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 conference rooms, executive offices, and huddle rooms.

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-WMX Installation Guide (Doc. 7511). Alternate mounting procedures for the CCS-UC-CODEC-100 are provided in step I.

A. Install the 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 of the CCS-TS-6500.

B. Install Mounting Brackets on the Codec

1. Remove the three side cover bottom screws from each side of the codec and discard them.

2. Attach the right and left codec mounting brackets to the codec using the supplied screws.

C. Install the 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.

2. Tools Required

A #1 or #2 Phillips screwdriver and a socket wrench with 1/2” and 7/16” sockets are required for installation.

B.  Tools Required

A #1 or #2 Phillips screwdriver and a socket wrench with 1/2” and 7/16” sockets are required for installation.

- Preparation

A. Verify Contents

Before starting installation, check the system package contents. Included items are listed in the following table.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch Screen, Color, 10”</td>
<td>TS-101-CB-S</td>
<td>1</td>
</tr>
<tr>
<td>Camera, USB, Fixed, 2 Megapixel</td>
<td>CCS-CAM-USB-F-100-SHROUD</td>
<td>1</td>
</tr>
<tr>
<td>CCS, Cable, Audio, 3.5 mm to (2X) RCA, 3’ (1 m)</td>
<td>CBL-AUD-3MM-RCA-3</td>
<td>1</td>
</tr>
<tr>
<td>CCS, Cable, Audio, 3.5 mm to (2X) RCA, 12’ (4 m)</td>
<td>CBL-AUD-3MM-RCA-12</td>
<td>1</td>
</tr>
<tr>
<td>Cable, VGA to DVI, 30’ (~10 m)</td>
<td>CBL-VGA-DVI</td>
<td>30</td>
</tr>
<tr>
<td>Cable, HDMI to DVI, 30’ (~10 m)</td>
<td>CBL-HD-DVI-30</td>
<td>30</td>
</tr>
<tr>
<td>Cable, HDMI to DVI, 2’ (~6 m)</td>
<td>CBL-HD-DVI-2</td>
<td>30</td>
</tr>
<tr>
<td>Cable, CAT5, 14’ (~4.3 m)</td>
<td>CBL-CAT5-14</td>
<td>1</td>
</tr>
<tr>
<td>CCS, Cable, Sleeve, Expandable, Wrap, 1/2” x 33” (13 x 838 mm), Blk</td>
<td>CBL-SLEEVE-EXPAND-WRAP 1/2-33-BL</td>
<td>11</td>
</tr>
<tr>
<td>Crestron Collab Sys, Unified Comm, Codec, MSL/YANC, 14’ (~4.3 m), 1080p, Blk</td>
<td>CCS-UC-CODEC-100</td>
<td>11</td>
</tr>
<tr>
<td>Crestron Collab Sys, SPK, Sound Bar, Blk</td>
<td>CCS-SPK-100-B</td>
<td>11</td>
</tr>
<tr>
<td>Wall Mount Kit, CCS-TS-6500</td>
<td>CCS-TS-6500-WMK</td>
<td>11</td>
</tr>
<tr>
<td>Crestron Collab Sys, Touch Screen, 65” (1.65 m), 1080p, Blk, 4 Cable Assembly</td>
<td>CCS-UC-CODEC-100</td>
<td>11</td>
</tr>
<tr>
<td>Accessory Bracket Assembly</td>
<td>CCSA-BRKT-100</td>
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</tr>
<tr>
<td>Codec Mounting Bracket, Right</td>
<td>N/A</td>
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</tr>
<tr>
<td>Codec Mounting Bracket, Left</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Sound Bar Bracket</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Camera Bracket</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Cable Tray</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Shelf Mount Bracket</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Rack Mount Bracket</td>
<td>Included with codec</td>
<td>11</td>
</tr>
<tr>
<td>Power Pack for Ethernet</td>
<td>PWE-480SU</td>
<td>1</td>
</tr>
<tr>
<td>1’ (~3 m) LAN Cable</td>
<td>CBL-CAT5-1</td>
<td>1</td>
</tr>
</tbody>
</table>

1. Mounting hardware supplied.

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

Installation

NOTE: Mounting hardware is packaged with the parts and assemblies.

