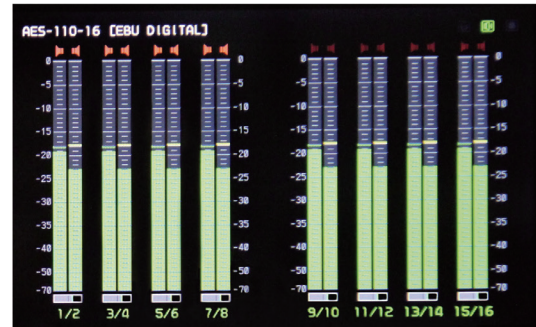


Examples of display picture

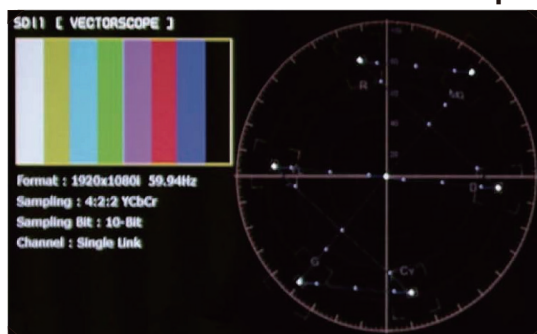
5" Video Screen



16ch Audio Level Meter



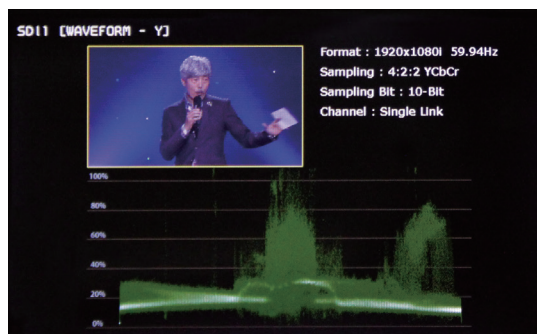
Waveform & Vector Scope



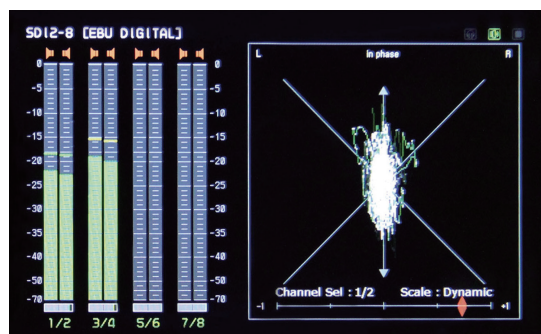
Audio Loudness (LKFS/LUFS)



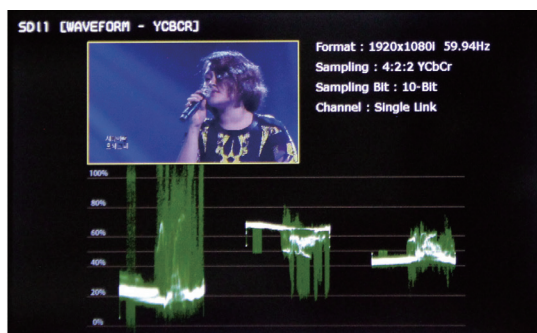
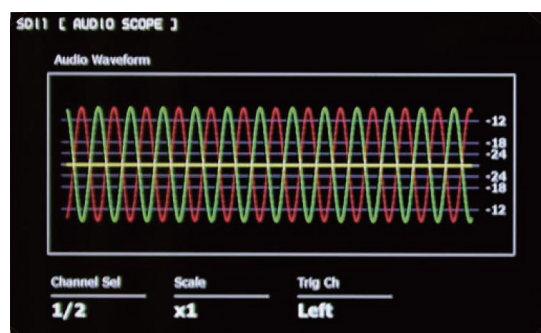
Waveform - Y



X-Y Vector & 8ch Level



Waveform - YCBCR

Audio Waveform
(Phase Error Check & Audio Speaker Alarm)



VHDM-4216G

VHDM-4216G can monitor and analyze all of 3G/HD/SD-SDI, Dolby E, Dolby Digital(AC3), AES/EBU and Analog audio. On dual 2.4-inch LCD screens, it's easy and convenient to monitoring and set LKFS, Alarm, Speaker, Level meter scale, Phase and so on. So all users can experience high-quality performance.

