



DMA SERIES

DIGITAL MIXER-AMPLIFIERS

DMA101 / DMA201 / DMA401

OWNER'S MANUAL



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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this device near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other device that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit the device.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the device. When a cart is used, use caution when moving the cart / device combination to avoid injury from tip-over. 
13. Unplug this device during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled, or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
16. **WARNING:** To reduce the risk of fire or electric shock, this device should not be exposed to dripping, splashing, rain, or moisture, and objects filled with liquids, such as a vase, should not be placed on this device.
17. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle.
18. The mains plug of the power supply cord shall remain readily operable.
19. Protective earthing terminal. The apparatus should be connected  to a mains socket with a protective earthing connection.

CAUTION - SHOCK RISK



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK
DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE**

**AVIS: NE PAS EXPOSER CE MATÉRIEL À LA PLUIE OU L'HUMIDITÉ
AFIN DE RÉDUIRE LE RISQUE D'INFLAMMATION OU DE CHOC ÉLECTRIQUE**



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IMPORTANT SAFETY INSTRUCTIONS



WARNING - WHEN THE DEVICE IS IN USE:

- **WARNING:** For the terminals marked with symbol of ⚡ may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.
- **WARNING:** The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
- **WARNING:** The mains plug is used as disconnect device. The disconnect device shall remain readily operable.
- To prevent electric shock, do not remove the product cover as there are high voltage components inside. Refer all servicing to AtlasIED.
- Should any of the following irregularities occur during use, immediately switch off the power, disconnect the power cord from the AC outlet and contact AtlasIED. Do not attempt to continue operation of the product when any of the following conditions are present as this may cause fire or electric shock:
 - If there is smoke or a strange smell coming from the unit.
 - If the product falls or the case is damaged.
 - If water or any metallic object falls into the product.
 - If the power supply cord is damaged in any way.
 - If the unit is malfunctioning.
- Do not insert or drop metallic objects or flammable materials into the ventilation holes of the product's cover, as this may result in electric shock or fire.
- Do not place any containers with liquid or metallic objects on the top of the product. If any liquid spills into the unit, fire or electric shock may result.
- Never operate this product or touch the power supply cord during an electrical storm, electric shock may result.
- Never exceed the power rating on the product when connecting equipment. Fire and/or property damage may result
- Operate the product only with the voltage specified on the unit. Fire and/or electric shock may result if a higher voltage is used.
- Do not modify, kink, or cut the power cord. Do not place the power cord in close proximity to heaters and do not place heavy objects on the power cord, including the product itself. Doing so may result in fire or electrical shock.
- Ensure that the safety ground terminal is connected to a proper ground. Never connect the ground to a gas pipe as a catastrophic disaster may result.
- Be sure the installation of the product is stable. Avoid slanted surfaces as the product may fall and cause injury or property damage.



CAUTION - WHEN INSTALLING THE PRODUCT:

- Plugging in or unplugging the power cord with wet hands may result in electric shock.
- Never move the unit with the power cord plugged into the wall, as damage to the power cord may result.
- When unplugging the cord from the wall, grasp the plug, NOT the cord.
- Never install this product in humid or dusty locations, nor in direct sunlight, near sources of heat, or in areas where sooty smoke or steam are present. Fire and electric shock may result.
- Keep all sides of the unit at least 3 1/2" away from objects that may obstruct air flow to prevent the unit's internal temperature rise.



CAUTION - WHEN THE PRODUCT IS IN USE:

- Never place heavy objects on the product, causing it to fall and/or break, resulting in personal injury and property damage. In addition, the product itself may fall and cause injury and property damage.
- Contact AtlasIED for instructions on cleaning the inside of the unit. Large accumulations of dust inside the unit may result in heat buildup and fire.
- Ensure that the power supply plug is securely plugged into the wall outlet. Never allow dust to accumulate on the power plug or inside the wall outlet.
- When cleaning the unit or the unit is not to be operated for an extended period, unplug the power cord from the wall.



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INTRODUCTION

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 support diverse sound reinforcement needs, ensuring high-quality audio performance in a variety of environments.

The DMA Series is configured at the factory as a traditional mixer-amplifier and requires no control software 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 Control 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 expandability, 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 leverage Bluetooth Low Energy (BLE) technology, allowing installers to easily configure the amplifiers using the DMA Control App. By simply downloading the app on a smartphone, users can scan for and connect to available devices and make configurations effortlessly. The intelligent DMA Control 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 cable 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, employing Category 5/6 cabling to support 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 convenient plug-and-go remote level control and assignable source select accessory wall plates, enhancing user audio content accessibility and ease of use. Connections for these accessories 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 useful for installations requiring distinct audio control in separate spaces.

The DMA Amplifier features a 70.7 V / 100 V speaker system load test known as the Push Here Diagnostic® (PHD). This function allows users to check speaker lines for wiring and impedance errors. The system automatically verifies that the tap settings of the attached speakers do not exceed the amplifier's rated power, determines whether speakers are incorrectly tapped at 8 Ω , and checks that speaker wires are free from shorts.

DMA Amplifiers are designed for efficiency and convenience, featuring a compact, 1 RU half-rack format with a rack mounting 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.



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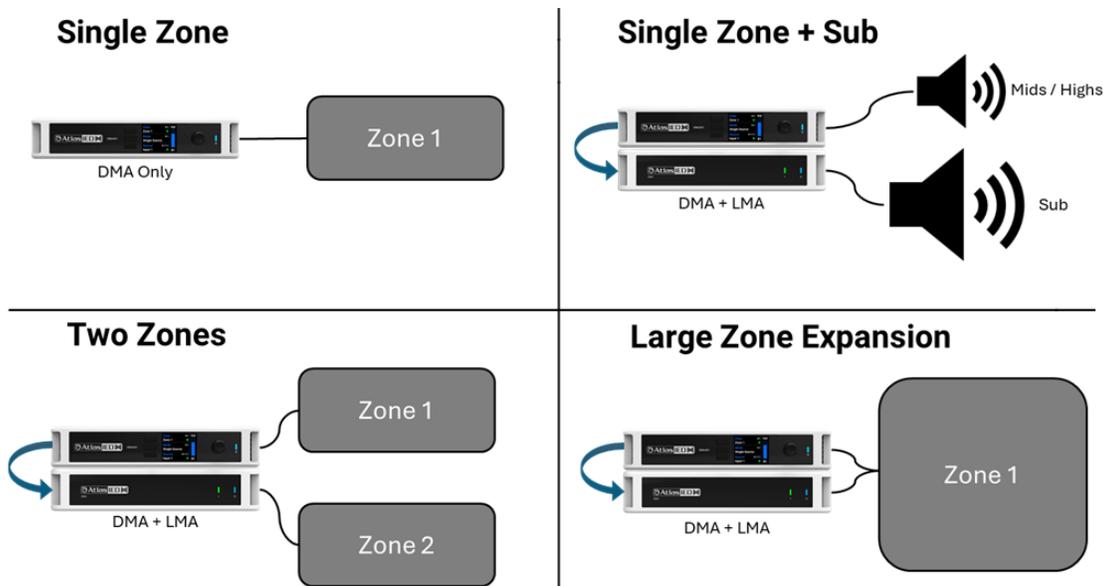
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KEY FEATURES

- DMA101 – 100W, DMA201 – 200W, DMA401 – 400W Digital Mixer Amplifiers
- Individual channel load configurations of 2 Ω , 4 Ω , 8 Ω , 25 V, 70.7 V & 100 V
- Amplifiers
- Balanced inputs
- Unbalanced RCA inputs (stereo - summed to mono)
- Priority mute
- Optional remote level control and source controls
- Energy savings standby
- Auto sensing 100 VAC–240 VAC mains power supply
- Rear panel attenuators
- Meets Energy Star Standards <1 W in Standby Mode
- Convection cooling in Idle Mode; fan-assist under signal

DMA CONFIGURATIONS

The DMA amplifier is configured to operate as a Single Zone system or, when linked with a LMA amplifier, other options are a 2 Zone system, a 1 Zone with a Subwoofer, and an Expansion mode when additional power is required for one larger zone.



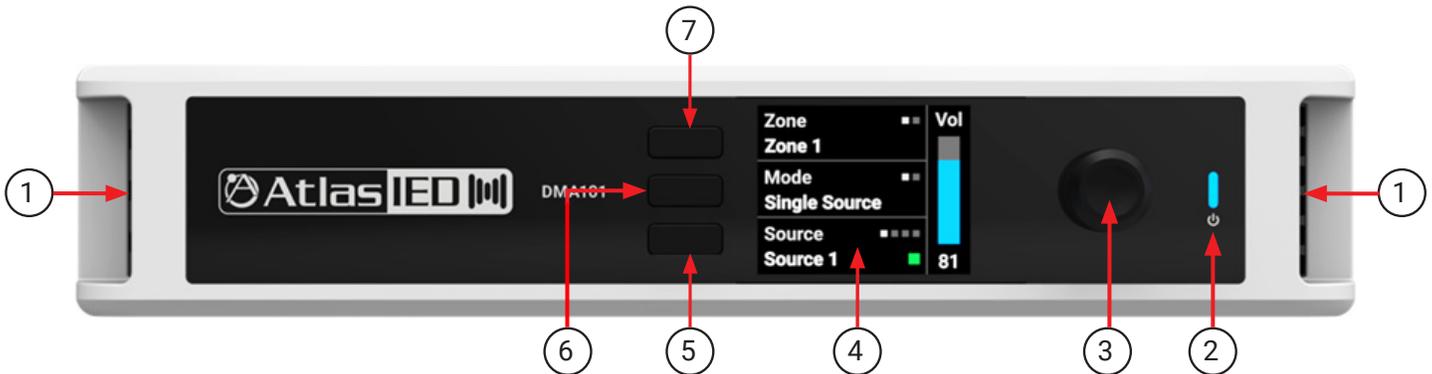
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FRONT PANEL



1. VENTILATION / COOLING

The cooling system of the DMA Series includes an idle mode with convection cooling and variable-speed, fan-assisted cooling during amplification for DMA201 and DMA401 models. This functions by drawing in cool from the front of the amplifier and expelling hot air through the rear and the sides. Notably, the design of the DMA Series is such that air filters are not necessary. However, in environments with high levels of dust or dirt, occasional cleaning may be required to ensure optimal performance.

