



Scan for full manual

## VP-778 Quick Start Guide

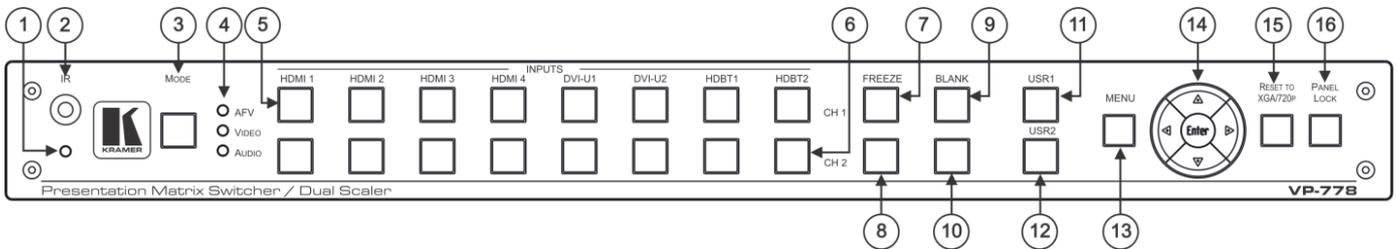
This guide helps you install and use your **VP-778** for the first time.

Go to [www.kramerav.com/downloads/VP-778](http://www.kramerav.com/downloads/VP-778) to download the latest user manual and check if firmware upgrades are available.

### Check what's in the box

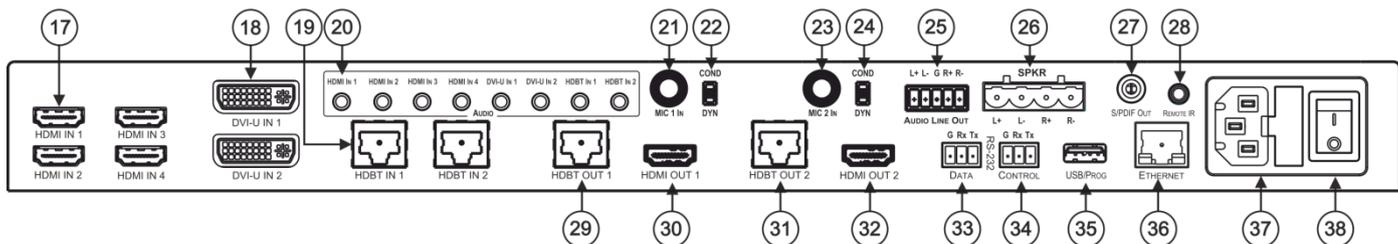
- ✓ **VP-778** Presentation Matrix Switcher/Dual Scaler
- ✓ 1 Set of rack ears
- ✓ 4 Rubber feet
- ✓ IR remote control transmitter with batteries
- ✓ 1 Power cord
- ✓ 1 Quick start guide
- ✓ 2 DVI (M) to 15-pin HD (F) (AD-DM/GF)
- ✓ 2 DVI-A (M) to 5 BNC (F) adaptor cables (ADC-DMA/5BF-1)

### Get to know your VP-778



#	Feature	Function
1	IR LED	Lights red when the unit accepts IR remote commands
2	IR Receiver	Accepts IR remote commands
3	MODE Button	Select the operation mode: AFV (audio follow video), VIDEO or AUDIO
4	Mode LED indicators	Indicate the operation mode, as selected via the MODE button
5	CH 1 INPUT Selector Buttons	HDMI Press to select the HDMI input (from 1 to 4)
		DVI-U Press to select the DVI-U (universal) input (from 1 to 2)
		HDBT Press to select the HDBT input (from 1 to 2)
6	CH 2 INPUT Selector Buttons	HDMI Press to select the HDMI input (from 1 to 4)
		DVI-U Press to select the DVI-U (universal) input (from 1 to 2)
		HDBT Press to select the HDBT input (from 1 to 2)
7	CH 1 FREEZE Button	Press to freeze/unfreeze the CH 1 output video image
8	CH 2 FREEZE Button	Press to freeze/unfreeze the CH 2 output video image
9	CH 1 BLANK Button	Press to toggle between a blank screen (black) and the CH 1 display
10	CH 2 BLANK Button	Press to toggle between a blank screen (black) and the CH 2 display
11	USR1 User-defined Button	Press to launch a programmed command (for example, to turn a projector on)
12	USR2 User-defined Button	Press to launch a programmed command (for example, to turn a projector off)
13	MENU Button	Press to access/exit the OSD menu. Press and hold the MENU button to toggle between the same menu functions in CH1 and CH2 (for example, between CH1 brightness and CH2 brightness). When in the MIC Effects menu, press and hold the MENU button to toggle between MIC 1 and MIC 2

