



ANSREM Remote Microphone Installation Sheet

Product description

The ANSREM is a supervised remote microphone panel for use with the ANS25, ANS50, and ANS100 audio notification systems. The ANSREM makes it possible to send emergency voice messages through the system speakers from a location that is remote from the ANS panel.

The ANSREM uses 3-pair shielded cable to connect to ANSREMSUP supervisory card, which is mounted within the ANS master panel. Fault conditions in the wiring or in the remote microphone circuitry are reported to the fire alarm control panel (FACP) using the same supervisory path as the ANS master panel.

Specifications

Table 1: Specifications

Model	ANSREM	ANSREMSUP
Input voltage	24 Vdc	24 Vdc
Input current		
Standby	20 mA	30 mA
Active	40 mA	50 mA
Wiring	12 to 22 AWG	12 to 22 AWG

Operation

When the system is in the alarm state, keying the ANSREM microphone interrupts the alarm signal and digital message. Live voice messages can then be broadcast over the system.

When the system is in normal standby state, the ANSREM microphone can be keyed to make announcements at any time.

Keying an ANSREM microphone at any time turns on the In Use LEDs on all other ANSREMs, and disables the other units. This ensures that only one operator is able page over the system. If the microphone in the master ANS panel is keyed, it overrides all ANSREM microphones.

Installation instructions

Ensure that all wiring and devices installed in the system meet the following standards:

- NFPA 70 *National Electrical Code*
- NFPA 72 *National Fire Alarm and Signaling Code*
- NFPA 101 *Life Safety Code*
- Applicable state and local codes

Install this equipment in a clean, dry environment. Avoid locations where equipment is subjected to vibration. Remove all electronic assemblies from the enclosure *before* drilling or punching the enclosure. Where possible, make all cable entries from the rear or sides. Before making any modifications to the enclosure, be certain that they will not interfere with the assemblies.

Make sure all power is off before making any wire connections.

Terminals

Table 2: Terminal descriptions

Terminal [1]	Description
TB1-1	V+ 24 Vdc 40 mA
TB1-2	Ckt Neg
TB1-3	Fault +24 V (pull down 10 mA)
TB1-4	PTT +24 V 10 mA
TB1-5	Audio 1 Vrms 10 mA
TB2-1	MIC PTT +24 V 10 mA
TB2-2	V+ 24 Vdc 100 mA
TB2-3	PTT +24 V 10 mA
TB2-4	Audio 1 Vrms 10 mA
TB2-5	Ckt Neg
TB2-6	Fault +24 V 10 mA
TB2-7	Earth Ground

[1] TB1 designations are the same for both the ANSREM and ANSREMSUP. TB2 is on the ANSREMSUP only.

Wiring instructions

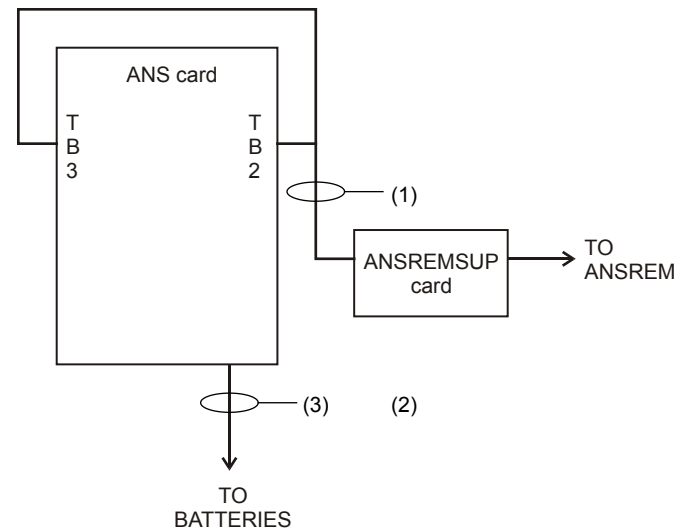
Refer to the wiring, terminal designation, and application diagrams that follow.

1. Run 3-pair shielded wire (22 AWG minimum) from the ANS master panel to the ANSREM remote microphone location.
2. Mount the ANSREMSUP supervision card in the ANS master cabinet, using snap-track.
Attach snap-track to the ANS master cabinet as required. The supervision card may already be factory-mounted and wired.
3. Make the wiring connections shown in Figure 1.
4. Verify correct installation of the end-of-line resistor (EOLR) on the ANSREM.

