

AUDIO MONITOR

LV 5837



AES / EBU

3U size
(half Rack)

* Specifications subject to change without notice due to product improvements.

Loudness Display **AES/EBU Digital Audio Signal Support**

GENERAL

The LV 5837 is an audio monitor designed for use with audio console and master monitoring. It measures AES/EBU audio signals.

It can display loudness measurements, level meters, Lissajous curves, surround sound fields, and audio status independently or in combination.

FEATURES

- **Equipped with 8 connectors (16 channels) of AES/EBU signal inputs**
The LV 5837 is equipped with 8 BNC connectors (16 channels).
- **Support for LPCM, DOLBY-E, DOLBY-DIGITAL, and DOLBY-DIGITAL Plus**
LPCM audio is supported as standard. DOLBY-E, DOLBY-DIGITAL, and DOLBY-DIGITAL PLUS can be supported with a Dolby module (a Dolby option).
- **Headphone output**
A 3.5 mm mini jack is available.
- **Support for various types of scales**
The LV 5837 supports dBFS, Nordic, BBC, and DIN level meter scales. The level scale for loudness measurements supports both absolute values and relative values in reference to a target level.
- **Wide variety of measurement features**
 - 1) Audio level meter and peak hold meter capable of showing measurements for up to 16 channels simultaneously
 - 2) Lissajous display capable of displaying Lissajous curves and correlation meters of any two channels
 - 3) Surround display capable of displaying Lissajous curves and surround sound fields of adjacent channels
 - 4) Status display capable of showing measurements for 16 channels simultaneously
 - 5) Loudness measurement in two measurement modes of the three available measurement modes: monaural, stereo, and 5.1 channel
 - 6) Chart display capable of showing the change in the short-term loudness values and long-term loudness values over time
 - 7) Logging of long-term loudness values with local time and time code information
 - 8) Channel status analysis display
 - 9) User bit display
 - 10) Metadata analysis display for DOLBY-E, DOLBY-DIGITAL, and DOLBY-DIGITAL Plus (Dolby option)

SPECIFICATIONS (LV 5837)

Audio Signal Input Connectors

Input Connectors: 8 BNC connectors, 16 channels
Supported Formats
Standard: LPCM
Dolby Option: DOLBY-E, DOLBY-DIGITAL,
DOLBY-DIGITAL Plus
Sampling Frequency: 32 k to 192 k
Quantization: 24 bits

Headphone Jack

Output Connector: 3.5 mm mini jack

Audio Level Meter

Display Method: Assign up to 16 audio channels to level meters
Audio Level Meter (Measurements Other Than Loudness)
Response Model: True-Peak, PPM-Typel, PPM-Typell, VU
Audio Level Meter (Loudness Measurements)
Response Model: Momentary, ShortTerm, Custom
Reference Level Range:
0 dBFS to 40 dBFS (1 dBFS steps)
Warning Level Range:
0 dBFS to 40 dBFS (1 dBFS steps)
Coloring:
Green up to the reference level
Yellow between the reference level and
warning level
Red at the warning level and higher

Peak Hold Meter

Response Model: True-Peak, PPM-Typel, PPM-Typell
Peak Hold Time: OFF or 0.0, 0.5 to 5.0 s (0.5 s or 1.0 s steps)

Meter Scale

Compliant Standards: dBFS, Nordic, BBC, DIN (measurements other
than loudness)
LKFS, LUFS, LK, LU (loudness measurement)
Dynamic Range:
dBFS 0 dBFS to -60 dBFS
Nordic 12 dB to -42 dB
BBC 7 dB to 1 dB
DIN 5 dB to -50 dB
LKFS (LUFS) 0 LKFS to -60LKFS
LK (LU) Value relative to the reference
level

Lissajous Display

Display Method: Displays an audio Lissajous waveform of the
two channels that you select
Channel Mapping: Specify 2 channels from among 16 channels
AGC Setting: Can be turned on and off
AGC Operating Range:
Operates in the range of 0 dBFS to -45 dBFS

Correlation Meter

Display Method: Displays the correlation coefficient between
the pair of signals assigned to the Lissajous
display using a value between -1 and 1

Surround Display

Display Method: Displays a graphical representation of a sound
field
Surround Formats: Stereo, 5.1ch
Channel Mapping: Assign channels to L,
R, C, LFE, Ls, and Rs as you like
Center Channel Format:
Normal, Phantom Center
AGC Setting: Can be turned on and off
AGC Operating Range:
Operates in the range of 0 dBFS to -45 dBFS