2. AC MAINS & POWER SUPPLY STATUS INDICATOR

The DMA Channel Status indicator employs RGB LED technology to offer a visual indication of various conditions related to the channel's operation. Each channel has a separate indicator:

- **Idle Mode** (Blue - Blinking) – The LED will blink blue indicating the amplifier is in a low power state. The fans are off during this state with the amplifier operating in convection cooling mode. The amplifier is ready to receive a signal and has no wake-up delay.
- **Power-On Mode** (Blue - Steady) – The LED will illuminate a steady blue state when proper AC mains power is applied to the amplifier, indicating that the amplifier is active and ready for use.
- **Standby Mode** (Yellow - Steady) – A steady yellow state indicates Standby mode, in which the amplifier's power supply is in Energy Save Mode, and the amplifier is not ready for use. To activate Standby mode, the rear panel remote activation control GPI must be triggered by shorting the (STB) and ground (G) pins together. In Standby mode, the LMA power consumption is less than 1 watt, and the amplifier will not pass audio.
- **Protect Mode** (Red - Steady) – A steady red LED illuminates in the event of a fault condition with the power supply. If this occurs, unplug the amplifier from the AC mains and have the AC mains inspected by a qualified technician. If the AC power is stable, plug the DMA amplifier back in. If the LED remains red, contact AtlasIED Technical Support at 1-800-876-3333.
- **AC Fault** (Red - Blinking) – The LED will blink red when there is either low or high AC mains voltage, indicating a fault condition with the AC mains powering the amplifier. Under this condition, the amplifier will not function until the AC mains are within the amplifier's voltage requirements. DMA AC mains operating voltage requirements are 100 V–132 V and 208 V–240 V. In the event there is a short in one of the speaker outputs, the amplifier will go into protect mode with all channel LEDs and the AC mains LED blinking red. The amplifier will attempt to reset itself every 20 seconds until the short condition has been removed.
- **Thermal Protection** (Yellow - Blinking) – This LED represents the temperature condition of the amplifier. It will blink yellow if the power supply's thermal protection is triggered, causing the power output to reduce. This allows the amplifier to cool down while remaining functional.

3. LEVEL KNOB

The DMA Power Supply Status indicator utilizes RGB LED technology to provide a visual indication of various conditions related to the incoming AC mains and the amplifier's power supply.

FRONT PANEL - (CONTINUED ON NEXT PAGE)

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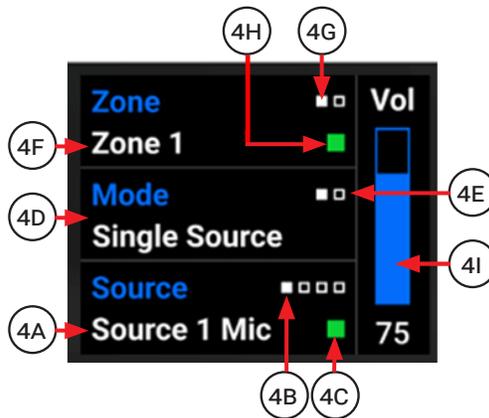


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FRONT PANEL - (CONTINUED)

4. LCD DISPLAY

- 4A. Source Selected Name
- 4B. Source Indicator Selected 1-4
- 4C. Selected Source Audio signal Indicator
- 4D. Mode Selection - Source or Mix
- 4E. Mode Selection Indicator
- 4F. Zone Selected Name
- 4G. Zone Output Selected
- 4H. Zone Output Signal Present Indicator
- 4I. Source or Mix Master Level Indicator



5. SOURCE SELECTION SWITCH

Provides manual selection of the audio source signal input.

6. SOURCE OR MIX MODE SELECTION SWITCH

Provides manual selection of audio source signal sources or a mixture of multiple input sources.

7. ZONE SELECTION SWITCH

Provides manual selection of Zone 1 and Zone 2.



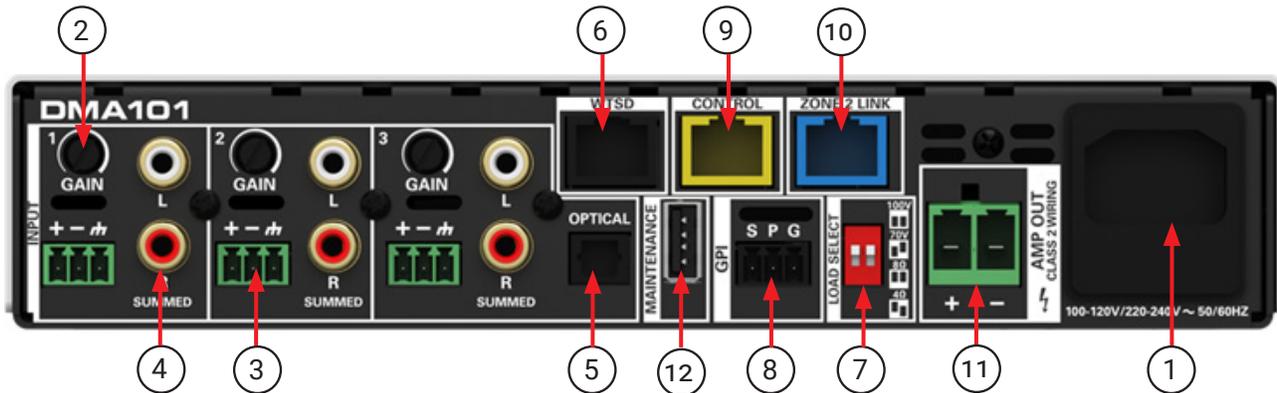
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REAR PANEL



1. AC MAINS INPUT

The DMA Series is equipped with a global, wide-range AC mains power supply that functions on 100V–120V and 220V–240V 50/60 Hz power sources. The amplifiers feature an IEC-600320-C14 receptacle and come with a detachable 1.8 meter 14 gauge NEMA 5-15 power cord. Insert the IEC connector of the power cord into the IEC receptacle of the DMA Series amplifier, ensuring it is securely connected. For applications outside North America, refer to local electrical code requirements to select the appropriate power cord.

2. CHANNEL GAIN CONTROLS

Inputs 1, 2, 3 of the DMA amplifiers features an independent detented Gain control. When either potentiometer is turned down (all the way to the left, or fully counterclockwise), no signal will come out of the corresponding amplifier channel. When turned up (all the way to the right, or fully clockwise), the amplifier will be set for maximum level.

- **Low Audio Level Applications** – If the audio levels are producing only a few watts, it is recommended to set the level controls at around the 12 o'clock position and to increase the input signal in order to optimize the system's gain structure and reduce the noise floor.
- **70.7 V and 100 V Applications** – When using a 70.7 V or 100 V system at any power level, it is recommended to set the level controls at the 3 o'clock position and increase the input signal in order to optimize the system's gain structure and reduce the noise floor.

3. MIC/LINE INPUTS

Inputs 1, 2, A and 3 feature a mic or line input and a balanced line level to the (+) (–) and (G) terminals. **Note:** If connecting an unbalanced line level input, short the (G) and (–) terminals together. Use the DMA Control App to select between line or mic level. Each input can be configured independently.

4. RCA INPUTS

Inputs 1, 2, and 3 feature Unbalanced Left and Right RCA connectors. These inputs are electrically summed into a mono signal. **Note:** The RCA inputs are always active along with the balanced input. Their signals are combined before the gain control stage.

5. OPTICAL INPUT

Input 3 features an Optical input. This input is in parallel with the RCA and Line inputs.

6. WTSD INPUT

This Black RJ45 connector is an input for the DMA line of external wall plate input accessories. A DMA amplifier can connect to a DMA accessory wall plate up to 300 ft away using industry standard Category 5/6 cable with RJ45 connectors. For more information, refer to the section **Control Port Accessories** on page 11 in this manual. **Note:** This port is not a network port.

7. AMPLIFIER LOAD CONFIGURATION SWITCHES - IMPORTANT!

The DMA series provides flexibility in configuring load requirements, allowing independent load selections for each channel. Each channel can be configured for 2 Ω , 4 Ω , 8 Ω , 25 V, 70.7 V, and 100 V loads by means of two dedicated DIP switches.

