

*AM1200
Sound Masking System*

AVLELEC
www.SoundmaskingInstallation.com

**AM1200
Sound Masking System**



8641 S. Warhawk Rd. Conifer, CO 80433
Patrick.McAllister@AVLELEC.com
(303) 670-1099 (303) 679-8949 fax

Specifications are subject to change without notice.

Table of Contents

Safety Instructions.....	3
Introduction	6
Features	6
Applications.....	6
Controls and Features	7
Installation Tips	9
Amplifier Output Frequency Graphs	10
Specifications	11
Architect and Engineer Specifications	11
Warranty.....	12



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.

Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus 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 apparatus (including amplifiers) 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 from the apparatus.
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 apparatus. When a cart is used use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus 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 apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. **WARNING:** To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as a vase, should not be placed on this apparatus.
16. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle.
17. The mains plug of the power supply cord shall remain readily operable.



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 3½" away from objects that may obstruct air flow to prevent the unit's internal temperature rise.



WARNING – When the Device is in Use

- To prevent electric shock, do not remove the product cover as there are high voltage components inside. Refer all servicing to AVLELEC.
- Should any of the following irregularities occur during use, immediately switch off the power, disconnect the power cord from the AC outlet and contact AVLELEC. Do not attempt to continue operation with the product as this may cause fire or electric shock:
 - Smoke or strange smell coming from the unit.
 - If the product falls or the case is damaged.
 - If water or any metallic objects 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 wattage 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 the Device 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 AVLELEC 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 time period, unplug the power cord from the wall.

Introduction

The AVLELEC AM1200 is a self-contained Analog Audio Masking System. The AM1200 features a compact enclosure utilizing two efficient wide range 2" x 4" speakers that are powered by an internal 12 W amplifier channel. Selectable White and Pink Analog generators are incorporated to allow maximum masking design flexibility. A variable Hi-Cut filter to contour the masking noise to the environment. The AM1200 also features an external 12 W 70.7V amplifier output to drive other 70.7V speakers, such as the AVLELEC M2000, making it ideal for small installation that require a self-contained system.

The AM1200 amplifier channels are a highly efficient Class D topology and are powered by an external in line UL rated 24VDC power supply. There are separate internal and external level controls to provide system balancing. All controls are recessed tamper proof screw drive type potentiometers.

Installation is flexible and easy to do. There are four mounting holes on the chassis so the AM1200 can be mounted to the wall or ceiling. If you need a single suspension point, two removable hanger brackets are included for mounting.

Key Features

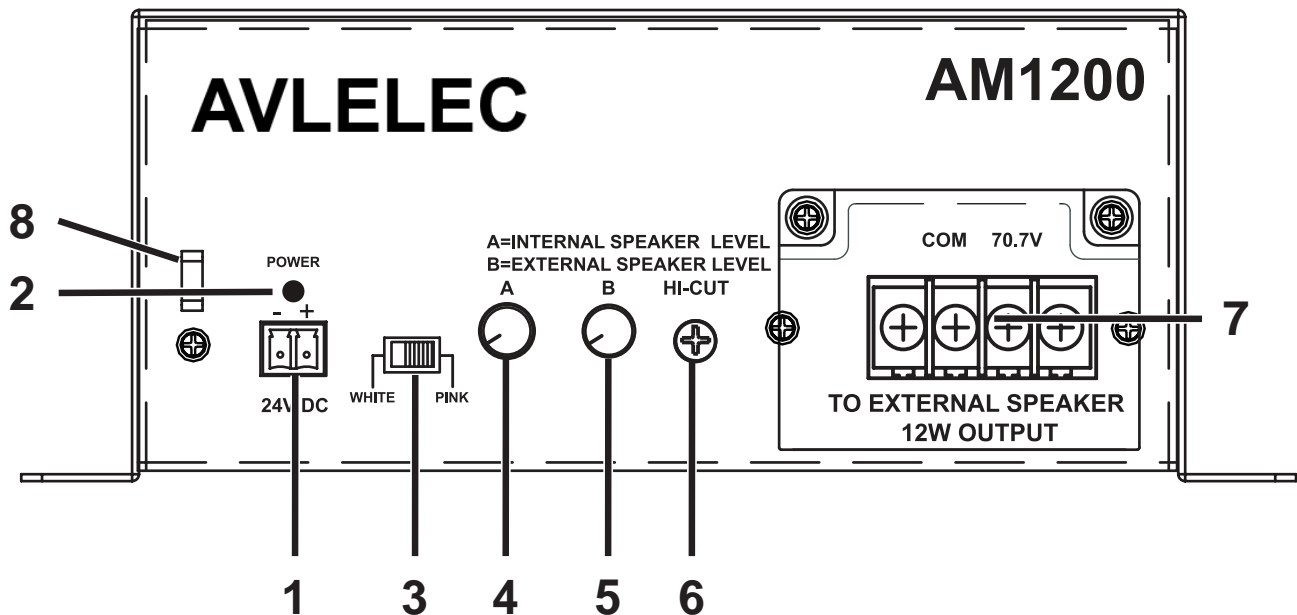
- Self-Contained Audio Masking System
- Compact Enclosure Design
- Features Two Efficient Wide Range 2" x 4" Speakers
- Internal 12 W x 2 Channel Class D Amplifier
- External 12 W 70.7V Amplifier Output to Feed Other Speakers
- Selectable White and Pink Noise Analog Generators
- Variable Hi-Cut Filter
- External UL Rated 24VDC Power Supply
- Four Mounting Holes for Wall Mount Applications
- 2 Removable Hanger Handles for Suspended Mounting

