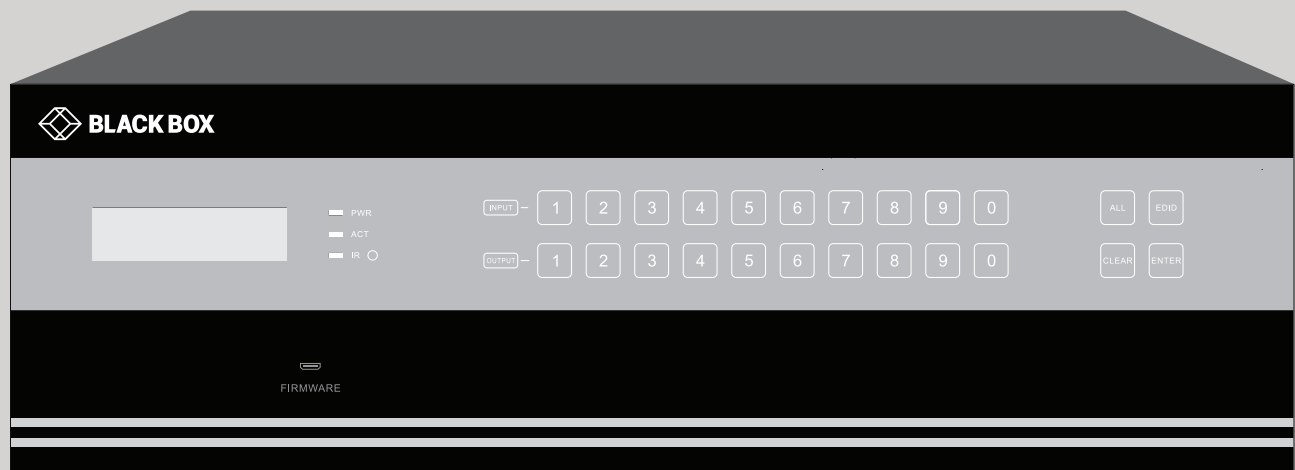


DATA SHEET

AVS-1600-R2, AVS-3200-R2, AVS-HDMI2-4KI, AVS-HDMI2-4KO, AVS-HDB-4KI, AVS-HDB-4KO,
AVS-VGA-HDI, AVS-AUD-IO

MODULAR MATRIX SWITCHES

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM



OVERVIEW

MODULAR MATRIX SWITCHES DATA SHEET

INTRODUCTION

The Modular Matrix Switch 16 port or 32-port, 4K Seamless, I/O Auto detect is a high-performance seamless AV modular matrix Switch providing 12 or 24 flexible PCIe slots for single HDMI/CATx/VGA input/output cards and 4 or 8 fixed slots for output signal cards.

With its advanced modular design, a single CATx/HDMI/VGA input/output card can make up different kinds of matrixes. All the cards support plug-and-play. It supports different video signals with seamless cross switching. Every video or audio signal is transmitted and switched independently to decrease signal attenuation. The Switch can handle all the audio-visual management, including switching, driving, scaling, etc.

The Matrix Switch uses 12 or 24 card slots for flexible input and output signal card combinations, and 4 or 8 card slots for output signal cards.

Select from HDMI, CATx and VGA signal cards. All the signal cards support seamless distribution and hot-plug.

FEATURES

- HAS 12 OR 24 CARD SLOTS FOR FLEXIBLE INPUT/OUTPUT COMBINATION, AND 4 OR 8 SLOTS FOR OUTPUT SIGNAL CARDS
- COMPREHENSIVE SIGNAL CARD COMPATIBILITY: HDMI/CATX/VGA
- AUTOMATICALLY RECOGNIZES INPUT/OUTPUT SIGNAL CARDS
- POWERFUL EDID MANAGEMENT
- UPNP ENABLES QUICK-CONNECTION TO GUI
- HDCP COMPLIANT
- SEAMLESS AV DISTRIBUTION THROUGH DIFFERENT AV SIGNALS
- CONTROLLABLE VIA FRONT PANEL BUTTONS, IR, RS-232 AND TCP/IP
- ADJUSTABLE OUTPUT RESOLUTION
- ONLINE FIRMWARE UPGRADE VIA USB PORT

