

# Technomad RPA System Installation and Operation Guide

The RPA systems consist of two, four or six Vernal T loudspeakers, a 200' spool of wire and an amplifier rack with an audio mixer and 70v amplifier. The RPA system also includes a speaker bracket for each speaker.

## System set up

- 1) The amplifier rack should be located in a place with access to clean 120vAC power where the rack will not be exposed to moisture. The rack is not weatherproof and is not intended for use outside. The speakers can be installed in any environment.
- 2) The speakers can be installed in any location but should be installed with their grills oriented vertically or tilted downwards.
- 3) Once the speakers have been installed, they can be wired to the amplifier rack. There are several output terminals on the rear of the amplifier- the plus terminal (red) of the speaker should be wired to the 'A' terminal (marked 70v) on the rear of the amplifier and the negative terminal on the speaker should be connected to the 'COM' terminal on the rear of the amplifier. The speakers can all be wired to the amplifier terminals or they can be daisy-chained using the speaker terminal blocks.
- 4) The output volume of individual speakers can be controlled by transformer selection switch on the rear of the speaker. The speakers are shipped set to the 60w setting, but can also be set to the 10, 20 and 40w settings. Do not use the 8 ohm setting with the 70v amplifier provided with the system.
- 5) After the speakers are wired into the system and have been tested, Technomad recommends sealing the terminal block connections with silicone rubber caulking to prevent oxidation.

## Operation

Once the speakers have been installed and the amplifier rack has been placed in its location, it is time to set the levels of the system.

The RPA system has 2 microphone inputs and 4 line level inputs. The line level inputs can be used with any line level audio source such as a CD player, computer, iPod, satellite radio receiver, etc... In a device which uses a headphone output such as a iPod, the devices volume level should be set no higher than 30%. When using the microphone, care should be taken to not speak too closely into the microphone or to yell into the microphone as that can damage both the microphone and the amplifier.

When setting a source level, attention should be paid to the 'CLIP' indicator on the front of the amplifier. This light should only flicker when there is a peak in audio from the source unit, during a loud passage in a piece of music for example, and should not stay lit constantly during system operation. If the light is staying lit, the level control on the audio mixer for that source should be turned down until the light is not staying lit.