MultiView™II DVI-TX Transmitter: Quick Start Guide



The **Magenta MultiView™II DVI-TX** transmitter extends a DVI-D video signal over F/UTP[‡] cable. There are user-configurable settings for video, audio, and serial options which can be controlled from the front panel. For more details please refer to the complete **MultiView™ II DVI-TX User Guide**, available for download at <u>www.tvone.com</u>.

Required Tools / Hardware / Materials: Appropriate screwdriver(s) and mounting hardware (optional, for example: rack-mount, wall or under-desk mounting). Required materials include appropriate cables for your specific application.

PRECAUTIONS: (1) Do not apply AC power until instructed to do so. (2) This equipment is not intended for, nor does it support, distribution through an Ethernet network. Do not connect these devices to any sort of networking or telecommunications equipment! (3) Use only tvONE-approved MultiView™ power adapters. Failure to do so may damage this device and will void the warranty.

(Optional) Depending on installation requirements: At any time during installation, the transmitter may be securely mounted using appropriate brackets and hardware.

(Optional) Connect local display via the LOCAL OUT port.

Connect video source to the transmitter's DVI IN port.

3 Connect the F/UTP cable via the **LINK OUT** port.



Figure 1 – MVII-DVI-TX Transmitter Rear View

4 (Optional) Make your serial and/or audio connections via the DB9 IOIO or AUX I/O connectors, as needed.

Note: The DB9 serial port is only available when the "SAP" option is present.

S Connect the DC power cable (+5VDC @ 2.6A. max) to the POWER port.

POWER
Figure 2 – MVII-DVI-TX
Transmitter Front View

Operating mode:

Off = normal, On = Config

Configuration status indicators

2 3 4 5 6 7 8

Video-status indicator Power **ON** indicator

Power-up Check: After all signal and power cables are connected, then apply AC power. The power **ON** indicator should light. If the video source is providing a valid video signal, the **video-status** indicator should also be on. If there is a local monitor attached, a video image should appear on the monitor. If there is no image on the display, recheck all cables and ensure the display is turned on.

Front Panel Controls: (Refer to Figure-2) There are two buttons (**CFG** and **SEL**), and several green LED status indicators. These are used to control the operating modes of the transmitter, and to display current status. In "normal-mode", the **CFG** indicator is off. In "configuration-mode", the **CFG** indicator is on.

Changing Internal Settings: In configuration-mode (CFG indicator = on), the CFG and SEL buttons, plus the LED indicators (1-8) will allow you to change internal configuration settings. The changes are effective immediately and are saved in non-volatile memory.

- * <u>To enter configuration-mode</u>: Press **CFG** button once. The **CFG indicator** will turn on, confirming you are in configuration-mode. Once in this mode, the LED indicators 1-8 will display the current settings as described in the tables below.
- * <u>To exit configuration-mode</u>: Leave the buttons untouched for 10 seconds. The **CFG indicator** will turn off (normal-mode).

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[‡] F/UTP cable is constructed of 4 unshielded twisted pairs, with a foil screen around all 4 pairs

Sync-mode Options: The DVI-TX is factory-configured for Fixed-Sync mode. This is the required mode for compatibility with the companion MVII-DVI-Rx-1K receiver which provides a DVI-D output signal. The DVI-TX is also compatible with other MultiView-II analog receivers that provide a VGA output signal. For these analog receivers, RepliSync-II mode is preferred as it will offer the widest range of compatibility with video formats. However, special circumstances may necessitate that one of the other sync-modes be selected. In any case, all attached receivers **must** also be configured for the same sync-mode. Otherwise, you may not get a proper video display output at that receiver.

- (starting in normal-mode) Press and release the CFG button once to access configuration-mode. CFG indicator = on.
- Press and release the SEL button once. You will now be able to change sync-mode settings.
- ED indicators 1-3 should be illuminated (either DIM or ON); all others (indicators 4-8) should be off.
- 4 Press the CFG button repeatedly to step through the available sync-mode settings as shown below.
- **6** To leave configuration-mode step through all the options OR leave the buttons untouched for 10 seconds.

