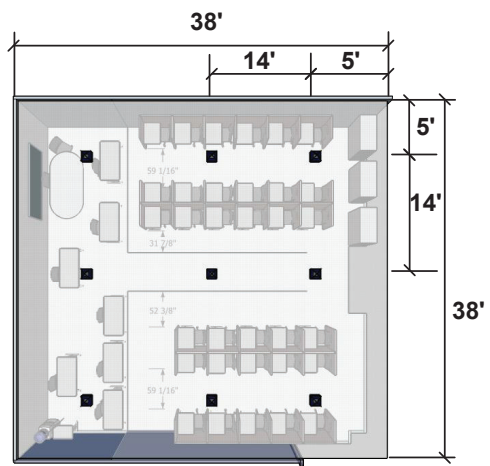
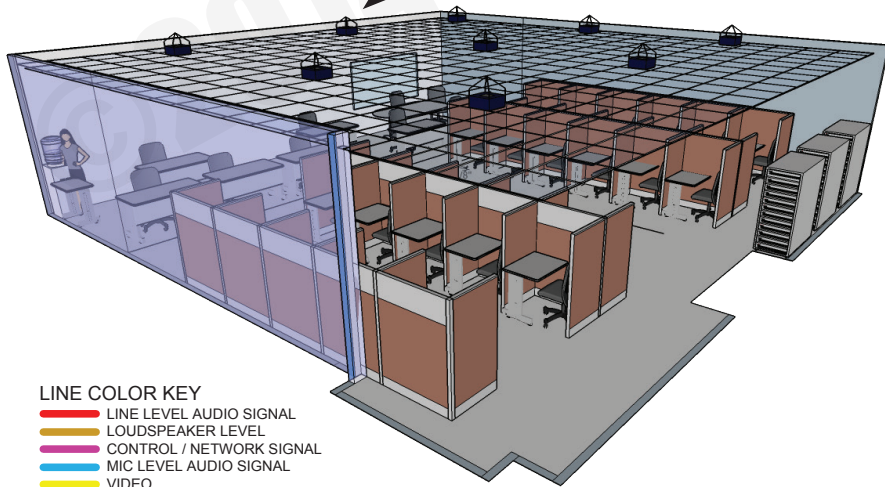
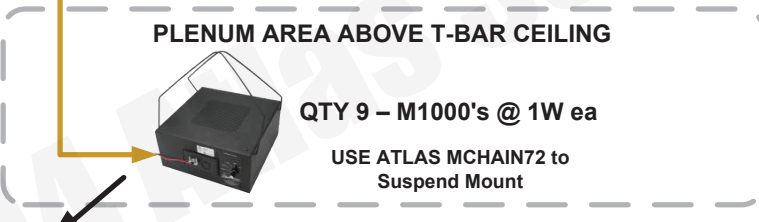
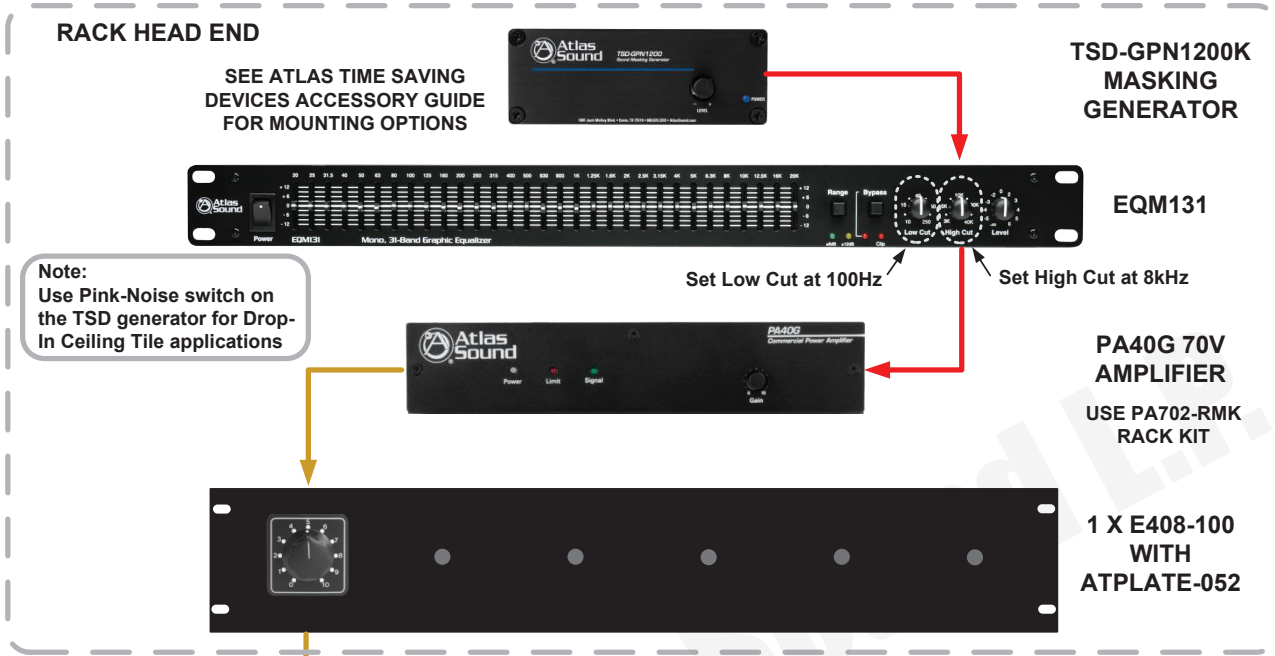




Single Zone Sound Masking System Featuring TSD-GPN1200K Masking Generator



- LINE COLOR KEY**
- LINE LEVEL AUDIO SIGNAL
  - LOUDSPEAKER LEVEL
  - CONTROL / NETWORK SIGNAL
  - MIC LEVEL AUDIO SIGNAL
  - VIDEO
  - GROUND
  - 120V

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



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**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. It is also effectively used to reduce distracting adjacent office noise, traffic or other unwanted noise to improve the work environment. Every space has it's own acoustic signature thereby requiring a specific sound masking noise curve to be tuned for the desired curve in a given space. In this example a small single room call center in an "Open" room setting is detailed. In this type of setting only one masking noise curve is required. See Atlas Sound "MaskingSpectra.doc" at [atlassound.com](http://atlassound.com) for specific guidance on open and closed office masking curve settings.

**Application Example Description:**

In this example, the TSD-GPN1200K is deployed to provide a basic masking noise signal fed to an EQM131. The 1/3 octave equalizer is used to enhance specific frequencies to establish the desired "Open Office" curve. The TSD-GPN1200K is connected to nine (9) M1000 speakers, tapped at 1-Watt each, suspended in the plenum space being powered by a PA40G amplifier with master level set by an E408-100 (stepped) volume control.

**Benefits:**

- Cost Effective Speech Privacy
- Improved Work Environment
- Increased Productivity

**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

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