CX10

Countertop/Under Cabinet Controller

Quick Reference Guide

CX10 Inverted

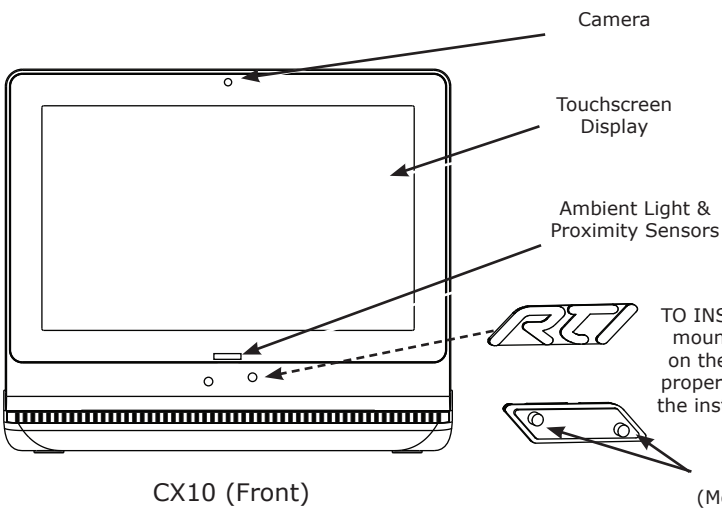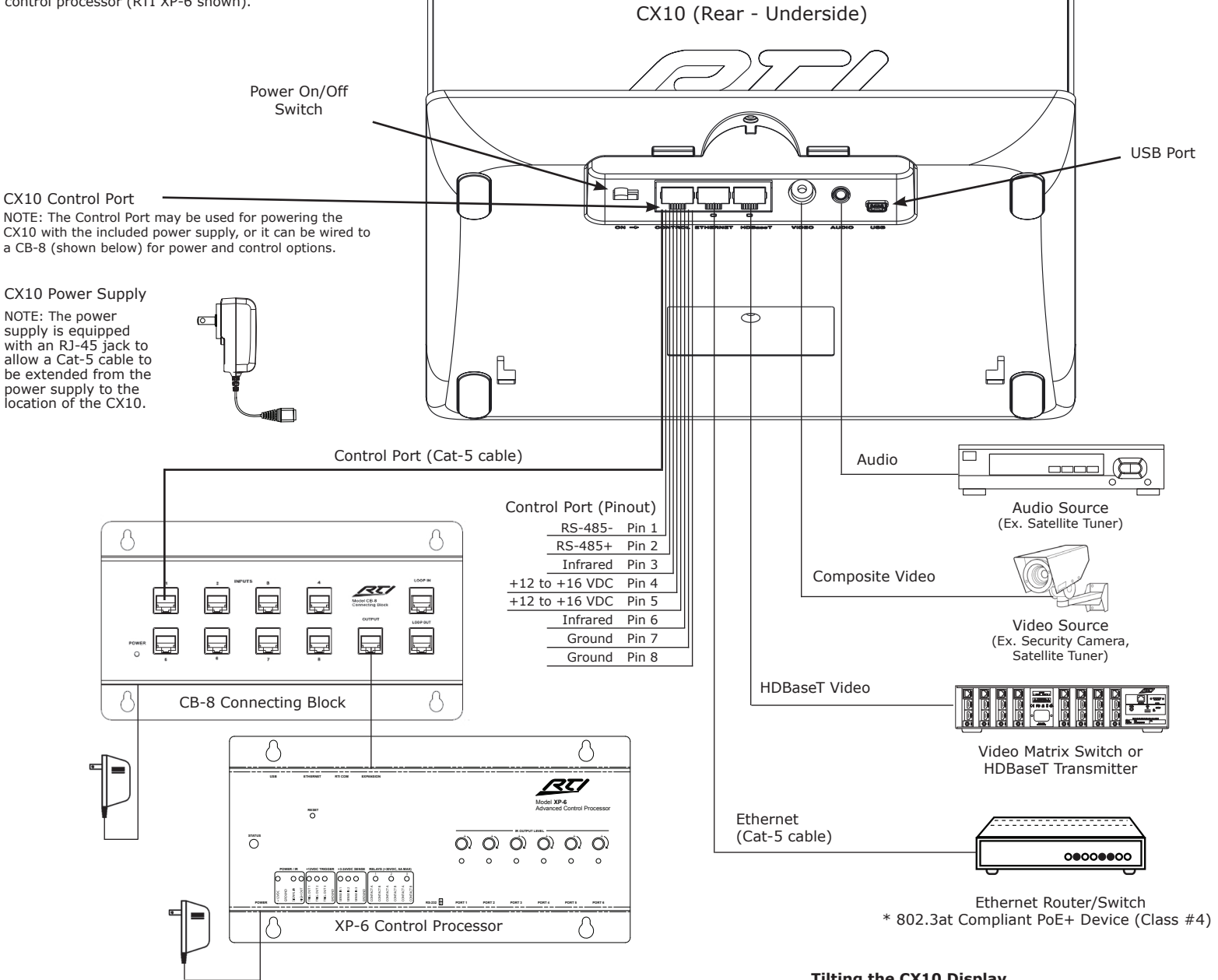

CX10 - Tilted 90°

CX10 - Tilted 10°

From the executive boardroom to the gourmet kitchen, the versatile CX10 touchpanel delivers simple, intuitive control of the environment and entertainment. The sleek unit can be set on a countertop or inverted and mounted under a cabinet, providing custom control on its 10-inch, high-resolution LCD touchscreen. The CX10 is also a high-quality HD video display with its integrated HDBaseT input and stereo speakers. Additional user-friendly features include video intercom support and a built-in composite input for viewing video from security cameras and other devices. The CX10's large display features a tilt range from 10 degrees to 90 degrees for the best viewing angle possible in countertop and under-cabinet installations. The touchpanel is programmable to the finest detail via RTI's Integration Designer® software, allowing integrators to easily create the ultimate custom user interface. The result is an elegant and sophisticated control solution that allows users to effortlessly engage with their surroundings.

The CX10 provides superior quality and reliability as well as these features:

