

# **Avaya Room Systems XT Series & Avaya Collaboration Unit CU360**

**Third-Party Accessories** 

Version 4.19

For XT Series and CU360



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Third Party Accessories List 4.19, May 31, 2022

http://support.avaya.com

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# **Chapter 1 | Overview**

This document provides customers and integrators with a list of third-party accessories compatible for XT Series and CU360 endpoints.

The accessories have been tested in Avaya laboratories and are guaranteed for interoperability and acceptable quality when used with XT Series and CU360 endpoints.

#### Important

The third-party products listed in this document are certified for XT series (the XT7100, XT5000 Series and XT4x00 endpoints) starting from Release 8.3 and for CU360 starting from Release 10.0 unless specified otherwise.

The accessories belong to these categories:

- Video
- Audio
- Rack-mounting

This document lists valuable information on the accessories such as features or connections. It allows customers and integrators to purchase the product and solve typical use cases, such as HDMI extension, audio connectivity conversion, or rack-mounting.

#### Important

Any and all information and statements in this document are provided as a free service and in an "as is" condition without any legal or other obligations being assumed by Avaya towards any third party. The information herein was based on specific third party products tested. The third party may change these products and/or provide different versions thereof and therefore, please note, that the testing results provided are specific only to the actual product versions tested. Results of subsequent testing may change in any event that the third party makes any changes to the product. You will be solely responsible to verify the precise version of the third party product and interoperability with our products to confirm satisfaction to your commercial and technical requirements.

# **Chapter 2 | Integrating with Video Accessories**

This section lists the video-out and video-in accessories that were tested.

# **Integrating with Video-out Accessories**

This section lists video-out accessories that were tested for the XT Series.

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#### **Important**

This section is related to XT Series only

### **HDMI to SD-HD Conversion**

This figure illustrates the HDMI to SD-HD conversion process.



Figure 1: **HDMI to SD-HD Conversion** 

# Mini-HDMI to SDI Converter from Blackmagic Design

Supplier: Blackmagic Design

Part number/Product Name: Mini HDMI to SDI converter

Description and pictures from <u>supplier web site</u>: "Designed for converting HDMI to SDI out with the choice to embed SDI audio from the HDMI, AES/EBU or balanced analog audio inputs."



Figure 2: Mini-HDMI to SDI Converter from Blackmagic Design

#### Features:

- Capable of sending audio and video to SDI devices
- Adds SDI outputs to video cameras with HDMI connection, OR
- SDI outputs to XT endpoints

#### Supported resolutions:

XT7100: 720p at 50/60fps and 1080p at 25/30fps

XT5000 Series: 1080p at 60fps

XT4300: 1080p at 60fps

### **HDMI to 3G HD-SDI Converter from Kramer**

Supplier: Kramer

Part number/Product Name: FC-113

Description and pictures from <u>supplier web site</u>: "The FC-113 is a high-performance format converter for HDMI signals. It converts an HDMI input signal to two identical SDI video signals with embedded audio."





Figure 3: HDMI to 3G HD-SDI Converter from Kramer

Features: Sends audio and video to HD-SDI devices.

#### Supported resolutions:

XT7100: 720p at 50/60fps and 1080p at 25/30fps

XT5000 Series: 1080p at 60fps

XT4300: 1080p at 60fps

# **HDMI to Composite/S-video Conversion**

This figure describes the HDMI to Composite/S-video conversion process.

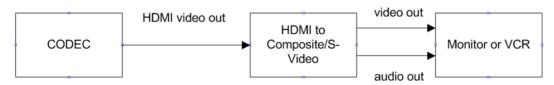


Figure 4: HDMI to Composite/S-video Conversion

# **HDMI to Composite Scaler from Gefen**

Supplier: Gefen

Part number/Product Name: GTV-HDMI-2-COMPSVIDSN

Description and pictures from supplier web site: "GefenTV HDMI to Composite Scaler lets you transform HDMI HD video in resolutions from 480p to 1080p into Composite video or S-Video format, properly sized for optimal view on your SD Monitor or VCR."



Figure 5: HDMI to Composite Scaler from Gefen

#### Supplier web site

#### Features:

- Out PAL or NTSC, Underscan/ Overscan
- Composite and S-Video out
- SPDIF and Analog audio out

- XT7100: up to 720p at 50/60fps, 1080i at 25/30fps (tested forcing 1080p goes to 1080i)
- XT5000 Series: 1080p at 60fps to PAL/NTSC underscan/overscan + audio
- XT4300: 1080p at 60fps to PAL/NTSC underscan/overscan + audio

# **HDMI to Component or RGBHV Converter**

This figure illustrates the HDMI to component conversion process.

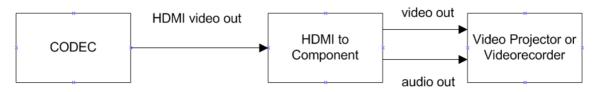


Figure 6: **HDMI to Component Conversion** 

This figure illustrates the HDMI to RGBHV conversion process.



Figure 7: **HDMI to RGBHV Conversion** 

# **HDFury 3 Converter from HDFury**

Supplier: HDFury

Part number/Product name: HDFury 3

Description and pictures from <u>supplier web site</u>: "How old is your HDTV or projector? If your HDTV or projector was bought before 2005, it does not have an HDMI input. This means that you'll never be able to use the full potential of your expensive projector, plasma display, or PC screen with the HD sources."



Figure 8: **HDFury 3 Converter** 

Specifications: See supplier web site

Features:

- Input: HDMI 1.3

Output: Component or RGBHV (user selectable)

Supported resolutions:

XT7100: up to 720p at 50/60fps and 1080p at 25/30fps (tested forcing 1080p)

XT5000 Series: 1080p at 60fps

XT4300: 1080p at 60fps

### Recorder

This section lists the recorders that were tested for the XT Series.

### **Capture HD from Crestron**

Supplier: Crestron

Part number/Product name: Capture HD™ High-Definition Capture Recorder

Description and picture from supplier web site: "Provides a very simple and cost-effective solution for capturing lectures, presentations, medical procedures, seminars, and training sessions in high-definition 1080p. You can use this product alone or as part of a complete CaptureLiveHD™ system.



