

CCS-UC-1-AV-PLUS

Crestron Mercury® – Tabletop UC Video Conference System w/Professional Camera

- > The ultimate tabletop AV conferencing solution for any UC platform
- > Present, call, conference, and collaborate — all through one amazing tabletop device!
- > Simple, intuitive touch screen UX — provides a consistent user experience in every room
- > Customizable front-of-room experience on the room display
- > A complete kit solution — just add a display and mount
- > Easy to specify and install — no custom design, programming, or software installation required!
- > Easy to provision and manage through Crestron® XiO Cloud™
- > Connects and communicates securely over any enterprise or SMB network
- > Full open SIP conferencing speakerphone
- > Bluetooth® pairing with mobile phones
- > USB connectivity for laptops running web conferencing or other software
- > Native Skype® for Business VoIP support
- > Professional-quality HD USB room camera
- > AirMedia® 2.0 wireless BYOD presentation and content sharing^[1]
- > HDMI® input for laptop and other AV content sources^[2]
- > DisplayPort and USB-C™ input via optional Multihead cable (sold separately)
- > HDMI output for room display device
- > Exceptional full-duplex audio performance
- > Extremely natural 2-way wideband voice quality
- > Integrated 360° quad microphone array
- > High-powered full-range speaker
- > Limes Audio TrueVoice® AEC technology
- > High-visibility mic mute indication
- > Available add-on mic pods for extra coverage
- > 7" (178 mm) HD color touch screen
- > LDAP corporate directory access
- > Active Directory® authentication
- > Room scheduling integration with Microsoft® Exchange or Crestron Fusion®
- > Built-in PinPoint™ beacon for use with the Crestron PinPoint App^[4]
- > Built-in PIR occupancy detector
- > Persistent occupancy awareness combining motion and voice detection
- > IoT cloud based provisioning and management
- > Web browser configuration
- > Enterprise-grade security
- > Dual LAN ports
- > PoE+ or AC line powered^[3]
- > 100-240V universal power pack included
- > CEC, IR, or RS-232 display control



- > Power management and scheduling
- > Optional 180° swivel mount kit available
- > Optional display and camera extender solutions available
- > Complete kit contains the Crestron Mercury® tabletop console, Huddly™ GO camera, cables, and power supply

Crestron Mercury®

Crestron Mercury is a remarkable tabletop console device engineered to provide a superior conferencing and collaboration experience for enterprise and SMB applications. It is available in multiple forms, including models for “Open UC” audio or video conferencing applications, as well as models dedicated for use with the Microsoft Teams® IC platform as part of a complete **Crestron Flex** kit solution. In any huddle space, meeting room, or executive office, Crestron Mercury delivers a distinctively simple and consistent user experience in all the places people work and meet.

Built on the IoT cloud based **XiO Cloud™** platform, Crestron Mercury empowers IT administrators and AV integrators to deploy, manage, monitor, and *evolve* thousands of networked UC devices — simply, quickly, and securely — all from a single dashboard. By standardizing on Crestron Mercury, any organization can realize a more productive and stress-free workplace through greater acceptance and utilization of UC technology that’s truly easy to use.

The Crestron Mercury Tabletop UC Video Conference System (**CCS-UC-1-AV-PLUS**) provides a complete video conference room solution for open-platform UC applications. In one stunning tabletop console device, Crestron Mercury comprises a high-performance, full-duplex conferencing speakerphone and touch screen controller with extensive connectivity options for BYOD devices and networked solutions. The complete system includes cables, power supply, and professional quality camera.

The Crestron Mercury system enables audio and video conferencing, collaboration, and content sharing using any UC platform. It works with any

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web conferencing application running on a laptop connected via USB; it pairs with any mobile device via Bluetooth®; and it supports wired or wireless AV presentation from any BYOD source via HDMI® and AirMedia®. It also works natively with any SIP VoIP phone system or Skype® for Business VoIP application. Integrated room scheduling capabilities, corporate directory access, and a customizable front-of-room UX provide knowledge workers with the tools they need to work smart and efficiently.

