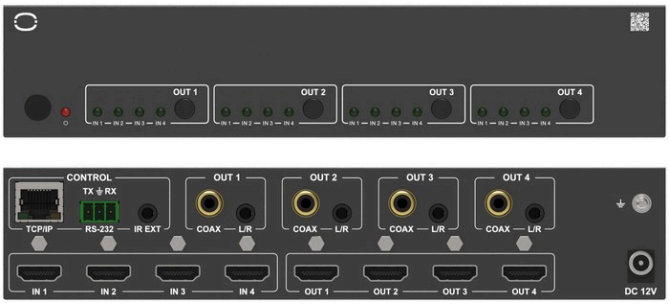
4K60 4:4:4 4×4 HDMI Matrix with Independent Per-Output Scaling

Route One Rack to 4K and Legacy 1080p Screens at Once — Dual Audio De-embedding, ARC & 18Gbps HDR



Routes any of four HDMI 2.0 sources to four displays and scales each output independently, so a 4K60 main and a legacy 1080p overflow screen both run clean from the same box. The matrix ships in a compact metal enclosure — 8.66" wide and 1.73" high, with mounting ears supplied — and draws 10W from a locking 12V/2.5A supply, putting a full 4×4 18Gbps routing and scaling engine on a single shelf. It is the right choice for conference rooms, houses of worship, sports bars and media rooms where mixed-resolution displays and a separate audio zone matter more than paying pro-tier matrix prices.

Every output de-embeds audio to both a 3.5mm analog L/R jack and an RCA coaxial port, and ARC returns a display's audio to the coaxial output — feeding a zone amp, soundbar or DSP without an AVR upgrade. It passes 4K60 4:4:4 at the full 18Gbps with HDR10, HDR10+, Dolby Vision and HLG, carries advanced EDID management, and is controllable over RS-232 or TCP/IP with a built-in Web GUI, IR remote and front panel. Its differentiator is coverage: dual analog-and-coax de-embed with ARC return and independent 4K→1080p scaling on all four outputs, a feature set otherwise found only on matrices costing several times more.

> **Surge Protection Recommended —** This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

TABLE OF CONTENTS

1. Features

- ✓ HDMI 2.0, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- ✓ Video resolution up to 4K2K@60Hz (YUV 4:4:4)
- ✓ Supports 18Gbps video bandwidth
- ✓ Four outputs can be individually scaled (4K→1080p)
- ✓ De-embedded audio to analog L/R and coaxial port outputs
- ✓ ARC audio return on the coaxial output only
- ✓ Built-in Web GUI for TCP/IP control
- ✓ Advanced EDID management supported
- ✓ Four methods of control: front panel, RS-232, IR remote and TCP/IP
- ✓ Compact design for easy and flexible installation

2. Package Contents

- ✓ 1x 4×4 HDMI 4K 18Gbps Matrix
- ✓ 1x 12V/2.5A locking power adapter
- ✓ 1x IR remote
- ✓ 2x Mounting ears
- ✓ 1x 38kHz IR receiver cable (1.5 m)
- ✓ 1x 3-pin / 3.81mm phoenix connector
- ✓ 4x Machine screws (KM3×4)

