

AMPLIFIER KIT

DESCRIPTION

The amplifier kit (P/N 10-2773-X) is the heart of Fike's Emergency Communication System (ECS). It is designed to feed a single audio zone and provide an integral 24 VDC visual notification appliance circuit. The amplifier is capable of providing up to 50 watts of audio output power to connected voice evacuation speakers. The amplifier provides four (Class B) audio output circuits that are compatible with 25 or 70 Vrms speakers. An optional Class A card (P/N 10-2746) can be installed where redundant speaker circuit wiring is required. Each speaker circuit is capable of distributing the entire 50 watts of available amplifier power or the 50 watts can be distributed amongst all four circuits in any combination, as long as the 50 watts maximum is not exceeded.

Each amplifier has an integral backup amplifier circuit. In the event that the primary amp circuit should fail, the backup amplifier circuit will automatically be switched in. This eliminates the need for the installation of a secondary (backup) amplifier for each audio zone.

The amplifier can store up to 16 digitally recorded voice messages, each of which may be up to 30 seconds long. User-defined custom messages (up to 30 seconds long) can be recorded and downloaded to nonvolatile memory on the amplifier through the control panel's programming software.

The amplifier card(s) can be mounted in the host fire alarm control panel enclosure for smaller applications or for larger more complex systems, the amplifier(s) may be mounted in any of the optional amplifier distribution cabinets. These cabinets allow the amplifier to be strategically located throughout the building close to the speaker zones they serve, thus reducing the amount of wiring required between the amplifier and the connected speakers as well as reducing audio signal degradation. The amplifier interfaces to the system via the control panel's RS485 peripheral bus, which allows up to 31 amplifiers to be connected to a single control panel. The amplifier is equipped with an integral battery charger and power supply that is capable of supplying power and battery backup for up to three amplifiers.

SPECIFICATIONS

General

- All amplifiers come standard with power transformer and audio transformer (see ordering information for details)
- Maximum of 50 watts audio output power
- Four Class B speaker circuits; can be wired Class A with addition of Class A speaker card (P/N 10-2746). Compatible with 25 Vrms or 70 Vrms speakers
- Integral backup amplifier circuit
- Stores up to 16 digitally recorded voice messages, each up to 30 seconds long
- Communicates with CyberCat control panel via the RS485 peripheral bus connection (31 amplifiers maximum); 4,000 ft. (1,219 m) maximum length to last device
- Single Class A/B notification appliance circuit rated 2 A @ 24 VDC
- NAC circuit capable of producing SYNC protocol for Gentex and System Sensor
- Removable wiring terminal block that accept 14 – 26 AWG wire
- Amplifier dimensions: 12.0" (30.5 cm) L x 6.0" (15.24 cm) W
- Compatible with CyberCat 254/1016 panels with firmware version 5.00 or higher
- Input for dual-channel amplifier operation
- Can be connected to voice systems Audio Network for live paging
- Can be mounted in same enclosure with the CyberCat controller or in separate remote audio enclosure (see ordering information for details)

Power

- Operates from 120 VAC/60 Hz or 240 VAC 50/60 Hz transformer
- Integral battery charging circuit capable of charging of up to 18 AH batteries
- A single set of 18 AH batteries can provide standby power for up to 3 amplifiers
- Amplifier card consumes 108mA* @ 24 VDC in normal standby and alarm

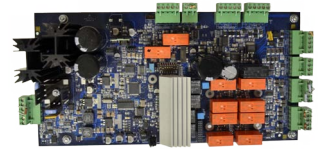
*Note: Fike Amplifiers produce an audio path supervision pulse which momentarily peaks at 322mA. This supervision pulse duration is extremely short, so battery calculations for the Amplifier should be based upon the average current draw of 108mA (standby and alarm), as demonstrated by the approved battery sizes.

Operating Environment

- 32 - 120°F (0 - 49°C)
- 93% relative humidity, non-condensing

Compatibility

- CyberCat® 1016, 254 and 50 with firmware version 5.xx and higher



APPROVALS:

- UL - S3217
- FM - 3038846
- CSFM - 7165-0900:0137
- City of New York - 6063



OPERATION

Operation of Fike's Emergency Communication System is based on the standard Zone and State relationship that is used by all of Fike's Intelligent Fire Alarm control panels. Amplifier activation is tied to the panel's operational states via zone mapping and/or a switch press on the control panel or control card (i.e. paging control card, remote paging control card, I/O switch card, audio control switch card). The amplifier will either play a canned message, play live audio (page) or record the live audio and repeat over and over (page with record and repeat) for Voice of MNS operation. In addition, each amplifier has the capability of having a local microphone connected directly to the amplifier that allows paging solely to that amp's speaker circuits upon keying of the microphone. This feature does not allow broadcast of page across the Audio Network and is isolated to the amplifier's microphone. No panel interaction is required for this operation. This feature does not allow broadcast of page across the audio network.

ORDERING INFORMATION

Fike P/N	Description
10-2773-1	120 V, Amplifier Kit (includes 1 each of 10-2726, 02-10881 and 02-12825)
10-2773-2	240 V, Amplifier Kit (includes 1 each of 10-2726, 02-10882 and 02-12825)
Spare Parts	
10-2726	Amplifier Card (50 WATT)
10-2746	Amplifier Class A Module
02-10881	120 VAC Power Transformer
02-10882	240 VAC Power Transformer
02-12825	Audio Transformer