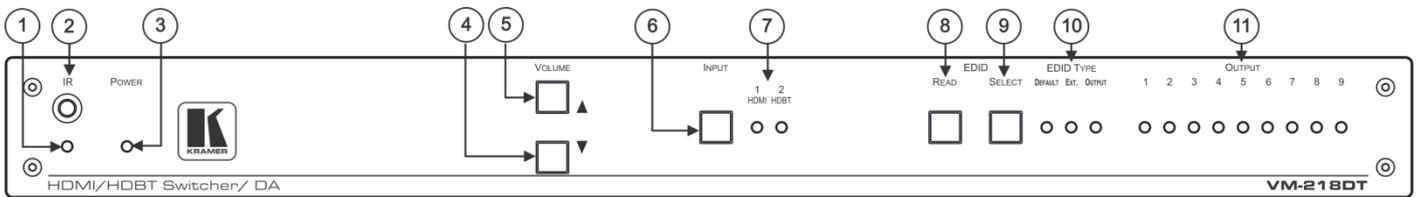# KRAMER

VM-218DT Quick Start Guide

This guide helps you install and use your **VM-218DT** for the first time.

Go to www.kramerav.com/downloads/VM-218DT to download the latest user manual and check if firmware upgrades are available.

Step 1: Check what's in the box

- ☑ **VM-218DT** HDMI/HDBT Switcher/DA
- ☑ 1 Power cord
- ☑ 1 Quick start guide
- ☑ 4 Rubber feet
- ☑ 1 Set of rack ears

Step 2: Get to know your VM-218DT

| #	Feature	Function
1	IR LED	Lights orange when the unit accepts IR remote commands.
2	IR Sensor	Enabled only if IR OUT 2 (on the rear panel) is not connected. Use to control a peripheral device connected to OUT 2 HDBT with that device's remote controller.
3	POWER LED	Lights when the unit is powered.
4	VOLUME (▼)	Press to decrease the volume of the analog audio output.
5	VOLUME (▲)	Press to increase the volume of the analog audio output.
6	INPUT Selector Button	Press to select input 1 HDMI or input 2 HDBT.
7	INPUT LEDs	Lights green to indicate the selected input: 1 HDMI or 2 HDBT.
8	EDID READ Button	Press to read the selected EDID and write it to both inputs.
9	EDID SELECT Button	Press to cycle through the sources from which to read the EDID: Default, External, or Output. When Output is selected, cycles through outputs 1 to 9. The relevant EDID TYPE and OUTPUT LEDs light green.
10	EDID TYPE LEDs	Lights green to indicate the selected EDID type: DEFAULT, EXT. (external) or OUTPUT.
11	OUTPUT LEDs (1 to 9)	When EDID TYPE OUTPUT LED lights green, press the EDID SELECT button briefly to cycle through output 1 to 9 to select the output from which to read EDID. The relevant LED lights during EDID setup and remains lit after completing the EDID setup.
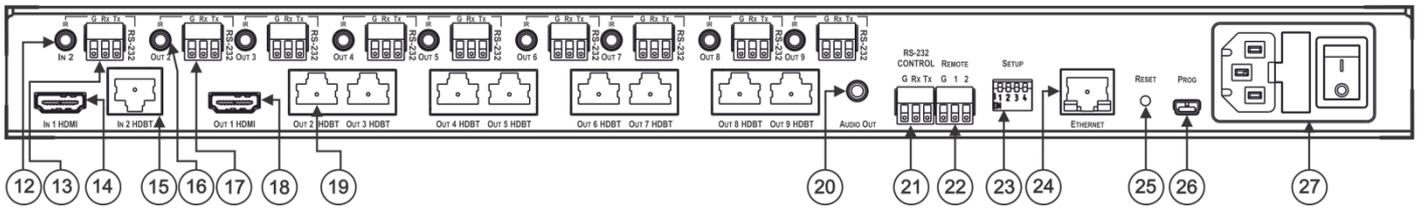
| #	Feature	Function
12	IN 2 IR on a 3.5 Mini Jack	Connect to an IR emitter/sensor cable for IR link extension via IN 2 HDBT.
13	IN 2 RS-232 (G, Rx, Tx) Terminal Block Connector	Connect to a serial controller for RS-232 link extension via IN 2 HDBT.
14	IN 1 HDMI Connector	Connect to an HDMI source.
15	IN 2 HDBT on RJ-45 Connectors	Connect to an HDBT transmitter (for example, **TP-580Txr**).
16	IR OUT on 3.5 Mini Jacks (2 to 9)	Connect to remote IR emitter/sensor cables to IR control the devices that are connected to the HDBT acceptors.
17	RS-232 OUT (G, Rx, Tx) Terminal Block Connectors (2 to 9)	Connect to serially control the devices connected to the HDBT acceptors.
18	OUT 1 HDMI Connector	Connect to a local HDMI acceptor.
19	OUT HDBT RJ-45 Connectors (2 to 9)	Connect to HDBT receivers (for example, **TP-580Rxr**).
20	AUDIO OUT 3.5mm Mini Jack	Connect to an analog audio acceptor.
21	RS-232 CONTROL 3-pin Terminal Block	Connect to the serial controller to control the **VM-218DT**.
22	REMOTE 3-pin Terminal Block	For future use.
23	SETUP DIP-switches	Use to set the device behavior.
24	ETHERNET RJ-45 Connector	Connect to LAN for remote IP control of the **VM-218DT**.
25	RESET Button	Press and hold while powering on the device to reset to factory default parameters.
26	PROG Mini USB Connector	Connect to a PC to perform firmware upgrades.
27	Mains Power Connector, Fuse, and Switch	Connect to the mains supply.

