

# **Scopia XT Series**

# **Third-Party Accessories**

Version 2.0 For Solution 8.0.x, 8.2



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Third-Party Accessories for Scopia XT Series Version 2.0, June 10, 2013

http://www.radvision.com

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# Chapter 1 | Overview

The purpose of this document is to provide customers and integrators with a list of third-party accessories suitable for Scopia XT Series endpoints.

The accessories have been tested in RADVISION laboratories and are guaranteed for interoperability with our products and for acceptable quality of final results.

#### Important

The third-party products listed in this document are certified for the Scopia XT1200 and Scopia XT5000, unless specified otherwise.

The accessories belong to these categories:

- Video
- Audio
- Rack-mounting

The document lists valuable information on the accessories (such as features or connections). This information allows customers and integrators to easily purchase the product and solve typical use cases, such as HDMI extension, audio connectivity conversion, or rack-mounting of Scopia XT Series devices.

#### 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 RADVISION towards any third party. The information herein was based on specific third party products tested on or around June 2013. 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 describes the video accessories that were tested for the Scopia XT Series. The section lists video-out and video-in accessories.

## **Integrating with Video-out Accessories**

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

#### **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 Scopia XT1200 or Scopia XT5000.

- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 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:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 1080p at 60fps

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

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

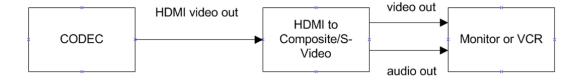


Figure 4: HDMI to Composite/S-video conversion

## **HDMI to Composite Scaler from Gefen**

- Supplier: Gefen
- Part number/Product Name: GTV-HDMI-2-COMPSVIDS

 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** 

- · Features:
  - Out PAL or NTSC, Underscan/Overscan
  - Composite and S-Video out
  - SPDIF and Analog audio out
- Supported resolutions:
  - Scopia XT1200: up to 720p at 50/60fps, 1080i at 25/30fps (tested forcing 1080p goes to 1080i)
  - Scopia XT5000: 1080p at 60fps to PAL/ NTSC underscan/overscan + audio

## **HDMI** to Composite/S-video Converter from Lenkeng

- Supplier: Lenkeng (also in Amazon web site)
- Part number/Product name: LKV381
- Description and pictures from <u>supplier web site</u>: "This converter box is designed to convert HDMI HD video to either Composite Video or S-Video."







Figure 6: HDMI to Composite/S-video Converter from Lenkeng

- Features:
  - Out PAL or NTSC
  - Composite or S-Video out (by means of a switch)

- Analog audio out
- Supported resolutions:
  - Scopia XT1200: up to 720p at 50/60fps PAL/ NTSC + audio, and 1080i at 25/30fps (tested forcing 1080p goes to 1080i) PAL/ NTSC + audio
  - Scopia XT5000: 720p at 50/60fps, 1080p at 60fps to PAL/ NTSC. No audio-out with current version (scheduled for next software release).

#### **HDMI** to Component or RGBHV Converter

This figure illustrates the HDMI to component conversion process.



Figure 7: **HDMI to Component Conversion** 

This figure illustrates the HDMI to RGBHV conversion process.

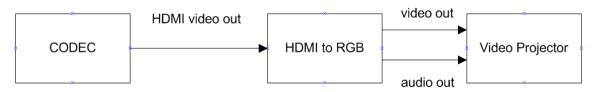


Figure 8: **HDMI to RGBHV Conversion** 

## **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 9: **HDFury 3 Converter** 

• Specifications: See supplier web site

· Features:

- Input: HDMI 1.3

Output: Component or RGBHV (user selectable)

• Supported resolutions:

- Scopia XT1200: up to 720p at 50/60fps and 1080p at 25/30fps (tested forcing 1080p)
- Scopia XT5000: 1080p at 60fps

#### Recorders

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

#### **Design Intensity Pro from Blackmagic**

Supplier: Blackmagic Design

• Part number/Product name: Intensity Pro

• Description and pictures from <u>supplier web site</u>: "Intensity Pro is the world's first HDMI and analog component, NTSC/PAL and S-Video PCIe capture and playback card for Windows, Mac OS X and Linux computers. Intensity Pro is great for HDTV or standard definition editing using big screen televisions and video projectors. Intensity Pro works with uncompressed SD or HD video, and compressed codecs such as DNxHD, ProRes, DVCPRO HD, DVCPRO 50, JPEG, HDV and DV! Intensity Pro is a professional editing card featuring maximum real time effects in Avid Media Composer 6™, Apple Final Cut Pro™ and Adobe Premiere Pro™, with full support for both uncompressed and compressed AVI and QuickTime files. Intensity Pro also has full integration with Adobe After Effects and Photoshop. Suitable for HD recording and streaming."



