

DA-PM8GD

Dante PoE Pendent Mount Speaker Install Sheet



Introduction

AtlasIED DanteTM PoE speakers consist of a speaker, amplifier, control board, and a Dante interface. The DA-PM8GD amplifier can produce up to 15-watts RMS of power in single channel mode or up to 2 x 10-watts in dual channel mode with IEEE 802.3at compliant PoE+ switches and 10-watts single channel mode or 2 x 5-watts in dual channel mode with PoE power. Interconnection is via a top panel mounted female RJ-45 connector. All models are compatible with the Audinate® Dante digital audio transport platform. The DA-PM8GD features user configurable amplifier modes, Input EQ, Level Control, and Masking with room tuning EQ. All controls are done via the AtlasIED IP Discovery and Control software. Through this software, the active IP speaker can be discovered on the network with the ability to custom name each speaker with a location tag for system management. The AtlasIED control software features an audible ping-me locator making it convenient to physically locate the speaker. System tuning can be done on an Individual speaker or by an assigned group.

Dante Overview

Audinate created Dante, is an uncompressed, multi-channel digital media networking technology, with near-zero latency and synchronization. Hundreds of Dante-enabled products are available from many manufacturers, enabling you to mix other Dante-enabled devices from multiple manufacturers.

One cable does it all. Dante does away with heavy, expensive analog or multicore cabling, replacing it with low-cost, widely available CAT5e or CAT6 cable for a simple, lightweight, and economical solution. Dante integrates media and control for your entire system over a single, standard IP network.

Dante systems can easily scale from a simple pairing of a console to a computer, to large capacity networks running thousands of audio channels. Because Dante uses logical routes instead of physical point-to-point connections, the network can be expanded and reconfigured at any time with just a few mouse clicks.

Since the signal audio is transmitted digitally, common analog challenges like interference from other electrical equipment, crosstalk between cables, or signal degradation over long cable runs is not a problem. Setting up Dante networks is easy, even the most complex networks can be set up and configured quickly and easily with Dante, making system integration simple. Dante automatically handles the technical complexities.

Signal routing and system configuration with Dante is fast, simple, and incredibly flexible. Dante ControllerTM is a powerful software application that manages devices on the network. Setting up a Dante network is typically just a matter of plugging devices into an Ethernet switch and connecting a computer to the network. All Dante devices are automatically discovered and displayed in Dante Controller, so a system can be up and running in seconds.

Visit www.audinate.com for details or to learn more on using Dante.





Prior to Starting Installation

Before installing, note the unit's MAC address found under the top cover (example 00:02:C1:81:00:00). Once connected to a network and powered, the Dante IP endpoint speaker will boot up and automatically obtain an IP address from a DHCP server on the network. All AtlasIED Dante PoE speakers come preconfigured in DHCP mode. Once the speaker is powered on, it can be discovered in the Audinate's Dante Controller software or the AtlasIED IP Discovery and Control Software. The AtlasIED Dante speaker will appear in Dante Controller software as an AtlasIED speaker. **Example:** Dante Model name is DA-PM8GD with the Dante Device Name of DA-PM8-82001B, with the last 6 digits being from the MAC address. Using Dante controller software, audio signals can be routed to the DA-PM8GD speaker. Making amplifier configuration changes or audio adjustments to the DA-PM8GD speaker requires using the AtlasIED IP Discovery & Control software. This software can be downloaded using the following link: http://autoupdate.atlasied.com/atlasieddiscover/setup.exe.

Factory assign Username and Passwords are:

- Username "admin"
- Password "admin"

After logging in for the first time, you will be asked to change the factory Username and Password. **Note:** If the login reset is selected, all setting will be cleared and set back to the original factory settings.

Installation via Mounting Cables (Included)

General considerations and hardware recommendations:

CAUTION: A fall from almost any height could result in serious injury or death. Assure that the speaker is firmly mounted to an object that can handle the weight of the DA-PM8GD. The mounting surface the DA-PM8GD is being attached to should be able to handle five or more times the weight of the DA-PM8GD.

The hardware employed must be safely and securely attached both to the speaker and the structure in question, using only the mounting holes. A general rule for soft surface installations (wood beams) is to multiply the corresponding working load limit by 75%. The result will be approximate working load strength. Use thread locking compound for all installations.

