

MP-SC-21CODEC

PRODUCT SPECIFICATION SHEET 18G 2×1 Presentation Switcher with Soft Codec and CEC



Product Overview

The MP-SC-21CODEC is an HDMI 2.0 presentation switcher designed to switch one HDMI input or one USB-C input to a single HDMI output. It supports video resolutions up to 4K×2K@60Hz 4:4:4 8-bit, HDR 10 and HDCP 2.2, while providing automatic or manual source selection.

The unit also provides balanced analog audio de-embedding and USB connectivity for host and HID peripherals such as cameras, microphones and keyboards. CEC and RS232 control enable convenient display and third-party device control.

Key Features

- 18G 2×1 presentation switcher with HDMI and USB-C inputs.
- Supports automatic switching as well as front-panel and RS232 control.
- HDMI 2.0; up to 4K×2K@60Hz 4:4:4 8-bit; HDR 10; HDCP 2.2.
- USB-C supports video transmission and charging up to 40W.
- USB 3.0/2.0 data support with one HOST port and two DEVICE ports.
- Balanced stereo analog audio output for HDMI audio de-embedding.
- Smart EDID management with fixed and user-defined EDID options.
- CEC display control for power, mute and volume functions.

Application Highlights

Presentation Rooms Connect laptop/HDMI and USB-C sources to one display.	Video Conferencing USB host/device connectivity for camera and microphone workflows.
Meeting & Collaboration Automatic source switching simplifies day-to-day operation.	AV Integration CEC and RS232 provide display and third-party device control.

At-a-Glance

Video Inputs	1 × HDMI, 1 × USB-C
Video Output	1 × HDMI
Maximum HDMI Resolution	4K×2K@60Hz 4:4:4 8-bit
USB-C Input Resolution	Up to 4K×2K@30Hz 4:4:4
Bandwidth	18Gbps
Audio	Balanced Stereo L/R de-embedded output
Control	Front panel, RS232, CEC, EDID
Power	24V DC, 2.71A adapter; 54W max consumption

Source: MP-SC-21CODEC User Manual, version MP-SC-21CODEC_2019V1.2. Specifications and functions are reproduced from the supplied manual.

Detailed Technical Specifications

VIDEO	
Video Input	1 × HDMI; 1 × USB-C

Video Input Connector	1 × Type-A female HDMI; 1 × Type-C USB
HDMI Input Resolution	Up to 4K×2K@60Hz 4:4:4 8-bit
USB-C Input Resolution	Up to 4K×2K@30Hz 4:4:4
Video Output	1 × HDMI
Video Output Connector	1 × Type-A female HDMI
HDMI Output Resolution	Up to 4K×2K@60Hz 4:4:4 8-bit
HDMI Version	2.0
HDCP Version	2.2
USB Version	3.0
HDR 10	Supported
CEC / HPD	Supported
AUDIO	
Audio Output	1 × AUDIO OUT — Stereo balanced L/R
Audio Connector	1 × 5-pin terminal block
HDMI Audio Format	LPCM 7.1, Dolby Atmos®, Dolby TrueHD, Dolby Digital Plus, DTS:X™, DTS-HD Master Audio™ pass-through
Stereo Audio Format	PCM
Maximum Output Level	2.0Vrms ± 0.5dB
THD+N	<0.05% (-80dB), 20Hz–20kHz bandwidth
SNR	>80dB, 20Hz–20kHz bandwidth
Crosstalk Isolation	>70dB @ 10kHz
Frequency Response Deviation	<±0.5dB, 20Hz–20kHz
Output Load Capability	1kΩ and higher
Stereo Channel Separation	>70dB @ 1kHz
CONTROL & USB	
Control	1 × EDID, 1 × FW, 1 × RS232, 1 × HOST, 2 × DEVICE
Control Connectors	4-pin DIP switch, Micro-USB, 3-pin terminal block, Type-B USB 3.0, 2 × Type-A USB 3.0
USB-C Charging	Up to 40W
GENERAL	
HDMI 2.0 Cable Length	4K@60Hz 4:4:4 ≤5m; 4K@60Hz 4:2:0 ≤10m; 1080P ≤15m
Operating Temperature	–10°C to +55°C
Storage Temperature	–25°C to +70°C
Relative Humidity	10% to 90%
Power Supply	Input: AC 100–240V, 50/60Hz; Output: 24V DC, 2.71A
Power Consumption	54W maximum
Dimensions (W×H×D)	168.0 × 24.5 × 95.0mm
Net Weight	245g

Interface & Control Summary

Front Panel	Input selection, AUTO mode, display ON/OFF, mute, volume +/-, EDID DIP switch, firmware port
Rear Panel	HDMI IN, USB-C IN, HDMI OUT, balanced AUDIO OUT, RS232, USB HOST, 2 × USB DEVICE, DC 24V
Auto Switching	Selects newly detected input; switches to the other active input when the current source is removed
RS232	9600 baud default; 8 data bits, 1 stop bit, no parity; configurable baud rates
EDID	Pass-through, fixed built-in profiles and five user-defined EDID memories

Package Contents: MP-SC-21CODEC switcher, 2 × mounting ears with 4 screws, 4 × plastic cushions, 5-pin terminal block, RS232 cable (3-pin terminal block to DB9), power cord, 24V DC 2.71A power adapter and user manual.

Note: The supplied manual states that functions and parameters may change without notice. Always refer to the latest manufacturer/distributor documentation for current specifications.