Figure 10: Design Intensity Pro from Blackmagic

- Supported resolutions:
  - Scopia XT1200 up to 720p at 50/60fps and 1080p at 25/30fps (tested forcing 1080p)
  - Scopia XT5000 720p at 50/60fps (1080p at 60fps not available)

#### **Capture HD from Crestron**

- Supplier: Crestron
- Part number/Product name: Capture HD™ High-Definition Capture Recorder
- Description and picture from <u>supplier web site</u>: "Provides a very simple and cost-effective solution for capturing lectures, presentations, medical procedures, seminars, and training

sessions in high-definition 1080p. Use standalone or as part of a complete CaptureLiveHD™ system."



Figure 11: Capture HD Recorder from Crestron

- Supported resolutions:
  - Scopia XT1200: up to 720p at 50/60fps and 1080p at 25/30fps (tested forcing 1080p)
  - Scopia XT5000: 720p at 50/60fps (1080p at 60fps not available)

#### **Recorder from Gefen**

- Supplier: Gefen
- Part number/Product name: GTV-HD-PVR (max. 720p)
- Description and picture from <u>supplier web site</u>: "GefenTV Hi-Def Personal Video Recorder uses a built-in hard drive and SD flash cards, with standard MPEG-4 compression and H.264 encoding technology."





Figure 12: Recorder from Gefen

- Supported resolutions:
  - Scopia XT1200: up to 720p at 50/60fps and not available for 1080p at 25/30fps (tested forcing 1080p)
  - Scopia XT5000: 720p at 50/60fps (1080p at 60fps not available

## **Integrating with Video-in Accessories**

This section lists suppliers of video-in accessories.

#### SD-HD to HDMI Conversion

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

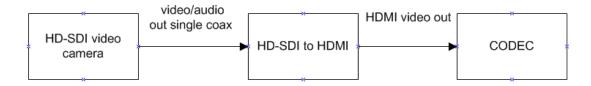


Figure 13: SD-HD to HDMI Conversion

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

- Supplier: Blackmagic Design
- Part number/Product name: Mini SDI to HDMI converter
- Description and pictures from <a href="supplier web site"><u>supplier web site</u></a>: "Converts from SDI to HDMI video out with embedded HDMI audio, plus balanced AES/EBU or analog audio out."



Figure 14: 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.
- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 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 15: 3G HD-SDI to HDMI Converter from Kramer

- 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:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 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 16: 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 17: Composite/S-video to HDMI Scaler from Gefen

- Features:
  - In PAL or NTSC Composite and S-Video
  - Toslink and analog audio in
- Supported resolutions:
  - Scopia XT1200: up to 720p at 50/60fps
  - Scopia XT5000: 720p at 50/60fps and 1080p at 50/60fps (no audio from the HD input)

## Composite /S-Video to HDMI Scaler from Lenkeng

- Supplier: Lenkeng (also available through Amazon web site)
- Part number/Product name: LKV363
- Description and pictures <u>supplier web site</u>: "LKV363 RCA Composite video and S-video to HDMI Scaler takes either Composite Video or S-Video as input and converts it to HDMI 1080p."







Figure 18: Composite/S-Video to HDMI Scaler from Lenkeng

- Features:
  - Input PAL or NTSC
  - Composite or S-Video in (by means of a switch)

- Analog audio in
- Supported resolutions:
  - Scopia XT1200: up to 720p at 60fps, PAL/ NTSC + audio
  - Scopia XT5000: 720p at 60fps, 1080p at 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 19: Composite Video and Audio to HDMI Scaler

- Features:
  - Input composite video in PAL / NTSC
  - Analog audio in unbalanced stereo
- Supported resolutions:
  - Scopia XT1200: 720p 50/60fps
  - Scopia XT5000: 720p at 50/60fps, 1080p at 50/60fps

#### **Component to HDMI Conversion**

This section lists the Component to HDMI accessories that were tested with the Scopia XT Series.

