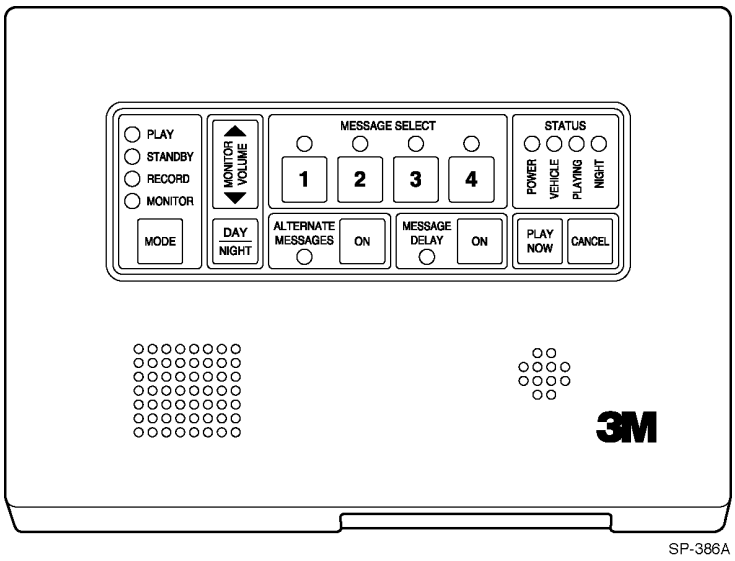
Audio Greeter
Model A300
Installation Instructions



SP-386A

Package Contents

Quantity	Description
1	Model A300 Audio Greeter, Part No. 78-9236-6457-3
1	Power Supply; +12 VDC @ 800 mA, Plug-in, Part No. 78-8095-0976-9
1	Microphone; High Sensitivity Electret Condenser, 3.5 mm Stereo Plug
1	Wire Cover
1	Installation Instructions, Part No. 78-6912-0717-5
1	Operating Instructions, Part No. 78-6912-0714-2
1	Operating Instructions Placard; Wall Mount, Part No. 78-6912-0721-7
1	Warranty Card
1	Receiving Report Card

Please check for shipping damage. Notify the shipping company immediately if any damage is found. Retain all packaging and components for inspection by the shipping company.

Introduction

The 3M™ Audio Greeter, Model A300, is designed for use with intercom systems. A typical application is use in a quick service drive-thru restaurant to play digitally stored messages through a menu speaker.

Installation

Determining the Best Location for the A300 Audio Greeter

The A300 should be mounted on a vertical wall about 60 inches high. If the user must bend over a countertop to reach the A300, then lower it to 50 inches so the user can speak directly into the on-board microphone.

A quiet location is recommended if frequent voice recording is anticipated. A nearby manager's office or other enclosed room would be ideal. Cable runs over 35 feet should be avoided to reduce signal degradation.

Mounting Hardware (not supplied)

4 each, #8 screws
4 each, wall anchors

Mounting the A300 Audio Greeter

Before mounting the A300 to the wall, we recommend that you attach all the cables to the A300 while it rests on a countertop or a chair near its mounting surface. This allows easy access to all jumpers and controls with the cover open.

1. Remove the A300 cover and unplug the switch panel ribbon cable from the main circuit board.
2. Place the A300 at the desired location 50" to 60" high. Mark the locations of the four holes in the base onto the mounting surface.
3. Using appropriate mounting hardware (not supplied), attach the A300 base to the mounting surface.
4. Plug the ribbon cable into the main circuit board and attach the cover.
5. Clean the left-hand side of the cover with denatured alcohol and attach the external microphone holder using the double-stick tape provided.
6. Attach the wire cover to the right side of the A300 using the screws provided.

⚠ **Important**
If it is necessary to operate the A300 with the cover removed while it is mounted on a vertical wall, do not allow the cover to hang from the switch panel ribbon cable. The cover may rest on the top edge of the base plate, but make sure it doesn't fall off.

