ASP-MG2240
Amplified Sound Masking System

Features
- Amplified Masking Controller
- 2 Masking Zones
- 2 x 20-Watt Outputs
- Analog White & Pink Noise Generators
- Balanced Line Output for 3rd Zone
- Speech Enhanced Privacy Mode (Adjustable +/- 12dB)
- Mic / Line Input for Paging with EQ & Limiter
- Auxiliary Input for BGM with EQ & Limiter
- Push Here Diagnostic (PHD) System Test Circuitry
- Assignable Balanced Line Output
- DSP Parameters EQ, Hi & Lo Pass Filters, Limiter
- PC Software Control
- 24 / 7 Schedule for Each Output
- System Commissioning Ramp On Each Output
- Meets Low Voltage Class 2 Wiring Codes

Applications
The ASP-MG2240 is suited for applications requiring a secured speech environment, paging or background music (BGM) audio. The ASP-MG2240 is designed to provide detailed masking privacy for a wide range of acoustical environments including open office areas, conference rooms, huddle/meeting rooms, as well as delivering non-masking content to areas where needed.

General Description
The AtlasIED ASP-MG2240 is a two zone masking controller with integrated amplification. The compact design incorporates features including two-channels of amplification, separate analog masking generators with EQ, 24/7 scheduler, System Commissioning Ramp, balanced Mic/line input, auxiliary input for background audio, and a line output. The PC control software allows the user to customize the system to meet the installation requirements. Settings can be stored in the unit or in the PC for file back up or recall. The ASP-MG2240 offers industry leading preconfigured presets that are specific to common and advanced masking applications. These settings are based on AtlasIED proprietary Chanaud Masking Filters.

Precise sound masking is now quick to implement. The compact ASP-MG2240 can deliver quality audio in a single masking zone up to 7000 sq. ft. or can be split into two 3500 sq. ft. zones. This compact integrated solution features two internal 20-watt amplifier channels along with internal DSP with intuitive control software. This software makes setup fast because of the practical real life preset configurations that can be selected and modified for customization.

Speech Privacy Enhancement for conference rooms or medical offices is an economical solution to meet federal HIPAA law requirements. The ASP-MG2240 features a customizable speech privacy solution for any environment. When in a private meeting that requires speech privacy, a switch can be pressed to activate the “Speech Privacy Enhancement” mode. The masking signal level will increase to a pre-set level to enhance privacy one the button is pressed. A variety of optional Speech Privacy Enhancement signs are available to connect to the ASP-MG2240 that provide visual indication that a room is being used and that the speech privacy system is in use.

The ASP-MG2240 is an all-in-one solution for most environments. The ASP-MG2240 not only supplies speech privacy but also delivers paging and background music audio. Mic / line and AUX inputs each have a selectable five band EQ and Hi & Lo pass filters. For paging applications, the ASP-MG2240 incorporates a unique hi Q feedback filter specifically tailored to the vocal frequency range. Adjustable output limiters are in the audio chain to protect against system overdrive.

Many installations are incorrectly installed for a variety of reasons and are a leading cause of equipment failure. The ASP-MG2240 includes a patent pending automatic diagnostic system test, called the Push Here Diagnostic (PHD). The PHD button is designed to check the connected speaker lines for wiring and amplifier loading errors. This test can be activated once all speakers are connected and the circuit automatically verifies that the attached speakers’ tap settings do not exceed the amplifier’s rated power and the speaker wire is free from shorts.

Most traditional sound masking systems require the speaker wire to be placed in electrical conduit because of the high voltage output of the amplifier. This method is effective but is expensive to implement. The ASP-MG2240 meets low voltage Class 2 wiring electrical code requirements, eliminating the need to run the speaker wire in expensive conduit. This is a huge cost savings for any installation. The ASP-MG2240 utilizes advance technology to meet the Class 2 electrical codes but still delivers quality speech privacy, paging, and background music audio.

The integrated amplifiers are more than 90% efficient and when combined with a 24 / 7 masking scheduler, the system has the perfect balance between audio performance and energy conservation. When the scheduler is set to minimum use, the ASP-MG2240 only draws 4.4-watts, during everyday use the average power consumption is only 19-watts, and under maximum use power consumption is 67-watts. The ASP-MG2240 is one of the most energy efficient sound masking systems available today.
Common Applications

Example 1 – Shows a common open office environment requiring two zones due to the differences in architectural material designs. Zone A is an open ceiling room and Zone B drop ceiling design. Both Zones require different masking tuning.

ASP-MG2240 Masking in 2 Zone Example
Common Applications

**Example 2** – Shows a two-zone application with a lobby, Zone B, and an open office, Zone A, design. Sound Masking is applied to both zones that require different tuning, paging to both zones, and background music to just Zone B.

**ASP-MG2240 Masking in 2 Zone with BGM and Paging**

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24VDC PSU
BGM Media Player

Page Mic
Set VOX Mute in GUI
VOX Mutes Aux Input (BGM)

Bal Line Out
Zone Expansion Assigned in GUI

Amp B Out
Amp A Out

Masking - Open Office
M1000 Masking Speakers
Up to 17 set at 1W ea

Masking - Hallway
FAP40T
Up to 17 (total on B Amp) set at 1W ea
BGM and Paging is Mixed into Masking in GUI if Used

Masking - Lobby
FAP40T
Up to 17 (total on B Amp) set at 1W ea
BGM and Paging is Mixed into Masking in GUI if Used

In this Example:
Amp A is set up for Open Office acoustics. Amp B is set up for Direct Field acoustics - set Taps to balance Hallway and Lobby volume levels. Mix non-masking Audio into B amp.
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Common Applications

Example 3 – Shows a conference room that requires speech privacy during certain meetings and a visual indicator to know the Speech Enhancement is active.

Wired Privacy Signs for Conference Room with ASP-MG2240

LED signs light up when 12V DC port is activated by CC Button

Contact Closure Button wired to Phoenix CC activation port

Zone B
Zone A – Open Office

Inside Conference Room
Enhanced Privacy In Use
Enhanced Privacy In Use

Inside Conference Room

Outside Conference Room

Lobby Zone B
Hallway Zone B
Open Office Zone A

Zone B Provides Enhanced Privacy for Conference Room when activated