• A 10.1" widescreen LCD with 1280x800 (WXGA) resolution and integrated capacitive touchscreen.
• Displays HD video via the integrated HDBaseT video input.
• Analog audio input and stereo speakers.
• Integrated 10/100 Base-T and 802.11 Wireless Ethernet.
• Built-in high output IR for direct control of devices through an IR connecting block.
• Powered using power supply or PoE+ (Power over Ethernet Plus).
• Proximity and ambient light sensors automatically wake the unit up and adjust the brightness upon being approached.
• Video intercom capability available via the built-in camera, microphone, and speakers.
• USB and Ethernet (hard-wired or wireless) software program updates.
• Adjustable tilt display (from 10°-90°) and CX10 can be inverted and mounted under a cabinet.
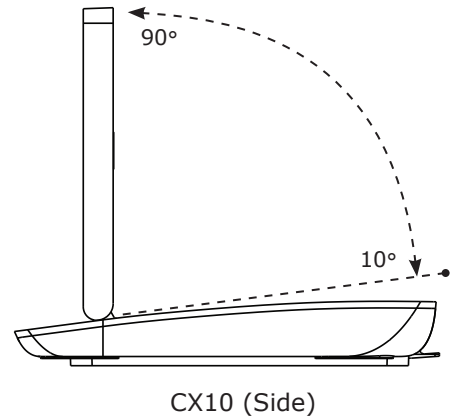
Connection Options

The following diagram shows a "control system operation" of the CX10, which utilizes an RTI control processor (RTI XP-6 shown).

CX10 (Rear - Underside)

Power On/Off Switch

USB Port

CX10 Control Port
NOTE: The Control Port may be used for powering the CX10 with the included power supply, or it can be wired to a CB-8 (shown below) for power and control options.

CX10 Power Supply
NOTE: The power supply is equipped with an RJ-45 jack to allow a Cat-5 cable to be extended from the power supply to the location of the CX10.

