KRAMER

VS-3232DN-EM Quick Start Guide
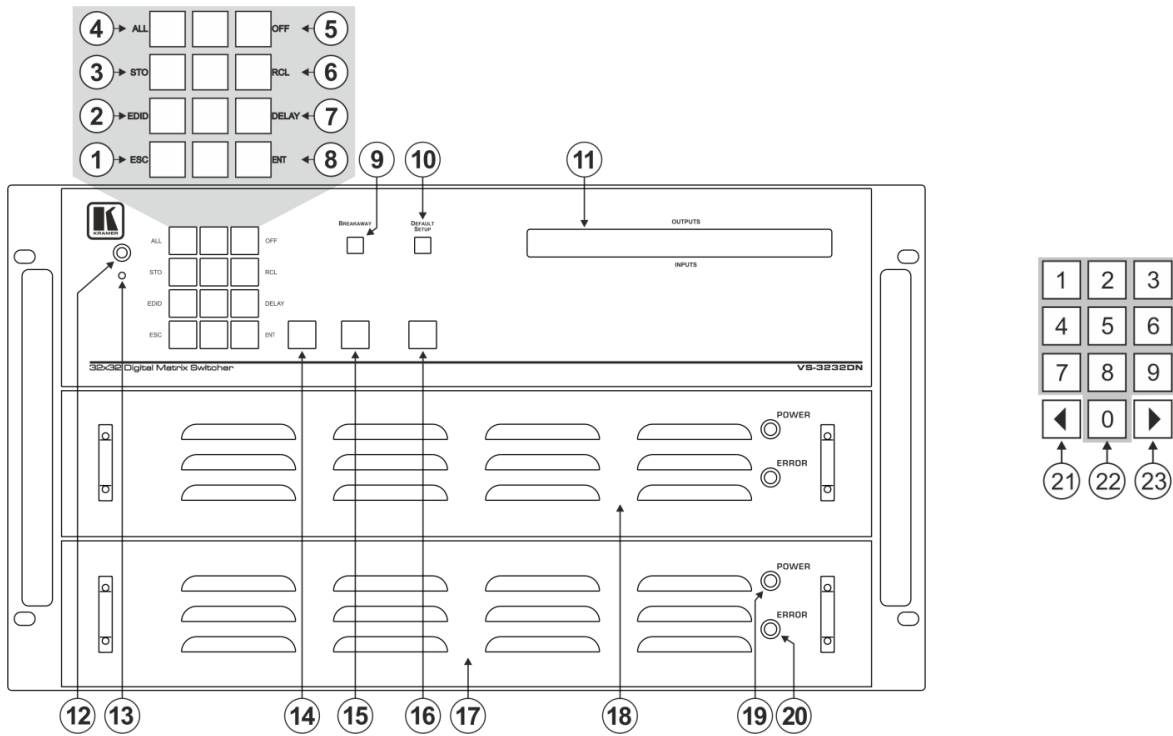
This guide helps you install and use your **VS-3232DN-EM** for the first time.

Go to www.kramerav.com/downloads/VS-3232DN-EM to download the latest user manual and check if firmware upgrades are available.
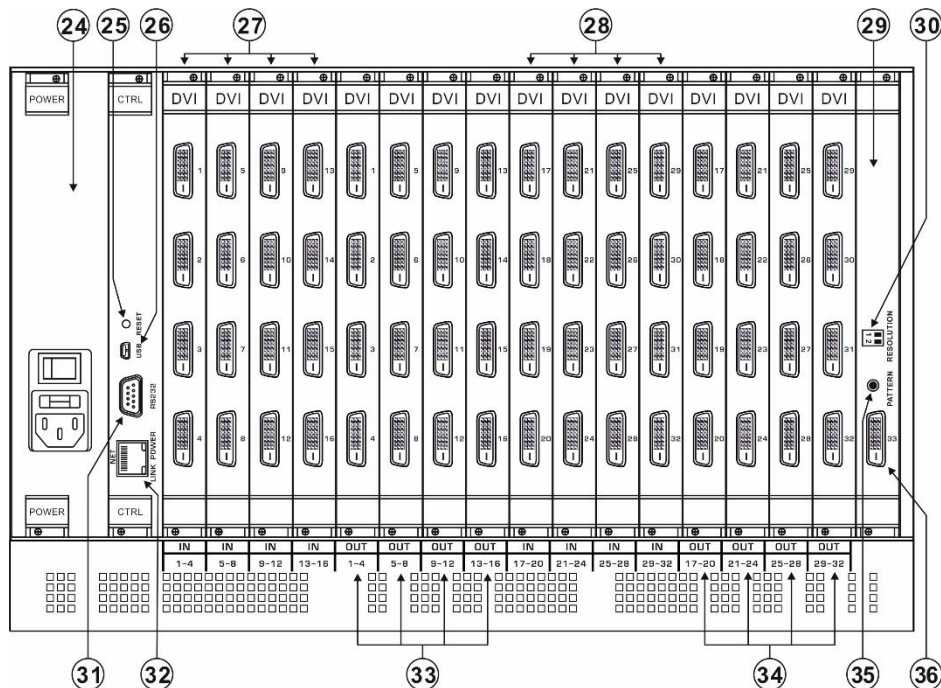
Step 1:   Check what's in the box

