

Installation and Use

Install the unit away from heat sources, such as vents and radiators, and in rooms with adequate ventilation. Ensure that air can circulate freely behind, beside, and above the unit. Do not exceed the maximum ambient operating temperature of 18°-108° F (-8° - 42°C). Be aware of conditions in an enclosed rack that may cause the temperature to exceed ambient room conditions.

To install a VFOM-1, first fit a personal anti-static grounding strap and continue to wear it throughout the following procedure.

- Power down the VA-8600 by removing the power cord. Do not attempt to install the VFOM-1 card in a powered VA-8600 device. In order for the power supply capacitors to discharge, allow the amplifier power to remain off for at least five minutes before proceeding.
- Remove the VA-8600 top cover (6 x #4x¹/₄" self-tapping screws, 3 at front, 3 at rear; 2 x #6 machine screws, center top of cover).
- Viewing the rear of the VA-8600, locate the module in Slot 10. Remove the blank panel from this position (remove 3 x #4x1/4" self-tapping screws, slide panel upward).
- Viewing the amplifier from the top, on the motherboard locate and remove the #4-32 machine screw marked 10 (near connector J10, AUX PWR).
- Fit the VFOM-1 module (with ribbon cable attached) by sliding the rear panel into the position formerly occupied by the blank panel.
- Re-fit the three rear panel screws and re-fit the motherboard screw through the VFOM-1 mounting bracket (marked MH3 on VFOM-1 PCB).
- Locate the NM-1 network module adjacent to the newly fitted VFOM-1 module; on the NM-1 locate connector To NM-1, J17.
- Plug the free end of the ribbon cable from the VFOM-1 module into J17 of the NM-1 module, ensuring that pins are aligned and that the polarizing stripe on the cable is toward the top of the VA-8600 at both the NM-1 end of the cable and the VFOM-1 end of the cable.
- Check that all screws are tight and re-fit the VA-8600 top cover.
- Each VFOM-1 module must be enabled in the Vocia software.
- The VFOM-1 module is now ready for use.

Rear Panel Connections

The rear panel of the VFOM-1 has four 4–way connectors, each of which provides connections for two speaker circuits.

The connector numbers correspond to the AM-600 amplifier channel of that number (refer to the amplifier channel numbers printed above the AM-600 amplifier modules on the VA-8600 rear panel).

- Connections are labeled with a positive (+) and negative (-) symbol.
- Connections are via 5.08mm pluggable screw terminal blocks.

A cable harness set is supplied with the VFOM-1. Each cable in this set connects the output of two AM-600 amplifier modules to corresponding connections on the VFOM-1. Harness connections are numbered. Ensure the numbers correspond with the AM-600 channels and the VFOM-1 connector numbers. Connections to speakers must be made using the AM-600 amplifier output connectors supplied as part of the VFOM-1 harness set. Cables to speakers must be paralleled with harness cables to the VFOM-1 in each AM-600 output connector.

Supported Failover Modes

The VFOM-1 failover module facilitates two failover modes for the VA-8600:

- **7:1 failover mode:** Amplifier channel 8 is assigned as the failover channel for channels 1 through 7. The amplifier can be configured from 2:1 failover up to 7:1 failover, but the failover channel will only ever be channel 8.
- **3:1 failover mode:** Amplifier channels 4 and 8 are assigned as failover channels for channels 1 through 3 and 5 through 7 respectively. The amplifier can be configured for 2:1 failover if fewer channels are required; however, the failover channels will always be 4 and 8.

When either of these failover modes is selected, other failover modes (1:1 channel failover and device failover) are not possible for that VA-8600. Dual 3:1 failover does not permit a mix of failover modes/non-failover modes within one VA-8600 unit. Note also that 3:1 or 7:1 failover inherently precludes failover of more than one channel in a failover group.

Initiation of a failover condition is through automatic detection of an unrecoverable failure in an amplifier channel within the failover group. Unrecoverable failure may be determined by one or more of the following amplifier fault conditions: Loss of communications to the amplifier; DC on Amplifier Output; Thermal Overload; Persistent Output Short Circuit; Persistent Power Supply Drop or Loss of Power Supply. When failover is initiated, the load is disconnected from the failed channel and connected via the VFOM-1 to the designated failover channel. In addition, the configuration for the failed channel is copied to the failover channel to preserve parameters such as zone assignment, equalization, etc.

Note that if the failure of an amplifier channel is caused by factors external to the amplifier (such as a short circuited speaker cable), that condition may also cause unrecoverable failure of the failover channel after failover has occurred. Once failover has occurred, it will remain permanent until the amplifier unit is re-powered.