Applications

Achieve acoustical privacy in open and partitioned office areas by installing AVLELEC's self-contained audio masking system. The AM1200 is a compact assembly that adds low-level sound into a environment to obscure ambient noise, thus achieving conversational privacy in designated areas. The equalized masking sound lowers intelligibility and "masks" disruptive outside sounds.

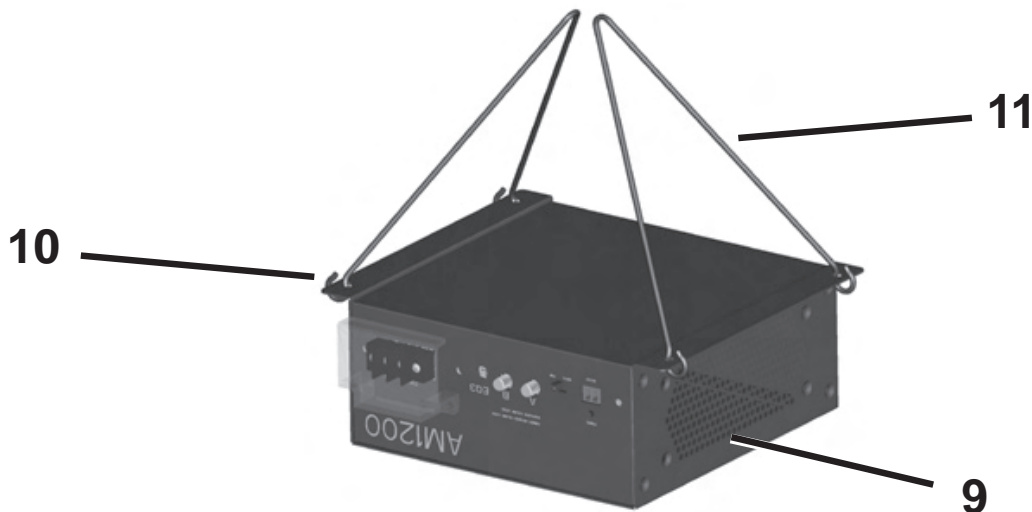
This easy-to-install system may be used in general applications to increase privacy and/or productivity in individual cubicle and work areas by “blocking out” surrounding conversations. It is also used in individual office areas, common waiting areas, and professional offices where confidential conversations occur.

