

# CX Panel Studio Site Requirements

The CX Panel system consists of two distinct control panels designed for specific Ross Video workflows.

This document provides the necessary site requirements for installing and integrating the CX Director Panel, used with OverDrive systems, and the CX-3R Joystick Panel, used for robotic camera control in SmartShell systems.

The CX-3R Joystick Panel is designed for robotic camera control in SmartShell, featuring joysticks, control knobs, and programmable buttons. Compared to the legacy **Joystick Panel (5110AR-25X)**, the CX-3R Joystick Panel does not support camera control through Dashboard or paint parameter adjustments, such as iris and master black control.

Both panels are Ethernet-connected, require Dashboard for configuration, and are not interchangeable between OverDrive and SmartShell. Each panel has unique operational needs, networking configurations, and physical requirements, which are detailed in this guide.

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**Ask Us Anything** — Ross Video is pleased to provide guidance and answer any questions you might have about planning your installation. Our friendly, experienced Program Managers can help you achieve an efficient and trouble-free installation.

**IMPORTANT:** Ross Robotics always strives to provide excellent customer service. Installation of equipment provided by Ross Robotics must be performed by Ross-qualified personnel only. If any unqualified persons unpack and/or attempt to install equipment provided by Ross Robotics, the warranty is voided, and any actions required to correct the installation and/or repair the equipment will be at the expense of the customer and/or systems integrator.

## About CX Panel

The CX Panel is available in two models:

- **CX Director Panel:** Designed exclusively for **OverDrive**, this panel provides custom control buttons and audio faders to manage live productions and automation.
- **CX-3R Joystick Panel:** Engineered for **SmartShell**, this panel offers joysticks, control knobs, and button-based commands to control robotic camera systems.

Each panel is purpose-built for its respective system and is not interchangeable between **OverDrive** and **SmartShell**.

Both panels connect via Ethernet and require **DashBoard** for configuration.

## CX Panel Packages

The CX Panel Packages are as follows:

- **OVD-HW-CX-3D** — CX Director Panel designed for OverDrive system integration, featuring 32 LCD buttons, 10 audio faders, and Ethernet connectivity.

- **RRB-UCP-CX-3R** — CX-3R Joystick Panel designed for SmartShell system integration, featuring 2 joysticks, control knobs, and 30 multi-color LCD buttons for robotic camera control.

## General Studio Requirements

Understanding the studio conditions required for CX Panels ensures optimal performance and longevity. Proper climate control, ventilation, and cleanliness are key factors to maintain reliability.

**Note:** The following table has criteria that apply to both the CX Director and CX-3R Joystick Panels.

Criteria	Details
<b>Location</b>	• <b>Indoor Use Only:</b> CX Panels must be installed in a climate-controlled indoor environment.
<b>Operating Temperature</b>	• 5°C to 40°C (41°F to 104°F)
<b>Humidity</b>	• N/A (to be provided)
<b>Storage Temperature</b>	• 5°C to 40°C (41°F to 104°F)
<b>Ventilation</b>	• Ensure adequate airflow around the panel to prevent overheating.
<b>Environment Cleanliness</b>	• Keep the panel free from dust, debris, and excessive moisture.

## Software Requirements

The CX Panels require specific software configurations for each model.

Proper installation and updates of DashBoard, SmartShell, and OverDrive ensure efficient operation and compatibility with other Ross Video systems.

Panel Model	Details
<b>CX Director Panel</b>	<ul style="list-style-type: none"> <li>• Requires OverDrive (Caprica Server integration required).</li> <li>• Requires DashBoard for configuration.</li> </ul>
<b>CX-3R Joystick Panel</b>	<ul style="list-style-type: none"> <li>• Requires SmartShell 7.3 or later.</li> <li>• Requires DashBoard for configuration.</li> <li>• Requires CX Panel Adapter Service on SmartShell system.</li> <li>• Default Communication Port: 14011 (configurable in DashBoard).</li> </ul>

## Firmware Updates

Regular firmware updates ensure CX Panels operate smoothly and remain compatible with the latest software enhancements. Panels must be updated via DashBoard software to maintain system reliability and performance.

## CX Panel Studio Requirements

The following table lists studio requirements for CX Panels:

Studio Requirements	Details
Power Supply	<ul style="list-style-type: none"> <li>• CX Director Panel and CX-3R Joystick Panel: 55W, 3.7A, 15V</li> <li>• Backup Power: A UPS (Uninterruptable Power Supply) is recommended.</li> </ul>
Network	<ul style="list-style-type: none"> <li>• Ethernet Connection: Required for communication with OverDrive (CX Director) or SmartShell (CX-3R Joystick).</li> <li>• IP Configuration: Static IP required.</li> </ul>
Cables	<ul style="list-style-type: none"> <li>• <b>Power Connections:</b> Primary (PS1) and Secondary (PS2) Power Supplies (Supports one or both as needed) 15V DC power supply (must be connected before plugging into AC mains)</li> <li>• <b>Ethernet:</b> RJ45 Ethernet Port (required for network integration)</li> </ul>
Desk Mounting	<ul style="list-style-type: none"> <li>• <b>Cutout Dimensions:</b> <ul style="list-style-type: none"> <li>• CX Director Panel and CX-3R Joystick Panel: 17.5" x 5.25"</li> </ul> </li> <li>• <b>Flush Installation:</b> Ensure no dirt or debris is underneath the bezel.</li> <li>• <b>Desk Surface Material:</b> The desk should be made of a material that is structurally stable, easy to cut, and capable of securely supporting the panel.</li> </ul>
Rack Mounting	<ul style="list-style-type: none"> <li>• <b>Mounting Brackets:</b> CX Panel must be installed in a standard 19-inch rack, include ventilation requirements, and retain existing bracket and screw details. Refer to <b><i>CX Panel Quick Start Guide (5000DR-370-01)</i></b> for installation instructions.</li> </ul>