

Centralized Banked Amplifiers¹

Overview²

EST3 supports centralized (banked) amplifier configurations for Mass Notification/Emergency Communication (MNEC), life safety, and emergency signaling.³

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 Amplifier(s) are an option.⁴

Special interface modules, the 3-ATPINT, or MN-ABPM panel-mount, accept analog audio signals @ 25 or 70 Vrms from EST3's zoned amplifiers and passes these signals to the 1B3-125 and 1B3-250 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 on the ATP.⁵

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 an integral trouble signal and silence switch.⁶

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. MR-201/C or MN-204/C relays provide DPDT contacts for switching power amplifier risers when a system has standby amplifiers.⁷

SIGA-CC1 (Single Channel) or CC2 (Dual Channel) output control modules command and supervise each audio circuit or zone. The SIGA-RM1 Riser Monitor Module provides audio riser supervision.⁸

Standard Features⁹

- **Large Supervised Amplifiers [1B3-250 & 1B3-125]**¹⁰
 - 250 or 125 Watt amplifiers
 - broad frequency response and low distortion
 - thermal and electronic protection

- **Amplifier Terminal Panel [ATP]**¹¹
 - supports two audio power amplifiers
 - charges and supervises up to 40 AH batteries
 - standard 19 inch rack mounting
 - Terminal Panel Interface Module [3-ATPINT]
 - supports connection to EST3 Zoned Amplifiers¹²

- **Supported by System Definition Utility**¹³
 - fast rules based programming

- **Part of an end-to-end 520 Hz signaling solution**¹⁴
 - UL approved for use in sleeping rooms

- **Uses the 3-ASU & 3-ASU/FT Audio Source Units**¹⁵
 - site-recordable or downloadable messages
 - live paging
 - hierarchical operation of eight distinct digital audio channels

- **Uses the ZA20 amplifier as a source**¹⁶
 - Class A or B connection¹⁷
 - Supports Multiple PreAmps
 - Optional Standby PreAmps
 - 25 Vrms or 70 Vrms interface
 - drives multiple 3-ATPINTs in same rack

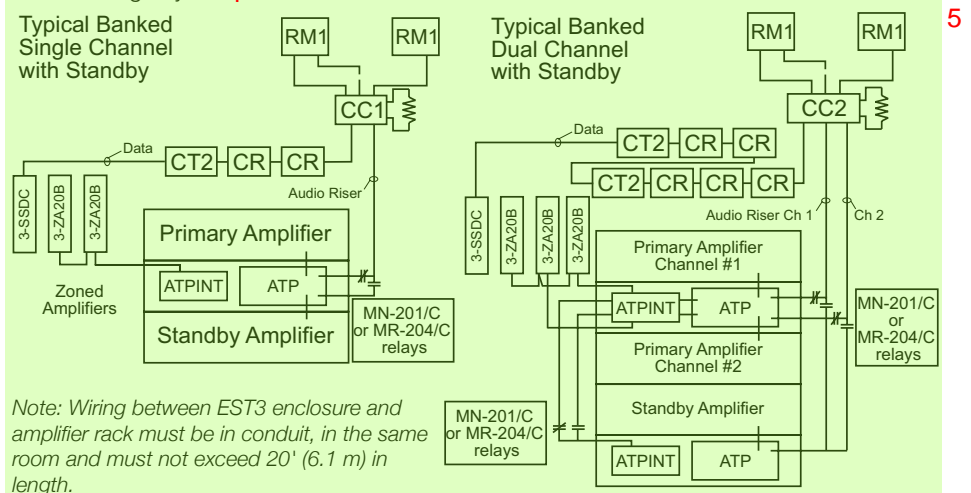
Application 1

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 3

Block Wiring Layout 4



Typical System Components 6

Data Sheets are available for the following components. 7

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
1B3-250	250 Watt Power Amplifier
1B3-125	125 Watt Power Amplifier
SIGA-CT1	Single Circuit Input Module
SIGA-CT2	Dual Circuit Input Module
SIGA-RM1	Riser Monitor 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
MR-201/C	Relay for ARM-8 (single DPDT)
MR-204/C	Relay for ARM-8 (four-position DPDT)
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
MFC	Module Fire Cabinet

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