KRAMER





VS-622DT Quick Start Guide

This guide helps you install and use your **VS-622DT** for the first time.

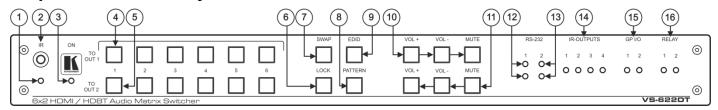
Go to <u>www.kramerav.com/downloads/VS-622DT</u> to download the latest user manual and check if firmware upgrades are available.

Step 1: Check what's in the box

✓ VS-622DT 6x2 HDMI / HDBT Audio Matrix Switcher ✓ 1 Quick start guide ✓ 1 Set of rack ears

✓ 1 Power cord
 ✓ 4 Rubber feet

Step 2: Get to know your VS-622DT

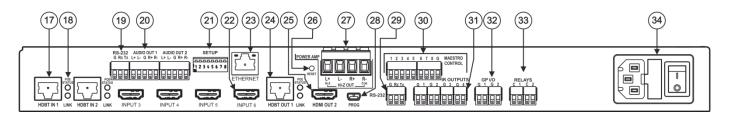


#	Feature	Function	
1	IR LED	Lights red when the unit accepts IR remote commands.	
2	IR Receiver	Receives signals from the remote control transmitter.	
3	ON LED	Lights when the unit is powered.	
4	TO OUT 1	Press to select an input to switch to OUT 1 (from 1 to 6).	
5	TO OUT 2	Press to select an input to switch to OUT 2 (from 1 to 6).	
6	LOCK Button	Press to lock the front panel buttons.	
7	SWAP Button	Press to swap between audio outputs.	
8	PATTERN Button	Press to activate the test pattern generator. When the generator is active, press one of the input buttons to select a test pattern.	
9	EDID Button	Press to capture the EDID.	
10	Output 1 Audio Buttons	VOL +: Increase output 1 volume.	
		VOL -: Decrease output 1 volume.	
		MUTE: Mute output 1 audio signal.	
11	Output 2 Audio Buttons	VOL +: Increase output 2 volume.	
		VOL -: Decrease output 2 volume.	
		MUTE: Mute output 1 audio signal.	
12	HDBT RS-232 LEDs	Indicates data transmission from a controller to a device connected to the transmitter via HDBT OUT 1:	
		TX 1: Lights green when data is transmitted via HDBT OUT 1.	
		RX 1: Lights red when data is received on HDBT OUT 1.	
13	EXTERNAL (Controller)	Indicates data transmission via the RS-232 port (item 29) to the VS-622DT:	
	LEDs	TX 2: Lights green when data is transmitted on the RS-232 port.	
		RX 2: Lights red when data is received on the RS-232 port.	
14	IR OUTPUT LEDs (1 to 4)	4) Lights green when the relevant IR port transmits data.	
15	GPI/O LEDs (1 to 2)	Lights green when the port is triggered.	
16	RELAY LEDs (1 to 2)	Lights green when the relay is closed.	

P/N: 2900-301025QS

VS-622DT Quick Start (P/N: 2900-301025QS REV 3)

