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**MMIO DEMUX-HDSDI-4AES** 3G/HD/SD Signal & AES Audio De-embedder

**User manual V1.0**



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## Revision Status

Rev Date	Description
Dec. 17, 2013	Initial release of the MMIO DEMUX-HDSDI-4AES User Manual Firmware V1.0

# MMIO DEMUX-HDSDI-4AES

## I Description

MMIO DEMUX-HDSDI-4AES is a kind of de-embedder based on Mini-Box chassis. It can extract four AES digital audio signal from a single serial digital signal. It supports SD-SDI, 1.5 Gbps HD-SDI and 3.0 Gbps HD-SDI for inputs and outputs.

MMIO DEMUX-HDSDI-4AES supplies real-time input signal status indicator and power indicator which make it convenient to monitor. The de-embedded audio channel can be selected through DIP Switch.

MMIO DEMUX-HDSDI-4AES is easy to install, and can be widely used in broadcasting system, studios and other professional audio fields.

## II Features

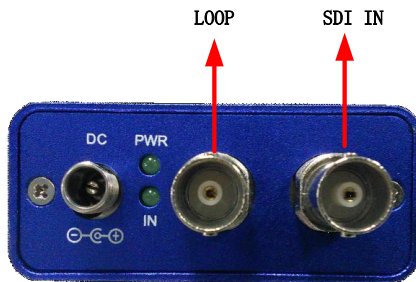
- ✧ 4 AES digital audio signal extracted from a single serial digital signal
- ✧ Inputs and outputs for SD-SDI, 1.5Gb/s HD-SDI and 3.0Gb/s HD-SDI
- ✧ Support self-definition de-embedded audio channel via DIP Switch
- ✧ All audio interfaces adopt 3-PIN connector, balanced output
- ✧ Supply real-time input signal status indicator and power indicator
- ✧ Support bypass function with power on

### III MMIO DEMUX-HDSDI-4AES interface display

#### 3.1 Overview



#### 3.2 Right panel



**DC IN:** 12V 1A

**PWR:** Power indicator, when the power works normally, the indicator shows green.

**IN:** Input signal indicator, when the input signal is correct, the indicator shows green.

**3G/HD/SD IN:** BNC interface, digital signal input with embedded audio, support the SD-SDI, HD-SDI, and 3G-SDI.

SD: 525i 60, 625i 50

HD: 720p 50Hz/59.94Hz/60Hz

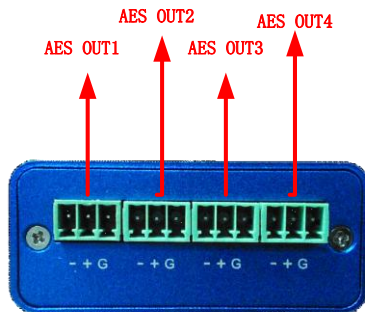
1080i 50Hz/59.94Hz/60Hz

1080p 23.97Hz/24Hz/25Hz/29.97Hz/30Hz

1080p 50 Hz/59.94Hz/60 Hz

**LOOP:** BNC interface, support bypass SDI input with power on.

### 3.3 Left panel



**AES OUT1 & AES OUT2 & AES OUT3 & AES OUT4 :** 3pin interface, 4 AES digital audio signal output.

### 3.4 Front panel



**MODE SET:** DIP Switch, users can set DIP position to achieve more functions, the DIP specific

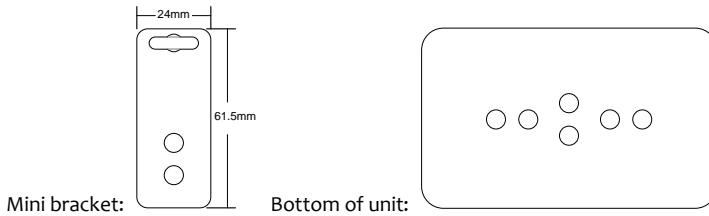
meaning as following:

DIP Switch		1	2	3	4	5	6	7	8	9	10
Select de-embedded audio channel	Silence	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	G1 &G2	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	G3 &G4	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	G2 &G3	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	G1 &G4	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
	G1 &G3	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
	G2 &G4	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF

