

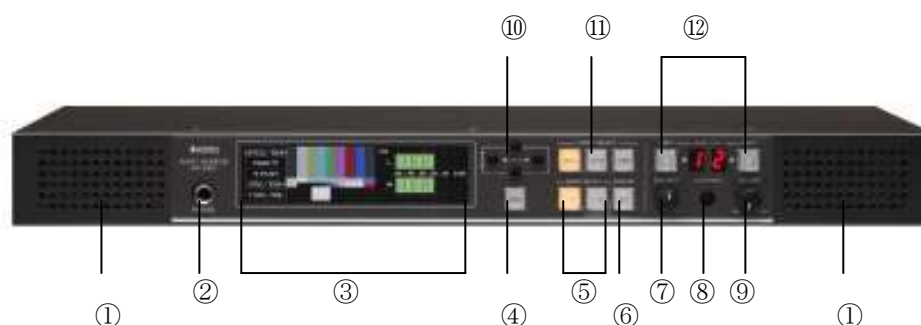
## 3G/HD/SD-SDI Audio Monitor AM-3800 Data Sheet

AM-3800, professional broadcasting audio monitor has audio de-embedded function from 3G/HD/SD-SDI input signal, then output to built-in L/R speaker, headphone jack and AES/EBU. High resolution LCD makes it possible to display nine ways of audio information such as level, VU, peak, frequency spectrum and so on.

5.1ch surround sound is able to be monitored with down mixing.

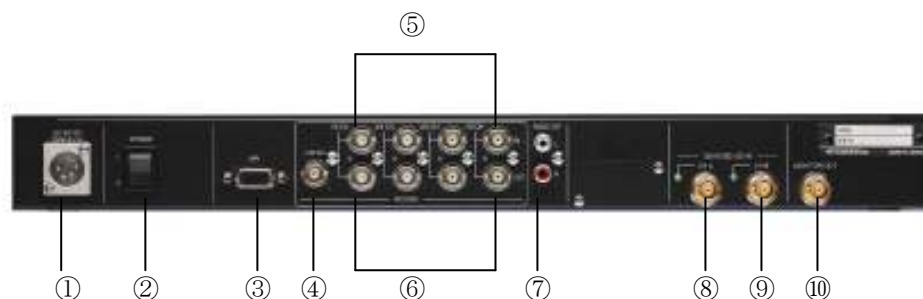
It is suitable for audio signal monitoring at any place in broadcasting studios.

### Front view



- |                         |                               |
|-------------------------|-------------------------------|
| ① Speaker               | ⑦ Audio L/R balance knob      |
| ② Stereo headphone jack | ⑧ LCD Brightness adjust knob  |
| ③ LCD                   | ⑨ Audio volume knob           |
| ④ Menu button           | ⑩ Cursor button               |
| ⑤ Group select button   | ⑪ Input select button         |
| ⑥ Down mix button       | ⑫ Audio channel select button |

## Rear view



- |                        |                             |
|------------------------|-----------------------------|
| ① DC input connector   | ⑥ AES/EBU output            |
| ② Power SW             | ⑦ Analog audio output (RCA) |
| ③ GPI interface        | ⑧ 3G/HD/SD-SDI input (CH A) |
| ④ AES/EBU output (L/R) | ⑨ 3G/HD/SD-SDI input (CH B) |
| ⑤ AES/EBU input        | ⑩ Monitor output            |

## Features

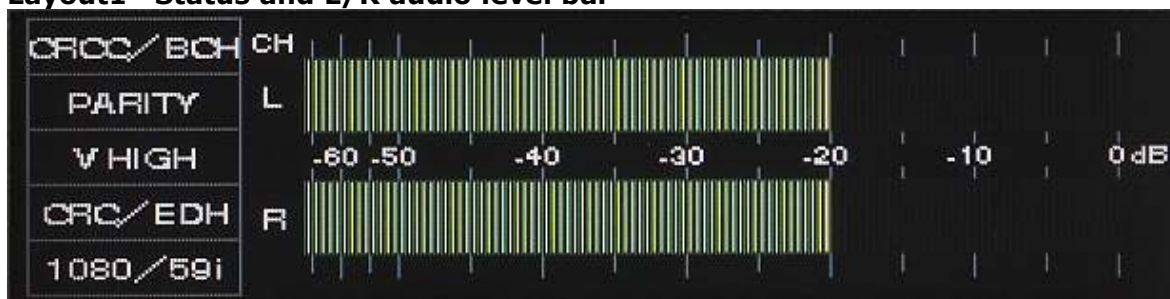
- Audio de-embedded from selected SDI input up to 16 channels
- 5.1ch to L/R down mix to support ISO/IEC 13818-7 and ARIB STD B-21
- High resolution LCD for level, VU, peak, phase, frequency spectrum and video
- 3G-SDI input out output capable
- Preset data save and load (preset 1 and 2)
- GPI for remote control
- Smart and compact, 1U size
- DC power operation, 10 to 18V