Status Display

Level Meter Numeric Display:
Displays audio levels using values based on
the assigned scale
Error Detection: Level-over, clipping, mute, silent, parity,
validity, CRC, Dolby CRC, frame location
Elapsed Time: Elapsed time from error count reset
Channel Status Bits
Display Format: Binary
Analysis Display Information:
Format, AudioData, Emphasis, SignalLock,
SampleFrequency, Reference, ChannelMode,
Resolution, Alignment, Origin, Destination,
TimeCode, CRC
User Bits
Display Method: Binary
DOLBY-E Metadata
Displayed Contents: Dolby-E CommonMetadataStatus
AC-3 MetadataStatus
AC-3 ExtendedBitstreamInfo
DOLBY-DIGITAL Metadata
Displayed Contents: AC-3 MetadataStatus
AC-3 ExtendedBitstreamInfo
DOLBY-DIGITAL Plus Metadata

Loudness Measurement

Measurement Modes: Monaural, stereo, 5.1
Channel Mapping: Assign channels to L, R, C, LFE, Ls, and Rs
as you like
Level Meter Display: Momentary, ShortTerm, LongTerm
Chart Display: Displays numerically the change in the
ShortTerm and LongTerm responses over
time.
Chart Display Time: 1 min, 4 min, 10 min, 30 min, 1 hour, 2 hours,
4 hours, 6 hours, 12 hours
Operation Modes: ARIB, EBU, ATSC, Custom
Custom Mode Settings:
BlockSize, Overlap, AbsoluteGating,
RelativeGating, TargetLevel
Operation Control: START/PAUSE key

Logging Feature

Function: Records detected errors or LongTerm
loudness values with timestamps
Recording Time: Records at 1-second intervals for 1 week
Recording Control: START/PAUSE key

Environmental Conditions

Operating Temperature: 0 to 40°C
Operating Humidity: 85 %RH or less (no condensation)
Operating Environment: Indoors
Operating Altitude: Up to 2,000 m
Overvoltage Category: II
Pollution Degree: 2

Power Supply:

10 to 18 VDC

Dimensions:

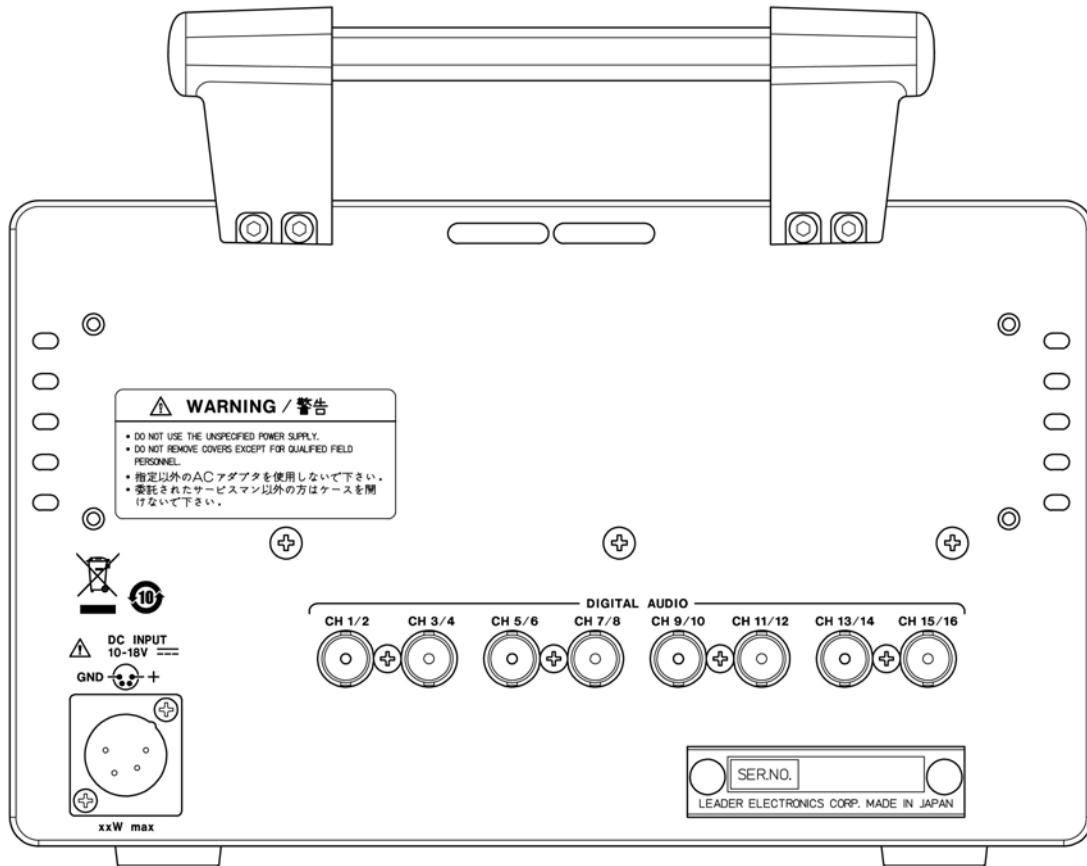
215 (W) × 128 (H) × 72 (D) mm (excluding
protrusions)

Accessories:

Instruction Manual 1
AC adapter..... 1

* The Dolby option is a factory option.
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(Dolby is a trademark of Dolby Laboratories.)

■ Rear Panel



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