#### **VP-728 Scaler / Switcher from Kramer**

- Supplier: Kramer
- Part number/Product name: VP-728
- Description and pictures from <u>supplier web site</u>: "The VP-728 is a 9-input scaler/switcher for analog and digital video, unbalanced stereo, and S/PDIF audio signals. It scales any video signal composite, s-Video (Y/C), component video (YUV), HDMI, computer graphics video and JPEG files) up or down to a selectable graphics or HDTV output resolution via HDMI or 15-pin HD outputs. It provides glitch-free switching between sources through FTB™ (fade-thru-black) switching technology."



Figure 20: VP-728 Scaler/Switcher from Kramer

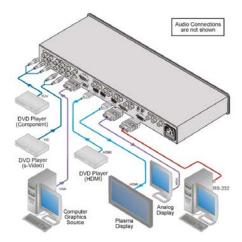


Figure 21: Connecting the VP-728 Switcher

- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps (tested forcing 1080p)
  - Scopia XT5000: 720p at 50/60fps and 1080p at 60fps

#### Important

This was tested with Kramer software version VTB 1.23 Audio 2.18.

#### **VP-434 Scaler / Switcher from Kramer**

- Supplier: Kramer
- Part number/Product name: VP-434
- Description and pictures from supplier web site: "The VP-434 is a high-performance scaler for component video and computer graphics video with unbalanced stereo audio signals. It scales the selected video signal to a computer graphics or HDTV output resolution, embeds the audio and outputs an HDMI signal."



Figure 22: VP-434 Scaler/Switcher from Kramer

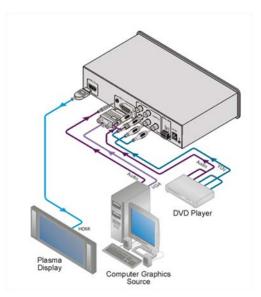


Figure 23: Connecting the VP-434 Scaler/Switcher

- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 720p at 50/60fps and 1080p at 60fps

# **Integrating with Video Cable Extenders**

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

### **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.

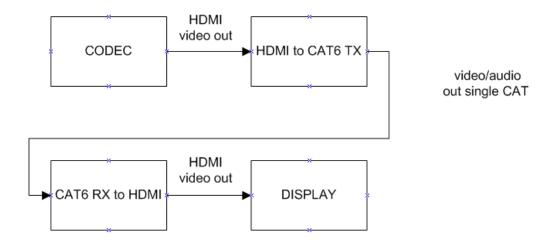


Figure 24: Signal transfer between the codec and the display

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

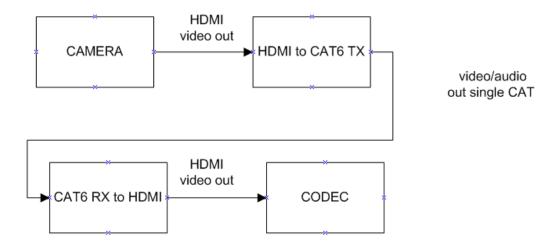


Figure 25: Signal transfer between the camera and the codec

#### **Cable Extender from Obonok**

- Supplier: Obonok Technologies
- Part number/Product name: T1-3D transmitter, R1-3D receiver
- Features:
  - Extends 1080p60 video plus RS-232 over single CAT6 cable up to 100m long.
  - Tested with Scopia XT1200, Scopia XT5000, and with camera control.



Figure 26: Cable Extender from Obonok (from supplier web site)

- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 720p at 50/60fps and 1080p at 50/60fps

#### **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 27: Cable Extender from Kramer Model TP-573 (from supplier web site)



Figure 28: Cable Extender from Kramer Model TP-574 (from supplier web site)

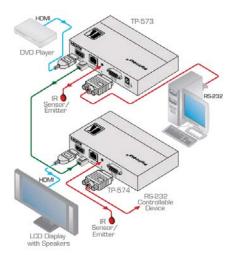


Figure 29: Connection diagram (from supplier web site)

- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 720p at 50/60fps and 1080p at 50/60fps

# **Integrating with Video Cameras**

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

## **Storz HD Endoscopic Camera**

- Supplier: Storz
- Part number/Product name: Image 1 Full HD
- Description from supplier web site as detailed below: "Telemedicine surgery camera

endoscopic. Razor sharp and crystal clear images with natural color reproduction in Full HD resolution are a prerequisite to highest chirurgic standards in all medical endoscopic disciplines. With a proven record in high quality design, optimized weight and ergonomic handling and the latest image sensor technology KARL STORZ's H3-Z and H3-ZI camera heads set the standard in endoscopy."