Figure 9: **Capture HD Recorder from Crestron** 

- XT7100: up to 720p at 50/60fps and 1080p at 25/30fps (tested forcing 1080p)
- XT5000 Series: 720p at 50/60fps (1080p at 60fps not available)
- XT4300: 720p at 50/60fps (1080p at 60fps not available)

# **Integrating with Video-in Accessories**

This section lists suppliers of video-in accessories.

#### **Important**

This section is related to XT Series only

### **SD-HD to HDMI Conversion**

This figure illustrates the SD-HD to HDMI conversion process.



Figure 10: **SD-HD to HDMI Conversion** 

### Mini-SDI to HDMI Converter from Blackmagic Design

Supplier: Blackmagic Design

Part number/Product name: Mini SDI to HDMI converter

Description and pictures from supplier web site: "Converts from SDI to HDMI video out with embedded HDMI audio, plus balanced AES/EBU or analog audio out."



Figure 11: Mini-SDI to HDMI Converter from Blackmagic Design

#### Features:

- Using SDI devices as input
- Suitable for connecting SDI based video sources from cameras or video mixers and switchers to videoconference endpoints

- XT7100: 720p at 50/60fps and 1080p at 25/30fps
- XT5000 Series: 720p at 50/60fps and 1080p at 60fps
- XT4300: 720p at 50/60fps and 1080p at 60fps

### 3G HD-SDI to HDMI Converter from Kramer

Supplier: Kramer

Part number/Product name: FC-331

Description and pictures from supplier web site: "The FC-331 is a high-performance format converter for video signals up to 3G HD-SDI. It converts the input video format (with embedded audio) to an HDMI output signal."





Figure 12: 3G HD-SDI to HDMI Converter from Kramer

#### Supplier web site

#### Features:

- Using HD-SDI devices as input.
- Suitable for connecting HD-SDI based video sources from cameras or video mixers and switchers to videoconference endpoints.

#### Supported resolutions:

- XT7100: 720p at 50/60fps and 1080p at 25/30fps
- XT5000 Series: 720p at 50/60fps and 1080p at 60fps
- XT4300: 720p at 50/60fps and 1080p at 60fps

# Composite/S-video to HDMI Conversion

This figure illustrates the Composite/S-video to HDMI conversion process.



Figure 13: Composite/S-video to HDMI Conversion

# Composite/S-Video to HDMI Scaler from Gefen

Supplier: Gefen

Part number/Product name: GTV-COMPSVID-2-HDMIS

Description and pictures from supplier web site: "The GefenTV Composite to HDMI Scaler takes either Composite or S-Video as input and converts it to digital HDMI video, scaling it up to a maximum output of 1080p resolution."



Figure 14: Composite/S-video to HDMI Scaler from Gefen

#### Supplier web site

#### Features:

- In PAL or NTSC Composite and S-Video
- Toslink and analog audio in

- XT7100: up to 720p at 50/60fps
- XT5000 Series: 720p at 50/60fps and 1080p at 50/60fps (no audio from the HD input)
- XT4300: 720p at 50/60fps and 1080p at 50/60fps (no audio from the HD input)

# Composite Video and Audio to HDMI Scaler from **Kramer**

Supplier: Kramer

Part number/Product name: VP-410

Description and pictures supplier web site: "The VP-410 is a high-performance scaler for composite video and audio to HDMI signals. It scales the composite video, embeds stereo audio and converts the signal to an HDMI output."



Figure 15: Composite Video and Audio to HDMI Scaler

#### Supplier web site

#### Features:

- Input composite video in PAL / NTSC
- Analog audio in unbalanced stereo

- XT7100: 720p 50/60fps
- XT5000 Series: 720p at 50/60fps, 1080p at 50/60fps
- XT4300: 720p at 50/60fps, 1080p at 50/60fps

# **Integrating with Video Cable Extenders**

#### 0

#### **Important**

This section is related to XT Series only

With XT systems, the standard cable for the first camera is a 2.5 m triple cable (power+signal+control). A 5 m cable is available in the optional cable kit. Longer video cables are not available in the price list, but cable extenders can be used as described below. Positioning the first camera at more than 5 m requires some tailoring, per the following guidelines:

- HDMI maximum distance is 5 m at 1080p60 (10m at 1080p30 or 720p60) using high quality cables. An HDMI repeater, such as the Kramer extender is required if you exceed 5 meters
- VISCA cable is a serial RS232 cable, and a good quality cable can reach up to 15 meters. A serial repeater or the use of the camera's remote control is required for distances over 15 meters. Some HDMI repeaters are also able to repeat the serial signal for a longer distance. The VISCA extender is part of the qualified Kramer Video + Control extenders in this document.
- The maximum distance of the power supply cable for first camera is 5 meters. The camera requires a separate power supply (as available as part of the XT Cameras Cable Kit, #700512192) when exceeding 5 meters. This camera power supply is included with optional cameras.

This section lists the video cable extenders that were tested for the XT Series.

The XT Cameras cable kit (#700512192) includes all the items needed to connect a second camera, at 5m from the codec:

- 1x HDMI to DVI 5m cable, to connect the second camera to the XT
- 1x VISCA serial cross cable 10m. to connect first and second camera
- 1x HDMI to DVI converter to connect a camera to the DVI input and use it for live video instead of content
- Power supply for Flex, Advanced II Camera and Deluxe Camera (Power cord to be added depending upon the region and following Avaya One Source configurator guidelines)
- Spare lens cap for Flex Camera and Deluxe Camera

# **Using Cable Extenders for Remote Video Devices**

This figure illustrates signal transfer between the codec and the remote display by means of a video cable extender.

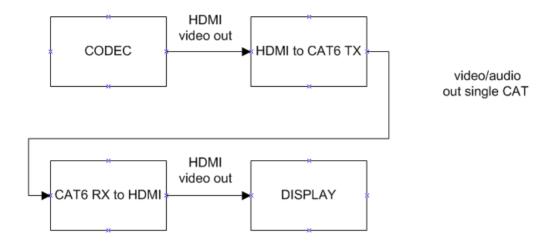


Figure 16: Signal Transfer Between the Codec and the Display

This figure illustrates signal transfer between the remote camera and the codec by means of a video cable extender.