REAR PANEL - (CONTINUED ON NEXT PAGE)

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REAR PANEL - (CONTINUED)

AMPLIFIER LOAD CONFIGURATION SWITCHES (CONTINUED)

For 2 Ω loads or 25 V systems, use 4 Ω switch settings. Refer to the power specifications for power ratings corresponding to the selected load. By following the provided chart and ensuring the correct DIP switch positions, you can tailor the amplifier's load configuration to suit your specific needs. Always refer to the owner's manual for additional details and specifications.

Table 1 - Channel 1 Load Selection Switch Positions		
System	DIP Switch #1	DIP Switch #2
100 V	Up	Up
70.7 V	Up	Down
8 Ω	Down	Down
25 V	Down	Up
4 Ω	Down	Up
2 Ω	Down	Up



8. GPI CONTROL PORT

The DMA GPI control port serves two functions:

- **Standby Mode** – Connect Pin 1 (STB) to Pin 3 (G) via a switch to activate Standby mode. This mutes all channels and places the amplifier in Energy Save mode. When Standby is activated, the AC mains power LED illuminates in a steady Yellow state, and power consumption is less than 1 W. Switch requirements are low voltage and low current SPST.
- **Priority Mode** – Connect Pin 2 (PRI) to Pin 3 (G) via switch to activate Priority mode, muting all inputs. Switch requirements are low voltage and low current SPST. All channel LEDs will blink Red.



Figure A: Standby Mode

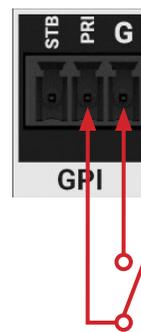


Figure B: Priority Mode

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REAR PANEL - (CONTINUED)

CONTROL PORT ACCESSORIES

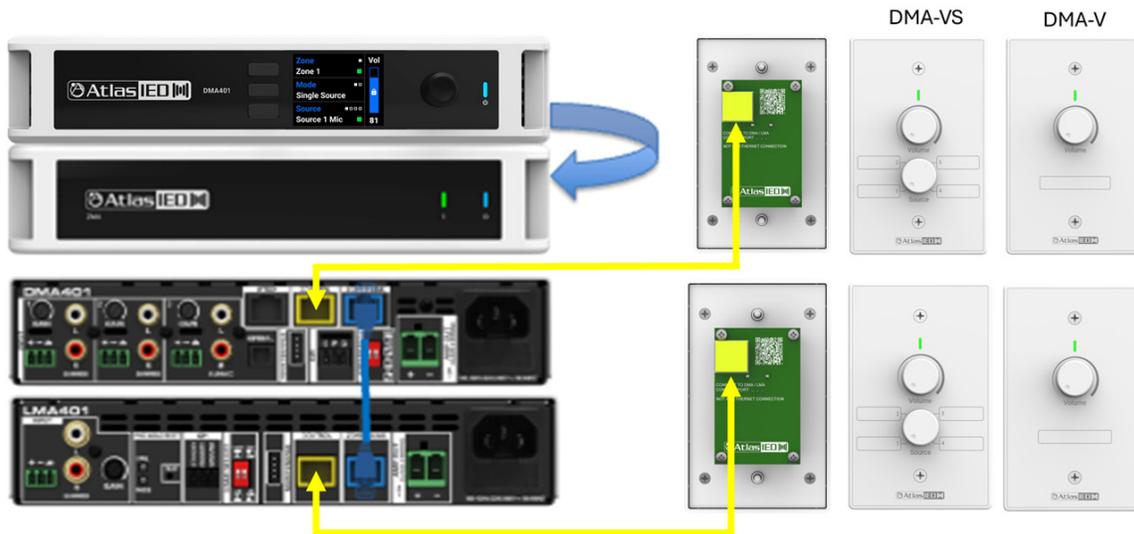
9. REMOTE LEVEL CONTROL PORT

DMA Amplifier and DMA-V (Volume Control) Accessory – A DMA amplifier level can be adjusted remotely using a DMA-V accessory up to 330 feet away. Connectivity from the DMA amplifier to the DMA-V wall plate is via industry standard Category 5/6 cable with RJ45 connectors. LMA and DMA-V connectors are color coded (Yellow) to make the identification quick and simple. **Note:** This port is not a network port. The Control Port operates on a 10 kΩ-based system, and it is recommended to use the optional AtlasIED DMA-V wall control for this purpose. Follow these guidelines for proper setup:

DMA Amplifier & DMA-VS Remote Level Control & Source Selector – A DMA amplifier level can be adjusted remotely using a DMA-V accessory up to 330 ft away. Connectivity from the LMA amplifier to the DMA-V wall plate is via industry standard Category 5/6 cable with RJ45 connectors. LMA & DMA-V connectors are color coded (Yellow) to simplify identification. **Note:** This port is not a network port. The control port operates on a 10 kΩ-based system, and it is recommended to use the optional AtlasIED DMA-V wall plate accessory for this purpose. Follow these guidelines for proper setup:



DMA Amplifier & DMA-VS Remote Level Control & Source Selector in 2 Zone Applications – When the LMA amplifier is used as a Zone 2 amplifier and connected to a DMA amplifier, the LMA and the DMA amplifiers can have separate level and source selection controls. The DMA Control App is used to assign sources to switch selections. The DMA-V level control works with both DMA and LMA amplifiers in all setups and requires no additional user configuration. **Note:** The DMA-VS works in all setups with a DMA amplifier but only works with an LMA amplifier when a DMA and an LMA amplifier are linked together.



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REAR PANEL - (CONTINUED)

CONTROL PORT RJ45 CONNECTOR WIRING PIN-OUT

If the DMA-V does not meet installation requirements for level control, the pins of the Remote Level Control can be accessed by an external potentiometer or audio processor. **Note:** These boards are available from online suppliers such as DigiKey and Amazon. Table 1 shows the Control Port RJ45 assignments for level control.

Table 1 - DMA Control Port RJ45 Connector Pin Assignments	
Pin 1	Do not connect
Pin 2	RMT Level Return 0–10 V
Pin 3	GND Audio
Pin 4	Power Out +10 VDC
Pin 5	Do not connect
Pin 6	Do not connect
Pin 7	Do not connect
Pin 8	Do not connect

Figures 1 and 2 below illustrate the use of a generic RJ45 break-out board with screw terminals to control a DMA amplifier power level externally.

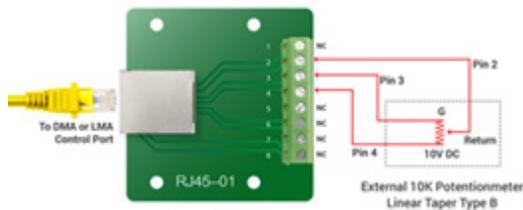


Figure 1: Remote level control with external potentiometer

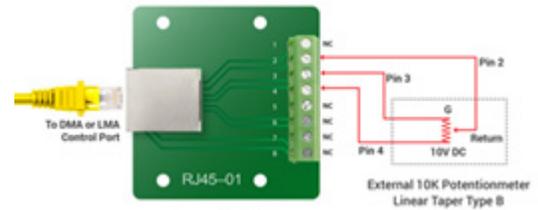
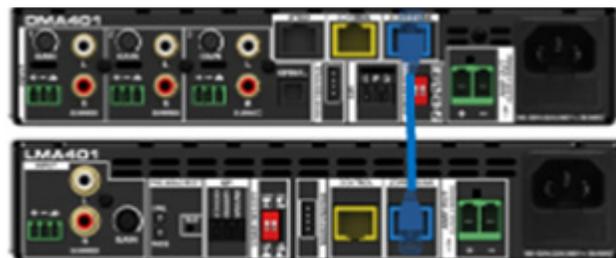


Figure 2: Remote level control with external control system

10. Zone 2 Link Ports

The DMA amplifier is designed to work with an LMA zone amplifier in setups with two zone type configurations. The Zone Link bus is used to connect an LMA amplifier with a DMA amplifier. The link bus connection is color-coded (Blue) on both amplifiers. The LMA Zone 2 amplifier connects with the DMA Zone 2 amplifier via industry standard Category 5/6 cable with RJ45 connectors. **Note:** This port is not a network port.



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REAR PANEL - (CONTINUED)

DMA ZONE 2 LINK PORT TO LINE LEVEL ADAPTER

To use the DMA Zone 2 audio output signal to feed an amplifier other than an LMA, a generic RJ45 adapter board can be used to access the balanced audio signal. **Note:** These boards are available online suppliers such as DigiKey and Amazon. See Figure 3 for adapter board connections and Table 2 for pin assignments.

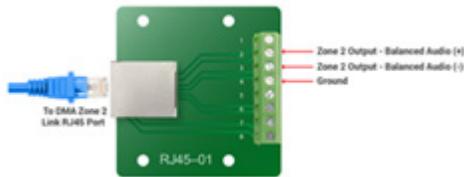


Figure 3: Using a generic RJ45 adapter board to send a balanced audio output signal to an external (non-LMA series) amplifier

Table 2 - DMA Amplifier Zone 2 Link Bus RJ45 Pin Assignments	
Pin 1	Zone 2 Output - Balanced Audio (+)
Pin 2	Zone 2 Output - Balanced Audio (-)
Pin 3	GND Audio
Pin 4	Do not connect
Pin 5	GND
Pin 6	Do not connect
Pin 7	Do not connect
Pin 8	Do not connect

11. Loudspeaker Connections

DMA Series amplifiers are equipped with a locking Euroblock-type connector. Please follow the guidelines below when working with the connector, keeping safety in mind:

- Safety Precautions - Before starting the process, ensure that the amplifier is unplugged from the AC mains source to avoid potential high voltage electrical shock.
- Connector Details - The removable Euroblock connector is a 2-position, 7.62 mm pitch design.
- Wire Gauge Recommendation - It is recommended to use 14 gauge (AWG) or larger diameter wire for connecting to the loudspeaker.
- Wire Size Acceptance - The terminal can accept wire sizes of 18 gauge (AWG) to 10 gauge (AWG) Class 3 wiring.
- Wire Preparation - Properly prepare the wire by stripping it back 0.25" (6 mm). It is not recommended to tin (apply solder to) the wire.
- Connection Process - Insert the wire into the terminal block slot and secure it by tightening the screws firmly. This step is critical to ensuring a secure connection for both safety and optimal audio quality.
- ⚠ Caution - Failure to tighten screws securely could lead to electrical shock or damage to the amplifier.

