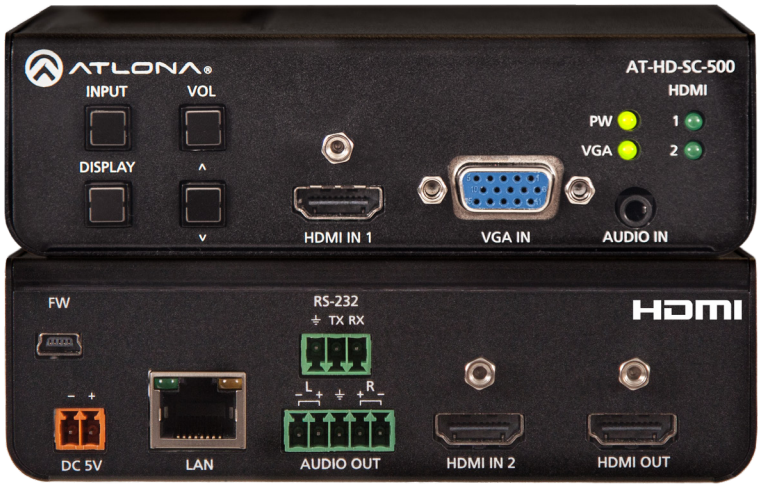
Three-Input HD Video Scaler
for HDMI and VGA Signals



Introduction

The Atlona **AT-HD-SC-500** is a scaler with built-in 3×1 switcher for HDMI and VGA signals. It features two HDMI inputs and a VGA input with 3.5mm audio connector. The scaler is designed to take video signals from switchers, PCs or laptops and scale them to an HDMI output at a wide-range of HDTV and PC resolutions, up to 1080p/60Hz and WUXGA (1920×1200). For ease of operation, the AT-HD-SC-500 features auto-switching for active input selection when sources are connected or if there is a change in source power status. Input selection can also be controlled from the front panel, RS-232, or TCP/IP commands. Set-up is performed using Atlona's webGUI or OSD. Set-up options include variable preferred input resolutions, output resolution, plus control of brightness, contrast, saturation, hue and sharpness. The AT-HD-SC-500 is ideal for applications where multiple signals with different resolutions must be optimized for a display.

Applications

- **Complete system applications**
  The HD-SC-500 provides a compact, yet comprehensive and cost-effective system integration solution with automatic input selection, display control capabilities, and essential audio processing.
- **Expanding system capabilities**
  The HD-SC-500 can also be used as an input device on a switcher, matrix switcher, or distribution amplifier that doesn't have a VGA input, and as a dedicated scaler for any device with an HDMI output.

Key Features

3×1 HDMI and VGA video scaler

- Features two HDMI inputs plus a VGA input with 3.5mm audio connector.
- Allows advanced HDMI display devices to be used with legacy VGA sources.

HD video scaler with HDMI output and input resolution control

- Scales output video signals up to 1080p/60Hz and1920×1200; Choose preferred scaler input resolution from 800×600 to 1920×1200.
- Assures compatibility of VGA and HDMI sources with the display.

Automatic display control using CEC, TCP/IP, or RS-232 commands

- Automatically changes projector power state based on active or standby mode of scaler. Control signals transmitted via CEC, IP or RS-232.
- Eliminates need for complex control system in AV systems. Enables display and volume control. CEC enables control of low-cost consumer displays.

Automatic input selection using video detection technology

- Selects active input when sources are connected or if there is a change in source power status.
- Eliminates need for complex control system in AV systems.

Two HDMI inputs

- Digital inputs to support up to two HDMI sources or DisplayPort and DVI sources with appropriate adapters.
- Ideal for a variety of digital sources including laptops, PCs, and cameras.

One analog input on 15-pin HD connector

- Accepts RGBHV signals using common adaptors and break out cables.
- Provides input options for legacy analog sources.

TCP/IP and RS-232 control

- Flexible control options for compatibility with third-party control systems.
- Reduces integration time and costs.

EDID management

- Manages EDID communications between source and switcher; allows integrators to force a source to a preferred resolution.
- Ensures desired audio formats and video resolutions are provided to the AV system.