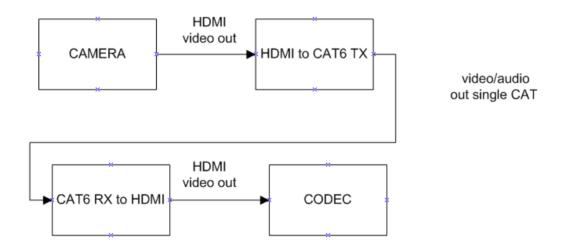


Figure 17: Signal Transfer Between the Camera and the Codec

### **Cable Extenders from Kramer**

Supplier: Kramer

Part number/Product name: TP-573, TP-574

Description and pictures from supplier web site: "DGKat™ twisted pair transmitter for HDMI, bidirectional RS-232 and infrared signals. The TP-573 converts the input signals to a twisted pair signal and the TP-574 converts it back to HDMI, RS-232 and infrared signals."



Figure 18: Cable Extender from Kramer Model TP-573 (from supplier web site)



Figure 19: Cable Extender from Kramer Model TP-574 (from supplier web site)

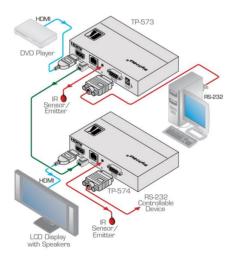


Figure 20: Connection Diagram (from supplier web site)

#### Supported resolutions:

- XT7100: 720p at 50/60fps and 1080p at 25/30fps
- XT5000 Series: 720p at 50/60fps and 1080p at 50/60fps
- XT4300: 720p at 50/60fps and 1080p at 50/60fps

In order to implement the schematic connections of Figure 20 and interface the Kramer TP-573 and TP-574 to the XT camera serial interface port, two different connections are required:

The first consists of a cable adapter applied between the Kramer TP-574 video receiver serial port and the XT camera cable provided with the XT system. Below is a picture of this cable adapter and its pinout.



Figure 21: XT Camera Input, Cable Adapter to Kramer TP-574

#### **Pinout**

Mini Din 8 pole Female	Canon DB9 pole Male
1	
2	
3	2
4	5
5	3
6	
7	
8	

The second cable adapter connects the XT camera serial interface to the Kramer TP-573 video transmitter serial port.



Figure 22: Camera Output, Cable Adapter to Kramer TP-573

#### **Pinout**

Mini Din 8 poles Male	Canon DB9 poles Male
1 Cloop	
2	
3	3
4	5
5	2
6	
7	
8	

# Integrating with USB to serial converter

#### Important

This section is related to XT Series only

Supplier: Aten

Part number/Product name: UC232A

Description: UC232A is a USB to RS232 serial port converter. It provides PCs, notebooks and handheld computing devices using USB as external PnP RS232 port.



Figure 23: Aten UC232A

#### Supplier web site

XT7000 / XT5000 / XT4300 configuration:

- o Accessing to the menu:
  - Configure/Advanced/Utilities/Remote Access/ATCommands
    - Select for AT commands:
      - ✓ Option Yes (AT commands enables for both IP and RS232)
      - ✓ IP Only
      - ✓ RS232 Only

Select also the Baud Rate required and configure the PC serial port or the client connected to the XT as follows:

- BaudRate = BaudRate selected
- Data = 8 bit
- Parity = none
- Stop = 1 bit
- Flow Control = none

# **Integrating with Video Cameras**

This section lists video cameras that were tested for the XT Series.

#### 0

#### **Important**

This section is related to XT Series only

# **USB Camera Logitech HD Pro Webcam C920**

Supplier: Logitech

Part number/Product name: HD Pro Webcam C920



Figure 24: HD Pro Webcam C920 (from supplier web site)

Description: USB camera 1080p

#### Features:

- Microphone
- Autofocus
- Horizontal field of view 69°
- Optical resolution 3MP
- Digital zoom 1.8X, digital pan and tilt.

#### Supported resolutions:

XT7100 / XT5000 Series / XT4300: 1080p at 30fps or 720p at 30fps

**Note:** supported with camera released till 2018.

To check if the camera is supported, it is possible to read the Product ID (PID) USB camera connecting the camera to a Windows PC.

Windows PC path: "Device Manager – >universal Serial Bus controller-> Logitech USB Camera (HD Pro Webcam C920) ->(using right mouse button) Properties -> Details -> Property=Hardware Ids

#### PID table:

046d:082d -> legacy (compatible) C920 devices 046d:0892 -> post-2018 (not supported) C920 devices

# **USB Camera Logitech HD Pro Webcam C930e**

Supplier: Logitech

Part number/Product name: HD Pro Webcam C930



Figure 25: HD Pro Webcam C930e (from supplier web site, supplier support site)

Description: USB camera 1080p

#### Features:

- Microphone
- Autofocus
- Horizontal field of view 81°
- Optical resolution 3MP
- Digital zoom 4X, digital pan and tilt software

#### Supported resolutions:

XT7100 / XT5000 Series / XT4300: 1080p at 30fps or 720p at 30fps

# **Ceiling Document Camera**

Supplier: Lumens

Part number/Product name: CL510



Figure 26: CL510 from Lumens (supplier web site)

Description: Camera designed to be suspended or embedded into the ceiling.

Features:

- Full HD 1080p

- One button optimization function

Laser beam for document centering.

Supported resolutions:

- XT7100 / XT5000 Series / XT4300: 1080p at 30fps

# Sony SRG120DH

Supplier: Sony

Part number/Product name: SRG-120DH



Figure 27: SRG-120DH from Sony (from supplier web site)

Description: The SRG-120DH is a desktop 1080p/60 HD PTZ camera with built-in IP control.

#### Features:

- 12x optical zoom
- Full HD 1080p60
- Horizontal field of view 71°
- HDMI output.

#### Supported resolutions:

- XT7100 / XT5000 Series / XT4300: 1080p at 60fps

#### Notes:

You are required to use cable P/N 55111-00060 XTCBLCAM MULTICBL WRNG 2.5M for the connection of the first XT camera.

