

Crestron RL™ is a comprehensive group collaboration solution that combines Crestron® hardware with Microsoft® Lync® software. The Crestron RL solution is based on Microsoft Lync 2013, a popular and powerful server-based application that many companies already use on a daily basis. This full-featured, unified communication system enables video, voice, interactive content sharing, presence, and chat from one touch screen interface.

Two Crestron RL systems are offered. The dual display system (CCS-UC-100-2 KIT) is perfect for medium to large conference rooms, and includes two high-definition 65" touch displays. The single display system (CCS-UC-100-1 KIT) includes a single 65" touch display and is ideally suited for small to medium sized conference rooms, executive offices, and huddle rooms.

1 Preparation

A. Verify Contents

Before starting installation, check the system package contents. Included items are listed in the following table. Retain all documents and parts supplied for use in the installation process.

DESCRIPTION	PART NUMBER	QTY
Touch Screen, Color, 10"	TS-1051-C-B-S	1
Camera, USB, Fixed, 2 Megapixel	CCS-CAM-USB-F-100	1
CCS, Cable, Audio, 3.5 mm to (2X) RCA, 3' (1 m)	CBL-AUD-3MM-RCA-3	1
CCS, Cable, Audio, 3.5 mm to (2X) RCA, 12' (4 m)	CBL-AUD-3MM-RCA-12	1
Cable, VGA to DVI, 30' (~10 m)	CBL-VGA-DVI-30	1
Cable, HDMI to DVI, 30' (~10 m)	CBL-HD-DVI-30	1
Cable, HDMI to DVI, 3' (1 m)	CBL-HD-DVI-3	1
Cable, HDMI to DVI, 20' (~6 m)	CBL-HD-DVI-20	1
Cable, CAT6, 14' (~4.3 m)	CBL-CAT6-14	1
CCS, Cable, Sleeve, Expandable, Wrap, 1/2" x 33" (13 x 838 mm) L, Blk	CBL-SLEEVE-EXPAND-WRAP 1/2-33-B	2
Crestron Collab Sys, Unified Comm, Codec, MSLYNC	CCS-UC-CODEC-100	1 <sup>1</sup>
Crestron Collab Sys, SPK, Sound Bar, Blk	CCS-SPK-SB-100-B	1
Wall Mount Kit: CCS-TS-6500	CCS-TS-6500-WMK	1 <sup>1</sup>
Crestron Collab Sys, Touch Screen, 65" (1.65 m), 1080p, Blk	CCS-TS-6500-B	1 <sup>2</sup>
3 Cable Assembly	CBL-HD-ASSY	1
Accessory Bracket Assembly	CCSA-BRKT-100	1 <sup>1</sup>
Codec Mounting Bracket, Right	N/A	1 <sup>1</sup>
Codec Mounting Bracket, Left	N/A	1 <sup>1</sup>
Sound Bar Bracket	N/A	1 <sup>1</sup>
Camera Bracket	N/A	1 <sup>1</sup>
Cable Tray	N/A	1 <sup>1</sup>
Shelf Mount Bracket	Included with codec	1
Rack Mount Bracket	Included with codec	2
Power Pack For Ethernet	PWE-480SU	1
1' (~0.3 m) LAN Cable	CBL-CAT6-1	1

- 1. Mounting hardware included.
- 2. One in CCS-UC-100-1 KIT; two in CCS-UC-100-2 KIT

B. Tools Required

Installation requires the use of a #1 or #2 Phillips screwdriver as well as a socket wrench with 1/2" and 7/16" sockets.

