# **LIMINATOR M2**

# CLASS A DUAL TRANSFORMER STEREO MASTERING COMPRESSOR

### **OWNER'S MANUAL**

www.airfieldaudio.com

Thank you for choosing Airfield Audio.

Our many years of specializing in tech service, custom build and modifications to high end studio and professional audio installations are now being expanded with an exciting new product. For the Airfield Audio Liminator M2 we have analyzed more than a dozen classic and vintage audio compressors, and have distilled the best of the best into this device. Your ears will love the sound of this unique analog processor.

Class A discrete transistor circuitry is used exclusively, with classic input and output transformers deployed as an important element of the design. In fact, a main feature of the Liminator M2 is the inclusion of 2 switchable input transformers per channel. Dual power supplies are incorporated for absolute minimum crosstalk and maximum stereo separation. All front panel controls as well as internal components have been selected for ruggedness and long life. We take pride in quality construction; all units are handcrafted with care, thoroughly bench tested, calibrated and burned in for 96 hours.

The Airfield Audio Liminator M2 exemplifies state of the art analog audio design, and delivers natural, musical characteristics to the mastering process.

For reasons not even science can fully explain, the best analog devices create a sonic magic that flows from the sound source into the human ear with the highest clarity and resolution. Airfield Audio is dedicated to this natural process. It sounds very very very yeary good.

#### **REAR PANEL VIEW**

IMPORTANT: SET THE MAINS SWITCH ON THE REAR PANEL TO THE CORRECT VOLTAGE.

Be certain that the unit has a ½ AMP fuse (115 VAC mains) or ¼ AMP fuse (230 VAC mains).

The INPUT and OUTPUT XLR connectors are Balanced Transformer Coupled, pin 2 hot.

Connect the supplied IEC power cable to the IEC mains socket on the rear panel. <u>USE ONLY A 3 PRONG GROUNDED POWER CABLE</u>. For safety reasons do not lift the ground on the power plug by using a 3 to 2 ground lift adapter.

Link Jack: connect a standard ¼" unbalanced guitar type cable or Y-cables. Should be used for multi-channel operation of three or more Liminator channels.

Turn on the unit and allow 30 minutes warm up.

	A B	С	D	Е	F	G	Н	I	J	
<b>A.</b>	THRESHOLD	This contr Fully cour	21 position detented variable adjustment.  This control determines the amount of gain reduction.  Fully counter-clockwise (ccw), gain reduction is off.  Fully clockwise (cw), gain reduction is at maximum.							
В.	ATTACK	5 position rotary switch, ccw: fastest, cw: slowest.								
C.	RELEASE	5 position	5 position rotary switch, ccw: fastest, cw: slowest.							
D.	RATIO	-	5 position rotary switch, select 1.2 (very gentle), 1.5 (gentle), 2 (moderate), 4 (medium) or 8 (heavy) compression.							
Е.	OUTPUT	21 position detented variable adjustment, ½ dB per step. This control determines the amount of gain make up. Fully ccw, audio is -4dB. Fully cw, gain is +10 dB.								
F.	LINK	This switch mixes channel control voltages for stereo operation. In down position, unit will operate as dual mono.				n.				
G.	T1/T2/ BYPASS	Select input transformer or Bypass. T1 (Jensen) is very clean and transparent. T2 (Sowter) sounds richer with more harmonics.								
Н.	S/C HPF	Side Chain	high pass	filter, 5	position	n rotary s	witch,			

Select Off, 40, 80, 160, 300 Hz.

- I. VU Select Output level or GR (gain reduction).
- **J. POWER** Power is On when switched up. Meters will illuminate.

# **SPECIFICATIONS**

**INPUT IMPEDANCE:**  $15K\Omega$ , Transformer Balanced, Pin 2 hot

**OUTPUT IMPEDANCE:**  $75\Omega$ , Transformer Balanced, Pin 2 hot

FREQUENCY RESPONSE: ± 0.25dB, 20 Hz to 20 kHz

- 2dB at 10 Hz, -2dB at 68 kHz with Transformer 1 - 2dB at 10 Hz, -2dB at 120 kHz with Transformer 2

NOISE: less than -80 dB, 20 Hz to 80 kHz, -92 dB typical below operating level

**DISTORTION:** less than .02% THD at unity gain, 4dBu input level

.1% THD at 24 dBu input level

**MAXIMUM OUTPUT:**  $+32 \text{ dBu into } 600\Omega$ 

**GAIN REDUCTION RANGE:** 0 ~ 10 dB

**CROSSTALK:** -89 dB @ 1KHz, + 4dBu signal level

ATTACK: 8, 18, 28, 40, 80 milliseconds, ratio dependent

**RELEASE:** .1, .3, .6, 2, 6 seconds

GAIN REDUCTION ELEMENT: LD1 forward biased optical resistive module

METER: dB Gain Reduction

dB Output (0VU = + 4dBu)

**POWER REQUIREMENTS:** 20 watts, 115 / 230 VAC, 50 / 60Hz

FUSE TYPE: slo-blo, ½ Amp for 115 VAC mains, ¼ Amp for 230 VAC mains

**DIMENSIONS:** 19" Rackmount 3U Chassis

**DEPTH:** 8" (200mm)

WEIGHT: 18 pounds (10 kg)

## WARRANTY AND REGISTRATION

Airfield Audio equipment is covered by a limited warranty against manufacturing defects in materials and craftsmanship for a period of two years from date of original purchase. Under the terms of this warranty, Airfield Audio Inc. will repair or replace the part or parts of the product which prove to be defective (except meter lamps, which are guaranteed for 6 months from date of purchase), provided the purchaser gives Airfield Audio prompt and satisfactory proof thereof.

If the equipment requires warranty repair, please contact your dealer or Airfield Audio by telephone, or email. The purchaser's sole remedy shall be to return the product to Airfield Audio, where the defect will be repaired at no charge for parts and labor. All returns to Airfield Audio require a return authorization number and must be in original packaging, shipped to Airfield Audio via insured freight at the owner's expense. Charges for transportation costs and damage in transit are not covered by this warranty. The equipment will then be returned via prepaid, insured freight, method and carrier to be determined solely by Airfield Audio.

Airfield Audio Inc. is not responsible for damage from abuse or for any claim including but not limited to property damage, loss of revenue, incidental or consequential damage of any kind whatsoever which may result from failure of this product.

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MODEL	SERIAL #
DUD CHA CE DATE	CLIDDLIED
PURCHASE DATE	SUPPLIER
OWNER	
ADDRESS	
ADDRESS	
EMAIL	