HDCP management

- HDCP compliance can be disengaged through AMS, the web GUI, or a control system.
- Allows non-protected material from PCs to pass to non-compliant displays, streaming devices, and teleconference systems; protected content is not transmitted.

Key Features (continued)

Front panel input select button

- Overrides automatic input selection when two active sources are present.
- Simple manual control allows presenter to maintain control of the image on screen.

Front panel display on/off control

- Remotely controls display power state; provides alternate 'Display Mute' mode.
- Eliminates need for manual operation of display or use of IR remote control.

Front panel volume control

- Adjusts level of both embedded and de-embedded audio; provides 'Mute' mode.
- Simplifies audio level settings for best sound.

Audio de-embedding

- De-embeds PCM audio from HDMI inputs to audio output.
- Provides audio signal routing to sound system.

Balanced audio output

- Professional, +4dBu audio is provided on a 5-pin captive screw connector.
- Allows for fast integration with professional sound systems.

Works with AMS

- This IP-controllable product can be remotely managed by the Atlona Management System software.
- Integrates product configuration, management, and updates to reduce installation time and enable remote support.

Included accessories

- User guide, power supply, detachable power cable, captive screw connectors, and mounting brackets.

Specifications

Video		
Signal	Input - HDMI Input - VGA Output - HDMI	
Copy Protection	HDCP 1.3	
Pixel Clock	225 MHz	
HD/SD	1920x1080p@23.98/24/25/29.97/30/50/59.94/60Hz 1920x1080i@50/59.94/60Hz 1280x720p@50/59.94/60Hz	720x576p 720x576i 720x480p 720x480i
VESA All resolutions are 60Hz	1920x1200 1680x1050 1600x1200 1440x900 1400x1050 1366x768 1360x768	1280x1024 1280x800 1152x768 1024x768 800x600 640x480
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	

Audio			
HDMI Pass-Through Formats	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Bit Depth	Up to 24 bits		
Analog Audio			
Format	Stereo 2-Channel		
Balanced Output	+4 dBu nominal gain, +20 dB headroom		
Frequency Response	20 Hz to 20 kHz, ± 0.5 dB		
THD+N	< 0.004% at 20 Hz to 20 kHz		
SNR	> 105 dB at 1 kHz, zero clipping @ 0 dBFS, unweighted		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Control	
RS-232	Device control and configuration Supported baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200
IP	Protocols: HTTP, Telnet, mDNS Modes: DHCP, Static - selectable through webGUI
CEC Support	Yes

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10

Buttons and Indicators	
Buttons: INPUT, DISPLAY, VOL UP, VOL DN	4 x momentary, tact-type
Indicators: POWER, VGA 1, 2	4 x LED, green

Connectors	
HDMI IN 1	1 x Type A, 19-pin female
HDMI IN 2	1 x Type A, 19-pin female
VGA IN	1 x HD15, female
HDMI OUT	1 x Type A, 19-pin female
AUDIO IN	1 x 3.5 mm, mini-stereo
AUDIO OUT	1 x 5-pin captive screw, balanced / unbalanced 2-channel
RS-232	1 x 3-pin captive screw
LAN	1 x RJ45, 100Base-T
PWR	1 - 2-pin captive screw

Environmental	Fahrenheit	Celsius
Operating Temperature	+32 to +122	0 to +50
Storage Temperature	-4 to +140	-20 to +60
Operating Humidity (RH)	20% to 90%, non-condensing	

Power	
Consumption	10.4 W
External Power Supply	100 - 240 V AC, 50/60 Hz Output: 5 V / 4 A DC

Dimensions (H x W x D)	Inches	Millimeters
Unit	1.50 x 5.00 x 4.02	38 x 127 x 102
Power Supply (AT-PS-54-C)	1.20 x 2.00 x 3.20	30 x 50 x 81

Weight	Pounds	Kilograms
Device	0.60	0.27

Certification	
Device	CE, FCC
Power Supply	CE, TUV, RCM, RoHS, FCC

Compliance	
NDAA-899	Yes

Accessories

SKU	Description
AT-LC-H2H-1M	LinkConnect 1 Meter HDMI to HDMI Cable
AT-LC-H2H-2M	LinkConnect 2 Meter HDMI to HDMI Cable
AT-LC-H2H-3M	LinkConnect 3 Meter HDMI to HDMI Cable

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