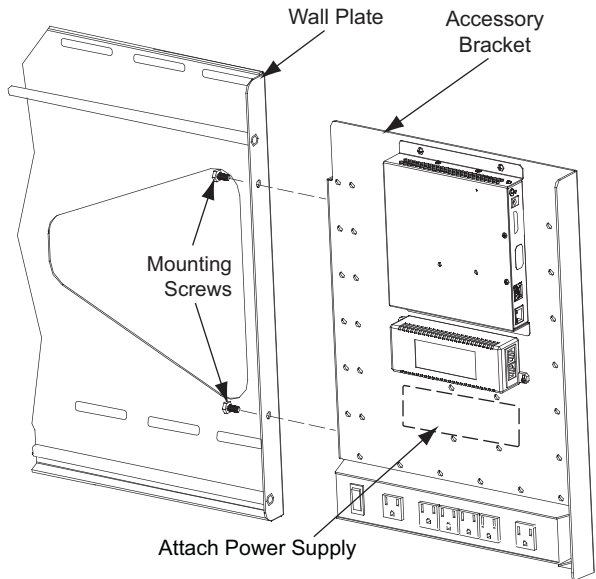
2 Installation

**NOTE:** Mounting hardware is packaged with the parts and assemblies to be attached.

Typical CCS-UC-100 installation procedures are provided in steps A through H. For detailed information about the CCS-TS-6500 Tilting Wall Mount for 65" Display, refer to the included CCS-TS-6500-WMK Installation Guide (Doc. 7511). Alternate mounting procedures for the CCS-UC-CODEC-100 are provided in step I.

A. Install Accessory Bracket Assembly

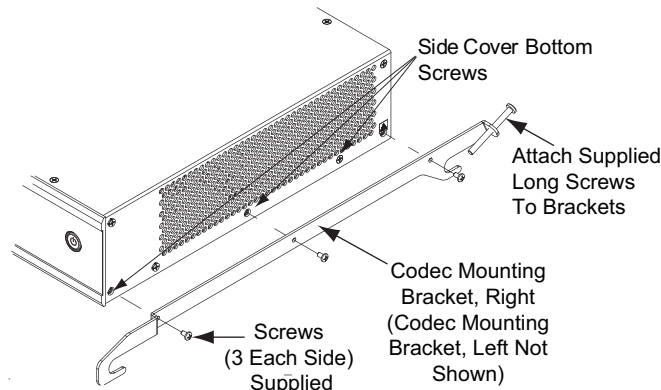
- 1. Use the supplied 1/4-20 x 1/2" mounting screws to attach the accessory bracket assembly to the wall plate (part of the CCS-TS-6500).



- 2. Use two plastic tie wraps (supplied), to attach the power supply for the 65" touch screen overlay to the accessory bracket in the area indicated by the dashed line in the illustration above. The port for the ac power source should face to the right.
- 3. Cut the tie wraps securing the power strip cable to the accessory bracket (secured for shipping only).

B. Install Mounting Brackets on Codec

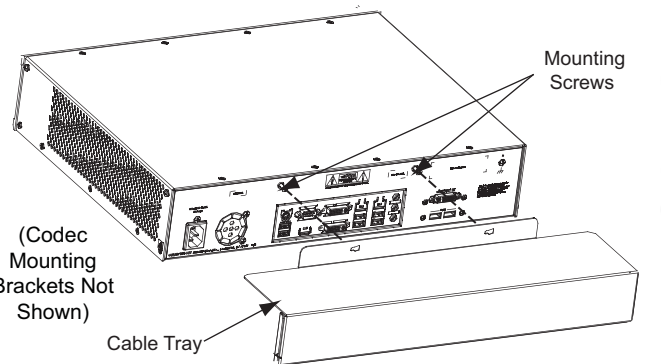
- 1. Remove three side cover bottom screws from each side of the codec and discard them.
- 2. Attach right and left codec mounting brackets to codec using the supplied screws.



C. Install Cable Tray

Attach the supplied cable tray to the rear of the codec as follows:

- 1. Attach all interface and power cables to the rear of the codec, including those that connect to the CCS-TX-201-C and PoE injector mounted on the accessory bracket assembly. (Refer to the connection details on page 3.)
- 2. Route the cables right or left toward their intended termination point, and bundle them with plastic tie wraps as necessary.
- 3. Loosen the two screws indicated in the illustration below approximately 1/4" (6 mm).
- 4. Mount the cable tray on the screws, slide the tray to the right to engage the keyhole slots, and tighten the screws.

