

ULTIMATE HDMI SWITCHING! 4 IN / 4 OUT 4K HYBRID MATRIX SWITCHER



Overview

UHC

CHOBT

The Absolute Acoustics[®] NDS-UHM44 is a HDMI/HDBaseT[™] matrix switcher with 4 inputs and 4 outputs capable of transmitting audio, video, control signals and electrical power supply for distances up to 100m over a single twisted-pair cable. Its unique hybrid architecture combines 4 HDMI inputs, 1 HDMI output and 3 HDBaseT[™] outputs in a compact 1U chassis.

With a range of exclusive technologies, **UHM44** offers advanced features for distributing HDMI signals, such as native support for UHD/4K resolutions, high definition audio formats, and compliance with the new HDCP 2.2 copy protection standard, making it perfect for deployment of multimedia distribution systems in residential or corporate environments. Additionally, each of the output zones of **UHM44** have HDMI audio breakout, extracting the digital audio contained in the HDMI signal into a pair of RCA connectors, and extension ports for IR and RS232, leading control signals to the remote zone. Enhancing flexibility, the last output of **UHM44** is equipped with MultiRange technology, which enables transmission of HDBaseT signals for both 70m or 100m, depending on the chosen receiver.

UHM44 can be controlled manually via buttons on its front panel, or remotely by sending IR or RS232 codes. When connected to an Ethernet network, it can also be controlled over Telnet protocol, or through its web interface - which also works as a easy way to perform all settings. And further expanding the range of features, **UHM44** can act as an automation hub, forwarding commands received on its control ports via RS232 (Serial Bridge) or HDMI-CEC (CEC Bridge) to the devices connected to the remote receivers.

UHD/4K ENABLED

Compatible with the new ultra-high definition sources and displays, sending signals with resolutions up to 2160@30 with YCbCr 4:4:4, or 2160@60 with 4:2:0 color format.

HDCP 2.2 COMPLIANT

Fully licensed and compatible with HDCP 2.2, the latest content protection specification, enabling the transmission of ultra-high definition signals directly from the source.

MULTI-RANGE HDBASET

Deploy your systems without any concern about distances with two output ports compatible with both 228 ft (70m) and 328 ft (100m) HDBaseT[™] receivers.



CEC

BRIDGE

HDMI AUDIO BREAKOUT

Each output includes a pair of RCA connectors for digital audio extraction, enabling direct connections to multi-room or professional audio distribution systems.

HDMI-CEC BRIDGE

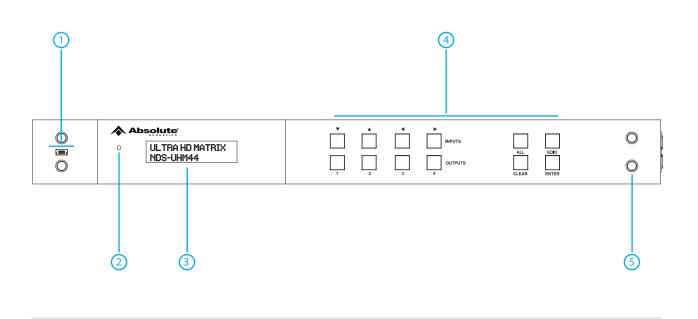
Control compatible displays connected to the outputs using HDMI-CEC protocol and save control ports of your automation system.

POC TECHNOLOGY



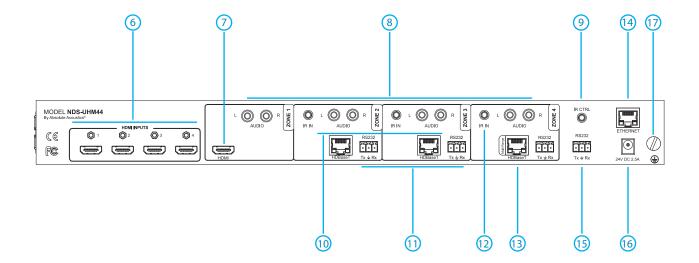
Each HDBaseT output provides electrical power supply to the remote receiver unit using the same CAT cable, making the installation process much easier.





