DMA Series

DIGITAL MIXER-AMPLIFIERS

TECHNICAL DATA SHEET

PRODUCT SUMMARY

The AtlasIED DMA digital mixer amplifier series offers a great blend of traditional simplistic analog functionality with the convenience of modern digital technology. This combination makes them user-friendly and adaptable for various audio applications. The DMA design focuses on ease of installation and intuitive operation, making these models suitable for both professional and casual users. With advanced features that allow for system flexibility and expandability, these amplifiers can cater to diverse sound reinforcement needs, ensuring high-quality audio performance in different environments.

The DMA Series is configured at the factory as a traditional mixer amplifier and requires no app for basic operation. The front panel interface and selection controls are designed for simple, intuitive use. Refer to the specifications and quick start guide for default settings. For advanced configuration, the DMA App provides full design flexibility along with factory presets for 1 Zone, 2 Zone, 1 Zone plus Expansion, and 1 Zone with Subwoofer systems. Use the DMA amplifier QR code to access instructional videos at www.atlasied.com.

The DMA Series from AtlasIED offers versatile power options with 100 W, 200 W, and 400 W models for single-zone applications. For installations that require an additional amplified zone or power expendability, the DMA amplifiers can seamlessly link to the LMA Series, expanding the audio system capability. Both the DMA and LMA amplifier series can be configured for various load options, such as 2 Ω, 4 Ω, 8 Ω, and constant voltage outputs of 25 V, 70.7 V, or 100 V.

A switch-mode, global auto-sensing power supply ensures a stable output even in fluctuating power conditions. The power supply and output stage are meticulously engineered to deliver exceptional dynamic high output voltage and current simultaneously to virtually any loudspeaker load. Additionally, the DMA Series amplifiers are energy-efficient, meeting Energy Star standards for consuming less than 1 W of power in GPI-enabled standby mode. DMA Series amplifiers are so efficient that they typically operate in a convection-cooled state. Variable-speed, whisper-quiet fans engage if additional cooling is needed.

The DMA Series leverages Bluetooth Low Energy (BLE) technology, allowing installers to easily configure the amplifiers using the DMA App. By simply downloading the app on a smartphone, users can scan for available devices, connect, and make configurations effortlessly. The intelligent DMA App also features an cloud update function, ensuring that users have access to the latest features and improvements. Additionally, system designs can be created offline or saved during live configurations for convenience in future installations.

A standard Ethernet is used to connect a DMA Amplifier to an AtlasIED LMA Amplifier via the proprietary Link Bus. This setup allows the DMA to manage all audio signals and performance conditions for both amplifiers, ensuring optimal audio performance and coordination.

The DMA Series excels in audio management with its diverse input options and controls. Each model is equipped with four selectable source inputs. Inputs 1, 2, and 3 feature balanced mic/line inputs along with summed RCA connections, plus a TOSLINK optical input allowing for versatile connectivity. The fourth input utilizes WTSD Bus technology utilizing Category 5/6 cabling, which supports various remote wall-mounted accessories, including commercial-grade Bluetooth receivers and mic/line input mixers. This setup allows for flexible audio configurations, as these accessories can be positioned up to 100 meters away from the DMA unit and can be daisy-chained together. This capability enables the DMA to expand to a total of six inputs, making it an excellent choice for larger installations or more complex audio setups. A Priority Mute Override GPI is provided for life safety requirements.

The DMA Series offers a convenient plug-and-go remote level control and assignable source select accessory wall plates, enhancing user audio content accessibility and ease of use. Wall plate ports are color-coded and utilize Category 5/6 cabling, allowing for installation at distances of hundreds of feet from the main unit. Linking a DMA amplifier with an LMA series amplifier creates a configurable two-zone audio system. This setup enables independent remote level control and source selection for each zone, providing flexibility in managing audio across different areas. This feature is particularly beneficial for installations requiring distinct audio control in separate spaces.

The DMA Amplifier features a diagnostic 70.7 V / 100 V speaker system load test known as the Push Here Diagnostic (PHD). This function allows users to check the speaker lines for wiring and impedance errors. The system will automatically verify that the tap settings of the attached speakers do not exceed the amplifier's rated power, confirm that no speakers are incorrectly tapped at 8 Ω, and check that the speaker wires are free from shorts.

The DMA Amplifiers are designed for efficiency and convenience, featuring a compact 1 RU half-rack format, rack kit included. This design allows for easy integration into various setups, making them ideal for virtually all audio applications. Their space-saving nature does not compromise on performance, ensuring high-quality sound amplification in a sleek package.

Whether your application involves a large distributed constant voltage sound system, a high SPL sound reinforcement system, or both, the AtlasIED DMA Series is the solution for a multi-functional, high-power, and cost-effective amplifier.

KEY FEATURES

- Factory configured as a traditional mixer amplifier (no mobile app required)
- Three power levels available (100 W, 200 W, and 400 W)
- Multi-impedance capable (2 Ω, 4 Ω, 8 Ω, 25 V, 70.7 V and 100 V)

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KEY FEATURES (CONTINUED)

- DMA Control mobile app available for iOS and Android
- Factory configured presets for 1 zone, 2 zone, zone expansion and subwoofer applications
- Color-coded I/O section
- 3 Mic/Line balanced Euroblock inputs
- 3 sets of RCA summed mono inputs.
- Optical input port for streaming audio from digital displays
- WTSD input (input expansion bus)
- LMA Zone 2 link bus
- Quick-select Gate and Compressor presets
- AtlasIED speaker presets
- Design file download/upload capable
- Rack kit included
- Energy-efficient, 1 W standby GPI
- Rack kit included
- Convection cooling, Audio Signal Sense variable speed fan on demand
- Priority Mute GPI
- Load diagnostic tool
- Rear attenuators
- Compatible with remote level controllers (AtlasIED DMA-V, DMA-VS)
- Compatible with remote source select controller (AtlasIED DMA-VS)
- Compact (1 RU, half-rack design)

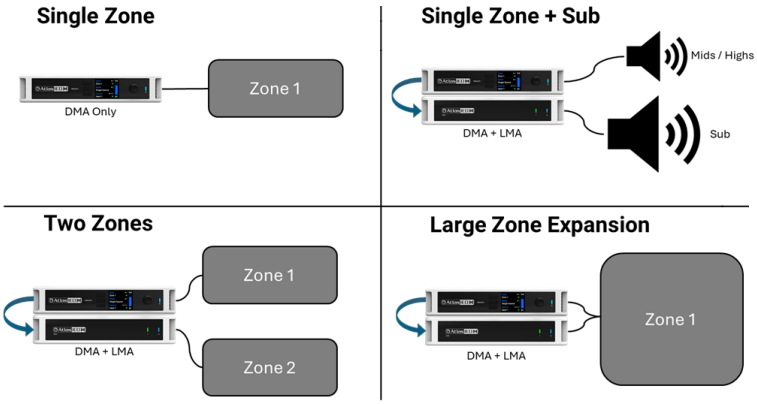
APPLICATIONS

The AtlasIED DMA Amplifier Series offers a robust, single-channel amplifier that excels in multi-impedance load scenarios. Its versatility makes it suitable for various applications, including commercial distributed systems and sound reinforcement in low-impedance audio systems.

