

MultiView™ II XRTx Transmitter: Quick Start Guide

The **Magenta MultiView™ II XRTx** transmitter extends an analog video signal over FTP CAT5 cable (also CAT5e and CAT6). 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 XRTx User Guide**, available for download at www.tvone.com.

Required Tools / Hardware / Materials: Tools include 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™ II 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.

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

1 Connect video source to the transmitter's **VGA IN** port.

3 Connect the CAT5 cable via the **LINK OUT** port.



Figure 1 - XRTx Transmitter Rear View

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

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

Note: The DB9 serial port is only available when the "232", "SA" or "SAP" option is present.



Figure 2 - XRTx Transmitter Front View

Operating mode:
Off = normal, On = Config

Video-status and DDC-copy indicator

Power-on indicator

Power-up Check: After all signal and power cables are connected, apply AC power. The power **ON** indicator should light. If the video source is providing a valid VGA (RGB+HV) video signal, the **video-status** indicator should also be on (for any other type of video signal this status indicator will always be off). 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 (**COPY/CFG** and **DDC MODE/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 or flashing.

DDC Mode Selection: When the XRTx is operating in normal-mode (**CFG indicator is off**), it is possible to quickly select between the 3 DDC operating modes simply by using the **DDC MODE** button at any time:

- ❖ **STD:** Selects the **Magenta Magic** DDC profile. Press the **DDC MODE** button until the **STD** indicator (LED 6) is on. The **Magenta Magic** profile is a default set of common video resolutions. *This is the factory default setting.*
- ❖ **LOCAL:** Selects the DDC profile from a locally-connected display. Press the **DDC MODE** button until the **LOCAL** indicator (LED 7) is on. The LOCAL mode allows the video source device to directly read the DDC profile from the locally connected-display (if present). Note that LOCAL mode **does not** store any DDC profile information inside the XRTx device.
- ❖ **COPY:** Selects a previously stored copy of a DDC profile. Press the **DDC MODE** button until the **COPY** indicator (LED 8) is on. To use the COPY mode, a DDC profile must have already been read and stored into the XRTx.

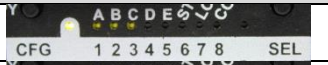
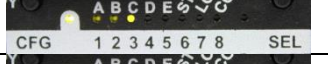
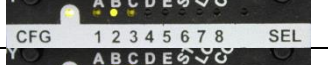
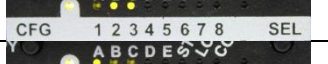
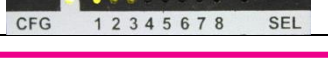
To perform a DDC-copy operation: Ensure the **COPY** mode is selected (LED 8=on), then: (1) Connect a display to the **LOCAL OUT** port. (2) Push and hold the **COPY** button until the copy-status indicator flashes 3 times, indicating a successful operation. If it only flashes once, the operation failed and the previously stored DDC profile (if any) will remain unchanged.

Changing Internal Settings: In configuration-mode (**CFG indicator = on or flashing**), 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.

- ❖ **To enter configuration-mode-1:** Press **CFG** button once. The **CFG indicator** will turn **on**, confirming you're in configuration-mode-1. Once in this mode, the LED indicators 1-8 will display the current settings as described in the tables below.
- ❖ **To enter configuration-mode-2:** Press **CFG** button twice. The **CFG indicator** will **flash**, confirming you're in configuration-mode-2. Once in this mode, the LED indicators 1-8 will display the current settings as described in the tables below.
- ❖ **To exit configuration-mode:** Leave the buttons untouched for 10 seconds. The **CFG indicator** will turn off (normal-mode).






Configuration Mode-1, Sync-mode Options: The XRTx is factory-configured for auto-detecting the proper sync-mode (RepliSync-I normal/stretched). This mode is generally compatible with all existing MultiView receiver products that support RepliSync (if they are also using their default settings). However, some video sources may require a custom sync-mode setting (especially at 1080p and 1920x1200 video resolutions). For these cases, one of the other sync-modes can be selected. Note that any connected MultiView receiver **MAY** also require a change to its sync-mode settings. Otherwise, you may not get a proper video display output at that receiver.