12. Maintenance Port

DMA series amplifiers have a built-in USB-A port for Hardware Host firmware updates. Insert a USB flash drive with the firmware downloaded from the appropriate DMA product page on the [AtlasIED website](http://AtlasIED.com). Refer to the topics **Identifying DMA Firmware on page 14** and **Updating DMA Firmware on page 14** for more information. **Note:** A detailed DMA Firmware Update Guide is available in the DMA Support File section on www.atlasied.com.



DMA SERIES

DIGITAL MIXER-AMPLIFIERS
DMA101 / DMA201 / DMA401



OWNER'S MANUAL

UPDATING DMA FIRMWARE

DMA firmware can be upgraded through the USB-A interface on the unit's rear panel using files from a USB flash drive that have been downloaded from the DMA product page on the AtlasIED website.

Note: A detailed DMA Firmware Update Guide is available in the DMA Support File section on www.atlasied.com.

Note: The USB drive must be configured for the FAT32 format.

Note: Drives that are preconfigured for FAT32 have a storage capacity of 32 G or less.

To update DMA firmware using the Maintenance port and USB drive, do the following:

1. Navigate to the **DMA Amplifier** product page on the AtlasIED website and click on the **Support Files** tab.
2. Locate the firmware file in the directory. **Note:** Firmware for DMA101, DMA201, and DMA401 are located in separate zip files.
3. Copy the relevant firmware to the Flash drive.

Note: Firmware files for more than one DMA model may be stored on the same USB drive. The DMA amplifier will select the correct version.

4. Unplug the DMA from AC mains power. Wait for 1 minute, even if the power LED goes off. **Note:** The power supply must be fully discharged for the firmware update process to function correctly.
5. Insert the USB drive into the USB port located on the rear panel of the DMA amplifier.
6. Activate power to the amplifier. The firmware update will begin automatically.

IDENTIFYING DMA FIRMWARE

The DMA Amplifier operates using two types of firmware: DSP/UI firmware and Hardware Host firmware. The installed version of each can be identified using the DMA Control App, or when the DMA is activated, the amplifier's front panel display.

DSP/UI firmware is accessed from the cloud using the DMA Control App firmware link.

Hardware Host firmware is accessed from the AtlasIED website on the **DMA Amplifier** product page and clicking on the **Support Files** tab.

To determine the current version of each type of firmware installed in the DMA amplifier, use either of the following methods.

Front Panel Display Method

1. Turn off or unplug the DMA AC mains to the DMA amplifier.
2. Wait 1 minute and then restore power to the amplifier. As it reboots, the amplifier will show the version of each type of firmware in the front panel display.

Note: The Host Hardware firmware version is listed after the ampersand (&).



LED must be OFF for 1 minute



Figure 4: The DSP/UI (cloud) firmware version appears to the left of the ampersand (&).



Figure 5: The Host Hardware (USB drive) firmware version appears to the right of the ampersand (&).

IDENTIFYING DMA FIRMWARE - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
DMA101 / DMA201 / DMA401

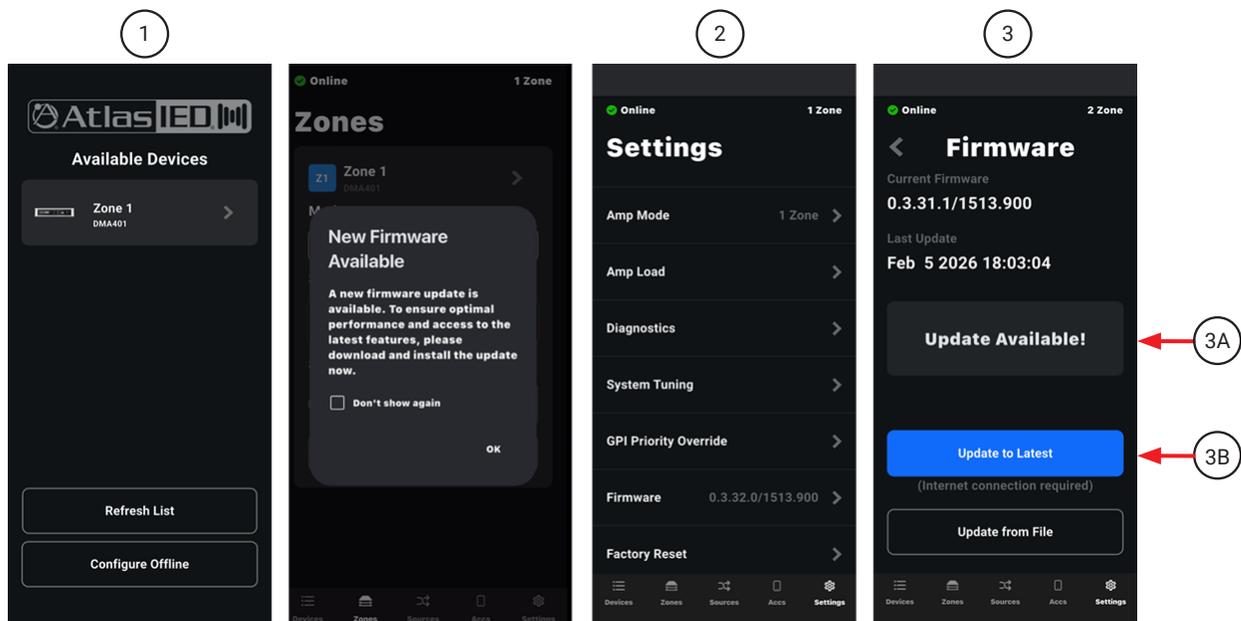


OWNER'S MANUAL

IDENTIFYING DMA FIRMWARE - (CONTINUED)

DMA Control App Method

1. Open the DMA Control App and connect to the DMA amplifier.
2. Navigate to the **Settings** page.
3. Tap to expand the **Firmware** tab. The page will state whether the DSP/UI and the Host Hardware firmware is up to date.
 - A. If the *Host Hardware* firmware needs to be updated, refer to the instructions in the section **Updating DMA Firmware** on page 14.
 - B. If the *DSP/UI* firmware needs to be updated, the blue **DSP/UI Update to Latest** button will illuminate. To update the firmware to the latest version, tap the button.



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OPERATING THE DMA AMPLIFIER OUT OF THE BOX

The DMA amplifier offers a balanced approach for installation, providing both ease of use and configuration for basic applications and advanced features for more complex installation needs. This makes it suitable for a wide range of users, from beginners to those with more intricate requirements.

The DMA series feature basic, out-of-the-box preset configurations for the most common applications accessible from the front panel controls. For a basic, quick start of a DMA amplifier, it is not necessary to use the AtlasIED DMA Control App.

1. **Zone Switch** – 1 Zone (Only the DMA speaker output is active). To add Zone 2, use the DMA Control App.



2. **Mode Switch** – 1 Zone (Only DMA speaker output active) Select between Single Source and Mix modes.

Note: The DMA amplifier is configured out of the box in Single Source Mode.

- **Mode Switch (Single Source)** – Only the selected input/source is audible.



- **Source Switch (Single Source)** – Press the **Source** switch until the correct input is selected.



OPERATING THE DMA AMPLIFIER OUT OF THE BOX - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
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OWNER'S MANUAL

OPERATING THE DMA AMPLIFIER OUT OF THE BOX - (CONTINUED)

3. **Mode Mix** – In Mix Mode, all inputs / sources with signal can be audible at the same time if the individual level is turned up.



- **Mix Level** – Input selection for the source level adjustment. Each input level can be set separately. The color of the meter bar will change to yellow while indicating the level of the input selected. After 10 seconds, the display will revert to the Zone Mix Level screen with a blue meter bar.



4. **Level Control** – Rotate the knob clockwise to increase or counter-clockwise to decrease the Zone Level or Source Mix levels. The extent of the blue meter bar will vary according to the Zone Level setting. The yellow bar will vary with the Input level setting. Pressing the knob in when in Zone Mode mutes or unmutes the audio. Pressing the knob in when in Mix Mode mutes the input selected. When muted, the color of the meter bar will turn from blue or yellow to red.



