KRAMER





VM-4DT Quick Start Guide

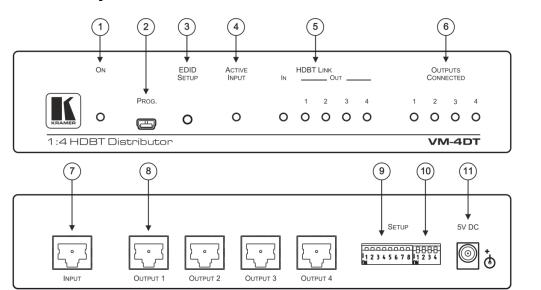
This guide helps you install and use your VM-4DT for the first time.

Go to www.kramerav.com/downloads/VM-4DT to download the latest user manual and check if firmware upgrades are available.

Step 1: Check what's in the box

VM-4DT 1:4 HDBT Distributor \checkmark 1 Power adapter and cord ✓ 1 Quick start guide $\mathbf{\mathbf{V}}$ 4 Rubber feet

Step 2: Get to know your VM-4DT



#	Feature		Function
1	ON LED		Lights green when the unit receives power.
2	PROGRAM Mini USB Connector		Use to send RS-232 commands. Connect to a PC to perform firmware upgrades (via K-Upload) and work with the EDID Designer. K-Upload and EDID Designer can be downloaded from our Web site at: <u>www.kramerav.com/manual/EDID Designer.</u> To use the mini USB port, you need to download and the Kramer USB driver from our Web site at: <u>www.kramerav.com/support/product_downloads.asp</u> and install it.
3	EDID SETUP Button		Press to capture the input EDID, force RGB mode or select the default EDID.
4	ACTIVE INPUT LED		Lights green when an HDMI signal is embedded on the HDBaseT input.
5	HDBT LINK LEDs	IN	Lights green when a link is established with the HDBaseT transmitter.
		OUT	Lights green when a link is established with the HDBaseT receiver (from 1 to 4). Flashes when a non-HDCP acceptor is connected to the output and the input is HDCP-encrypted (the content is displayed for only a few seconds).
6	OUTPUTS CONNECTED LEDs		Lights green when an acceptor (sink) is detected on the HDBaseT receiver connected to the output (from 1 to 4).
7	INPUT HDBT Connector		Connects to an HDBaseT source, for example TP-580T .
8	HDBT OUT Connectors		Connect to an HDBaseT acceptor (from 1 to 4), for example TP-580R .
9	SETUP 8-way DIP-switches		Use to set IR (DIP-switches 1-4) and RS-232 (DIP-switches 5-8) command behavior.
10	SETUP 4-way DIP-switch		Always keep all four DIP-switches UP (off).
11	I 5V DC		+5V DC connector for powering the unit.





Step 3: Install the VM-4DT

Install VM-4DT using one of the following methods:

- Attach the rubber feet and place the unit on a flat surface.
- Fasten a bracket (included) on each side of the unit and attach it to a flat surface. For more information go to www.kramerav.com/downloads/VM-4DT.
- Mount the unit in a rack using the recommended rack adapter (see www.kramerav.com/product/VM-4DT).

Step 4: Connect the inputs and outputs

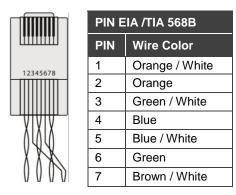
Always switch OFF the power on each device before connecting it to your VM-4DT. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the VM-4DT.

1234567 OUTPUT 1 OUTPUT 2 OUTPUT 3 OUTPUT 4 INPUT HDBT HDBT HDBT HDBT HDBT **TP-580R TP-580R** TP-580R **TP-580R** TP-580T

HDBT RJ-45 Pinout:

Use a straight pin-to-pin cable with RJ-45 connectors. We recommend that for HDBT cables, the ground shielding be

connected/soldered to the connector shield.



For optimum range and performance use the recommended Kramer cables available at www.kramerav.com/product/VM-4DT.

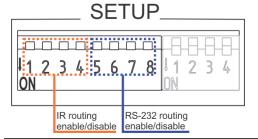
DIP-Switch Setup:

To enable/disable IR and RS-232 routing, set the DIP-switches (by default, set to OFF) as follows:

SETUR

5V DC

0



C	Out #	IR Routing is enabled when:	RS-232 Routing is enabled when:
C	OUT 1	DIP 1 – OFF (up)	DIP 5 – OFF (up)
C	DUT 2	DIP 2 – OFF (up)	DIP 6 – OFF (up)
C	OUT 3	DIP 3 – OFF (up)	DIP 7 – OFF (up)
C	OUT 4	DIP 4 – OFF (up)	DIP 8 – OFF (up)

Step 5: Connect the power

Connect the power adapter to the VM-4DT and plug the adapter into the mains electricity.