## Specifications

<b>Input</b>	unbalanced AES/EBU	4 pairs
	3G/HD/SD-SDI	2ch
<b>Output</b>	unbalanced AES/EBU	4 pairs +1 pair (speaker out)
	Analog RCA	L/R (speaker out)
	3G/HD/SD-SDI	1ch (monitor out)
<b>Signal</b>	Embedded audio	SMPTE299M/272M
	3G-SDI	SMPTE424M
	HD-SDI	SMPTE292M
	SD-SDI	SMPTE259M
<b>Format</b>	HDTV	1080i60/59.94/50
		1080p60/59.94/50/30/29.97/25/24/23.98
		1080sF30/29.97/25/24/23.98
		720p60/59.94/50/30/29.97/25/24/23.98
	SDTV	525i60/59.94
		625i50
<b>Control</b>	GPI	D-Sub 15pin
<b>Display</b>	LCD	320dots x 96 lines
<b>General</b>	Voltage	DC12V(10-18V)
		4pin male Cannon XLR connector
	Power consumption	15W
	Operating temperature range	0 to 40°C
	Operating humidity range	30 to 80%RH (no condensation)
	Dimensions	430(W)×44(H)×148(D)mm (1U size:excluding projected parts)
	Weight	Approx. 2.2kg

## LCD View

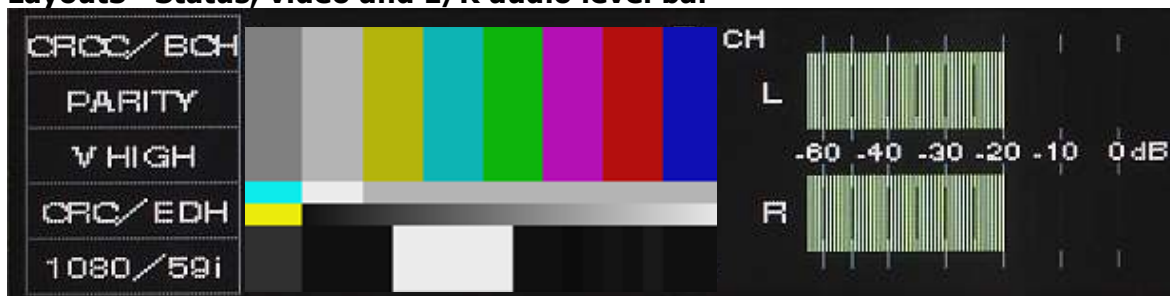
**Layout1 Status and L/R audio level bar**



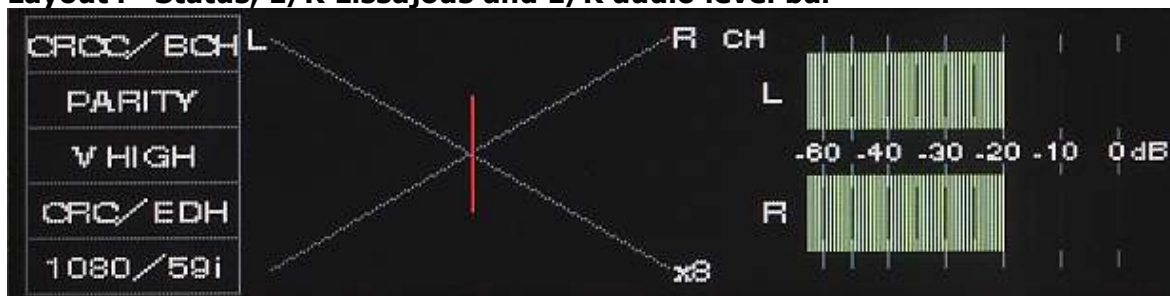
**Layout2 Status and 1-8ch audio level bar**