- ❶ (starting in normal-mode) Press and release the **CFG** button once to access configuration-mode-1. **CFG indicator = on**.
- ❷ Press and release the **SEL** button once. You will now be able to change sync-mode settings.
- ❸ LED indicators 1-3 should be illuminated (either DIM or ON); all others (indicators 4-8) should be off.
- ❹ Press the **CFG** button repeatedly to step through the available sync-mode settings as shown below.
- ❺ 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
<u>dim</u>	<u>dim</u>	<u>dim</u>		The XRTx will auto-detect the required RepliSync-I mode ("normal" or "stretched"). This is the <u>factory-default</u> setting.
dim	dim	ON		Force RepliSync-I normal Horizontal sync. pulse encoding.
dim	ON	dim		Force RepliSync-I "stretched" Horizontal sync. pulse encoding.
dim	ON	ON		Force RepliSync-II.
ON	dim	dim		Force fixed-sync mode. NOTE: A connected MultiView receiver must also be in fixed-sync mode and with H/V polarities selected at the receiver.

Configuration Mode-1, 4th Pair Options: The XRTx 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 an optional daughterboard is installed (232, SA or SAP options), then the 4th-pair utilization is defined by the installed daughterboard. It **will not be possible to change** any of the 4th-pair settings as described below.

- ❶ (starting in normal-mode) Press and release the **CFG** button once to access configuration-mode-1. **CFG indicator = on**.
- ❷ Press and release the **SEL** button twice. You will now be able to change 4th-pair option settings.
- ❸ LED indicators 4-6 should be illuminated (either DIM or ON); all others (indicators 1-3, 7 and 8) should be off.
- ❹ Press the **CFG** button repeatedly to step through the available 4th-pair settings as shown below.
- ❺ 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 <i>Note: If an optional daughterboard is installed these cannot be changed.</i>
dim	dim	dim		If option-module is installed: 4 th -pair operating mode is defined by the presence of the option-module (232/SA/SAP) and this setting cannot be changed If the 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		Direct pass-through of 4 th -pair wires (custom applications).
<u>dim</u>	<u>ON</u>	<u>dim</u>		External analog (L+R summed) audio. This is the <u>factory-default</u> mode if no daughterboard option is installed.
dim	ON	ON		External S/PDIF digital audio. Input-impedance = 75-ohms.
ON	dim	dim		Simplex-serial.

Configuration Mode-2, Video Coupling: Select AC or DC coupling, and DC-restore functions, to be applied to the input video.

- ① (starting in normal-mode) Press and release the **CFG** button twice to access configuration-mode-2. **CFG indicator = flashing.**
- ② Press and release the **SEL** button **once**. You will now be able to change video-coupling settings.
- ③ LED indicators 1-2 should be illuminated (either DIM or ON); all others (indicators 3-8) should be off.
- ④ Press the **CFG** button repeatedly to step through the available video-option settings as shown below.
- ⑤ To leave configuration-mode step through all the options OR leave the buttons untouched for 10 seconds.

LED1	LED2	Front Panel View	Video Options Mode
<u>dim</u>	<u>dim</u>		Auto-detect AC/DC coupling mode based on input signal. This is the factory-default mode.
dim	ON		Video-input is DC coupled.
ON	dim		Video-input is AC coupled, no DC-restore function.
ON	ON		Video-input is AC coupled, DC-restore function enabled.

Configuration Mode-2, Video Termination: Select input video termination to be 75 ohms or high-impedance (Hi-Z).

- ① (starting in normal-mode) Press and release the **CFG** button twice to access configuration-mode-2. **CFG indicator = flashing.**
- ② Press and release the **SEL** button **twice**. You will now be able to change video-termination settings.
- ③ LED indicator 3 should be illuminated (either DIM or ON); all others (indicators 1, 2, 4-8) should be off.
- ④ Press the **CFG** button repeatedly to toggle video termination on/off, as shown below.
- ⑤ To leave configuration-mode step through all the options OR leave the buttons untouched for 10 seconds.

LED3	Front Panel View	Video Options Mode
<u>dim</u>		Video input impedance is Hi-Z.
<u>ON</u>		Video-input impedance is 75-ohms. This is the factory-default setting.

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

- ① Disconnect the DC power cable (or AC power).
- ② 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 CAT5 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 MVII-XRTx User Guide, downloadable from www.tvone.com