The DMA can also be configured for separate audio outputs. The main output is powered by the internal amplifier and the second channel output uses a line output to connect with a LMA amplifier to power a second zone, stereo channel, subwoofer or to provide expansion power for Zone 1. See Illustration 1 below.

Whether used as a standalone unit or as a secondary zone amplifier in conjunction with a DMA amplifier, the LMA Series is perfect for environments such as restaurants, presentation rooms, classrooms, conference rooms, and retail spaces for both background and foreground music. Its flexible design ensures that it can meet diverse audio needs effectively.

ILLUSTRATION 1 - DMA+LMA MODES



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AUDIO SPECIFICATIONS/PERFORMANCE

System			
Model	DMA101, DMA201, DMA401		
Type	Digital Mixer Amplifier, 1 Zone with Zone Link output		
Zones	1 Zone with Zone 2 Link Ouput		
Power Supply Type	Switch Mode - Wide Range 100 V-132 V / 208 V-264 V		
Amplifier Topology	Class D		
Number of Fixed Inputs	4 Source Selections		
DSP Internal	Yes		
Configuration	Bluetooth BLE Mobile App (Does not require Wi-Fi or cellular signal for regular operation, only for firmware updates)		
Network	No		
Optional Card Slot	No		
Output Power[1]	**DMA101**	**DMA201**	**DMA401**
Power 1 Channel			
4 Ω, 8 Ω, 70.7 V, 100 V	100 W	200 W	400 W
25 V[7]	100 W	150 W	350 W
2 Ω[8]	100 W	100 W	350 W
Factory Default Settings (As Shipped - Configurable via DMA Control App)			
Amplifier Configuration	1 Zone		
Level Controls - Analog	Rear Panel (Fully Counterclockwise is OFF)		
GPI Ports	Standby OFF, Priority Mute OFF		
Load Configuration (Rear Panel)	Factory default setting is 70.7 V		
Source 1 Assignment	Mic, Level Pad Enabled, Phantom Off, EQ Preset - Bypass, Compressor Preset - Bypass		
Source 3 Assignment	RCA (Summed Stereo), EQ Preset - Music, Compressor Bypass		
Source 3 Assignment	RCA (Summed Stereo), EQ Preset - Music, Compressor Bypass		
Source 4 (WTSD) Assignment	WTSD Accessories, Active, Limiter (0 dBv/1 V)		
Source Analog Gain Control (Rear Panel)	OFF (fully counterclockwise)		
Source 1, 2, 3 WTSD Levels	Set to 50% (Adjustable via panel selection buttons, control knob function, or DMA App)		
Zone Master Level	Set to 50% (Adjustable via panel selection buttons, control knob function, or DMA App)		
Priority Override (VOX)	Source 1 Send; Source 2, 3, WTSD Receive; Duck 50%; Hold - 2 seconds		
Screen Saver	Active after 2 minutes		
Front Panel Controls & Display			
Source/Input Quantity	LCD, 28 mm × 354 mm		
Encoder Knob	Qty. 1, Rotary Knob, Level Adjustment		
Zone Selection	Momentary Button		
Mode Select	Momentary Button. Select between Single Source or Mix Mode.		
Source Select	Momentary Button. Select between Single Source or Mix Mode.		

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Inputs/Sources	
Location	Rear Panel
Input Quantity	Four (4) fixed inputs. Up to two (2) WTSD accessories can be added to the WTSD Bus.
Input/Source 1	Qty. 1 Balanced Line / Mic , Qty 1 RCA L + R Summed
Input/Source 2	Qty. 1 Balanced Line / Mic, Qty 1 RCA L + R Summed
Input/Source 3	Qty. 1 Balanced Line / Mic, Qty 1 RCA L + R Summed, Qty 1 Optical
Input/Source WSTD Bus	Qty. 1 WTSD Balanced Line Input. **Note:** WTSD Bus supports up to three (3) daisy-chained accessories
Inputs 1, 2, 3 (Balanced and Unbalanced)	
Location	Rear Panel
Input Connector Type	Qty. 3, 3-position, 3.5 mm Euroblock (Green)
Input Sensitivity - Line Mode	Balanced: 775 mV. Unbalanced: 775mV
Input Sensitivity - Mic Mode	10 mV - No Pad. 30 mV with 10 dB pad enabled.
Inputs 1, 2, 3 - Mic Mode HPF	120 Hz / 12 dB (defeatable)
Line Input Max Level Inputs 1, 2, 3	Balanced Line: 18 dBu (6.3 V). Mic Mode: -10dBu (230 mV). RCA: 16 dBu.
Input Impedance - Line	1.2 kΩ
Input Impedance - Mic	1.2 kΩ
Phantom Inputs 1, 2, 3	24 VDC (defeatable)
Mic Inputs CMRR	80 dB
RCA Inputs 1, 2, 3 (L + R Electronically Summed)	
Location	Rear Panel
Input Sensitivity	-10 dBv (316 mV) - L & R summed
Input Impedance	10 kΩ
Max Input Levels	16 dBv (2.5 V)
DSP Elements - 1, 2, 3	Easy presets for EQ, Compressor, Gate or Limiter for Music, Speech, Media Applications, plus advanced DSP settings.
Input 3 - Optical	
Location	Rear Panel
Number of Ports	Qty. 1
Input Connector Type	Optical TOSLINK
Optical Format	PCM
Input WTSD (Bus)	
Location	Rear Panel
Number of Ports	Qty. 1
WTSD Port Type	RJ45 (Black)
WTSD Input Sensitivity	500 mV or 1 V (DMA App selectable)
DSP Elements	Easy EQ Application Presets, Compressor or Limiter, Parametric EQ
Maximum Input Level	18 dBu (6.3 V)
DSP Elements - WTSD Bus Inputs	Easy presets for EQ, Compressor, Gate or Limiter for Music, Speech, Media Applications, plus advanced DSP settings.
Maximum Bus Distance	100 m (330 ft.)