Installation Diagrams

Figure 1. “Installing the A300 Audio Greeter with the 3M D-15 Intercom”

Figure 2. “Installing the A300 Audio Greeter with the 3M Interconnect Module”

Figure 3. “Installing the A300 Audio Greeter with the 3M C762AA/BA/C921AA Base Station”

Figure 4. “Installing the A300 Audio Greeter with the 3M C921BA /C922 Base Station”

Figure 5. “Installing the A300 Audio Greeter with the HME SYS2500D/DS/DSL Base Station”

Figure 6. “Installing the A300 Audio Greeter with the HME WBS2000 Base Station”

Figure 7. “Installing the A300 Audio Greeter with the Panasonic WX-C510/WX-C1010 Base Station”

Figure 8. “Optional Installation with the HME or Panasonic Base Station”

Figure 9. “Installing the A300 Audio Greeter with an Intercom Using an Outside Speaker/Microphone”

Figure 10. “Installing the A300 Audio Greeter with the 3M Sodar Vehicle Detector”

Configuration

The Operating Modes and Message Delay Times of the A300 are set with jumper JMP1 and DIP switches SW2 and SW3 located on the circuit board. Tables 1 and 2 list the switch settings.

Vehicle Detect Configuration

JMP1

Position A - Position A is the default selection for most 3M Intercom installations.

Position B - Position B is used when an optional relay must be added to trigger the A300. An optional relay may be required in cases where the HME or Panasonic intercom triggers an external service timer. (See Figure 8)

Note: *When JMP1 is in position B, a +5Volt pull-up voltage is applied to VEH DET + (J9 terminal 8). Then, a contact closure between VEH DET - (J9 terminal 9) and COM (J9 terminal 3, 6 or 11) will initiate a vehicle detect trigger.*

Mode Configuration

SW2

A description of each mode follows. Table 1 lists the DIP switch settings.

Message 4 External Trigger

When SW2 number 1 is ON, the fourth message can only be played to the outside menu speaker when triggered from MSG4TRG, connector J9-10. The trigger signal should be a contact closure from MSG4TRG to COM (i.e. fire alarm, etc.).

Automatic message Repeat

When SW2 number 2 is ON, the selected message(s) will continuously repeat when triggered by a vehicle detect signal. The message(s) will stop when the vehicle detect signal is disengaged.

Note: *The Automatic Message Repeat will only work with a presence-type vehicle detector (i.e. Loop detector, Sonic detector).*

Vehicle Detect Trigger Polarity

When SW2 number 3 is OFF, the A300 will be triggered by a positive going (low to high) vehicle detect signal. When SW2 number 3 is ON, the A300 will be triggered by a negative going (high to low) vehicle detect signal.

Pulse/Presence Vehicle Detector

When SW2 number 4 is OFF, the A300 requires a presence-type vehicle detect signal (i.e. Loop detector). When SW2 number 4 is ON, the A300 requires a pulse-type vehicle detect signal (i.e. air switch).

Timer Trigger Polarity

When SW2 number 5 is OFF the TTL output at TIMER TRG, connector J9-12 will be a positive going (0.8V to 5.0V) signal when triggered by a vehicle detect signal. When SW2 number 5 is ON the TTL output at TIMER TRG will be negative going (5.0V to 0.8V) when triggered by a vehicle detect signal.

Music Mode

When SW2 number 6 is ON, the A300 will play music at the menu speaker when a message is not playing. The input music source must have its own balanced output power amplifier and volume control capable of driving the 4 – 8 ohm balanced menu speaker. When SW2 number 6 is ON, the A300 will pass audio from the music source to the menu speaker. When a vehicle triggers the A300, the music will be interrupted while the greeter plays its message(s). The music will resume playing at the menu speaker 2 minutes after the vehicle detect signal is disengaged. Note: *Use this feature only with the 3M C921BA Base Station.*

Menu Microphone Mute

When SW2 number 8 is ON, the inbound audio from the Menu Microphone will be muted while the A300 plays message(s) to the Menu Speaker. *The message(s) can only be heard if the A300 AUDIO OUT line is connected to the C760/C960 AUDIO IN line (use AUDIO OUT potentiometer on A300 to adjust message volume).* When SW2 number 8 is OFF, in full duplex operation, the A300 message will be heard through the menu microphone while the message is being played through the menu speaker.

