Hall Research HSM-44-BX 4K 4x4 Simultaneous HDMI/HDBaseT Matrix Switch

As a member of Genesis Digital Matrix™ series of switchers, the HSM-44-BX matrix provides exceptional quality, intuitive operation and powerful control methods that are hallmarks of Hall Research's video matrix switches.

The 4K matrix is a 4x4 cross-point switch in a compact 1-RU enclosure. Each output has integrated video splitter so that simultaneous HDMI and HDBaseT are provided.

The HDBaseT outputs extend HDMI, IR, RS-232, Ethernet, and Power over a single CAT6 cable to 100m (328 ft). The HDBaseT outputs are compatible with all compliant HDBaseT receivers such as the Hall Research's HBX-R which is a cost effective Receiver that provides HDMI, IR, RS-232 and IP (Ethernet) extension and gets its power from the matrix for maximum convenience.

The HSM-44-BX supports HDMI resolutions up to 4K @ 30 Hz 4:4:4 and 4K @ 60 Hz 4:2:0. It also supports HDCP 2.2 and 1.4, 3D, deep-color. PCM, Dolby, DTS, and HD audio standards. The matrix intelligently calculates EDID for each input based on the EDID of the connected sinks.

The Hall Research Experience

Our engineers have designed this product to be as intuitive to operate as possible. For example, the control commands employ simple English syntax. Want to **C**onnect **V**ideo of output 4 to input 1 the command is simply **CV**4,1. How about connecting all outputs to input 1 CV*,1 (for those of you that remember DOS)!

Want to make ties (video routing) from front panel? The system does not care whether you start by pressing an input or an output button first. If you press an output button, it lights up along with the input that it is currently routed to, and you simple select a different input. Conversely, if you press an input button first, any or all outputs that it is routed to will light up, and you can simply select other outputs to send that input to.

EDID management is another powerful feature of this matrix switch. You can select the EDID for each input from a list of 15 internal "canned" EDIDs, or you can use the EDID from any monitor connected to the outputs. Alternatively can even have the matrix compute the EDID for each input based on the capabilities of all the monitors that it is being routed to in order to get the best image with highest resolution possible. For example, say you are routing an input to three 4K TVs, then the EDID of that input will have 4K as a supported resolution. Now, if you decide to send that video to a 4th TV that only supports 1080p, instead of getting a blank screen, the matrix will re-compute the EDID to specify 1080p as the max supported resolution. If you remove the 1080p TV from that group, the EDID will revert back to 4K.

Features

- HDCP 2.2 and 4K UHD
- Simultaneous HDMI and HDBaseT on each output
- Extends HDMI, IR, RS-232, Ethernet, and Power on HDBaseT
- Intuitive front panel control with two-line LCD
- Analog and Digital Extracted Audio Outputs
- Uses Hall Research Genesis™ Control Command Set (GCCS)
- Save and Recall Presets of commonly used routing patterns
- HDMI video output can be blanked or un-blanked
- Controlled via: Front Panel, RS232, IP (Telnet), and IR
- Internal Universal Power Supply with standard IEC C14 connector
- 1U rack mountable metal enclosure