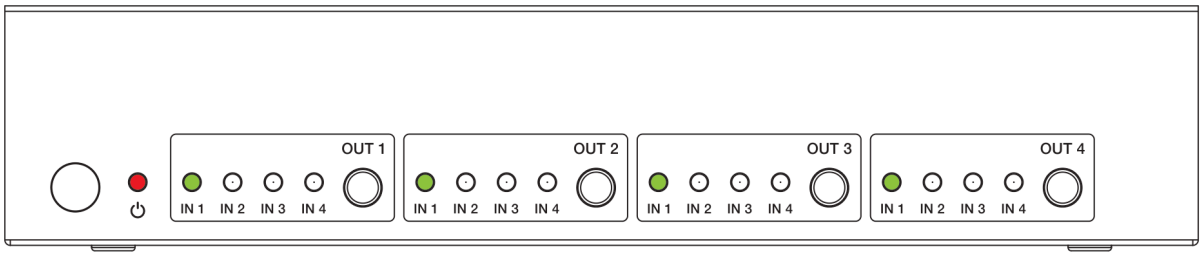
3. Specifications

VIDEO	
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Resolution	4K2K 50/60Hz 4:4:4; 4K2K 50/60Hz 4:2:0; 4K2K 30Hz 4:4:4; 1080p, 1080i, 720p, 720i, 480p, 480i; all HDMI 3D TV formats; all PC resolutions including 1920 × 1200
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit [1080p, 4K30Hz, 4K60Hz (YCbCr 4:2:0)]; 8-bit [4K60Hz (YCbCr 4:4:4)]
Video Bandwidth	18Gbps
Output Scaling	4K→1080p (Bypass / 4K→1080p / Auto)
3D Support	Yes
HDR Support	HDR10, HDR10+, Dolby Vision, HLG
ESD Protection	Human-body model: ±8kV (air-gap discharge), ±4kV (contact discharge)
AUDIO	
HDMI Audio Formats	PCM 2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Coaxial Audio Formats	PCM 2.0, Dolby Digital/Plus, DTS 2.0/5.1
L/R Audio Formats	PCM 2.0CH

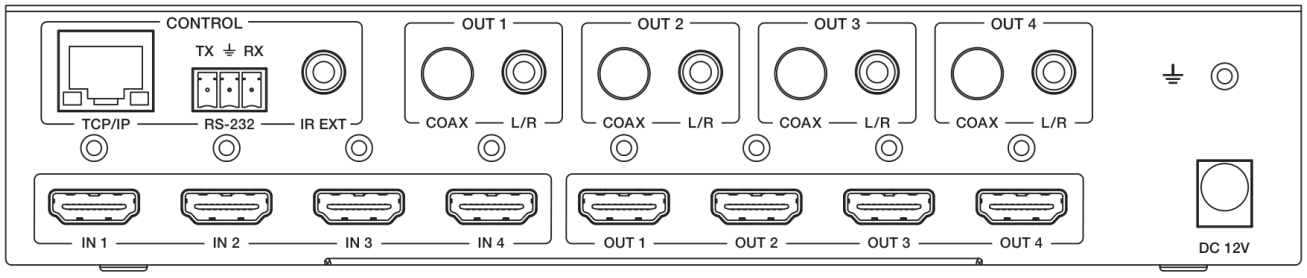
continued

ARC	Return on coaxial output only
CONNECTIONS	
Input Ports	4 × HDMI Type A (19-pin female)
Output Ports	4 × HDMI Type A (19-pin female); 4 × L/R audio out (3.5mm stereo mini-jack); 4 × coaxial audio out (RCA)
Control Ports	1 × TCP/IP (RJ45); 1 × RS-232 (3-pin phoenix connector); 1 × IR EXT (3.5mm stereo mini-jack)
POWER	
Power Supply	Input: AC 100–240V 50/60Hz; Output: DC 12V/2.5A (locking connector)
Power Consumption	10W (max); 1.56W (standby)
PHYSICAL	
Housing	Metal enclosure
Color	Black
Dimensions (unit)	8.66" (W) × 4.13" (D) × 1.73" (H) — 220 × 105 × 44 mm
Weight (unit, net)	1.75 lbs (0.79 kg / 792 g)
ENVIRONMENTAL	
Operating Temperature	32°F – 104°F (0°C – 40°C)
Storage Temperature	−4°F – 140°F (−20°C – 60°C)
Relative Humidity	20–90% RH (non-condensing)

4. Panel descriptions



Front panel



Rear panel

Rows below are therefore given in the manual's own order with no No. column to key against the artwork. A human should still audit the lifted crops against these names.

