom Control are carried over to the CX Director Panel button to which it is assigned.

To customize a CX Director Panel button assigned to a Custom Control

1. At the bottom of the **Device View**, click **Custom Controls**.

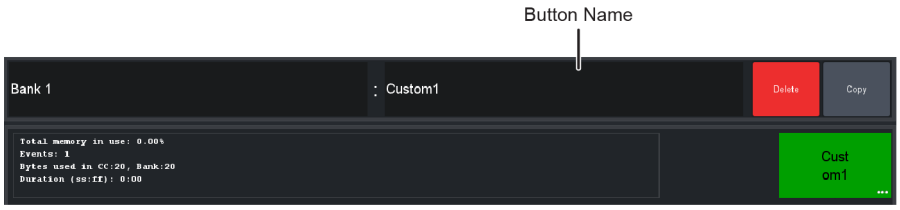
   The **Custom Controls** client opens.

2. In the **Bank** column of the **Custom Controls** table, click the Custom Control **bank** that contains the Custom Control assigned to the CX Director Panel button to customize.

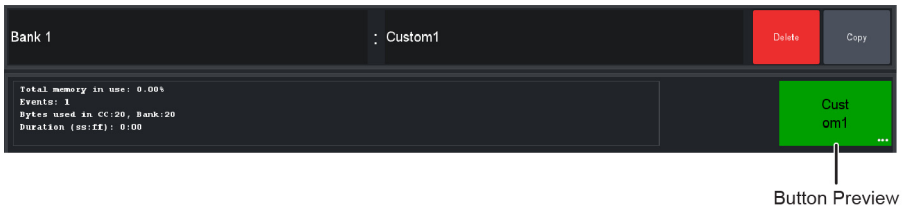
3. In the **CC Name** column of the **Custom Controls** table, click the **Custom Control** assigned to the CX Director Panel button to customize.

   The **Custom Controls** client displays the selected bank and Custom Control name at the top of the client.

4. In the **Name** box at the top of the **Custom Controls** client, enter the name to display on the CX Director Panel button to which the Custom Control is assigned.



5. At the top of the **Custom Controls** client, click the **Button Preview**.



   The **Select Style** dialog box opens.

6. Click a **Style** button in the top button row of the **Select Style** dialog box to set the text style for the CX Director Panel button assigned to the Custom Control.

   The available text styles for CX Director Panel buttons names are as follows:

Standard	Small	Small Invert	Medium	Medium Invert	Large	Large Invert	None
STD TXT	SMALL TXT	SMALL INV	MED TXT	MED INV	LG	LG	

   The **Select Style** dialog box closes and the **Button Preview** updates along with the button on the CX Director Panel.

7. Click the **Button Preview**.

   The **Select Style** dialog box opens.

8. Click a **Color** button in the bottom button row of the **Select Style** dialog box to set the background color for CX Director Panel button assigned to the Custom Control.

   The available background colors for CX Director Panel buttons are as follows:

   The **Select Style** dialog box closes and the **Button Preview** updates along with the button on the CX Director Panel.

Selecting the Faders to Control

A CX Director Panel contains five or ten physical faders that work in conjunction with the DirectAudio interface of DirectControl to control the faders in the On-Air Audio view and on the OverDrive system audio mixer. Since a CX Director Panel does not have enough faders to control all audio channels in the On-Air Audio view, you must select the channels to control with your CX Director Panel faders.

To control an audio channel with a CX Director Panel fader, the channel must meet the following conditions:

- The channel must be selected in the Audio Channel Includes tab.
- The channel must be displayed in the DirectControl On-Air Audio view.
- The channel must be the first five or ten channels that match the previous conditions. The number of channels that you can control depends on the number of physical faders on your CX Director Panel.

On the CX Director Panel, the display above a fader displays the channel name it controls.

✶ Before you can select CX Director Panel faders to control, your Caprica Server must have a configured audio mixer device. For more information on configuring an audio mixer Caprica device, refer to the following:

› The ***Caprica Device Setup Sheet*** for your audio mixer.