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AUDIO SPECIFICATIONS/PERFORMANCE

Input Level Gain	
Location	Rear Panel
Gain Adjustment Type	Analog, detented potentiometer, flathead screwdriver adjustment
Quantity	Three (3), recessed, rotary, detented attenuators for sources/inputs 1-3
AC Mains / Power Supply Status Indicators	
Location	Front Panel
Type	Multi-color LED
Power	Blue
Standby	Yellow
AC Mains Out of Safe Operating Range	Red (flashing)
Internal Temperature	Yellow (flashing)
Protect/Fault	Red
Input & Output Status Indicator	
Location	Front Panel LCD
Signal (Input & Zone Output)	Green
Output Limit	Yellow (Flashing)
Output Protect	Red
Over Current / Fault	Red (Flashing)
GPI Ports	
Location	Rear Panel
Number of Ports	Qty. 3
Type of Connector	Euroblock, 3.5 mm, 3-position (Black)
Functions	Standby (Energy Save Mode); contact closure enabled.
Functions	Priority Mute. Contact closure enables all-channel mute.
Control Port	
Location	Rear Panel
Number of Ports	Qty .1,
Type of Connector	RJ45 - Yellow (Not Ethernet)
Link Function	Connects to DMA Amplifer: Bi-directional communication between DMA and LMA Amplifiers; balanced audio line output (up to 2 V).
Control Port Max Distance	100 m (330 ft)
Zone 2 Link Port	
Location	Rear Panel
Number of Ports	Qty. 1
Balanced Input Gain - 70.7 V Mode	RJ45 - Blue (Not Ethernet)
Link Function	Connects to DMA Amplifer: Bi-directional communication between DMA and LMA Amplifiers; balanced audio line output (up to 2 V).
Zone 2 Link Maximum Distance	100 m (330 ft) between DMA and LMA amplifiers

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AUDIO SPECIFICATIONS/PERFORMANCE

Load Configuration Settings (Rear Panel)	
Location	Rear Panel
Load Selection	Qty. 1, 2-position DIP switch for 4 Ω, 8 Ω, 70.7 V, 100 V settings
PHD Load Test (Load Diagnostic Test) (DMA Control App)	
Function	Improper Amplifier Loading Diagnostic Tool
Activation Switch	DMA App
Diagnostic Indicators	DMA App: Pass=Green, Fail=Red
Maintenance Port (Rear Panel)	
Location	Rear Panel
Hardware, Firmware Update	USB 2.0 for hardware update, DMA App for DSP firmware update
Output Terminals (Speaker - Rear Panel)	
Output Connectors - Type	Removable Euroblock, 7.62 mm pitch, locking
Output Connectors - Number of Terminals	One (1) 2-position
Wire Size	28-10 Gauge (Class 2 Wire)
Current Rating	30 A RMS per Terminal
DMA Control App	
App Type	Apple iOS, Android
App Communication	BLE (Communication Protocol, Non-Streaming)
DMA Device Locator	Auto with Unit Identifier
Security	Login Username and Password required
DMA Programming	Online and Offline modes
Design Backup	Yes
Device Locate	Identifies the DMA model connected
Amplifier Operating Modes	
1-Zone Mode	Same audio content in one area. Requires DMA amplifier only.
2-Zone Mode	Separate controlled audio content in two areas. Requires linked DMA and LMA amplifiers.
1-Zone with Subwoofer	Full-range speakers plus low-frequency speaker. Requires linked DMA and LMA amplifiers.
1-Zone with Expansion	Same audio content in one area with additional speakers. Requires linked DMA and LMA amplifiers.
Zone Source Operation	
Single-Source Mode	Single Source Play Mode between Source 1, Source 2, Source 3, WTSD
Mix Mode	Custom mix of any combination of the four sources with a master level.
Zone DSP Functions	
Speaker Presets	A selection of EQ settings tailored for AtlasIED speakers
Zone EQ - Simple	Easy EQ Faders (Bass, Mid, Treble)
Zone EQ - Advanced	HPF, High Shelf, Low Shelf, 5-Band Parametric

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Limiter	Threshold Adjust with Active Indicator
Priority Mute	Assignable Source Trigger, Threshold, Easy Presets or Advanced Settings
Input / Source DSP Functions	
EQ Presets	Bypass, Speech, TV / Media, Music, Custom
Custom Advanced EQ	HPF, 3-band parametric
Gate Easy Presets (Mic Mode)	Off, Slow, Typical, Fast
Gate Custom Presets (Mic Mode)	Threshold, Attack, Hold
Compressor Easy Presets (Mic Mode)	Off, Relaxed, Typical, Aggressive
Compressor Custom Presets (Mic Mode)	Threshold, Ratio, Attack, Release
Advanced DSP Settings	
Password	Supports up to 32 characters
Import / Export Files	System Design files can be imported or exported for use on other projects
Screen Saver	Adjustable from 1 to 15 minutes
Front Panel Lockout	A 4-digit assignable code to lock the DMA front panel controls
PHD (Speaker Load Diagnostic)	Amplifier load test for extreme system miswiring
System Tuning Generator	Pink noise generator
GPI Controls	Priority and Zone volume level settings
Control Accessory Settings	
DMA-VS	Source Selection is Assignable. Remote Level has Auto Detect and locks out Front Panel Level **Note:** Zone 1 & Zone 2 have Independent Source Assigments
DMA-V	Remote Level has Auto Detect and locks out Front Panel Level. **Note:** Zone 1 & Zone 2 can have individual remote level controls.
Electrical Specifications (General)	
Total Harmonic Distortion 1 kHz and 1 dB Below Rated Power	≤0.15%
Signal-to-Noise Ratio (8 Ω)	>93 dBA Below Rated Output (A-Weighted),
Frequency Response	20 Hz-20 kHz (+0/-1.5dB) in 2-, 4-, 8-Ohm, 25 V Modes; 50 Hz-20 kHz (+0/-1.5 dB) in 70.7 V, 100 V Modes
Slew Rate	>18 V/µs
Damping Factor (20 Hz to 400 Hz)	>250
DSP	32 bit, 48 kHz
Max Voltage per Output - 100 V Setting	101 V
Max Current per Output - 4 Ω Setting	DMA101 - 7 A, DMA201 - 10 A, DMA401 - 14 A
Protection	Soft Start, Input RF, DC, Short Circuit, Current Overload, Clip Limit, AC Mains Under / Over Voltage Shut Off, Peak Current Limit, Over Temp

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AUDIO SPECIFICATIONS/PERFORMANCE

Input Gains & Input Sensitivity	DMA101	DMA201	DMA401
Balanced Input - Sensitivity	775 mv	775 mV	775 mV
Balanced Input Gain - 100 V Mode	42.2 dB	42.2 dB	42.2 dB
Balanced Input Gain - 70.7 V Mode	39.2 dB	39.2 dB	39.2 dB
Balanced Input Gain - 8 Ω Mode	31.2 dB	34.2 dB	37.2 dB
Balanced Input Gain - 4 Ω Mode	28.2 dB	31.2 dB	34.2 dB
RCA Summed Input - Sensitivity	316 mV	316 mV	316 mV
RCA Summed Gain - 100 V Mode	50 dB	50 dB	50 dB
RCA Summed Gain - 70.7 V Mode	47 dB	47 dB	47 dB
RCA Summed Gain - 8 Ω Mode	39 dB	42dB	45 dB
RCA Summed Gain - 4 Ω Mode	36 dB	32 dB	35 dB
WTSD Zone 2 Link Sensitivity	1 V	1 V	1 V
WTSD Zone 2 Link Gain -100 V Mode	40 dB	40 dB	40 dB
WTSD Zone 2 Link Gain - 70.7 V Mode	37 dB	37 dB	37 dB
WTSD Zone 2 Link Gain -8 Ω Mode	28 dB	32 dB	35 dB
WTSD Zone 2 Link Gain - 4 Ω Mode	26 dB	29 dB	32 dB

