

SYS10K – System 10K Modular Audio Amplifier Series

The ATI System 10K is the ideal device for multiple distribution when it comes to stereo or mono line amplification, microphone amplification, or headphone distribution. The SYS10K is perfect for any ballpark, museum, or large venue such as the United Nations, where many of our SYS10K systems can be found. The 3RU rack holds up to ten function modules and two power supplies. Each plug-in module is supplied with its own applicable connector assembly, thereby allowing for ease of insertion and quick hot-swaps.

The system features headphone jacks on all modules to allow a quick signal check. The flexible design lets you mix basic and metered modules in the same enclosure to optimize your system design. All input, output, and power lines are fully RF bypassed to reduce noise pickup. A double ground plane PC board shield combines with an additional top formed shield covering on each module to protect low-level circuitry from direct noise pickup. The distribution power regulation on each amplifier module minimizes localized heat buildup in the power supplies. System 10K's versatility makes it perfect for your large venue.

- **Mix and Match Plug-In Function Modules**
- **Power Splitting Distribution Amplifier Modules**
- **Individual Output Distribution Amplifier Modules**
- **Independent Level Adjustments**
- **Master Gain Input Control**
- **Headphone Outputs**



Available Plug-In Function Modules

DISTRIBUTION AMPLIFIERS

CDA100	1X6 DA with Compression
DA100	1X6 Distribution Amplifier
DA200	Dual 1X4 DA
DA200S	1X8 Distribution Amplifier
IDA100-1	1X6 DA w/ individual level controls – Transformer Output
IDA100-2	1X6 DA w/ individual level controls
MDA100	Metered 1X6 DA
MDA200	Metered Dual 1X4 DA
MIDA100-1	Metered 1X6 DA –Transformer Output
MIDA100-2	Metered 1X6 DA
SDA200	Stereo 1X4 DA w/ main level and L&R trim
SMDA200	Stereo Metered 1X4 DA w/ main level and L&R trim

SINGLE CHANNEL AMPLIFIERS

LA100-1	Line Amplifier – Transformer Output
LA100-2	Line Amplifier
MA100-1	Mic Amplifier – Transformer Output
MA100-2	Mic Amplifier
MLA100-1	Metered Line Amplifier – Transformer Output
MLA100-2	Metered Line Amplifier – Transformer Output
MMA100-1	Metered Mic Amplifier – Transformer Output
MMA100-2	Metered Mic Amplifier

TWO CHANNEL AMPLIFIERS

LA200-1	2 CH Line Amplifier – Transformer Output
LA200-2	2 CH Line Amplifier
MA200-1	2 CH Mic Amplifier – Transformer Output
MA200-2	2 CH Mic Amplifier
MLA200-1	Metered 2 CH Line Amplifier – Transformer Output
MLA200-2	Metered 2 CH Line Amplifier
MMA200-1	Metered 2 CH Mic Amplifier – Transformer Output
MMA200-2	Metered 2 CH Mic Amplifier



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Technical Specifications

DISTRIBUTION AMPLIFIER MODULES

Gain	24dB nominal, 54dB for CDA – Front Panel Gain Controls
Output Clipping Level	+22dBm Max, 600 ohms
Input Level	+24dBm Max, Bridging 600 ohms
Distortion @ 30Hz to 20kHz	0.25% Max THD @ +20dBm output
Noise	-84dBm EIN
Input Impedance	10K ohm Minimum, Balanced
Metering (MDA/CDA/MIDA)	Ten segment LED Bargraph; Range –21 to +6 VU at 3dB/step, 0 VU adjustable 0 to +18dBm.
Metering (SMDA/MDA)	Ten segment LED Bargraph; Range –15 to +12 VU at 3dB/step, 0 VU adjustable +8dBm down to –10dBm
Connection (DA/MDA/CDA/MIDA)	External audio wiring is connected to barrier blocks with pre-wireable fanning strips (standard) or punch blocks on the module connector assembly.
Connection (SDA/SMDA/DA/MDA)	External audio wiring is connected to punch blocks on the applicable module connector assembly.
Signal Alarm Threshold (MDA/CDA)	Detects on signal dropouts of 30dB below 0 VU, longer than ¼ Sec.
Signal Alarm Output (MDA/CDA)	CMOS FET Switch to .025 posts with mating plug. May be paralleled to activate common alarm.

MIC AMPLIFIER MODULES

Gain	74dB, 64dB and 24dB with front panel gain control at clockwise MAX*
Output Clipping Level	+24dBm Max, 600 ohms
Input Level	125mVrms Max
Distortion @ 30Hz to 20kHz	0.05% Max THD @ +22dBm output
Noise	-124dBm EIN
Input Impedance	4k ohm Minimum, Balanced
Phantom Power	Selectable by internal jumper plug position. Three positions: Off, 12VDC at 4mA internal power or external phantom power source of up to 48VDC.
Metering	Ten segment LED Bargraph; Range –15 to +12 VU at 3dB/step, 0 VU adjustable +8dBm down to –10dBm
VCA Option	Provides remote gain control; requires an external 10K ohm linear taper potentiometer
Connection	External audio wiring is connected to punch blocks on the applicable module connector assembly <i>*Gain steps are selectable via internal jumper position</i>

LINE AMPLIFIER MODULES

Gain	74dB, 64dB and 24dB with front panel gain control at clockwise MAX*
Output Clipping Level	+24dBm Max, 600 ohms
Input Level	+24dBm Max, Bridging 600 ohms
Distortion @ 30Hz to 20kHz	0.05% Max THD @ +22dBm output
Noise	-94dBm EIN 70dB below nominal output
Input Impedance	10K ohm Minimum, Balanced
Metering	Ten segment LED Bargraph; Range –15 to +12 VU at 3dB/step, 0 VU adjustable +8dBm down to –10dBm
VCA Option	Provides remote gain control; requires an external 10K ohm linear taper potentiometer
Connection	External audio wiring is connected to punch blocks on the applicable module connector assembly <i>*Gain steps are selectable via internal jumper position</i>

ALL MODULES

Nominal Output Level	+4dBm, Balanced 600 Ohms @ 0VU Meter Indication
Frequency Response	30Hz to 20,000Hz, ±0.25dB
Input Hum Rejection	60 dB Minimum (common mode 60-120Hz)
Crosstalk to Adjacent Modules	70dB below nominal output @ 10kHz
Headphone Output	10Vrms to 600 ohm headphones
Power Requirements	PS100 Power Module: A bi-polar unregulated 18VDC 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.
Size	Rack Frame: 5-1/4"(13.14cm) H 19"(48.26cm) W 14-1/2"(35.56cm) D Amp Modules: Eurocard format, 100mm X 220mm. 1.2"(3.0cm) panel width Power Supply Module: Eurocard format, extruded frame, 2.0"(5.1cm) panel width
Warranty	Limited, Two Year Warranty