› The **Configuring Devices to Connect to an OverDrive System** section in the ***Caprica User Guide***.

› The **Configuring Audio** section in the ***Caprica User Guide***.

To select the audio channels to control with CX Director Panel faders

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Director Panel Configuration** node.

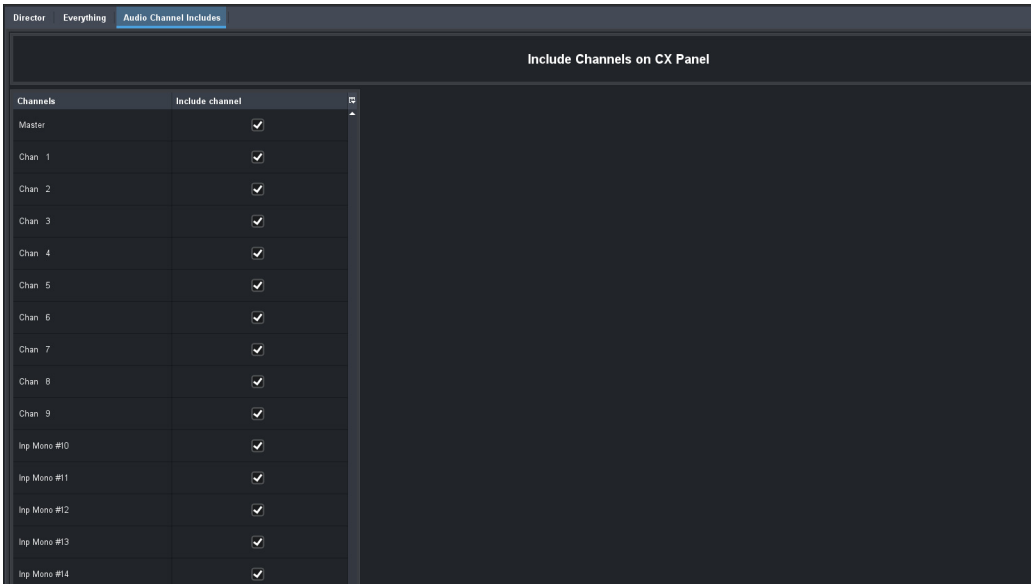
   The **CX Director Panel Configuration** client opens in the **Device View**.

4. Use the **Window** menu to select **Full Screen**.

   The **CX Director Panel Configuration** client expands to full screen view.

5. Click the **Audio Channel Includes** tab.

   The **Audio Channel Includes** tab opens.



6. To manage the audio channels available to the CX Director Panel, use the check boxes in the **Include channel** column as follows:

   - **Control** — select the check box to the right of an audio channel that you want to control with a physical fader on your CX Director Panel.
   - **Do Not Control** —clear the check box to the right of an audio channel that you do not want to control with a physical fader on your CX Director Panel.

CX Everything Panel OverDrive Setup

In an OverDrive system that contains a Caprica Server, you can connect a CX Everything Panel that contains physical control buttons and audio faders. CX Everything Panels are optional OverDrive companion control panels for users who prefer a dedicated control surface. CX Everything Panels work in conjunction with the OverDrive touch screen, keyboard, and mouse to offer you multiple interfaces to your OverDrive system.

✶ CX Everything Panels only work with OverDrive systems that contain a Caprica Server.

The following topics are discussed in this chapter:

- Configuring CX Everything Panel Buttons
- Selecting the Faders to Control

Configuring CX Everything Panel Buttons

A CX Everything Panel contains 32 multi-color LCD buttons that enable to access 32 pages that each contain 32 buttons to which you can assign a Custom Control. Pressing a CX Everything Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system. You can also configure CX Everything Panel buttons to open another button page after the assigned Custom Control finishes.

A CX Everything Panel contains two pads of 15 multi-color LCD buttons that you can configure to run any combination for the following actions when a user presses a button:

- Open a new page of buttons for button pad 1, 2, or both.
- Run a Custom Control.
- Select a camera to control.