Control Port (Cat-5 cable)

Audio

Audio Source
(Ex. Satellite Tuner)

Control Port (Pinout)

RS-485-	Pin 1
RS-485+	Pin 2
Infrared	Pin 3
+12 to +16 VDC	Pin 4
+12 to +16 VDC	Pin 5
Infrared	Pin 6
Ground	Pin 7
Ground	Pin 8

Composite Video

Video Source
(Ex. Security Camera, Satellite Tuner)

Model CB-8 Connecting Block

CB-8 Connecting Block

HDBaseT Video

Video Matrix Switch or HDBaseT Transmitter

Ethernet
(Cat-5 cable)

Model XP-6 Advanced Control Processor

XP-6 Control Processor

Ethernet Router/Switch
* 802.3at Compliant PoE+ Device (Class #4)

Tilting the CX10 Display

The CX10 display tilts between 10° and 90° by pushing or pulling it into to the desired position.
NOTE: Forcing the display past these angles may damage the unit.

Camera

Touchscreen Display

Ambient Light & Proximity Sensors

90°

10°

Rotatable RTI Logo
TO INSTALL: Insert the RTI logo mounting posts into the holes on the front of the CX10 in the proper orientation depending on the installation type (table top or inverted).

RTI Logo Backside
(Mounting posts shown)

CX10 (Front)

CX10 (Side)

Mounting

MOUNTING

The CX10 is designed to be hard-wired (with power, video, Ethernet, etc.) and installed upright on a table or countertop. Additionally, the CX10 can be mounted inverted under a cabinet using the included mounting bracket.

COUNTERTOP INSTALLATION

1. Place CX10 on a table or countertop - no mounting bracket required.
2. Install necessary wiring and the "RTI" logo in the proper orientation.

IMPORTANT NOTE:

Under normal operating conditions, when the CX10 is displaying video via the HDBaseT input, there is the potential for heat buildup on the underside of the unit reaching temperatures of 130°F/55°C. The CX10 is equipped with a fan and cooling vents to aid in heat dissipation while video is playing. Extra precautions such as a mat may also be added to protect the table/countertop surface from potential damage due to prolonged heat exposure.

1. The cooling fan is only active when HDBaseT video is in use.
2. Regular cleaning of the cooling/fan vents is recommended to prevent dust build up.
3. Do not block the cooling and fan intake vents.

UNDER CABINET (INVERTED) - INSTALLATION

1. Position the CX10 mounting bracket set back one inch from the front edge of a cabinet underside using the "Front" label/arrow for proper orientation.
2. Attach the bracket using four #8 pan head fasteners* installed through the four mounting holes. Tighten until snug - do not over tighten.
3. Place the CX10 bottom side up, screen facing out and orient the grooves on the underside of the unit over the mounting bracket alignment tabs.
4. Once aligned, push up on the CX10 to insert the mounting bracket tabs into the grooves then pull the unit forward (toward you) until the unit snaps into place.
5. Install necessary wiring and the "RTI" logo in the proper orientation.

NOTE: Depending on the installation, the type and length of fastener used may vary.

UNDER CABINET (INVERTED) - REMOVAL

1. Remove all wiring.
2. Press and hold up the two mounting bracket release tabs on the rear of the bracket.
3. With one hand supporting the weight of the CX10, push the unit backward (away from you) until it disengages from the bracket.

CX10 - Rear View

Cooling Vents (2)

Fan Intake Vent

CX10 - Inverted Installation

Release Tabs (2)

Mounting Holes (4)

Alignment Grooves (2)

Installation & Operation

POWERING THE CX10

A) **12VDC/2A Power Supply:** The power supply is equipped with an RJ-45 jack to allow a Cat-5 cable to be extended from the power supply to the location of the CX10. Plug a Cat-5 cable into the CX10 Control Port and extend the cable to the location of the power supply, then plug the power supply into a AC wall outlet.

Or

B) **CB-8 Connecting Block:** Wire a Cat-5 cable from the CX10 Control Port to the RTI CB-8 Connecting Block (see diagram).

