

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

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|-----------------|---|
| 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

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|-----------------|--|
| 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

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|----------------------------------|--|
| 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

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| 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

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|----------------------------|--|
| 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

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|-------------------------------|--|
| 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, One Year Warranty |