FRONT PANEL

Name	Description
IR Receiver Window	Receives the infrared signal for remote control of the matrix.
POWER LED	A red LED indicates the unit is powered on.
OUT 1/2/3/4 button	Short-press to cycle through input sources IN 1/2/3/4 for the corresponding OUT 1/2/3/4 port. Press and hold an OUT button for 3 seconds to switch the scaler mode for that output port.
IN 1/2/3/4 LED	When an input is selected as the source for an output port, the corresponding green LED lights up.

REAR PANEL

Name	Description
TCP/IP	Control port for TCP/IP control or for reaching the built-in Web GUI.
RS-232	3-pin pluggable connector for RS-232 control of the matrix.
IR EXT	If the unit's IR receiver window is blocked or the unit is installed out of infrared line of sight, plug the IR receiver cable into this port to receive the remote signal.
Coaxial Audio OUT 1 / OUT 2 / OUT 3 / OUT 4	RCA connectors for coaxial audio output from HDMI OUT 1 / OUT 2 / OUT 3 / OUT 4 respectively.
L/R Audio OUT 1 / OUT 2 / OUT 3 / OUT 4	3.5mm mini-jack connectors for stereo audio output from HDMI OUT 1 / OUT 2 / OUT 3 / OUT 4 respectively.
GND	Screw terminal for earthing the matrix.
IN 1/2/3/4 port	HDMI signal input ports; connect your HDMI source devices (such as a Blu-ray player or games console) here with HDMI cables.
OUT 1/2/3/4 port	HDMI signal output ports; connect your HDMI display devices (such as a TV or monitor) here with HDMI cables.
DC 12V	DC 12V input for the 12V/2.5A power supply.

5. Introduction

This high-performance 4×4 HDMI 4K 18Gbps matrix switches any of four HDMI 2.0 sources to four HDMI 2.0 displays. Each input and output supports resolutions up to 4K60 4:4:4 with HDCP 2.2, and the four outputs can be individually scaled from 4K down to 1080p. De-embedded audio can be output through the analog L/R and coaxial audio ports, and the ARC function can return a display's audio to the coaxial output only. The matrix supports advanced EDID management and 18Gbps bandwidth, and you can control it from the front panel, by RS-232, by IR remote, or over TCP/IP.

6. Connecting to the matrix

Connect the unit in the following order:

1. Connect your HDMI input sources. 2. Connect your HDMI display devices. 3. Connect your control device: TCP/IP, RS-232 or IR IN. 4. Connect your audio devices to either the coaxial or the L/R audio output ports. 5. Connect the 12V DC power supply.

CABLE LENGTH BY RESOLUTION

The manual recommends "Premium High Speed HDMI" cable and lists these HDMI IN/OUT cable-length limits by resolution:

RESOLUTION	CABLE LENGTH
4K60	10ft / 3M
4K30	30ft / 10M

continued

RESOLUTION	CABLE LENGTH
1080P60	42ft / 15M

7. Using the matrix

POWER LED AND STANDBY MODE

The power LED shows the operating state. When it is **red**, the matrix is active and fully controllable. When it is **off**, the matrix is in standby; you can change this state using the API commands, the IR remote, or the Web GUI.

SELECTING INPUTS

To choose the source for an output, press that output's button (OUT 1 / OUT 2 / OUT 3 / OUT 4) on the front panel. Each press cycles to the next input, and the corresponding input-source LED lights up when it is selected.

8. IR remote

Use the IR remote to operate the matrix without touching the front panel:

- **Power:** powers the matrix on or sets it to standby.
- **Output 1/2/3/4:** selects the input source (IN 1/2/3/4) for the matching output port; the corresponding green LED on the front panel lights up.
- **Input keys 1/2/3/4** (under each output): select the desired input source for that output port.
- **Previous / next keys:** step to the previous or next input source for the OUT 1/2/3/4 output; the corresponding green front-panel LED lights up.
- **SD:** switches the selected output between downscale and bypass mode.