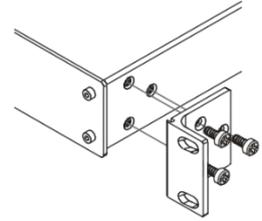
#	Feature	Function
14	◀ Button// VOLUME Button	Press to move to the previous level in the OSD screen. When not within the OSD menu, press to decrease the Audio CH1 volume
	▶ Button // VOLUME Button	Press to move to the next level in the OSD screen. When not within the OSD menu, increase the Audio CH 1 volume
	▽// VOLUME Button	Press to move down the menu list and to decrease numerical values. When in the transition mode and not within the OSD menu mode, press to decrease the Audio CH 2 volume
	△// VOLUME Button	Press to move up the menu list values and to increase numerical values. When in the transition mode and not within the OSD menu mode, press to increase the Audio CH 2 volume
	ENTER Button	Press to enter sub-menu items, and save. When in the transition mode and not within the OSD menu, performs as a TAKE button (to carry out a transition).
15	RESET TO XGA/720P Button	Press to reset the video output resolution to XGA or 720p and change the deep color settings to Off on the output. Press and hold for about 3 secs to toggle between reset to XGA and reset to 720p
16	PANEL LOCK Button	Press and hold for about 3 seconds to lock/unlock the front panel buttons



#	Feature	Function	
17	HDMI IN Connectors	Connect to the HDMI source (from 1 to 4)	
18	DVI-U IN Connectors	Connect to the video source that can be HDMI, VGA, Component or Composite video (from 1 to 2). See DVI-U pinout (Step 4)	
19	HDBT IN Connectors	Connect to an HDBT Transmitter (for example, the Kramer <b>TP-580Txr</b> ) to pass audio and video signals as well as serial commands (from 1 to 2)	
20	AUDIO Input Unbalanced Connectors	HDMI IN 3.5mm Mini Jack	Connect to an unbalanced audio source for HDMI 1 to HDMI 4 when using analog audio instead of embedded audio
		DVI-U IN 3.5mm Mini Jack	Connect to the unbalanced stereo audio of the DVI-U source (from 1 to 2)
		HDBT IN 3.5mm Mini Jack	Connect to the unbalanced stereo audio source for HDBT1 to HDBT 2 when using analog audio instead of embedded audio
21	MIC 1	6mm Jack	Connect to a microphone (see microphone pinout, Step 4)
		COND/DYN MIC Switch	Select between a condenser and a dynamic type microphone
22	MIC 2	6mm Jack	Connect to a microphone (see microphone pinout, Step 4).
		COND/DYN MIC Switch	Select between a condenser and a dynamic type microphone
23	MIC 2	6mm Jack	Connect to a microphone (see microphone pinout, Step 4).
24		COND/DYN MIC Switch	Select between a condenser and a dynamic type microphone
25	AUDIO LINE OUT (L, R) Terminal Block	Connect to the L and R balanced stereo audio acceptor	
26	SPKR OUT 4-pin Terminal Block	Connects to a pair of loudspeakers	
27	S/PDIF OUT RCA Connector	Connect to a digital audio acceptor	
28	REMOTE IR 3.5mm Mini Jack (opening) Covered by a cap. The 3.5mm connector at the end of the internal IR connection cable fits through this opening	Connects to an external IR receiver unit for controlling the machine via an IR remote controller (instead of using the front panel IR receiver), Optional. Can be used instead of the front panel (built-in) IR receiver to remotely control the machine (only if the internal IR connection cable has been installed)	
29	Channel 1 output connectors	HDBT OUT 1 RJ-45	Connect to an HDBT receiver (for example, Kramer <b>TP-580Rxr</b> ) to pass Ethernet, audio and video signals, as well as serial commands
30		HDMI OUT 1	Connect to an HDMI acceptor
31	Channel 2 Output Connectors	HDBT OUT 2 RJ-45	Connect to an HDBT receiver (for example, Kramer <b>TP-580Rxr</b> ) to pass Ethernet, audio and video signals, as well as serial commands
32		HDMI OUT 2	Connect to an HDMI acceptor
33	RS-232 DATA Terminal Block Connectors	Connect to the PC or the remote controller and pass data between this RS-232 port and the serial matrix (see Step 8)	
34	RS-232 CONTROL Terminal Block Connectors	Connect to the PC or the remote controller for RS-232 control of the <b>VP-778</b>	
35	USB PROG Connector	Connects to a USB drive to upgrade the firmware	
36	ETHERNET Connector	Connects to the PC or other Controller through computer networking	
37	Power Connector with Fuse	AC connector, enabling power supply to the unit	
38	POWER Switch	Switch for turning the unit on or off	