Crestron Mercury transforms any meeting room, huddle space, or executive office into a highly effective collaboration space, enabling people to work together and share content irrespective of location. Intuitive operation, exceptional full-duplex wideband audio, and full-motion HD video afford a gratifying and productive meeting experience for all participants. Crestron Mercury is secure, easy to deploy, and easy to manage, with extensive features and capabilities engineered to maximize the value of your investment through increased efficiency and productivity.

Voice Calling & Audio Conferencing

- The Crestron Mercury console is a full-featured VoIP conferencing speakerphone that's fully compatible with major SIP-compliant phone systems. Its advanced design provides highly intelligible, full-duplex communication for every participant around a conference table. Dialing and answering calls is easy and intuitive using the large HD color touch screen. Corporate directory access (LDAP) enables one-touch dialing from the customer's centrally managed directory.
- Crestron Mercury pairs with any mobile phone using Bluetooth to make calls or join a call in progress. It instantly transforms a personal phone call into a whole-room audio conference with clear, echo-free audio and the ability to start and stop a call, adjust volume, mute, and display caller ID on the touch screen. Bluetooth-enabled phones appear automatically on the touch screen, enabling instant connectivity with the press of a button.
- Connecting a laptop computer via USB enables enhanced audio performance for any softphone or audio conferencing application running on the laptop.
- Native Skype for Business VoIP support enables one-touch join capability to join a scheduled Skype meeting (audio only), or you can simply place a Skype call using the directory or dial pad.

For audio-only "Open UC" applications, refer to the Crestron Mercury audio conference system (CCS-UC-1 W/PS). For a dedicated Microsoft Teams audio conferencing solution using Crestron Mercury, refer to the Crestron Flex M100-T system for Microsoft Teams (UC-M100-T).

BYOD Multimedia Presentation

- Connecting a display device to the console's HDMI output enables high-definition video presentation from all types of BYOD sources.
- Built-in AirMedia 2.0 technology allows for wireless presentation of content from a laptop, smartphone, or tablet device via the room's Wi-Fi® wireless network. For more information about AirMedia, please visit <https://www.crestron.com/airmedia>.^[1]
- Any AV source can be plugged in via HDMI to present full-motion HD video content on the room display. Sources with DisplayPort or USB Type-C™ outputs can also be

connected using the optional [Multihead HD Video Cable](#) (sold separately).^[2]

- Crestron Mercury behaves like any Bluetooth or USB Audio class device, enabling use as a speaker and/or microphone for all types of multimedia applications running on a computer or smartphone. Even if you're not on a call, you can use Crestron Mercury to share audio content with everyone in the room, or make a professional audio recording of the meeting, with exceptional results.

Videoconferencing & Web Collaboration

- Videoconferencing is enabled by simply connecting a laptop running a web conferencing or UC application such as Microsoft Teams, Skype for Business, Cisco WebEx®, GotoMeeting®, Slack®, BlueJeans, or Zoom™. No more huddling around a laptop to interact and share content with remote participants.
- With the laptop and camera connected via USB, all participants are provided with enhanced bidirectional audio along with a high-definition view of the whole room through the included USB camera.
- Connecting the laptop's HDMI output allows the whole room to view far-end content and camera images on the main room display. Laptops with DisplayPort or USB Type-C outputs can also be connected using the optional [Multihead HD Video Cable](#) (sold separately).

For a dedicated Microsoft Teams or Skype for Business video conferencing and collaboration solution using Crestron Mercury, refer to the Crestron Flex M150-T system (UC-M150-T). For a complete Zoom Rooms video conferencing and collaboration solution, visit <https://www.crestron.com/zoomrooms>.

Superb Sound Quality

Crestron Mercury's advanced design facilitates perfectly natural conversations with exceptional audio fidelity and pickup. Its integrated 360° quad microphone array faithfully captures voices at every seat at the table. Its high-powered, full-range speaker produces full, rich and real sounding audio for both voice and program material.^[2] Limes Audio TrueVoice® AEC technology achieves transparent full-duplex performance free of distracting echo or noise. Wideband audio codec support allows for full-spectrum, bidirectional voice communication.