9. Web GUI operation guide

The matrix includes a built-in web interface for control and configuration, organised into seven pages. To reach it, enter the matrix's IP address into a web browser on your PC. The default IP address is **192.168.1.100**. You can find the matrix's current IP address over RS-232 by sending the command `r ipconfig!` from a serial tool, which returns the current network settings.

To connect:

1. Connect the matrix's TCP/IP port to your PC with a UTP cable. 2. Set your PC's IP address to the same network segment as the matrix — for example, PC IP `192.168.1.200` with subnet mask `255.255.255.0`. 3. Enter the matrix's IP address into your browser to open the Web GUI.

At the login page, select the username and language and enter the password. The default credentials are:

USERNAME	PASSWORD
User	user
Admin	admin

All seven pages are available in **Admin** mode; only the **Status** and **Video** pages are available in **User** mode. The **Log out** and **Power on** buttons at the top right are always available — the Power button toggles the matrix between "Power on" and "Stand by".

The seven pages are:

1. **Status** — shows firmware and IP information (model name, installed firmware version, network settings). Visible in both User and Admin modes. 2. **Video** — select the input source for each output and manage presets. To build a preset, select the inputs for the four outputs, then click **Save**; click **Set** to apply a saved preset and **Clear** to remove it. Up to four presets can be saved. 3. **Input** — shows the name and connection status of each input (names are editable) and provides the per-input EDID list. You can also upload a binary EDID file to the User 1 or User 2 memory (**Browse** the file, select User 1 or User 2, then **Upload**), and read/store any input's or User 1/User 2's EDID to your PC. 4. **Output** — shows the name and connection status of each output (names are editable), sets the scaler mode, and toggles ARC and stream output per port. 5. **CEC** — perform CEC management. Input control operates each source (multiple at once), and output control operates each display — power on/off, volume up/down, active-source switching (multiple at once). 6. **Network** — configure IP settings and change the Web login password. IP settings are editable only when IP mode is set to **Static**. After any change here, the browser redirects to the home or login page and you must log in again with the new settings. 7. **System** — panel lock/unlock, beep on/off, serial baud-rate selection, firmware update, restore factory defaults, and reboot.

SCALER MODES (OUTPUT PAGE)

MODE	BEHAVIOUR
Bypass	Output resolution follows the input source (pass-through).
4K→1080P	Output resolution is downscaled from 4K to 1080p.
AUTO	Scales automatically to match the display's requirements.

When ARC is enabled on an output, the returned audio from the display is sent out the coaxial audio port and the L/R audio port is muted.

EDID OPTIONS

Each input's EDID drop-down offers the following options:

EDID OPTION
1080P, Stereo Audio 2.0
1080P, Dolby/DTS 5.1
1080P, HD Audio 7.1
1080I, Stereo Audio 2.0
1080I, Dolby/DTS 5.1
1080I, HD Audio 7.1
3D, Stereo Audio 2.0
3D, Dolby/DTS 5.1
3D, HD Audio 7.1
4K2K30Hz_444 Stereo Audio 2.0
4K2K30Hz_444 Dolby/DTS 5.1
4K2K30Hz_444 HD Audio 7.1
4K2K60Hz_420 Stereo Audio 2.0
4K2K60Hz_420 Dolby/DTS 5.1
4K2K60Hz_420 HD Audio 7.1
4K2K60Hz_444 Stereo Audio 2.0
4K2K60Hz_444 Dolby/DTS 5.1
4K2K60Hz_444 HD Audio 7.1
4K2K60Hz_444 Stereo Audio 2.0 HDR
4K2K60Hz_444 Dolby/DTS 5.1 HDR
4K2K60Hz_444 HD Audio 7.1 HDR
USER_1
USER_2
COPY_FROM_TX_1
COPY_FROM_TX_2
COPY_FROM_TX_3
COPY_FROM_TX_4

10. RS-232 control command

You can also control the matrix by RS-232. Connect the matrix's RS-232 port to a PC with a serial cable and open a serial command tool (such as Comm Operator, Docklight or Hercules) to send ASCII commands. Use these serial settings:

SETTING	VALUE
Baud rate	115200 (default)
Data bits	8
Parity	None
Stop bits	1

The TCP/IP protocol port is **8000**. In the commands, `x`, `y`, `z` and `XXX` are parameters and `!` is the delimiter.

