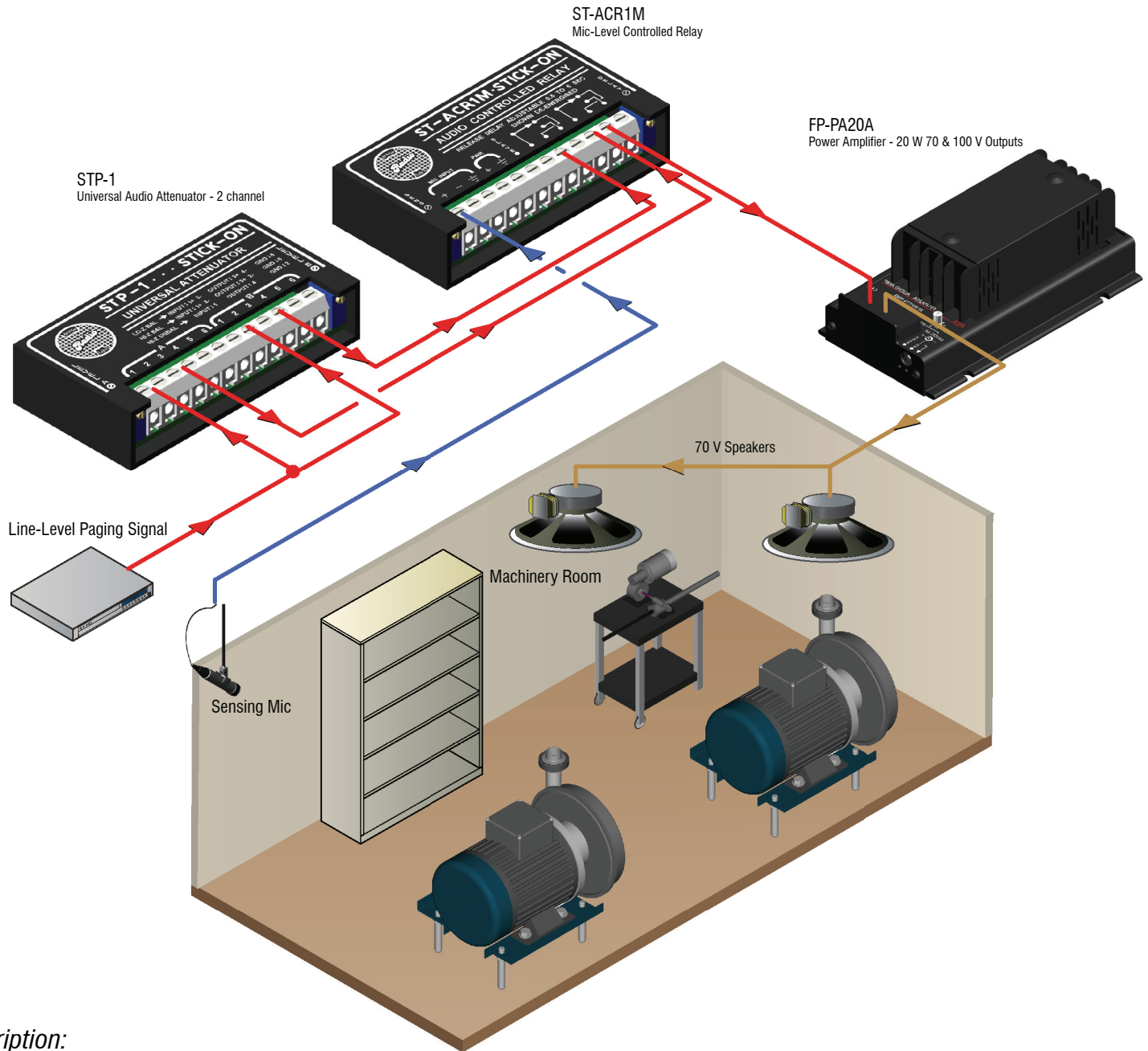


ZONE AUTOMATIC PAGING LEVEL CONTROL

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 factories where heavy machinery is in use at some times, making higher sound system levels necessary while the machinery is operating, then restoring the normal level when the machinery is no longer running.

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 machinery room. A sensing microphone is oriented to pick up machinery noise but not paging audio. Machine noise triggers the ST-ACR1M which switches the higher audio input level to the amplifier. In the absence of machine noise, 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-24U2 24 Vdc 2 A | 1 |

| Line Color Key | |
|----------------|-------------------------|
| Red | Line Level Audio Signal |
| Orange | Loudspeaker Level |
| Purple | Control Signal |
| Yellow | Video |
| Blue | Mic Level Audio Signal |
| Green | Ground |
| Brown | Power |
| Black | Miscellaneous |