You are required to use cable P/N 55111-00027 VISCA CROSS CABLE 10M for the connection of the second XT camera. If multiple cameras are cascaded using a VISCA daisy chain, all must be the same brand and model.

This camera model is supported on XT v8.3.5 and above.

For best results set the XT configuration Cameras Driver as Automatic.

(Configure\ Advanced\ I/O Connection\ Cameras\ General\ Drive→Automatic)

### Sony SRG-300H

Supplier: Sony

Part number/Product name: SRG-300H



Figure 28: SRG-300H from Sony (from supplier web site)

Description: The SRG-300H is a desktop or ceiling mount HD PTZ camera.

#### Features:

- 30x optical zoom
- Full HD 1080p60
- Horizontal field of view 71°
- HDMI output

#### Supported resolutions:

XT7100 / XT5000 Series / XT4300: 1080p at 60fps

#### Notes:

It is required to use cable P/N 5111-00060 XTCBLCAM MULTICBL WRNG 2.5M for the first XT camera connection.

It is required to use cable P/N 5111-00027 VISCA CROSS CABLE 10M for the second XT camera connection. If multiple cameras are cascaded using a VISCA daisy chain, all must be the same brand and model.

This camera model is supported on XT v8.3.5 and above.

For best results set the XT configuration Cameras Driver as Automatic

Configure\ Advanced\ I/O Connection\ Cameras\ General\ Drive→Automatic

# **Integrating with Wireless Presentation Device**

#### Important

This section is related to XT Series only

- Supplier: Barco
- Part number/Product name: CSC-1
- Description: Wireless presentation system for high-profile meeting rooms and boardrooms.



Figure 29: Barco CSC-1

#### Supplier web site

- Features:
  - ✓ The CSC base unit features the ability to display on 2 screens simultaneously and show 4 different sources on screen synchronizing the audio/video.
  - ✓ Wireless protocol: IEEE 802.11 a/g/n, 2.4GHz
  - ✓ 1x Ethernet LAN, 5 x USB, Analog line In/Out
  - √ iPad, iPhone and Android compatibility
- Supported resolutions with XT7100 / XT5000 Series / XT4300:
  - √ HD 1080p at 60fps
  - ✓ DVI 1080p at 60fps

# Integrating with speaker tracking devices

#### Important

This section is related to XT Series only

### **VideoGecom Automatic Speaker Tracking System**

Supplier: VideoGecom

Part number/Product name:

- PTZ Camera Automatic Tracking System composed of:
  - ✓ Shure DDs 5900DCN system main unit and microphone bases
  - ✓ CPU Control Unit
  - ✓ Software configuration wizard

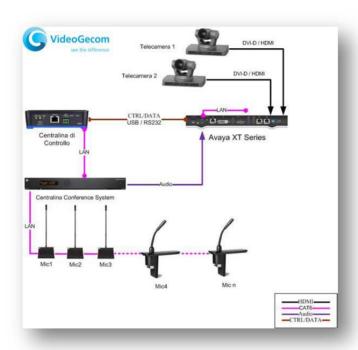


Figure 30: Camera Automatic Tracking Diagram (from supplier web site)

- Description from a supplier brochure: A complete kit to integrate the automatic tracking system feature of the active speaker to an Avaya videoconferencing system.
- Features:
  - ✓ Control two cameras and up to 120 camera presets
  - ✓ Web configuration by password
  - ✓ Microphone activation by voice, push to talk or controlled by meeting leader
  - ✓ Indication of who is speaking
- Supported resolutions:
  - √ XT7100 / XT5000 Series / XT4300: 1080p at 30fps

# **Integrating Text and Graphics with Live Video**

#### 0 **Important**

This section is related to XT Series only

Supplier: e-mediavision

Part number/Product name: Point-HD. Video Board + PC software suitable for Educational, Telemedicine, Telelearning.

Description and pictures from supplier web site

"POINT is designed for real-time graphics video illustration, or 'telestration' and has been enhancing live broadcasts since 2000. Based on a touch screen control, the system offers unprecedented power, quality and flexibility for telestration applications. If you have something to explain in a live situation there is no other product that can do it as well as POINT. Its range of tools provides the facilities for the presenter to dynamically illustrate events with captivating graphics and all under fingertip control."



Figure 31: Point HD by e-mediavision

- XT7100: 720p at 50/60fps and 1080p at 60fps
- XT5000 Series: 720p at 50/60fps and 1080p at 50/60fps
- XT4300: 720p at 50/60fps and 1080p at 50/60fps

### Products for health care

#### Important

This section is related to XT Series only

### **HD4300 Telemed by Aditech**

Supplier: Aditech (<u>website</u>)

- Part number/Product name: HD-4300 Telemed

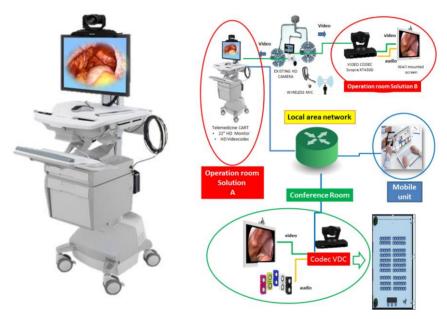


Figure 32: System Connection Diagram

- Description: Telemedicine system
- Features:

Expand flexible healthcare access through telehealth with this easy and affordable mobile solution, which combines the power to support onboard diagnostics and videoconferencing. HD 4300 Telemed integrated with different kits allows a full HD bidirectional audio/video communication in the clinical setting.

The system supports real time second opinion consulting through the Hospital internal LAN. The video can be directly recorded via HD 4300 Telemed. HD 4300 Telemed is a full movable device and the network connection is guaranteed by its embedded wi-fi adapter.

- Supported resolutions:
  - ✓ Inside XT4300: 720p at 50/60fps and 1080p at 50/60fps
  - ✓ compatible also with XT7100 and XT5000 Series

# Videc Teledoc HD++ by Meytec

Supplier: Meytec

- Part number/Product name: Vimed Teledoc HD++



Figure 33: Vimed DOC Basic HD++

- Description: Mobile Workstation for the communication between physicians and patients.
- Features: The VIMED® TELEDOC HD++ is a mobile workstation for simultaneous image transmission and video communication in Full HD quality. The system is tailored to the specific needs of the medical field.
  - ✓ The system is designed according to the requirements of the Medical Device Directive (MDD) 93/42/EEC.