Functional Flexibility

Crestron Mercury's unique sloped shape is not only attractive and unobtrusive — it's also functional, allowing for placement at either the center or head of the table. Large or long tables are easily accommodated by adding up to two mic pods (CCS-UCA-MIC KIT sold separately), which may be daisy-chained or individually home-run to the main console.^[3]



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Tapping the mute bar on top of the console mutes the microphones. Its extra-bright, bi-color indicator bar ensures that the mic and mute status are clearly visible to the whole room. Each mic pod also includes a remote mute button and indicator for full room participation.

For ultimate versatility, the console can be powered using either PoE+ or the included 100-240V universal power pack.^[3] It can sit freely on any tabletop surface, or be permanently attached to the table using the optional 180° swivel mount kit ([CCS-UCA-SMK](#) sold separately).

HD Color Touch Screen

Its extra-large, high-definition touch screen makes the Crestron Mercury system easy for everyone to use, whether starting or joining an online meeting, dialing or answering a phone call or video call, looking up contacts, presenting and sharing content, or managing the room schedule. The full-color user interface provides quick access and intuitive operation, and affords a consistent user experience from room to room. The touch screen is configurable to provide just the functions required, and can be personalized using custom background images.

Professional HD Camera

The Crestron Mercury AV-PLUS conferencing system includes a professional quality Huddly™ GO conferencing camera, which features exceptionally clear and sharp image quality, ultra wide-angle 150° diagonal field of view, and HD 720p video resolution. Precision optics and advanced video processing ensure a perfect view of the room for far-end participants.



Room Scheduling Integration

Crestron Mercury integrates directly with Microsoft® Exchange or [Crestron Fusion®](#) to allow seamless room scheduling and automation for any number of rooms. The built-in calendar application provides details about the current scheduled meeting, and allows meetings to be scheduled or extended right from the touch screen. Through the front-of-room display, meeting attendees are welcomed to the room with an on-screen confirmation of the scheduled meeting. As the meeting progresses, gentle notifications appear on screen to show the time left and what's scheduled next for the room. The onscreen UX is customizable to display just the information required, and can be personalized using custom background images and corporate logos.

As part of a Crestron Fusion room scheduling solution, the [Crestron® PinPoint™ App](#) can be used to locate and reserve any available room in the facility. As you enter a room equipped with a Crestron Mercury system, the built-in PinPoint beacon^[4] detects your presence and provides personalized feedback and connection options on your mobile device, letting you instantly start your presentation. Crestron Mercury also works with [Crestron room scheduling touch screens](#) installed outside each room, all integrated through Crestron Fusion or Microsoft Exchange.

Occupancy Sensing

Crestron Mercury detects room occupancy using a patent-pending combination of motion and voice activity. A built-in passive infrared detector initially senses when someone is present in front of the touch screen, and then voice activity is used to maintain the room's occupied status as long as anyone in the room is talking.

Occupancy detection provides several benefits, such as monitoring and reporting room usage to Crestron Fusion, or automating the system to power down to save energy when all parties leave the room. System power can also be managed according to a daily schedule.

Network Management and Security

Crestron Mercury is an enterprise-grade appliance, ideally equipped for mass deployment throughout any-sized corporate, university, medical, military, or governmental facility. IoT cloud based provisioning enables complete network configuration in advance of hardware delivery, with touchless updates following installation. Devices can also be configured individually using a computer web browser, or in batches using the Crestron Deployment Tool for Powershell®.

