

SECTION 27 41 16
INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT

GUIDE SPECIFICATION

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Specifier: Please see PART 4 for a listing of products specified in this Guide Specification.

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1 GENERAL

NOT USED in this Guide Specification. Specifier shall Specify PART 1 administrative and procedural requirements as needed.

2 PRODUCTS

2.1 Unified Communications Audio Wireless Transceiver and Auto Mixer

Specifier Note:

The Crestron® Flex UC-AUDIO-HUB is a wireless transceiver and auto mixer that connects with up to four paired Crestron Flex UC-AUDIO-POD units simultaneously through Digital Enhanced Cordless Telecommunications (DECT) technology. The UC-AUDIO-HUB receives audio from each connected UC-AUDIO-POD microphone and transfers the auto-mixed audio to a UC Engine via USB. The Flex Hub also distributes audio from the UC Engine via USB to all connected UC-AUDIO-POD units simultaneously.

2.1.1 Basis of Design

2.1.1.1 Crestron UC-AUDIO-HUB

2.1.2 Device Definition

2.1.2.1 Unified Communications Audio Wireless Transceiver with the following capabilities:

- 2.1.2.1.1 Support of multiple proprietary wireless speaker and microphone device connections via Digital Enhanced Cordless Telecommunications (DECT) technology
- 2.1.2.1.2 Automatic mixing of incoming audio from proprietary wireless speaker and microphone devices sent to soft codec by same manufacturer
- 2.1.2.1.3 Reception and distribution of audio from soft codec by same manufacturer to all DECT connected proprietary wireless and speaker microphone devices
- 2.1.2.1.4 Support for proprietary remote configuration and monitoring software by same manufacturer

2.1.3 Device Architecture

2.1.3.1 Construction

- 2.1.3.1.1 Enclosure: Lightly textured black finish, plastic housing
- 2.1.3.1.2 Mounting: Freestanding, stackable, surface mount and wall / ceiling mount option with included black plastic bracket

2.1.3.1.3 Dimensions

- 2.1.3.1.3.1 Height: 1.35 in. (34 mm), 1.77 in. (45 mm) with bracket

2.1.3.1.3.2 Width: 5.04 in. (128 mm), 5.36 in. (137 mm) with bracket

2.1.3.1.3.3 Depth: 5.20 in. (133 mm)

2.1.3.1.4 Weight: 8.9 oz (253 g) without bracket

2.1.3.1.5 Environmental Operating Conditions

2.1.3.1.5.1 Temperature: 41° to 104° F (5° to 40° C)

2.1.3.1.5.2 Humidity: 10% to 95% RH (noncondensing)

2.1.3.1.5.3 Heat Dissipation: 12.3 BTU/hr

2.1.4 Functions

2.1.4.1 Wireless Communication

2.1.4.1.1 Frequency

2.1.4.1.1.1 DECT ULE Frequency Bands

2.1.4.1.1.1.1 US: 1920 - 1930 MHz 5 channels

2.1.4.1.1.1.2 Europe: 1880 - 1900 MHz 10 channels

2.1.4.1.1.1.3 Range up to 50 ft. (approx. 15 m) indoor

2.1.5 Connectors

2.1.5.1 USB-C: USB-C (PC) connection for audio and HID data

2.1.5.2 24 VDC, 0.75 A: 24 VDC 0.75 A via external 100-240 VAC power pack, included

2.1.5.3 RJ45: 1000 Mbps Ethernet

2.1.6 Controls and Indicators

2.1.6.1 Buttons

2.1.6.1.1 Pair: Tactile push button

2.1.6.1.2 Reset: Recessed push button

2.1.6.2 Indicators

2.1.6.2.1 Power: Green LED indicates device is powered on

2.1.6.2.2 Sync: Five SYNC LEDs indicate pairing and connection to each proprietary wireless speaker and microphone device

2.1.7 Compliance

2.1.7.1 Regulatory Model: M202109001

2.1.7.2 IC, CE, FCC Part 15 Class B digital device, Intertek® Listed for US & Canada

2.2 Unified Communications Wireless Speaker and Microphone

Specifier Note:

The Crestron® Flex UC-AUDIO-POD is a wireless tabletop conferencing device with speaker and microphone that is ideal for small to large rooms. The Flex Pod wirelessly connects and transfers audio to and from a paired Crestron Flex UC-AUDIO-HUB. The connected Flex Hub receives and sends audio to a UC Engine through a USB connection. Up to four Flex Pods can connect with a Flex Hub simultaneously providing omnidirectional sound in large or medium conference rooms and multi-purpose meeting spaces.

2.2.1 Basis of Design

2.2.1.1 Crestron UC-AUDIO-POD

2.2.2 Device Definition

2.2.2.1 Unified Communications wireless speaker and microphone with the following capabilities:

2.2.2.1.1 Digital Enhanced Cordless Telecommunications (DECT) connection to wireless transceiver and auto mixer by same manufacturer