Safety Instructions



Caution: There are no operator serviceable parts inside the unit.

Warning: Use only the Kramer Electronics power supply that is provided with the unit. 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-4DT

Acquire EDID by:

- Using the **EDID SETUP** front panel button.
- Using the Kramer EDID Designer PC tool connected to USB.
- Manually sending RS-232 serial commands via laptop connected to USB.

USB setup for RS-232 communication:

RS-232			
Baud Rate:	115200		
Data Bits:	8		
Stop Bits:	1		
Parity:	None		
Command Format:	ASCII		
Example (Copy the E	DID data from Output 1 to the Input): "#CPEDID 1,1,0 <cr></cr>		
Factory Reset			
Protocol 3000:	#FACTORY command to reset to factory default configuration.		



VM-4DT supports EDID Designer (via the mini USB port) that can be loaded from our Web site: <u>Kramer EDID</u> <u>Designer</u>.

To use the mini USB port, you need to download and the Kramer USB driver from our Web site at: www.kramerav.com/support/product_downloads.asp and install it.

Acquiring the EDID via front panel

Press the **EDID SETUP** once to display the current EDID source: OUT 1, OUT 2, OUT 3, OUT 4, or all OUT LEDs flash (default EDID).

To acquire an EDID:

- 1. Press EDID SETUP. the current EDID source is displayed.
- 2. Press **EDID SETUP** (a second time) to enter EDID select mode.
- Press EDID SETUP repeatedly to cycle through the EDID source options. The OUT LEDs flash in the following order: OUT 1 -> OUT 2 -> OUT 3 -> OUT 4 -> all output LEDs flash (default EDID).

Stop pressing **EDID SETUP** once the required EDID source is reached.

Wait a few seconds, until VM-4DT acquires the EDID.
When complete, all output LEDS return to normal operation, displaying the present output connection status.



If an unconnected output is chosen or the connected EDID cannot be read, the VM-4DT loads the default EDID.

Forcing the RGB Mode

Normally (the default state), when acquiring the EDID, the device supports any color space that is defined in the acquired EDID parameters. In case of a color space problem, using the Force RGB mode may improve the colors of the image on the display.

То:	Do the following:
Force the acquired EDID to support only RGB color space:	Press and hold the EDID button for few seconds until all the output LEDs flash together four times. Continue to acquire the desired EDID. This acquired EDID is then forced to support the RGB color space only.
Return to the normal EDID mode:	Press and hold the EDID button for few seconds until the output LEDs flash together once. Continue to acquire the desired EDID.
View the current EDID mode:	Power cycle the unit. All output LEDs will flash together once when in normal EDID mode, and four times when in Force RGB mode.

Technical Specifications

Input	1 HDBT	On a female HDMI connector
Outputs	4 HDBT	On RJ-45 female connectors
Ports	1 USB	On a Mini female connector
Maximum Extension Range	40m (130ft)	At 4K@60Hz (4:2:0)
	70m (230ft)	At full HD (1080p@60Hz 36bpp)
	The specs only apply when using and OUT port separately; the tota	Kramer HDBaseT cables. This reach applies to each IN I end-to-end reach is the sum of all ports' reach.
Video	Max. Resolution	4K@60Hz 4:2:0
	Max. Data Rate	10.2Gbps (3.4Gbps per graphic channel)
	Compliance	Supports HDMI 2.0, HDCP 1.4 and HDBaseT 1.0
Control	Front Panel	EDID SETUP button
		OUTPUTS CONNECTED, HDBT LINK, ACTIVE INPUT, and ON indication LEDs
	Rear Panel	DIP-switches
Power	Consumption	5V DC, 3.5A
	Source	5V DC, 4A
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%, RH non-condensing
Regulatory Compliance	Safety	CE, FCC
	Environmental	RoHs, WEEE
Enclosure	Size	Desktop
	Cooling	Fan ventilation
General	Net Dimensions (W, D, H)	21.5cm x 16.3cm x 4.4cm (8.4" x 6.4" x 1.8")
	Shipping Dimensions (W, D, H)	35.1cm x 21.2cm x 7.2cm (13.8" x 8.3" x 2.8")
	Net Weight	0.98kg (2.2lb) approx.
	Shipping Weight	1.5kg (3.34lb) approx.
Accessories	Included	Power cord and adapter
Specifications are subject to c	hange without notice at www.krame	

