# Control

# CA-10 Automation Controller



# Introduction

The Control4 CA-10 Automation Controller is the most powerful member of Control4's award-winning line of controllers, designed to provide the speed, memory, and reliability required to power the most demanding projects. The CA-10 raises the bar for home automation through:

- A powerful processor that provides great performance for the largest projects.
- Redundant internal power supplies to reduce failures due to a power spike or brown out.
- Dual solid state drives (SSD) with data replication to safeguard the customer's project and customizations.
- SSDs that are accessible behind a magnetically attached front panel for effortless service.
- Dual network interface controllers to protect against switch, cable, or other network failures.
- Redundant cooling fans to ensure quiet, worry-free performance.
- 5 year warranty, included.

### Box contents

- CA-10 Automation Controller
- Power cord
- Rack ears (2) attached
- Cable ferrite clamps (2)

# Specifications

| Model number           | C4-CA10   |
|------------------------|---|
| Connections            |   |
| Network                | 2 × Ethernet—10/100/1000BaseT (redundant connections)                 |
| Storage                | Dual 32 GB (minimum) solid-state drives (SSD) in RAID 1 configuration |
| USB port               | 2 USB 3.0 ports-1A  |
| Power                  |   |
| Power requirements     | AC power supply accepts 100-240V ~ 50-60 Hz (1A)                      |
| Power supplies         | 2 redundant power supplies with auto failover                         |
| Power consumption      | Max 70W (239 BTU/hr)  |
| Miscellaneous          |   |
| Operating temperature  | 32 °F to 104 °F (0 °C to 40 °C)                                       |
| Storage temperature    | 4 °F to 158 °F (-20 °C to 70 °C)                                      |
| Fans                   | 2 redundant fans  |
| Fan dB level           | Max: 44 dB  |
| Dimensions (W × D × H) | 17.5 × 10.125 × 1.72" (444 × 258 × 44 mm)                             |
| Weight                 | 9.55 lb (4.33 kg)   |
| Shipping weight        | 12 lb (5.44 kg)   |
| Minimum OS version     | Requires Control4 Smart Home OS 3.1 or newer                          |

#### Warnings



**Caution!** To reduce the risk of electrical shock, do not expose this apparatus to rain or moisture.

AVERTISSEMENT ! Pour réduire le risque de choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.



**Caution!** In an over-current condition on USB, the software disables the output. If the attached USB device does not appear to power on, remove the USB device from the controller.

**AVERTISSEMENT !** Dans une condition de surintensité sur USB le logiciel désactive la sortie. Si le périphérique USB connecté ne semble pas s'allumer, retirez le périphérique du contrôleur.

For more information, visit the Products pages at dealer.control4.com.

## Additional resources

The following resources are available for more support.

- Control4 Knowledgebase: <u>kb.control4.com</u>
- Dealer Forums: <u>forums.control4.com</u>
- Control4 Technical Support: <u>dealer.control4.com/dealer/support</u>
- Control4 website: <u>www.control4.com</u>
- Composer Pro documentation in online help or PDF format available on the Dealer Portal under Support: <u>ctrl4.co/docs</u>

## Front view



- A Caution LED—The RGB status LED gives system status feedback. See "Troubleshooting" in this document for LED status information.
- **B** Link LED—The blue LED indicates that the controller has been identified in a Control4 Composer project and is communicating with Director.
- **C Power LED**—The blue LED indicates that AC power is connected. The controller turns on immediately after power is applied to it.
- D SSD LEDs—The red LED indicates an error with the SSD. See "Troubleshooting" in this document for LED status information. The SSD LEDs are only visible when or when the covered is removed.



- A Power port-AC power receptacle for an IEC power cord.
- **B** ID button—Button used to identify the device in Composer Pro and reset the controller. The ID button on the CA-10 is also an LED that displays feedback useful during a factory restore. See "Troubleshooting" in this document.
- **C Reset button**—Button used to factory reset the controller. See "Troubleshooting" in this document.
- D USB—Two USB 3.0 ports for external USB drives (e.g., FAT32-formatted devices). See "Setting up external storage devices" in this document.
- **E ETHERNET**—Two 10/100/1000 redundant Ethernet ports for local network connection. See "Connecting the controller" in this document. These two ports do not function as an Ethernet switch.

## Installing the controller

#### **Requirements:**

- Ensure that the Ethernet network is in place before starting system setup.
- The controller requires two Ethernet network connections. When both are connected, the controller communicates with other IP devices in the home and access Control4 system updates over a redundant network connection.
- Composer Pro software version 3.1.0 or newer is required for configuration.