Step 3: Install VM-218DT

Install **VM-218DT** 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.
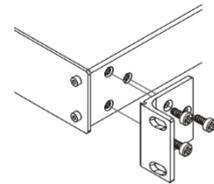
Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **VM-218DT**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VM-218DT**.
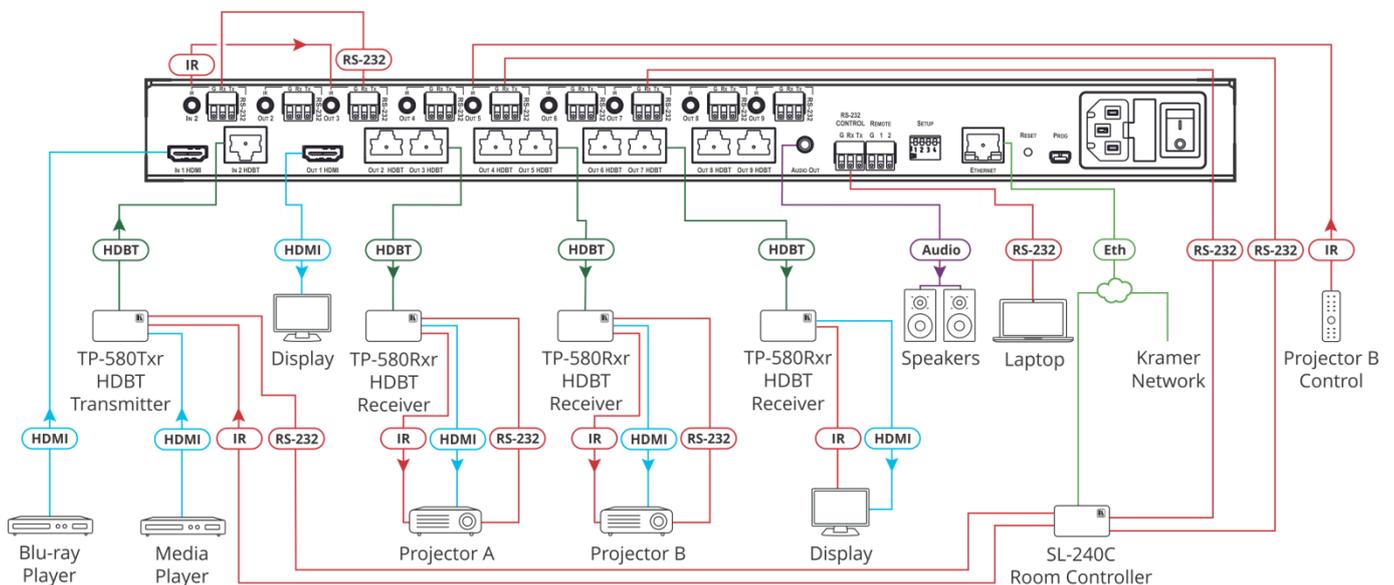
RJ-45 Pinout:

For the Ethernet connector, see the wiring diagram below:
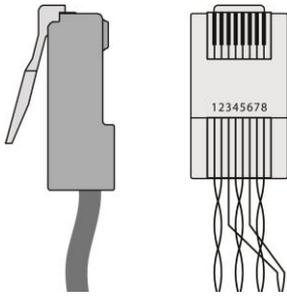
PIN EIA /TIA 568B	
PIN	Wire Color
1	Orange / White
2	Orange
3	Green / White
4	Blue
6	Green
7	Brown / White
8	Brown

For optimum range and performance use the recommended Kramer cables available at www.kramerav.com/product/VM-218DT.

DIP-Switch Settings

Changes to the DIP-switches only take effect on power-up. After changing a switch, reboot the device. All DIP-switches are set to Off (up) by default.