Assigning Page Changes to CX Everything Panel Buttons

You can assign a page change to any of the 30 multi-color LCD buttons on your CX Everything Panel. Pressing a page change button opens a new page of buttons for button pad 1, 2, or both.

To assign page changes to CX Everything Panel buttons

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.
4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
5. Click the **Everything** tab.

   The **Everything** tab opens.
6. Use the **TYPE** list to select **Standard**.

   The **Standard** button actions display below the **CX Everything Panel** image.

7. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the button page that contains the button or buttons to assign a page change.

   The **CX Everything Panel** image displays the buttons for the selected page.

8. In the **CX Everything Panel** image, click the **button** to assign a page change.

9. Use any combination for the following lists to select the page to open in a button pad:

   - **Left Page** — use this list to select page to open for button pad **1**.
   - **Right Page** — use this list to select page to open for button pad **2**.

   Select **None** to keep the current page open in the associated button pad.

10. Click **Apply**.

    The selected button updates on the CX Everything Panel. The assigned page change is only available for the selected **button** in the selected **page**.

Assigning Custom Controls to CX Everything Panel Buttons

You can assign a Custom Control to any of the 30 multi-color LCD buttons on your CX Everything Panel. Pressing a CX Everything Panel button runs the assigned Custom Control from the Caprica Server in your OverDrive system. You can also add a page change after the assigned Custom Control finishes.

✶ Before you can assign Custom Controls to CX Everything Panel buttons, you must create the required Custom Controls on your Caprica Server. Custom Controls must contain at least one command.

To assign Custom Controls to CX Everything Panel buttons

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.

2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.

3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.

4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.

5. Click the **Everything** tab.

   The **Everything** tab opens.

6. Use the **TYPE** list to select **Standard**.

   The **Standard** button actions display below the **CX Everything Panel** image.

7. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the button page that contains the button or buttons to assign a Custom Control.

   The **CX Everything Panel** image displays the buttons for the selected page.

8. In the **CX Everything Panel** image, click the **button** to assign a Custom Control.

9. Use the **Bank** list to select the bank that contains the Custom Control to assign to the selected button.

10. Use the **CC** list to select the Custom Control to assign to the selected button.

11. Use the **Page** list to select the **page** of CX Everything Panel buttons to display on the CX Everything Panel after the Custom Control assigned to the button starts. Select **None** to continue displaying the current page of CX Everything Panel buttons

12. Click **Apply**.

    The selected button updates on the CX Everything Panel. The assigned Custom Control is only available for the selected **button** in the selected **page**.

Assigning Cameras to CX Everything Panel Buttons

You can assign a camera to any of the 30 multi-color LCD buttons on your CX Everything Panel. Pressing a CX Everything Panel button selects the assigned camera so the you can control it using the CX Everything Panel roller and joystick.

✶ Before you can assign cameras to CX Everything Panel buttons, you must have cameras configured on your Caprica Server.

To assign cameras to CX Everything Panel buttons

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.

2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.

3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.

4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.

5. Click the **Everything** tab.

   The **Everything** tab opens.

6. Use the **TYPE** list to select **Standard**.

   The **Standard** button actions display below the **CX Everything Panel** image.

7. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the button page that contains the button or buttons to assign a camera.

   The **CX Everything Panel** image displays the buttons for the selected page.

8. In the **CX Everything Panel** image, click the **button** to assign a camera.

9. Use the **Camera** list to select the camera to control.

10. Use the **Mode** list to select the control mode to use for the selected camera. The modes available in the **Mode** list depend on the camera selected in the **Camera** list.

11. Use the **Show** list to select the camera show that contains the shots to use with the selected camera. The shows available in the **Show** list depend on the camera selected in the **Camera** list.

12. Use the **Shot** list to select the shot to position the selected camera. The presets and moves available in the **Shot** list depend on the show selected in the **Show** list.

    - **Shot** — move the camera to the preset position when the user presses the associated CX Everything Panel button.
    - **Move** — load the camera position, but do not move the camera when the user presses the associated CX Everything Panel button. Press the button once again to move the camera to the loaded position.

