## **ATEM Talkback Converter 4K**

### **Technical Specifications**

#### Description

ATEM Talkback Converter 4K handles up to 8 cameras for SDI talkback using embedded audio channels 15 and 16 as used on the Blackmagic Studio Cameras and ATEM Camera Converter. Supports 12G-SDI for all SD, HD and Ultra HD formats up to 2160p60 and provides BNC connections to each camera, and an optical fiber socket for adding an optical fiber SFP module for extending camera distances when required. Includes push to talk buttons, support for tough and common aviation headsets, loop through for more than 8 camera support, built in speaker, front panel mic input and much more.

#### Connections

#### **SDI Program Input**

1 x 10-bit SD/HD/Ultra HD 4K auto switching program input from switcher, including tally information with 16 channel embedded audio.

#### **SDI Program Output**

1 x 10-bit SD/HD/Ultra HD 4K auto switching program loop thru output connects to another ATEM Talkback Converter 4K.

#### Talkback Audio

Aviation Headsets with 0.25" TRS headset connector and 0.206" TRS microphone connector. Front mounted balanced XLR microphone connector.

#### **Analog Audio**

 $1\,\mathrm{x}$  stereo RCA monitoring output.

#### SDI Camera Input

8 x 10-bit SD/HD/Ultra HD 4K auto switching 16 channel embedded audio.

#### **SDI Camera Output**

8 x 10-bit SD/HD/Ultra HD 4K auto switching 16 channel embedded audio.

#### **SDI Output**

 $8 \times 10$ -bit SD/HD/Ultra HD 4K auto switching 16 channel embedded audio.

## Optical Fiber Video Input (Optional)

8 x single mode SD/HD/Ultra HD 4K auto switching camera inputs with LC connector.

# Optical Fiber Video Output (Optional)

#### Optical Fiber Audio Input

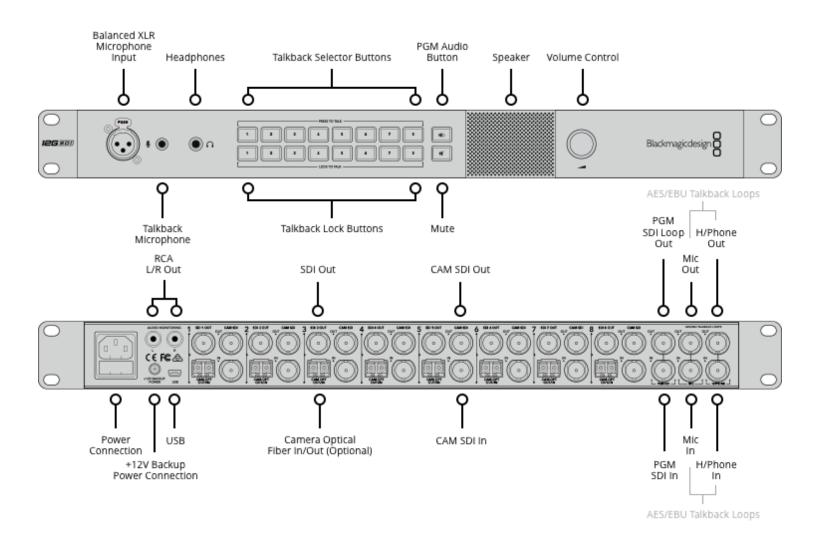
8 x single mode camera audio inputs with LC connector. Channels 1 and 2 are camera audio. Channels 15 and 16 are intercom audio.

#### Optical Fiber Audio Output

8 x single mode camera audio outputs with LC connector. Channels 1 and 2 are camera audio. Channels 15 and 16 are intercomaudio.

#### **Computer Interface**

1 x mini-B type USB connector for firmware updates.



#### Standards

#### **SD Format Support**

525/29.97 NTSC, 625/25 PAL

#### **HD Format Support**

1280 x 720p50, 1280 x 720p59.94, 1280 x 720p60, 1920 x 1080i50, 1920 x 1080i59.94, 1920 x 1080i59.94, 1920 x 1080PsF23.98, 1920 x 1080PsF24, 1920 x 1080PsF25, 1920 x 1080PsF29.97, 1920 x 1080PsF30, 1920 x 1080p23.98, 1920 x 1080p24, 1920 x 1080p25, 1920 x 1080p29.97, 1920 x 1080p30, 1920 x 1080p50, 1920 x 1080p59.94, 1920 x 1080p60.

#### **2K Format Support**

2048 x 1080p23.98, 2048 x 1080p24, 2048 x 1080p25, 2048 x 1080PsF23.98, 2048 x 1080PsF24, 2048 x 1080PsF25.

#### **4K Format Support**

3840 x 2160p23.98, 3840 x 2160p24, 3840 x 2160p25, 3840 x 2160p29.97, 3840 x 2160p30, 3840 x 2160p50, 3840 x 2160p60, 4096 x 2160p23.98, 4096 x 2160p24, 4096 x 2160p25, 4096 x 2160p29.97, 4096 x 2160p30, 4096 x 2160p50, 4096 x 2160p60.

#### **SDI Compliance**

SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 424M Level B, SMPTE 425M.

#### **Audio Sampling**

Television standard sample rate of 48Khz, 24-bit A/D conversion.

#### **Video Sampling**

4:2:2, 4:4:4

#### **Color Precision**

10-bit

#### **Color Space**

REC 601, REC 709.

#### **Multiple Rate Support**

SDI switches between SD, HD and Ultra HD 4K.

#### Software

#### Internal Software Upgrade

Via included updater application.

# Operating Systems



Mac OS X 10.9 Mavericks, Mac OS X 10.10 Yosemite or later.



Windows 7 or Windows 8.

Power Requirements Power Usage 60 Watts

#### **Power Supply**

110 - 240V AC input with redundant 12-31V DC input.

Physical Specifications



Physical Installation

#### **Physical Installation**

1 rack unit size. Less than 6 inches deep.

Environmental Specifications

Operating temperature 0° to 40° C (32° to 104° F)

Storage temperature -20° to 45° C (-4° to 113° F) **Relative Humidity** 

0% to 90% non-condensing

What's Included

ATEM Talkback Converter 4K

Software SD Card