Cooling System	
Cooling System	Idle Mode is convection. Audio signal sensing variable speed fan engages as required.
Cooling Air Flow Direction	Rear-to-front, no filters
Fan Noise - Idle	0 dBu
Fan Noise - Max	42 dBu
Environmental	
Operating Temperature	10° F to 104° (-12°C to 40° C)
Relative Humidity	0–95%, noncondensing

AC Power Requirements - All DMA Models	
Operating Voltage Auto Switch	100 V to 132 V / 208 V to 264 V
Minimum Power-Up Voltage	95 V
Maximum Operating Voltage	264 V
Mains Connector	IEC C14
Power Cord (Supplied)	IEC C 13 Plug / 18 AWG, 1.8 m cord / NEMA 5-15 plug

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Power Consumption & Current Draw @ 120 VAC Mains	DMA101		
	Amps	Watts	Btu/hr[4]
Standby Mode, Meets Energy Star Standards	0.02 A	0.4 W	1.4 Btu
Low Power Mode[9]	0.1 A	5.8 W	20 Btu
Idle Active	0.2 A	11.0 W	38 Btu
Average Power - 2 Ω[2, 8]	0.3 A	18.5 W	63 Btu
Average Power - 4 Ω[2]	0.3 A	18.9 W	64 Btu
Average Power - 8 Ω[2]	0.3 A	19.6 W	67 Btu
Average Power - 25 V[2, 7]	0.3 A	19.0 W	65 Btu
Average Power - 70.7 V[2]	0.3 A	19.2 W	66 Btu
Average Power - 100 V[2]	0.3 A	20.2 W	69 Btu
Pink Noise Power - 2 Ω[3, 8]	1.1 A	82.3 W	281 Btu
Pink Noise Power - 4 Ω[3]	1.2 A	86.9 W	297 Btu
Pink Noise Power - 8 Ω[3]	1.2 A	86.8 W	296 Btu
Pink Noise Power - 25 V[3, 8]	1.1 A	83.5 W	285 Btu
Pink Noise Power -70.7 V[3]	1.1 A	83.4 W	285 Btu
Pink Noise Power - 100 V[3]	1.1 A	85.2 W	291 Btu
Burst Power - 2 Ω[4, 8]	0.5 A	46.2 W	158 Btu
Burst Power - 4 Ω[4]	0.6 A	47.9 W	163 Btu
Burst Power - 8 Ω[4]	0.6 A	48.0 W	164 Btu
Burst Power - 25 V, Note[4, 7]	0.6 A	48.4 W	165 Btu
Burst Power - 70.7 V[4]	0.6 A	48.1 W	164 Btu
Burst Power - 100 V[4]	0.6 A	48.8 W	167 Btu
Music Power - 2 Ω[5, 8]	0.9 A	94.8 W	323 Btu
Music Power - 4 Ω[5]	1.0 A	95.5 W	326 Btu
Music Power 25 V[6, 8]	1.0 A	96.9W	331 Btu
Music Power 70.7 V[5]	1.0 A	96.7 W	330 Btu
Music Power - 100 V[5]	1.1 A	98.2 W	335 Btu
Sine Wave Power - 2 Ω All CH Driven[6, 8]	1.3 A	109.6 W	374 Btu
Sine Wave Power - 4 Ω[6]	1.5 A	117.7 W	402 Btu
Sine Wave Power - 8 Ω[6]	1.5 A	120.6 W	412 Btu
Sine Wave Power- 25 V[6, 7]	1.5 A	115.4 W	394 Btu
Sine Wave Power- 70.7 V[6]	1.4 A	114.8 W	392 Btu
Sine Wave Power - 100 V[6]	1.4 A	115.2W	393 Btu

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Power Consumption & Current Draw @ 120 VAC Mains	DMA201		
	Amps	Watts	Btu/hr[4]
Standby Mode, Meets Energy Star Standards	0.02 A	0.4 W	1.4 Btu
Low Power Mode[9]	0.1 A	5.9 W	20 Btu
Idle Active	0.2 A	11.7 W	39 Btu
Average Power - 2 Ω[2, 8]	0.6 A	46.2 W	157 Btu
Average Power - 4 Ω[2]	0.8 A	57.8 W	197 Btu
Average Power - 8 Ω[2]	0.7 A	50.2 W	171 Btu
Average Power - 25 V[2,7]	0.6 A	44.6 W	152 Btu
Average Power - 70.7 V[2,7]	0.6 A	45.3 W	154 Btu
Average Power - 100 V[2]	0.6 A	47.8 W	163 Btu
Pink Noise Power - 2 Ω[3, 8]	2.1 A	156.5 W	532 Btu
Pink Noise Power - 4 Ω[3]	2.1 A	158.7 W	541 Btu
Pink Noise Power - 8 Ω[3]	2.0 A	149.3 W	509 Btu
Pink Noise Power - 25 V[3]	2.0 A	142.6 W	486 Btu
Pink Noise Power - 70.7 V[3]	2.0 A	145.5 W	496 Btu
Pink Noise Power - 100 V[3]	2.1 A	157.2 W	536 Btu
Burst Power - 2 Ω[4, 8]	1.0 A	69.4 W	236 Btu
Burst Power - 4 Ω[4]	1.2 A	82.2 W	280 Btu
Burst Power - 8 Ω[4]	1.1 A	78.3 W	267 Btu
Burst Power - 25 V[4]	1.1 A	70.8 W	241 Btu
Burst Power - 70.7 V[4]	1.1 A	72.3 W	246 Btu
Burst Power - 100 V[4]	1.1 A	70.5 W	240 Btu
Music Power - 2 Ω[5, 8]	2.0 A	140.5 W	479 Btu
Music Power - 4 Ω[5]	2.2 A	156.2 W	532 Btu
Music Power - 25 V[6, 8]	2.0 A	142.7 W	486 Btu
Music Power - 70.7 V[5]	2.0 A	140.8 W	480 Btu
Music Power -100 V[5]	2.1 A	147.9 W	504 Btu
Sine Wave Power - 2 Ω[6, 8]	3.1 A	237.6 W	808 Btu
Sine Wave Power - 4 Ω[6]	3.2 A	242.3 W	826 Btu
Sine Wave Power - 8 Ω[6]	3.2 A	240.5 W	820 Btu
Sine Wave Power - 25 V[6, 7]	3.1 A	235.2 W	802 Btu
Sine Wave Power - 70.7 V[6]	2.9 A	220.4 W	752 Btu
Sine Wave Power - 100 V[6]	3.0 A	225.6 W	769 Btu