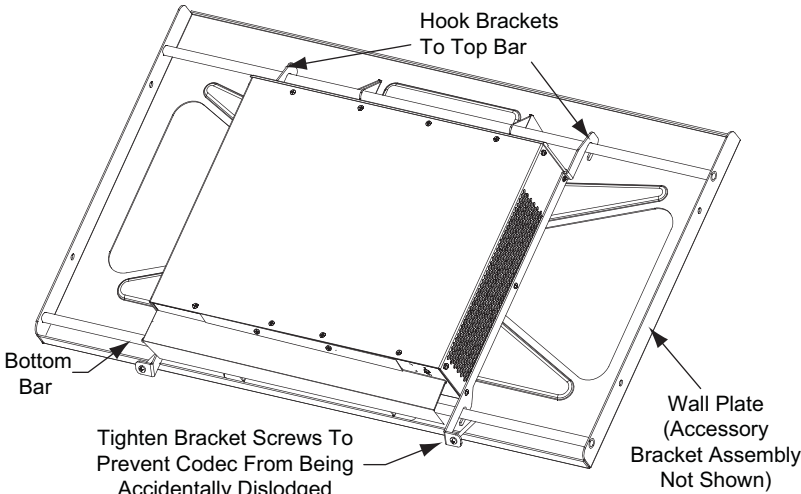


(Continued on following page)

2 Installation (Continued)

D. Attach Codec to the Wall Plate

- 1. Hook the mounting brackets attached to the codec to the top bar of the wall plate.
- 2. With the brackets resting against the bottom bar, tighten the bracket screws so that they extend under the bottom bar to secure the codec in position.



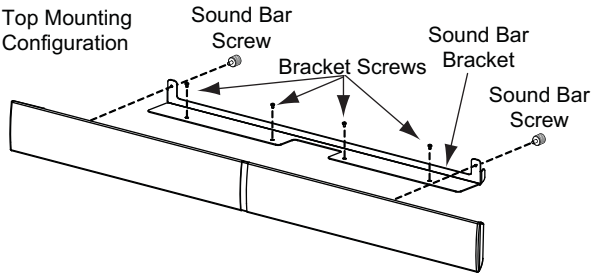
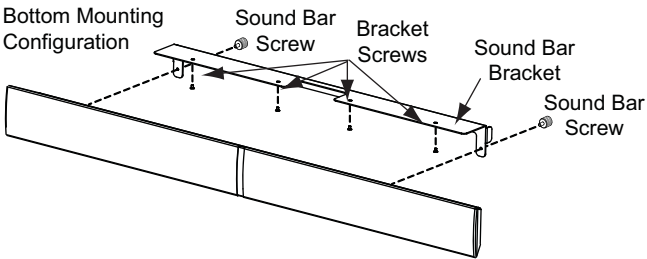
E. Attach Display to the Wall Plate

**WARNING:** At least two qualified people should perform the mounting procedure. Personal injury and property damage can result from dropping or mishandling the flat panel.

Attach the display to the wall plate as described in the CCS-TS-6500-WMK Installation Guide (Doc. 7511).

F. Attach Sound Bar to Display

- 1. Attach the sound bar bracket to the bottom (recommended) or top of the display frame using the four supplied screws as shown in the following illustrations.
- 2. Remove the two screws and mounting brackets from the rear of the sound bar as supplied, and use the screws to attach the sound bar to the sound bar bracket. (Retain the mounting brackets for possible alternate sound bar mounting configuration.)

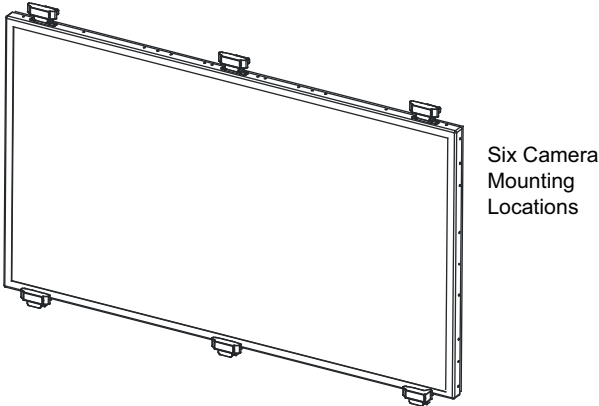
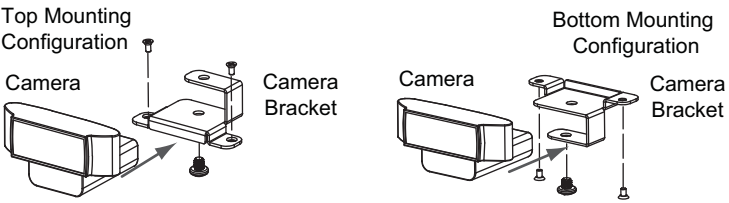


G. Alternate Sound Bar Mounting

In certain configurations, it may be desirable to have the sound bar mounted on a wall or on a horizontal surface rather than on the 65" touch screen. In such cases, refer to the instructions in the Quickstart Guide (Doc. 7560) supplied with the sound bar.