- ☑ **VS-3232DN-EM 4x4 to 32x32 Modular Multi-Format Managed Digital Matrix Switcher**
- ☑ Infrared remote control transmitter with batteries (for future use)
- ☑ 1 Power cord
- ☑ 1 Set of rack ears (attached)
- ☑ 1 Quick start guide

Step 2:   Get to know your VS-3232DN-EM

#	Feature			Function
1	Double-function Selector Buttons Area	Menu Button Functions	ESC	Press to exit the current operation.
2			EDID	Press to assign EDID channels.
3			STO	Press to store the current setup in a preset. After pressing the MENU button, this button lights and is enabled.
4			ALL	Press to connect an input to all outputs. After pressing the MENU button, this button lights and is enabled.
5			OFF	Press to turn off an output. After pressing the MENU button, this button lights and is enabled.
6			RCL	Press to recall a preset. After pressing the MENU button, this button lights and is enabled.
7			DELAY	Press to set the delay between confirming an action and the execution of the action.
8			ENT	Press to complete the input-output setup when using a one-digit number instead of two digits. For example, to enter input 5, you can press either 05 or 5, ENTER. Press to enter the options in a setup menu.
9	BREAKAWAY Button			Press to exit a menu.
10	DEFAULT SETUP Button			Press to recall the default setup.

#	Feature		Function
11	OUTPUTS/INPUTS LCD Display		Displays the outputs (upper row) switched to the selected inputs (lower row). Displays user interface messages and menus.
12	IR Receiver		Infrared remote control sensor.
13	IR LED		Lights yellow when receiving commands from the IR remote control transmitter.
14	TAKE Button		Press to confirm actions.
15	MENU Button		Press once to enable the ALL, OFF, STO and RCL buttons. Press again to enter the configuration menu. When in a Menu, press to cycle through the menu items.
16	LOCK Button		Press and hold for approximately 2 sec to lock/unlock the front panel buttons.
17	Power Supply		Supplies power to the device.
18			
19	POWER LED		Lights green when power supply is active and the device is powered on.
20	ERROR LED		Lights red when an error is detected. Briefly lights red immediately following a power disruption (e.g., cable disconnection, power off, and so on).
21	◄ (Backward)		Press to shift the display right (the LCD display only shows 13 cross-points out of a total of 32).
22	1, 2, 3, 4, 5, 6, 7, 8, 9, 0		Numeric keypad, 1 to 0.
23	► (Forward)		Press to shift the display left (the LCD display only shows 13 cross-points out of a total of 32).