2.2.2.1.2 360° microphone pickup

2.2.2.1.3 Acoustic echo cancellation

2.2.2.1.4 Automatic gain compensation

2.2.2.1.5 Noise reduction

2.2.2.1.6 In-call volume and mic mute controls

2.2.2.1.7 Speaker volume indicator and LED indicator ring

2.2.2.1.8 Optional tabletop mounting accessory and Kensington® lock support

2.2.2.1.9 Flexibility in room placement according to site conditions

2.2.2.1.10 Support for proprietary remote configuration and monitoring software by same manufacturer

2.2.3 Device Architecture

2.2.3.1 Construction

2.2.3.1.1 Enclosure

2.2.3.1.1.1 Lightly textured black finish

2.2.3.1.1.2 Plastic housing

2.2.3.1.1.3 Perforated stainless steel grilles

2.2.3.1.1.4 Die-cast aluminum bottom cover

2.2.3.1.2 Mounting: Tabletop mounting only

2.2.3.1.3 Dimensions

2.2.3.1.3.1 Height: 3.0 in. (76 mm)

2.2.3.1.3.2 Width: 4.40 in. (112 mm)

2.2.3.1.3.3 Depth: 4.25 in. (108 mm)

2.2.3.1.4 Weight: 1.6 lb. (726 g)

2.2.3.1.5 Environmental Operating Conditions

2.2.3.1.5.1 Temperature: 41° to 104° F (5° to 40° C)

2.2.3.1.5.2 Humidity: 10% to 95% RH (noncondensing)

2.2.3.1.5.3 Heat Dissipation: 12 BTU/hr

2.2.4 Functions

2.2.4.1 Wireless Communication

2.2.4.1.1 Frequency

2.2.4.1.1.1 DECT ULE Frequency Bands

2.2.4.1.1.1.1 US: 1920 - 1930 MHz 5 channels

2.2.4.1.1.1.2 Europe: 1880 - 1900 MHz 10 channels

2.2.4.1.1.1.3 Range up to 50 ft. (approx. 15 m) indoor

2.2.4.2 Audio

2.2.4.2.1 DSP

2.2.4.2.1.1 Acoustic echo cancellation

2.2.4.2.1.2 Automatic gain control

2.2.4.2.1.3 Dynamic noise suppression

2.2.4.2.1.4 Speaker volume control

2.2.4.2.1.5 Full-duplex IEEE 1329 Type 1 compliant

2.2.4.3 Speaker

2.2.4.3.1 Range: One full range 2 in. speaker

2.2.4.3.2 Frequency Response: 100 Hz to 7 kHz

2.2.4.3.3 Output Level: 74 dB SPL at 1 m

2.2.4.4 Microphone

2.2.4.4.1 Microphone: 360° quad mic array

2.2.4.4.2 Pickup Range: 10 ft. (approx. 3 m)

2.2.5 Connectors

2.2.5.1 USB-C: 5 VDC, 3 A via external 100-240 VAC power pack (included with device)

2.2.5.2 Security Port: Kensington Security Slot™ port

2.2.6 Controls and Indicators

2.2.6.1 Buttons

2.2.6.1.1 Speaker Volume Up / Down: Capacitive, backlit

2.2.6.1.2 Mic Mute: Capacitive, backlit

2.2.6.1.3 Pair: Push button

2.2.6.1.4 Reset: Recessed push button

2.2.6.2 Indicators

2.2.6.2.1 Mic Unmute: Green LED indicates microphone is unmuted

2.2.6.2.2 Mic Mute: Red LED indicates microphone is muted

2.2.6.2.3 Volume Level: White LED indicates the speaker volume

2.2.7 Compliance

2.2.7.1 Regulatory Model: M202109002

2.2.7.2 IC, CE, FCC Part 15 Class B digital device, Intertek® Listed for US & Canada

2.2.7.3 Full-duplex IEEE 1329 Type 1 Compliant

3 EXECUTION

NOT USED in this Guide Specification. Specifier shall Specify PART 3 On-Site work as needed.

4 APPENDICES

4.1 SPECIFIED PRODUCTS

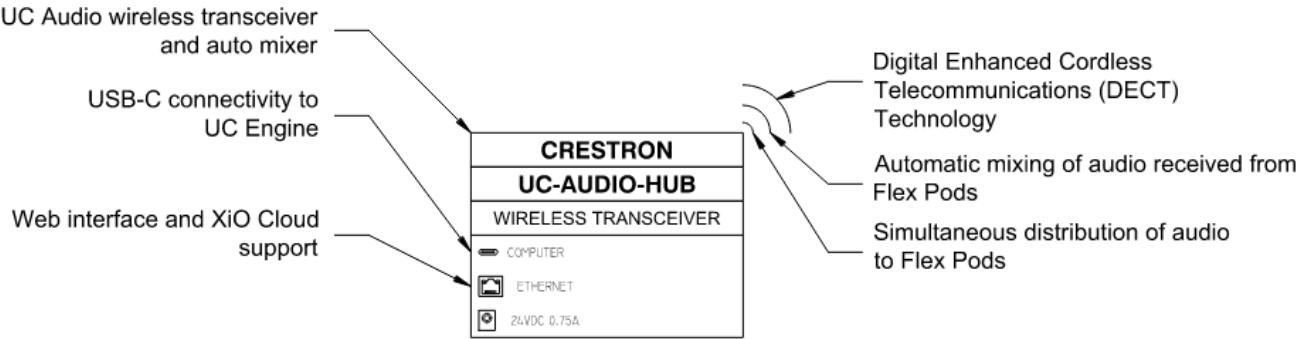
Specifier Note: This Article includes Crestron products specified in this Guide Specification document. This Article is for reference only and should not be required in actual project manual unless included in an overall system equipment list.

4.1.1 Crestron UC-AUDIO-HUB

4.1.2 Crestron UC-AUDIO-POD

4.2 Input / Output Connection Diagrams

4.2.1 UC-AUDIO-HUB



4.2.2 UC-AUDIO-POD