#	Feature	Dip-switch Settings
1	Reserved	
2	Reserved	
3	Digital audio pass-through	On (down) – Digital audio pass-through without audio extraction.
		Off (up) – Digital audio de-embedding (default).
		Note that enabling digital audio pass-through (On) mutes its de-embedding via the analog output.
4	Force RGB	On (down) – Force RGB mode.
		Off (up) – Normal mode (default)

Step 5: Connect the power

Connect the power cord to **VM-218DT** and plug it into the mains electricity.
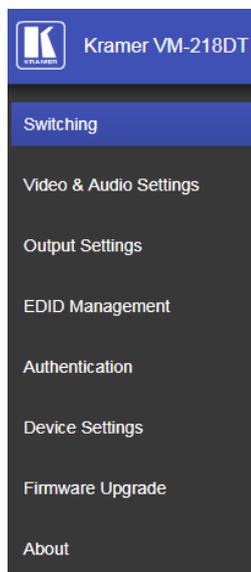
Safety Instructions

⚠

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 VM-218DT

Web pages:

KRAMER Kramer VM-218DT	
Switching	
Video & Audio Settings	
Output Settings	
EDID Management	
Authentication	
Device Settings	
Firmware Upgrade	
About	

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):			#ROUTE 1,1,1 <cr>
Ethernet Parameters			
IP Address:	192.168.1.39		
Subnet Mask:	255.255.0.0	Default UDP Port #:	50000
Default Gateway:	192.168.0.1		
Full Factory Reset			
Front Panel Buttons:	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.		
Web Pages:	In the Device Settings page, click Reset.		

Technical Specifications

Inputs	1 HDMI	On a female HDMI connector
	1 HDBT	On an RJ-45 connector
Outputs	1 HDMI	On a female HDMI connector
	8 HDBT	On RJ-45 connector
	1 Unbalanced Stereo Audio	On a 3.5mm mini jack
Ports	1 IR IN	On a 3.5mm mini jack for IR link extension via IN 2HDBT
	8 IR OUT	On 3.5mm mini jacks for IR link extension via OUT HDBT (2 to 9)
	1 RS-232 IN	On a 3-pin terminal block for serial link extension via IN 2HDBT
	8 RS-232 OUT	On 3-pin terminal blocks for serial link extension via OUT HDBT (2 to 9)
	1 Mini USB	On a female USB connector for firmware upgrade
	1 RS-232	On a 3-pin terminal block for device control
	1 10/100BaseT Ethernet	On an RJ-45 female connector for device control via LAN
Extension Reach	4K @60Hz (4:2:0)	Up to 40m (130ft)
	Full HD (1080p @60Hz 36bpp)	Up to 70m (230ft)
	Compliance	HDBaseT 1.0
Video	Max. Resolution	4K@60Hz (4:2:0) and 4K@30Hz (4:4:4)
	Compliance	Supports HDMI 2.0 and HDCP 1.4
Analog Audio	Max Level	1 Vrms
	THD + Noise	0.03% @1kHz at nominal level
Controls	Front Panel	Front panel buttons: input select, volume, EDID, IR
		Indication LEDs: input select, EDID type
	Rear Panel	RS-232 device control
		RS-232 remote control via HDBT ports
		IR remote control via HDBT ports
		Ethernet device control
		DIP-switches
Supported PC Web Browsers	Windows 7 and Higher	Internet Explorer (32/64 bit) version 10
		Firefox version 30
		Chrome version 35
	MAC	Chrome version 35
		Chrome version 63.0.3239.84
		Firefox version 30
		Firefox version 57.0.2
		Safari version 7
	Minimum Browser Window Size	1024 x 768 when in full screen mode
Power	Consumption	65VA
	Source	100-240V AC, 50/60Hz
Cooling	Fan Ventilation	
Environmental Conditions	Operating Temperature	0° to +40°C (32° to 104°F)
	Storage Temperature	-40° to +70°C (-40° to 158°F)
	Humidity	10% to 90%, RHL non-condensing
Regulatory Compliance	Safety	CE
	Environmental	RoHs, WEEE
Enclosure	Size	19" 1U
	Type	Aluminum
General	Net Dimensions (W, D, H)	19", 7.2", 1U, rack mountable 18.3 cm
	Shipping Dimensions (W, D, H)	52.5cm x 33cm x 10.7cm (20.7" x 13" x 4.2")
	Net Weight	1.6kg (3.4lbs) approx.
	Shipping Weight	2.7kg (6lbs) approx.
Accessories	Included	Power cord, rack ears
	Optional	For optimum range and performance use the recommended USB, Ethernet, serial and IR Kramer cables available at www.kramerav.com/product/VM-218DT
Specifications are subject to change without notice at www.kramerav.com		