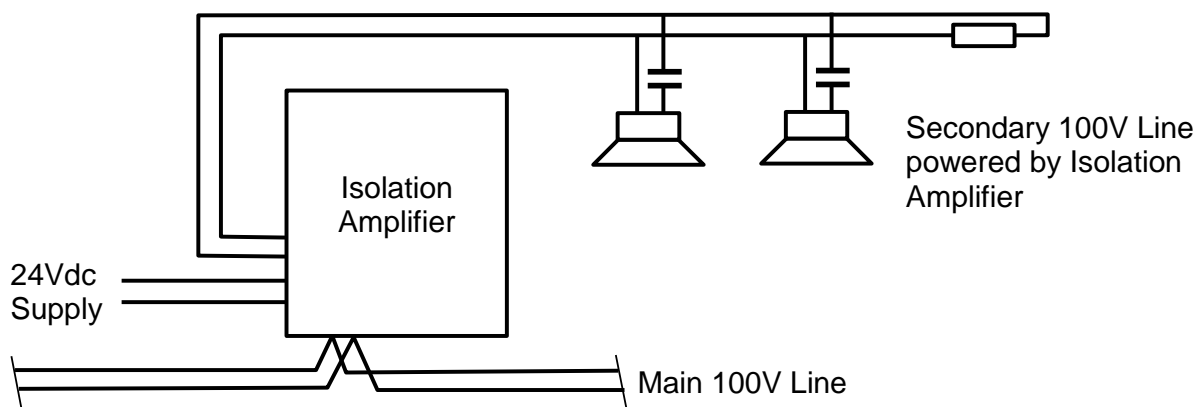


ISOLATION AMPLIFIER 100V 60W

The FP1135 Isolation Amplifier is a self-contained slave amplifier which connects to an existing 100V speaker line and reproduces this signal at up to 60W load on a separate supervised 100V line. The Isolation Amplifier is suitable for use with speech and music as well as with warning tones.

The 100V output line from the amplifier is electrically isolated from the input 100V line, so noise or other signals on the output line are kept separate and do not affect the input line.

The Isolation Amplifier supervises its output 100V line independently of supervision on the main 100V line. Any wiring fault, internal fault or power fail, is signalled back to the main amplifier or tone generator via the main 100V line's supervision facility.



Typical Applications

- System expansion – the Isolation Amplifier presents a 1W load to the main 100V line (which must be included in the main amplifier's loading), so it effectively increases the overall system capacity by 60W. This also avoids the need to cable from an expansion area all the way back to the main amplifier or tone generator, if the Isolation Amplifier is locally powered.
- Additional branching – an existing system can be expanded or divided with one or two additional supervised branches of 100V wiring without affecting the existing supervision arrangements.
- Security isolation – the Isolation Amplifier can be used to drive speakers in a secure military or commercial area so that eavesdropping from outside via the speaker line is much more difficult. The Isolation Amplifier should be installed just inside the secure area.

Compatibility

The Isolation Amplifier can be used with virtually any supervised 100V speaker system that will detect a 10k Ω leakage fault on the line. This includes QE90, Microvac, Simplex 4100, T-GEN 50, T-Gen2 and many applications of Mini-Gen.

It can also be used with unsupervised systems, but separate arrangements may need to be made to extend the Isolation Amplifier's fault output back to an annunciation point.

Power Supply

The Isolation Amplifier requires a supply of 27Vdc at 3A for full power output. If there is a nearby FIP or EWIS with sufficient capacity, the supply can be taken from this. Otherwise, a dedicated power supply unit and battery of sufficient capacity must be used. This power supply will require supervision to comply with current fire alarm and warning system standards in Australia and New Zealand.

Installation

Installation instructions (LT0677) are included with each unit.

The Isolation Amplifier can be mounted in any position, but for ease of installation and servicing should be on a vertical surface. The standard cabinet is not suitable for mounting in exterior or wet environments.

Specifications

Supply Voltage	19.6V - 28.8V dc Reduced performance below 27.0V
Supply Currents:	
Quiescent	170mA (no speech or background music)
Active	3A for 60W output at 27VDC
Input Signal	100V rms at 1W max.
Output Voltage	100V rms
Output Power	60W rms
Output Line Supervision ELD	1 branch: 56k Ω 0.4W, 2 branches: 100k Ω 0.4W each
Fault Signalling	10k Ω load placed across input 100V line
Cabinet Size	295H x 240W x 80D mm

Ordering Codes

FP1135 FP,T-GEN2,ISOLATION AMPLIFIER,100V,60W