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Power Consumption & Current Draw @ 120 VAC Mains	DMA401		
	Amps	Watts	Btu/hr[4]
Standby Mode, Meets Energy Star Standards	0.02 A	0.4 W	1.4 Btu
Low Power Mode[9]	0.1 A	4.8 W	16 Btu
Idle Active	0.2 A	9.7 W	33 Btu
Average Power - 2 Ω[2, 8]	1.0 A	71.4 W	244 Btu
Average Power - 4 Ω[2]	1.2 A	78.1 W	266 Btu
Average Power - 8 Ω[2]	1.1 A	76.6 W	261 Btu
Average Power - 25 V[2,7]	1.0 A	70.8 W	242 Btu
Average Power - 70.7 V[2,]	1.1 A	76.3 W	260 Btu
Average Power - 100 V[2]	1.1 A	75.2 W	257 Btu
Pink Noise Power - 2 Ω[3, 8]	3.0 A	238.8 W	815 Btu
Pink Noise Power - 4 Ω[3]	3.3 A	254.5 W	868 Btu
Pink Noise Power - 8 Ω[3]	3.2 A	242.6 W	828 Btu
Pink Noise Power - 25 V[3, 8]	3.2 A	246.2 W	840 Btu
Pink Noise Power - 70.7 V[3]	3.2 A	251.7 W	859 Btu
Pink Noise Power - 100 V[3]	3.2 A	250.9 W	856 Btu
Burst Power - 2 Ω[4, 8]	1.7 A	151.3 W	516 Btu
Burst Power - 4 Ω[4]	1.8 A	161.8 W	552 Btu
Burst Power - 8 Ω[4]	1.7 A	150.2 W	513 Btu
Burst Power - 25 V[4, 7]	1.7 A	147.9 W	505 Btu
Burst Power - 70.7 V[4]	1.8 A	156.3 W	533 Btu
Burst Power - 100 V[4]	1.8 A	155.2 W	530 Btu
Music Power - 2 Ω[5, 8]	3.3 A	265.6 W	906 Btu
Music Power - 4 Ω[5]	3.5 A	276.4 W	943 Btu
Music Power - 25 V[6, 8]	3.3 A	263.8 W	900 Btu
Music Power - 70.7 V[5]	3.4 A	270.2 W	922 Btu
Music Power -100 V[5]	3.4 A	271.5 W	926 Btu
Sine Wave Power - 2 Ω[6, 8]	5.0 A	403.5 W	1377 Btu
Sine Wave Power - 4 Ω[6]	5.3 A	436.0 W	1488 Btu
Sine Wave Power - 8 Ω[6]	5.2 A	420.3 W	1434 Btu
Sine Wave Power - 25 V[6, 7]	5.1 A	415.6 W	1418 Btu
Sine Wave Power - 70.7 V[6]	5.1 A	417.2 W	1424 Btu
Sine Wave Power - 100 V[6]	5.1 A	412.8 W	1409 Btu

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DMA Series

DIGITAL MIXER-AMPLIFIERS

TECHNICAL DATA SHEET

AUDIO SPECIFICATIONS/PERFORMANCE

Power Consumption & Current Draw @ 230 VAC Mains	DMA101		
	Amps	Watts	Btu/hr[4]
Standby Mode, Meets Energy Star Standards	0.02 A	0.5 W	1.7 Btu
Low Power Mode[9]	0.06 A	6.1 W	21 Btu
Idle Active	0.1 A	11.0 W	38 Btu
Average Power - 2 Ω[2, 8]	0.3 A	20.2 W	69 Btu
Average Power - 4 Ω[2]	0.3 A	21.4 W	73 Btu
Average Power - 8 Ω[2]	0.3 A	21.9 W	75 Btu
Average Power - 25 V[2,7]	0.3 A	20.5 W	70 Btu
Average Power - 70.7 V[2,]	0.3 A	20.8 W	71 Btu
Average Power - 100 V[2]	0.3 A	20.7 W	71 Btu
Pink Noise Power - 2 Ω[3, 8]	0.5 A	75.4 W	257 Btu
Pink Noise Power - 4 Ω[3]	0.6 A	80.3 W	274 Btu
Pink Noise Power - 8 Ω[3]	0.6 A	80.8 W	276 Btu
Pink Noise Power - 25 V[3, 8]	0.6 A	81.4 W	278 Btu
Pink Noise Power - 70.7 V[3]	0.6 A	82.3 W	281 Btu
Pink Noise Power - 100 V[3]	0.6 A	81.7 W	279 Btu
Burst Power - 2 Ω[4, 8]	0.3 A	30.2 W	103 Btu
Burst Power - 4 Ω[4]	0.4 A	31.7 W	108 Btu
Burst Power - 8 Ω[4]	0.4 A	31.2 W	106 Btu
Burst Power - 25 V[4, 7]	0.4 A	31.2 W	106 Btu
Burst Power - 70.7 V[4]	0.4 A	31.9 W	109 Btu
Burst Power - 100 V[4]	0.4 A	31.2 W	106 Btu
Music Power - 2 Ω[5, 8]	0.6 A	82.3 W	281 Btu
Music Power - 4 Ω[5]	0.6 A	81.9 W	279 Btu
Music Power - 25 V[6, 8]	0.6 A	80.2 W	274 Btu
Music Power - 70.7 V[5]	0.6 A	81.7 W	279 Btu
Music Power -100 V[5]	0.6 A	82.4 W	281 Btu
Sine Wave Power - 2 Ω[6, 8]	0.8 A	115.2 W	393 Btu
Sine Wave Power - 4 Ω[6]	0.9 A	121.4 W	414 Btu
Sine Wave Power - 8 Ω[6]	0.9 A	123.5 W	421 Btu
Sine Wave Power - 25 V[6, 7]	0.8 A	114.9 W	392 Btu
Sine Wave Power - 70.7 V[6]	0.8 A	114.6 W	391 Btu
Sine Wave Power - 100 V[6]	0.8 A	115.3 W	393 Btu

Power Consumption & Current Draw @ 230 VAC Mains	DMA201		
	Amps	Watts	Btu/hr[4]
Standby Mode, Meets Energy Star Standards	0.03 A	0.5 W	1.7 Btu
Low Power Mode[9]	0.1 A	6.0 W	20 Btu
Idle Active	0.1 A	12.2 W	42 Btu
Average Power - 2 Ω[2, 8]	0.3 A	35.2 W	120 Btu
Average Power - 4 Ω[2]	0.4 A	39.8 W	135 Btu
Average Power - 8 Ω[2]	0.4 A	37.5 W	127 Btu