Position Number	ON Position	OFF Position
1	Message 4 External Trigger Activated	* Message 4 External Trigger Deactivated
2	Automatic Message Repeat ON	* Automatic Message Repeat OFF
3	Vehicle Detect Trigger Polarity Negative	* Vehicle Detect Trigger Polarity Positive
4	Pulse Detector	* Presence Detector
5	Timer Trigger Polarity - Negative	* Timer Trigger Polarity - Positive
6	Music Mode ON	* Music Mode Off
7	Not Used	Not Used
8	Menu Microphone Mute ON	* Menu Microphone Mute OFF

* Default Factory Settings

Table 1. 3M Audio Greeter SW2 Mode Configuration

Message Delay Timer Configuration

The message delay timer is set with SW3. Table 2 lists the switch setting for each message delay time.

Position Number 1	Position Number 2	Position Number 3	Position Number 4	Message Delay (Seconds)
OFF	OFF	OFF	OFF	0
OFF	OFF	OFF	ON	1
OFF	OFF	ON	OFF	2
* OFF	* OFF	* ON	* ON	* 3
OFF	ON	OFF	OFF	4
OFF	ON	OFF	ON	5
OFF	ON	ON	OFF	6
OFF	ON	ON	ON	7
ON	OFF	OFF	OFF	8
ON	OFF	OFF	ON	9
ON	OFF	ON	OFF	10
ON	OFF	ON	ON	11
ON	ON	OFF	OFF	12
ON	ON	OFF	ON	13
ON	ON	ON	OFF	14
ON	ON	ON	ON	15

* Default Factory Settings

Table 2. 3M Audio Greeter SW3 Message Delay Timer Configuration

Additional Features

$\overline{\textbf{TALK}}$ - This terminal is an active low input, used to cancel the current playing message. When connected to the $\overline{\textbf{TALK}}$ output terminal on the C921BA base station, it allows the operator to remotely cancel the playing message by pressing and holding the headset or intercom TALK button for at least one second. ***A short tap of the TALK button will cancel only the alert tones, allowing the message to continue and be heard in the headset/beltpack.***

***Note**

1. If Talk Lock *IS* used, you must disconnect the wire from the $\overline{\textbf{TALK}}$ terminal on the base station.
2. If talk Lock *IS NOT* used, you must connect the wire from the $\overline{\textbf{TALK}}$ terminal on the base station.

AUDIO_OUT – This terminal is used in conjunction with the microphone mute feature, SW2 number 8. The AUDIO_OUT terminal on the A300 sends the currently playing audio message to the AUDIO_IN terminal of the intercom so that the message from the A300 is heard in the headset or intercom if the microphone mute feature is ON.

System Checkout and Balancing

The system checkout of the A300 Audio Greeter can be completed by following the steps below:

1. Plug the +12VDC power supply into an electrical outlet and connect power plug into J5.
2. Turn the power switch on. Make sure the A300 completes its boot-up cycle. (Each LED will flash once, then the unit will beep 3 times).
3. Press the MODE button until the RECORD light comes on. Record a message in all four message locations.
4. Press the MODE button until the MONITOR light comes on. Play each message by pressing the MESSAGE SELECT number button and pressing PLAY NOW button. Also press the MONITOR VOLUME arrow buttons to change the volume of the messages.
5. Select all the messages by pressing all the MESSAGE SELECT number buttons. Test the ALTERNATE MESSAGES function by pressing the ALTERNATE MESSAGES ON button and the PLAY NOW button several times. Verify that each time the PLAY NOW button is pressed that the next message is played until the first message is played again. While a message is playing press the CANCEL button to verify that the message stops.
6. Verify that the vehicle detector is operating properly by having a vehicle drive into the vehicle detection area. The VEHICLE LED should illuminate when the vehicle is detected, and go off when the vehicle leaves.
7. Press the MODE button until the PLAY light comes on to test messages at the menu sign. Select all the messages by pressing all the MESSAGE SELECT number buttons.
8. Stand near the outside menu sign speaker and have a vehicle drive into the vehicle detection area to verify that all the messages play at the speaker. Also have someone inside the building press the PLAY NOW and CANCEL buttons to verify their operation.
9. Have the person inside press the MESSAGE DELAY ON button. Drive the vehicle through the vehicle detection area and verify that the message is delayed by the correct preset delay time.
10. Adjust potentiometer MENU SPKR VOL, located on the left side of the A300, to control the menu sign message volume. Also press the DAY/NIGHT button while playing a message to verify the night-time menu sign message volume.
11. For 3M C760/C960 Systems only. Adjust potentiometer AUDIO OUT to set the message volume in the headset/intercom.
    Note: *Potentiometer AUDIO OUT is only used to set the message volume for the convenience of the headset/intercom operator. Therefore, to reduce operator fatigue, adjust AUDIO OUT to set the message volume so it is barely audible in the headset/intercom.*
12. Attach the Wire Cover plate using the hardware supplied.
13. Attach the Operating Instructions Placard to a nearby wall, if possible, using an appropriate mounting method.