COMPARISON CHARTS

COMPARISON CHART: MAIN UNITS

SPECIFICATION	AVS-1600-R2	AVS-3200-R2
CONTROL CONNECTORS	(1) IR ALL IN, (1) IR EYE, (1) RS-232, (1) TCP/IP	(1) IR ALL IN, (1) IR EYE, (1) RS-232, (1) TCP/IP
CARD SLOT CONNECTORS	(16) PCI-E	(32) PCI-E
POWER SUPPLY	100 to 240 VAC	100 to 240 VAC
POWER CONSUMPTION	13 W (no load)	26 W (no load)
DIMENSIONS	5.2"H x 19.0"W x 12.6" D (13.2 x 48.3 x 32.0 cm)	8.7"H x 19.0"W x 15.0" D (22.1 x 48.3 x 38.3 cm)
OPERATING TEMPERATURE	14 to 131° F (-10 to 55° C)	14 to 131° F (-10 to 55° C)
STORAGE TEMPERATURE	-13 to 158° F (-25 to 70° C)	-13 to 158° F (-25 to 70° C)
HUMIDITY	10 to 90% relative humidity	10 to 90% relative humidity

COMPARISON CHART: INPUT/OUTPUT CARDS

PART NUMBER	INPUT CONNECTORS	OUTPUT CONNECTORS	POWER CONSUMPTION
AVS-HDM2-4KI	(1) 19-pin Type A Female HDMI; (1) 3-pin pluggable terminal block	–	4 W (max.)
AVS-HDMI2-4KO	–	(1) 19-pin Type A Female HDMI; (1) 3-pin pluggable terminal block	1.5 W (max.)
AVS-HDB-4KI	(1) RJ-45 female; (2) 3-pin pluggable terminal blocks; (2) 3.5mm mini jacks	–	15 W (max.)
AVS-HDB-4KO	–	(1) RJ-45 female; (2) 3-pin pluggable terminal blocks; (2) 3.5-mm mini jacks	17 W (max.)
AVS-VGA-HDI	(1) 15-pin HD female, (1) 3-pin pluggable terminal block	–	2 W (max.)
AVS-AUD-IO	(1) 3-pin pluggable terminal block	(1) 3-pin pluggable terminal block	5 W (max.)



SPECIFICATIONS

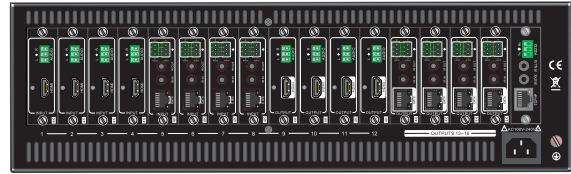
MODULAR MATRIX SWITCH (AVS-1600-R2)

FRONT VIEW



AVS-1600-R2

BACK VIEW



AVS-1600-R2

WHAT'S INCLUDED WITH THE AVS-1600-R2

- (1) MODULAR MATRIX SWITCH 16 PORT, 4K SEAMLESS, I/O AUTO DETECT
- (1) IR RECEIVER
- (2) MOUNTING EARS
- (1) IR REMOTE
- (4) PLASTIC CUSHIONS
- (1) RS-232 CABLE
- (1) POWER CORD

NOTE: Input/Output (I/O) cards are sold and packed separately, all the items listed above are for the Matrix Switch only.

MODULAR MATRIX SWITCH (AVS-1600-R2)

CONNECTORS

CONTROL (1) IR ALL IN, (1) IR EYE, (1) RS-232, (1) TCP/IP

CARD SLOT (16) PCI-E

CONTROL CONNECTORS (2) 3.5-mm mini jacks, (1) DB9, (1) RJ-45

POWER

POWER SUPPLY 100 to 240 VAC

POWER CONSUMPTION 13 W (no load)

GENERAL

DIMENSIONS 5.2"H x 19.0"W x 12.6" D (13.2 x 48.3 x 32.0 cm)

OPERATING TEMPERATURE 14 to 131° F (-10 to 55° C)

STORAGE TEMPERATURE -13 to 158° F (-25 to 70° C)

HUMIDITY 10 to 90% relative humidity

WEIGHT 3.8 lb. (1.75 kg)

SPECIFICATIONS

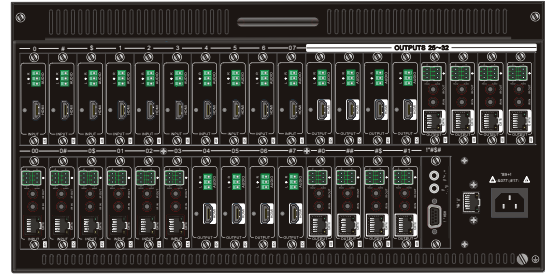
MODULAR MATRIX SWITCH (AVS-3200-R2)