Important notes:

1. Every command must end with an exclamation mark (`!`). Any carriage return after the command is ignored. 2. All spaces shown in the commands are required. 3. All response messages end with a CR/LF sequence. 4. When all four inputs are requested by one command, the response reports each input on its own line. 5. When all four outputs are requested by one command, the response reports each output on its own line.

COMMAND LIST

(The `r type!` model response has been renamed from the OEM model to the KanexPro MPN.)

ASCII COMMAND	FUNCTION	FEEDBACK
`s power z!`	Power the device on/off; z=0~1 (0 off, 1 on)	`power on` / `System Initializing... Initialization Finished!` / `power off`
`r power!`	Get current power state	`power on` / `power off`
`s reboot!`	Reboot the device	`Reboot… System Initializing... Initialization Finished!`
`help!`	List all commands	—
`r type!`	Get device model	`MMX-4X4AUD`
`r status!`	Get device current status	Reports all status: power, beep, lock, in/out connection, video/audio crosspoint, EDID, scaler, HDCP, network status
`r fw version!`	Get firmware version	`MCU FW version x.xx.xx`
`r link in x!`	Get connection status of input x; x=0~4 (0=all)	`HDMI IN1: connect`
`r link out y!`	Get connection status of output y; y=0~4 (0=all)	`HDMI OUT1: connect`
`s beep z!`	Enable/disable buzzer; z=0~1 (0 off, 1 on)	`beep on` / `beep off`
`r beep!`	Get buzzer state	`beep on` / `beep off`
`s lock z!`	Lock/unlock front-panel buttons; z=0~1 (0 off, 1 on)	`panel button lock on` / `panel button lock off`
`r lock!`	Get panel-lock state	`panel button lock on/off`
`s save preset z!`	Save output-to-input switch state to preset z; z=1~8	`save to preset 1`
`s recall preset z!`	Recall saved preset z; z=1~8	`recall from preset 1`