13. In the **Duration** box, enter or select the number of seconds in which to move the selected camera to the position of the show selected **Shot** list.

14. Optionally, you can add a **Custom Control** and or a **page change** to your camera selection.
15. Click **Apply**.

    The selected button updates on the CX Everything Panel. The assigned camera is only available for the selected **button** in the selected **page**.

    button CC > Cam> shot

Assigning the Camera to Follow Selection to CX Everything Panel Buttons

You can assign the camera to follow selection to any of the 30 multi-color LCD buttons on your CX Everything Panel. CX Everything Panel buttons can be assigned to select the Prepared, On Air, or Next camera.

To assign the camera to follow selection to CX Everything Panel buttons

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.
4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
5. Click the **Everything** tab.

   The **Everything** tab opens.
6. Use the **TYPE** list to select **Follows**.

   The **Follows** button actions display below the **CX Everything Panel** image.

7. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the button page that contains the button or buttons to assign a camera.

   The **CX Everything Panel** image displays the buttons for the selected page.
8. In the **CX Everything Panel** image, click the **button** to assign a camera follow selection.

9. Use the **Follows Type** list to select the camera to follow:

   - **Prepared** — select the prepared camera. A camera must be selected before you can use this button. The top left corner of the information screen displays the text **Cam** when the CX Everything Panel has selected a camera.

     Double press the Prepared button to lock and follow the on-air camera. When locked to the on-air camera, double press the Prepared button to release the lock.
   - **On Air** — select the first on-air camera. A camera must be selected before you can use this button. The top left corner of the information screen displays the text **Cam** when the CX Everything Panel has selected a camera.

     Double press the On Air button to lock and follow the on-air camera. When locked to the on-air camera, double press the On Air button to release the lock.
   - **Next** — press this button to select the next camera in the camera list. A camera must be selected before you can use this button. The top left corner of the information screen displays the text **Cam** when the CX Everything Panel has selected a camera.

     When locked to the On-Air camera, the Next button selects the next on-air camera. When locked to the Preset camera, the Next button selects the next prepared camera.

10. Click **Apply**.

    The selected button updates on the CX Everything Panel.

Customizing CX Everything Panel Button Appearance

You can customize the names of CX Everything Panel buttons that open pages. For CX Everything Panel buttons that run Custom Controls or select cameras, you can customize the button names, name text style, and background color.

Page Buttons

Renaming a CX Everything Panel page also changes the name displayed on the CX Everything Panel button assigned to open the page.

To rename a CX Everything Panel page and the button assigned to open it

1. At the bottom of the **Device View**, click **CX Panel Configuration**.

   The **CX Panel Configuration** client opens in the **Device View**.

2. Click the **Everything** tab.

   The **Everything** tab opens.

3. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the page to rename.

4. Click **...** to the right of the **Button Pad Page** list.

   The **Page Name** box displays below the **CX Everything Panel** image.

5. In the **Page Name** box, enter a new name for the page.

6. Click **Apply**.

   The name of the selected page updates, and the CX Everything Panel button assigned to open the page displays the new page name.

Custom Control and Camera Buttons

Customized CX Everything Panel Custom Control and camera buttons can be quickly changed back to their default appearance.

To customize a CX Everything Panel Custom Control or camera buttons

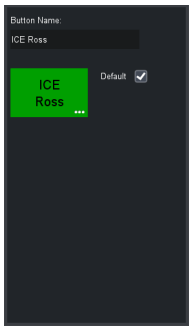
1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.
4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
5. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the button page that contains the button or buttons to assign a camera.

   The **CX Everything Panel** image displays the buttons for the selected page.
6. In the **CX Everything Panel** image, click the **button** to customize.

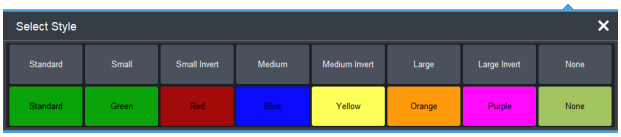
   The section below the **TYPE** list displays the current style of the selected button.