5. **Default Input Settings** – The following are default input settings.
- Source 1 MIC – Preconfigured to Mic Mode. Phantom power is disabled. Mic Pad is ON, assigned as the Priority Input (VOX). 120 Hz, 12 dB HPF enabled. EQ is flat. Receive when Input 1 has signal. HPF 40 Hz / 12 dB, EQ Flat, Input Level is preset to 25%.
 - Source 2 & 3 RCA – Preconfigured to RCA summed mode. Duck receive when Input 1 has signal. HPF 40 Hz / 12 dB. EQ is flat. Input Level is preset to 25%.
 - Source 4 WTSD – 1 V Sensitivity, Active. Duck receive when Input 1 has signal. HPF 40 Hz / 12 dB. EQ is flat. Input Level is preset to 25%.
6. **Zone Settings** – The following are factory default settings for zones.
- HPF 40 Hz / 12 dB
 - EQ is flat.
 - DMA-V accessory (if applied) functions. The Volume Lock icon appears in the meter bar and the level adjustment on the DMA amplifier front panel is disabled. Rotary knob push-in Mute function remains active.
 - If a DMA-V or DMA-VS accessory is connected, a padlock icon appears in the level meter bar.

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OWNER'S MANUAL

CHANGING SETTINGS WITH THE DMA CONTROL APP

The DMA Control App is used for system setup and configuration. It is not intended for streaming music or for the end user (the customer) to use for live adjustments. The DMA Control App utilizes BLE technology.

UNDERSTANDING BLUETOOTH TECHNOLOGY TYPES

There are two types of Bluetooth in common use with mobile telephones and tablets. Each serves a different purpose.

- **Bluetooth Streaming** – This allows the streaming of music from a device to a Bluetooth-equipped vehicle, speaker or receiver. This is the most common use of Bluetooth technology. For streaming audio, pair your phone or tablet with the device with which you want to connect. This function is located in the Settings section of a phone or tablet.
- **BLE (Bluetooth Low Energy)** – This form of Bluetooth is used for controlling items and receiving information from a device. The DMA amplifier and DMA Control App use a BLE connection to configure amplifier modes, select source types, set up EQ and limiting, and adjust levels. BLE also appears in the Settings section of phones and tablets but with a different identification following the name. **Note:** This identification will vary according to the brand of the device.

PAIRING THE DMA CONTROL APP & DMA AMPLIFIER

Do the following to pair the DMA Control App with a DMA Amplifier.

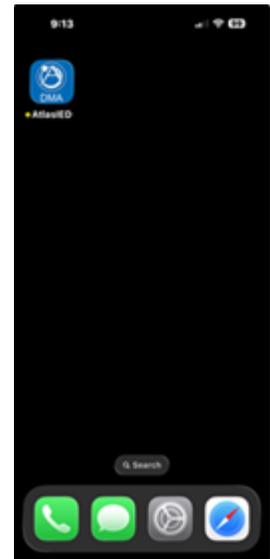
1. Download the AtlasIED DMA Control App from the Android Google Play Store or the Apple App Store. Search for "AtlasIED DMA Control".



App Store logo



DMA Control App on Android Galaxy



DMA Control App on Apple iPhone



DMA SERIES

DIGITAL MIXER-AMPLIFIERS
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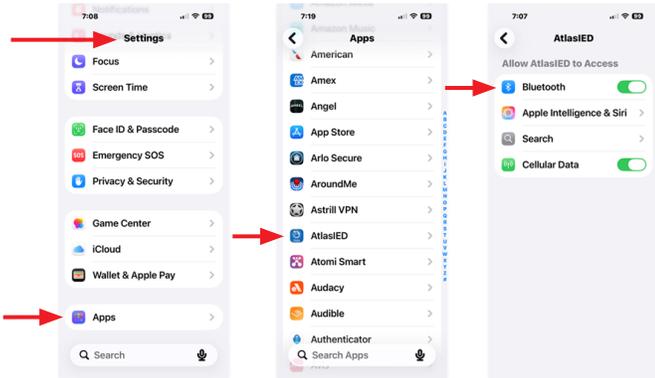
PAIRING THE DMA CONTROL APP WITH A DMA AMPLIFIER - (CONTINUED)

- After downloading the DMA Control App, ensure in the Settings section of the device to be paired that Bluetooth is enabled

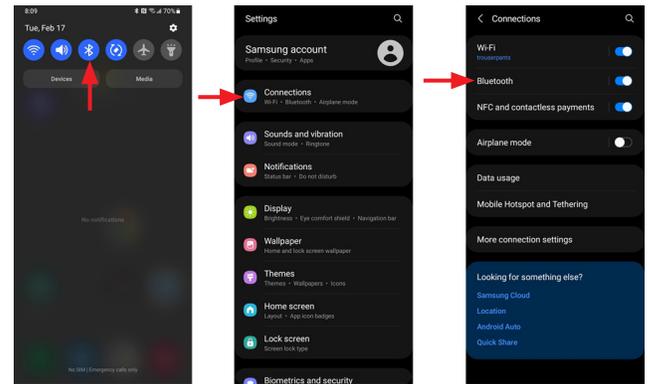


Click **Allow** for the DMA Control App to discover a DMA amplifier or DMA-BT accessory.
Note: This notification will appear differently for different mobile device brands.

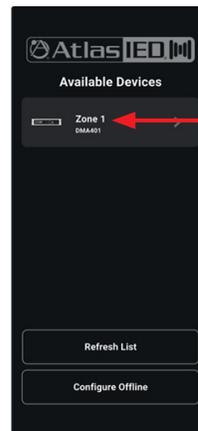
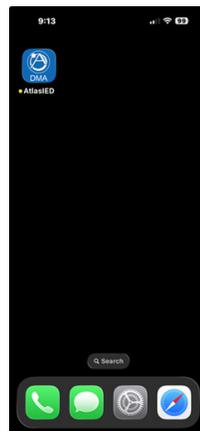
Apple iOS



Android



- When first opening the DMA Control App to connect to a DMA device, you should be within 10 ft (3 m) of the DMA Amplifier you are configuring. You should be able to see the amplifier's display. The maximum range for a Bluetooth connection is 100 ft (30 m). The actual range will vary depending upon the environment.
- Confirm the DMA amplifier power LED is Blue. Open the DMA Control App and the DMA amplifier will appear as discovered under Available Devices. **Note:** If the DMA amplifier does not appear as discovered, check the Bluetooth settings on the device to ensure the DMA Control App is enabled.



DMA SERIES

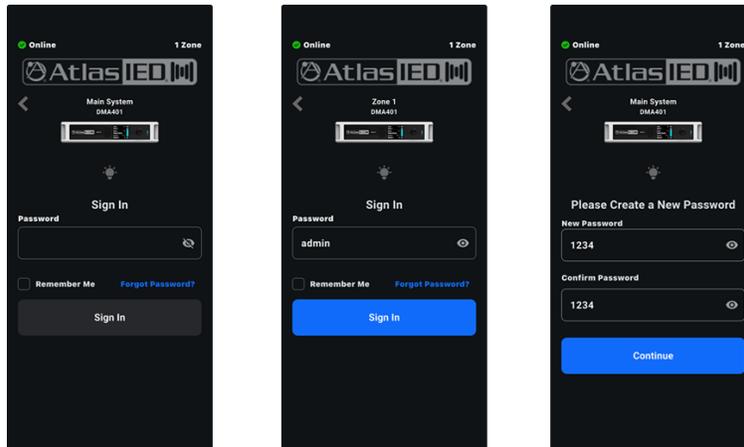
DIGITAL MIXER-AMPLIFIERS
DMA101 / DMA201 / DMA401



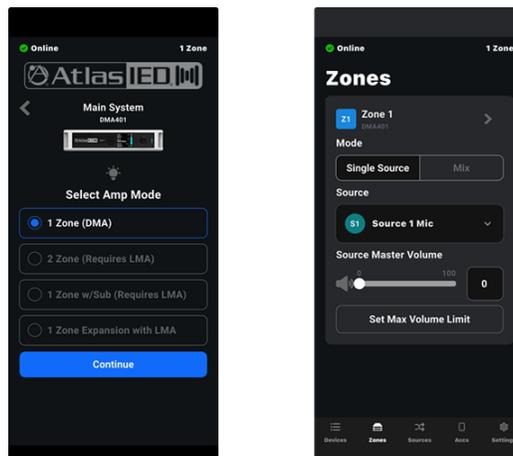
OWNER'S MANUAL

PAIRING THE DMA CONTROL APP WITH A DMA AMPLIFIER - (CONTINUED)

5. Select the DMA amplifier and sign in by entering the default password **admin** in all lower-case letters. A password change is required prior to any further use. The new password is limited to 16 characters but is not restricted by type (i.e. punctuation marks, special characters, numbers, letter case). **Note:** The default password can be re-entered, but a password change will be required for each session. To reset a forgotten or unknown password, refer to the section **Resetting the DMA Login Password** on page 23 in this manual.



6. **1 Zone (DMA)** – After entering the password, you will be asked to select the amplifier mode to be configured. The DMA amplifier is pre-configured to 1 Zone operation. For all other configurations, an LMA series amplifier is required to be connected via the Linked Amplifier Output.



