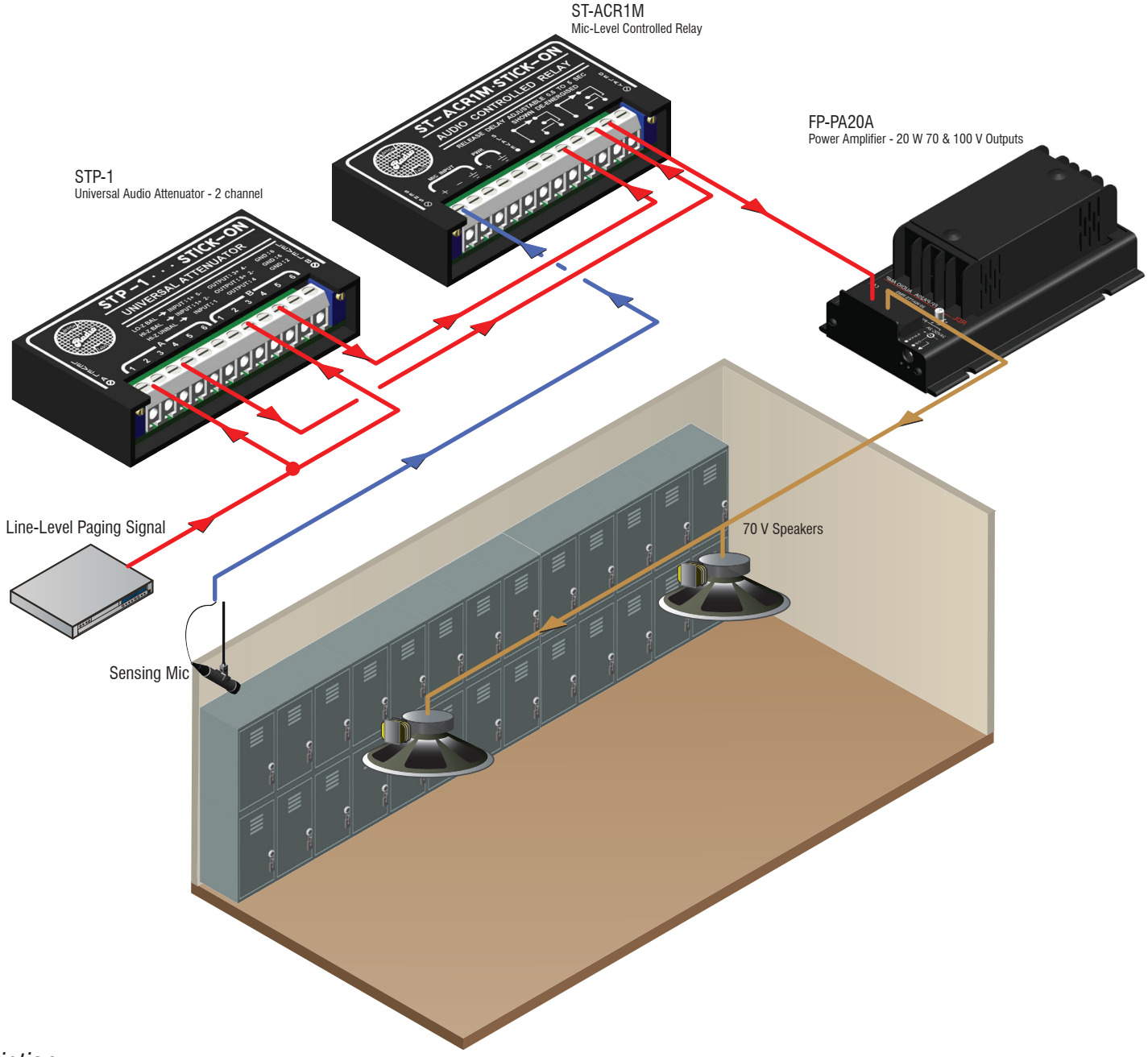
SINGLE ZONE AUTOMATIC PAGING LEVEL CONTROL

Automatic Stepped Level Adjustment for Ambient Level Changes



Description:

The circuit shown is ideal in applications where paging levels are normally sufficient, but at times high ambient noise levels make the paging impossible to hear. This is common in school hallways which may be empty or crowded, making higher sound system levels necessary during periods of heavy congestion. Normal levels are restored when traffic is minimal.

In this example, the STP-1 Universal Audio Attenuator is used to set two audio levels (normal and high) for the line-level audio feeding the power amplifier for the hallway. A sensing microphone is oriented to pick up ambient noise but not paging audio. Ambient noise triggers the ST-ACR1M which switches the higher audio input level to the amplifier. When noise levels return to normal, the ST-ACR1M switches back to the standard paging level. An RDL TX-70A Speaker Level Interface can be added to obtain line-level paging audio from a constant voltage speaker line.

An RDL FP-PA20A Power Amplifier is used in this example.

Parts List

Product	QTY
FP-PA20A	1
STP-1	1
ST-ACR1M	1

Recommended Pwr. Supplies

Product	QTY
PS-24V3A 24 Vdc 3 A	1

Line Color Key

- Line Level Audio Signal
- Loudspeaker Level
- Control Signal
- Video
- Mic Level Audio Signal
- Ground
- Power
- Miscellaneous