Each module is shipped with an EOLR installed. When the system has multiple ANSREM units, verify that the EOLR is installed on the last unit only.

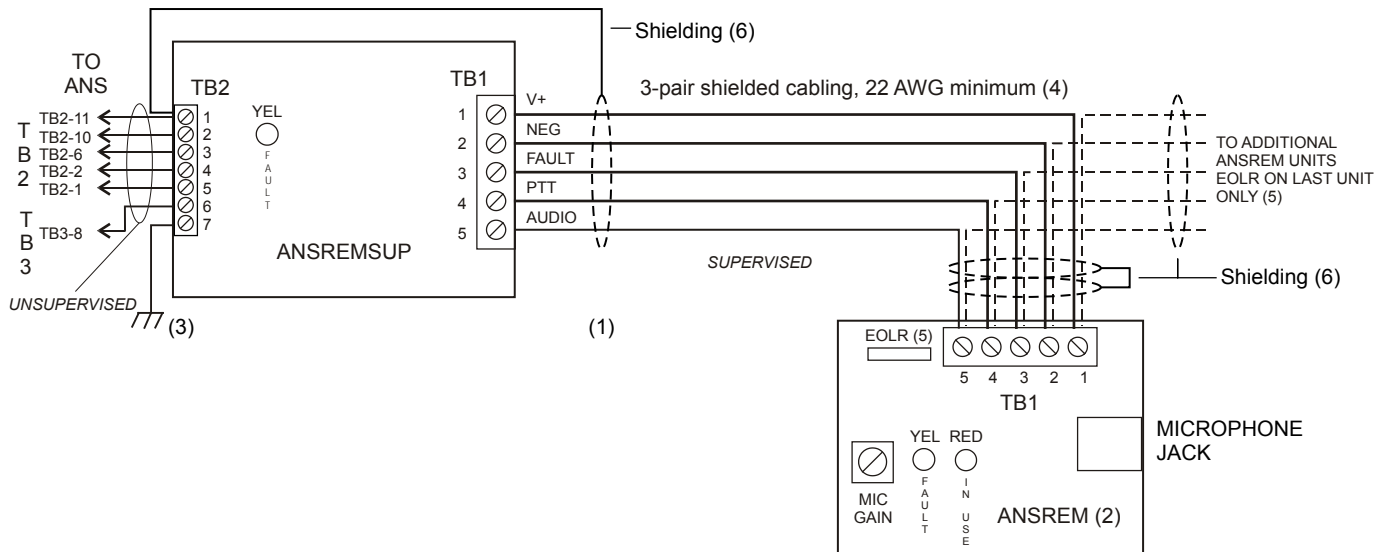
5. Apply power to test the system:
 - a. Test the ANS master microphone.
 - b. Test ANSREM remote microphone.
6. Place the panel in alarm and retest the ANS master microphones:
 - a. Ensure that the tone and message are broadcast.
 - b. Test that keying the microphones overrides any automatic message or tone.

Figure 1: Wiring the ANSREMSUP



- (1) All wiring from ANSREMSUP is power-limited. All wiring must be routed to maintain minimum spacing from any nonpower-limited wiring.
- (2) When circuits are power-limited, use power-limited cable as detailed in the National Electrical Code, Article 760, such as FPL or FPLP type cabling.
- (3) Battery cabling is nonpower-limited. Do not route any power-limited wiring within 1/4 in. of the battery cabling.

Figure 2: Wiring the ANSREM



- (1) All wiring is power-limited.
- (2) The ANSREMSUP must be mounted in the ANS enclosure or in another UL Listed cabinet within 20 ft. and connected using conduit.
- (3) The ANSREMSUP must be mounted using metal standoffs or an earth ground connection must be made to TB2-7.
- (4) Maximum line resistance is 100 Ω per line: approx. 5,000 ft. using 22 AWG. Maximum line resistance also depends on the number of devices.
 - 2 ANSREMs = 100 ohms max. line resistance
 - 3 ANSREMs = 80 ohms max. line resistance
 - 4 ANSREMs = 65 ohms max. line resistance
 - 5 ANSREMs = 50 ohms max. line resistance
 Using more than 5 ANSREMs is not recommended
- (5) EOLR is a 6/3 SIP 10 k Ω resistor network. Install EOLR on the last ANSREM only.
- (6) Terminate the cable shielding at the ANSREMSUP. The shielding must be continuous from the ANSREMSUP to the last ANSREM, but must not be terminated on any ANSREM card. Join the shielding at each cable break, but do not land the shielding on the ANSREM card.