Controls and Features



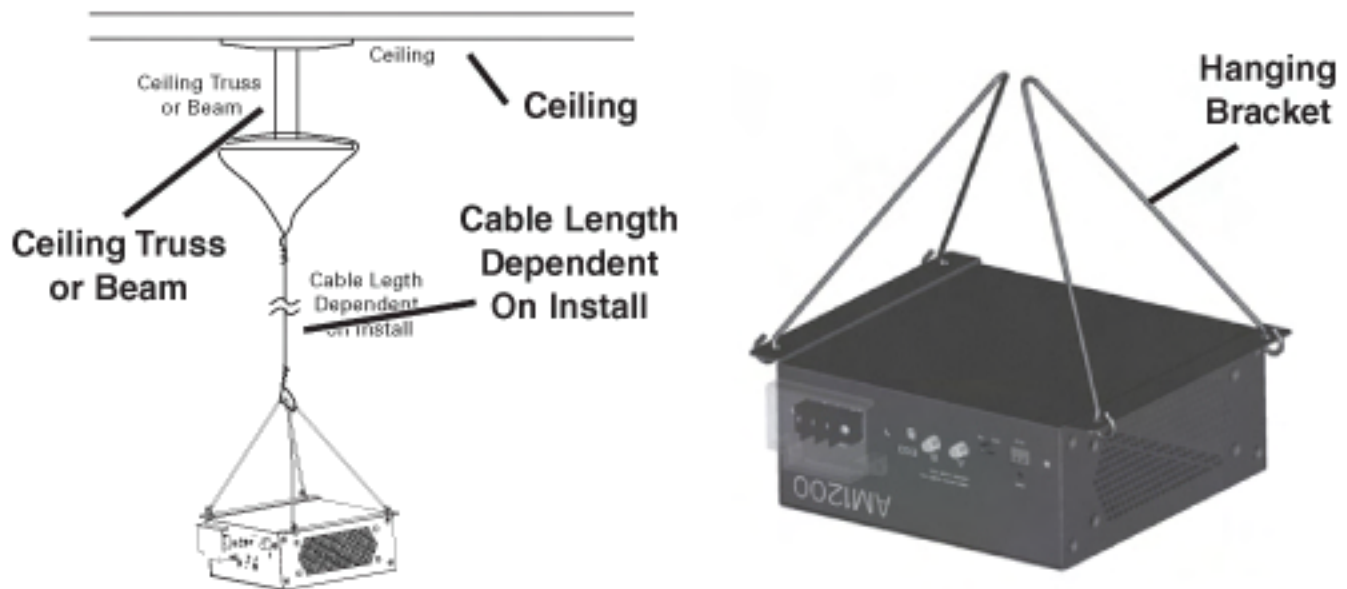
1. **DC Power Input** – An UL Certified external 24VDC power supply is supplied to power the AM1200.
Note: Only use this approved power supply or failure may occur.
2. **Power Indicator** – A Blue LED will illuminate if the External DC power supply is plugged into the receptacle and has AC power supplied.
3. **White or Pink Nose Selection Switch** – Slide the switch to the desired type of signal needed.
4. **Internal Speaker Level Control** – A level control has been incorporated to adjust the level of the internal speakers. Clockwise increases the signal. Note: When the gain is turned fully counter-clockwise there will still be some signal present at the output.

5. **External Speaker Level Control** – A level control has been incorporated to adjust the level of the external 70.7V amplifier output. Clockwise increases the signal. The Internal and External Level Controls are independent of each other. Note: When the gain is turned fully counterclockwise there will still be some signal present at the output.
6. **Hi-Cut EQ** – This potentiometer allows one to adjust the noise parameter to meet a basic masking spectrum. This Hi-Cut filter adjusts from 1 kHz to 7 kHz at 6 db per octave. See the illustration showing the frequency curves to get a complete understanding of the EQ range.
7. **External Amplifier 70.7V Output** – This 12 W 70.7V amplifier output is to power additional masking speakers. It is suggested to use the AVLELEC M2000 speakers. This amplifier output has its own level control but utilizes the same signal as the internal speakers.
8. **Power Cord Strain Relief support** – To secure power cord to chassis place a cable tie through the slot and around the cord.



9. **Internal Speakers** – The AM1200 has two internal speakers, to adjust the speaker level use the internal speaker level control.
10. **Mounting Holes** – There are four mounting holes to secure the AM1200 to a wall or ceiling.

11. **Hanger Bracket** – There are two hanger brackets included with the AM1200. These can be used to suspend the unit from a simple point.



The above illustration shows you how to mount the AM1200 to a open or Plentum ceiling. We suggest suspending the unit via a cable to the enclosed AM1200 hanging brackets. The cable must be secured enough to handle 5 times the weight of the unit. Note: The location of ceiling of which you want to secure the AM1200 must meet your local building codes. Contact your local building inspector prior to installation. Placement of the AM1200 must be within 6 ft of an approved electrical outlet that meets the local electrical codes.