Crestron Fusion or XiO Cloud management enables monitoring and logging of room and equipment usage, as well as centralized help desk support. Advanced security features include 802.1x authentication, Active Directory® credential management, LDAP directory management, Kerberos authentication, SRTP, SSH, TLS, and HTTPS. Dual LAN ports allow VoIP or AirMedia traffic to be isolated on a secondary network, and 802.3at PoE+ compatibility enables the Crestron Mercury console to be powered through its primary LAN connection.^[3]

XiO Cloud™ Connected

XiO Cloud is Crestron's unifying IoT cloud based platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. XiO Cloud enables installers and IT managers to deploy and manage thousands of devices in the amount of time it would ordinarily take to manage just one. It provides a zero-touch solution that allows complete configuration of device settings without any hardware in hand, then simply connect each device on site and let XiO Cloud push out the settings, licenses, drivers, and firmware updates – automatically and securely – for a quick and painless, ready-to-use deployment.

Ongoing XiO Cloud services facilitate daily management and monitoring of every device through a single dashboard with comprehensive reporting and logging, live status viewing and alerts, performance metrics and analytics, scheduled actions and updates, and more. As requirements grow and evolve, new features and functionality can be added easily to one or many devices at any time without ever going on site. XiO Cloud is a subscription-based service offering an adaptable SaaS (Software as a Service) solution with graduated levels of functionality and unlimited scalability. For more information about XiO Cloud, please visit <https://www.crestron.com/xiocloud>.

SPECIFICATIONS

Included Components

CCS-UC-1-AV: Crestron Mercury tabletop UC video conference console
PW-2420RU: Universal power pack for video conference console^[2]
CCS-CAM-USB-F-300: Huddly GO camera
UC-HUB-USB: USB hub/power supply for camera^[5]
 USB cable for camera, USB Type-C male to USB 3.0 Type-A male, 3 ft (90 cm)
CBL-USB-A-EXT-15: USB extension cable for camera, Type A male-to-female, 15 ft (4.57 m)
CBL-USB-A-BMICRO-6: USB cable for laptop computer, Type A male to micro-B male, 6 ft (1.83 m)
CBL-HD-THIN-HS-6: HDMI cable for content source, Type A male-to-male, 6 ft (1.83 m)
CBL-HD-20: HDMI cable for display device, Type A male-to-male, 20 ft (6.1 m)
STIRP: IR emitter for display device w/7 ft (2.13 m) 3.5mm mini-phone plug cable
 Ethernet LAN cable, RJ45 male-to-male, 12 ft (3.66 m)

Video Conference Console

Touch Screen: 7 inch (178 mm) diagonal capacitive multi-touch TFT active matrix color LCD, 1280 x 800 pixels
Mic Mute Symbol & Light Bar: (2) Capacitive “buttons” with bi-color LEDs, either button toggles between mute and unmute, the symbol LED blinks green when the unit is powering up, all LEDs illuminate red when the mic is muted, all LEDs illuminate green when the mic is unmuted during an active call or online meeting
Audio Codec Support: G.711, G.722, G.729, Siren 7
AEC: Limes Audio TrueVoice acoustic echo cancellation, automatic mic mixing, automatic gain control, and dynamic noise reduction; full-duplex IEEE 1329 Type 1 compliant
Speaker: Full range speaker, 11 Watts amplifier power, 95 dB SPL at 0.5 m maximum output, 90 Hz to 22 kHz frequency response
Microphones: 360° quad mic array, 20 ft (6 m) typical pickup range
Extension Microphones: Supports two mic pods, model **CCS-UCA-MIC KIT** (sold separately)
Camera Input Resolution: HD 1080p @ 30 fps
Content Input Resolutions: Up to 1920x1080@60Hz (1080p60)
Display Output Resolutions: 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60)
Occupancy Sensor: Patent-pending “Persistent Occupancy Awareness” combining passive infrared motion and voice activity detection, 6 ft (1.83 m) PIR range in front of touch screen, activates touch screen and display device and reports room occupancy to Crestron Fusion
Ethernet: Dual-port 10/100 Mbps; enterprise grade security and management including IEEE 802.1X, Active Directory authentication, LDAP, Kerberos, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), SRTP, digest access authentication, password login, HTTPS secure provisioning, XiO Cloud client; primary port is IEEE 802.3at Type 2 PoE+ compliant
SIP VoIP: Open SIP, SDP, IETF SIP (RFC 3261 & companion RFCs), DTMF tone generation (RFC 2833 & in-band), low-delay audio packet transmission, adaptive jitter buffers, packet loss concealment