Installation Diagrams

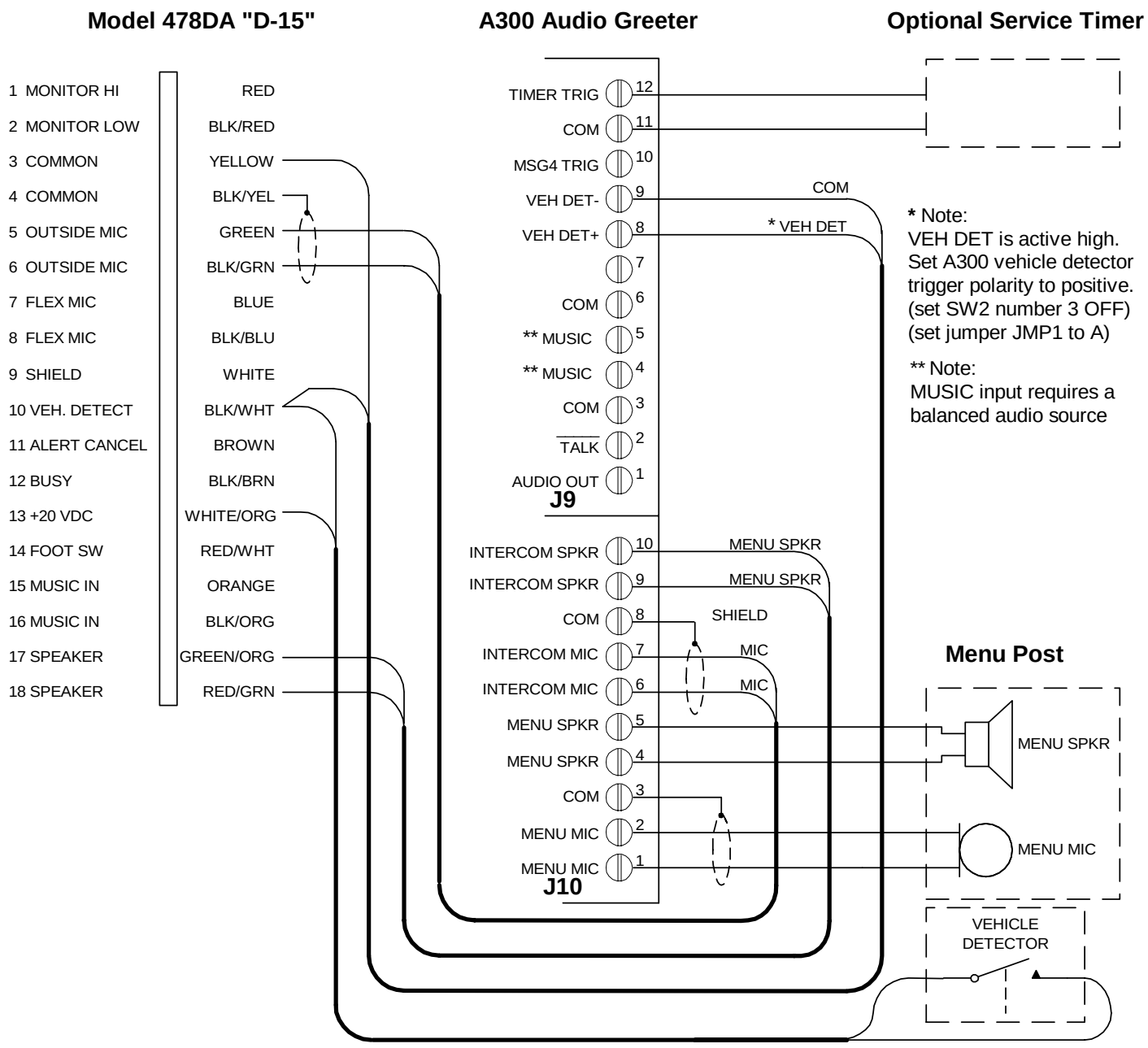


Figure 1. Installing the A300 Audio Greeter with the 3M D-15 Intercom

