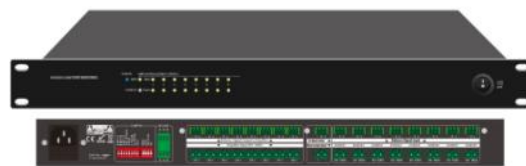


# ELV Amplifier Fault Changeover System

## Ensure Uninterrupted PA with Auto Amplifier & Line Monitoring



The **ELV AF8000** is a critical component for high-availability Public Address systems. This 1U rack-mount unit provides 8 channels of automatic amplifier fault detection and changeover to a backup amplifier. It also integrates speaker line supervision, monitoring for impedance changes (indicating faults like open or short circuits). With clear LED status indication and RS485 communication for integration, the AF8000 ensures system reliability for critical announcements.



AF8000

### Key Features

- **Automatic Amplifier Backup:** Monitors up to 8 main amplifiers and instantly switches respective channels to a backup amplifier upon detecting failure (< 1 second changeover).
- **Clear Status Indication:** Front panel LEDs provide immediate visual feedback on individual amplifier and line status.
- **RS485 Communication:** Allows integration with central monitoring systems or IP PA controllers (e.g., IP2100 series) for remote fault reporting.
- **Compact Design:** Fits standard 19" racks, consuming only 1U height.
- **Integrated Speaker Line Supervision:** Monitors connected 50V/70V/100V speaker lines for integrity (OK, Open, Short) based on impedance fluctuation ( $\pm 10\%$  or  $\pm 20\%$  configurable).
- **Configurable Monitoring:** Dip switches allow enabling/disabling monitoring per zone and setting monitoring parameters.
- **High Power Handling:** Each zone can handle up to 500W speaker load.

### Applications

Essential for life safety systems, transportation hubs, large public venues, industrial facilities, and any PA system where continuous operation during amplifier or speaker line faults is critical.

### System Compatibility

- **Amplifiers:** Monitors standard 100V line amplifiers (e.g., ELV A-XXXXD series). Requires amplifiers compatible with 20kHz pilot tone injection for line supervision, or a system controller providing it.
- **Controllers:** Can integrate via RS485 with IP PA controllers (e.g., IP2100 series) or other monitoring systems.
- **Backup Amplifier:** Requires a compatible backup amplifier connected to the backup inputs.

### Technical Specifications

| Specifications*       | AF8000                                                                     |
|-----------------------|----------------------------------------------------------------------------|
| Description           | 8 Channel Amplifier Fault Changeover System                                |
| Channels              | 8 Main Amplifier Inputs, 8 Backup Amplifier Inputs, 8 Speaker Line Outputs |
| Connectors            | Phoenix/Euroblock for Amps & Lines, RS485                                  |
| Line Monitoring       | 50V/70V/100V Speaker Lines, Pilot Tone Req. (20kHz $\pm 5\%$ )             |
| Detection Sensitivity | $\pm 10\%$ or $\pm 20\%$ Speaker Line Impedance Fluctuation                |
| Fault Detection Time  | Amp: < 1s; Speaker Line: < 2s per zone; Failure: 5-15s                     |
| Changeover Time       | < 1 Second                                                                 |
| Zone Load Capacity    | 500W / 100V Line Max.                                                      |
| Communication         | 2 x RS485                                                                  |
| Power Supply          | DC 24V (Max 2A)                                                            |
| Dimensions            | 483 x 44 x 368 mm                                                          |
| Weight                | 4.3kg                                                                      |

*\*Specifications are subject to change without prior notice*

### Ordering Information

| Model No. | Description                                 |
|-----------|---------------------------------------------|
| AF8000    | 8 Channel Amplifier Fault Changeover System |