



AM-2L In-Picture Audio Meter with Loudness Display



The Chromatec AM-2L is an in-picture and dedicated on-screen audio level meter for displaying two channels of analog or digital audio, together with a loudness meter*, in bargraph form.

The loudness meter section of the AM-2L has been designed following extensive quantitative and subjective tests including audience research. The audio signal is processed by level dependent and critical band filters providing an accurate means of displaying subjective loudness, enabling broadcasters better control of audio signals.

AES/EBU or analog signals may be displayed depending on the options chosen. Four bar groups, A, B, C & D can be assigned to display levels, sum & difference, sum only or loudness. A separate phase bar may be positioned at the top or bottom of the picture. A range of standard meter scales and their corresponding ballistics may be selected. When PPM scales are in use the VU meter (VU1 or VU2) may be superimposed in bar, split bar or block form so that both types of meter can be viewed simultaneously.

The meter is viewed on a dedicated video monitor using the AM-2L's internal background generator or superimposed on an external composite video signal.



A comprehensive on-screen menu may be displayed in order to select the parameters required and to set user defaults. Combined alarm facilities for no audio, over-level and sustained anti-phase are incorporated together with a separate alarm for loudness 'over', all with external TTL remote switching for a signal light and audible alarm. Separate on-screen indication of all alarms is provided together with an alarm counter for the loudness meter to indicate when it has been triggered up to five times when in the "timed latch" mode. A latching red marker above each level bar is also provided to indicate when the audio signal reaches the top of the scale. When operating in the digital domain data related to the incoming signal is displayed in the menu.

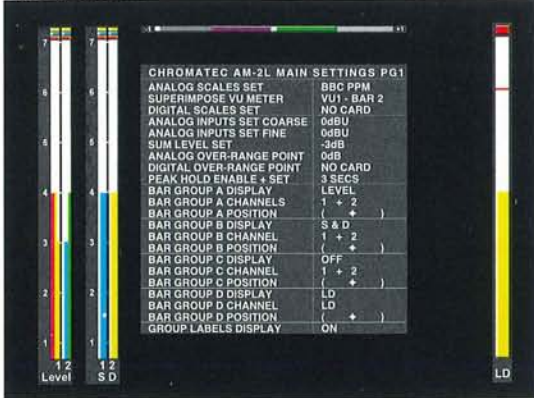
A connector is fitted to the rear panel duplicating the front panel button contacts, allowing remote control of all functions. The AM-2 is housed in a 1U rackmount case thereby occupying little space.

* Developed by Thames Television Ltd in conjunction with the Independent Television Commission and manufactured under licence. Thames Television are now a part of Pearson Television plc.

Level and loudness display with phase bar



On-screen menu



Level and Sum & Difference display with phase bar



Main Features:

- ◇ Two audio channels. Level, phase, sum & difference and loudness bars may be displayed together or individually.
- ◇ True, perceived loudness display.
- ◇ Option of AES/EBU digital or analog inputs, depending on the input card fitted.
- ◇ Meter information may be displayed on an internally generated black background or superimposed on an incoming composite video signal.
- ◇ Front panel insert on/off and fade controls allow adjustment of the mix level of the inserted information.
- ◇ A lock function prevents inadvertent operation of secondary controls.
- ◇ A full function on-screen menu may be displayed to set user preferences and defaults.
- ◇ A wide range of analog scales and ballistics may be user selected plus two AES/EBU digital scales when a digital input card is fitted.
- ◇ VU1 and VU2 meters may be superimposed on any PPM scale in bar, split bar or block form.
- ◇ All bar positions and colours may be user selected to suit individual requirements.
- ◇ AES/EBU status information is displayed in the menu when a digital card is fitted.
- ◇ Signal peak indicators together with peak store.
- ◇ Over scale indicators.
- ◇ Over level, no signal, sustained anti-phase & loudness 'over' alarms with remote switched output loudness alarm counter.
- ◇ Full or partial wired remote control facility.
- ◇ PAL or NTSC operation.



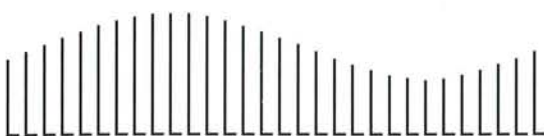
Loudness display only



Specification

Analog audio inputs	.....Electronically balanced
Input impedance	.....25kΩ
Digital audio input	.....AES/EBU with buffered loop-through
Frequency response	.....20Hz - 20kHz ±0.5dB
Video input/output	.....75Ω composite
Video standard	.....625 line PAL or 525 line NTSC
Meter characteristics & scales	.....BBC 1-7 + DIN type 1, +5 to -50dB
	.....Nordic +12 to -42dB + VU1, VU2 +3 to -20dB
	.....Extended VU +20 to -60dB + Digital 0 to -60dB + Extended Digital 0 to -80dB
Loudness meter	.....According to Thames Television specification
External control	.....Female 15 pin "D" type connector
Power requirements	.....110/230VAC, 30W
Dimensions482w x 330d x 45h
Weightapprox 4kg

Specifications subject to change without notice



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