Features

- Audio Loudness(LUFS/LKFS) Monitoring
 - Phase(Stereo Graphic), Loss of Input, Silence Audio Error*
 - Speaker Alarm on error*
 - LKFS Alarm function*
 - Ability to monitor all kinds of audios (Dolby-E, AC3,3G/HD/SD-SDI embedded audio, Digital AES/EBU, Analog audio, etc)
 - 2CH 3G/HD/SD-SDI preset based audio de-embedder(16CH)
 - 2CH Dolby-E and Dolby digital(AC3) decoder*
 - 8CH AES/EBU digital(unbalanced 75 Ohm and balanced 110 Ohm) audio
 - 8CH Analog audio*
 - Dual 5.0" TFT-LCD, Display Resolution 800x480
 - Graphic Audio 16CH Level Meters 70 Segment
 - Audio Level Meter Scale : SMPTE Digital, EBU IRT, BBC, SMPTE IRT, FRANCE VU, NORDIC, SMPTE VU, EBU Digital, Expanded DIN, EBU, EBU VU, DIN
 - Phase-correlation LCD display, Speaker Alarm and Audio Phase reversal detection
 - Signal Audio Multi Monitoring(SDI, Dolby, AES/EBU and Analog)
 - Premium quality drivers and power amplifiers
 - High quality production processing, not a simple monitoring
 - User-friendly button designed on the front panel
 - Left/Right Power Speaker(8 Ohm 5W), Left/Right woofer Speaker(8 Ohm 10W)
 - Audio Phase Correlation LCD Display and Signal Alarm
 - Video Waveform, Vector, Audio/Video Status Monitoring
 - High sensitivity headphone jack
 - System Controlled by SNMP*
 - 19" standard rack mountable(2RU)
- * is optional.

Audio Monitor										
VHDM-4216G	Channel	Rack SIZE	3G	HD/SD -SDI	Dolby	AES /EBU	Analog	LKFS /LUFS	PHASE	Stereo Phase
	16	2RU	√	√	√	√	√	√	√	√
	Level Meter	Premium AMP	Signal Alarm	Graphic Mon	Video -LCD	A/V Status	WFM /Vector	SNMP/ Ethernet	Voice Memory	Speaker Alarm
	√	√	√	√	√	√	√	√	√	√



Back

3G/HD/SD-SDI, Dolby, AES/EBU, Analog Audio Input/Output

- 3G/HD/SD-SDI embedded audio input
- 3G/HD/SD-SDI output (16ch de-embedder)
- Independent Dolby-E input*
- Compatible with Dolby digital(AC3) input*
- Dolby-E, AC3 Decoder output(AES/EBU 1/2~7/8, Down mix, Aux)*
- 8ch digital(AES/EBU) audio input (75 Ohm unbalanced)
- 8ch digital(AES/EBU) audio input(110 Ohm balanced)
- 8ch digital(AES/EBU) audio output (75 Ohm unbalanced)
- 8ch digital(AES/EBU) audio output(110 Ohm balanced)
- 8ch analog audio input (balanced)*
- 8ch analog audio output (balanced)*
- 2ch program audio output (balanced-XLR)
- Ethernet (SNMP : TCP/IP)*
- RS-422 remote control

• * is optional.

Specifications

3G/HD/SD serial video input

Standard	SD,HD and 3G-SDI: SMPTE 292M, SMPTE 259M, SMPTE 424M
Number of input	2
Connector	BNC
Equalization	Typical maximum equalized length of 5C cable: 90m at 2.97Gb/s, 120m at 1.485Gb/s, and 250m at 270Mb/s
Return loss	> 15dB up to 1.5GHz

AES/EBU audio input (Dolby E, AC3)

Standard	SMPTE 276M for single ended synchronous or asynchronous PCM/AES
Number of input	2
Connector	BNC or add-on bus
Sampling rate	48 kHz Synchronous
Impedance	75 Ohm
Level	0.2V to 1V nom

AES/EBU audio input

Standard	AES-1992 for balanced synchronous or asynchronous PCM/AES, SMPTE 276M for single ended synchronous or asynchronous PCM/AES
Number of input	75 Ohm : 8 / 110 Ohm : 8
Connector	BNC or D-sub
Sampling rate	32 kHz to 96 kHz
Resolution	24 bit
Impedance	75 Ohm or 110 Ohm
Level	0.2V to 1V nom for BNC, 2V to 7V for balanced operation

Electrical & Mechanical

Input voltage	100V - 240V AC
Frequency	50/60 Hz
Power	100W
Dimension	483X 88X 313 mm(WxHxD)
Weight	5.9Kg
Operating temperature	0°C to +40°C

3G/HD/SD serial video output

Standard	Same as serial video input
Number of output	2
Signal level	800mV nominal
DC offset	0V±0.5V
Rise/Fall time	135ps nominal
Overshoot	<10% of amplitude
Return loss	>15dB up to 1.5GHz(typ.) >10dB up to 3GHz(typ.)
Wideband jitter	<0.2UI

AES/EBU audio output & dolby digital(AC3), dolby E output

Number of output	75 Ohm : 4
Connector	BNC
add-on bus	1
Resolution	24 bit
Sampling rate	Sampling Rate 48KHz synchronous
Nominal I/O delay	1 frame

AES/EBU audio output

Number of output	75 Ohm : 8 / 110 Ohm : 8
Connector	BNC and D-sub 26pin
Resolution	24 bit

Analog audio input/ output

Type	Balanced analog audio
Number of input	8
Number of output	8
Input impedance	10K Ohm
In/out connector	D-SUB 26P Male/Female
Frequency response	±0.2dB(20Hz ~ 20KHz)
Total Harmonic distortion	0.05%(20Hz ~ 20KHz)
Signal-to-noise ratio	-75dB(20Hz ~ 20KHz)
Acoustic distortion	8%

Program and Monitor Line Output

Type	Balanced
Number of output	2
Out connector	XLR

Color TFT-LCD

Screen size	5 Inch TFT-LCD
Display resolution	800x480
Contrast ratio	400:1