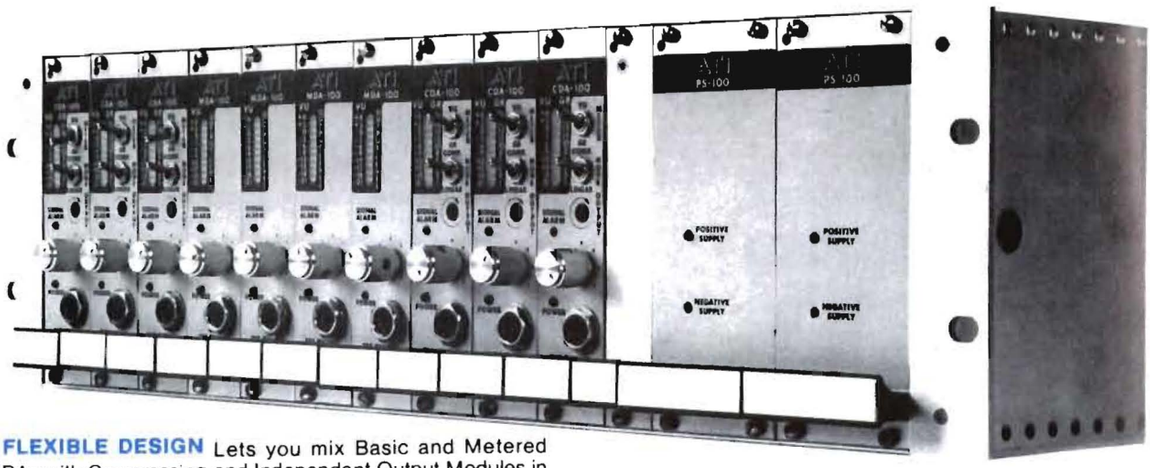
Micro Amp Series™

DA-10000

MODULAR DISTRIBUTION AMPLIFIER SYSTEMS

AUDIO TECHNOLOGIES INCORPORATED
Dedicated to sound engineering

Sound reasons to specify ATI



FLEXIBLE DESIGN Lets you mix Basic and Metered DAs with Compressing and Independent Output Modules in the same enclosure to optimize your system performance.

EFFICIENT PACKAGING Ten Amplifier Modules and two Power Supplies plug into a Eurocard Spec enclosure. You can assemble up to a 10 in by 60 out Distribution System in only 5-¼ inches.

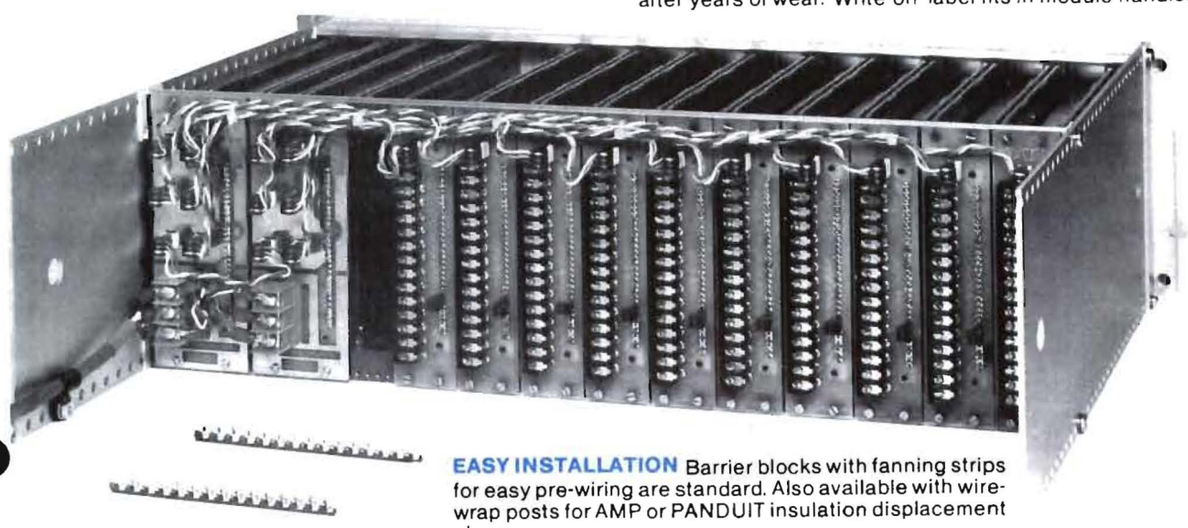
RF PROTECTED All input, output and power lines are fully by-passed. Double ground plane PC board shielding with an additional top formed shield cover on each module protect low-level circuitry from direct pick-up. AC line filtering and nonconcentric wound transformers prevent power line transient and RF feedthrough.

