HDMI 4x4 Matrix Switch (500415)

Frequently Asked Questions (FAQ)

1. **What is the matrix switching time?** Maximum three (3) seconds.

2. **Does it have drivers for Control4, AMX or Crestron?** Not at this time.

3. **Can a different source be selected for each output?** Yes

4. **Does the 500415 allow encrypted HDMI from a cable box to be distributed to multiple outputs?** Yes. Each input port of the 500415 has it's own HDMI Receiver. Therefore the cable box only negotiates with this HDMI Receiver chip. When the cable box negotiates with the HDMI Receiver in the 500415, default EDID information is sent to the cable box. The default EDID use in the 500415 is based on a Display EDID (TV).

5. **Is the EDID information stored in the matrix switch receiver fixed or can it be modified?** The EDID in the matrix switch receiver presents itself to the HDMI source as a 1080p/Deep Color display and is fixed.

6. **If the cable box has two (2) HDCP keys available and four (4) displays are selected at the matrix output, what will happen?** Each input to the matrix switch presents itself to the HDMI source as a single display. Therefore, the cable box only needs one (1) HDCP key per matrix switch input port. The matrix switch contains eight (8) HDCP keys; one for each output and therefore there should be no conflicts.

7. **If one display supports only a low resolution, and another display supports high resolution how will the matrix switch react?** The HDMI source (i.e. cablebox) resolution must be set manually to a resolution that all connected displays support.

8. **What happens if one source is connected to multiple displays and each display supports a different resolution? Is there dynamic EDID or does each display need to support the same resolution?** Since the matrix switch is a non-blocking, any-to-any switch, it is not possible to implement dynamic EDID since each time a TV powers off, all connected TVs would need to renegotiate and this would cause a visual glitch lasting 2-4 seconds. Furthermore, any time the user switch sources (i.e. the point of the matrix), all the TVs connected to that source would glitch as well. Therefore, the HDMI sources must be set to a resolution that all TVs support. In practice, most recent TVs support downscaling from 1080p, and therefore the issue would not exist.

9. **Will the Matrix switch pass 3D information?** 3D is specified under HDMI 1.4 and not HDMI 1.3. The 500415 supports HDMI 1.3 and therefore cannot be guaranteed to support 3D.

10. **Up to how many levels can the 500415 be cascaded?** Up to four (4) 500415 may be cascaded via the Local Monitor I/O to build a 4x16 matrix.