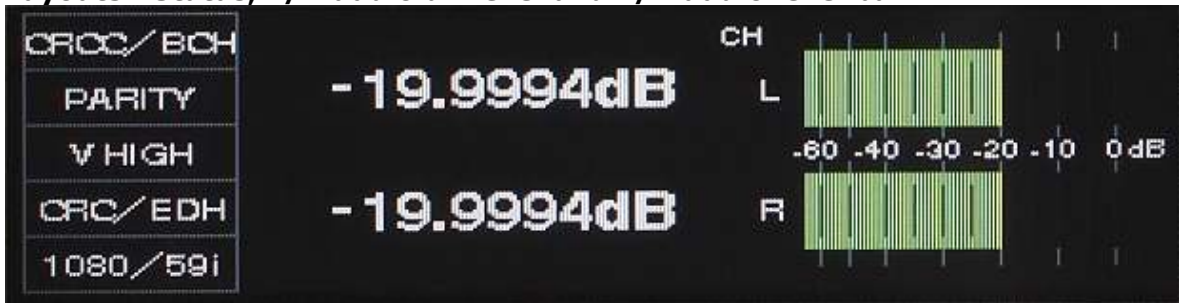
**Layout3 Status, video and L/R audio level bar**



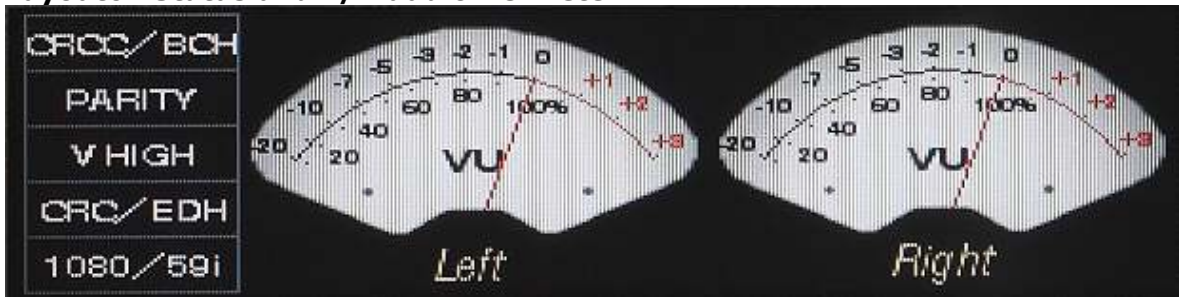
**Layout4 Status, L/R Lissajous and L/R audio level bar**



**Layout5 Status, L/R audio dB level and L/R audio level bar**



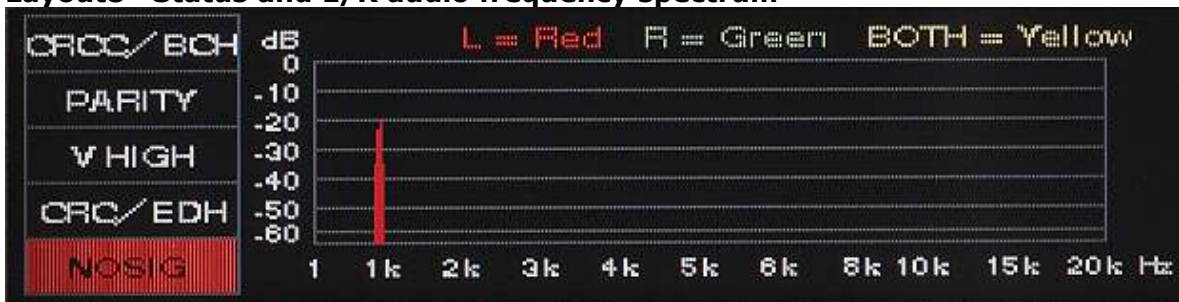
**Layout6 Status and L/R audio VU meter**



**Layout7 Status and L/R audio Peak meter**



**Layout8 Status and L/R audio frequency spectrum**



**Layout9 Status and L/R audio peak level**



## Operation

### Layout select



Push layout button (either left side or right side) to select LCD layout between 1 to 9.

### Input select



Push SDI-A button to select SDI CH A input.  
Push SDI-B button to select SDI CH B input.  
Push AES button to select AES/EBU input.