**Power Cord
Attaches to
Chassis**

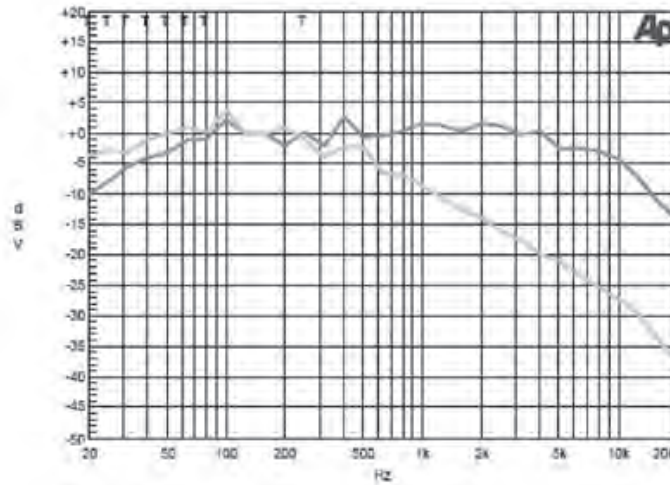


It is important to secure the power cord to the chassis. To do so, make a loop in the power cord making sure there is no stress on the mating connectors and secure the power supply cable to the chassis support tab via the a cable tie. See Picture above for an example.

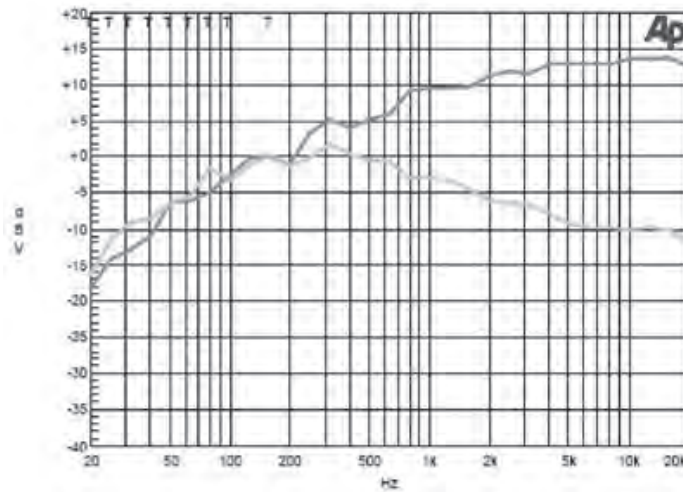
AVLELEC
www.SoundmaskingInstallation.com

8641 S. Warhawk Rd. Conifer, CO 80433
Patrick.McAllister@AVLELEC.com
(303) 670-1099 (303) 679-8949 fax

Amplifier Output Frequency Graphs



Pink Noise flat and with Hi-Cut engaged



White Noise flat and with Hi-Cut engaged

AA-GPN1200 Specifications

Type: Self-Contained Audio Masking System

Speakers: Two 2" x 4" 200 Hz – 4 KHz

Filter Selection: Selectable White, Pink Noise

Level Control: Internal Speaker, External Amplifier Output

Amplifier: Class D, 2 x 12 W @ 70.7V (416Ω Load)

Hi-Cut Control: Variable 1 KHz – 7 KHz 6 dB Per Octave

Supply Voltage: UL Rated External Inline 24VDC Power Supply

Panel Finish: Black

Mounting: Four Holes for Wall Mount, 2 Brackets for Suspension Mount

Dimensions: Chassis: W 7.25" (184mm) with mounting tabs, H 2.68" (68mm), D 6" (152mm)

Weight: Unit 3.0 lbs (1.35Kg), Shipping 3.5lbs (1.55Kg)

Architect and Engineer Specifications

The analog masking system shall be AVLELEC Model AM1200. It shall be a self-contained system with the ability to power external speakers. The AM1200 shall have two internal 2" x 4" speakers. The frequency response shall be 200 Hz – 4 kHz. The speakers shall be powered by a Class D 12 W amplifier channel. AM1200 shall be powered by an UL approved external inline 24VDC power supply. The AM1200 shall be capable of producing either analog pink or white noise. The Hi-Cut filter shall be adjustable from 1 kHz to 7 KHz at 6 dB per octave. The AM1200 shall have an 12 W 70.7V amplifier output with separate level control. The unit shall have four mounting holes along with hanging brackets. The AVLELEC AM1200 shall be used as a stand-alone unit or to power addition 70.7V speakers. Finish shall be black semi-gloss epoxy. The AVLELEC AM1200 shall be a unit weight of 3.0 lbs, and have a shipping weight of 3.5 lbs.

Limited Warranty

All products distributed by AVLELEC 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 AVLELEC 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. AVLELEC 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 AVLELEC 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, AVLELEC 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.

AVLELEC 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 AM1200 Masking System require service, please contact the AVLELEC warranty department at 303-670-1099 to obtain an RA number.

AVLELEC Tech Support can be reached at 303-670-1099.

Visit our web site at www.AVLELEC.com to see other AVLELEC products.