1. 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.

2. Cut the tie wraps securing the power strip cable to the accessory bracket (secured for shipping only).

3. Attach the supplied long screws to the brackets.
II. Alternate Codec Mounting

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

Table or Shelf Mounting

Rack Mount

Bracket (One Each Side)

Remove three side cover screws and discard them (typical, both sides).

Attach the bracket to the unit using the supplied screws.

Rack Rail

Rack Mount Screws (Not Supplied)

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

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

Attach the bracket to the unit using the supplied screws.

Shelf Mount Bracket (One Each Side)

3. Screws to Mount to Table or Shelf (Not Supplied)

Bottom Mounting Configuration

Attach the bracket to the top bar.

Bottom Bar

Tighten the bracket screws to prevent the codec from being accidentally dislodged.

Wall Plate (Accessory Bracket Assembly Not Shown)

Tighten the bracket screws to prevent the codec from being accidentally dislodged.

D. Attach the 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 the 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 the Sound Bar to the 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, 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 quickstart guide (Doc. 7560) supplied with the sound bar.

H. Attach the Camera to the Display

1. Remove the screen clamp, lockwasher, and screw before installing the camera on the display frame.

2. Use the two 6-32 X 3/4" L screws supplied with the camera to attach it to the display frame in one of the three available locations.

Three Camera Mounting Locations

Screen Clamp, Lockwasher, and Screw

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 or Shelf Mounting

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

Remove both side cover top screws and discard them before attaching the bracket to the unit (typical, both sides).

Attach the bracket to the unit using the supplied screws.

Rack Mounting

Remove three side cover screws and discard them (typical, both sides).

Attach the bracket to the unit using the supplied screws.

(Continued on the following sheet.)
**Crestron RL™ Group Collaboration System for Lync®**

### Hookup (Typical)

**Supplied Cables**

<table>
<thead>
<tr>
<th>CODE</th>
<th>TAG</th>
<th>NAME</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>CBL-USB-A-B-3</td>
<td>USB HID from codec to CCS-TX-201-C</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>CBL-CAT6-5</td>
<td>Codec control LAN to CCS-TX-201-C</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>CBL-HD-3'</td>
<td>Codec to CCS-TX-201-C</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>CBL-USB-A-B-3</td>
<td>USB HID from codec to overlay 1</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>CBL-VGA-DVI-30</td>
<td>Codec video in from VGA laptop</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>CBL-HD-DVI-3</td>
<td>DVI from codec to HDMI on display 1</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>CBL-HD-DVI-20</td>
<td>DVI from codec to HDMI on display 2</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>CBL-AUD-3MM-ROA-3</td>
<td>Codec audio out to sound bar</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>CBL-CAT-6-14</td>
<td>LAN to building network</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>CBL-USB-A-B-10</td>
<td>USB HID from codec to overlay 2</td>
<td></td>
</tr>
</tbody>
</table>

1. Part of 3 cable assembly (supplied already sleeved).
2. Part of accessory bracket assembly.

**NOTE:** Use the two supplied pieces of CCS-CBL-SLEEVE-EXPAND-WRAP to group cables as follows:

- The power cable from the USB camera, the power supply cable for the display 1 overlay, and the USB HID from the codec to overlay 1 (E).
- The power cable from power strip to the sound bar, the CBL-HD-DVI-3 cable (G) between the codec and display 1, and the power cable from the power strip to the codec.

For regulatory compliance information, refer to Doc. 7548.
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 using an Office 2013 Lync account, 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 and perform the following steps.

1. On the TS-1051-C-B-S login screen, enter the default administrative password Crestron12345678# to log in.
2. Click the Accept button on the End User License Agreement (EULA) screen that appears. Another EULA is then 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 Touch tab and select the proper time zone from the drop-down list, 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 Time/Date 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 display and any other touch displays attached to the system.
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 telling that import was successful. Touch the Done button on the bottom of the setup screen.
7. Touch to open the Crestron setup screen.
8. 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 username@domain.com and the SIP URI is in the format username@domain.com. If the Lync account is not domain attached, enter the name and password only.
9. 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.
10. 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.
11. Repeat steps 3 through 8 as necessary.