Skype for Business VoIP: Skype for Business client (audio only), compatible with Office 365® cloud service or on-premises Skype for Business Server 2015 (or above); supports Enterprise Voice, Phone System, O365 modern authentication (limited), directory lookup, PSTN calling
Bluetooth: Bluetooth 4.0 device pairing for wideband speech (HFP) and multimedia audio streaming (A2DP); Crestron PinPoint proximity detection beacon^[4]

USB Device: USB 2.0 micro Type B device port, supports UAC, UVC, and HID for plug & play compatible audio/speakerphone interface and camera video output to a USB host computer running web conferencing or other software

USB Host, Camera: USB 2.0 Type A host port, supports UVC for camera video input

USB Host, Accessory: USB 2.0 Type A host port, powers optional Multihead cable (**CBL-MULTI-HD-6** sold separately)

RS-232: 3.5 mm TRS mini phone jack, supports 2-way display device control and monitoring up to 115.2k baud with software handshaking

IR/Serial: 3.5 mm TS mini phone jack, supports 1-way display device control via infrared up to 1.1 MHz or serial TTL/RS-232 (0-5 Volts) up to 19.2k baud

HDMI Input: HDMI Type A input port for content source; supports HDCP 1.4, EDID, CEC

HDMI Output: HDMI Type A output port for display device; supports HDCP 1.4, EDID, CEC

AirMedia: (Via Ethernet) IPv4, mDNS, TLS, AES; 0.25 to 8.5 Mbps bitrate peak (variable depending on content complexity), 1.4 Mbps typical bitrate average, stereo audio^[1]

AirMedia Mobile App OS Support: Apple® iOS®, Android®

AirMedia Client Software OS Support: Windows® 7, Windows 8, Windows 10, macOS® (versions 10.10 through 10.13); 30 fps video frame rate

AirMedia Device Mirroring: Shares the full screen image and audio from an Apple iOS, Android, macOS, or Windows device

Power Options:

PoE+: IEEE 802.3at Type 2, Class 4 (25.5 W) PoE+ Powered Device^[3];
24VDC: 24 Volts DC via external 100-240V AC, 50/60 Hz power pack, model **PW-2420RU** (included)

Dimensions: 4.11 x 8.92 x 12.74 in (105 x 227 x 324 mm) HWD

*Refer to the **CCS-UC-1-AV** and **CCS-UCA-MIC KIT** spec sheets for additional specifications and compliances.*

Camera

Model: Huddly GO

Optics: 16 Megapixel Type 1/2.3 CMOS sensor, ultra wide angle six element aspherical glass lens, f/2.8 aperture

Field of View: 150° diagonal, 120° horizontal, 90° vertical

Processing: Automatic 180° image rotation when mounted upside down, dynamic light optimization, auto white balance

Noise Reduction: 3D noise reduction, bias compensating spatio-temporal filtering, wide area chroma filtering, flicker elimination

Scaling: Real-time scaling, dewarping, and perspective correction

Resolution: HD 720p @ 30 fps

Color Space: YCbCr 4:2:0, YCbCr 4:2:2

USB: USB 3.1 via USB Type-C port, supports UVC 1.1 for video and communications interface to UC Engine

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Connector Panel

Power: USB powered via UC-HUB-USB (included) ^[5]

Mounting: Embedded mounting hinge for attachment to a display device, 1/4-20 threaded fitting for tripod mount

Dimensions: 1.30 x 1.58 x 2.82 in (33 x 40 x 72 mm) HWD

Refer to the [CCS-CAM-USB-F-300 spec sheet](#) for additional specifications.