- 1. System service port
- 2. Power status indicator
- 3. Status display
- 4. Operational controls
- 5. Openings for optional cover panel
- 6. HDMI input ports
- 7. HDMI output port
- 8. Analog audio output ports
- 9. IR control port

- 10. HDBaseT output ports
- 11. RS232 extension ports
- 12. IR extension ports
- 13. Multi Range HDBaseT output port
- 14. Ethernet port
- 15. RS232 control port
- 16. DC power cable inlet
- 17. Chassis ground pin





Compatible Receivers



NDS-572HD-RX

HDBaseT [™] Lite receiver with 2-way IR and RS232 for distances up to 228 ft (70m) @ 1080p, or 130 ft (40m) @ UHD/4K. Compatible with all ports of UHM matrix switchers.

- 228 ft (70m) @ 1080p; 130 ft (40m) @ 2160p
- HDBaseT input / HDMI output
- IR input 3.5mm TRS
- IR output 3.5mm TS
- RS232 Port 3-pin Phoenix



NDS-872HD-RX

HDBaseT [™] receiver with 2-way IR and RS232 for distances up to 328 ft (100m) @ 1080p, or 228 ft (70m) @ UHD/4K. Compatible with MultiRange ports of UHM matrix switchers.

- 328 ft (100m) @ 1080p; 228 ft (70m) @ 2160p
- HDBaseT input / HDMI output
- IR input 3.5mm TRS
- IR output 3.5mm TS
- RS232 Port 3-pin Phoenix

Technical Specifications

SIGNAL BANDWIDTH: 10.2Gbps HDMI COMPATIBILITY: CEC, EDID, HDCP 2.2 SUPPORTED RESOLUTIONS: 800x600, 1024x768, 1280x768, 1280x960, 1280x1024, 1600x1200, 1920x1080, 1920x1200, 3840x2160, 4096x2160* COLOR DEPTH: 8 - 12 bits/ch** SUPPORTED AUDIO (HDMI): Dolby Atmos, Dolby TrueHD, Dolby Digital Plus, Dolby Digital, DTS-X, DTS-HD Master Audio, DTS 5.1, 2 - 8Ch PCM 32-192kHz 16-24 bits SUPPORTED AUDIO (ANALOG): 2Ch PCM 32-192kHz 16-24 bits TRANSMISSION DISTANCE (HDMI): up to 32 ft (10m) @ 1080p or 16 ft (5m) @ 4K using standard HDMI passive cable TRANSMISSION DISTANCE (HDBASET): up to 228 ft (70m) @ 1080p or 130 ft (40m) @ 4K (HDBaseT); up to 328 ft (100m) @ 1080p or 228 ft (70m) @ 4K (HDBaseT MultiRange) **RECOMENDED CABLE:** STP/UTP CAT 6 or higher

HDMI INPUTS: 4x HDMI Type A HDMI OUTPUTS: 1x HDMI Type A HDBASET OUTPUTS: 2x HDBaseT Lite RJ45; 1x HDBaseT (MultiRange) RJ45 AUDIO OUTPUTS: 4x Analog Stereo RCA IR INPUTS: 3x 3.5mm TS RS232 INPUTS: 3x 3-pin Phoenix CONTROL PORTS: 1x IR 3.5mm TRS, 1x RS232 3-pin Phoenix, 1x 10/100 Ethernet RJ45 SERVICE PORT: 1x USB Type A POWER INLET: 1x 5.5mm "latch-locking" **OPERATING TEMPERATURE:** 32° to 104° F (0° - 40°C) DIMENSIONS: 17.2 x 1.75 x 9.25 in (437 x 44 x 235 mm) WEIGHT: 4.41lb (2.0kg) POWER SUPPLY: DC 24V 2.5A **CONSUMPTION:** 48W (max) CERTIFICATIONS: UL, FCC, CE, RoHs WARRANTY: 2 years

* Resolutions of 3840x2160 and 4096x2160 are only available with the YCbCr 4:2:0 color format. ** Resolutions of 3840x2160 and 4096x2160 are only available with 8-bits Color Depth.