AVERTISSEMENT: Une chute de n'importe quelle hauteur pourrait entrainer des blessures graves ou même la mort. S'assurer que le haut-parleur est fermement attaché à un point qui peut supporter le poids du DA-PM8GD. Ce point d'attache devrait être en mesure de supporter une charge supérieur ou égale à cinq fois le poids d'un DA-PM8GD.

La quincaillerie utilisée devrait être sécuritairement fixée à la surface de montage et au haut-parleur en utilisant que les points d'ancrages prévus à cet effet. Pour les installation sur des poutres ou madriers en bois, il est recommandé de multiplier la capacité charge maximale par 75%. Ce calcul donnera approximativement la capacité de charge utile. Toujours utiliser un frein filet.

CAUTION: Mounting the DA-PM8GD may require two people.

AVERTISSEMENT: L'installation d'un DA-PM8GD peut nécessiter l'intervention de deux personnes.

When in doubt, contact a qualified structural / mechanical engineer for approval of the mounting materials and methods.

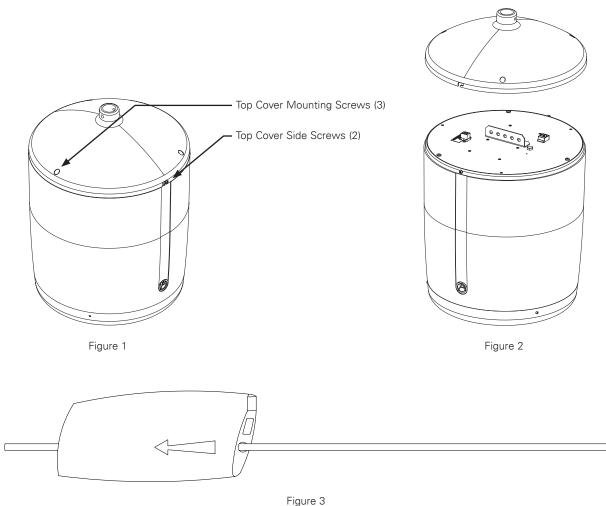
- 1. Rotate the top cover counterclockwise and pull up to remove. (Figures 1 and 2)
- 2. Locate suitable support structure in the area the speaker is to be installed.
- 3. Route the bare end of the main support cable though the included clamp, then around the mounting structure, and back through the clamp. (Figures 3 and 4)
- 4. Adjust the cable length in the clamp so that the eyelet end of the cable is at the final height above the floor. (Figure 5)
- 5. Route the eyelet end of the main support cable through the top cover of the DA-PM8GD. Attach the included carabiner clip to the eyelet and the large mounting hole on the back of the DA-PM8GD. (Figure 6)
- 6. Repeat steps 1 4 for the safety cable and attach it to one of the outer mounting holes on the support plate of the DA-PM8GD using the included mounting screw. (Figure 6)
- 7. Route the Ethernet cable through the top cover and connect to the RJ-45 Connector. Add extra cable length for a service loop during assembly. Do not pull or stress the Ethernet cable or damage may occur to the RJ45 connector.

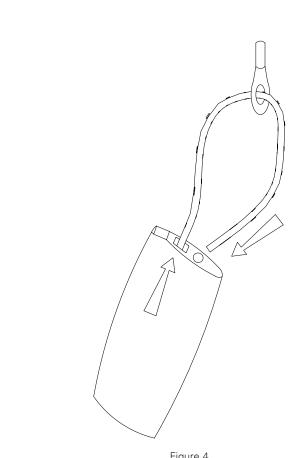




- 8. If you will be using the secondary speaker amplifier output, route the speaker cable through the top cover and connect to the Speaker Out terminals, paying attention to the wiring polarity. Add extra cable length for a service loop during assembly. **Note:** There will be no audio present at these secondary speaker terminals until the amp is configured from Single channel mode to Dual channel mode.
- 9. Position the top cover over the side cover screws and rotate the cover clockwise to align the top cover mounting screw holes. Install the 3 mounting screws which are located in the hardware bag. Then tighten the side cover screws.
- 10. Slide the top hole-plug over the main support cable, safety cable, and Ethernet cable using the opening on the side of the plug. Then slide the plug down the cable and into the top cover hole. (Figures 7 and 8)

Note: If the speaker is being installed outdoors, seal plug with RTV silicone to prevent moisture from entering speaker.