**Note:** Power switch UP=OFF DOWN=ON

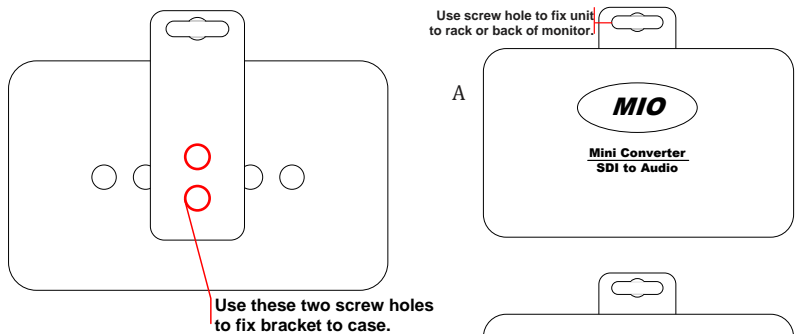
## IV Installation Guide

The unit is equipped with mini mounting bracket. And there are several screw holes on the bottom of unit for installing the mini bracket. Please see the pictures below.

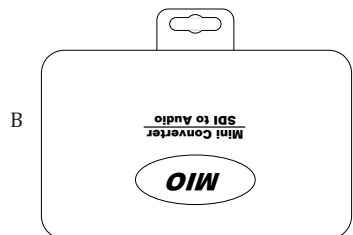


There are several ways to fix this bracket to case. According the direction of connection, you can choose one appropriate way to fix it.

Fix the bracket vertically like this:

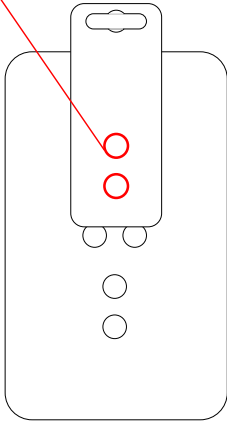


Fix the bracket horizontally like thiSs:

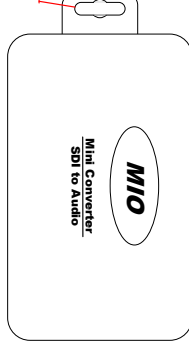




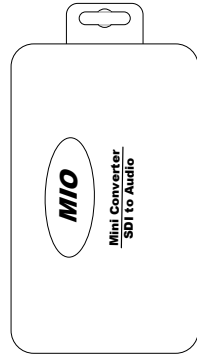
Use these two screw holes  
to fix bracket to case.



A  
Use screw hole to fix unit to  
rack or back of monitor.



B



## V Technical specification

### Digital video input:

Input interface: 1\*HD/SD-SDI, BNC connection  
Impedance: 75Ω  
Format: SMPTE-259M-C; 270Mb/s  
SMPTE-292M; 1.485Gps  
SMPTE-425; 2.970Gps

### Analog audio Output:

Output interface: 2\*3pin  
Impedance: 600Ω

### Digital video output:

Output interface: 1\*HD/SD-SDI LOOP, BNC connection  
Impedance: 75Ω  
Format: SD: 525i 60, 625i 50  
HD: 720p 50Hz/60Hz  
1080i 50Hz/60Hz  
1080p 24Hz/25Hz/30Hz  
1080p 50 Hz/60 Hz  
SMPTE 259M-C; 270Mb/s  
SMPTE-292M; 1.485Gps  
SMPTE-425; 2.970Gps  
Level: 800mV±10%  
Rise time/Fall time: ≤270PS (20%-80%) (HD)  
750~1500PS (20%-80%) (SD)  
Jitter: <0.2UI (100 kHz)

**Status indicator:**

Input signal status indicator

Power indicator

(Indicate by shining or extinguishing of the green LED)

**Power consumption:**

Power: 12VDC 1.5A

Dimension: 123mm\*92mm\*29mm

## V Contact

Technical support

Tel: 010-58858188

Fax: 010-58858189

Website: [www.gefei-tech.com](http://www.gefei-tech.com)

E-mail: [swang@gefei-tech.com](mailto:swang@gefei-tech.com)

Address

Beijing Gefei Tech. Co., Ltd

A-603 Power Creative Plaza

NO.1 Shangdi E.Rd.

Haidian District Beijing 100085

*To find more information, please visit [www.gefei-tech.com](http://www.gefei-tech.com)*