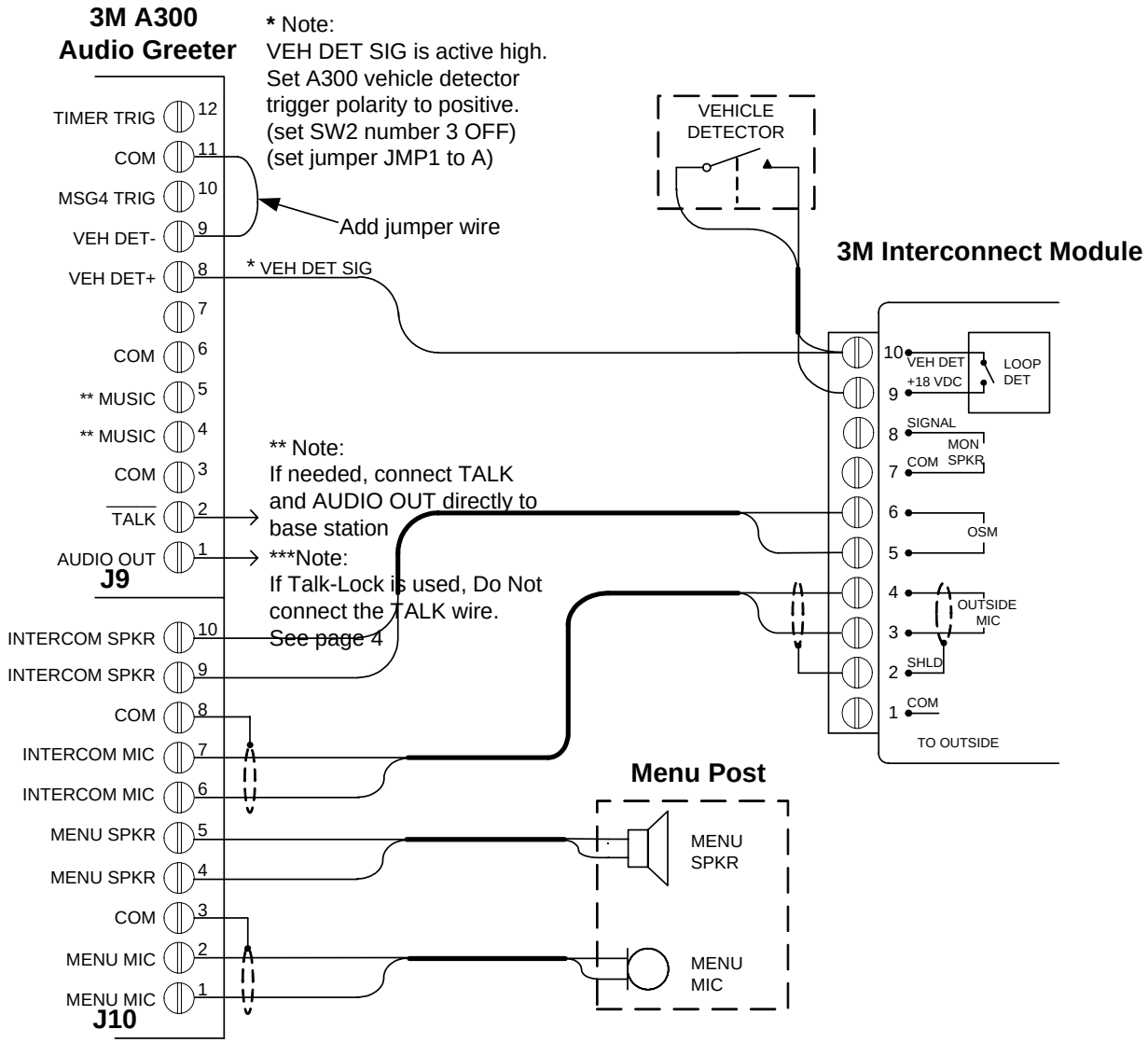


Figure 2. Installing the A300 Audio Greeter with the 3M Interconnect Module