7. In the **Name** box, enter the name to display on the selected CX Everything Panel button.
8. To change the name text style of the selected CX Everything Panel button, complete the following steps:

   a. Click the **Button Preview**.

   The **Select Style** dialog box opens.



   b. Click a **Style** button in the top button row of the **Select Style** dialog box to set the text style for the CX Everything Panel button assigned to the Custom Control.

   The available text styles for CX Everything Panel buttons names are as follows:

Standard	Small	Small Invert	Medium	Medium Invert	Large	Large Invert	None
STD TXT	SMALL TXT	SMALL INV	MED TXT	MED INV	LG	LG	

   The **Select Style** dialog box closes and the **Button Preview** updates.

   c. Click **Apply**.

   The selected button on the CX Everything Panel displays the newly set style.

9. To change the background color of the selected CX Everything Panel button, complete the following steps:

   a. Click the **Button Preview**.

      The **Select Style** dialog box opens.

   b. Click a **Color** button in the bottom button row of the **Select Style** dialog box to set the background color for CX Everything Panel button assigned to the Custom Control.

      The available background colors for CX Director Panel buttons are as follows:

Standard	Green	Red	Blue	Yellow	Orange	None
						

      The **Select Style** dialog box closes and the **Button Preview** updates.

   c. Click **Apply**.

      The selected button on the CX Everything Panel displays the newly set style.

Restoring Default Appearance for a Button

Customized CX Everything Panel Custom Control and camera buttons can be quickly changed back to their default appearance.

To customize a CX Everything Panel Custom Control or camera buttons

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.
4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
5. Use the **Left Button Pad Page** list or the **Right Button Pad Page** list in the **CX Everything Panel** image to select the button page that contains the button or buttons to assign a camera.

   The **CX Everything Panel** image displays the buttons for the selected page.
6. In the **CX Everything Panel** image, click the **button** to customize.

   The section below the **TYPE** list displays the current style of the selected button.
7. Select the **Default** check box.
8. Click **Apply**.

The selected button on the CX Everything Panel displays the default style. The default style for Custom Control buttons is the name, name text style, and background color specified for Custom Control assigned to the button.

Selecting the Faders to Control

A CX Everything Panel contains five or ten physical faders that work in conjunction with the DirectAudio interface of DirectControl to control the faders in the On-Air Audio view and on the OverDrive system audio mixer. Since a CX Everything Panel does not have enough faders to control all audio channels in the On-Air Audio view, you must select the channels to control with your CX Everything Panel faders.

To control an audio channel with a CX Everything Panel fader, the channel must meet the following conditions:

- The channel must be selected in the Audio Channel Includes tab.
- The channel must be displayed in the DirectControl On-Air Audio view.
- The channel must be the first five or ten channels that match the previous conditions. The number of channels that you can control depends on the number of physical faders on your CX Everything Panel.

On the CX Everything Panel, the display above a fader displays the channel name it controls.

✶ Before you can select CX Everything Panel faders to control, your Caprica Server must have a configured audio mixer device. For more information on configuring an audio mixer Caprica device, refer to the following:

› The ***Caprica Device Setup Sheet*** for your audio mixer.

› The **Configuring Devices to Connect to an OverDrive System** section on page 26–2.

› The **Configuring Audio** on page 26–13.