FRONT VIEW



AVS-3200-R2

BACK VIEW



AVS-3200-R2

WHAT'S INCLUDED WITH THE AVS-3200-R2

- (1) MODULAR MATRIX SWITCH 32 PORT, 4K SEAMLESS, I/O AUTO DETECT
- (2) MOUNTING EARS
- (4) PLASTIC CUSHIONS
- (1) RS-232 CABLE
- (1) POWER CORD

NOTE: Input/Output (I/O) cards are sold and packed separately, all the items listed above are for the Matrix Switch only.

MODULAR MATRIX SWITCH (AVS-3200-R2)

CONNECTORS

CONTROL	(1) IR ALL IN, (1) IR EYE, (1) RS-232, (1) TCP/IP
CARD SLOT	(32) PCI-E
CONTROL CONNECTORS	(2) 3.5-mm mini jacks, (1) DB9, (1) RJ-45

POWER

POWER SUPPLY	100 to 240 VAC
POWER CONSUMPTION	26 W (no load)

GENERAL

DIMENSIONS	8.7"H x 19.0"W x 15.0" D (22.1 x 48.3 x 38.3 cm)
OPERATING TEMPERATURE	14 to 131° F (-10 to 55° C)
STORAGE TEMPERATURE	-13 to 158° F (-25 to 70° C)
HUMIDITY	10 to 90% relative humidity
WEIGHT	3.8 lb. (1.75 kg)

SPECIFICATIONS

4K HDMI AND ANALOG AUDIO INPUT/OUTPUT CARDS (AVS-HDMI2-4KI/AVS-HDMI2-4KO)



AVS-HDMI2-4KI



AVS-HDMI2-4KO

4K HDMI AND ANALOG AUDIO INPUT/OUTPUT CARDS (AVS-HDMI2-4KI/AVS-HDMI2-4KO)

AVS-HDMI2-4KI

INPUT	(1) HDMI, (1) Analog audio
INPUT CONNECTOR	(1) 19-pin Type A Female HDMI; (1) 3-pin pluggable terminal block
POWER CONSUMPTION	4 W (max.)

AVS-HDMI2-4KO

OUTPUT	(1) HDMI, (1) Analog audio
OUTPUT CONNECTOR	(1) 19-pin Type A Female HDMI; (1) 3-pin pluggable terminal block
POWER CONSUMPTION	1.5 W (max.)

GENERAL

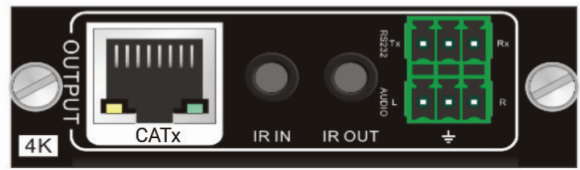
STANDARDS	HDMI 1.4 and HDCP 2.2
EDID	Supports EDID Management
OUTPUT RESOLUTION	Auto, 4K x 2K @ 60 Hz 4:2:0, 4K x 2K @ 30 Hz, 1024 x 768 @ 60 Hz, 1920 x 1080p @ 60 Hz, 1280 x 720 @ 60 Hz

SPECIFICATIONS

4K CATX, ANALOG AUDIO, RS-232, AND IR INPUT/OUTPUT CARDS (AVS-HDB-4KI/AVS-HDB-4KO)