#### Supplier web site

- Inside XT5000: 720p at 50/60fps and 1080p at 60fps
- \*compatible also with XT7100 and XT4300

# **Trumpf TruVidia Manager**

Supplier: Trumpf Medical

Part number/Product name: TruVidia Manager video management system



Figure 34: TruVidia Manager Video

Description from supplier web site as detailed below:

TruVidia® Manager Video management system uses three modules: routing, documentation, and communication.

Operating Room staff can broadcast video signals, document images and videos of operations, as well as communicate internally and externally. It offers real, bidirectional HD video quality with up to two parallel HD 1080p channels and a high level of communication quality through its audio technology.

Supplier web site

#### Demo Video

Supported resolutions:

- Inside XT5000: 1080p at 60fps

\*compatible also with XT7100 and XT4300

### **Monitor Touchscreen**

#### **Important**

This section is related to CU360 only The monitor touchscreen support will be present in XT series starting from version 9.2 (GA target, Q3 CY19)

Having a touch screen monitor attached to your unit makes it easier to type using the virtual keyboard and to access the menu. The virtual keyboard is visible on the screen by tapping on any edit field. When you connect a touch screen monitor to your unit, it must be a standard multitouch touch screen monitor supporting Android 7 via USB.

### Dell

A successfully tested touchscreen monitor is DellS2240T.

This monitor has no integrated audio. You must connect audio speakers for audio. Alternatively you can use the Avaya B109 with CU360. Display Dimension 21.5". For information on the Dell S2240T please visit <a href="http://www.dell.com">http://www.dell.com</a>.

### **IIYama**

The IIYAMA tested monitors are:

PROLITE TH4264MIS-B2AG

Note: The built-in speakers were adequate. Display Dimension 42"

PROLITE T2250MTS

Note: Avaya recommends using the Avaya B109 as speaker device. Display Dimension 21.5" For more information visit https://iiyama.com.

# Sharp

The successfully Sharp tested monitors are:

PN-70TA3

Note: The built-in speakers were adequate. Display Dimension 70"

PN60-SC5

Note: The built-in speakers were adequate. Display Dimension 60"

For more information visit <a href="https://www.sharp-cee.com/cps/rde/xchg/scee/hs.xsl/-/html/index.htm">https://www.sharp-cee.com/cps/rde/xchg/scee/hs.xsl/-/html/index.htm</a> .

### **Smart**

It has been successfully tested the following board:

SMART Board 8070i

Display Dimension 70"

For more information visit <a href="https://home.smarttech.com">https://home.smarttech.com</a>.

### **Planar**

The Planar monitor that was successfully tested is:

Planar PCT2235

Note: The built-in speakers were adequate. Display Dimension 21.5"

For more information visit <a href="https://www.planar.com">https://www.planar.com</a>.

# Cart

This section provides a list of Cart devices tested and qualified with CU360.

### **Euromet**

Supplier: Euromet

For details about these accessories, please visit supplier's web site at <a href="https://euromet.com/en/">https://euromet.com/en/</a>.

Model: "Turn"



Figure 35: **Euromet Turn** 

Model: "Slide Cart"



**Euromet Slide Cart** Figure 36:

# **Adapter Type C to HDMI**

#### **Important**

This section is related to CU360 only starting from version 11.3

### **Foinnex**

The Foinnex adapter that was successfully tested is:

USB C to HDMI Adapter with Charging Power for Galaxy S9/S8/S10 Plus, Note 8, Note 9 as Samsung Dex Sta"



Figure 37: Foinnex adapter

For more information visit http://www.foinnex.com/

Note: Available on Amazon shop on April 2021

# **Intpw**

The Intpw adapter that was successfully tested is:

USB C to HDMI Adapter 4K for MacBook Pro, HDMI Adapter Hub Dock with USB 3.0 Port, Type-C PD Charging Port Compatible w/Nintendo Switch/MacBook Air 2018/Chromebook Pixel/Dell XPS13 - Space Grey



Figure 38: Intpw adapter

For more information visit https://intpw.com/

Note: Available on Amazon shop on April 2021

### **Demkico**

The Demkico adapter that was successfully tested is "Demkico USB C to HDMI Adapter 4K, Multiport Type C Adapter with USB 3.0 Port, Type-C Charging Port Converter Adapter"



Figure 39: **Demkico adapter** 

Just google it to find the device on the most common online shops.

Note: Available on Amazon shop on May 2021

### **QGeeM**

The QGeeM adapter that was successfully tested is "QGeeM USB C to HDMI Adapter 4K Cable"



Figure 40: **QGeeM** adapter

For more information visit <a href="https://qgeem.store/">https://qgeem.store/</a>

Note: Available on Amazon shop on June 2021

### **Barco**

#### 0 **Important**

This section is related to CU360 only starting from version 11.4

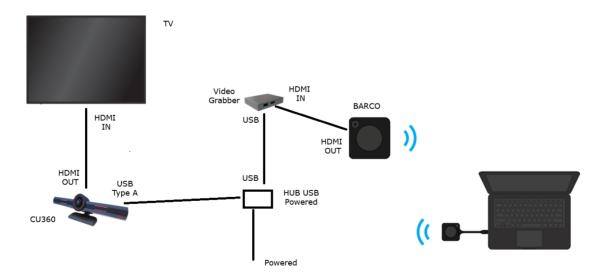
# **Barco Clickshare CX-50**

The Barco Clickshare CX-50 could be used as USB video input for CU360 system.

In this way a user could do the following actions:

- 1. clicking on the Barco ClickShare button, it's possible to share the PC stream into the room TV connected to the CU360, while the CU360 is not in a meeting.
- 2. when the CU360 is connected to a meeting, clicking on the Barco ClickShare button, it's possible to share the PC stream as USB presentation stream from the CU360.