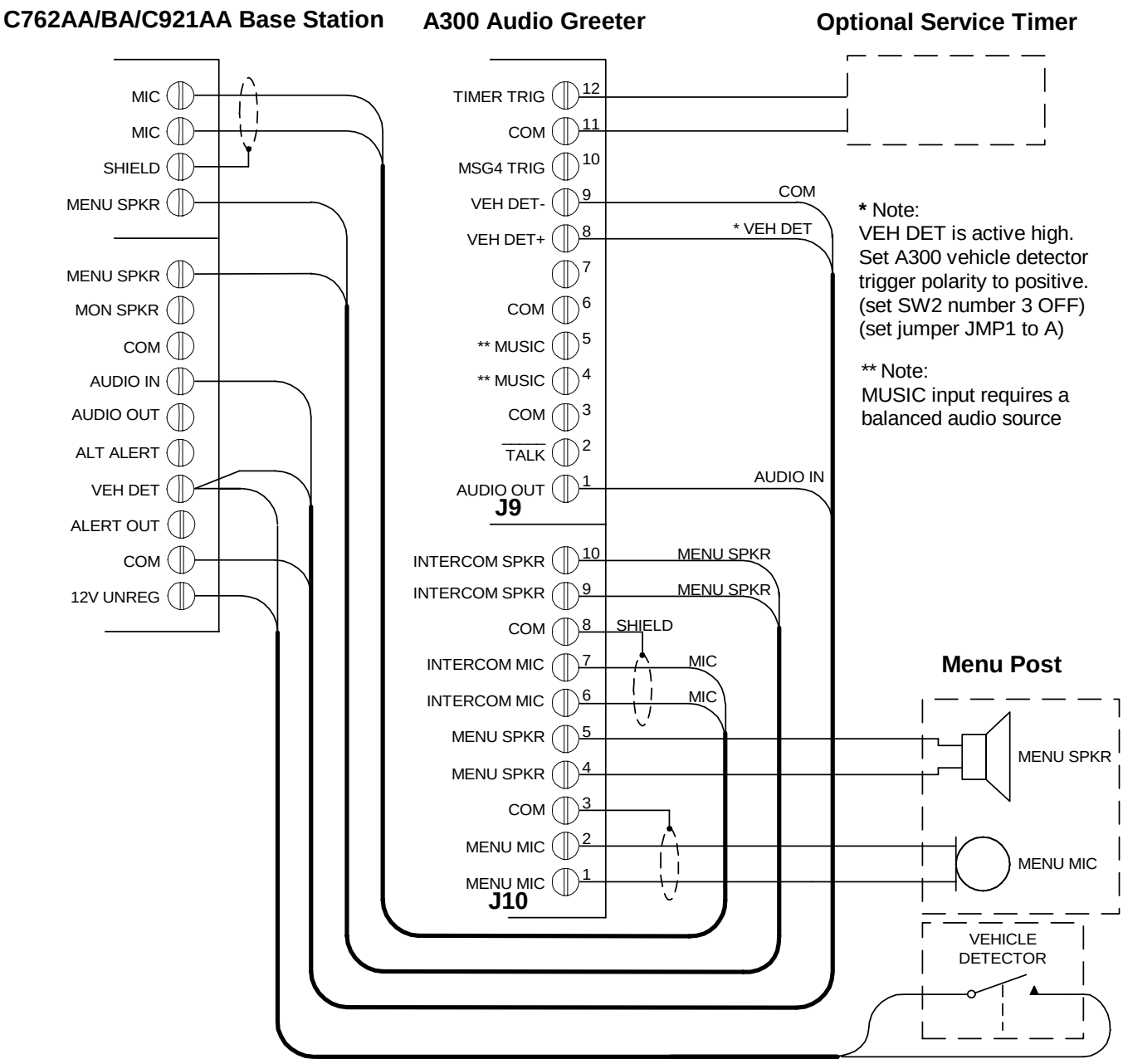


Figure 3. Installing the A300 Audio Greeter with the 3M C762AA/BA/C921AA Base Station