H. Attach Camera to Display

- 1. Insert the camera into the camera bracket for top (recommended) or bottom mounting, and secure the camera using the single supplied screw.
- 2. Use the two supplied screws to attach the camera bracket with camera to the monitor frame in one of the three available locations opposite the sound bar location.



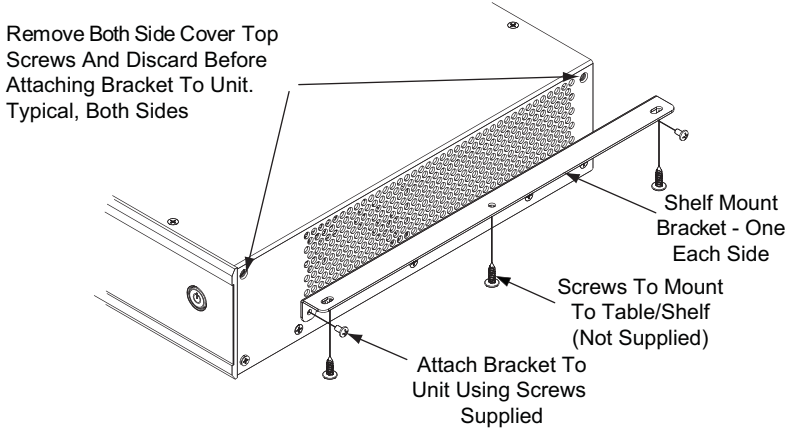
**NOTE:** If the camera is to be mounted in the top center position, the screws already holding the touch overlay control box need to be removed since the camera bracket uses the same screws. The camera is then mounted on top of the control box, with one screw going through both plates into the overlay frame.

I. Alternate Codec Mounting

The following information applies only to installations in which the codec is not to be attached to a wall plate.

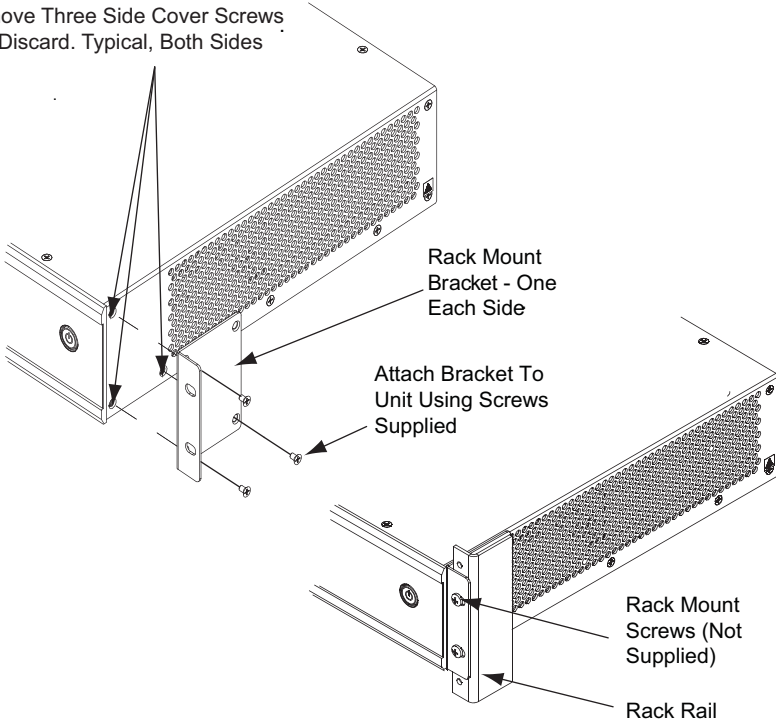
Table/Shelf Mounting

Locate unit position and mounting holes under the table/shelf using the supplied mounting template.