DMA SERIES

DIGITAL MIXER-AMPLIFIERS

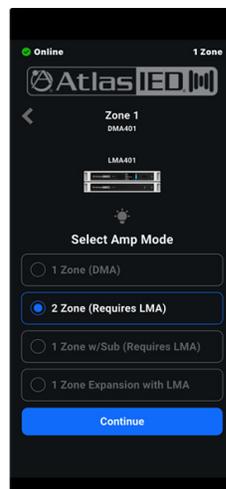
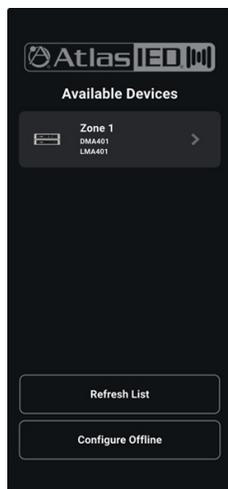
DMA101 / DMA201 / DMA401



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PAIRING THE DMA CONTROL APP WITH A DMA AMPLIFIER - (CONTINUED)

7. **DMA & LMA Linked Discovery** – When discovering the DMA amplifier with an LMA connected via the Linked Amplifier Output, the DMA + LMA are listed as a single selection. Available selections are 2 Zone, 1 Zone with Subwoofer, and 1 Zone Expansion. See **DMA + LMA Example Setups** on page 22.



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PAIRING THE DMA CONTROL APP WITH A DMA AMPLIFIER - (CONTINUED)

DMA + LMA EXAMPLE SETUPS

A. DMA linked to LMA, 2 Zone system diagram with separate Zone Source Level Control and Source Selection



B. DMA linked to LMA, 1 Zone + Subwoofer



C. DMA linked to LMA, 1 Zone Expanded



Note: For full details on DMA Control App functions, refer to the DMA Control App Quick Start Guide at www.atlasied.com.

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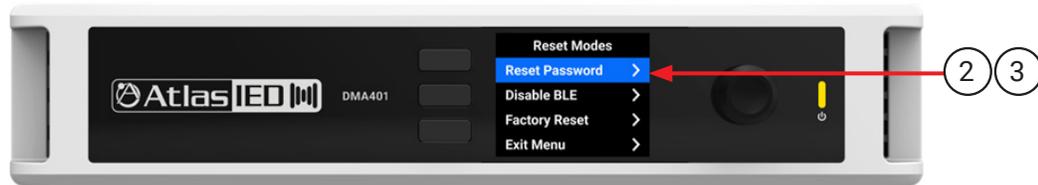


OWNER'S MANUAL

RESETTING THE DMA LOGIN PASSWORD

In the event the login password is misplaced, it can be reset without losing the amplifier settings by doing the following.

1. Unplug the AC mains power cord and then wait 1 minute for the power supply to fully discharge. Neither the color LCD nor the LED should be illuminated.
2. Press and hold in the control knob while reconnecting the AC mains power cord. Continue to hold in the knob until the following screen appears.



3. Use the control knob to scroll to and then select **Reset Password** and follow the prompts. **Note:** Amplifier settings from before the password reset will be retained.

DISABLING BLE (BLUETOOTH)

In some situations, the BLE (Bluetooth) must be disabled so the DMA amplifier cannot be discovered by another device. To disable the DMA BLE, follow these steps. **Note:** The BLE can be re-enabled by following these steps and turning the BLE ON.

1. Unplug the AC mains power cord and then wait 1 minute for the power supply to fully discharge. Neither the color LCD nor the LED should be illuminated.
2. Press and hold in the control knob while reconnecting the AC mains power cord. Continue to hold in the knob until the following screen appears.



3. Use the control knob to scroll to and then select **Disable BLE** and follow the prompts. **Note:** The DMA Control App will not connect.

RESETTING THE DMA TO FACTORY DEFAULT SETTINGS

To start a new amplifier configuration, the easiest way is to perform a DMA amplifier factory reset as shown below. **⚠ Caution:** This will delete all previous settings.

1. Unplug the AC mains power cord. Wait 1 minute for the power supply to fully discharge.
2. Press and hold in the control knob while reconnecting the AC mains power cord. Continue to hold in the knob until the following screen appears.



3. Use the encoder knob to scroll to and then select **Factory Reset** and follow the prompts. **⚠ Caution:** This will delete all previous settings.

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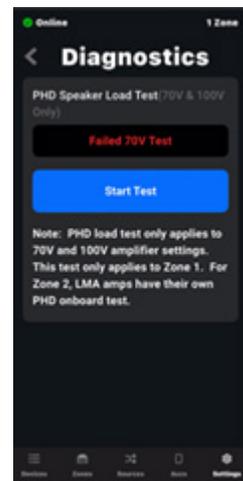
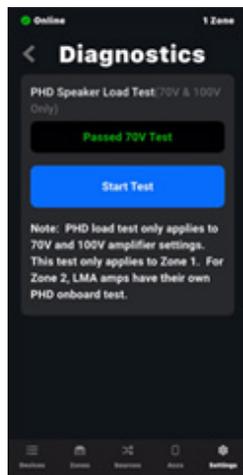
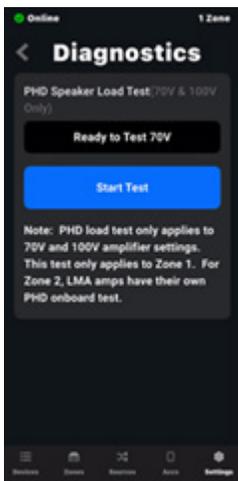
OWNER'S MANUAL

CONDUCTING A SELF-DIAGNOSTIC TEST USING PHD

The Push Here Diagnostic® (PHD) is designed to check connected loudspeaker lines in a 70.7 V distributed system for wiring and impedance errors. This test can be conducted once all speakers are connected. The self-diagnostic circuit automatically detects whether the tap settings for the attached loudspeakers tap exceed the amplifier's rated power, any speakers are mistakenly tapped at 8 Ω, and whether speaker wire has shorted to ground

To use the PHD feature:

1. Install the DMA amplifier.
2. Install the 70.7 V / 100 V distributed speaker system according to the design and double-check the speaker tap settings. The total power for all the speakers should NOT exceed the maximum power rating of the DMA amplifier installed.
3. Connect the speaker system to the amplifier. Pay special attention when connecting the speaker leads to the proper terminals on the amplifier. **Note:** All speaker power taps must be on a 70.7 V or 100 V setting.
4. Activate power to the amplifier.
5. Open the DMA Control App and connect to the DMA amplifier.
6. In the app, navigate to the **Settings** page.
7. Select **Diagnostics**.
8. Select **PHD Speaker Load Test**.
9. Tap **Start Test** to activate the PHD diagnostic test circuit. The diagnostic tests take a few seconds to measure the speaker load and determine if there is a wiring fault. If the test reading is "Passed", continue the installation. If the reading is "Failed", further investigation is required. Refer to the topic **PHD Load Testing** on page 25 in this manual.



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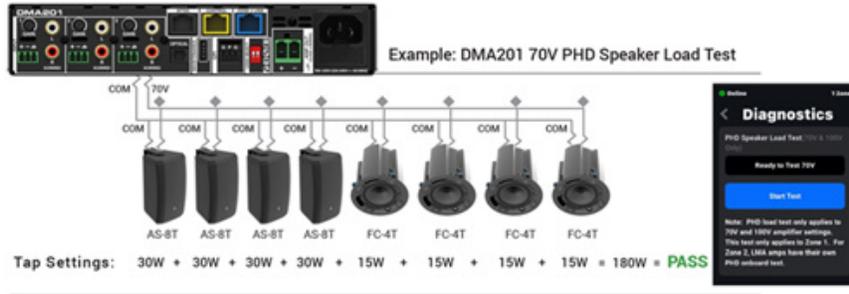


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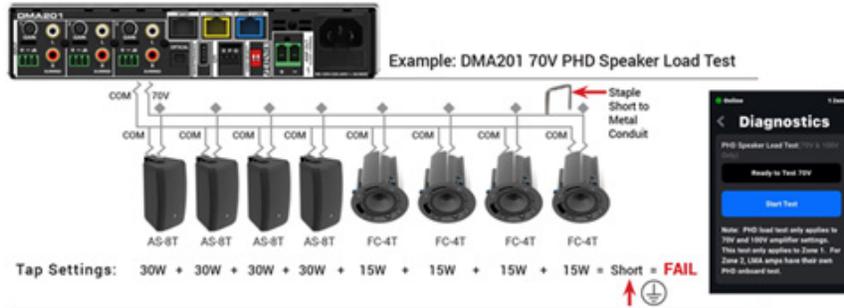
PHD LOAD TESTING

The following illustrations show the results of a PHD load test on the same type of distributed system – the first with no issues detected followed by three showing failures, each caused by a different type of common wiring error.

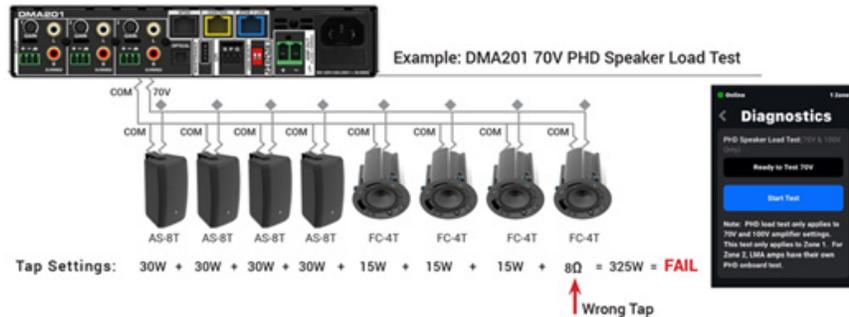
- **Passed** – The system shows no sign of incorrect wiring or an improper tap setting.