- Supplier web site:
  - http://www.it.trumpf.com/prodotti.html
  - http://karlstorz-hd-endoscopy.com/
  - http://www.karlstorz.com/cps/rde/xchg/SID-351BFF56-18323D50/karlstorzen/hs.xsl/9161.htm
- Supported resolutions:

Scopia XT1200: 1080p at 25/30fpsScopia XT5000: 1080p at 60fps

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

• Supplier: Logitech

• Part number/Product name: HD Pro Webcam C920



Figure 30: HD Pro Webcam C920 (from supplier web site

- Description
- USB camera 1080p
- Features: Audio microphone, autofocus, horizontal field of view 69,7°, optical resolution 3MP, digital zoom 1.8X, digital pan and tilt
- Supported resolutions:
  - Scopia XT5000: 1080p at 30fps or 720p 30fps

## **Ceiling Document Camera**

• Supplier: Lumens

• Part number/Product name: CL510



Figure 31: CL510 from Lumens (from 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:

Scopia XT5000: 1080p at 30fps

#### **Document Camera**

• Supplier: Lumens

• Part number/Product name: PS760



Figure 32: PS760 from Lumens (from supplier web site)

• Description: HD multimedia document camera.

• Features: 20x optical zoom, Full HD 1080p, Backlight, Gooseneck lamps,.

• Supported resolutions:

Scopia XT5000: 1080p at 30fps

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

• Supplier: e-mediavision

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

• Description and pictures from <u>supplier web site</u>: "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 33: Point HD by e-mediavision

- Supported resolutions:
  - Scopia XT1200: 720p at 50/60fps and 1080p at 25/30fps
  - Scopia XT5000: 720p at 50/60fps and 1080p at 50/60fps

## Integrating Text and Graphics with a Multimedia Device

- Supplier: Apple
- Part number/Product name: Apple TV
- Description and pictures from supplier web site:

"Apple TV is a tiny entertainment powerhouse that plays the content you love from iTunes, Netflix, Hulu Plus, YouTube, and your favorite sports leagues on your widescreen TV. In up to 1080p HD. Just plug it in and discover a whole world of movies, TV shows, photos, music, and more."



Figure 34: Apple TV

 AirPlay lets you wirelessly stream what's on your iOS device to the XT codec (Audio and Video content) via Apple TV. Or mirror what is on your iPad, iPhone, Mac display to the codec. For more information, see the <u>AirPlay web site</u>.

Mirroring. Put your audience in the palm of your hand.



Figure 35: Airplay from Apple

• Supported resolutions:

Scopia XT1200: 720p at 50/60fpsScopia XT5000: 720p at 50/60fps

#### Important

HDCP-protected signals cannot be reproduced.

For AirPlay you to connect both Apple TV and the iPad to the same WiFi access point.

Since the audio level output of the Apple TV device is strong, we recommend reducing the level input for better performance, as follows:

### **Configuring Apple TV**

#### **Procedure**

 From the Scopia XT Series web interface, select Administrator settings > I/O Connections > Audio - Input > HD.

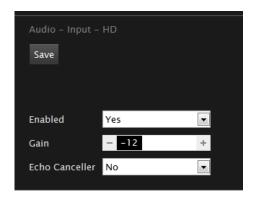


Figure 36: Configuring Apple TV

2. Set **Gain** to **-12**.

# Chapter 3 | Integrating with Audio Accessories

This section describes the audio accessories that were tested for the Scopia XT Series. The section lists audio-out and audio-in accessories.

## **Integrating with Audio-out Accessories**

This section lists audio-out accessories that were tested with the Scopia XT Series.

