



MFS31-H

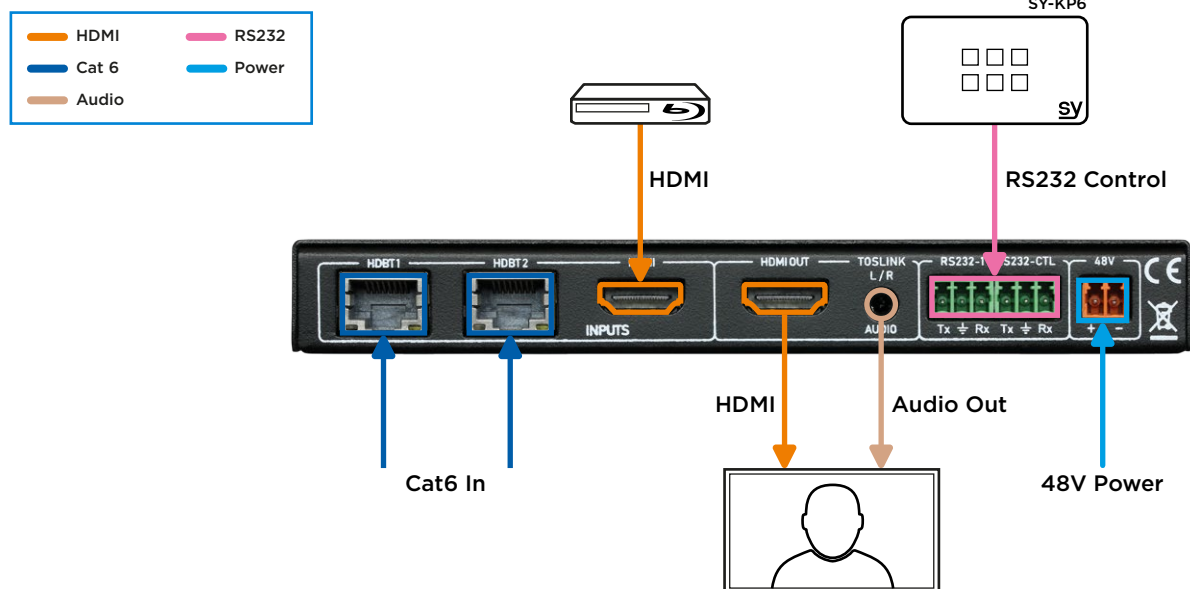
The MFS31-H 3x1 Multi Input Switch is a versatile AV switcher featuring 2x HDBaseT inputs and 1x HDMI 2.0 input, designed to simplify connectivity in commercial AV installations. The unit allows remote sources from other rooms or locations to be connected via HDBaseT, while providing a local HDMI input for convenient source connection. With support for iPOC (Intelligent Power over Cable) HDBaseT technology. Compatible SY HDBaseT transmitters can be connected and powered directly from the switcher, enabling video transmission up to 70m at 1080p or 40m at 4K over a single Cat cable. The selected source is then routed to a single HDMI 2.0 output, supporting resolutions up to 4K60 4:4:4.

The MFS31-H provides advanced signal management features including automatic or manual switching, EDID management, HDCP control, 4K downscaling, audio de-embedding, CEC control and comprehensive diagnostics, making it ideal for use in education, corporate, digital signage, meeting rooms and professional AV environments. Built-in diagnostic tools, including HDBaseT link monitoring, cable length measurement, signal analysis and temperature monitoring. This provides installers with the information required for efficient setup, commissioning and ongoing system maintenance.

FEATURES

- 2x iPOC HDBaseT inputs
- HDBaseT transmission up to 70m @ 1080p/40m @ 4K
- 1x HDMI 2.0 input and 1x HDMI 2.0 output
- Supports 4K60 4:4:4 video
- Auto or manual switching
- Colour space and resolution downscaling
- EDID management
- HDCP control
- Audio de-embedding
- 12 pattern test generator
- Video Keep Alive (VKA)
- HDMI HPD toggle control
- CEC control
- Bi-directional RS232 control
- Full on-board diagnostics
- Temperature monitoring and safety shutdown

CONNECTIVITY ILLUSTRATION



SPECIFICATIONS

PART NUMBER	SY-MFS31-H	
VIDEO RESOLUTIONS/FORMATS	All HDMI resolutions up to 3840x2160P @ 60Hz 4:2:0 (10.2Gbps)	
BANDWIDTH	HDMI Input: 18Gbps HDMI Output: 18Gbps HDBT Input: 10.2Gbps	
HDCP	Compatible with all versions up to 2.2v	
COLOUR SPACE	RGB, YCbCr 4:4:4, 4:2:2, 4:2:0	
COLOUR DEPTH	8/10/12bit	
HDMI STANDARD	2.0	
AUDIO FORMATS	2.0/5.1/7.1 channel LPCM, Dolby, AC3, DTS	
HDR	HDR (10, 12) and HBR supported	
INPUTS	Video 2x HDBaseT 4K60 4:2:0, 4K30 4:4:4 inputs 1x HDMI 2.0 4K60 4:4:4 input	
OUTPUTS	Video 1x HDMI 4K60 4:4:4	Audio Analogue: L/R 3.5mm Stereo Jack: 20Hz - 20kHz, 1.5Vrms Max Mini-Toslink: Supports all de-embedded digital formats
CONTROL	RS232 for control of unit RS232 bypass terminals for control system	
POWER SUPPLY	48V DC 0.5A	
OPERATION TEMPERATURE	-0 - 40°C	
STORAGE TEMPERATURE	-20 - 60°C	
OPERATING HUMIDITY	20% to 90%, relative humidity, non-condensing	
WEIGHT AND DIMENSIONS	Weight (net) 0.5kg	Size (WDH) 163 x 90 x 20mm (excluding connectors)
WHAT'S IN THE BOX	1x SY-MFS31H 2x 3 pin female captive screw connector 1x PSU 1x User manual	

REGULATORY COMPLIANCE



SY-MFS31-H Data Sheet 01. Details subject to change with no prior notice. ©SY Electronics 2026