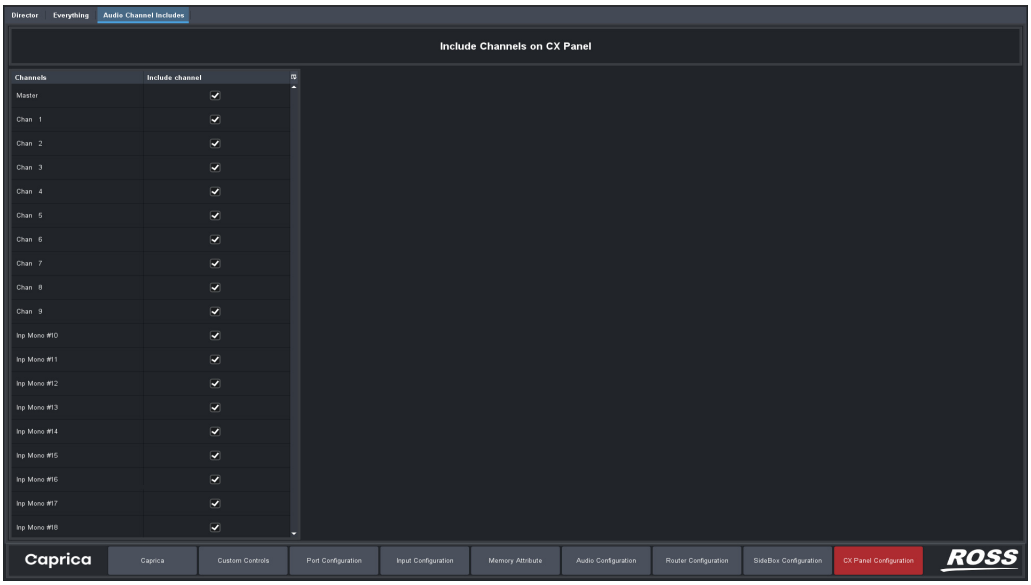
To select the audio channels to control with CX Everything Panel faders

1. In the **DashBoard Tree View**, expand your **Caprica Server** node.
2. In the **Caprica Server** node, expand the **Slot 0: Caprica** node.
3. Double-click the **CX Panel Configuration** node.

   The **CX Panel Configuration** client opens in the **Device View**.
4. Use the **Window** menu to select **Full Screen**.

   The **CX Panel Configuration** client expands to full screen view.
5. Click the **Audio Channel Includes** tab.

   The **Audio Channel Includes** tab opens.



6. To manage the audio channels available to the CX Everything Panel, use the check boxes in the **Include channel** column as follows:
   - **Control** — select the check box to the right of an audio channel that you want to control with a physical fader on your CX Everything Panel.
   - **Do Not Control** —clear the check box to the right of an audio channel that you do not want to control with a physical fader on your CX Everything Panel.

CX-3R Joystick Panel Setup

The CX-3R Joystick Panel is a control panel designed for robotic camera systems. It provides precise joystick control for camera movement and integrates with SmartShell, Ross Video's unified control system for robotics. The CX Panel Adapter Windows Service is required for communication between the CX-3R Joystick Panel and SmartShell.

✶ CX-3R Joystick Panel only work with SmartShell.

The following topics are discussed in this chapter:

- Install SmartShell CX Panel Adapter Service
- Ensure that SmartShell is configured to use a CX Panel
- Troubleshooting & More Details

Install SmartShell CX Panel Adapter Service

The CX Panel Adapter Windows Service is required for communication between SmartShell and the CX-3R Joystick Panel.

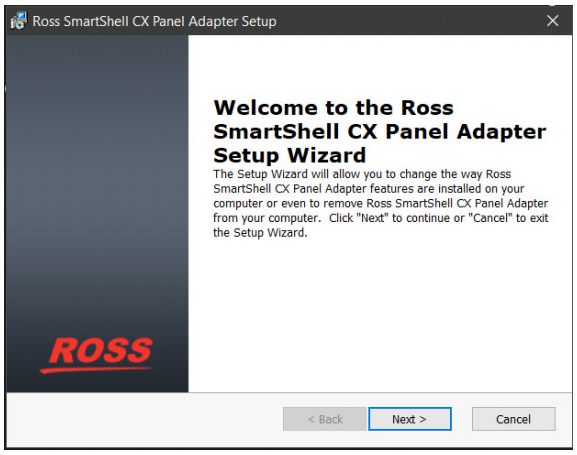
✶ The SmartShell CX Panel Adapter Service must be installed on the SmartShell machine.