- **Failed (Short in Speaker Wiring)** – A short to ground can occur anywhere core wire is exposed. This sometimes occurs during installation when a speaker cable has been nicked while being fed through a metal conduit or has come into contact with a staple.



- **Failed (Incorrect Speaker Tap Setting)** – Selecting an 8 Ω setting in a 70.7 V / 100 V speaker system in most cases will cause the amplifier to fail within a few days of use.



PHD LOAD TESTING - (CONTINUED ON NEXT PAGE)

DMA SERIES

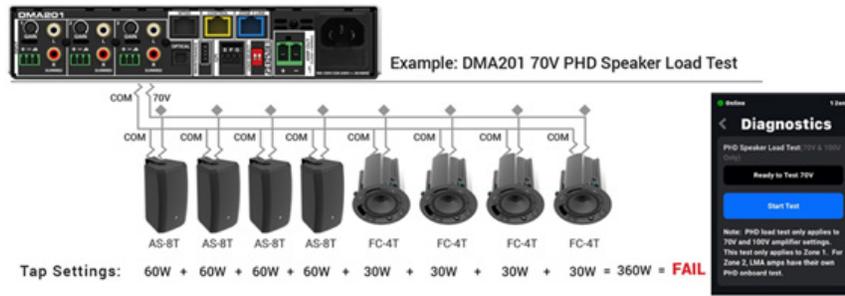
DIGITAL MIXER-AMPLIFIERS
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PHD DIAGNOSTIC LOAD TESTING - (CONTINUED)

- **Failed (Speaker Power Tap Overload)** – This occurs when too many speakers are connected to the amplifier or the wrong power taps are selected. For example, if a 200 watt, 70.7 V amplifier were used in a 70.7 V distributed system with eight speakers intended to be tapped at 10 W, but instead three of the speakers were accidentally tapped at 30 W, it would require 160 watts to drive the system properly. While this may work at low volume levels, increasing the volume will strain the amplifier and cause it to fail over time.



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PLACEMENT OF THE AMPLIFIER

Turn off all equipment before making connections. Install the amplifier in a standard-width 19" rack. It can be mounted above or below anything that does not generate excessive heat. Although the unit's chassis is shielded against radio frequency and electromagnetic interference, extremely high fields of RF and EMI should be avoided.

Ventilation – The appliance should be situated so that its location or position does not interfere with proper ventilation. For example, the DMA amplifier should not be situated in a sealed cabinet or on a shelf with obstacles on it that may impede the flow of air through the ventilation openings. It is recommended that it be mounted into an equipment rack.

Heat – The DMA amplifier should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce excessive heat. Ambient temperatures should not exceed 95° F (35° C) when equipment is in use.

CABLING

The DMA amplifier can be used with either balanced or unbalanced sources, and the outputs can be used with either balanced or unbalanced loads, provided the proper cabling is used.

A balanced line is defined as a two-conductor shielded cable with the two center conductors carrying the same signal but of opposite polarity when referenced to ground.

An unbalanced line is generally a single-conductor shielded cable with the center conductor carrying the signal and the shield at ground potential.

When using a balanced input with low level signals, AtlasIED recommends using either 20 AWG or 22 AWG two-conductor wire with shield, maintaining the proper polarity connections (i.e., positive-to-positive and negative-to-negative), and shield to ground. **Note:** The ground center pin of the Phoenix connector is common for both channels. For loudspeaker outputs, use Class 2, 2-conductor unshielded wire of the appropriate gauge.

Contact AtlasIED technical support at 1-800-876-3333 with questions regarding wire gauge. The number of loudspeakers connected and their tap settings will be required for technical support to properly recommend wire.

2 Ω OPERATION

The DMA amplifier is indeed versatile, designed for both high-voltage and high-current demands, making it adaptable to both distributed 100 V systems and low-impedance setups down to 2 Ω. In distributed systems, where an amplifier needs to output 70.7 V or 100 V to drive multiple speakers over long distances, it is a challenge for amplifiers under 200 W to step up the voltage. DMA amplifiers accomplish this by maintaining voltage effectively at these high levels.

For low impedance systems (2 Ω, 4 Ω, or 8 Ω) the amplifier delivers high current. While the voltage demands are lower, the amplifier's Class D output stage ensures stable, efficient current delivery for 8 Ω and 4 Ω loads and can handle 2 Ω loads as well. Power availability for 2 Ω is contingent upon the current available from the power supply. A 2 Ω load, for example, requires twice the current of a 4 Ω load. Hence, the specification is conservatively rated. In practical applications, the delivered power at 2 Ω often surpasses these figures. For 2 Ω setups using a DMA amplifier, use the 4 Ω settings. The amplifier will automatically sense 2 Ω loads.

25 V OPERATION

Current requirements in a 25 V distributed audio system are significantly higher than those operating at 70.7 V or 100 V. A 25 V system can be considered a low impedance audio system, in which both the power and voltage required results in lower impedance loads applied to the amplifier.

For example, in a system with twenty, 25 V speakers tapped at 10 W each, the total power requirement from the amplifier would be 200 W at 25 V. To determine the load impedance applied to the amplifier, use Ohm's Law. The formula is: $V^2 \div \text{Power} = Z$ ($25\text{ V} \times 25\text{ V}$) = 625. Six hundred twenty-five volts divided by 200 W = 3.1 Ω. This is the load applied to the amplifier.

For optimal performance in 25 V systems, the DMA loads switch should be set to 4 Ω. DMA amplifiers are designed to automatically sense the load within a range of impedances. However, if the power requirement exceeds 200 W, the load impedance will drop below 2 Ω, limiting the amplifier's output power. This is why model DMA401, for example, reduces power from 400 W to 200 W in 25 V applications.



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RACK KIT INSTALLATION

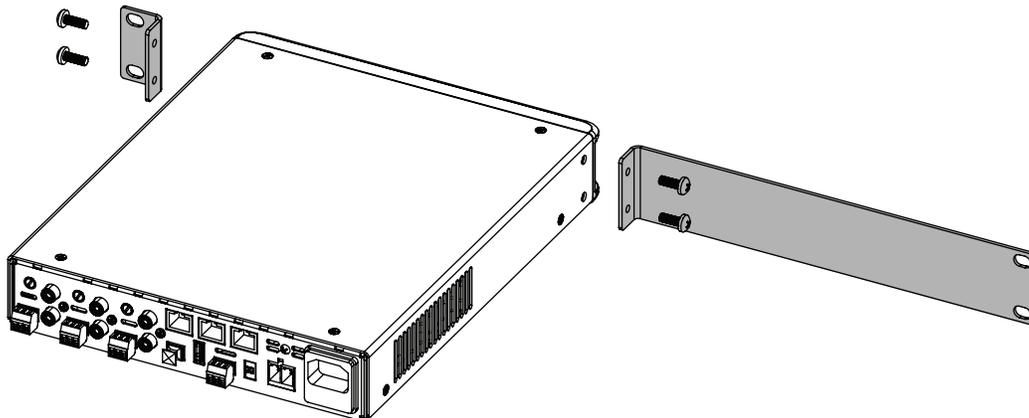
The DMA Series amplifier can be rack mounted as a single amplifier or side by side with any other AtlasIED half-rack model. All parts required to mount a DMA amplifier alone or together with another half-rack AtlasIED unit in a 1 RU space are included with the DMA amplifier. Depending on the mounting method, there may be unused parts; disregard them. Refer to the illustrations below for kit assembly.

Kit Contains:

- Rack ears - Short, Qty 2
- Rack ear to chassis screws M3 × 10 mm, Qty 4
- Rack ear - Long (for single-unit mounting), Qty 1
- Top & bottom chassis joiner plates, Qty 4
- 4-40 × 3/8" flat head black screws to secure joiner plate to chassis, Qty 16
- 10/32" × 1" rack mount screws, Qty 4
- 10/32" plastic washers, Qty 4

SINGLE DMA AMPLIFIER RACK MOUNT IN A 19" RACK

Mounting the DMA Amplifier into a 19"-inch rack requires using one (1) short rack ear and one (1) long rack ear. Chassis joiner plates are not used.