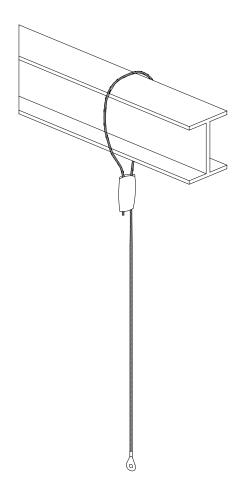
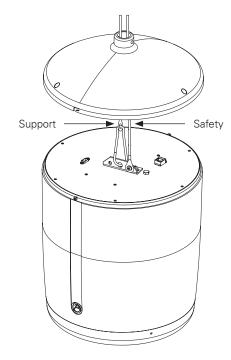
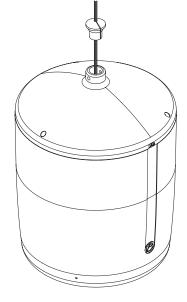


Figure 4

Figure 5





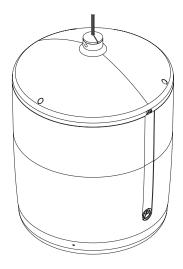


Figure 6

Figure 7

Figure 8



Suspended Installation via Down Pipe (Not-Included) Using 3/4" Diameter Ceiling Fan Hardware

The AtlasIED DA-PM8GD may also be installed using industry standard ceiling fan hardware. This hardware is available at most local hardware stores. Using this type of installation allows Ethernet cable and safety cable to be concealed with the down pipe providing a very clean installation.

- 1. Rotate the top cover counterclockwise and pull up to remove. (Figures 1 and 2)
- 2. Locate suitable support structure in the area the speaker is to be installed.
- 3. Mount the ceiling mount canopy and down pipe per manufacturer instructions.
- 1. Screw the DA-PM8GD top cover onto the bottom of the down pipe, install the safety screw though the side of the top cover and through the end of the down pipe. (Figure 9)
- Route the bare end of the safety cable though the included clamp, then around a suitable support structure, and back through the clamp. (Figures 3 and 4)
- Route the eyelet end of the safety cable down through pipe and the cover of the DA-PM8GD. Attach the eyelet to one of the outer mounting holes on the support plate of the DA-PM8GD using the included mounting screw. (Figure 9)
- 7. Route the Ethernet cable through the down pipe and connect to the RJ45 Connector.
- 8. Position the speaker under the top cover, align the side cover screws and rotate the speaker clockwise to align the top cover mounting screw holes. Install the 3 mounting screws which are located in the hardware bag. Then tighten the side cover screws. (Figure 9)

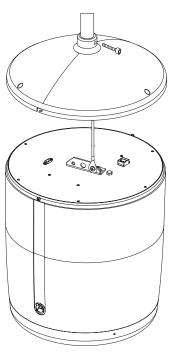


Figure 9

Wiring the DA-PM8GD Dante PoE Speaker

The DA-PM8GD ships configured for single speaker use. It can also be configured to drive a second passive version speaker of the same type PM8GD. The DA-PM8GD ships in 1 Channel Mode, the amplifier will deliver 15W power when connected to a PoE+ Ethernet switch and 10W when connected to PoE. The DA-PM8GD secondary speaker output terminal is disabled until the amplifier operational mode settings are changed during system set-up from 1 Channel to 2 Channel Mode. Operational Mode selection are configured in the AtlasIED Discovery and Control Software. Refer to the section AtlasIED Discovery and Control Software for Operation Mode Settings.

Electrical wiring requires a single Cat 5e/6 cable to be run from the PoE Ethernet Switch to the DA-PM8GD. Industry wiring standards for 802.3af and 802.3at PoE has a distance limit of 100 meters or 328ft, which is also the limit for the data transmission for Ethernet cables.

When installing a DA-PM8GD, the speaker comes preconfigured out the box in Single Speaker Mode. The only electrical cable connecting to the DA-PM8GD is a CAT 5e/6.





Note: Follow the installation and safety instructions when hanging a DA-PM8GD. It is important not to twist the CAT 5e/6 cable during installation or damage to the wire or RJ45 may occur.