LED1	LED2	LED3	Front Panel View	Sync-mode Setting
dim	dim	dim	CFG 12345678 SEL	The DVI-TX will auto-detect the required RepliSync-I mode ("normal" or "stretched").
dim	dim	ON	CFG 12345678 SEL	Force RepliSync-I normal Horizontal sync. pulse encoding.
dim	ON	dim	CFG 12345678 SEL	Force RepliSync-I "stretched" Horizontal sync. pulse encoding.
dim	ON	ON	CFG 12345678 SEL	Force RepliSync-II.
<u>ON</u>	dim	<u>dim</u>	CFG 1 2 3 4 5 6 7 8 SEL	Force Fixed-Sync mode. This is the <u>factory-default</u> setting. This is the <u>required</u> mode when interfacing to a MultiViewII DVI-Rx-1K receiver. NOTE: All connected MultiView receivers must also be in fixed-sync mode and with legacy units requiring the appropriate H/V polarities to be selected.

4th Pair Options: The DVI-TX provides several options for using the 4th-pair signals (pairs 1-3 are generally used for video). The factory-default settings support analog audio (L+R summed) on the 4th-pair. Note that any connected MultiView receiver must be configured with a matching 4th-pair operating mode. Otherwise, the desired 4th-pair signal will not work as expected. **Note:** If the optional SAP daughterboard is installed then the **4th-pair options are fixed and unchangeable.**

- (starting in normal-mode) Press and release the CFG button once to access configuration-mode. CFG indicator = on.
- Press and release the **SEL** button **twice**. You will now be able to change 4th-pair option settings.
- ED indicators 4-6 should be illuminated (either DIM or ON); all others (indicators 1-3, 7 and 8) should be off.
- Press the CFG button repeatedly to step through the available 4th-pair settings as shown below.
- **5** To leave configuration-mode step through all the options OR leave the buttons untouched for 10 seconds.

LED4	LED5	LED6	Front Panel View	4 th -pair Operating Mode
				Note: if an optional daughterboard is installed these cannot be changed.
dim	dim	dim	CFG 1 2 3 4 5 6 7 8 SEL	If SAP option-module is installed: 4 th -pair operating mode is fixed to SAP mode and this setting cannot be changed If the SAP option-module is not installed: 4 th -pair signals are disabled. This effectively "mutes" anything being sent on the 4 th pair. This can be useful for diagnostic purposes.
dim	dim	ON	CFG 1 2 3 4 5 6 7 8 SEL	Direct pass-through of 4 th -pair wires (custom applications).
<u>dim</u>	<u>ON</u>	<u>dim</u>	CFG 12345678 SEL	External analog (L+R summed) audio. This is the <u>factory-default</u> mode if no daughterboard option is installed. (-A mode).
dim	ON	ON	CFG 1 2 3 4 5 6 7 8 SEL	External S/PDIF digital audio. Input-impedance = 75-ohms.
ON	dim	dim	CFG 1 2 3 4 5 6 7 8 SEL	Simplex-serial ("-S" mode).
ON	dim	ON	CFG 1 2 3 4 5 6 7 8 SEL	Internal S/PDIF digital audio, de-embedded from video stream.

To reset all user-configurable options back to factory-default settings:

- Disconnect the DC power cable (or AC power).
- Press and hold the CFG button.
- 3 Connect the DC power cable (or AC power). All LEDs blink 3 times all settings are now changed back to factory-defaults.
- 4 Release the CFG button.

Troubleshooting: In many cases, problems encountered when installing MultiView™ II extension products can be resolved by checking the F/UTP cable termination. It must be pinned out according to the TIA/EIA 568B standard wiring specification. For additional troubleshooting information, or to obtain the TIA/EIA 568B wiring specifications please refer to the latest version of the MultiView™ II DVI-TX User Guide, downloadable from www.tvone.com.