continued

ASCII COMMAND	FUNCTION	FEEDBACK
`s reset!`	Reset to factory defaults	`Reset to factory defaults System Initializing... Initialization Finished!`
`s clear preset z!`	Clear stored preset z; z=1~8	`clear preset 1`
`r preset z!`	Get preset z information; z=1~8	video/audio crosspoint
`s baud rate xxx!`	Set serial baud rate (115200, 57600, 38400, 19200, 9600, 4800)	`Baudrate:115200`
`r baud rate!`	Get serial baud rate	`Baudrate:115200`
`s id z!`	Set the product control ID; z=000~999	`id 888`
`s in x av out y!`	Route input x to output y; x=1~4, y=0~4 (0=all)	`input 1 -> output 2`
`r av out y!`	Get output y signal status; y=0~4 (0=all)	`input 1 -> output 1 … input 4 -> output 4`
`s out y stream z!`	Set output y stream on/off; y=0~4 (0=all), z=0~1	`Enable out 1 stream` / `Disable out 1 stream`
`r out y stream!`	Get output y stream status; y=0~4 (0=all)	`Enable out 1 stream`
`s hdmi y scaler z!`	Set output y scaler mode; y=0~4 (0=all), z=1~3 (1=bypass, 2=4K→1080p, 3=Auto)	`hdmi 1 set to bypass mode`
`r hdmi y scaler!`	Get output y scaler mode; y=0~4 (0=all)	`hdmi 1 set to bypass mode`
`s hdmi y hdcp z!`	Set output y HDCP status; y=0~4 (0=all), z=0~1 (1=active, 0=off)	`hdmi 1 hdcp active`
`r hdmi y hdcp!`	Get HDCP status of output y; y=0~4 (0=all)	`hdmi 1 hdcp active`
`r edid in x!`	Get EDID status of input x; x=0~4 (0=all)	`IN1 EDID: 4K2K60_444, Stereo Audio 2.0` (per input)
`r edid data hdmi y!`	Get EDID data of output y; y=1~4	`EDID : 00 FF FF FF FF FF FF 00 …`
`s hdmi y arc z!`	Turn ARC on/off for output y; y=0~4 (0=all), z=0~1	`hdmi output 1 arc on` / `hdmi output 1 arc off`
`r hdmi y arc!`	Get ARC state of output y; y=0~4 (0=all)	`hdmi out1 arc on`
`s edid in x from z!`	Set input x EDID from default EDID z; x=0~4 (0=all), z=1~23 *(see note)*	`IN1 EDID:1080p,Stereo Audio 2.0`
`r mac addr!`	Get network MAC address	`Mac address: 00:1C:91:03:80:01`
`s ip mode z!`	Set IP mode; z=0~1 (0 Static, 1 DHCP)	`Set IP mode:Static. Please use "s net reboot!" command or repower device to apply new config!`
`r ip mode!`	Get IP mode	`IP mode: Static`

continued

ASCII COMMAND	FUNCTION	FEEDBACK
r ipconfig!	Get current IP configuration	IP Mode: Static, IP: 192.168.1.72, Subnet Mask: 255.255.255.0, Gateway: 192.168.1.1, Mac address: 00:1C:91:03:80:01, TCP/IP port=8000, telnet port=10
s ip addr xxx.xxx.xxx.xxx!	Set IP address	Set IP address:192.168.1.100 … (must be static; set DHCP off first)
r ip addr!	Get IP address	IP address:192.168.1.100
s subnet xxx.xxx.xxx.xxx!	Set subnet mask	Set subnet Mask:255.255.255.0 …
r subnet!	Get subnet mask	Subnet Mask:255.255.255.0
s gateway xxx.xxx.xxx.xxx!	Set gateway	Set gateway:192.168.1.1 …
r gateway!	Get gateway	Gateway:192.168.1.1
s tcp/ip port x!	Set TCP/IP port; x=1~65535	Set tcp/ip port:8000
r tcp/ip port!	Get TCP/IP port	tcp/ip port:8000
s telnet port x!	Set telnet port; x=1~65535	Set telnet port:23
r telnet port!	Get telnet port	telnet port:23
s net reboot!	Reboot network modules	Network reboot… IP Mode: Static …

EDID index for `s edid in x from z!` (the manual extends the range to z=1~27 in this list):

Z	EDID
1	1080p, Stereo Audio 2.0
2	1080p, Dolby/DTS 5.1
3	1080p, HD Audio 7.1
4	1080i, Stereo Audio 2.0
5	1080i, Dolby/DTS 5.1
6	1080i, HD Audio 7.1
7	3D, Stereo Audio 2.0
8	3D, Dolby/DTS 5.1
9	3D, HD Audio 7.1
10	4K2K30_444, Stereo Audio 2.0
11	4K2K30_444, Dolby/DTS 5.1
12	4K2K30_444, HD Audio 7.1
13	4K2K60_420, Stereo Audio 2.0
14	4K2K60_420, Dolby/DTS 5.1
15	4K2K60_420, HD Audio 7.1
16	4K2K60_444, Stereo Audio 2.0