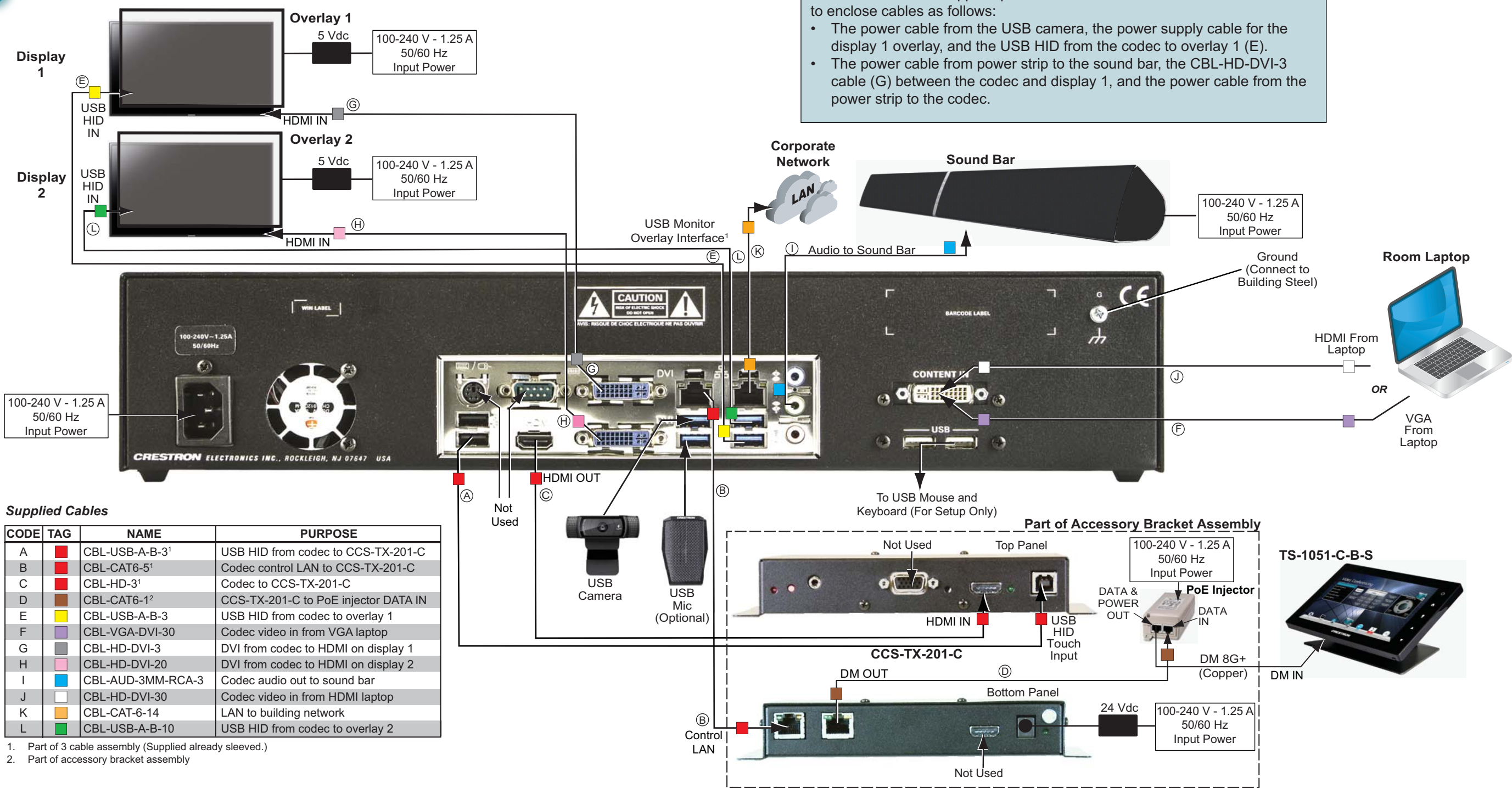
Rack Mounting

Remove Three Side Cover Screws and Discard. Typical, Both Sides





3 Hookup (Typical)



4 Initial Setup

Prerequisite Items From the Lync System Administrator

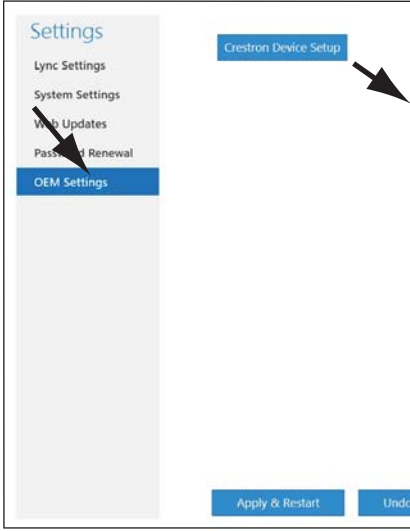
- A working Office 2013 Lync account that has been tested with a non-domain attached PC to be used as the Lync room system’s account.
- If used, a valid root certificate for the Lync network on a USB flash drive (e.g., root.cer).
- A USB keyboard and mouse for setup only.
- (Optional) A valid Outlook® Web Access (OWA) account for non-domain attached PCs. (This may not need to be used, but should be on hand.)