MODELS & ACCESSORIES

Available Models

CCS-UC-1-AV-PLUS: Crestron Mercury® – Tabletop UC Video Conference System w/Professional Camera

Available Accessories

CCS-UCA-SMK: Swivel Mount Kit

CCS-UCA-MIC KIT: Microphone Pods, Set of 2

CBL-MULTI-HD-6: Crestron Mercury® Multihead HD Video Cable, 6 ft (1.8 m)

CCS-UCA-EXT KIT: Display & Camera Extender Kit

HD-EXT-USB-2000-C: 4K HDMI® & USB over HDBaseT® Extender 2000

CNSP-XX: Custom Serial Interface Cable

CEN-SWPOE-16: 16-Port Managed PoE Switch

SW-XIOC-S Series: XiO Cloud™ Standard Provisioning and Management Service for one device; 1, 2, or 3 year subscription

SW-XIOC-P Series: XiO Cloud™ Premium Provisioning and Management Service for one device; 1, 2, or 3 year subscription

SW-FUSION-C-3: Crestron Fusion® Cloud; 250 rooms; 3-year service, support, and updates

SW-FUSION-P-L: Crestron Fusion® On-premises; Unlimited rooms; lifetime service, support, and updates

SW-HS-x-C: Crestron Fusion® Cloud Room Scheduling; 1-year, 3-year, or lifetime service, support, and updates for one touch screen

SW-HS-x-P: Crestron Fusion® On-premises Room Scheduling; 1-year, 3-year, or lifetime service, support, and updates for one touch screen

Notes:

1. AirMedia wireless presentation requires a wired network connection between the Crestron Mercury console and an external Wi-Fi wireless access point (not included). Laptops may alternately connect to AirMedia using a wired Ethernet connection. Full-motion video performance is dependent upon the performance of the network and the sending device. Computer client software and mobile device apps are available for download at <https://www.crestron.com/airmedia>.
2. The HDMI audio input signal is routed to the display device speakers. It does not play through the console speaker. The HDMI input is intended for use with laptops and other AV sources that included onboard audio volume adjustment. The console's volume control setting does not affect signals heard through the display speakers.
3. When used without any microphone pods connected, the Crestron Mercury console may be

powered using either PoE+ or the included power pack (model [PW-2420RU](#)). If one or two mic pods are connected, the console **MUST** be powered using the power pack. PoE+ cannot be used to power the console if any mic pods are connected. When using PoE+, make sure the network switch supports PoE+ (802.3at Type 2). Regular PoE (802.3af or 802.3at Type 1) cannot be used to power the console.

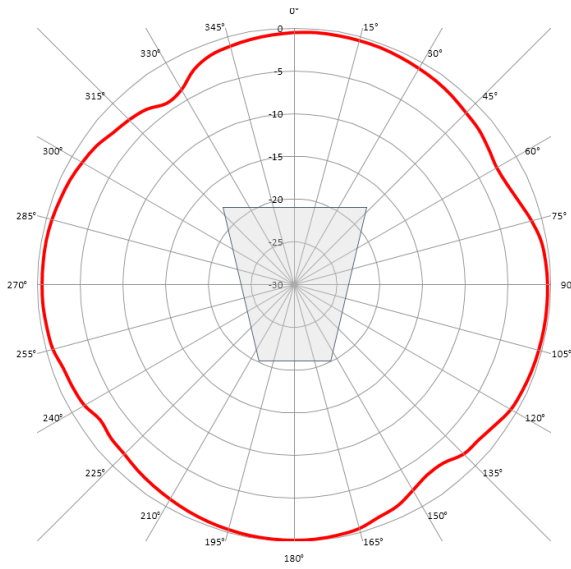
4. The built-in PinPoint beacon is not enabled at this time. This feature will be enabled in a future update.
5. The USB hub is strictly for powering the camera. It is not to be used for expanding USB connectivity or adding multiple cameras.

This product is covered under the Crestron standard limited warranty for 3 years, except for the touch screen display which is covered for 90 days. Refer to <https://www.crestron.com/warranty> for full details.

The specific patents that cover Crestron products are listed online at <https://www.crestron.com/legal/patents>.

Certain Crestron products contain open source software. For specific information, visit <https://www.crestron.com/opensource>.

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Microphone Array
Voice Bandwidth
Pickup Polar Pattern

