

# SD-MB-01

## 4K Magic Box



## Overview

SD-MB-01 Magic Box is a multifunctional, advanced audio and video processor. It can operate as a signal generator, delivering up to 30 distinct test pattern signals — ideal for video calibration and troubleshooting.

Equipped with a built-in scaler, the SD-MB-01 supports both upscaling and downscaling to custom resolutions, enabling output at virtually any resolution or frame rate within the 4K range. The scaler also supports video source rotation at 0°, 90°, 180°, or 270° angles.

For video input management, the SD-MB-01 allows customized EDID configuration via DIP switches or RS232 command lines, providing flexible compatibility with various display setups.

In addition, it features audio embedding at the HDMI input and de-embedding at the HDMI output, making it a powerful tool for integrated AV workflows.

## Key Features

- Support Signal Generation
- Support output resolution customisation
- Support input EDID management
- Support up and downscale
- Support signal cropping
- Support customised output signal window size
- Support customised output signal window position
- Support signal rotation of 90/180/270
- Support audio embedding
- Support audio de-embedding
- Support customised preset layouts
- Support HDMI1.4、HDCP1.4、HDMI2.0、HDCP2.2
- Support up to 4K@60Hz for both input and output
- Support multiple control methods, including front panel buttons, IR remote and the RS232 control
- Support USB upgrading

## Specifications

Video	
<b>Input port</b>	1* HDMI2.0
Input resolution	Up to 3840*2160@60Hz
<b>Output port</b>	1* HDMI2.0
Output resolution	Up to 3840*2160@60Hz
Audio	
Input port	1x HDMI, 1*3.5mm Analog
Input audio signal	RAW PCM, 16 bit, 32/44.1/48KHz sps; PCM 2.0
Output port	1* HDMI2.0, 1* Analog Audio(3.5mm audio)
Output audio signal	RAW PCM, 16 bit, 32/44.1/48KHz sps; PCM 2.0
Control	
Front control	Rotate
IR	IR remote controller (Not included in package)
RS232	3-pin Phoenix
Others	
Operating temperature	0 to +45 C (32 to + 113 F)
Storage temperature	-20 to +70 C (-4 to + 158 F)
Humidity	10% to 90%
Warranty	2 years
Power adapter	DC 12 V 1.5 A
Power consumption	10W(Max)
Product size(mm)	138*85*28
Net Weight	0.5kg

## System Diagram