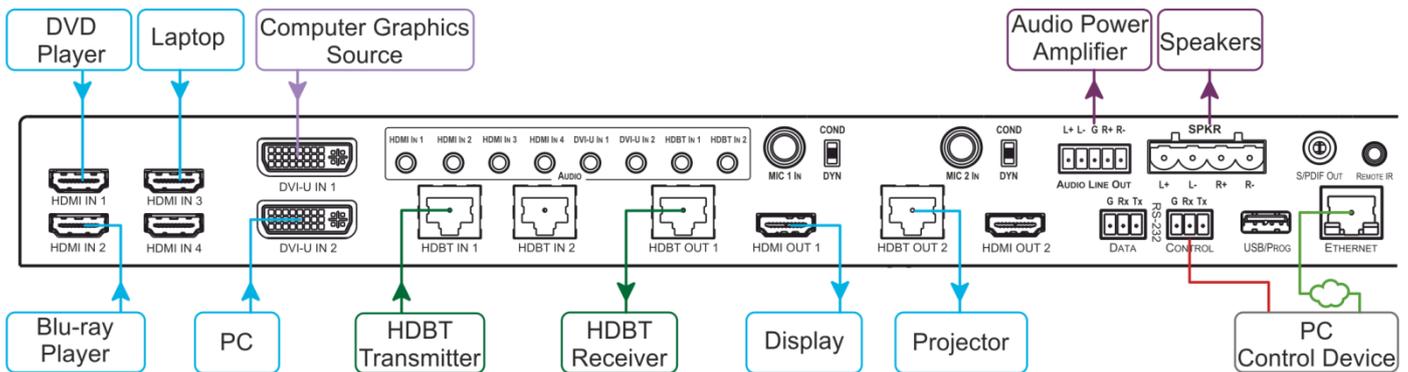
## Install the VP-778

To rack mount the machine attach both ear brackets to the machine (by removing the three screws from each side of the machine and replacing those screws through the ear brackets) or place the machine on a table.



## Connect the inputs and outputs

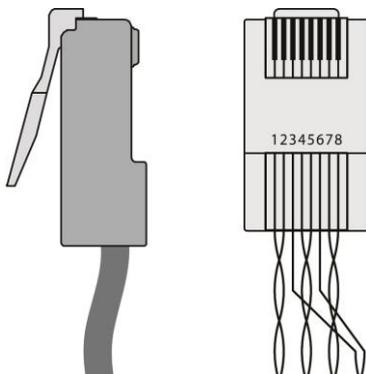
Always switch OFF the power on each device before connecting it to your **VP-778**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VP-778**.



Note that you can connect DVI-U to an analog (VGA, composite or component video) or digital (HDMI or DVI) source.

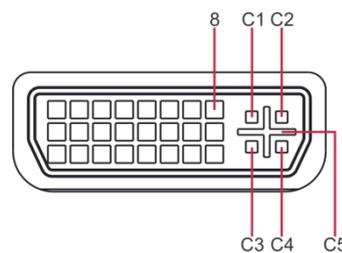
### RJ-45 Pinout:

For the Ethernet and HDBaseT connectors, see the proper wiring diagram below



PIN EIA /TIA 568B	
PIN	Wire Color
1	Orange / White
2	Orange
3	Green / White
4	Blue
5	Blue / White
6	Green
7	Brown / White
8	Brown

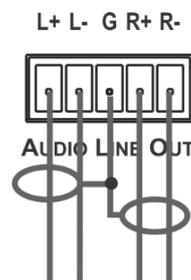
### DVI-U Pinout:



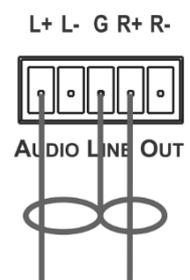
PIN	Wire Color
C1	Red / Pb
C2	Green / Y / CV
C3	Blue / Pr
C4	Horizontal sync (TTL)
C5	Common return
8	Vertical sync (TTL)

