

# MSD-402



## Presentation Switcher (built-in scan converter)

The IDK MSD-402 presentation switcher provides 4 inputs and 2 outputs and has a built-in scan converter. For video input, 2 HDBaseT and 2 HDMI/DVI are included. Input video signals are converted to HDMI/DVI signals or HDBaseT signals output at resolutions up to QWXGA or 1080p. For audio input, 4 digital inputs are included. Selected audio signals are output to digital audio and analog audio. Audio levels of each input and output can be set individually.

RS-232C and LAN are provided as communication ports for external control communication to enable you to set menus remotely. Bidirectional LAN communication is supported for HDBaseT input/output.

### FRONT / REAR PANEL

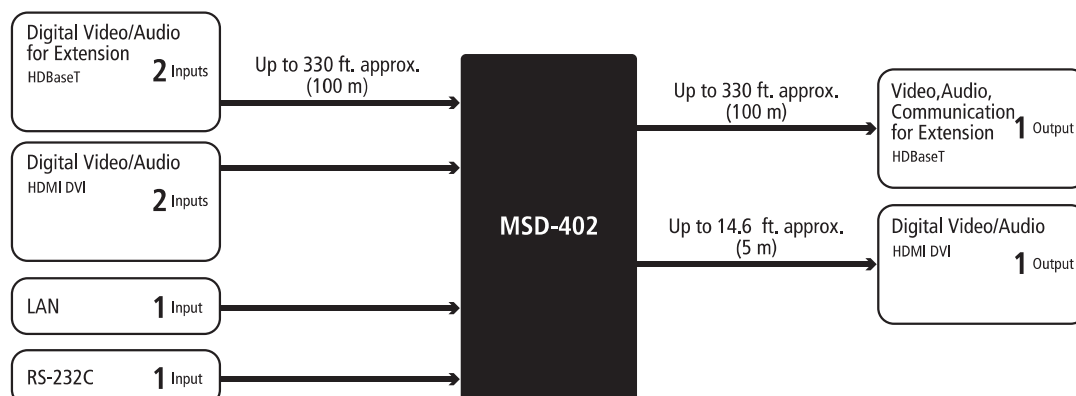


### FEATURES

- Video:**
- Up to QWXGA (Reduced Blanking) or 1080p
  - HDMI input cable EQ
  - Input: up to 33ft to 99ft approx. (10m to 30m)
  - Up to 330ft approx. (100m) extension over a Cat6 cable
  - **Scan converter**
  - Aspect control
  - Seamless switching
  - Anti-snow
  - **Picture in Picture**
- Audio:**
- D/A conversion
  - Volume adjustment
  - Multiple audio down mixing

- Control input:**
- RS-232C, LAN
- Others:**
- EDID emulation
  - Automatic input switching
  - Cross point memory
  - Preset memory
  - Last memory
  - Connection Reset
  - Lock mechanism for AC adapter

### CONNECTION DIAGRAM



## SPECIFICATIONS

Input	Video	HDMI	Number / Signal	2 inputs / HDMI Deep Color / DVI 1.0 HDCP1.4    TMDS single link    TMDS clock: 25 MHz to 225 MHz    Dot clock: 25 MHz to 165 MHz				
			Connector	2 female HDMI Type A				
			Others	Built-in Digital Cable EQ, EDID emulation				
		HDBaseT	Number / Signal	2 inputs / HDBaseT HDCP1.4    TMDS single link    TMDS clock: 25 MHz to 225 MHz    Dot clock: 25 MHz to 165 MHz				
			Connector	2 RJ-45 Cable: Cat5e/Cat6 (STP/UTP straight cable)				
		Format		480i / 480p / 576i / 576p / 720p / 1080i / 1080p VGA to QWXGA * WUXGA / QWXGA: Reduced Blanking				
		Audio	Digital	Number / Signal	4 inputs / Multi-channel linear PCM up to 8 channels Sampling frequency: 32 kHz to 192 kHz    Sample size: 16 bit to 24 bit    Reference level:-20 dBFS    Max. input level: 0 dBFS * IN1 to 3: can be selected digital or analog audio,			
	Connector			2 female HDMI Type A 2 RJ-45				
	Output	Video	Digital	Number / Signal	1 output / HDMI Deep Color / DVI 1.0 HDCP1.4    TMDS single link    TMDS clock: 25 MHz to 225 MHz    Dot clock: 25 MHz to 165 MHz			
				Connector	1 female HDMI Type A			
Number / Signal				1 output / HDMI Deep Color / DVI 1.0 (HDCP) HDCP1.4    TMDS single link    TMDS clock: 25 MHz to 225 MHz    Dot clock: 25 MHz to 165 MHz				
Connector			1 RJ-45 Cable: Cat5e/Cat6 (STP/UTP straight cable)					
Format			480i / 480p / 576i / 576p / 720p / 1080i / 1080p VGA / SVGA / XGA / WXGA(1280x768) / WXGA(1280x800) / Quad-VGA / SXGA / WXGA(1360x768) / WXGA(1366x768) / SXGA+ / WXGA+ / WXGA++ / UXGA/WSXGA+ / VESA1080/WUXGA/QWXGA * VESA1080 / WUXGA / QWXGA: Reduced Blanking					
Audio			Digital	Number / Signal	2 output / Multi-channel linear PCM up to 8 channels Sampling frequency: 32 kHz to 192 kHz    Sample size: 16 bit to 24 bit    Reference level: -20 dBFS    Max. output level: 0 dBFS			
				Connector	1 female HDMI Type A, 1 RJ-45			
Analog		Number / Signal	1 output / Stereo LR balanced and unbalanced signals Output impedance: 75 Ω    Reference level: -10 dBu    Max. output level: +10 dBu					
			Connector	2 terminal blocks (5-pin)				
Max. extension distance		Input	HDMI/DVI	33 ft. to 99 ft. approx. (10 m to 30 m)				
			HDBaseT	Up to 330 ft. approx. (100 m)				
		Output	HDMI/DVI	Up to 16.4 ft. approx. (5 m)				
			HDBaseT	Up to 330 ft. approx. (100 m)				
Function	Scan Converter			Aspect ratio control, Seamless switching, Picture adjustment (brightness, contrast, display position, display size), Picture-in-picture				
	Others			Volume adjustment (volume of input and output ports can be set separately),    Cross-point memory (storage for 4 settings), Preset memory (8 settings and startup settings),    Last memory,    Anti-snow,    Connection Reset,    Front panel security lockout, Auto input detection and switching				
External control	Serial control port		Number / Signal	1 port / RS-232C				
			Connector	1 terminal block (5-pin)				
	LAN control port		Number / Signal	1 port / 10Base-T (Auto Negotiation), 100Base-TX (Auto Negotiation), Auto MDI/MDI-X				
			Connector	1 RJ-45				
Others	Power			Input: 100 - 240 VAC ± 10%, 50 Hz / 60 Hz ± 3 Hz    Output: 12VDC 4.2A (power supply unit is supplied)				
	Power consumption			TBD				
	Dimensions			TBD(EIA rack 1/2U, not including projections)				
	Weight			TBD				
	Temperature			Operating temperature: 32 °F to 104 °F (0 °C to +40 °C)    Storage temperature: -4 °F to +176 °F (-20 °C to +80 °C)				
	Humidity			Operatina/ Storage humidity: 20% to 90% (Non Condensing)				