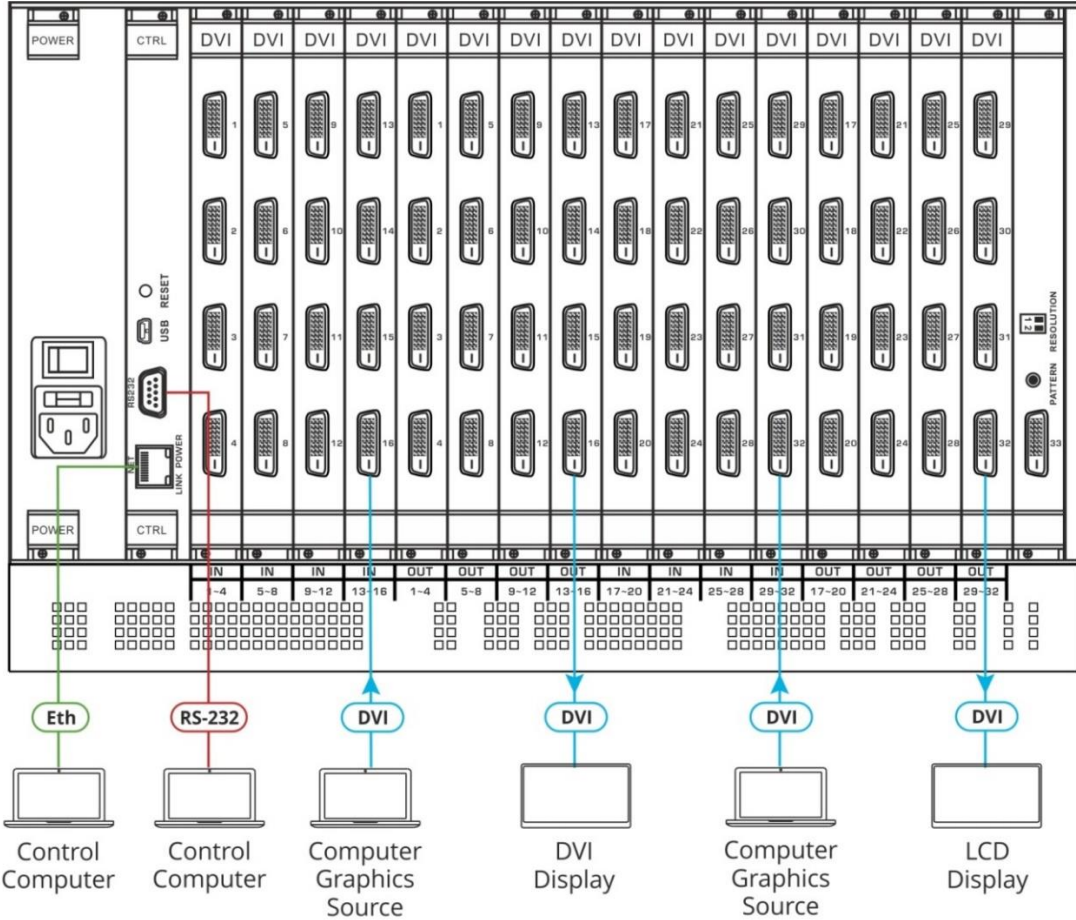| #	Feature		Function
24	AC Mains Power Module		Fuse holder and power cord socket. Connect to the AC mains supply.
25	RESET Button		Press to restart the **VS-3232DN-EM**.
26	USB Virtual COM Port USB Mini-B Connector		Connect to a PC or remote controller and perform firmware upgrade of the device and compatible input/output cards.
27	IN 1~16 Connectors	INPUTS	Connect to the relevant video sources, depending on the cards installed (1 to 16).
28	IN 17~32 Connectors		Connect to the relevant video sources, depending on the cards installed (7 to 32).
29	TEST Module		Signal generator module for testing video outputs.
30	RESOLUTION DIP-switches		Set the resolution for video generated by the Test module.
31	RS-232 9-pin D-sub Port		Connects to the remote operation PC or remote controller and perform firmware upgrade of the device and compatible input/output cards.
32	NET Ethernet RJ-45 Connector		Connect to a PC or controller via the Ethernet LAN and perform firmware upgrade of the device and compatible input/output cards. The LINK LED flashes when communication is active. The POWER LED lights when the interface receives power.
33	OUT 1~16 Connectors	OUTPUTS	Connect to the relevant video acceptors, depending on the cards installed (1 to 16).
34	OUT 17~32 Connectors		Connect to the relevant video acceptors, depending on the cards installed (17 to 32).
35	PATTERN Button		Press the button repeatedly to change the video pattern generated by the Test module.
36	Test Module DVI Molex 24-pin Video Connector		Connect to one of the relevant video inputs/outputs to aid in troubleshooting.

Step 3: Install the VS-3232DN-EM

To rack mount the machine, the **VS-3232DN-EM** is pre-assembled with ear brackets attached to the machine.

- Ensure that the environment (e.g., maximum ambient temperature & air flow) is compatible for the device.
- Avoid uneven mechanical loading.
- Appropriate consideration of equipment nameplate ratings should be used for avoiding overloading of the circuits.
- Reliable earthing of rack-mounted equipment should be maintained.

Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **VS-3232DN-EM**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VS-3232DN-EM**.

