

# UC-SB1-CAM

## UC Video Conference Smart Sound Bar & Camera

- > A complete conferencing speakerphone and camera solution in one stunning front-of-room device
- > Sleek and stylish sound bar design installs cleanly beneath the room display(s) — mounts on the wall or sits on a credenza
- > Multicolor status bar — stylishly indicates audio volume, mute, and operational status
- > 180° far-field adaptive beamforming microphone array — senses who is speaking and optimizes directionality for clear pickup
- > 23 foot (7 meter) microphone pickup range — eliminates any need for tabletop microphones
- > High-powered 2-way stereo speakers — produces full, rich, and natural sound quality
- > Advanced AEC & DSP technology — affords exceptional full-duplex audio performance with highly-intelligible, echo-free 2-way voice quality
- > Built-in Huddly IQ™ camera — a premium conferencing camera fully integrated into the sound bar
- > Ultra wide-angle 150° diagonal field of view — captures the entire room
- > Genius Framing lossless digital autozoom — automatically detects people and frames them perfectly in the shot
- > Full HD 1080p video resolution, precision optics, and advanced video processing — delivers a crystal clear video image
- > 3x digital zoom, pan, and tilt — allows manual shot control and presets via software<sup>[1]</sup>
- > People counting — enables room usage analytics via software<sup>[1]</sup>
- > USB 3.0 — provides audio and video connectivity through a single USB interface
- > Plug & Play — compatible with major computer OS platforms running any web conferencing software
- > Engineered to Microsoft Teams® and Skype® for Business specifications
- > Available as part of a complete Crestron Flex UC system for Microsoft Teams
- > Analog audio I/O — input and output connections for local source and assistive listening devices
- > Integral hinged mounting bracket — simplifies wall mount installation
- > Low-power standby — wakes and sleeps automatically to save energy
- > Internal power supply — 100 to 240 Volt AC line powered



speakerphone performance with highly intelligible, echo-free voice clarity. A perfect view of the room is achieved through the built-in, high-end conferencing camera featuring HD 1080p video resolution, ultra-wide 150° diagonal field of view, and Genius Framing digital autozoom. Its compact, all-in-one design reduces clutter on the conference table, and even accommodates rooms with no table at all.

See also model UC-SB1 for a similar solution with no built-in camera. The UC-SB1 allows for the use of any USB camera mounted separately from the smart sound bar.

### USB Speakerphone & Camera

The UC-SB1-CAM comprises a high-performance AEC-enabled speakerphone and camera that are compliant with Microsoft Teams® and Skype® for Business specifications. It is available as part of a complete [Crestron Flex](#) UC video conference system kit, model [UC-B160-T](#). It is also available separately for integration with any computer running UC conferencing or web collaboration software, as well as for general presentation of computer-based AV content. A single USB 3.0 connection provides a plug-and-play interface to the computer, or to the [Crestron UC Engine](#) as part of a Crestron Flex system.

*Note: For [Zoom Rooms™](#) conferencing applications, the UC-SB1-CAM can be paired with a [Crestron TSW-760](#) or [TSW-1060](#) series touch screen along with a computer running [Zoom Rooms](#) software.*

The UC-SB1-CAM behaves like any USB Audio or USB Video class device, enabling use as a speaker, microphone, and camera for all types of multimedia applications running on a computer. Even if you're not on a call, you can use the smart sound bar to share content with everyone in the room, or make a professional recording of the meeting, with exceptional results.

### Superb Sound Quality

The smart sound bar facilitates perfectly natural conversations with exceptional audio fidelity and pickup. Its integrated 180° far-field microphone array faithfully captures voices throughout the room using adaptive beamforming technology to focus in on whoever is speaking. Its high-powered, two-way stereo speakers produce full, rich and real sounding audio for both voice and program material. High-performance AEC technology achieves transparent full-duplex performance free of distracting echo or noise. Additional digital signal processing assures optimal sound quality for an immersive experience, whether conferencing or presenting content.

All in one incredible front-of-room device, the [Crestron® UC Video Conference Smart Sound Bar & Camera \(UC-SB1-CAM\)](#) facilitates effortless conferencing without any other microphones, speakers, or camera to install. Mounted on the wall or placed on a credenza beneath the main room display(s), the smart sound bar looks great and sounds even better in any small to medium-sized meeting space.