### Connect the audio output:

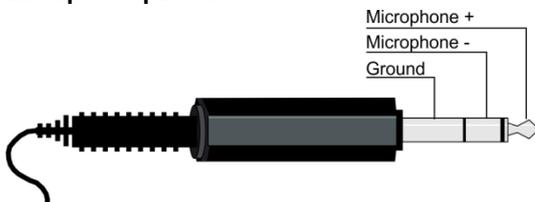
To a balanced stereo audio acceptor



To an unbalanced stereo audio acceptor



### Microphone pinout:



## Connect the power

Connect AC power to the rear of the **VP-778**, switch on its power and then switch on the power on each device.

### Safety Instructions



- Caution:** There are no operator serviceable parts inside the unit.
  - Warning:** Use only the power cord that is supplied with the unit.
  - Warning:** Do not open the unit. High voltages can cause electrical shock! Servicing by qualified personnel only.
  - Warning:** Disconnect the power and unplug the unit from the wall before installing.
- See [www.KramerAV.com](http://www.KramerAV.com) for updated safety information.

## Set operation parameters via OSD menu

Enter the OSD menu via the MENU button on the front panel or the IR remote control transmitter. Select a menu item and set parameters as required.

If you cannot see any video output, verify that the display, TV, or projector is in good working order and is connected to the **VP-778**. Verify that the **VP-778** is selected as the source. If you still cannot see any video output, press and hold the RESET TO XGA/720P button for 3 seconds to reset the output to XGA or 720p resolution.

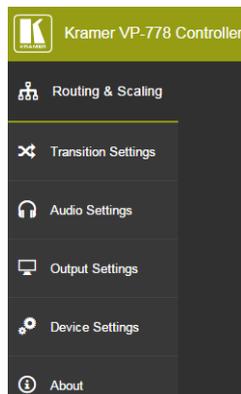
Menu Item	Function
Inputs	Sets the parameters for each input connector such as input type, native resolution, color depth, HDCP mode, audio input level and so on
Layout	Sets the display mode, transition settings (transition speed, mode, effects, direction, and take) and overlay settings (single window and PIP types), as well as output resolution and other output settings
Channel 1 / Channel 2	Sets the parameters for the Channel 1 / Channel 2 output including the source, aspect ratio, color settings, de-interlacing, noise reduction, projection, power save settings, test patterns, auto switching, audio settings and so on
Misc	Displays the information, OSD settings, USR keypad settings, FW upgrade and factory reset

## Operate via the front panel buttons and via the:

IR remote controller:



Web pages:



RS-232 and Ethernet:

RS-232			
<b>Protocol 3000</b>			
Baud Rate:	115,200	Stop Bits:	1
Data Bits:	8	Parity:	None
Example (decrease the volume on the DVI-U2 input):		#Y 0,165,-<CR>	
<b>TCP/IP Parameters</b>			
IP Address:	192.168.1.39	UDP Port #:	50000
Subnet mask:	255.255.000.000	Maximum UDP Connections:	Unlimited
Default gateway:	192.168.0.1	Maximum TCP Connections:	Unlimited
TCP Port #:	5000		
<b>Full Factory Reset</b>			
OSD:	Factory Reset through the Misc menu item (including or excluding ETH)		
Protocol 3000:	Including ETH: use "Factory" command or #Y 0,561,1<CR>		
	Excluding ETH: use "Factory" command or #Y 0,562,1<CR>		
Web pages:	Factory reset via the Device Settings embedded Web page (including or excluding ETH)		
Front panel buttons:	Including ETH: power up the device with the "RESET TO XGA/720P" key pressed. The arrow and ENTER buttons flash. Full factory reset is complete once the LEDs cease to flash and react normally.		

## Pass serial data via the device:

The **VP-778** lets you route serial data through its various ports in the following ways:

- Serial matrix** – up to eight sets of unidirectional connections can be configured for passing serial data from a selected source to a selected destination.  
 Select the source/destination ports: port tunneling, the DATA RS-232 port, HDBT IN1, HDBT IN2 HDBT OUT1 or HDBT OUT2.
- USR buttons** – a programmable command is launched to a selected destination with a press of a USR button.  
 Select the destination ports: port tunneling, the DATA RS-232 port, HDBT IN1, HDBT IN2 HDBT OUT1, HDBT OUT2 or all.