#### **Audio-out Connection**

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

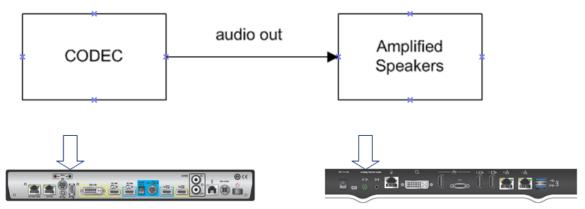


Figure 37: Audio-out connections in the Scopia XT Series

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

- Supplier: Kramer
- Part number/Product name: FC-46xl



Figure 38: FC-46xl HDMI Audio De-Embedder from Kramer

- 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: 8030A





Figure 39: Two-way monitor system from Genelec (from supplier web site)

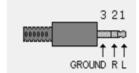
- Features:
  - Power: 40W+40W
  - Bandwidth: 58Hz-20kHz
  - Connections: XLR female balanced signal pin 1 (gnd), pin 2 (+), pin 3 (-)
- Connecting to Scopia XT1200 or Scopia XT5000 requires using a Y adapter cable with 2 XLR male and one stereo 3.5 mm jack plugs.



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 40: Connecting the monitor system

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

Supplier: Kramer

Part number/Product name: SPK-WA511

 Pictures and description from <u>supplier web site</u>: "The SPK-WA511 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."





Figure 41: Two-way monitor from Kramer

• Features:

Power: 30W+30W

Bandwidth: 45Hz-20kHz

- Connections: 2 RCA unbalanced signal

# **Home Cinema Speakers from Philips**

• Supplier: Philips

• Part number/Product name: HTS3111/12



Figure 42: Home Cinema Speakers from Philips (from supplier web site)

• Features:

Power: 30W+30W+40Wsubwoofer

- Bandwidth: 20Hz - 20kHz

• Connections: RCA stereo input

 Connecting to Scopia XT1200 or Scopia XT5000 requires using a Y adapter cable with 2 RCA male and one stereo 3.5 mm jack plug provided with the soundbar.

## **Monitor Speakers from M-Audio**

• Supplier: M-Audio

• Part number/Product name: Studiophile AV40









Figure 43: Monitor Speakers from M-Audio (from supplier web site)

• Features:

Power: 15W+15W

Bandwidth: 85Hz- 20kHz

• Connections: RCA stereo input

Connecting to Scopia XT1200 or Scopia XT5000 requires using a Y adapter cable with 2 RCA male and one stereo 3.5 mm jack plugs (not provided).

## Loudspeakers from Kalkmann

• Supplier: Kalkmann

• Part number/Product name: P40-D2; P46-D2; P50-D2



Figure 44: Loudspeakers from Kalkmann (from supplier web site)

• Features:

- Power: 25W+25W

- Bandwidth: 30Hz - 20kHz

• Connections: RCA stereo input

Connecting to Scopia XT1200 or Scopia XT5000 requires using a Y adapter cable with 2 RCA male and one stereo 3.5 mm jack plugs (not provided).

## **Integrating with Audio-in Accessories**

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

#### **Audio-in Connection**

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

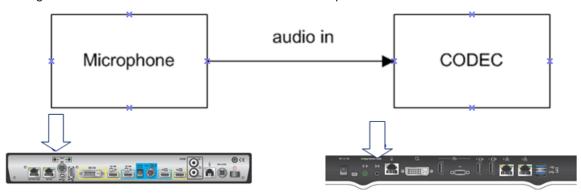


Figure 45: Audio-in connections of Scopia XT Series

### **Wireless Microphone System from Revolabs**

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



Figure 46: Wireless microphone system from Revolabs (from supplier web site)

- Features:
  - Bandwidth: 50Hz -14KHz
  - Radio Frequency:
    - o North and South America: 1920 to 1930 MHz
    - Africa, Asia, Australia, Europe: 1880 to 1900 MHz (DECT EU)
    - o Mainland China: 1900 -1920 MHz
    - Japan: 1893.5 to 1906.1 MHz
  - Range: 150 feet (45 meters) approx. (obstruction free)
  - 128-bit encryption
- Connections: 3.5mm jack balanced out
  Connecting to Scopia XT1200 or Scopia XT5000 requires using a cable with stereo jack to

stereo jack connection, provided by Revolabs.

#### **Configuring the Revolabs Microphone System**

#### **Procedure**

- From the Scopia 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 Scopia XT Series* for more information.