AVS-HDB-4KI



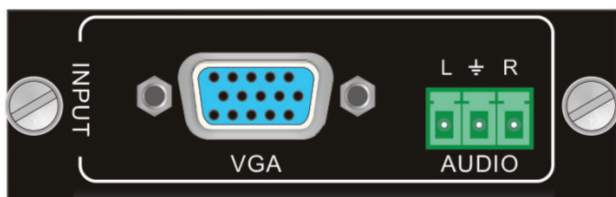
AVS-HDB-4KO

4K CATX, ANALOG AUDIO, RS-232, AND IR INPUT/OUTPUT CARDS (AVS-HDB-4KI/AVS-HDB-4KO)	
AVS-HDB-4KI	
INPUT	(1) CATx; (1) Analog audio; (1) RS232; (1) IR IN, (1) IR OUT
INPUT CONNECTOR	(1) RJ-45 female; (2) 3-pin pluggable terminal block; (2) 3.5mm mini jack
POWER CONSUMPTION	15 W (max.)
AVS-HDB-4KO	
OUTPUT	(1) CATx; (1) Analog audio; (1) RS232; (1) IR IN, (1) IR OUT
OUTPUT CONNECTOR	(1) RJ-45 female; (2) 3-pin pluggable terminal block; (2) 3.5-mm mini jack
POWER CONSUMPTION	17 W (max.)
GENERAL	
TRANSMISSION DISTANCE	1080p: Up to 229 ft. (70 m) over CAT6 cable; 4K x 2K: Up to 131 ft. (40 m) over CAT6 cable
STANDARDS	HDMI 1.4 and HDCP 2.2
EDID	Supports EDID Management
OUTPUT RESOLUTION	Auto, 4K x 2K @ 60 Hz 4:2:0, 4K x 2K @ 30 Hz, 1024 x 768 @ 60 Hz, 1920 x 1080p @ 60 Hz, 1280 x 720 @ 60 Hz



SPECIFICATIONS

VGA AND ANALOG AUDIO INPUT CARD (AVS-VGA-HDI)

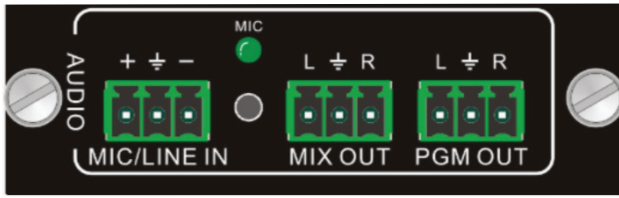


AVS-VGA-HDI

VGA AND ANALOG AUDIO INPUT CARD (AVS-VGA-HDI)	
VIDEO	
INPUT	(1) VGA
INPUT CONNECTOR	(1) 15-pin HD female
INPUT RESOLUTION	Up to 1920 x 1200 @ 50/60 Hz
AUDIO	
INPUT	(1) Analog audio
INPUT CONNECTOR	(1) 3-pin pluggable terminal block
SIGNAL FORMAT	PCM
FREQUENCY RESPONSE	20 Hz to 20 kHz, ± 0.5 dB
CMRR	>85 dB @ 20 Hz to 20 kHz
GENERAL	
POWER CONSUMPTION	2 W (max.)

SPECIFICATIONS

MIC/LINE IN, MIX OUT, AND PGM OUT INPUT/OUTPUT CARD (AVS-AUD-IO)



AVS-AUD-IO

MIC/LINE IN, MIX OUT, AND PGM OUT INPUT/OUTPUT CARD (AVS-AUD-IO)	
INPUT	
INPUT	(1) MIC/LINE IN
INPUT CONNECTOR	(1) 3-pin pluggable terminal block
OUTPUT	
OUTPUT	(1) MIX OUT; 1 PGM OUT
OUTPUT CONNECTOR	(1) 3-pin pluggable terminal block
GENERAL	
SIGNAL FORMAT	PCM
POWER CONSUMPTION	5 W
FREQUENCY RESPONSE	20 Hz to 20 kHz, ± 0.5 dB
CMRR	> 85dB @ 20 Hz to 20 kHz

ORDERING INFORMATION

ITEM	CODE
Modular Matrix Switch	
16-Port	AVS-1600-R2
32-Port	AVS-3200-R2
Input/Output Cards	
4K HDMI and Analog Audio	
Input	AVS-HDMI2-4KI
Output	AVS-HDMI2-4KO
4K CATx, Analog Audio, RS-232, and IR	
Input	AVS-HDB-4KI
Output	AVD-HDB-4KO
VGA and Analog Audio Input Card	AVS-VGA-HDI
Mic/Line In, Mix Out, and PGM Out Input/Output Card	AVS-AUD-IO

NOTES _____

DISCLAIMER

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ABOUT BLACK BOX

Black Box is a world leading technology solutions provider specializing in complete high-performance KVM, professional A/V signal distribution and extension and switching solutions for mission-critical applications. Black Box is dedicated to delivering superior project engineering, technical support, and 24/7 customer service you can rely on for your most critical operations.

Every day, our customers trust us to design, integrate, and maintain reliable control room solutions for broadcasting, post-production, stadiums & arenas, medical, air traffic control, oil & gas, government & military, and utility industries. Leave the tech to us and our comprehensive technology solutions will deliver secure connections, fast-response times, real-time collaboration and more.