Or

C) **Ethernet Port (Power over Ethernet Plus):** Wire a Cat-5 cable from the CX10 Ethernet Port to an 802.3at compliant Power-over-Ethernet switch (Class #4).
CAUTION: Using a non-compliant PoE device may damage the CX10.

CONNECTIONS

CONTROL PORT

The Control Port (RJ-45 Jack) may be used for powering the CX10 via the included power supply (see Powering The CX10 section) or wired to an RTI CB-8 connecting block for power and control options via the RTI control system. Additionally, the control port provides an infrared output for direct control of devices via IR.

ETHERNET PORT

The Ethernet port (RJ-45 Jack) is for connection to an Ethernet network via Cat-5 cabling. The CX10 may also be powered via the Ethernet port when a Power over Ethernet Plus Switch is used. Additionally, the CX10 supports wireless Ethernet, which is configured in Integration Designer.

HDBASET VIDEO INPUT

The HDBaseT video input (RJ-45 Jack) allows HD video to be delivered to the CX10 via a Cat-5 cable from HDBaseT compatible devices such as a matrix switch or an HDBaseT transmitter.

COMPOSITE VIDEO INPUT

The Composite video input (BNC Jack) supports video sources such as a security camera or a satellite tuner.

AUDIO INPUT

The audio input (3.5mm Jack) functions as a stereo audio input to be played on the CX10 internal speakers.

USB PORT

The USB port allows Integration Designer data files and firmware to be downloaded to the CX10 using a USB cable (USB A to Mini B).

PROGRAMMING

THE TOUCHSCREEN DISPLAY

The CX10 touchscreen display is programmed using the Integration Designer Programming Software. Normally it is organized into a series of pages containing objects (buttons, text, graphics, etc.) that are related to each other such as a music server, satellite TV, lighting, security etc.

ADJUSTING CX10 INTERNAL SPEAKER VOLUME

The CX10 internal speaker's volume level can be adjusted by programming buttons on the touchscreen with volume adjustment objects in Integration Designer.

UPDATING FIRMWARE

It is highly recommended that this and all RTI products have the latest firmware installed. The firmware can be found in the Dealer section of the RTI website (www.rticorp.com). Install the firmware using a USB cable (USB A to Mini B).

UPDATING SOFTWARE

RTI's Integration Designer data files can be downloaded to the CX10 using a USB cable (USB A to Mini B), or via hard-wired or wireless Ethernet. If the CX10 is hard-wired to a LAN and the router has DHCP enabled, the initial data file can be made over Ethernet.
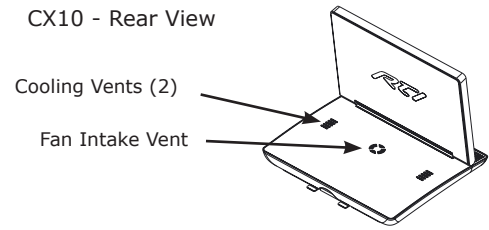
THE CX10 CONTROL PANEL

The CX10 has many settings that can be adjusted directly on the unit through the control panel. Please note that changes made directly in the CX10 control panel will be overwritten by changes made in Integration Designer.

Adjustable settings: Display (Backlight Level/Inverted Mode) • Set Clock • Time Out • Sound • Calibrate Touchscreen • Network Information • VOIP Intercom
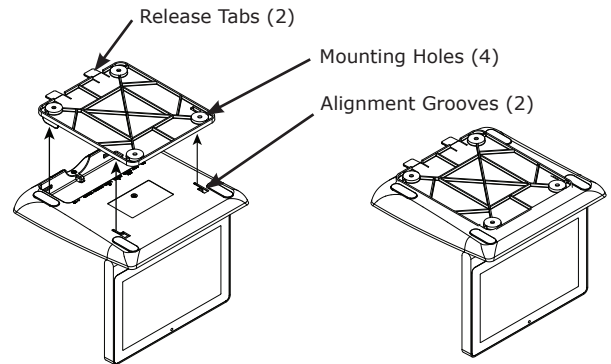
Access the Control Panel page: Assign a "Control Panel" page link to a button in the Integration Designer programming software.