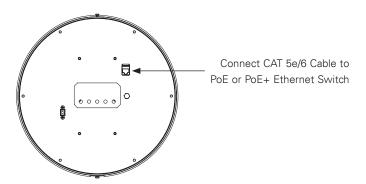


Figure 10

Wiring and Configuring the DA-PM8GD to 2 Channel Mode a Secondary Passive PD8GD Speaker

Wiring the DA-PM8GD - Run a single CAT 5e/6 cable from the PoE Ethernet Switch to the DA-PM8GD. Industry wiring standards for 802.3af and 802.3at PoE has a distance limit of 100 meters or 328ft, which is also the limit for the data transmission for Ethernet cables. When PoE+ is applied, each speaker will receive up to 10W of power, and when connected to a PoE switch, each speaker will receive up to 5W. Note: Follow the installation and safety instructions when hanging a DA-PM8GD. It is important not to twist the CAT 5e/6 cable during installation or damage to the wire or RJ45 may occur.

Wiring the DA-PM8GD to a PM8GD - Connect the DA-PM8GD active secondary amplifier output to a PM8GD passive speaker by using 2 conductor speaker wire, 18 gauge minimum with the wire rated to meet local codes. Follow the wiring diagram. The DA-PM8GD amplifier needs to be configured to 2 Channel Mode for the PM8GD to receive any signal. All configuration is done in the AtlasIED Discovery and Control Software.

The DA-PM8GD can power any 8-ohm speaker but we suggest a model of the similar type because the DA-PM8GD secondary amplifier output has the same factory DSP EQ settings as the DA-PM8GD. Amplifier levels can be adjusted independently using the AtlasIED Discovery & Configuration Software. **Note:** The PM8GD speaker needs to be wired for 8-ohm operation. The PM8GD ships configured for 70V / 100V operation. It is important to remove the PM8GD barrier strip jumper as shown. (Figure 11)

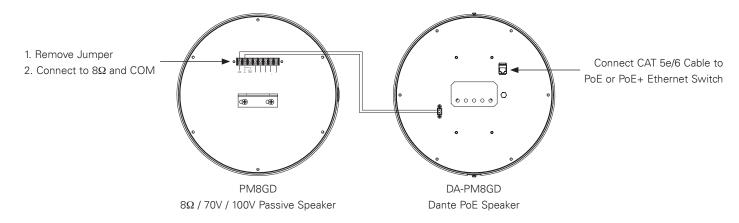


Figure 11





AtlasIED Discovery & Control Software

The AtlasIED Discovery and Control Software. This software can be downloaded using the following link. http://autoupdate.atlasied.com/atlasieddiscover/setup.exe





Dante Control Software & Device Information

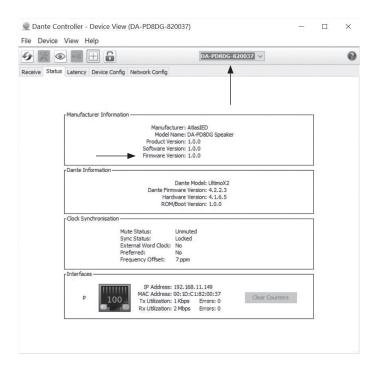
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It is extremely important when selecting a router or switch for the Dante network; not all routers or switches are the same. The size of the Dante network will influence which router or switch is needed to handle network traffic. There are three things to look for at a minimum or system dropouts may occur. Refer to Audinate for products they recommend.

- Gigabit speed.
- Network switch, it must be a "managed switch" type.
- A router with a built-in switch, it should have DD-WRT firmware or Open Source firmware.

Dante Controller Viewer DA-PM8GD Product Information

- Product Model Name (Fixed) is DA-PM8DG
- Dante Device Name (User Changeable) is DA-PM8GD- XXXXXX, X is last 6 characters of the MAC address.
- DA-PM8GD Dante configuration, 1 RX Channel, no TX Channels



Safety Instructions

Please read carefully before installing or operating. Read all instructions carefully. Heed all warnings. Assure that the speaker is securely mounted Always assure amplifier power is off before making any connections. Keep instructions for future reference. Should any questions arise after reading this document, please call AtlasIED Tech Support at 800-876-3333

Hearing Damage

CAUTION: All professional speaker systems are capable of generating very high sound pressure levels. Use care with placement and operation to avoid exposure to excessive levels that can cause permanent hearing damage.