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DMA Series

DIGITAL MIXER-AMPLIFIERS

TECHNICAL DATA SHEET

AUDIO SPECIFICATIONS/PERFORMANCE

Average Power - 25 V[2,7]	0.3 A	34.3 W	117 Btu
Average Power - 70.7 V[2,7]	0.4 A	37.0 W	126 Btu
Average Power - 100 V[2]	0.4 A	38.5 W	131 Btu
Pink Noise Power - 2 Ω[3, 8]	1.2 A	160.8 W	548 Btu
Pink Noise Power - 4 Ω[3]	1.2 A	159.4 W	543 Btu
Pink Noise Power - 8 Ω[3]	1.1A	150.7 W	514 Btu
Pink Noise Power - 25 V[3]	1.1 A	140.5 W	479 Btu
Pink Noise Power - 70.7 V[3]	1.1 A	145.2 W	495 Btu
Pink Noise Power - 100 V[3]	1.1 A	152.5 W	520 Btu
Burst Power - 2 Ω[4, 8]	0.7 A	69.8 W	238 Btu
Burst Power - 4 Ω[4]	1.2 A	82.2 W	255 Btu
Burst Power - 8 Ω[4]	1.1 A	78.3 W	247 Btu
Burst Power - 25 V[4, 7]	0.7 A	70.6 W	240 Btu
Burst Power - 70.7 V[4]	0.8 A	73.8 W	251 Btu
Burst Power - 100 V[4]	0.8 A	74.5 W	254 Btu
Music Power - 2 Ω[5, 8]	1.1 A	136.2 W	464 Btu
Music Power - 4 Ω[5]	1.2 A	146.6 W	500 Btu
Music Power - 25 V[6, 8]	1.1 A	133.2 W	454 Btu
Music Power - 70.7 V[5]	1.1 A	134.3 W	458 Btu
Music Power - 100 V[5]	1.1 A	137.6 W	469 Btu
Sine Wave Power - 2 Ω[6, 8]	1.8 A	243.3 W	830 Btu
Sine Wave Power - 4 Ω[6]	1.8 A	245.8 W	835 Btu
Sine Wave Power - 8 Ω[6]	1.7 A	228.5 W	779 Btu
Sine Wave Power - 25 V[6, 7]	1.6 A	211.3 W	720 Btu
Sine Wave Power - 70.7 V[6]	1.6 A	210.8 W	719 Btu
Sine Wave Power - 100 V[6]	1.6 A	213.2 W	727 Btu

Power Consumption & Current Draw @ 230 VAC Mains	DMA401		
	Amps	Watts	Btu/hr[4]
Standby Mode, Meets Energy Star Standards	0.03 A	0.5 W	1.7 Btu
Low Power Mode[9]	0.1 A	5.2 W	18 Btu
Idle Active	0.1 A	10.1 W	34 Btu
Average Power - 2 Ω[2, 8]	0.6 A	85.2 W	291 Btu
Average Power - 4 Ω[2]	0.6 A	89.1 W	304 Btu
Average Power - 8 Ω[2]	0.6 A	86.6 W	295 Btu
Average Power - 25 V[2,7]	0.6 A	86.4 W	295 Btu
Average Power - 70.7 V[2,]	0.6 A	88.9 W	303 Btu
Average Power - 100 V[2]	0.6 A	87.6 W	299 Btu
Pink Noise Power - 2 Ω[3, 8]	1.6 A	251.6 W	858 Btu
Pink Noise Power - 4 Ω[3]	1.6 A	252.8 W	863 Btu
Pink Noise Power - 8 Ω[3]	1.5 A	240.2 W	820 Btu
Pink Noise Power - 25 V[3, 8]	1.5 A	241.7 W	825 Btu
Pink Noise Power - 70.7 V[3]	1.5 A	236.0 W	805 Btu

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DMA Series

DIGITAL MIXER-AMPLIFIERS

TECHNICAL DATA SHEET

AUDIO SPECIFICATIONS/PERFORMANCE

Pink Noise Power - 100 V[3]	1.5 A	235.7 W	804 Btu
Burst Power - 2 Ω[4, 8]	1.1 A	131.2 W	448 Btu
Burst Power - 4 Ω[4]	1.3 A	142.8 W	487 Btu
Burst Power - 8 Ω[4]	1.3 A	140.3 W	479 Btu
Burst Power - 25 V[4, 7]	1.2A	138.2 W	472 Btu
Burst Power - 70.7 V[4]	1.2 A	136.9 W	467 Btu
Burst Power - 100 V[4]	1.2 A	137.4 W	469 Btu
Music Power - 2 Ω[5, 8]	1.6 A	233.9 W	798 Btu
Music Power - 4 Ω[5]	1.7 A	239.8 W	818 Btu
Music Power - 25 V[6, 8]	1.7 A	242.4 W	827 Btu
Music Power - 70.7 V[5]	1.7 A	240.6 W	821 Btu
Music Power -100 V[5]	1.6 A	235.8 W	805 Btu
Sine Wave Power - 2 Ω[6, 8]	2.8 A	431.1 W	1471 Btu
Sine Wave Power - 4 Ω[6]	2.8 A	433.2 W	1478 Btu
Sine Wave Power - 8 Ω[6]	2.7 A	427.6 W	1459 Btu
Sine Wave Power - 25 V[6, 7]	2.7 A	420.1 W	1433 Btu
Sine Wave Power - 70.7 V[6]	2.7 A	416.8W	1422 Btu
Sine Wave Power - 100 V[6]	2.6 A	402.9 W	1375 Btu

Notes:

1. Power Level - Test is defined as follows: A 1 kHz sine wave signal burst of 20 cycles (20 mS) at 1% THD+N, followed by 480 cycles of a 1 kHz sine wave at 10% of the max power. Other power measurements available upon request. All power tests were conducted at 120 V.
2. Average power draw is defined as pink noise input signal applied to achieve 1/4 of the 4 Ω or 70.7 V power rating.
3. Maximum pink noise power current draw is defined as pink noise applied as the signal source to the amplifier to achieve 100% of the 4 Ω or 70.7 V power rating. Using pink noise for testing amplifiers is a strenuous test that provides a consistent signal across the entire audio spectrum. Pink noise also provides a 6 db crest factor signal that injects a balance of RMS and peak signals providing realistic amp draw data for audio applications.
4. Maximum burst power draw is defined as follows: A 1 kHz sine wave signal burst of 20 cycles (40 mS) at 100% of the 4 Ω or 70.7 V power rating, followed by 480 cycles of a 1 kHz sine wave at 10% of the maximum power repeated. **Note:** The amp draw/watt data is the peak power consumed and not steady-state amplifier draw. This complies with the UL 62368-1 standard and testing for maximum peak amp draw for a 120 V, 15 A AC mains.
5. Music power draw is defined as dynamic input signal applied to achieve the maximum rated power into a 4 Ω or 70.7 V load. This test also represents realistic current draw data for audio applications. The current draw data is the maximum peak amp/watt and not steady-state amp draw. This complies with the UL 62368-1 standard and testing for maximum peak amp draw for a 120 V, 15 A AC mains. **Note:** When specifying this amplifier for power consumption, AtlasIED recommends using the Max Music Power Amps/ Watt rating data.
6. Sine wave power draw is defined as 1 kHz input signal applied to achieve the maximum power output before clip into a 4 Ω or 70.7 V load. This data should be used as a reference of the maximum current the amplifier can draw. Steady-state sine wave signals over 3 seconds should not be applied and may trip a 15 A, 120 V AC Mains breaker.
7. Twenty-five volt systems using 4 Ω Load Selection Settings.
8. Two-ohm loads using 4 Ω Load Selection Settings.