High-powered stereo speakers, adaptive beamforming microphone, and advanced digital signal processing deliver exceptional full-duplex

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## Intelligent HD Camera

The integrated Huddly IQ™ camera features an ultra wide-angle 150° diagonal field of view to capture an entire conference room in Full HD 1080p video resolution. High precision aspherical optics, 12 MP CMOS sensor, and advanced video processing ensure an immersive, crystal clear video image free from light or noise artifacts or optical aberrations.

Genius Framing digital autozoom intelligently detects the people in the room and frames them perfectly at all times for an optimal view with no loss of resolution. With Genius Framing, there's no need to control the camera manually or rely on stored presets. Whether conferencing one-on-one or with the entire staff in the room, even as people come and go or move around, wherever people are seated, the camera image adjusts automatically to frame everyone in the shot so no one gets left out.

## Enhanced Functionality

The UC-SB1-CAM smart sound bar integrates seamlessly with a wide variety of computer-based UC platforms. Plug-and-play USB connectivity enables control of the sound bar through the computer without requiring any extra software, remotes, or control system. The computer detects the sound bar connection automatically, and in turn the sound bar responds when an online meeting is started, speaker volume is adjusted, or the speaker or mic is muted. On the front of the sound bar, operational status is displayed by a stylish bar of light that expands outward as the volume is increased and changes colors to indicate connection and mute status.

To simplify operation and conserve energy, the smart sound bar powers on automatically when an audio input signal is detected, and reverts to low-power standby mode when no signal is detected for several minutes.

## Analog Audio Input & Output

Additional audio connectivity is provided through unbalanced stereo analog input and output jacks on the rear panel. The input accommodates any line-level audio source, which simply feeds to the internal amplifier and speakers with no volume control or other signal processing. The output is provided to feed an assistive listening system, and carries the same audio signal as the sound bar speakers.

## Easy Installation

Installation is a breeze using the integral hinged mounting bracket, which attaches easily to the wall and allows the sound bar to be tipped forward for full access to the rear panel connections. Once installed and connected, the sound bar is held upright magnetically for normal operation. The bracket allows for attachment to any wall surface using two screws. A total of eight mounting keyholes, arranged in 2 inch (51 mm) increments, accommodates any wall stud spacing from 12 to 24 inches (305 to 610 mm).

Alternately, the sound bar can be simply placed on a shelf or credenza. Optimal results are achieved by positioning the unit at ear/face height. A single 100-240 Volts AC outlet is required to power the unit.

## SPECIFICATIONS

### Speakers

**Woofers:** (2) 3 inch (76 mm) polypropylene cone w/rubber surround  
**Passive Radiators:** (2) 3 x 4-3/8 inch (76 x 112 mm) polypropylene cone w/rubber surround  
**Tweeters:** (2) 1 inch (25 mm) polyester dome  
**Amplifier Power:** 20 Watts RMS per channel, stereo  
**Frequency Response:** 80 Hz to 20 kHz ( $\pm 3$  dB)  
**Effective Output Level:** 91 dB SPL @ 1 meter, both channels driven at full power

### Microphone

**Microphone:** Linear quad-element far-field adaptive beamforming microphone array  
**Pickup Range:** 23 ft (7 m) typical  
**Pickup Angle:**  $\pm 90^\circ$  Horizontal  
**Frequency Response:** 20 Hz to 8 kHz

### Audio

**DSP:** Acoustic echo cancellation, dereverberation, automatic gain control, dynamic noise suppression, adaptive beamforming, speaker volume control, speaker EQ and limiting (fixed); full-duplex IEEE 1329 Type 1 compliant;

*Note: DSP affects USB audio in/out only unless noted otherwise*

**USB Audio In/Out:** USB 3.0, UAC 1.0 & HID, AEC-enabled USB speakerphone compliant with Microsoft Teams & Skype for Business specifications, 2-channel stereo far-end/content signal input, 2-channel mono microphone signal output; plug & play compatible with Crestron UC-ENGINE, computer, or other USB Audio Class host

**Analog Input:** 2-Channel stereo, fixed level (bypasses DSP), for in-room amplification of an external audio source

**Analog Input Sensitivity:** 1 Vrms per channel for full rated output

**Analog Output:** 2-Channel stereo, fixed level, feeds amplified audio content to an assistive listening system;

*Note: Output level varies for USB input signal only according to the speaker volume control setting; analog input signal passes through without volume control or DSP*

