



# AV Bridge MATRIX PRO™

## Frequently Asked Questions

*Will the MATRIX PRO have significant latency on local Program video outputs?*

- A) The throughput latency on the MATRIX PRO will be 1-2 frames depending on whether or not the PIP engine is engaged, and the amount of scaling involved.

*Is HDMI embedded audio supported?*

- A) Yes, on the PC Input only. The Left channel HDMI embedded audio on the PC input will appear in the audio matrix as HDMI Input. When audios are routed in the audio matrix to HDMI Output (Program), the HDMI Output will embed summed dual mono audio of anything routed to it in the audio matrix.

*Can the MATRIX PRO perform multiple PIPs?*

- A) No, the MATRIX PRO can only support PIP functions on the USB/IP Streaming buss. This streaming buss can be assigned to the local Program outputs if desired.

*What is the largest number of Vaddio EasyMICs which can be connected to the MATRIX PRO?*

- A) The MATRIX PRO can support up to four (4) Vaddio EasyMICs, either Table MicPODs™ or Ceiling MicPODs™, or the output from an EasyUSB PRO MIC I/O™. Each of the Table MicPODs supports one EasyMIC trigger button for use as a software event trigger.

*How much latency is created by the USB or IP encoding processes?*

- A) The USB MJPEG encoding is less than 300 milliseconds, the IP stream's H.264 encoding creates a similar latency. If viewing USB streams via Windows Media Player, QuickTime or VLC Player, their buffering during playback will make this delay look much longer than the time encoding really takes. Typically the amount of buffering can be adjusted in a player application.

*Are cameras supported other than those offered by Vaddio?*

- A) At this time, the only cameras supported by the (2) Cat-5 camera interfaces are Vaddio RoboSHOT™, ZoomSHOT™ and HD-Series cameras (not the HD-USB however). OEM camera support may be added at a later time, but other cameras can be used as HDMI sources without MATRIX PRO control, until the point where a firmware update for OEM camera support might be offered.

*Can there be a front panel lockout to prevent accidental mis-configuration?*

- A) There is no front panel lockout at this time. Any subsequent commands from the web pages or triggers will supersede any manual front panel commands.

*Is there HDCP compliance for the HDMI input?*

- A) Vaddio is pursuing HDCP compliance support, but we are still in process and are not offering it at this point in time. Expect it to be a supported feature in the future.

*Can the MATRIX PRO offer camera control via a simple joystick?*

- A) The MATRIX PRO can support a USB joystick operated on a computer which is browsing the served web page User Interface (UI) of the MATRIX PRO. The joystick will operate the camera whose tab is selected in the UI. Cameras can also be operated with an IR remote if required.

*Is it possible to have the (2) Cat-5 camera cabling distances greater than 150' (45.7m) for POV cameras, and 100' (30.5m) for PTZ cameras?*

- A) No, we can't change the laws of physics (yet). However, you can extend those distances further by locally powering the cameras if the camera has provisions for it. The video and control cabling can easily run much farther than those specified distances.



*Is it possible to remotely view a preview of a camera source in order to set a camera shot before selecting it in a Program or Streaming buss?*

- A) No. You could open a browser and view an IP or USB streamed source by selecting it in the source selection in the served webpage UI, but both streaming outputs would then show the camera set up. You could also set shots remotely using the streaming as a preview and switch Program for a local production.

*Is the AEC (Acoustic Echo Cancelation) built into the MATRIX PRO, or is it only in the Vaddio EasyUSB mic products?*

- A) There is an AEC signal in the MATRIX PRO available for any/all of the Mic/Line inputs. The Vaddio EasyUSB mic products generate their own AEC signal for use at the 3 microphone elements of each EasyMic products.

*Is the AEC “distributed” or summed?*

- A) Distributed. One (1) AEC per mic. The AEC is derived by whichever output you configure to be the Master output, assuming the Master output is feeding room audio amplification equipment.

*Does the MATRIX PRO support IPV6 Network Addressing?*

- A) No. The stack can support it, but it has not been implemented at this time.

*Is it the same resolution for IP and USB streaming?*

- A) Yes. There is an independent Program buss and an independent Streaming buss. Both Program outputs are the same source and resolution, and both IP and USB Streaming will be the same source and resolution. Due to the bandwidth limitations of USB 2.0, if you require simultaneous USB and IP streaming, the Streaming outputs will both need to be limited to a maximum resolution of 720P.

*Can you push firmware updates into downstream connected cameras through the MATRIX PRO?*

- A) Not at this time. Firmware updates for cameras must be performed in the same fashion as a stand alone camera would require.

*When storing camera presets, are the presets stored in the MATRIX PRO, or in the camera?*

- A) Presets are stored in the cameras and recalled by the MATRIX PRO. RoboSHOT cameras will store color information along with positional presets, other cameras store only positional presets and would require a separate command in Macro programming to change color/shading information when only a positional preset was recalled.

*What resolutions are supported on the HDMI inputs 1-3?*

- A) HDMI inputs 1-3 support the same resolutions as those supported on the HDMI of PC Input 4.

*Will the PC input DE-15 connector accept YUV and RGBHV as a source signal?*

- A) The “PC” DE-15 connector will only accept RGBHV signals, with a limited set of acceptable resolutions. There are resolutions available to cover 16:10, 16:9, 15:9, and 4:3 aspect ratios.

*Vaddio specifies “Cat-5” cabling, can we use Cat-6 or Cat-7 cabling with it?*

- A) Absolutely. Although Vaddio specifies Cat-5 cabling, our products will work fine with Cat-5, Cat-6 and Cat-7 cabling.

*Vaddio makes camera systems listed for use with the MATRIX PRO, and some of those cameras are only available in packages with Quick-Connects. Will those cameras be available for sale without Quick-Connects?*

- A) Yes. There are ZoomSHOT and RoboSHOT cameras available as accessories for use *only with the MATRIX PRO*, without Quick-Connect systems. The HD-Series of cameras (ClearVIEW and PowerVIEW) are available as stand-alone cameras and do not require special packages for use as accessories.

*Since there is currently no front panel “lock out” feature, do the video and audio mute/un-mute buttons give any indication of whether they are on or off?*

- A) Yes, the front panel buttons for muting and un-muting are blue during normal, un-muted use. They will light up in a red color instead of blue if they are in the Mute mode. The UI and the front panel buttons both act in real time and can be actuated or unactuated by either interface, again in real time.

*There are multiple control abilities for this unit, RS-232, Telnet, front panel, UI served via webpages as well as hardware triggers and software triggers. Which take priority?*

- A) All control functions can operate simultaneously, and are active. They act as our camera controllers and CCUs act in real time. The most recent command will be executed regardless of the command or trigger source.

*Does the MATRIX PRO support Standard Definition (SD) video?*

- A) It does not. With the abundance of cheap and easy SD to HD converters available, we chose to process only HD video in the MATRIX PRO. We suggest using 1080P video through the switcher and using the output processing to scale down video to resolutions below 1080P if required by Streaming or Program buses. There are readily available inexpensive scalers available in the market to process input or output signals if required.

*When performing a firmware update, will the configuration and settings be lost or will it require a factory reset?*

- A) Currently, firmware updates will “wipe” any configuration settings which have been programmed. The MATRIX PRO will eventually have the ability to export and import any Macros which have been programmed as trigger events, so the time required for duplicating room configurations for multiple implementations should be significantly reduced. At that point, we expect to prevent any firmware updates from erasing unit configurations.