DMA Series

DIGITAL MIXER AMPLIFIERS

TECHNICAL DATA SHEET

AUDIO SPECIFICATIONS/PERFORMANCE

Package Contents			
DMA Model	**DMA101**	**DMA201**	**DMA401**
Power Cord: IEC C13 Plug/18 AWG 1.8 m cord/NEMA 5-15 plug	Qty. 1	Qty. 1	Qty. 1
Input Connector: 3-position, 3.5 mm pitch	Qty. 3	Qty. 3	Qty. 3
GIP Connector: 3-postion, 3.5 mm pitch (black)	Qty. 1	Qty. 1	Qty. 1
Remote Level Connector: 5-position, 3.5 mm pitch	Qty. 1	Qty. 1	Qty. 1
Speaker Connector: 2-position, 7.62 mm pitch	Qty. 1	Qty. 1	Qty. 1
Rack Kit for Single & Dual mounting	Qty. 1	Qty. 1	Qty. 1
Installation Sheet with QR Code	Qty. 1	Qty. 1	Qty. 1

Dimensions	DMA101, DMA201, DMA401
Rack Mount Requirements	1 RU, 8.5" or 19" with rack kit extension ear
Dimensions - Unit, All DMA Models	8.75" W × 1.75" H × 11.23" D (222 mm × 44 mm × 285 mm)
Dimensions - Shipping, All DMA Models	15.35" W × 5.04" H × 12" D (390 mm × 306 mm × 128 mm)

Weight	Unit	Shipping
DMA101	5.3 lbs (2.4 kg)	9.4 lbs (4.26 kg)
DMA201	5.65 lbs (2.56 kg)	9.75 lbs (4.42 kg)
DMA401	6.0 lbs (2.72 kg)	10.1 lbs (4.58 kg)

Agency Approvals	
North America Agency	TÜV
Testing Standard North America	62368-1
FCC Class A (Conducted & Radiated Emissions)	Part 15B of the FCC Rules
CE	Yes (Includes RoHS and WEEE)

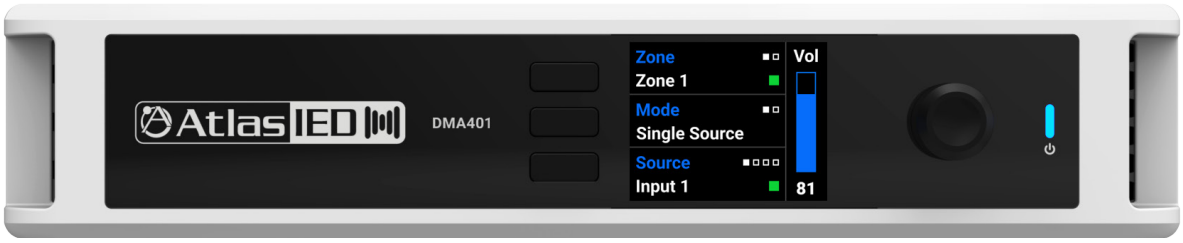
Accessory Items	
DMA-V	Wall Plate, Single Gang, Remote Level Control for DMA and LMA Amplifiers
DMA-VS	Wall Plate, Single Gang, Remote Level Control Plus Source Select for DMA and LMA Amplifiers
DMA-BT	Wall Plate, Single Gang, Bluetooth Audio
DMA-ML	Wall Plate, Single Gang, Microphone or Line Audio
WTSD-MIX31	Wall Plate, Single Gang, Bluetooth / Mic / Line Mixer
WTSD-MIX41	Wall Plate, Single Gang, Microphone or Line 4-input Audio Mixer