#### Setup:

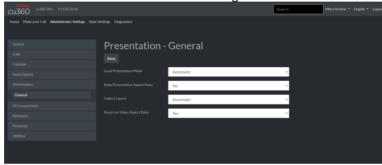


#### CU360 settings:

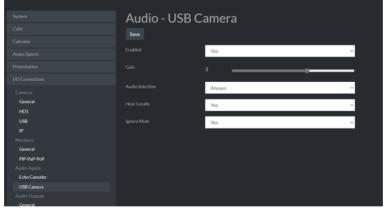
Control Camera = No (inside the web menu "Administrator Settings>I/O Connections>Cameras>USB)



Local Presentation Mode = Automatic (inside the web menu "Administrator Settings>Presentation>General)



Ignore Mute = Yes, Hear Locally = Yes (inside the web menu "Administrator Settings>I/O Connections>Audio Inputs>USB Camera)



#### Steps to see the PC stream on the TV not in CU360 meeting:

- click the Barco ClickShare button connected to the PC.
- Automatically the CU360 goes in presentation mode displaying the PC stream on the TV.

#### Steps to send the PC stream as USB presentation during CU360 meeting:

- Connect the CU360 in your meeting.
- Using CU360 remote control, press Presentation and choose USB video source for presentation. The remote sites will see as presentation the stream from the PC connected to the CU360 through Barco.

For more information visit https://www.barco.com/it/

# Chapter 3 | Integrating with Audio Accessories

This section describes the audio accessories that were tested.

# **Integrating with Audio-out Accessories**

Important

This section is related to XT Series only

## **Audio-out Connection**

This figure illustrates the audio-out connections in the XT Series.



Figure 41: Audio-out Connections in the XT Series

## HDMI Audio-out Connection HDMI Audio De-Embedder from Kramer

Supplier: Kramer

Part number/Product name: FC-46xl



Figure 42: FC-46xI HDMI Audio De-Embedder from Kramer (from supplier web site)

Features: Extracts audio from the HDMI

Connections:

- HDMI input
- HDMI output
- Toslink optical digital audio out
- RCA connector S/PDIF digital audio
- 3.5mm jack Unbalanced stereo analog audio

## Important

Set Audio Source Select to the Input position.

# **Two-Way Monitor System from Genelec**

Supplier: Genelec

Part number/Product name: 8030





Figure 43: Two-way monitor system from Genelec (from supplier web site)

#### Features:

Power: 40 W + 40 W

- Bandwidth: 58 Hz - 20 kHz

- Connections: XLR female balanced signal pin 1 (gnd), pin 2 (+), pin 3 (-)

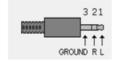
Connecting to XT7100, XT5000 Series or XT4300 requires using a Y adapter cable with 2 XLR male and one stereo 3.5 mm plug.



XLR Male 1



XLR Male 2



XLR Male 1	XLR Male 2	jack plug
pin#	pin#	pin#
1		3
2		2
3		3
	1	3
	2	1
	3	3

Figure 44: **Connecting the Monitor System** 

# **Two-Way Monitor System from Kramer**

Supplier: Kramer

Part number/Product name: Tavor 5-O

Pictures and description from supplier web site: "The Tavor 5-O is a pair of powered two-way speakers designed for indoor wall mounting. The system accepts a line-level stereo input and amplifies it using a built-in amplifier and outputs a speaker signal to the passive speaker."





Two-way monitor from Kramer Figure 45:

#### Features:

Power: 30 W + 30 W

- Bandwidth: 45 Hz - 20 kHz Connections: RCA stereo input

> Connecting to XT7100, XT5000 Series or XT4300 requires a Y adapter cable with 2 RCA male and one stereo 3.5 mm plug (not provided).

# **Home Cinema Speakers from Philips**

Supplier: Philips

Part number/Product name: HTS3111/12



Figure 46: Home Cinema Speakers from Philips (from supplier web site)

#### Features:

- Power: 30 W + 30 W + 40 W subwoofer

- Bandwidth: 20 Hz - 20 kHz Connections: RCA stereo input

> - Connecting to XT7100, XT5000 Series or XT4300 requires a Y adapter cable with 2 RCA male and one stereo 3.5 mm plug provided with the soundbar.

# **Monitor Speakers from M-Audio**

Supplier: M-Audio

Part number/Product name: Studiophile AV40









Figure 47: Monitor Speakers from M-Audio (from supplier web site)

#### Features:

- Power: 15 W + 15 W

- Bandwidth: 85 Hz - 20 kHz Connections: RCA stereo input

> - Connecting to XT7100, XT5000 Series or XT4300 requires a Y adapter cable with 2 RCA male and one stereo 3.5 mm plug (not provided).

# **Integrating with Audio-in Accessories**

This section lists audio-in accessories that were tested for the XT Series.

### 0

### **Important**

This section is related to XT Series only

## **Audio-in Connection**

This figure illustrates the audio-in connections of the XT Series.



Figure 48: Audio-in Connections of XT Series

Note: The following Audio-In accessories can be used with XT7100 and XT5000 series devices If you are using the XT4300 you require a 3-way pod instead of the standard analog microphone in order for the input to be free.

## **Wireless Microphone System from Revolabs**

Supplier: Revolabs

Part number/Product name: HD Single/Dual channel wireless microphone system.



Figure 49: Wireless Microphone System from Revolabs

Supplier web site

#### Features:

- Bandwidth: 50 Hz - 14 kHz

– Radio Frequency:

✓ North and South America: 1920 to 1930 MHz

✓ Africa, Asia, Australia, Europe: 1880 to 1900 MHz (DECT EU)

✓ Mainland China: 1900 to 1920 MHz

Japan: 1893.5 to 1906.1 MHz

- Range: 150 feet (45 meters) approx. (obstruction free)

- 128-bit encryption

Connections: 3.5 mm jack balanced out

- Connecting to XT7100 or XT5000 Series requires using a cable with a stereo plug to stereo plug connection, provided by Revolabs.

## Configuring the Revolabs Microphone System

The steps to configure the microphone in the XT are described in the following procedure.

