Overview

EST3 easily supports centralized banked amplifiers configurations. Model 3-ZA20 Zoned Amplifiers at the EST3 control panel provide a channel source(s) for banked amplifiers. The 3-ZA20 amplifiers can select any one (at a time) of the EST3 eight audio channels as a signal source. Examples include; page, alert and evacuation. Standby Amplifiers are an option.

A special interface module, the 3-ATPINT accepts analog audio signals @ 25 or 70 Vrms from EST3’s zoned amplifiers and passes these signals to the 1B3125 and 1B3250 audio power amplifiers via an Amplifier Terminal Panel (ATP). The 3-ATPINT can pass supervised audio signals to other ATPINTs within a local amplifier bank or to other remote banks of amplifiers. The 3-ATPINT mounts in the ATP.

The ATP Audio Terminal Panel interfaces one or two audio power amplifiers and monitors utility power, charges and supervises standby batteries, and provides switch-over to standby. Audio risers connect at this panel. It also has ground fault detection circuitry and an integral trouble signal and silence switch.

The EST3 System monitors and controls the amplifier bank through Signature series modules such as the SIGA-CT1 or 2 input modules and the SIGA-CR control relay. ARA-1 Relays provide DPDT contacts for switching power amplifier risers when a system has standby amplifiers.

SIGA-CC1 (Single Channel) or CC2 (Dual Channel) output control modules command and supervise each audio circuit or zone.

Model URSM Universal Riser Supervision Module provides audio riser supervision. A SIGA-CT1 or CT2 interfaces this unit to the EST3 System.

Banked amplifier configurations mount in RKU style cabinets. These units accept standard 19 inch rack mounting equipment.

Centralized Banked Amplifiers

Standard Features

- **Large Supervised Amplifiers (1B3250 & 1B3125)**
  - 250 or 125 Watt amplifiers
  - broad frequency response and low distortion
  - thermal and electronic protection

- **Amplifier Terminal Panel (ATP)**
  - supports two audio power amplifiers
  - charges and supervised up 40 AH batteries
  - ground fault detection circuit
  - standard 19 inch rack mounting
  - Terminal Panel Interface Module (3-ATPINT)
  - supports connection to EST3 Zoned Amplifiers
  - allows “daisy chain” connections to other ATPINTs

- **Supported by System Definition Utility**
  - fast rules based programming

- **Uses the 3-ASU & 3-ASU/FT Audio Source Units**
  - download messages and tones; site recorded messages
  - eight channel sources; page, alert, evacuation,
  - general, and four auxiliary channels
  - local, remote, auxiliary, and phone analog audio sources

- **Uses the ZA20 amplifier as a source**
  - Class A or B connection
  - Supports Multiple PreAmps
  - Optional Standby PreAmps
  - 25 Vrms or 70 Vrms interface
  - drives multiple 3-ATPINTs
Application

Life Safety Audio provides Emergency Response Personnel with a means to control building evacuation using voice instructions.

Banked Amplifiers provide EST3 with economy audio configurations for Single and some Dual channel applications.

Typical Configuration

Typical Banked Single Channel with Standby

Diagram showing block wiring layout of a typical banked single channel with standby.

Typical Banked Dual Channel with Standby

Diagram showing block wiring layout of a typical banked dual channel with standby.

Typical System Components

Data Sheets are available for the following components.

- 3-ASU/FT Audio Source Unit with Fire Phone
- 3-ASU Audio Source Unit
- 3-ATPINT Audio Terminal Panel Interface
- ATP Audio Terminal Panel
- ATP-220 Audio Terminal Panel 220 Vac
- 1B3250 250 Watt Power Amplifier
- 1B3125 125 Watt Power Amplifier
- SIGA-CT1 Single Circuit Input Module
- SIGA-CT2 Dual Circuit Input Module
- SIGA-CR Control Relay
- SIGA-MP1 Module Mounting Plate, eight spaces
- SIGA-MP2 Module Mounting Plate, four spaces
- ARM-8 Relay Module /w one relay, space for eight total
- ARA-1 Relay for ARM-8
- RKU-42 Standard 19 inch Rack Mounting Cabinet, 42 inch
- RKU-61 Standard 19 inch Rack Mounting Cabinet, 61.25 inch
- RKU-70 Standard 19 inch Rack Mounting Cabinet, 70 inch
- RKU-77 Standard 19 inch Rack Mounting Cabinet, 77 inch
- VP-1 Vented Panel, 1.75 inch
- VP-3 Vented Panel, 3.5 inch
- BP-1 Blank Panel, 1.75 inch
- BP-2 Blank Panel, 3.5 inch
- BP-3 Blank Panel, 5.25 inch
- URSM Universal Riser Supervisory Module
- MFC Module Fire Cabinet