NOTE: It is not possible to access the Control Panel by resetting the CX10 and pressing the touchscreen.

Product Contents

- One (1) CX10 Countertop/Undercabinet Controller
- One (1) International power supply kit with RJ-45 connector
- One (1) Rotatable RTI Logo
- One (1) Mounting bracket
- One (1) Quick reference guide
- One (1) Firmware update notification

Safety Suggestions

Read and Follow Instructions. Read all safety and operating instructions before operating the unit.
Retain Instructions. Keep the safety and operating instructions for future reference.
Heed Warnings. Adhere to all warnings on the unit and in the operating instructions.
Heat. Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.
Power Sources. Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.
Power Cord Protection. Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cord plugs at power receptacles and at the point at which they exit from the unit.
Water and Moisture. Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.
Object and Liquid Entry. Do not allow objects to fall or liquids to be spilled into the enclosure through openings.
Servicing. Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.
Damage Requiring Service. The unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

Cleaning

To clean your CX10, lightly dampen a lint-free cloth with plain water or a mild detergent and wipe the touchscreen, keypad and outer surfaces.

NOTE: Do not use harsh chemicals as damage to the unit may occur.

Federal Communications Commission Notice

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Ce dispositif ne peut causer des interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.

FCC Contains FCC ID: MMURTI2100

Contains IC (Canada): 3166A-RTI2100

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DECLARATION OF CONFORMITY (DOC)
The Declaration of Conformity for this product can be found on the RTI website at: www.rticorp.com/declaration

Contacting RTI

For news about the latest updates, new product information, and new accessories, please visit our web site at: **www.rticorp.com**

For general information, you can contact RTI at:
Remote Technologies Incorporated
5775 12th Ave. E Suite 180
Shakopee, MN 55379
Tel. (952) 253-3100
Fax (952) 253-3131
info@rticorp.com

Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).

RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready:

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

Please do not return products to RTI without return authorization.

Limited Warranty

RTI warrants new products for a period of three (3) years (excluding consumables such as rechargeable batteries which are warrantied for one (1) year) from the date of purchase by the original purchaser (end user) directly from RTI / Pro Control (herein referred to as "RTI"), or an authorized RTI dealer.
Warranty claims may be initiated by an authorized RTI dealer using the original dated sales receipt or other proof of warranty coverage. In the absence of the receipt of purchase from the original dealer, RTI will provide warranty coverage extension of six (6) months from the date code of the product. Note: RTI warranty is limited to the provisions set forth in this policy and does not preclude any other warranties offered by third parties who are solely responsible for those other warranties.

Except as specified below, this warranty covers defects in product material and workmanship. The following are not covered by the warranty:

- Product purchased via unauthorized sellers or internet sites will not be serviced-regardless of purchase date.
- Damages caused by accident, misuse, abuse, neglect or acts of God.
- Cosmetic damage, including, but not limited to, scratches, dents and normal wear and tear.
- Failure to follow instructions contained in the Product Installation Guide.
- Damages due to products used in an application or environment other than that for which it was intended, improper installation procedures or adverse environmental factors such as incorrect line voltages, improper wiring, or insufficient ventilation.
- Repair or attempted repair by anyone other than RTI and Pro Control or authorized service partners.
- Failure to perform recommended periodic maintenance.
- Causes other than product defects, including lack of skill, competence or experience of user.
- Damage due to shipment of this product (claims must be made to the carrier).
- Altered unit or altered serial number: defaced, modified or removed.

RTI Control is also not liable for:

- Damages caused by its products or for failure of its products to perform, including any labor costs, lost profits, lost savings, incidental damages, or consequential damages.
- Damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made on behalf of a third party.
- Loss of, or damage to, data, computer systems or computer programs.

RTI's liability for any defective product is limited to repair or replacement of the product, at the sole discretion of RTI.
In cases where the warranty policy conflicts with local laws, the local laws will be adopted.