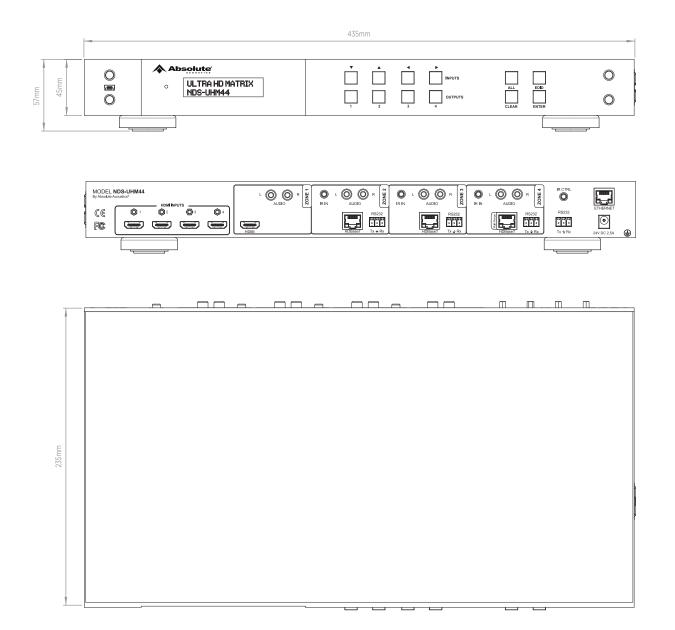


ULTRA-HD MATRIX SWITCHERS COMPARISON TABLE

	UM44	UM88	UHM44	UHM88
INPUTS/SOURCES	4 HDMI	8 HDMI	4 HDMI	8 HDMI
OUTPUTS/ZONES	4 HDMI	8 HDMI	1 HDMI / 3 HDBaseT	2 HDMI / 6 HDBaseT
MULTI RANGE HDBASET OUTPUTS	—	_	1	2
PoC on HDBASET OUTPUTS	-	-	YES	YES
SOURCE AUDIO EXTRACTION	4	8	-	-
ZONE AUDIO EXTRACTION	1	2	4	8
HDCP 2.2	YES	YES	YES	YES
4K / UHD (10.2Gbps)	YES	YES	YES	YES
CEC BRIDGE	IP & RS232	IP & RS232	IP & RS232	IP & RS232
SERIAL BRIDGE	NO	NO	YES	YES
ADVANCED WEB GUI	YES	YES	YES	YES
CONTROL PORTS COVER PANEL	IP, RS232 & IR	IP, RS232 & IR	IP, RS232 & IR	IP, RS232 & IR
MAGNETIC COVER (OPTIONAL)	YES / MCP1	YES / MCP1	YES / MCP1	YES / MCP2
COMPATIBLE EXTENDERS HDMI OUTPUTS HDBASET OUTPUTS	470, 570, 870 or 970HD Kits	470, 570, 870 or 970HD Kits	470, 570, 870 or 970HD Kits 572RX or 872RX	470, 570, 870 or 970HD Kits 572RX or 872RX
RACK SIZE	1U	1U	1U	2U
DIMENSIONS	17.12 x 1.75 x 9.25in (435 x 44.5 x 235mm)	17.12 x 1.75 x 9.25in (435 x 44.5 x 235mm)	17.12 x 1.75 x 9.25in (435 x 44.5 x 235mm)	17.12 x 3.5 x 14.96in (435 x 89 x 380mm)
WEIGHT	3.9lb (1.77kg)	4.32lb (1.96kg)	4.41lb (2.0kg)	11.9lb (5.4kg)



UHM44



Notes

LEGAL NOTICE

1. All brand names, product names or trademarks are property of their respective owners.

2. Some trademarks may be mentioned to refer to the entities that own such marks, names or their products.

3. Absolute Acoustics has no interest in the ownership of trademarks and trade names.

4. Absolute Acoustics is not responsible for errors in typography or photography and, in order to improve its products, reserves the right to change specifications without notice.



All equipment should be disconnected from the power supply prior to installation to avoid damage to the unit.