### Channel select



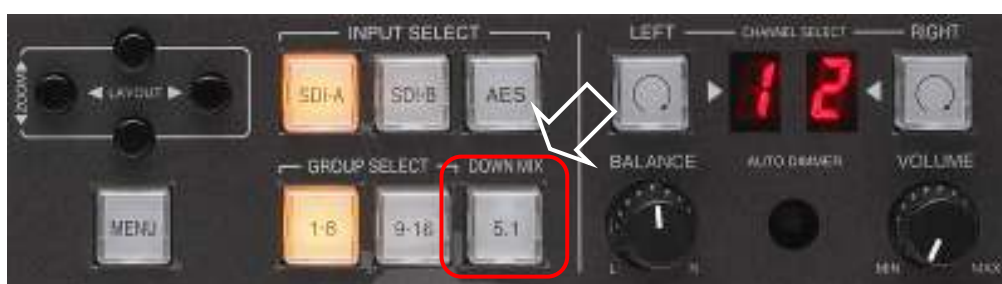
Push LEFT (or RIGHT) button repeatedly to select desired audio embedded channel from Ch1 to 8 (or from Ch9 to 16 when Group 9-16 selected).  
Selected channel number is displayed at 7-seg LED.

### Group select



Push 1-8 (or 9-16) button to select desired audio embedded channel group.

### Down mix



Push 5.1 button for down mixing, following down mixing matrix set in advance (See DOWN MIX SEL).

### Balance



Rotate BALANCE Knob to adjust L/R audio balance.

## Volume



Rotate VOLUME Knob to adjust L/R audio output level.

## Selectable Parameter

### PEAK HOLD TIME

0.5/1.0/1.5/2.0sec (2.0sec as factory default)

### PEAK FALL TIME

0.3/0.6/0.9/1.2sec (1.2sec as factory default)

### VU RESPONSE TIME

100/200/300msec (300msec as factory default)

### REF LEVEL

-18/-20dBFS (-20dBFS as factory default)

### OVU REF LEVEL

+0/+4dBu (+4dBu as factory default)

### PEAK X-AXIS TIME

10/30/60/120sec (60sec as factory default)

### BRIGHT SEL

AUTO/MIN/1/2/3/4/5/6/7/8/9/MAX (AUTO as factory default)

### ANALOG BOOST

OFF/x2/x4/x8/x16/x32/x64/x128 (OFF as factory default)

### DOWN MIX L CH

1 to 8 (1 as factory default)

### DOWN MIX R CH

1 to 8 (2 as factory default)

### DOWN MIX C CH

1 to 8 (4 as factory default)

### DOWN MIX Ls CH

1 to 8 (5 as factory default)

**DOWN MIX Rs CH**

1 to 8 (6 as factory default)

**DOWN MIX SEL**

1 to 17 (1 as factory default)

**3G SAMPLING STRUCTURE1**

AUTO/4:2:2/4:4:4 (AUTO as factory default)

**3G SAMPLING STRUCTURE 2**

AUTO/YPbPr/RGB (AUTO as factory default)

**3G PIXEL DEPTH**

AUTO/10bit/12bit (AUTO as factory default)

**3G ANC LINK**

LINK A/LINK B (LINK A as factory default)

**LAYOUT1 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT2 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT3 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT4 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT5 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT6 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT7 DISPLAY**

ON/OFF (ON as factory default)

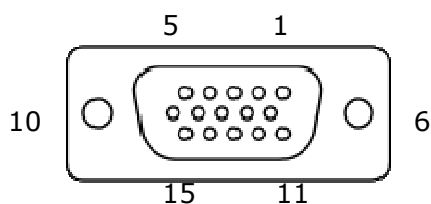
**LAYOUT8 DISPLAY**

ON/OFF (ON as factory default)

**LAYOUT9 DISPLAY**

ON/OFF (ON as factory default)

## GPI



<u>Pin number</u>	<u>Item</u>	<u>Function</u>
1	GND	GND
2	SDI-A ch	Select SDI-CH A input
3	SDI-B ch	Select SDI-CH B input
4	AES ch	Select AES/EBU input
5	GPI ENABLE	GPI active or inactive
6	GROUP 1-8 group	Select embedded audio GROUP 1-8
7	GROUP 9-16 group	Select embedded audio GROUP 9-16
8	1/2 ch	Select 1ch(L)/2ch(R) audio output
9	3/4 ch	Select 3ch(L)/4ch(R) audio output
10	5/6 ch	Select 5ch(L)/6ch(R) audio output
11	7/8 ch	Select 7ch(L)/8ch(R) audio output
12	DOWNMIX	Select down mix output
13	PRESET1 DATA LOAD	Call preset1 data
14	PRESET2 DATA LOAD	Call preset2 data
15	GND	GND