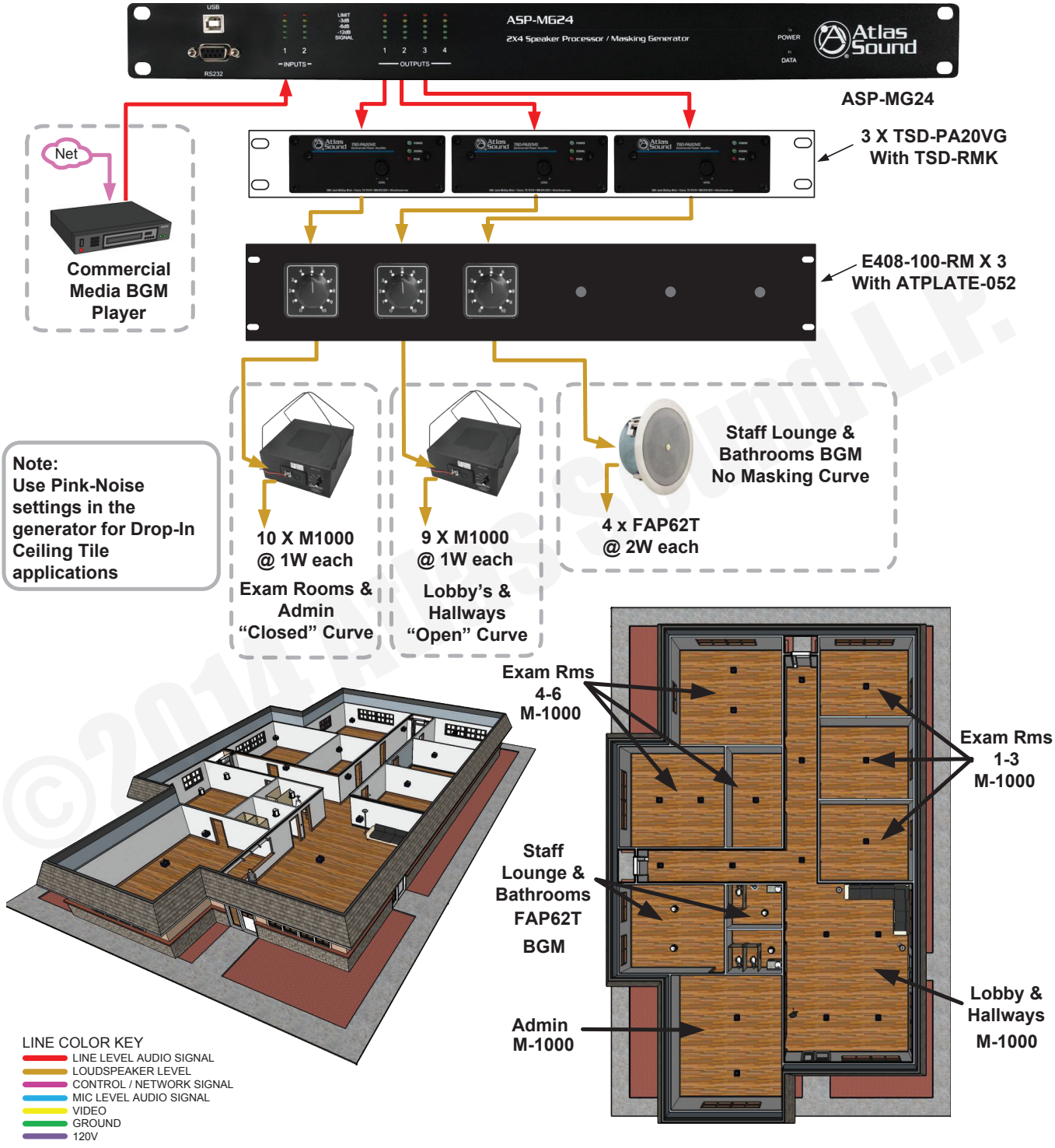
3 Channel Sound Masking System with BGM Featuring ASP-MG24 Processor



This is a design concept and is not meant to be a fully engineered system design. Contact Atlas Sound for system design help.

Atlas Sound
1601 Jack McKay Blvd. • Ennis, Texas 75119 U.S.A.
Telephone: 800.876.3333 • Fax: 800.765.3435

Overview:

A sound masking system is a distributed audio sound system that emits a low-level non-distracting masking noise (similar to pink noise) typically tailored to reduce far-field speech intelligibility and thereby improving speech privacy. In a Medical Clinic, Doctor-Patient confidentiality is required and many small clinics are not constructed to provide adequate sound isolation. Sound Masking is a very cost effective way to provide the required privacy. Every space has it's own acoustic signature thereby requiring a specific sound masking noise curve to be tuned for the specific curve in a given space. This example illustrates two different masking curve areas, open areas "Lobby and Hallways" and closed "Exam Rooms". See Atlas Sound "MaskingSpectra.doc" at atlassound.com for specific guidance on open and closed office masking curve settings. In addition, a BGM (no masking) zone is provided in the staff lounge and bathrooms using the third channel of the ASP-MG24.

Application Example Description:

In this example, the ASP-MG24 (4-channel masking processor) is deployed to provide the two different specific filter curves necessary for the open lobby and hallways and closed exam rooms. The exam rooms use a TSD-PA20VG amplifier powering ten (10), M1000 speakers set at 1-Watt each with a master level set by an E408-100 (stepped) volume control. The open lobby and hallways have a TSD-PA20VG amplifier powering nine (9) M1000 speakers set at 1-watt each with a master level set by an E408-100 (stepped) volume control. The M1000 speakers are suspended in the plenum space. FAP-62T flush mount ceiling speakers are used for the BGM zones set at 2-watts each and powered by a TSD-PA20VG 70V amplifier, also using a master volume control. The three TSD amplifiers are mounted side-by-side using the TSD-RMK accessory rack mount. A commercial music subscription player provides the music source.

Benefits:

- Cost Effective Speech Privacy
- Improved Work Environment
- Helps Achieve Doctor-Patient Privacy

Application Example Notes:

1. Install design physical assumptions:
   - The suspended ceiling is mineral tile.
   - The plenum depth is between 1 and 3 feet.
   - There are no absorption materials in the ceiling plenum.
   - The suspended ceiling height is lower than 12 feet.

2. See Atlas Sound "MaskingSpectra.doc" for guidance on open and closed office masking curves.
   - Set system EQ - Bandpass filters for (Low-Cut) HP = 100Hz; (High-Cut) LP = 8kHz
   - Walk the space with an RTA and adjust dB levels of each frequency to match curve settings on chart (in MaskingSpectra.doc) in space.
   - Typical levels are from 42dB to 46dB.
   - Some offices may need to ease into the level setting over a few days to allow employee's to adjust without noticing the change. Do this by adjusting the level pot one step at a time until the desired 42dB or more needed is reached.
   - For an Auto Scheduler Level Control see: Atlas ASP-MG24TDB

Atlas Sound
1601 Jack McKay Blvd. • Ennis, Texas 75119 U.S.A.
Telephone: 800.876.3333 • Fax: 800.765.3435