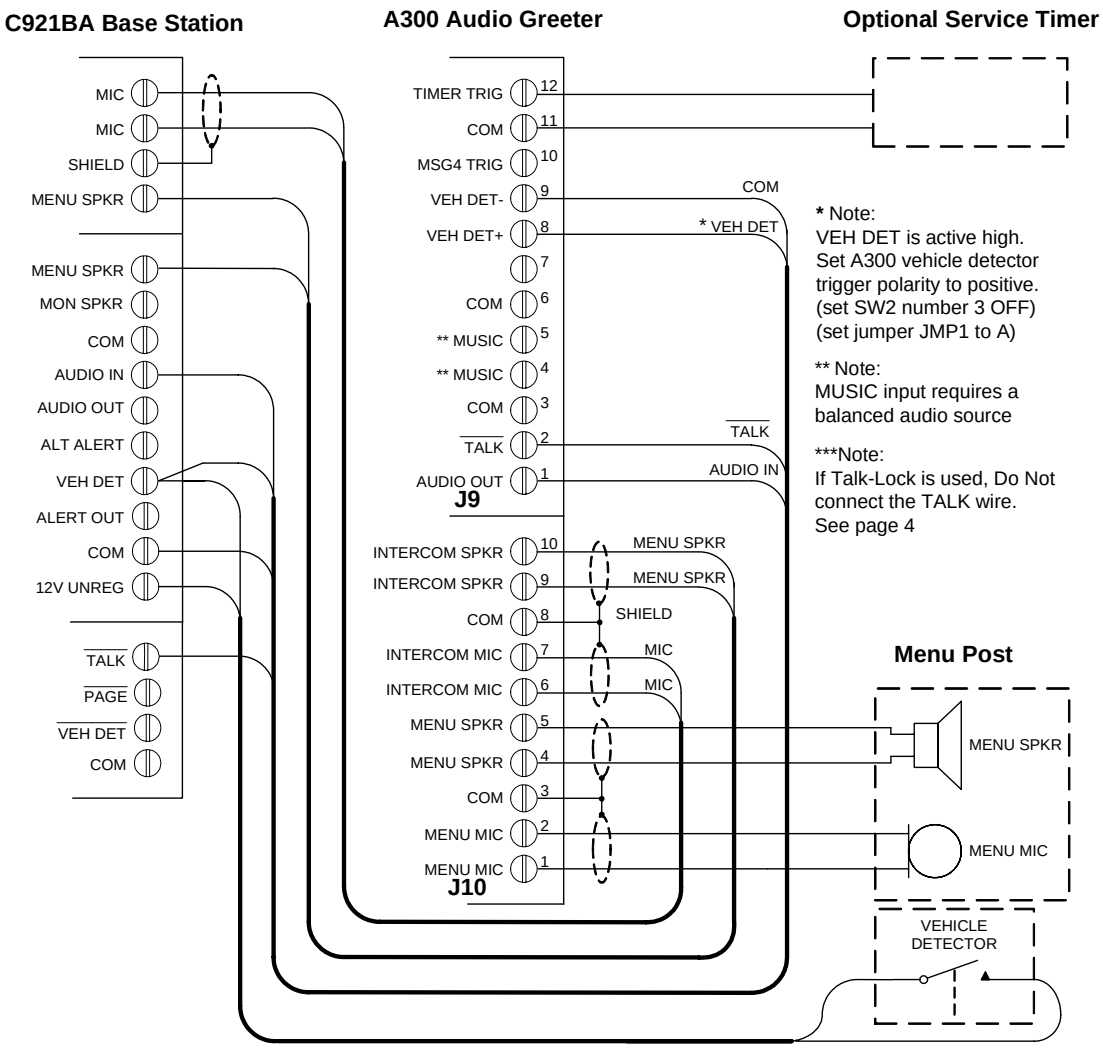


Figure 4. Installing the A300 Audio Greeter with the 3M C921BA/C922 Base Station