CLEAN AND QUIET Extremely low distortion, high slew rate design eliminates the irritating harshness of TIM distortion. Typical 100 db dynamic range is ideal for distributing digital satellite feeds.

RELIABLE BY DESIGN Dual Power Supplies share the load and provide complete back-up in case of failure. Dual AC inputs allow redundant input power back-up from separately fused AC lines. Power Failure Alarm contacts and status LEDs warn of problems. Each plug-in module is separately fused, regulated and short protected.

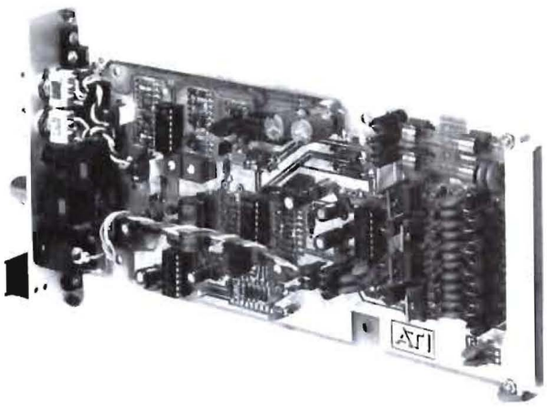
COOL OPERATION Distributed Power regulation on each amplifier module minimizes localized heat build-up in the power supplies. Module power components exposed for optimum convection cooling.

ATTRACTIVE AND SAFE Closed front panel design with reverse printed polycarbonate overlays looks great even after years of wear. Write-on label fits in module handle.



EASY INSTALLATION Barrier blocks with fanning strips for easy pre-wiring are standard. Also available with wire-wrap posts for AMP or PANDUIT insulation displacement plugs.

DA10000 Distribution Amplifiers



DA100
Basic One In, Six Out Distribution Amplifier.
Single power stage drives six active balanced outputs at +22dBm each. Split and by-passed build-out resistors give protection against shorts and RF. Balanced bridging input. Single panel level control sets all outputs. Headphone monitor jack.

MDA100
Metered One by Six Distribution Amplifier.
Adds a LED Bargraph VU Meter to the basic amplifier described above. Measures -21 to +6 VU with O VU adjustable for outputs from 0 to +18dBm. Signal Alarm indicator and output warns of dead channel.

CDA100
Compressing One by Six Distribution Amplifier.
Adds a Gated Compressor to the MDA100. Controls on inputs above -30dBm. Compression Slope adjustable up to 20:1. Input level sensor gates compressor gain recovery to prevent background noise build-up during program pauses. Meter is switchable to Output or Gain Reduction levels. Switchable linear amplifier mode.

IDA100
Independent Six Output Distribution Amplifier.
Six Transformer (-1) or active Balanced (-2) outputs Individual trimmers provided for each output along with a Master Level control. Headphone output.

MIDA100
Metered Independent Output Distribution Amplifier
Six Transformer (-1) or Active Balanced (-2) outputs with independent level controls. LED Bargraph meter switchable to all outputs.

Which is best in your system?

