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## Crestron RL2

### Crestron RL® 2 Group Collaboration System for Skype® for Business, Wall Mount Package

- > A full-featured, simple to use group collaboration system based on Skype® for Business
- > Works with any compatible touch screen display up to 70" to provide a turnkey wall mounted solution for conference rooms, huddle rooms, and executive offices
- > Supports single or dual display configurations
- > Enables interactive collaboration from anywhere using any device
- > Easy to specify and install requires no custom design or programming
- > Low cost of ownership no MCUs or gateways needed
- > Tabletop touch screen console affords easy, intuitive operation
- > Allows customizable control of room lighting, shades, AV, and other equipment [6]
- > Includes a high-definition camera, microphone, and sound bar
- > Allows customization using Crestron and Crestron-approved third-party accessories
- > Provides auto-switching HDMI®, VGA, and DM 8G+® content source inputs
- > Supports audio as well as video from content sources
- > Allows input expansion using DigitalMedia™ transmitters and switchers<sup>[4]</sup>
- > Integrates seamlessly with Crestron Avia™ Digital Signal Processors
- > Integrates with Crestron Fusion® Cloud to support enterprise-wide room monitoring<sup>[7]</sup>
- > Mobile cart option available

Crestron RL® 2 is an advanced group collaboration solution for conference rooms and huddle spaces that combines Crestron® hardware with Skype® for Business software. Skype for Business (formerly Microsoft® Lync®) offers an enterprise-ready unified communications platform capable of delivering presence, instant messaging, voice, and video across the network or Internet using computers and mobile devices. Crestron RL 2 extends the Skype for Business experience to the conference room so groups can communicate and collaborate in real time from multiple locations. Crestron RL 2 combines the intuitive room control solutions of Crestron with the unified communication and collaboration features of Skype for Business.

#### **Easy to Use**

With one touch of the touch screen, anyone can walk into a conference room and instantly start a collaboration session. Crestron RL 2 lets you share your desktop with local and remote participants, view and annotate over a PowerPoint® presentation, and use the room's large screen touch display as an interactive whiteboard to sketch out ideas — all in real time. Remote participants can join from their personal computers, mobile devices, and other Crestron RL 2 systems. Crestron RL 2 lets everyone share their ideas and documents collaboratively — anytime, anywhere, with any device.

#### **Easy to Purchase and Install**

The Crestron RL 2 wall mount system package (CCS-UC-200-WMT KIT) can turn a typical meeting room or office into a collaborative meeting



space. It works with third-party touch screen displays up to 70" diagonal and includes everything required for a turnkey solution. There's no complicated design or programming required. It connects over the corporate LAN, so there are no additional infrastructure expenses such as MCUs or gateways. And, if your organization already uses Skype for Business, there are no additional licenses or fees required.

Installation involves simply mounting the display assembly to the wall (display not included), plugging in the power and LAN cables, and placing the microphone and touch screen console on the conference table. <sup>[1]</sup> The display assembly includes hidden storage for the system codec and other components, affording a clean appearance while eliminating the need for a separate equipment rack.

Dual display configurations are supported by adding a second wall mount kit (CCS-TS-6500-WMK, sold separately). A mobile cart option is also available to allow the complete system to be moved from room to room or repositioned within a multipurpose space. The mobile cart option features an attractive, height-adjustable design with heavy duty casters.<sup>[2]</sup>

NOTE: See also the CCS-UC-200 and CCS-UC-200-HUD for other room types and system configurations.

#### **Enhanced Connectivity, Integration, and Control**

Crestron RL 2 included a number of features not found in other Skype for Business based systems, affording several powerful ways to use and customize your system:

- Single or Dual Display Rooms of various types and sizes are supported, allowing the use of one or two high-definition displays.
   USB HID touch overlay support enables annotation and other interactive presentation capabilities right on the main display(s) at the front of the room.
- Tabletop Touch Screen Console The included 10" touch screen console provides an intuitive user interface for managing group collaboration sessions. It's so simple to use, anyone can instantly start



