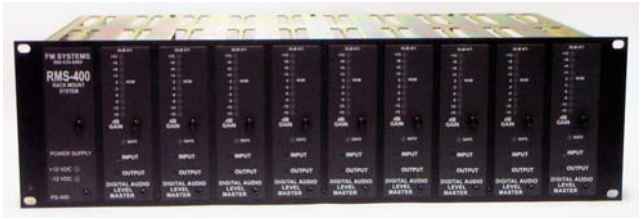
DLM 471



(MOUNTED IN RMS400 RACK PANEL)

Digital Stereo Audio Level Master

The DLM471 Digital Audio Level Master stabilizes AES-3id digital audio volume so that the level remains constant when the input level varies wildly. This product has both digital and stereo analog inputs and outputs that will correct audio level variations over a range of more than 30dB. This unit will control the encoded audio level on any AES-3id or S/PDIF compatible input signals.

It will lock to the incoming AES-3id digital audio sample rate when using a digital source, or if used with its analog input as an A/D converter, can internally generate crystal-stable 48 kHz or 44.1 kHz digital output. In A/D mode, the unit can also be configured to lock to an incoming digital input reference.

The DLM471 card uses transformer isolated input and output 75 Ohm BNC connectors for trouble-free interconnection. It can also be used with S/PDIF input and output signals to interface to compatible consumer equipment by using a low cost BNC to RCA adaptor.

The unit also has balanced analog audio input and output connections. It can serve as a D/A converter, since the analog outputs are active along with the digital output, and these stereo analog outputs can be used as additional outputs, for metering, monitoring or the main program feed. It can also serve as an A/D converter, since the analog inputs can be used to encode analog audio into digital AES-3id output signals.

The control system is program-dependent and is designed to minimize audible artifacts such as pumping, ducking on loud transients, or noise rush-up in pauses. This allows the digital audio Level Master to control the audio level without adding a sound of its own. The noise gate freezes the audio gain when the audio level subsides to prevent an increase of noise when the program is quiet. The unit controls the audio level without audible compression artifacts, so you get program audio that sounds natural without the annoying level variations. Recommended dialog normalization settings for downstream AC3 encoders are provided for trouble-free audio level set-up.

A ten LED display indicates the degree of gain control being exerted on the digital audio and a “Gate” LED lights when the gain control is frozen. This system will control the digital audio variations over a 32 dB range. An LED on the rear panel indicates the data input status.

The monitor/line analog audio output level is field programmable by jumpers on the PC Card. The monitor analog output level can be set for a balanced -4, 0, +4 dBm and also -10 dBm unbalanced.

The Digital Audio Level Master is a broadcast quality, automatic digital audio level control system, built for performance and reliability with the price and quality conscious audio professional in mind.

Each DLM471 card contains one digital stereo control system, and nine of these cards will fit into one RMS-400 mainframe. The RMS-400 mainframe will hold audio level control for up to 9 stereo channels in just 3 "RU" rack unit spaces.

INPUT **SPECIFICATIONS**

Digital Format	AES-3id or S/PDIF
Sample Rate	44.1KHz or 48KHz (Auto Detect)
Impedance (Digital)	75 Ohm (Unbalanced)
Digital Connector	BNC (Female) Transformer-isolated
Analog Audio Level	Left/Right Balanced Line Level
Analog Connector	Balanced Removable Screw Terminal

CONTROL SYSTEM

Audio Control Range	>32 dB
Gate	Program Dependent Gain Hold
Distortion	< 0.015 %THD
Signal-To-Noise	-95 dB, A-weighted, Typical
Input Level	Front Panel Adjustable

OUTPUT

Digital Format	AES-3id (1V P-P)
Sample Rate	44.1KHz or 48KHz (Auto or Select)
Impedance (Digital)	75 Ohm (Unbalanced)
Digital Connector	BNC (Female) Transformer-isolated
Digital/Analog Output Trim	Adjustable Front Panel +/- 3dB
Analog Level (Field Select)	-4, 0, +4dBm (-10dBm Unbalanced)
Analog Connector	Balanced Removable Screw Terminal

METERING

Level Control	Ten-segment Front Panel LED Meter
Gate	Front Panel LED Indicator
Digital Signal Lock	Rear Panel LED Indicator

MECHANICAL

Card Size	10.50"L x 5.00"H x 1.20"D
Racking Configuration	1 of 9 Spaces in RMS400 (3 RU)
Power Requirement	+/-12 VDC, 150mA (RMS-400)