UC-SB1-CAM

UC Video Conference Smart Soundbar & Camera

- *A complete conferencing speakerphone and camera solution in one front-of-room device*
- *Sleek and stylish design installs cleanly beneath the room display(s) — mounts on the wall with an integral mounting bracket or sits on a credenza*
- *180° far-field adaptive beamforming microphone array senses who is speaking and optimizes directionality for clear pickup*
- *High-powered 2-way stereo speakers produce 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 soundbar*
- *Ultra wide-angle 150° diagonal field of view captures the entire room*
- *Full HD 1080p video resolution, precision optics, and advanced video processing delivers a crystal clear video image*
- *4x digital zoom, pan, and tilt allows manual shot control*
- *Genius Framing lossless digital autozoom automatically detects people and frames them perfectly in the shot[1]*
- *People counting provides room usage analytics[2]*
- *Analog audio input and output connections for local source and assistive listening devices*
- *Multicolor status bar indicates audio volume, mute, and operational status*
- *USB 3.0 port provides audio and video connectivity through a single USB interface*
- *Plug & Play compatible with major computer OS platforms running web conferencing software*

The Crestron® UC Video Conference Smart Soundbar & Camera (UC-SB1-CAM) is a front-of-room device that eliminates the need to install additional microphones, speakers, or cameras in a conference space. Mounted on the wall or placed on a credenza beneath the room display(s), the smart soundbar looks great and sounds even better in a small to medium-sized meeting space.

High-powered stereo speakers, adaptive beamforming microphone, and advanced digital signal processing deliver exceptional full-duplex speakerphone performance with highly intelligible, echo-free voice clarity. A perfect view of the room is achieved through the built-in conferencing camera featuring HD 1080p video resolution, ultra-wide 150° diagonal field of view, and Genius Framing digital autozoom.[1]

NOTE: See model UC-SB1 for a smart soundbar without a built-in camera. The UC-SB1 can be used with most USB cameras.

USB Speakerphone & Camera

The UC-SB1-CAM comprises a high-performance AEC-enabled speakerphone and camera. It is designed for integration with a computer running UC conferencing or web collaboration software, and can also be used for general presentation of computer-based AV content. A single USB 3.0 connection provides a plug-and-play interface to a computer.

The soundbar behaves like most USB Audio or USB Video Class devices, 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 soundbar to share content with everyone in the room, or make a professional recording of the meeting.

Superb Sound Quality

The soundbar facilitates conversations with exceptional audio fidelity and pickup. Its integrated 180° far-field microphone array faithfully captures voices throughout the room using adaptive beamforming technology. Its high-powered, two-way stereo speakers produce full, rich and real sounding audio. 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.

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 for an optimal view. With Genius Framing, there's no need to control the camera manually or rely on stored presets. When conferencing, the camera image adjusts automatically to frame everyone in the shot.[1] People counting analytics detects and reports the number of people in frame for analysis by room utilization software.[2]

CRESTRON

Enhanced Functionality

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

Analog Audio Input & Output

Additional audio connectivity is provided through unbalanced stereo analog input and output jacks on the rear panel. The input accommodates a line-level audio source, which 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 soundbar speakers.

Easy Installation

The integral hinged mounting bracket attaches easily to a wall surface using four screws. A total of eight mounting keyholes, arranged in 2 in. (51 mm) increments, accommodates wall stud spacing from 12 to 24 in. (305 to 610 mm). The mounting bracket allows the soundbar to be tipped forward for full access to the rear panel connections. Once installed and connected, the soundbar is held upright magnetically for normal operation. Alternately, the soundbar can be placed on a shelf or credenza. Optimal results are achieved by positioning the unit at ear/face height when seated. A single 100-240 VAC outlet is required to power the unit.

Specifications

Speakers

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

Microphone

Microphone	Linear quad-element far-field adaptive beamforming microphone array
Pickup Range	15 ft. (4.6 m)[3]
Pickup Angle	180° horizontal and 180° vertical
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, 2-channel stereo far-end/content signal input, 2-channel mono microphone signal output; Plug & play compatible with a 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

CRESTRON®

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

> **NOTE:** The output level varies for the USB input signal only according to the speaker volume control setting. Analog input signals pass through without volume control or DSP.

Camera

Model	Huddly IQ (mounted internally)
Image Sensor	12 Megapixel 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	Neural Compute Engine based on Intel® Movidius™ Myriad™ X video processing unit
Pan/Tilt/Zoom	4x lossless digital pan, tilt, and zoom
Autozoom	Genius Framing automatic lossless digital zoom intelligently frames people in the room[1]
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 the frame[2]

Video

USB Video Out	USB 3.0, UVC 1.1 & HID, conferencing camera; Plug & play compatible with a computer or other USB Video Class host
Output Resolution	HD 1080p @ 30 fps

Indicators

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

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 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 6 in. (13 cm) USB Type-C® to USB 3.0 Type A cable
24 VDC 2.5A	24 VDC via external 100-240 VAC, 50/60 Hz power pack, model PW-2420RU (included)

Power

Power Consumption	22 W

Environmental

Temperature	41° to 104° F (5° to 40° C)
Humidity	10% to 95% RH (non-condensing)
Heat Dissipation	75 BTU/hr

Construction

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

Height	4.57 in. (116 mm), 4.64 in. (118 mm) with feet
Width	43.60 in. (1107 mm)
Depth	3.90 in. (99 mm)

Weight

13.56 lb (6.2 kg)

Compliance

Regulatory Model: UC-SB

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, WEEE

Model

UC-SB1-CAM

UC Video Conference Smart Soundbar & Camera

Available Accessories

CBL-AUDIO Series

Mini-TRS Stereo Audio Interface Cables

Notes:

1. Genius Framing is controlled by Huddly software.
2. Access to people counting data requires software development with the Huddly Software Development Kit (SDK).
3. Microphone pickup range may vary in rooms with highly reflective infrastructure (e.g., glass walls, metal furniture, open ceilings, etc.) or above average ambient noise.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at 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. Refer to www.crestron.com/warranty for full details.

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

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Crestron and the Crestron logo are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Huddly IQ is either a trademark or registered trademark of Huddly AS in the United States and/or other countries. Intel is either a trademark or registered trademark of Intel Corporation in the United States and/or other countries. Movidius and Myriad are either trademarks or registered trademarks of Movidius Ltd in the United States and/or other countries. USB Type-C is either a trademark or registered trademark of USB Implementers Forum, Inc. in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

Specifications are subject to change without notice.

©2021 Crestron Electronics, Inc.

Rev 02/08/21