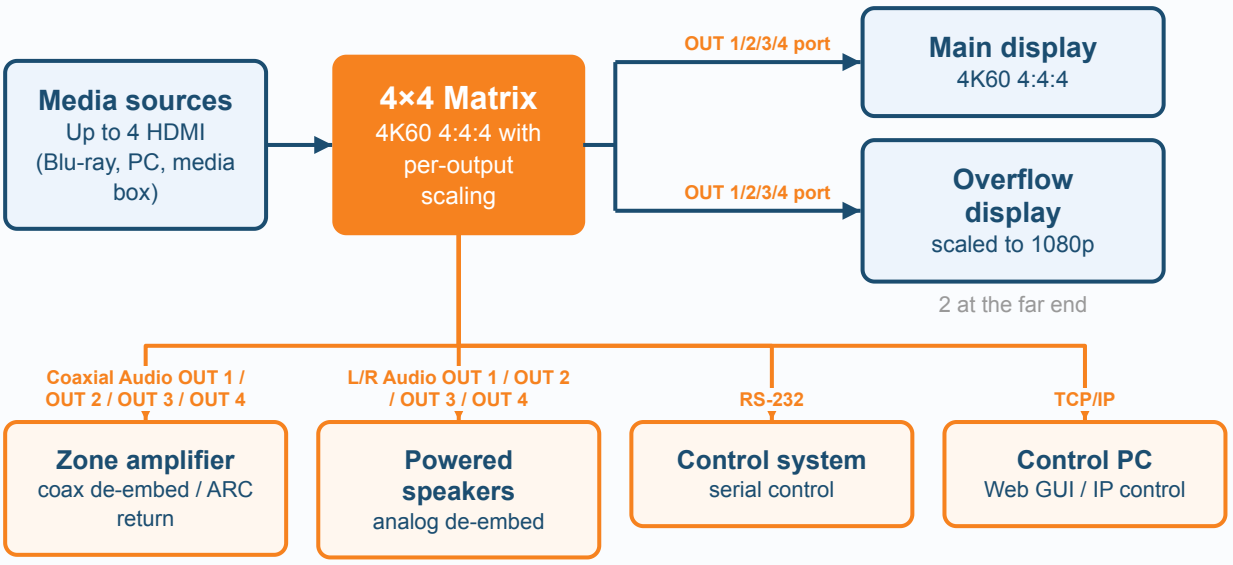
continued

Z	EDID
17	4K2K60_444, Dolby/DTS 5.1
18	4K2K60_444, HD Audio 7.1
19	4K2K60_444, Stereo Audio 2.0 HDR
20	4K2K60_444, Dolby/DTS 5.1 HDR
21	4K2K60_444, HD Audio 7.1 HDR
22	USER1
23	USER2
24	Copy_From_Hdmi_Tx_1
25	Copy_From_Hdmi_Tx_2
26	Copy_From_Hdmi_Tx_3
27	Copy_From_Hdmi_Tx_4

11. Application Example

TYPICAL SETUP

4K60 4:4:4 4×4 HDMI Matrix with Independent Per-Output Scaling



How it works: Every output de-embeds audio to both a 3.5mm analog L/R jack and an RCA coaxial port, and ARC returns a display's audio to the coaxial output — feeding a zone amp, soundbar or DSP without an AVR upgrade. It passes 4K60 4:4:4 at the full 18Gbps with HDR10, HDR10+, Dolby Vision and HLG, carries advanced EDID management, and is controllable over RS-232 or TCP/IP with a built-in Web GUI, IR remote and front panel. Its differentiator is coverage: dual analog-and-coax de-embed with ARC return and independent 4K→1080p scaling on all four outputs, a feature set otherwise found only on matrices costing several times more.

12. Troubleshooting

Q: The MMX-4X4AUD shows no picture and appears dead. What should I check?
A: Look at the POWER LED: red means the unit is active and controllable, off means it is in standby. Wake it from standby with the IR remote power key, the Web GUI Power button, or the s power 1! command.