### CCS-UC-200-WMT Crestron RL® 2 Group Collaboration System, Wall Mount Package

- a session with just one touch. The touch screen console can also be custom programmed to control room lighting, shades, climate, and AV equipment (see *Control System Integration* below).
- USB HD Camera The included camera provides remote participants with a high-definition view of the room through an extra-wide 90 degree diagonal field of view. Crestron RL 2 is also compatible with a range of Crestron and Crestron-approved third-party camera options.
- Microphone Options The CCS-UC-200-WMT package comes with a high-performance, low-profile USB table microphone that's capable of achieving excellent pickup of several participants at a table in a typical room. Alternately, up to two analog microphones (not included) may be connected. Microphone input capability can be expanded using a simple mic mixer (Crestron model MMX-6-USB) or an advanced Crestron Avia™ Digital Signal Processor. A full assortment of Crestron and Crestron-approved third-party microphone accessories is available. [3]
- Auto-Switching "Content" Inputs The HDMI®, VGA, and DM 8G+® inputs allow versatile connectivity for computers and other content source devices. Automatic switching between sources simplifies operation.
- DigitalMedia<sup>™</sup> System Integration The DM 8G+ input facilitates input expansion and signal extension using any Crestron DM 8G+ transmitter or switcher. An assortment of under-table or in-wall transmitters and switchers is offered to provide input connectivity for content sources wherever it's needed. DM 8G+ also allows for connection to a centralized DM<sup>®</sup> switcher, enabling access to shared media sources and cameras anywhere in the building.<sup>[4]</sup>
- Content Audio Support In addition to video, Crestron RL 2 accepts audio input signals via its HDMI, analog audio, and DM 8G+ inputs. When integrated with an Avia Digital Signal Processor (DSP), all content audio signals can be routed through the DSP along with microphone signals.
- Audio Output The stereo analog output ordinarily feeds the included sound bar, or may be used to feed a separate sound system. Alternately, audio may be routed via USB to an Avia DSP.<sup>[5]</sup>
- Control System Integration Complete control over room lighting, shades, AV, and other equipment can be enabled right on the tabletop touch screen console through integration with a Crestron control system.<sup>[6]</sup>
- Enterprise Monitoring Crestron RL 2 has the ability to communicate directly with the Crestron Fusion® Cloud Enterprise Management Service, allowing it to be monitored from a centralized help desk alongside every other conference room across the enterprise. Room scheduling and other advanced capabilities can be enabled through integration with a control system. [6,7]

#### Optional Crestron® Accessories

The following Crestron products are just some of the many options available for use with the Crestron RL 2 system:

- CCS-TS-6500-MCK Mobile Cart for CCS-TS-6500-WMK
- CCS-TS-6500-WMK Wall Mount Kit (for second display)
- MMX-6-USB 6-Channel USB Microphone Mixer
- DSP-1282 Avia<sup>™</sup> Digital Signal Processor w/USB Audio, AEC, & Audio Conferencing Interface

- DSP-1283 Avia Digital Signal Processor w/Dante<sup>™</sup>, USB Audio, AEC, & Audio Conferencing Interface
- DM-TX-4K-100-C-1G Wall Plate 4K DigitalMedia 8G+® Transmitter 100
- DM-TX-200-C-2G Wall Plate DigitalMedia 8G+ Transmitter 200
- DM-TX-4K-202-C 4K DigitalMedia 8G+ Transmitter 202
- DM-TX-4K-302-C 4K DigitalMedia 8G+ Transmitter 302
- DM-TX-201-C DigitalMedia 8G+ Transmitter 201
- DM-TX-401-C DigitalMedia 8G+ Transmitter 401
- DMPS3-4K-100-C 3-Series® 4K DigitalMedia Presentation System 100
- DMPS3-4K-150-C 3-Series 4K DigitalMedia Presentation System 150
- HD-CONV-USB-100 HD to USB Video Converter
- USB-EXT-DM USB over Ethernet Extender with Routing

#### **Third-Party Accessories**

The following third-party manufacturers offer accessories that have been tested and approved by Crestron for use with Crestron RL 2:

- ClearOne® CHAT® 170 Group Speakerphone
- LG® 43SE3B & KT-T430 43" IPS Display w/Touch Overlay
- Logitech® ConferenceCam CC3000e, PTZ Pro Camera
- NEC® V423-TM & V652-TM Touch Integrated 42" and 65" Large Screen Displays
- NEC E705 & OL-E705 70" Display w/10 Point Infrared Touch Overlay
- Panasonic® AW-HE2 HD Integrated Camera
- Polycom® CX5100 & CX5500 Unified Conference Stations
- Samsung® DM-D Series 55", 65", and 75" Displays w/Touch Overlay
- Samsung ED-D Series 55" and 75" Displays w/Touch Overlay
- Samsung DM-E Series 75" E-Board Display for Business
- Sharp® AQUOS BOARD® 60", 70", and 80" Interactive Display Systems
- Sharp PN-K322B 32" Touchscreen Monitor
- Sharp PN-60TW3 & PN-70TW3 60" and 70" Touchscreen Monitors
- Sharp PN-80TC3 80" Touchscreen Monitor
- Shure® Microflex® MX390 Series Boundary Microphones
- Vaddio<sup>™</sup> ClearVIEW HD-USB Camera, RoboSHOT<sup>™</sup> 12 HD PTZ Camera, AV Bridge