#### Mounting options:

- In-rack—The controller can be mounted in a standard equipment rack (1U). Insert the controller into the rack space and secure it with 4 standard rack screws (not included). Make sure the controller has adequate ventilation (vents are on the front and back of the controller).
- Cabinet or shelf—The controller can be installed on a shelf or other hard surface. Make sure the controller has adequate ventilation (vents are on the front and back of the controller).

## Connecting the controller

1 Connect the controller to the network. Connect both Ethernet ports.

a **Ethernet**—Plug the network cable into the controller's RJ-45 port (labeled "Ethernet") and the network port on the wall or at the network switch.

**Note:** If only one Ethernet connection is used, the Caution LED turns solid yellow to warn that only one Ethernet port is connected.

**b** Redundant Ethernet—Connect a second Ethernet cable to the second Ethernet port on the same LAN subnet for a redundant network connection. If one Ethernet connection fails on the CA-10, the redundant connection continues working.

Tip: To increase reliability in case of network equipment failure, connect the second Ethernet connection to another switch on the same LAN subnet.

Note: The redundant Ethernet connections do not function as a bonded Ethernet connection in order to increase speed. The dual ports are designed to provide redundancy in case one port, cable, or switch port fails.

- **c** Ferrite clamps—Install the included ferrite clamps on each Ethernet cable a few inches from the end that connects into the controller.
- 2 Connect any external storage devices (USB) as described in "Setting up external storage devices" in this document.
- **3** Connect the power cord to the controller's power port and then to an electrical outlet.

## Setting up external storage devices

You can store and access media from an external storage device, for example, a USB memory device, by connecting the USB drive to the USB port and scanning the media in Composer Pro.



**Note:** When using USB storage devices with the CA-10 controller, you can only use partitions with a 2 TB maximum size.

## Composer Pro driver information

Use Auto Discovery and SDDP to add the driver to the Composer project. See the *Composer Pro User Guide* (<u>ctrl4.co/cpro-ug</u>) for details.

Note: The CA-10 controller requires Composer 3.1.0 or higher.

# Troubleshooting

## LED troubleshooting guide



## Resetting to factory settings



To restore the controller to the factory default image, perform the following steps:

- 1 Insert one end of a paper clip into the small hole on the back of the controller labeled **Reset**.
- 2 Press and hold the **Reset** button, the controller will reset and the Caution LED will turn solid red.
- **3** Hold the button until the LED blinks double yellow, and then release it. This should take 15 to 20 seconds. The LED blinks yellow while the factory restore is running. When complete, the LED will turn off and the device will reset to complete the factory restore process.

### Restarting the controller

Press and hold the ID button for five seconds. The controller restarts.

#### Resetting the network settings



**Caution:** The network set process will remove any network configuration and set the controller's network settings to DHCP.

#### To reset the controller network settings to the default, follow these steps:

- 1 Disconnect power to the controller.
- 2 While pressing and holding the **ID** button on the back of the controller, power on the controller.
- **3** Hold the **ID** button until the LED is solid orange, then immediately release the button.
- **4** If during the boot sequence the LED stays orange, press and hold the **ID** button until the LED blinks blue, and then release it.

#### Replacing a failed SSD

The dual SSDs are located behind the front panel of the CA-10 and can be replaced in the field at the direction of Technical Support.

#### To replace an SSD, perform the following steps:

- 1 Remove the plastic front panel of the CA-10 by pulling it straight out from the magnetic mounts.
- 2 The LED next to each SSD shows solid red when the drive is in a failed state. Locate the drive with the red LED next to it.



- 3 Power down the controller.
- **4** Remove the screw holding in the SSD. The SSD will swing away from the controller.
- 5 Pull the failed SSD out of the mounting slot.
- **6** Insert the new SSD into the mounting slot, and while holding the SSD against the controller, replace the screw.
- ${\bf 7}\,$  Power on the CA-10. The SSD and Caution LEDs will flash while the RAID is rebuilding.
- 8 After the SSD LEDs stop flashing, indicating the RAID has been rebuilt, replace the front cover.

# More help

For the latest version of this document and to view additional materials, open the URL or scan the QR code on a device that can view PDFs.

# Regulatory/Safety information

To review regulatory information for your particular Control4 products, see the information located on the Control4 website at <u>ctrl4.co/reg</u>.

# Warranty

#### Visit <u>ctrl4.co/warranty</u> for details.

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