Q: My 1080p display shows nothing from a 4K source on the MMX-4X4AUD. What should I check?
A: Set that output's scaler mode to 4K->1080p or AUTO rather than Bypass, since Bypass passes the source resolution through unchanged. You can set it by holding the OUT button 3 seconds, on the Web GUI Output page, or with s hdmi y scaler 2!.

Q: I cannot open the MMX-4X4AUD Web GUI in my browser. What should I check?
A: Confirm your PC is on the same segment as the matrix (for example 192.168.1.200, mask 255.255.255.0) and that you are entering the matrix's current IP; the default is 192.168.1.100. If unsure of the address, send r ipconfig! over RS-232 to read the current IP, subnet, gateway and port.

Q: The front-panel buttons on the MMX-4X4AUD do nothing. What should I check?
A: The panel may be locked; a locked panel is reported by r lock! as panel button lock on. Unlock it with s lock 0!, or from the Web GUI System page.

Q: There is no sound from the L/R output on an MMX-4X4AUD output. What should I check?
A: Check whether ARC is enabled on that output: when ARC is on, the returned display audio is sent out the coaxial port and the L/R audio port is muted. Turn ARC off with s hdmi y arc 0! or on the Output page to restore L/R audio.

> **Need help? —** For additional support, contact KanexPro technical support at support@kanexpro.com or 888.975.1368, or scan the QR code below for the product page.

13. Installation FAQ

Q: How is the MMX-4X4AUD powered?
A: It uses the included 12V/2.5A locking power adapter into the DC 12V input; the adapter accepts AC 100-240V, 50/60Hz.

Q: In what order should I connect the MMX-4X4AUD?
A: Connect the HDMI sources first, then the HDMI displays, then your control device (TCP/IP, RS-232 or IR IN), then any audio devices to the coaxial or L/R outputs, and finally the 12V DC power supply.

Q: How do I set up my PC to reach the MMX-4X4AUD Web GUI?
A: Connect the matrix TCP/IP port to your PC with a UTP cable and set your PC to the same segment as the matrix, for example PC IP 192.168.1.200 with subnet mask 255.255.255.0. The matrix default IP is 192.168.1.100; enter that in a browser to open the Web GUI.

Q: What if the MMX-4X4AUD is installed out of the remote's line of sight?
A: Plug the supplied 38kHz IR receiver cable into the IR EXT port and place the receiver where it can see the remote. Use this whenever the unit's own IR window is blocked or out of infrared line of sight.

Q: What HDMI cable length can I run at each resolution on the MMX-4X4AUD?
A: Using Premium High Speed HDMI cable, the limits are 10ft/3M at 4K60, 30ft/10M at 4K30, and 42ft/15M at 1080p60, on both inputs and outputs.

14. Integration FAQ

Q: How can the MMX-4X4AUD be controlled?
A: It offers four control methods: the front panel, RS-232, the IR remote, and TCP/IP. A built-in Web GUI is available over TCP/IP.

Q: What RS-232 settings does the MMX-4X4AUD use?
A: Use 115200 baud (default), 8 data bits, no parity, and 1 stop bit. Every command must end with an exclamation mark, and all spaces shown in a command are required.

Q: How does a controller route a source on the MMX-4X4AUD over TCP/IP or RS-232?
A: Send the ASCII command s in x av out y! (x=1~4 input, y=0~4 output, 0=all), which returns feedback such as input 1 -> output 2. The TCP/IP protocol port is 8000.

Q: What sources and displays does the MMX-4X4AUD pair with?
A: It switches any of four HDMI 2.0 sources such as a PC, Blu-ray/DVD player, games console or media box to four HDMI displays such as a UHD TV, projector, monitor or notebook, with de-embedded audio to an amplifier and speakers via the coaxial or L/R outputs.

Q: Can the MMX-4X4AUD manage connected displays directly?
A: Yes, its CEC page can power displays on/off, adjust volume, and switch the active source, and it can operate multiple displays at once. Source devices can also be operated over CEC.