NOTE: Crestron authorized integrators, please see Crestron True Blue Online Help Answer ID: 5532 for additional information about these and other third-party accessories.



#### **SPECIFICATIONS**

#### **Included Components**

NOTE: For additional specifications and other details, please refer to the individual spec sheet for each component.

Package Model: CCS-UC-200-WMT KIT Single Display Wall Mount System (Display not included)

Contents: (1) CCS-UC-CODEC-200 Crestron RL 2 System Codec;

(1) TS-1051-C-B-S 10.1" Tabletop Touch Screen Console;

(1) CCS-TS-6500-WMK Display Wall Mount Kit;

(1) CCS-CAM-USB-F-100-SHROUD HD Camera;

(1) CCS-MIC-USB-100 Table Microphone;

(1) SAROS SB-200-P-B Sound Bar;

(Lot) Cables and Accessories

For a dual display system package, add (1) additional CCS-TS-6500-WMK to the above package. All cables and accessories required to support dual displays are included with the base package.

#### **System Connections**

**Content AV Inputs:** (1 each) HDMI, VGA, unbalanced stereo analog audio, and DM 8G+;

(1) 20 ft (6.1 m) HDMI cable included;

(1) 25 ft (7.6 m) VGA/audio cable included

Analog Microphones: (2) Balanced microphone audio inputs;

Internally summed to mono (used only for custom applications in lieu of the included USB microphone) [3];

Supplies 48 Volts DC phantom power

Touch Display Video Outputs: (2) HDMI (DVI compatible);

(1) 20 ft (6.1 m) HDMI cable included

(1) 3 ft (0.9 m) HDMI cable included

**Tabletop Touch Screen Console:** (1) DM 8G+ with PoDM;

25 ft (7.6 m) cable included [1]

Sound Bar: Unbalanced stereo analog line-level audio [5];

Stereo RCA cable included

USB: (2) USB 3.0 and (6) USB 2.0 host ports for camera, touch display(s), table mic (or optional mic mixer or audio DSP), and mouse/keyboard [8];

15 ft (4.5 m) USB cable included for table mic [1];

Additional USB cables included for camera and touch displays

LAN: (1) 10Base-T/100Base-TX/1000Base-T Ethernet;

14 ft (4.3 m) CAT6 LAN cable included

**Power:** (1) IEC 60320 C14 main power inlet; 6.5 ft (2.0 m) detachable power cord included;

2.3 Amps maximum @ 100-240 Volts AC, 50/60 Hz

#### Mechanical

Includes a wall mount display assembly consisting of a touch display wall mount kit (CCS-TS-6500-WMK) with additional hidden brackets for the codec (CCS-UC-CODEC-200), power supplies, and power strip. Additional

backets are included for mounting of the camera and sound bar above and below the touch display.

A second CCS-TS-6500-WMK may be added to support a dual display configuration.

#### **MODELS & ACCESSORIES**

#### **Available Models**

CCS-UC-200-WMT KIT: Crestron RL® 2 Group Collaboration System for Skype® for Business, Wall Mount, Single Display (Display not included)

#### **Included Accessories**

CCS-UC-CODEC-200: Crestron RL® 2 System Codec (Qty. 1 included)
TS-1051-C-B-S: 10.1" Tabletop Touch Screen Console for Crestron RL® 2,
Black Smooth (Qty. 1 included)

CCS-TS-6500-WMK: Wall Mount Kit for Crestron RL® 2 (Qty. 1 included) CCS-CAM-USB-F-100-SHROUD: HD Camera for Crestron RL® 2 (Qty. 1 included)

CCS-MIC-USB-100: Table Microphone for Crestron RL® 2 (Qty. 1 included) SAROS SB-200-P-B: Saros® Sound Bar 200, Powered, Black (Qty. 1 included)