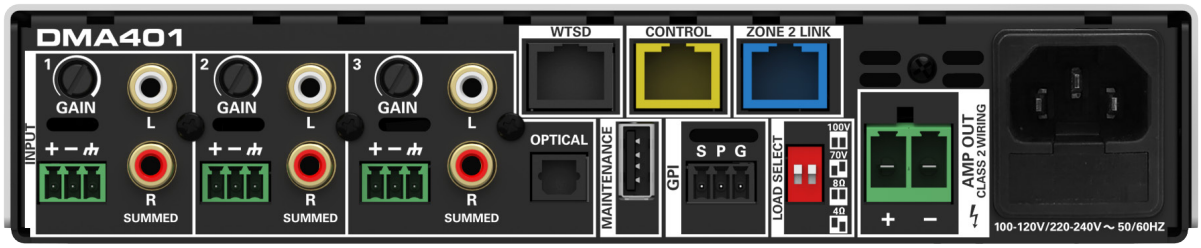
DMA Series

DIGITAL MIXER AMPLIFIERS

TECHNICAL DATA SHEET

PRODUCT IMAGES



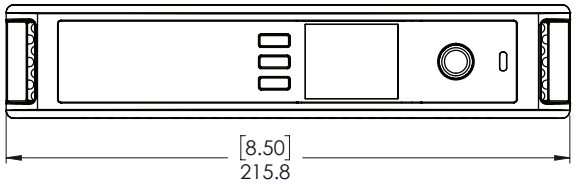


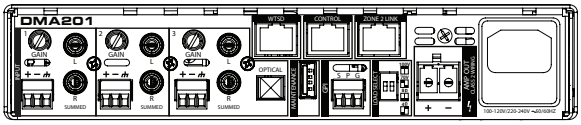
DMA Series

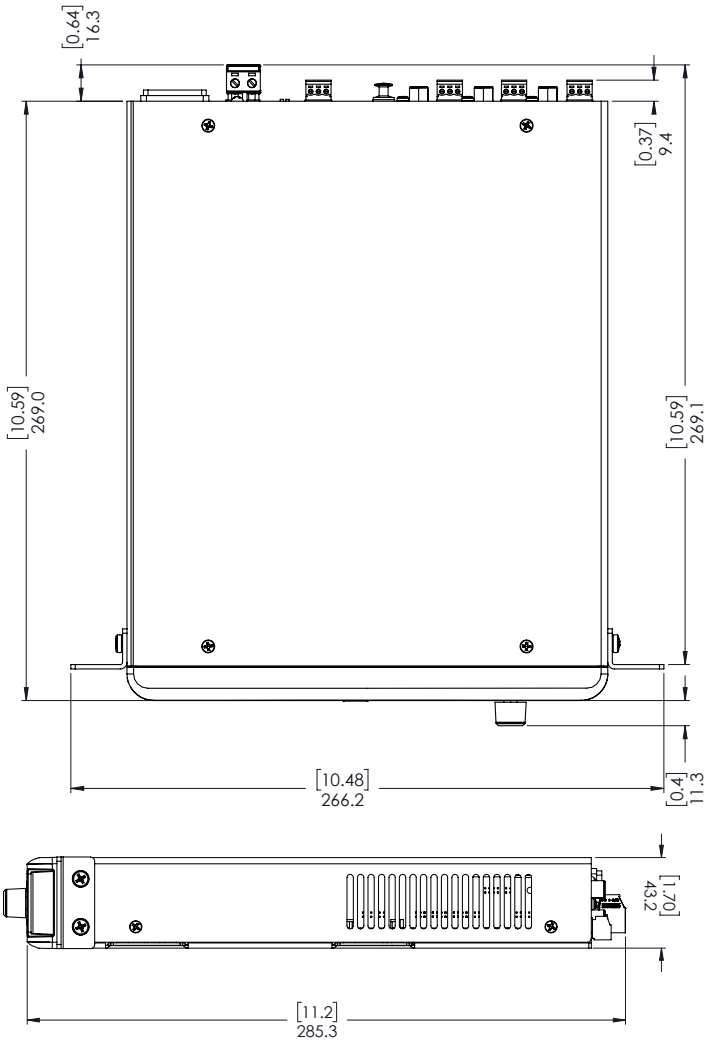
DIGITAL MIXER AMPLIFIERS

TECHNICAL DATA SHEET

DIMENSIONAL DRAWINGS







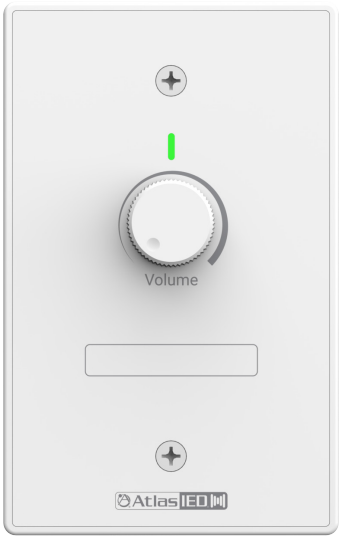
DMA Series

DIGITAL MIXER AMPLIFIERS

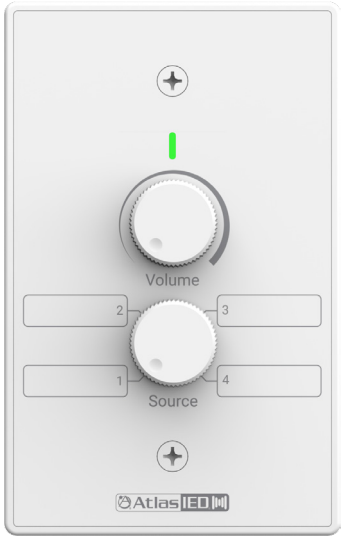
TECHNICAL DATA SHEET

ACCESSORIES

DMA-V - Single Zone Volume Control



DMA-VS - Volume Control + Source Select



DMA-ML - Mic/Line Input with Volume Control

DMA-BT - Bluetooth Audio

DMA Series

DIGITAL MIXER AMPLIFIERS

TECHNICAL DATA SHEET

ARCHITECT AND ENGINEER SPECS

The AtlasIED DMA Digital Mixer-Amplifier shall be a Single Zone Mixer-Amplifier Series expandable to Two Zones, designed for versatility and reliability, making it suitable for a wide range of audio applications.

The DMA Series shall have Bluetooth Low Energy (BLE) technology, allowing installers to easily configure the amplifiers using the DMA App. The intelligent DMA App also features an auto-update function, ensuring that users have access to the latest features and improvements. Users shall be able to be create system designs offline or online and save configurations, making it convenient for future DMA series installations and for backing up designs.

The DMA Series shall have four selectable source inputs. Inputs 1, 2, and 3 feature balanced mic/line inputs along with summed RCA connections, plus a TOSLINK optical input. The fourth input utilizes WTSD Bus technology utilizing Category 5/6 cabling, which supports various remote wall-mounted accessories, including commercial-grade Bluetooth receivers and mic/line input mixers. These accessories shall be positioned up to 100 meters away from the DMA unit and can be daisy-chained together. This DMA shall be expandable to up to six inputs. A Priority Mute Override GPI is provided for life safety requirements.

The DMA Amplifier Series shall feature a compact, rack-mountable design that occupies 1 RU in a half-rack format, and it is available in three power levels: 100 W, 200 W, and 400 W. The amplifiers support multi-impedance configurations of 2 Ω, 4 Ω, 8 Ω, and constant voltage outputs of 25 V, 70.7 V, and 100 V.

The DMA series power supply shall be a switch-mode, global auto-sensing design, ensuring stable output under varying conditions. The amplifiers operate in a convection-cooled state, with variable-speed, whisper-quiet fans engaging as needed. They are energy-efficient, meeting Energy Star standards by consuming less than 1 W in GPI-enabled standby mode. For connectivity, the DMA Series provides balanced Euroblock inputs and RCA summed mono inputs for versatile audio management. A Priority Mute Override is provided for life safety requirements. To link the DMA amplifiers with LMA amplifiers, standard Ethernet cables can be used.

The DMA series shall incorporate audio management that includes Zone 1 and 2 source selection and remote level control. Additionally, the DMA amplifiers shall include a Push Here Diagnostic (PHD) feature for 70.7 V / 100 V speaker system load testing, enabling users to verify wiring and impedance integrity. The amplifiers come with a 3-year warranty and provide access to technical support for installation and troubleshooting assistance.

The DMA Amplifier Series shall be ideal for applications that require distributed constant voltage sound systems, high SPL sound reinforcement systems, and background music or paging environments. The DMA series shall encompass three power levels (100 W, 200 W, and 400 W), multi-impedance capability (2 Ω - 100 V), and include a rack kit for easy installation, ensuring high-quality sound amplification in a compact, space-saving design.

The DMA Amplifier Series shall be a 1 RU half-rack device with the following dimensions for all models: 8.50 inches (216 mm) wide, 1.75 inches (44 mm) high, and 11.23 inches (285 mm) deep. The DMA101 shall weigh 5.3 lbs. (2.4 kg). The DMA201 shall weigh 5.65 lbs. (2.56 kg). The DMA401 shall weigh 6.0 lbs. (2.72 kg). The AtlasIED amplifier series shall be the DMA Series.