Installing SmartShell CX Panel Adapter Service on your SmartShell Computer

To install SmartShell CX Panel Adapter Service

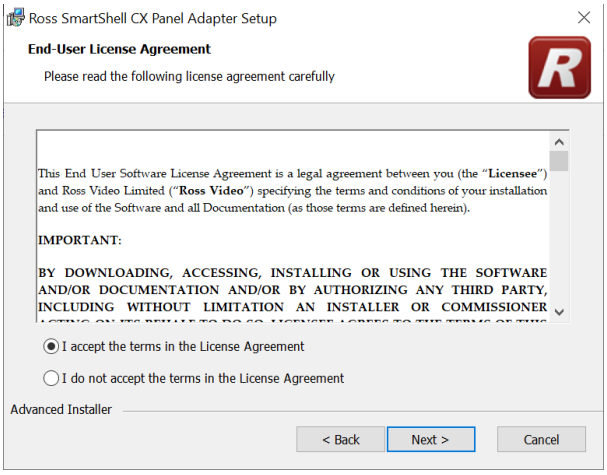
1. Download the SmartShell CX Panel Adapter Windows Service: SmartShellCxPanelAdapter-x.x.x-yyyy.mm.dd-hh.mm.msi
2. Open the **Ross SmartShell CX Panel Adapter Setup** installer on the SmartShell workstation.

   The **Ross SmartShell CX Panel Adapter Setup** wizard opens.



3. Click **Next**.

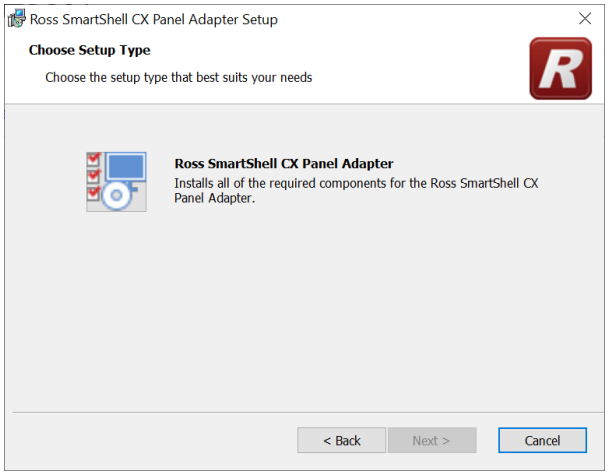
   The **End-User License Agreement** screen opens.



4. Read the **End-User License Agreement**.
5. Select the **I accept the terms of the License Agreement** option.

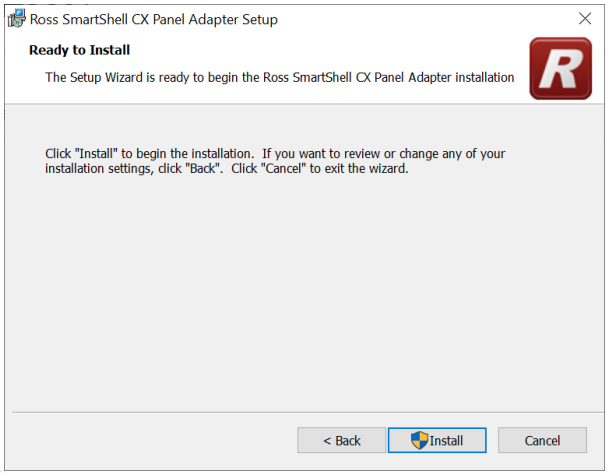
6. Click **Next**.

   The **Choose Setup Type** screen opens.



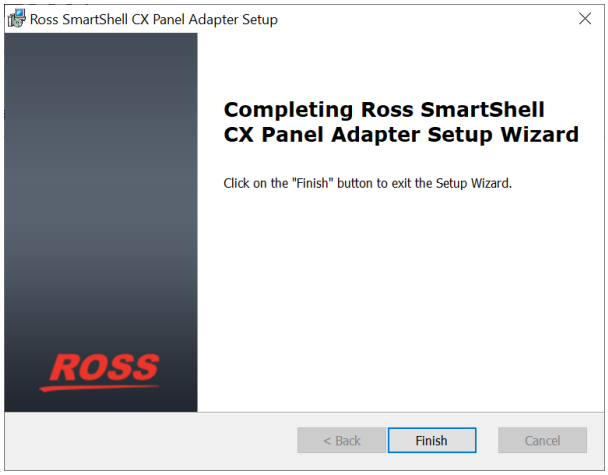
7. Click the **Ross SmartShell CX Panel Adapter** icon.