#### **Procedure**

- 1. From the XT Series web interface, select Administrator settings > I/O connections > Audio Input > Analog Audio
- 2. Select Line from the Type list.
- 3. Select Mono from the Mode list.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

## **Wireless Microphone System from Revolabs**

Supplier: Revolabs

Part number/Product name: 10-FLX2-200-VOIP



**FLX Microphone System from Revolabs** Figure 50:

Supplier web site

#### Features:

- Bandwidth: 100 Hz 10 kHz
- Wireless technology:
  - ✓ DECT 6.0 for US.
  - ETSI ETS 300 175 for other countries
  - ✓ Bluetooth® 2.1+EDR
- Range: 12 feet (3.6 meters) approx. (obstruction free)

Connections: 3.5 mm jack balanced out

- Connecting to XT7100 or XT5000 Series requires using a cable with a stereo plug to stereo plug connection, provided by Revolabs.

## Configuring the FLX Microphone System from Revolabs

The steps to configure the microphone in the XT are described in the following procedure.

#### **Procedure**

- 1. From the XT Series web interface, select Administrator settings > I/O connections > Audio Input > Analog Audio
- 2. Select Line from the Type list.
- 3. Select Mono from the Mode list.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

## **Ceiling Microphones from AKG**

Supplier: AKG

Part number/Product name: CHM 99

Description: Ceiling mounted microphone available in black or white. Adding another microphone requires installing an external mixer.



Figure 51: **CHM 99 Microphone from AKG** 

#### Supplier web site

#### Features:

- Transducer: Condenser - Polar Pattern: Cardioid

- Frequency Response: 70 Hz - 18 kHz

Connections: XLR male balanced out

- Connecting XT7100 or XT5000 Series requires using an adapter cable with one stereo 3.5 mm plug and one XLR female (not provided).

## Configuring the CHM 99 Microphone from AKG

The steps to configure the microphone in the XT are described in the following procedure.

#### **Procedure**

- 1. From the XT Series web interface, select Administrator settings > I/O connections > Audio Input > Analog Audio
- 2. Select Microphone from the Type list.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

## **Ceiling Microphone Array from Clearone**

Supplier: Clearone

Part number/Product name: Ceiling Microphone Array

Description and picture from Supplier web site: "The ClearOne Ceiling Microphone Array features three wide-range microphones mounted together into a single unit array, providing the rich sound of three individual unidirectional microphones while maintaining full 360 degree coverage." Works in conjunction with Clearone Converge Pro or Interact Pro or Interact AT audio conferencing mixers.



Figure 52: **Ceiling Microphone Array from Clearone** 

#### Features:

 Transducer: 3 x Condenser - Polar Pattern: Cardioid

 Frequency Response: 100 Hz – 12 kHz Connections: the mixer has phoenix connectors.

Connecting to XT7100 or XT5000 requires using a cable with stereo plug (not provided).

## **Configuring the Ceiling Microphone Array from Clearone**

The steps to configure the microphone in the XT are described in the following procedure.

### **Procedure**

- 1. From the XT Series web interface, select Administrator settings > I/O connections > Audio Input > Analog Audio
- 2. Select Line from the Type list.
- 3. Select Mono from the Mode list.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

# Integrating with Hands-free/Handsets Accessories

## Important

This section is related to XT Series only

The following accessories have been tested for use with XT Series Endpoints as audio in/out devices. They are connected to the USB slot of the XT or through a Wireless/Bluetooth/DECT adapter provided by the supplier.

Please connect USB audio devices to the lower USB port of the XT.



Figure 53: Connect USB audio devices to lower XT USB port.

#### **Procedure**

To enable an USB audio device as microphone input, browse to

[GUI] Configure >Advanced>I/O Connections>Audio-Inputs>USB Microphone [Web] Administrator Settings> I/O Connections> Audio-Inputs>USB Microphone



Figure 54:

**Configure USB Microphone** 

- 1. Enable: Yes
- Echo Canceller: Yes (recommended) or No according to the specific device. It is recommended to always enable the XT echo canceller (Echo Canceller: Yes); in this way XT can automatically adjusts the level of the transmitted signal and, if the monitor's speakers are active, XT can suppress the light echo produced by the headset/Hands-free accessory.
- 3. <u>Gain</u>: If for some reason the Echo Canceller is set to **No** (not recommended), please configure the audio gain according to the specific device (see below tables).

The USB device is recognized as audio output automatically if the Audio Outputs Management option is set to **Automatic**, in

[GUI] Configure >Advanced>I/O Connections>Audio-Outputs>General [Web] Administrator Settings> I/O Connections> Audio-Outputs>General

In this case, when you plug the USB audio device the audio output goes directly to the device and not to the monitors or to the speakers.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

Please note that the functional keys "mute on/off" and "volume up/down" act on only the device itself and are not reflected on XT, as well as other keys.

# **Supported Jabra Accessories**

Supplier: Jabra

For details about these accessories, please visit supplier's web site at http://www.jabra.com.

If Echo Canceller is set to No (not recommended), please set Gain as specified.

Supplier	Product name/Model	XT USB Mic Echo Canceller	XT USB Mic Gain
Jabra	Handset J450 version C	Yes*	0 dB
	Headset Supreme UC version B	Yes*	-2 dB
	Headset BIZ 2400 Duo USB version A	Yes*	0 dB
	Headset PRO 930 EMEA version A	Yes*	-5 dB
	Hands-free Speaker 510+ UC version B	Yes*	+3 dB
	Headset PRO 9450 DUO	Yes	

<sup>\*</sup> If the Echo Canceller is set to **No**, the specified gain must be configured for the device.

## **POD ClearOne CHAT50**

Supplier: Clearone

Part number/Product name: POD ClearOne CHAT50



Figure 55: ClearOne CHAT50

## Supplier web site

- Description: Personal Speakerphone

- Features:
  - ✓ Connection USB 2.0 compatible
  - ✓ Speaker bandwidth 220 Hz 14,000 Hz
  - ✓ Max Output Level 80 dB SPL @ 1 foot (0.30 meter)
  - ✓ Microphone bandwidth 50 Hz 7,750 Hz
  - ✓ Full Duplex, Acoustic Echo Cancellation, Automatic level control

## Configuring the POD ClearOne 50 Speakerphone

The steps to configure the microphone in the XT are described in the following procedure.