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## Camera

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**Model:** Huddly IQ (mounted internally)  
**Image Sensor:** 12 Megapixel Sony® IMX477 Type 1/2.3 CMOS sensor  
**Lens:** High precision, ultra wide angle, six element aspherical glass lens  
**Field of View:** 150° diagonal, 120° horizontal, 90° vertical  
**Aperture:** f/2.8  
**Processor:** Intel® Movidius® Myriad® X VPU with Neural Compute Engine hardware accelerator  
**Pan/Tilt/Zoom:** 3x lossless digital zoom, pan, and tilt<sup>[1]</sup>  
**Autozoom:** "Genius Framing" automatic lossless digital zoom intelligently frames around people in the room  
**Dynamic Light Optimization:** Auto-adjusts light levels and 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  
**People Counting:** Detects and reports the number of people in frame<sup>[1]</sup>

## Video

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**USB Video Out:** USB 3.0, UVC 1.1 & HID, conferencing camera compliant with Microsoft Teams & Skype for Business specifications; plug & play compatible with Crestron [UC-ENGINE](#), computer, or other USB Video Class host  
**Output Resolution:** HD 1080p @ 30 fps  
**Color Space:** YCbCr 4:2:0, YCbCr 4:2:2, MJPEG

## Indicators

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**Status Bar:** (1) Multi-segment RGBY LED zero-center mutually-diverging linear bargraph;  
Indicates the speaker volume, microphone mute, and speaker mute in red and green LEDs

## Connectors

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**AUDIO IN:** (1) 3.5 mm TRS mini-phone jack;  
Unbalanced stereo line-level audio input;  
Input Level: 1 Vrms maximum;  
Input Impedance: 10k Ohms

**AUDIO OUT:** (1) 3.5 mm TRS mini-phone jack;  
Unbalanced stereo line-level audio output;  
Output Level: 1 Vrms maximum;  
Output Impedance: 100 Ohms

**PC:** (1) USB 3.0 Type-B connector, female;  
USB 3.0 device port;  
Connects to [UC Engine](#) or computer;  
6 ft (1.83 m) USB 3.0 Type B to Type A cable included

**CAMERA:** (1) USB 3.0 Type-A connector, female;  
USB 3.0 host port;  
Connects to the internal camera output via a pre-installed 6 inch (13 cm) USB Type-C™ to USB 3.0 Type A cable

**100-240V~ 0.5A 50/60Hz:** (1) IEC 60320 C14 main power inlet;  
Mates with removable power cord, included

## Power

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**Main Power:** 500 mA maximum @ 100-240 Volts AC, 50/60 Hz  
**Heat Dissipation:** 75 BTU/hr

## Environmental

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**Temperature:** 41° to 104° F (5° to 40° C)  
**Humidity:** 10% to 90% RH (non-condensing)

## Construction

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**Enclosure:** Lightly textured gunmetal black finish, plastic housing, perforated stainless steel grilles, die-cast aluminum rear cover, integral steel hinged mounting bracket  
**Mounting:** Freestanding or surface wall mount at ear/face level (adhesive feet included, mounting bracket attached)

## Dimensions

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**Height:** 4.57 in (117 mm), 4.64 in (118 mm) with feet  
**Width:** 43.60 in (1108 mm)  
**Depth:** 3.90 in (100 mm)

## Weight

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Approximately 15 lb (6.8 kg)

## Compliance

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CE, IC, UL 62368-1, CSA C22.2 62368-1, EN 62368-1, IEC 62368-1, FCC Part 15 Class B, ICES-003 Issue 5 Class B, EN55022:2010 Class B, AS/NZS CISPR22:2010 Class B, AS/NZS CISPR 22:2010 Class B, EN55024:2010, EN61000-3-2:2014, EN61000-3-3:2013, RoHS compliant

## MODELS & ACCESSORIES

### Available Models

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**UC-SB1-CAM:** UC Video Conference Smart Sound Bar & Camera

### Available Accessories

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**UC-B160-T:** Crestron Flex B160-T – Wall Mount UC Video Conference System for Microsoft Teams®

**CBL-AUDIO Series:** Mini-TRS Stereo Audio Interface Cables

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## Notes:

1. This feature is not utilized as part of a Crestron Flex system. Requires [Huddly™](#) software or other software that supports this feature. Additional costs may apply.

This product may be purchased from an authorized Crestron dealer or distributor. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <https://www.crestron.com/How-To-Buy/Find-a-Representative> or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty for 3 years. 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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