#### **Available Accessories**

CCS-TS-6500-WMK: Wall Mount Kit for Crestron RL® 2 CCS-TS-6500-MCK: Mobile Cart for CCS-TS-6500-WMK

HD-CONV-USB-100: HD to USB Video Convertor MMX-6-USB: 6-Channel USB Microphone Mixer

**DSP-1282:** Avia<sup>™</sup> 12x8 Digital Signal Processor w/USB Audio, AEC, & Audio Conferencing Interface

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DM-TX-201-C: DigitalMedia 8G+® Transmitter 201

DM-TX-401-C: DigitalMedia 8G+® Transmitter 401

DMPS3-4K-100-C: 3-Series® 4K DigitalMedia™ Presentation System 100

DMPS3-4K-150-C: 3-Series® 4K DigitalMedia™ Presentation System 150

DM-CBL-8G-NP: DigitalMedia 8G™ Cable, non-plenum

DM-CBL-8G-P: DigitalMedia 8G™ Cable, plenum

DM-8G-CONN: Connector for DM-CBL-8G DigitalMedia 8G™ Cable

DM-8G-CRIMP: Crimping Tool for DM-8G-CONN

DM-8G-CONN-WG: Connector with Wire Guide for DM-CBL-8G

DigitalMedia 8G<sup>™</sup> Cable

DM-8G-CRIMP-WG: Crimping Tool for DM-8G-CONN-WG USB-EXT-DM: USB over Ethernet Extender with Routing



### CCS-UC-200-WMT Crestron RL® 2 Group Collaboration System, Wall Mount Package

#### Notes:

- 1. If necessary, the touch screen console cable may be extended to up to 200 ft (61 m) using Crestron DM-CBL-8G cable. Also, the microphone cable may be extended using a Crestron USB-EXT-DM USB extender. If extending multiple USB devices, a separate USB extender, consisting of (1) host module and (1) device module, is required for each device (except for touch displays, which may share a single USB extender). The USB-EXT-DM is for USB 1.0 and 2.0 devices only. USB signal extension may be via Ethernet or a dedicated CAT5e (or better) cable. All extra cables, connectors, and USB extenders are sold separately.
- Mobile cart, model CCS-TS-6500-MCK, sold separately. Dual display systems require two mobile carts.
- 3. The USB and analog microphone inputs are mutually exclusive.
- 4. DigitalMedia transmitters, switchers, cables, and related accessories sold separately.
- 5. The USB and analog audio outputs are mutually exclusive.
- 6. Crestron control system and custom programming sold separately.
- 7. Crestron Fusion Cloud sold separately.
- 8. USB mouse and keyboard not included; required for setup only.

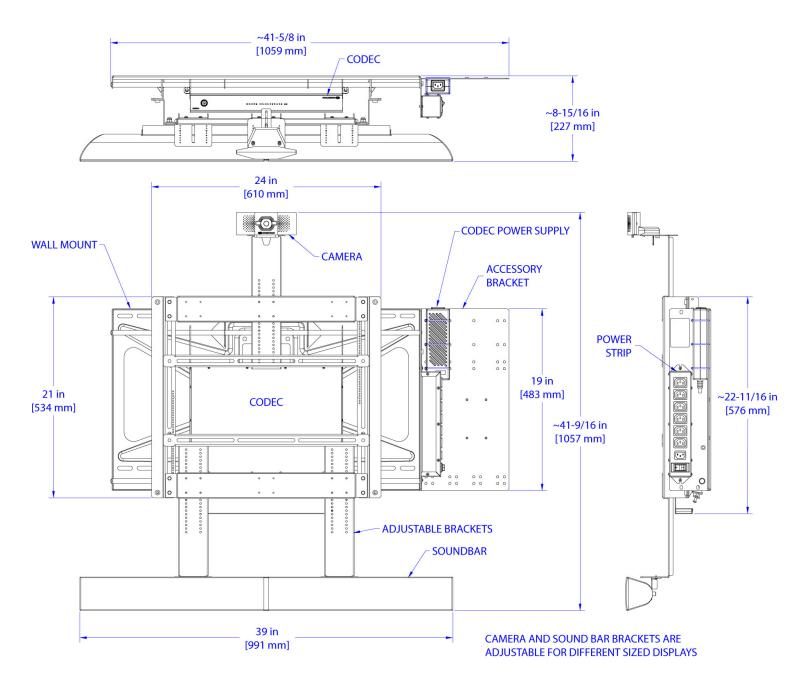
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The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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