Port Numbering:

All cards (except DVI dual link cards) have four physical ports. Numbering of ports is sequential from top to bottom and left to right.

Each DVI dual link card provides two physical ports which causes the loss of two numbers in the numbering sequence of that card only.

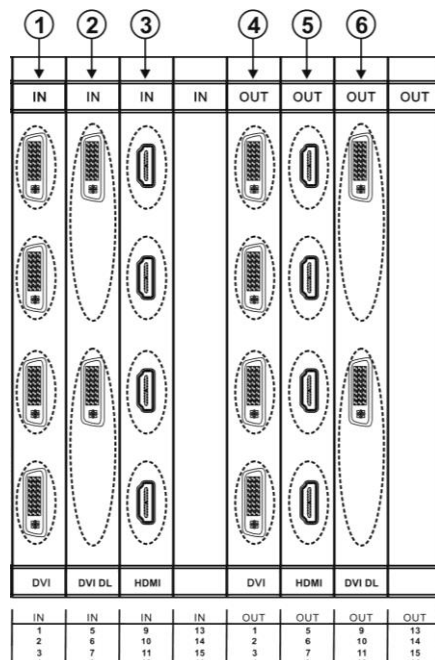**Note:** the maximum number of ports may vary.

Diagram #	Actual Port #
1	IN 1, IN 2, IN 3, IN 4
2	IN 5, IN 6
3	IN 9, IN 10, IN 11, IN 12
4	OUT 1, OUT 2, OUT 3, OUT 4
5	OUT 5, OUT 6, OUT 7, OUT 8
6	OUT 9, OUT 10

Note: There is no IN 7, IN 8, OUT 11 or OUT 12 because these slots contain DVI dual link cards.

Step 5: Connect the power

Connect the AC power cord to the rear of the **VS-3232DN-EM**, switch on its power and then switch on the power of connected devices.
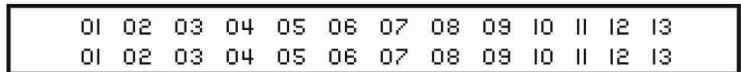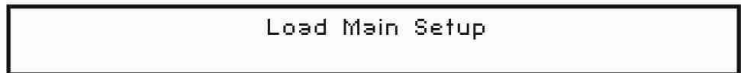
Step 6: Set operation parameters

The **VS-3232DN-EM** does not have separate output and input buttons. Instead, the front panel includes a numeric keypad.

When the unit is powered-on, the last matrix setup that was used is loaded. Use either the setup recall (records a stored configuration from a preset) or default setup recall (for quick retrieval of a commonly used programmable default setup) functions to retrieve other setups.

The LCD display can show only 13 out of the 32 available matrix combinations at once. To view any of the matrix combinations use the ◄ or the ► buttons on the front panel to shift the display to the right or left.

After switching on the power, the LCD display shows the following screens in sequence:

```
KRAMER ELECTRONICS, LTD
    32 SERIES MATRIX
```

```
Load Main Setup
```

```
01  02  03  04  05  06  07  08  09  10  11  12  13
01  02  03  04  05  06  07  08  09  10  11  12  13
```

Step 7: Operate VS-3232DN-EM

Operate **VS-3232DN-EM** via:

- Front panel buttons.
- Remotely, by RS-232 serial commands transmitted by a touch screen system, PC, or other serial controller via RS-232, USB or Ethernet port.
- Embedded web pages via the Ethernet.

RS-232 Control / Protocol 3000			
Baud Rate:	115,200	Parity:	None
Data Bits:	8	Command Format:	HEX
Stop Bits:	1		
Example: (Switch video input 4 to output 2): #VID 4>2			
Default Ethernet Parameters			
IP Address:	192.168.1.39	UDP Port #:	50000
Subnet mask:	255.255.255.0	TCP Port #:	5000
		Concurrent TCP Connections:	32
Default User:	Admin	Default Password:	Admin
Full Factory Reset	Press front panel MENU button twice. Select Total Matrix Reset > Factory Reset. Press TAKE twice.		
EDID	EDID data is passed between Output 1 and Input 1		

Using the embedded web pages:

Click the navigation pane to open the following pages:

- **Routing Settings** – Change the input to output routing.
- **EDID Management** – Copy EDIDs from outputs to inputs.
- **Settings** – Change device name and IP settings, configure card settings and upgrade card firmware, and perform factory reset.
- **About** – View current FW version and manufacturer information