Procedures

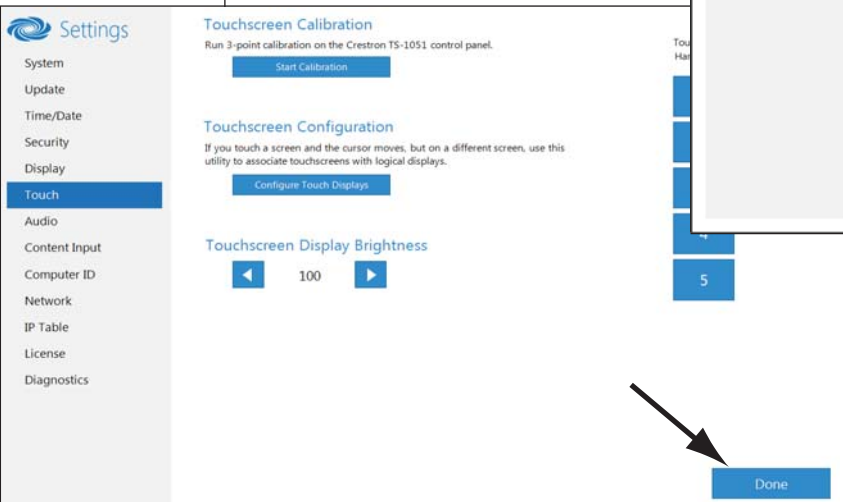
Once the hardware is installed and all appropriate hookup connections are completed, including a USB keyboard and mouse for setup procedures, apply power to the system.

1. The TS-1051-C-B-S displays a login screen. Enter the default administrator password `Crestron12345678#` to log in.
2. Click the **Accept** button on the End User License Agreement screen that appears. A second EULA is displayed. Click **Accept** on this screen to close it.
3. When the Microsoft LRS (Lync Room System) configuration screen appears, click the **OEM Settings** tab, and then click the **Crestron Device Setup** button to open the Crestron setup screen.
4. Click the **Time/Date** tab and select the proper time zone from the drop-down menu, and then set the time and date of the installation. The Lync server does not allow the client to authenticate if the time zone is incorrect.
5. Click the **Touch** tab, and then click the **Configure Touch Displays** button to run the Windows® touch screen setup utility. Follow any on-screen instructions. Upon completion, touch control is functional on the TS-1051-C-B-S control display and any other touch displays attached to the system.