Rev: 3

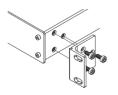


#	Feature	Function	
17	HDBT IN 1 RJ-45 Connectors (1 to 2)	Connect to an HDBT transmitter (for example, TP-580Txr).	
18	POE STATUS and LINK LEDs (for HDBT IN 1 to 2 and HDBT OUT 1)	Light when PoE is available and a link is established.	
19	Control RS-232 3-pin Terminal Block	Connect to the serial controller to control the device.	
20	AUDIO OUT Balanced Stereo Audio 5-pin Terminal Block Connectors (1 to 2)	Connect to an analog audio acceptor.	
21	SETUP DIP-switches	Used to set the device behavior.	
22	INPUT HDMI Connectors (3 to 6)	Connect to HDMI source (from 1 to 8).	
23	ETHERNET RJ-45 Connector	Connect to a remote network controller via a LAN.	
24	HDBT OUT1 RJ-45 Connector	Connect to an HDBT receiver (for example, TP-580Rxr)	
25	HDMI OUT 2 Connector	Connect to an HDMI acceptor.	
26	RESET Switch	Press and hold while powering on the device to reset to factory default parameters.	
27	Hi-Z OUT Terminal Block Connectors	Lo-Z – connect stereo output to Lo-Z speakers: L+ and L- to the left speaker; R+R- to the right speaker. Hi-Z (70V or 100V) – connect Hi-Z and COM to mono Hi-Z speakers.	
28	PROG Mini USB Connector	Connect to a PC to perform firmware upgrade.	
29	RS-232 (G, Rx, Tx) Terminal Block Connector	Connect to an RS-232 controlled device.	
30	MAESTRO CONTROL 9-pin Terminal Block Connectors	Connect to configurable buttons (configured via the Automation page), such as the RC-21TB .	
31	IR OUTPUT 2-pin Terminal Block Connectors (1 to 4)	Connect to IR blasters/emitters using cables up to 80m (260ft) long.	
32	GPI/O 2-pin Terminal Block Connectors (1 to 2)	Connect to controllable sensors or devices (for example, motion sensors). This port can be configured as a digital input, digital output, or analog input.	
33	RELAY 2-pin Terminal Block Connectors (1 to 2)	Connect to a relay controllable device, (for example, a motorized projection screen).	
34	Mains Power Connector, Fuse, and Switch	Connect to the mains supply.	

Step 3: Install VS-622DT

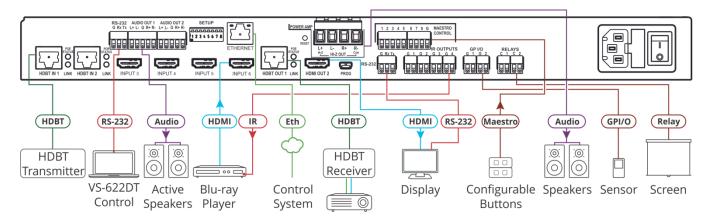
Install VS-622DT using one of the following methods:

- Remove the three screws from each side of the unit, reinsert those screws through the rack ears and mount on a 19" rack.
- Attach the rubber feet and place the unit on a flat surface.



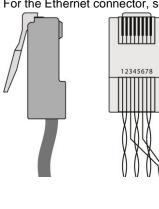
Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **VS-622DT**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VS-622DT**.



RJ-45 Pinout:

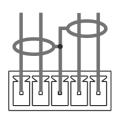
For the Ethernet connector, see the wiring diagram below:



PIN E	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	

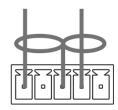
Audio output pinout:

To a balanced stereo audio acceptor:



L+ L- G R+ R-

To an unbalanced stereo audio acceptor:



L+ L- G R+ R-

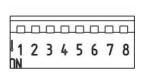
For optimum range and performance use the recommended Kramer cables available at www.kramerav.com/product/VS-622DT.

DIP-switch setup

A switch that is down is on; a switch that is up is off. By default, all the switches are up (off).

#	Feature	Description	
1	HDCP support on inputs	On (down)—Disable HDCP support on all inputs. Off (up)—Enable HDCP support which is defined by P3000 commands.	
2	Video mode switching Output 1	On (down)—Auto. Off (up)—Manual.	
3	Last connected/Priority mode Output 1	When DIP-switch 2 is set to Auto (ON): On (down)—Enable Last Connected mode. Off (up)—Enable Priority mode where the priority of each input is defined by the input number, (1 is the highest priority).	
4	Video mode switching Output 2	On (down)—Auto. Off—Manual.	
5	Last connected/Priority mode Output 2	When DIP-switch 4 is set to Auto (ON): On (down)—Enable Last-connected mode. Off (up)—Enable Priority mode where the priority of each input is defined by the input number, (1 is the highest priority).	
6	N/A	N/A	
7	Range mode for HDBT IN 1	On (down) – HDBaseT Ultra-long range (provides increased range at a reduced bandwidth). Off (up) – Normal range (default).	
8	Range mode for HDBT IN 2	On (down) – HDBaseT Ultra-long range (provides increased range at a reduced bandwidth). Off (up) – Normal range (default).	