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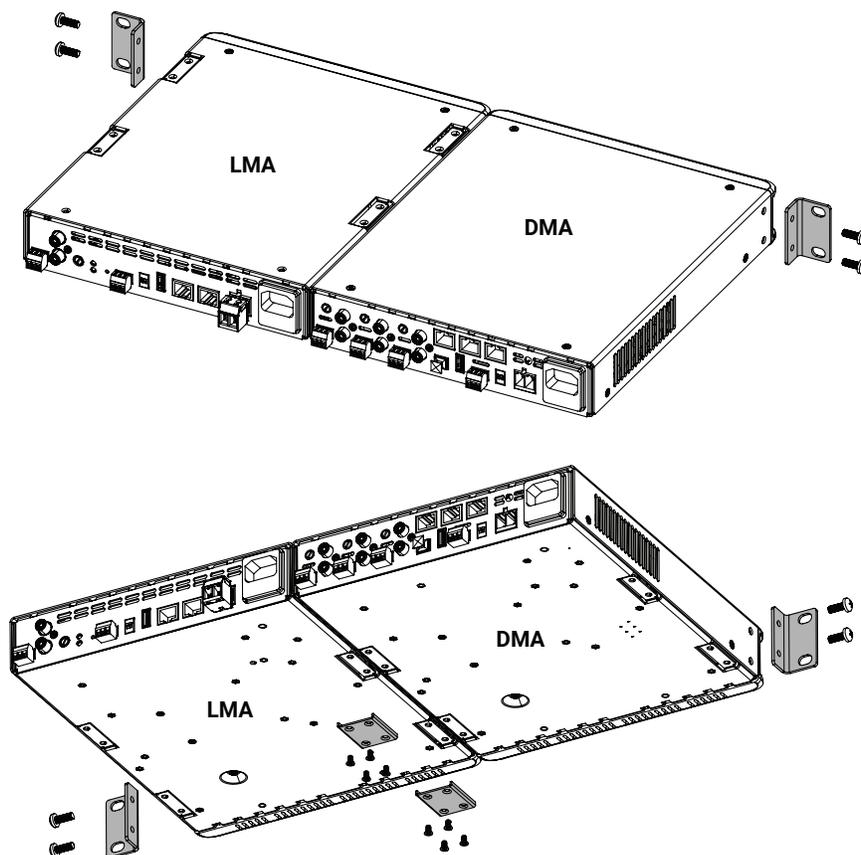


OWNER'S MANUAL

RACK KIT INSTALLATION - (CONTINUED)

LMA & DMA AMPLIFIER RACK MOUNT IN A FULL 19" SPACE

Mounting an LMA Amplifier and a DMA amplifier side by side into a 19"-inch rack requires the use of two (2) short rack ears and two (2) long joiner plates. Secure the joiner plates to the bottom of the chassis only.



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SPECIFICATIONS

System			
Model	DMA101, DMA201, DMA401		
Type	Digital Mixer Amplifier, 1 Zone with Zone Link output		
Zones	1 Zone with Zone 2 Link Output		
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 2 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 Control App)		
Zone Master Level	Set to 50% (Adjustable via panel selection buttons, control knob function, or DMA Control 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 x 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.		

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
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SPECIFICATIONS - (CONTINUED)

Inputs/Sources	
Location	Rear Panel
Input Quantity	Four (4) fixed inputs. Up to three (3) 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 WTSD Bus	Qty. 1 WTSD Balanced Line Input. Note: The 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 Control 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.)

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)



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OWNER'S MANUAL

SPECIFICATIONS - (CONTINUED)

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)
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 Amplifier: 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

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
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OWNER'S MANUAL

SPECIFICATIONS - (CONTINUED)

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	Loading Diagnostic Test
Activation Switch	DMA Control App
Diagnostic Indicators	DMA Control App: Pass=Green, Fail=Red
Maintenance Port (Rear Panel)	
Location	Rear Panel
Hardware, Firmware Update	USB 2.0 for hardware update, DMA Control 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 AWG (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

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

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OWNER'S MANUAL

SPECIFICATIONS - (CONTINUED)

Limiters	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 16 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 Assignments
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 Temperature

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
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OWNER'S MANUAL

SPECIFICATIONS - (CONTINUED)

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	42 dB	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%, non-condensing		
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		



DMA SERIES

DIGITAL MIXER-AMPLIFIERS
DMA101 / DMA201 / DMA401



OWNER'S MANUAL

SPECIFICATIONS - (CONTINUED)

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	96.9 W	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	115.2 W	393 Btu

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
DMA101 / DMA201 / DMA401



OWNER'S MANUAL

SPECIFICATIONS - (CONTINUED)

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

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

DIGITAL MIXER-AMPLIFIERS
DMA101 / DMA201 / DMA401



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SPECIFICATIONS - (CONTINUED)

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

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

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SPECIFICATIONS - (CONTINUED)

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	

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

DMA SERIES

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SPECIFICATIONS - (CONTINUED)

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

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)



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SPECIFICATIONS - (CONTINUED)

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.

SPECIFICATIONS - (CONTINUED ON NEXT PAGE)

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SPECIFICATIONS - (CONTINUED)

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-position, 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 x 1.75" H x 11.23" D (222 mm x 44 mm x 285 mm)		
Dimensions - Shipping, All DMA Models	15.35" W x 5.04" H x 12" D (390 mm x 306 mm x 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		



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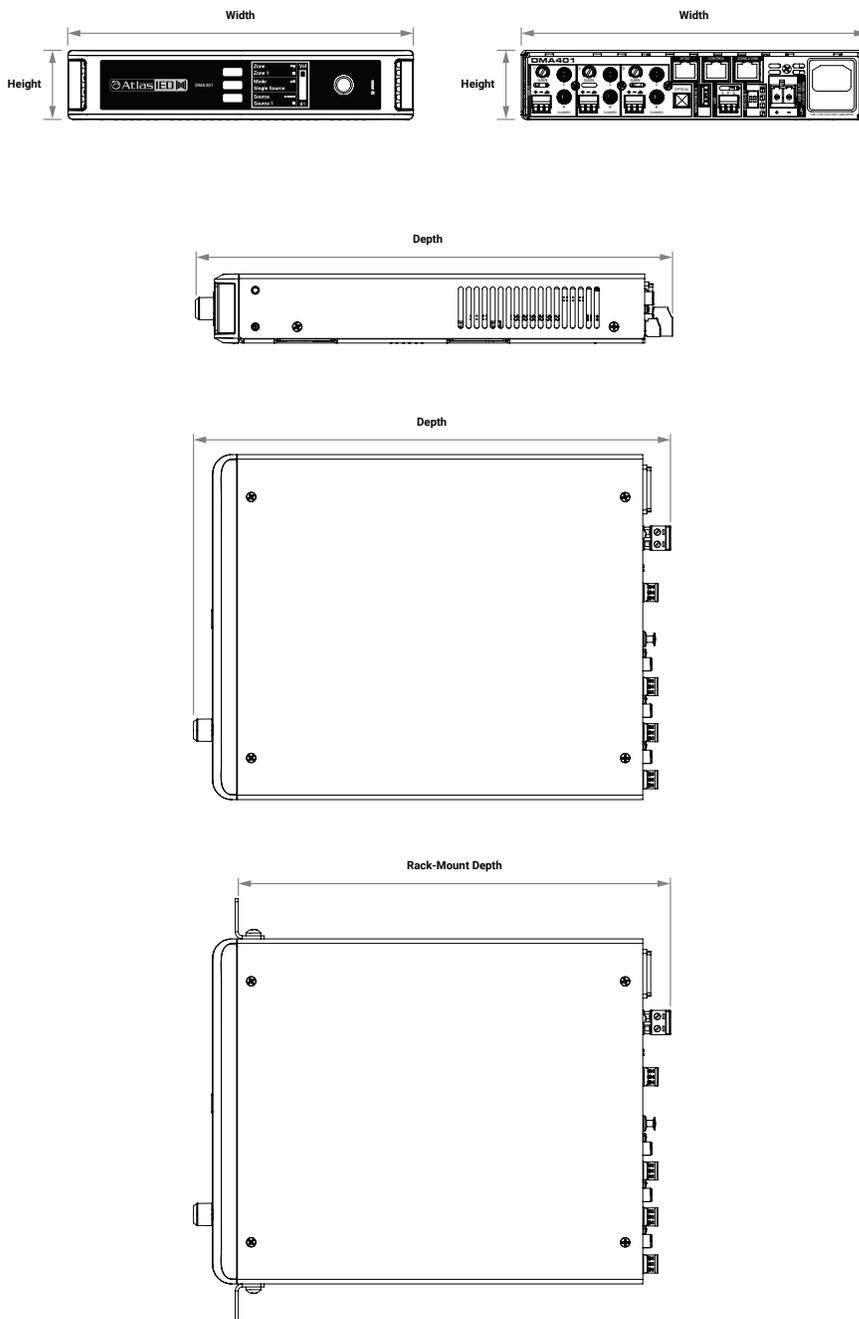
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DIMENSIONAL DRAWINGS

DMA Series

Product Dimensions

Width	8.50" (216 mm)
Height	1.70" (43 mm)
Depth	11.75" (299 mm)
Rack-Mount Depth	10.64" (270 mm)



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LIMITED WARRANTY

All products manufactured by AtlasIED are warranted to the original dealer / installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all AtlasIED products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. AtlasIED will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to AtlasIED do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any non-warranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLASIED SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

AtlasIED does not assume, or does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

SERVICE

Should your DMA Series Amplifier require service, please contact the AtlasIED warranty department through the online warranty claim process.

Online Warranty Claim Processes

1. Warranty submissions are accepted at: https://www.atlasied.com/warranty_statement where the type of return Warranty or Stock return can be selected.
2. Once selected, you will be prompted to enter your login credentials. If you do not have a login, register on the site. If already logged-in, navigate to this page by selecting "Support" and then "Warranty & Returns" from the top menu.
3. In order to file a Warranty Claim, you will need:

- A. A copy of the invoice / receipt of the purchased item
- B. Date of Purchase
- C. The product name or SKU
- D. The serial number for the item (if no serial number exists, enter N/A)
- E. A brief description of the fault for the claim

4. Once all required fields are completed, select the "Submit Button". You will receive 2 emails:
 - (1) with a confirmation of the submission .
 - (2) with a case# for your reference should you need to contact AtlasIED

Please allow 2-3 business days for a response with a Return Authorization (RA) number and further instructions.

AtlasIED Tech Support can be reached at
1-800-876-3333
[atlasied.com/support](https://www.atlasied.com/support)

Visit our website at www.AtlasIED.com to see other AtlasIED products.