PS100 Power Module
A bi-polar unregulated 18 VDC supply drives the system power buss through fused isolation diodes. Operates singly or as a redundant pair in the right hand positions of each rack frame. Front panel LEDs indicate low voltage and blown fuses. Power Failure Alarm relay contacts close for any power loss and can activate external alarm. Dual power transformers in each module run cooler and generate minimal hum field. 115 and 230 VAC operation.

RM100 Rack Frame
Mounts ten amplifier modules and two power modules in a 5¼" high by 19" wide Eurocard specification enclosure 14½" deep. All modules plug in from the front, are secured with captive hardware and present an attractive and safe closed front panel. Aluminum extrusion construction makes a strong and rugged enclosure and allows free convection for vertical air flow. The basic frame includes power bussing for all positions. Individual modules include mating connector assemblies which mount on the rear of the card frame and plug into the power bus. Connector assemblies provide barrier block connections with fanout strips for studio wiring, consult factory for alternate insulation displacement, mass termination connector systems which allow simple plug-on audio connections.

PS100

Barrier Block Mass Termination Plug

Mating Connector Assemblies

Specifications

DA-10000 MODULAR DISTRIBUTION AMPLIFIER SYSTEM

Specifications reflect performance in a typical DA10000 System consisting of ten mixed Distribution Amplifier modules and two PS100 Power Supplies mounted together in a RM100 Rack Frame.

Nominal Output Level at OVU Meter Indication	+4dBm, Balanced, 600 ohms.
Output Clipping Level All 60 outputs driven.	+22dBm, 600 ohms
Distortion at +20dBm output.	.25% THD,30 to 20,000 Hz. .10% IMD, SMPTE Measurement.
Crosstalk at 10Khz, adjacent modules.	70 db below nominal output.
Output Hum and Noise Any module position, 24 db gain, 20 Khz measurement bandwidth.	80 db below nominal output.
Frequency Response	+0, -.25db, 30 to 20,000 Hz.
Input Impedance	10Kohm, balanced differential. Protection diodes and bypasses.
Input Hum Rejection Common Mode, 60 to 120 Hz.	80 db, factory adjusted.
Signal Alarm Threshold	Detects on signal dropouts of 30db below O VU, longer than ¼ Sec.
Signal Alarm Output	CMOS FET Switch to .025 posts with mating plug. May be paralleled to activate common alarm.
Power Failure Alarm	N.C. Reed Relay contacts held open only if both power supply outputs are above 12 VDC. May be paralleled to activate a common alarm.

Metering MDA100, CDA100, MIDA100 only	Ten segment LED Bargraph. Range -21 to +6 VU at 3db/step, O VU adjustable 0 to +18dBm.
Headphone Output	10Vrms to 600 ohm headphones.
Gain	24 db nominal, 54 db for CDA 100.
CDA100 Compressor	
Input Threshold Level	-30 dBm, adjustable upward.
Attack Time	50 mSec
Release Time	5 Sec nominal, 2 to 20 Sec with component change.
Compression Hold Threshold	Input must drop 20 db below comp. threshold for longer than .25 Sec.
Recovery Time, to release Compression Hold	1mSec. Typical
Power Requirements	115/230 VAC ±10% 47-63 Hz.
Size	
Rack Frame	5¼"H by 19"W by 14½"D
Amplifier Modules	Eurocard format, 100 mm X 220mm. 1.2 inch panel width.
Power Supply Module	Eurocard Format, Extruded Frame, 2.0 inch panel width.
Accessories	
BP100-1	Blank Panel, replaces missing 1.2 inch amplifier module.
BP100-2	Blank Panel, replaces missing 2.0 inch Power Supply module.
EX100	DA Extender Assembly
Module Connector Assys, use for test fixtures, extra rack positions, etc.	PS100 Conn. 20181-501 DA Module Conn. 20179-501 DC Cable, 15" 20184-501 AC Line Cord 20185-501

Represented by:

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3 year limited warranty
Technical specifications are subject to change at the discretion of the manufacturer.