Step 5: Connect the power

Connect the power cord to VS-622DT and plug it into the mains electricity.

Safety Instructions



Caution: There are no operator serviceable parts inside the unit. **Warning:** Use only the power cord that is supplied with the unit.

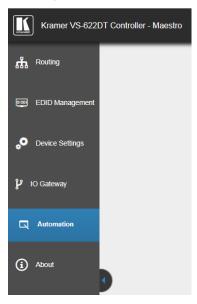
Warning: Do not open the unit. High voltages can cause electrical shock! Servicing by qualified personnel only.

Warning: Disconnect the power and unplug the unit from the wall before installing.

See www.KramerAV.com for updated safety information.

Step 6: Operate the VS-622DT

Web pages:



RS-232 and Ethernet:

RS-232/Ethernet					
Baud Rate:	115,200	Parity:	None		
Data Bits:	8	Command Format:	ASCII Protocol 3000		
Stop Bits:	1				
Example (Route input 1 to output 1): #VID			#VID 1>1 <cr></cr>		
Ethernet Parameters					
IP Address:	192.168.1.39	Default UDP Port #:	50000		
Subnet Mask:	255.255.0.0				
Default Gateway:	192.168.0.1				
Full Factory Reset	Full Factory Reset				
OSD:	Front panel buttons: power off the device, press and hold the RESET button for 3 seconds while powering the device, and then release.				
Protocol 3000:	"#FACTORY" command followed by #RESET command.				
Web Pages:	In the Device Settings page, General tab, click Factory reset.				

Technical Specifications

Inputs	2 HDBT	On female RJ-45 connectors
	4 HDMI	On female HDMI connectors
Outputs	1 HDBT	On a female RJ-45 connector
	1 HDMI	On a female HDMI connector
	2 Stereo Balanced Audio	On 5-pin terminal block connectors
	1 Stereo or 1 Mono Speaker	On a 4-pin large terminal block
Ports	1 Ethernet	On an RJ-45 female connector
	2 RS-232	On 3-pin terminal blocks
	1 USB	On a mini USB connector
	4 IR	On 2-pin terminal block connectors
	2 GPI/O	On 2-pin terminal block connectors
	2 Relays	On 2-pin terminal block connectors
Video	Max Resolution	Up to 4K@60Hz UHD (4:2:0)
	Compliance	HDMI 1.4 and HDCP 1.4
Reach	Extended	Up to 130m (430ft)
Controls	Front Panel	Input selection buttons, swap, EDID, lock and audio control buttons
		Power, RS-232, IR, GPI/O and relay indication LEDs
	Remote	RS-232
		Ethernet
		Web pages
		IR remote control transmitter
Power	Consumption	100-240V AC, 210VA max.
Cooling	Fan Ventilation	
Environmental	Operating Temperature	0° to +40°C (32° to 104°F)
Conditions	Storage Temperature	-40° to +70°C (-40° to 158°F)
	Humidity	10% to 90%, RHL non-condensing
Regulatory	Safety	CE
Compliance	Environmental	RoHs, WEEE
Enclosure	Size	19", 1U
	Туре	Aluminum
General	Net Dimensions (W, D, H)	43.64cm x 23.7cm x 4.36cm (17.18" x 9.3" x 1.72")
	Shipping Dimensions (W, D, H)	52.5cm x 33cm x 10.7cm (20.7" x 13" x 4.21")
	Net Weight	2.6kg (5.7lbs) approx.
	Shipping Weight	3.7kg (8.2lbs) approx.
Accessories	Included	Power cord