### **Procedure**

- 1. From the XT Series web interface, select **Administrator settings > I/O connections > Audio Input > USB Microphone.**
- 2. Select Enable Yes.
- 3. Select Echo canceller No.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

# **Digital/Analog Audio Conversion from Cypress Technology**

## Important

This section is related to XT Series only

This figure illustrates the analog-to-digital conversion process using the Cypress Technology Converter.



Figure 56: Analog to Digital Conversion

This figure illustrates the digital-to-analog conversion process using the Cypress Technology Converter.



Figure 57: **Digital to Analog Conversion** 

Supplier: Cypress Technology
Part number/Product name: DCT-9

Description and picture from <u>Supplier web site</u>: "The Universal Digital/Analog Audio Converter [...] can convert Optical, Coaxial and L/R audio signals.

- Analog audio to digital audio signal conversion
- Digital audio to analog audio signal conversion
- Simultaneously digital and analog audio output
- Digital coaxial to Toslink and Toslink to coaxial conversion

#### Features:

- Integrated digital interpolator filter and Digital-to-Analog Converter (DAC)
- Integrated Analog-to-Digital Converter (ADC)
- Supports sampling frequencies from 16 to 100 kHz



Figure 58: Digital-analog Converter from Cypress Technology

#### Connections:

- RCA connectors audio out and RCA connectors audio in
- RCA connectors SPDIF (COAX)
- TOSLINK optical
- Connecting to XT7100 or XT5000 Series requires using a Y adapter cable with 2 RCA male and one stereo 3.5 mm plug (not provided).
- If used as analog-to-SPDIF, XT7100 and XT5000 Series have stereo line out. No particular settings are required.

## **Configure SPIDF to Analog Conversion**

The steps to configure the device in the XT are described in the following procedure.

#### **Procedure**

- 1. From the XT Series web interface, select Administrator settings > I/O connections > Audio Input > Analog Audio.
- 2. Select Line from the Type list.
- 3. Select Stereo from the Mode list.

See the Installation Guide for XT Series for more information at https://support.avaya.com/.

## **Bluetooth Devices**

#### 0 **Important**

This section is related to CU360 only

This section provides a list of audio bluetooth devices tested with CU-360.

To successfully pair the CU360 to an audio device it is necessary to enable the Bluetooth feature in CU360.

See the Installation Guide for CU360 for more information at https://support.avaya.com/.

Supplier: Jabra

For details about these accessories, please visit supplier's web site at http://www.jabra.com.

Jabra MINI BT HDST



Figure 59: **Jabra MINI BT HDST** 

Handset J450 version C



Figure 60: Handset J450 version C

Hands-free Speaker 510+ UC version B



Figure 61: Hands-free Speaker 510+ UC version B

# **USB Audio Mixer Adapter**

#### 0 **Important**

This section is related to CU360 only

This section provides a list of usb audio mixer adapter devices tested with CU-360.

# **Behringer U-CONTROL UCA202**

Behringer Adapter



Figure 62:

**Behringer U-CONTROL UCA202** 

For more information visit <a href="https://www.behringer.com/">https://www.behringer.com/</a>

Note: Available on Amazon shop on June 2021

# Chapter 4 | Integrating with Rack-mounting Accessories

This section lists suppliers of rack-mount accessories for XT7100 / XT5000 Series / XT4300.



## **Important**

This section is related to XT Series only

# **Rack Mount for XT series from Middle Atlantic**

Supplier: Middle Atlantic

Part number/Product name: RSH4A2S XT5000

Search by Keyword "" - supplier web site

The Rackshelf for the XT5000 Series is also appropriate for the XT7100 and XT4300.

Middle Atlantic Products

# Chapter 5 | Use XT as USB audio/video peripheral for laptop

## Important

This section is related to XT Series only

# XT2USB

XT2USB – is a module compatible with XT series device.

Over a single USB 3.0 cable it allows the usage of the XT camera and microphone as peripherals for your laptop running application such as MS Teams, Zoom, Google Meet, WebRTC.

For further information please visit the supplier web site

5....2

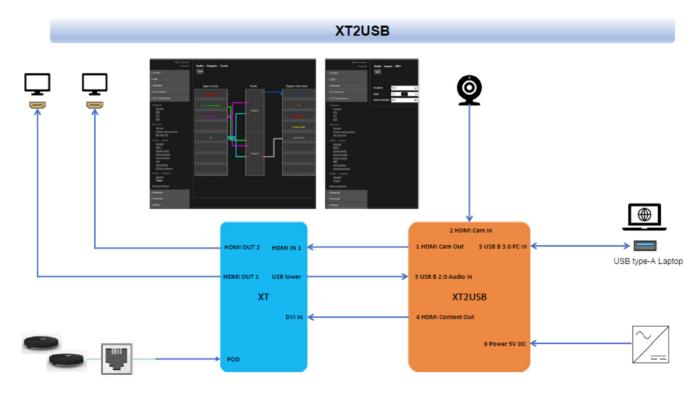


Figure 63: XT2USB

# **Chapter 6 | Power Supply**

## Important

This section is related to CU360 only

# **AC/DC Power Supply**

## **ALITOVE 5V@5A 25W**

Important – Safety Warnings

These are not an official Avaya Products, please refer to the supplier for safety warnings information.

Avaya declines all responsibility.

In the Avaya CU360 setup with two monitors and Audio Video Grabber used at the same time, it could be needed the usage of a power supply with more power than the one provided with the Avaya CU360.

This ALITOVE power supply could provide 25 W instead of 15W like the one provided with CU360.



Figure 64: ALITOVE 5V@5A 25W

For more information visit Alitove Power Supply

Note: Available on Amazon shop on April 2022

To connect this ALITOVE power supply to the CU360 it's necessary to use a DC plug adapter. It's available the SOULBAY - DC Plug adapter kit, in this kit the adapter to be used is type EIAJ-RC5320-4.



Figure 65: Soulbay - DC Plug adapter kit



Figure 66: Soulbay - type EIAJ-RC5320-4

For more information visit SoulBay DC Plug adapter kit

Note: Available on Amazon shop on April 2022