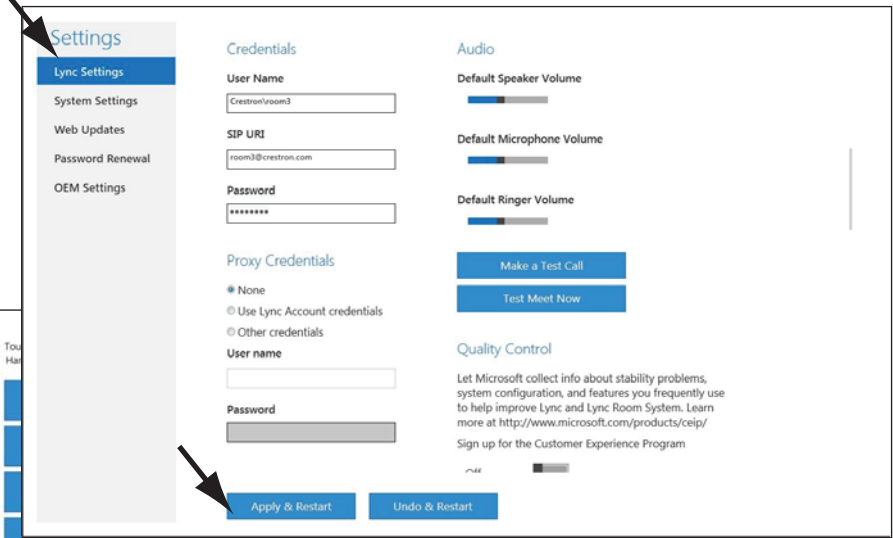
LRS Configuration Screen



Crestron Setup Screen

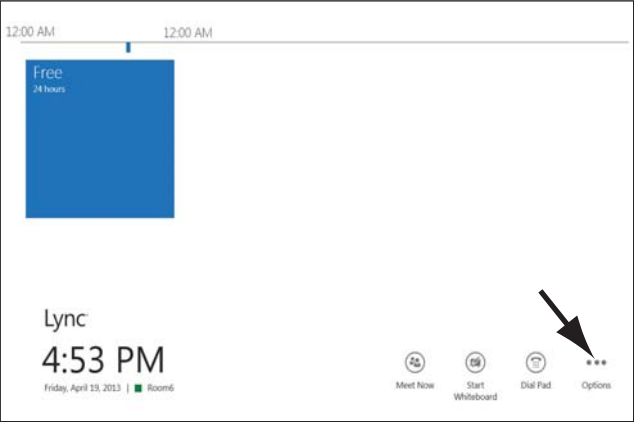


6. To use a root certificate for the Lync network, install a USB flash drive containing the root certificate into a USB port on the rear of the codec. Touch the *Security* tab, then touch *Import*. A standard Windows dialog box opens. Navigate to the certificate on the USB Flash drive, select it, and touch *Open*. A message appears saying the import was successful. Touch the **Done** button on the bottom of the setup screen. The display returns to the Microsoft LRS configuration screen.  
Alternatively, if attaching the codec to a domain, touch **Computer ID**, touch the **Domain** button, enter the domain name, and touch **Join**.
7. Touch the *Lync Settings* tab. Obtain the necessary Lync credential information from the site IT department and enter it into the *User Name*, *SIP URI*, and *Password* fields. The user name is in the format `domain\username` and the SIP URI is in the format `username@domain.com`. If NOT domain attached, enter the name and password only.
8. Touch the **Apply & Restart** button at the bottom of the screen.
9. The system reboots to the LRS screen and all displays should have the correct information. (This may take 30 - 40 seconds.)
10. If it is necessary to change any settings, touch *Options* in the lower right corner of the 10" touch screen. On the menu that appears, touch **Settings**.
11. On the authentication screen that appears, enter the administrator user name and password for the system, and touch **Authenticate**. The system reboots and a login screen appears on the 10" touch screen.
12. Continue, following the procedures given in steps 3 through 8 above as necessary.

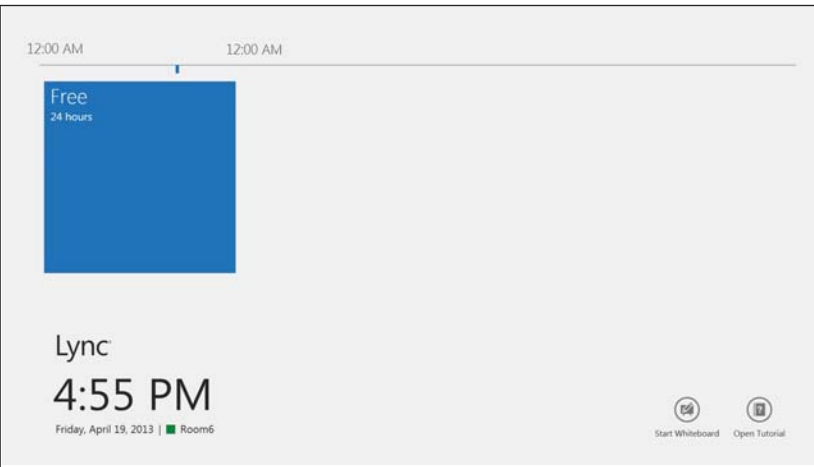


**NOTE:** Whenever a display change is made, repeat the step 5 procedure to ensure that the touch inputs are properly configured. Otherwise, it is possible for touch inputs from both the large screen and the control display to control the cursor on the control display.

Typical Display, 10" Touch Screen



Typical Display, 65" Touch Screen



The specific patents that cover Crestron products are listed at [patents.crestron.com](http://patents.crestron.com).

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