



## Introduction

The Atлона **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 Atлона’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 and 1920×1200; 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. RS-232 controlled from HDBaseT™ connection.
- 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.

### Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in residential and commercial systems.
- Specify, purchase, and install with confidence.

### Specifications

Resolution	
IN	1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@50/59.94/60Hz, 576p, 576i, 480p, 480i, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1360×768, 1280×1024, 1280×800, 1280×768, 1152×864, 1024×768, 800×600, 640×480
Preferred IN Resolution	1920×1200, 1920×1080, 1366×768, 1280×800, 1280×720, 1024×768, 800×600
OUT	1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60, 720p@25/29.97/30/50/59.94/60, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1400×1050, 1366×768, 1280×1024, 1280×800, 1024×768, 800×600
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:4:2
Color Depth	8-bit, 10-bit, 12-bit

Audio	
Analog IN	3.5mm stereo jack, -10 dBu nominal input
Analog OUT	Balanced, +4 dBu nominal analog output. Max output +18 dBu (only from 2Ch PCM sources)
HDMI IN/OUT	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS® 5.1, DTS:X, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio™, Dolby Atmos™
Sample Rate	32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
Bit Rate	up to 24-bit

Distance	Feet	Meters
HDMI IN/OUT @ 1080p	30	10

Signal	
Bandwidth	6.75 Gbps
CEC	Yes
HDCP	Switchable - Compliant / Non-compliant

Temperature	
Operating Temperature	+32 to +122 °F 0 to +50 °C
Storage Temperature	-4 to +140 °F -20 to +60 °C
Operating Humidity (RH)	20% to 90%, non-condensing

Power	
Consumption	10.4 W
Supply	Input: 110 - 240 V AC, 50/60 Hz Output: 5 V DC, 3.6 A

Dimensions	
H x W x D	1.50 x 5.00 x 4.02 in 38 x 127 x 102 mm

Weight	
Unit	0.60 lbs 0.27 kg

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