ATTENTION: Tous les systèmes de haut-parleurs professionnels sont capables de g n rer des niveaux de pression sonore très lev s. Utilisez les soins avec le placement et l'op ration pour viter l'exposition des niveaux excessifs pouvant causer des dommages auditifs permanents.





C	
System	
Туре	PoE / PoE+ Indoor 2' x 2' Suspended Ceiling Mount IP Speaker
Operation Mode	Self Powered
Indicators	Network Status
Operating Range (-10db)	70Hz - 15.5kHz
Frequency Response (+/- 5dB)	86Hz - 15.5kHz
Vertical Coverage	105° (800Hz - 4kHz)
Horizontal Coverage	105° (800Hz - 4kHz)
Directivity Factor (Q)	4.7 @ 2 kHz
Max SPL at 1m	106dB SPL Continuous / 109dB SPL Peak
Recommended Signal Processing	Built-In Processing
Transducers	
Transducer Qty and Size	(1) 8" (203mm)
Voice Coil Size	1" (26mm)
Cone Material	Curvilinear, Treated Industrial Paper
Sensitivity (1W / 1m)	96dB Average
Amplification	
Туре	Two-Channel Class D Topology
Power Input	PoE (IEEE 802.3af) / PoE+ (IEEE 802.3at)
Single Ch Mode, Power Rating (RMS) PoE (IEEEE 802.3AF)	10 Watts Max
Two Ch Mode, Power Rating (RMS) PoE (IEEEE 802.3AF)	5 Watts Max, plus 5W @ 8 Ohm Paralleled Output
Single Ch Mode, Power Rating (RMS) PoE+ (IEEEE 802.3AT)	15 Watts Max
Two Ch Mode, Power Rating (RMS) PoE+ (IEEEE 802.3AT)	10 Watts Max, plus 10W @ 8 Ohm Paralleled Output
THD	<.02%
Cooling	Passive / Convection
Audio Inputs and Outputs	
Input: Network Audio Type(s)	Audinate Dante
Input: Network Connectivity	RJ-45 Female
Output: Speaker Connectivity	Secondary Speaker Amplifier Output, Screw Terminal Block
Software	
AtlasIED Discovery & Control Software	Discover, Status, Fault Report, User Setup & Control
User Control Elements	
Amplifier Operation Mode	Single Unit Mode or Two Channel Mode (Parallel Secondary Output)
Login	Username & Password
IP Mode	Static or DHCP
Product Locator	Audible Find Me Ping
Dante Input	Parametric EQ, 3 Filters Hi-Pass Filter Input Limiter Level
Amplifier Level	Ch 1 & CH 2
Masking	1/3 Octave EQ Hi & Lo Pass Filter Level
File Export	Settings File Device Profile
File Input	Settings File Device Profile





Network	
Ethernet	IEEE 802.3 10/100Base-T
PoE / PoE+	IEEE 802.3 AF/AT Compliant
Protocols	
IP Addressing	DHCP / Static
Auto-Registration	Dante Controller Software, AtlasIED Discovery & Control Software
Digital Audio	Audinate Dante Audio
Time	NTP
Mechanical	
Color	Black
Mounting / Rigging Provisions	Pendent Type - Cable Included, Down Pipe Optional
Ingress Protection	IP-30
Logo	Removable
Product Dimensions (HxD)	16.62" (422mm), Diameter - 12.25" (311mm)
Shipping Dimensions (HxWxD)	18.5" x 14.75" x 15" (470mm x 375mm x 381mm)
Net Weight	12.5 lbs (5.67kg)
Shipping Weight	15.5 lbs (7.03kg)
Safety Ratings	
Safety Agency Ratings	ETL Listed 62368-1, CSA C22.2 #62368-1, IEC 62368-1 CB Scheme and FCC
Warranty Coverage	
Warranty Period	1 Year

Notes:

- 1. Sensitivity: Half space pink noise measurement at 6 ft (1.8 m) at 20% power; extrapolated to 1 meter and an input of 2.83 volts RMS.
- 2. Watts: All wattage figures are calculated using the rated nominal impedance.
- 3. Frequency response and sensitivity are half-space measurements.



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 nonwarranty 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 DA-PM8GD 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. One with a confirmation of the submission
 - 2. One with a case# for your reference should you need to contact us.

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 or atlasied.com/support.

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