   The **Ready to Install** screen opens.



8. Click **Install**.

   After the **Ross SmartShell CX Panel Adapter** installation completes, the **Installation Complete** screen opens.



9. Click **Finish**.
10. Verify the installation
    - **Configuration files** — C:\Program Files\Ross Video\SmartShellCxPanelAdapter\configuration
    - **Log files** — C:\Program Files\Ross Video\SmartShellCxPanelAdapter\workspace\.metadata\logs

    No configuration changes are needed unless using non-default ports.

Connecting your panel to the CX Panel Adapter Service

Before configuring SmartShell, ensure that the CX Robotics Panel is connected to DashBoard™.
Refer to "**Connecting DashBoard™ to a CX Panel**" on page 5–1 for instructions.

Ensure the following:

- The adapter service must be installed and running on the SmartShell computer.
- When connecting in DashBoard™, enter port **14011** and use the IP address of the SmartShell computer (not the CX Panel).

Once the DashBoard™ connection is complete, proceed with configuring SmartShell.

Ensure that SmartShell is configured to use a CX Panel

Once the CX-3R Joystick Panel is connected, you must configure SmartShell to communicate with it.

To configure SmartShell for the CX-3R Joystick Panel

1. Ensure that SmartShell version 7.3 or later is installed.
2. Navigate to the **SmartShell installation directory**:
    - Default location: **C:\Ross\SmartShell 7.3.xxx.yyy**
    - If SmartShell is installed in a different location, navigate to that directory.
3. Open the **SmartShell.exe.config** configuration file.
4. Remove commented-out lines (**<!--** and **-->**) related to CX Panel communication:
   <!--

   <CxPanelAdapter Host="localhost" Port="14010" ConnectInterval="10000"/>
   -->

   The output to enable this setting should look like the following:
   <CxPanelAdapter Host="localhost" Port="14010" ConnectInterval="10000"/>

5. Save the file and restart SmartShell
   Note: The Joystick status indicator in SmartShell changes color based on the connection status:
   - **Green** — Successfully connected to a CX Panel through the Adapter and SmartShell has active control.
   - **Grey** — No connection to the CX Panel Adapter, Ross SmartShell CX Panel Adapter Service or SmartShell has not been given active control of the CX Panel. This can occur in the following cases:
     › SmartShell is not connected to the SmartShell CX Panel Adapter Service - Confirm that the SmartShell CX Panel Adapter Service is running and that SmartShell is properly configured to use a CX Panel, including the correct port.
     › Multiple SmartShell stations are connected to the same CX Panel Adapter Service - Only one SmartShell instance can actively control the panel. The first connected station will show a green status, while additional stations will show a gray status with the notification:

     Another station <station name> already has control of the CX Panel.
   - **Red —** Connected to the Adapter, but no CX Panel is detected. To resolve this:
     › Confirm that the CX Panel Client Connection is correctly configured with the IP address and port of the SmartShell CX Panel Adapter Service.
     › Ensure that there is no firewall blocking access between the CX Panel and the Adapter Service.

Calibrate the Joysticks

Refer to **Calibrating Joystick and Roller Ranges** in **Calibrating Controls**.

Test the Joysticks

After calibrating the joysticks, test them to verify their movements.

To test the CX-3R Joystick Panel

1. Move the joysticks to confirm that SmartShell registers all movements.

   If everything has been correctly installed:
   - The SmartShell joystick dot will be Green to indicate that a panel is connected
   - The panel will light up to show the set of cameras currently in use by SmartShell
2. Test a preset move and verify that the panel sends commands to SmartShell.

Troubleshooting & More Details

For additional support on configuring and using the CX-3R Joystick Panel, refer to the ***CX-3R Joystick Panel User Guide (5000DR-380-01)***.