### **Wireless Microphone System from Revolabs**

• Supplier: Revolabs

• Part number/Product name: FLX



Figure 47: FLX microphone system from Revolabs (from supplier web site)

- Features:
  - Bandwidth: 100Hz -10KHz
  - Wireless technology:
    - o DECT 6.0 for US,
    - o ETSI ETS 300 175 for other countries
    - o Bluetooth® 2.1+EDR
  - Range: 12 feet (3,6 meters) approx. (obstruction free)
- Connections: 3,5mm jack balanced out

Connecting to Scopia XT1200 or Scopia XT5000 requires using a cable with stereo jack to stereo jack connection, provided by Revolabs.

#### **Configuring the FLX Microphone System from Revolabs**

#### **Procedure**

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

## **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 48: CHM 99 microphone from AKG (from supplier web site)

- · Features:
  - Transducer: CondenserPolar Pattern: Cardioid
  - Frequency Response: 70Hz to 18kHz
- Connections: XLR male balanced out

Connecting Scopia XT1200 or Scopia XT5000 requires using an adapter cable with one stereo 3.5 mm jack plug and one XLR female (not provided).

#### Configuring the CHM 99 Microphone from AKG

#### **Procedure**

- 1. From the Scopia 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 Scopia XT Series for more information.

## **Ceiling Microphone Array from Clearone**

• Supplier: Clearone

- Part number/Product name: Ceiling Microphone Array
- Description and picture from <u>supplier web site</u>: "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 49: Ceiling Microphone Array from Clearone

- Features:
  - Transducer: 3 x CondenserPolar Pattern: Cardioid
  - Frequency Response: 100Hz to 12kHz
- Connections: the mixer has phoenix connectors.
  Connecting to Scopia XT1200 or Scopia XT5000 requires using a cable with stereo jack (not provided).

#### Configuring the Ceiling Microphone Array from Clearone

#### **Procedure**

- From the Scopia 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 Scopia XT Series for more information.

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

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

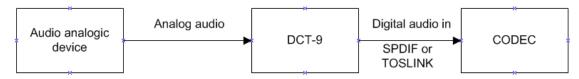


Figure 50: Analog to digital conversion

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

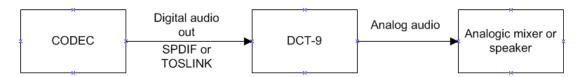


Figure 51: Digital to analog conversion

- 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 100kHz"



Figure 52: Digital-analog converter from Cypress Technology

- Connections:
  - RCA connectors audio out and RCA connectors audio in
  - RCA connectors SPDIF (COAX)
  - TOSLINK optical

Connecting to Scopia XT1200 or Scopia XT5000 requires using a Y adapter cable with 2 RCA male and one stereo 3.5 mm jack plugs (not provided).

If used as analog-to-SPDIF, Scopia XT1200 and Scopia XT5000 have stereo line out. No particular settings are required.

## **Configure SPIDF to Analog Conversion**

#### Procedure

- From the Scopia 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 Scopia XT Series for more information.

# Chapter 4 |Integrating with Rack-mounting Accessories

This section lists suppliers of rack-mount accessories for Scopia XT1200 and Scopia XT5000.

## Rack Mount for Scopia XT1200 from Middle Atlantic

- Supplier: Middle Atlantic
- Part number/Product name: RSH4?2S RADVISION SCOPIAXT1200



Figure 53: Rack mount for Scopia XT1200 (from supplier web site)

## Rack Mount for Scopia XT5000 from Middle Atlantic

- Supplier: Middle Atlantic
- Part number/Product name: RSH4?2S RADVISION SCOPIAXT5000
- Supplier web site: <a href="http://www.middleatlantic.com/">http://www.middleatlantic.com/</a>

## **Wall Mount Bracket for Camera from Vaddio**

- Supplier: Vaddio
- Part number/Product name: 535-2000-232 Wall Mount for Sony EVI-HD7V
- Supplier web site: <a href="http://www.vaddio.com/product/model-hd7v-thin-profile-wall-mount-bracket">http://www.vaddio.com/product/model-hd7v-thin-profile-wall-mount-bracket</a>



Figure 54: Camera Wall Mount Bracket (from supplier web site)



#### **About Radvision**

Radvision, an Avaya company, is a leading provider of videoconferencing and telepresence technologies over IP and wireless networks. We offer end-to-end visual communications that help businesses collaborate more efficiently. Together, Radvision and Avaya are propelling the unified communications evolution forward with unique technologies that harness the power of video, voice, and data over any network.

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