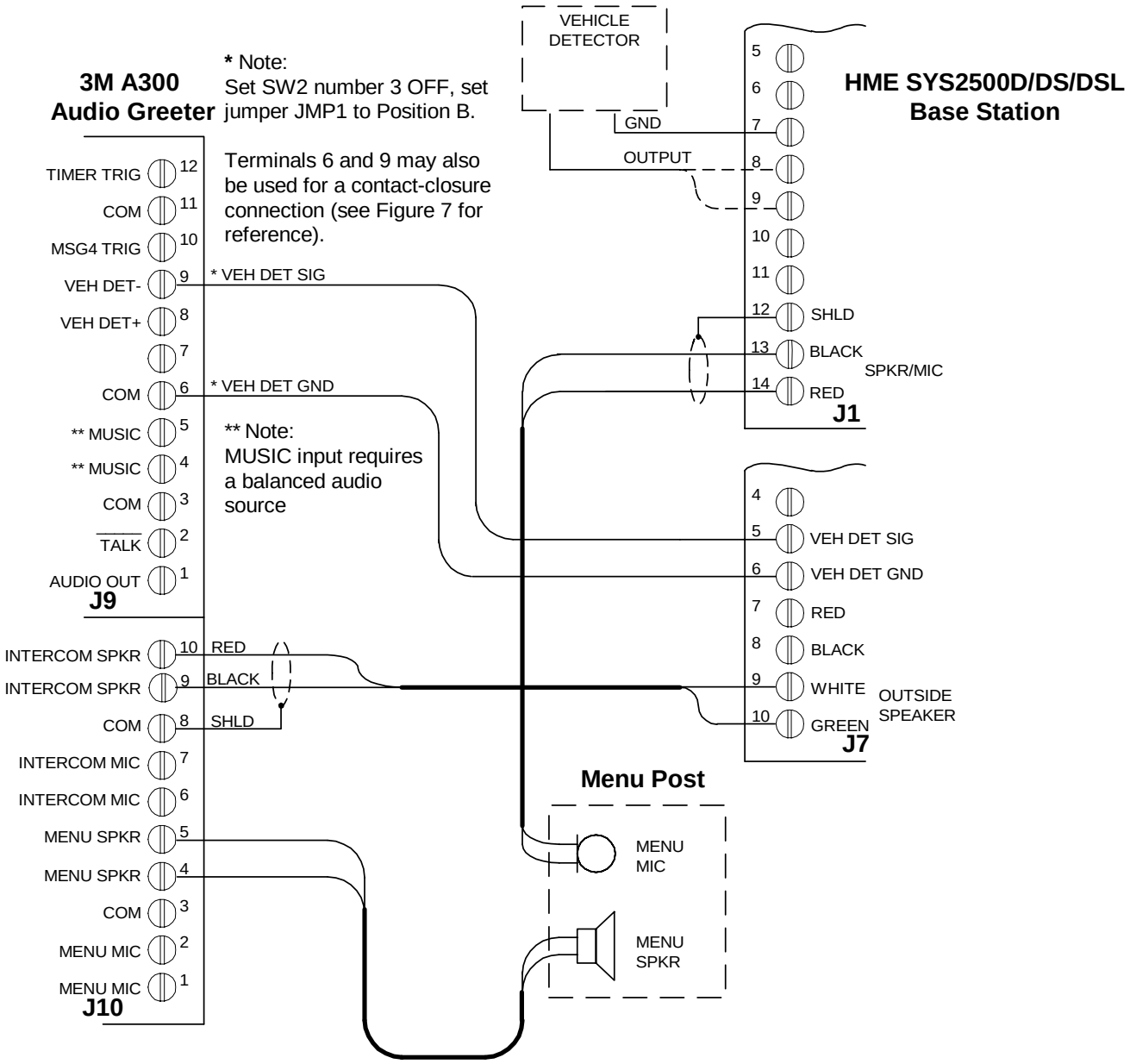


Figure 5. Installing the A300 Audio Greeter with the HME SYS2500D/DS/DSL Base Station

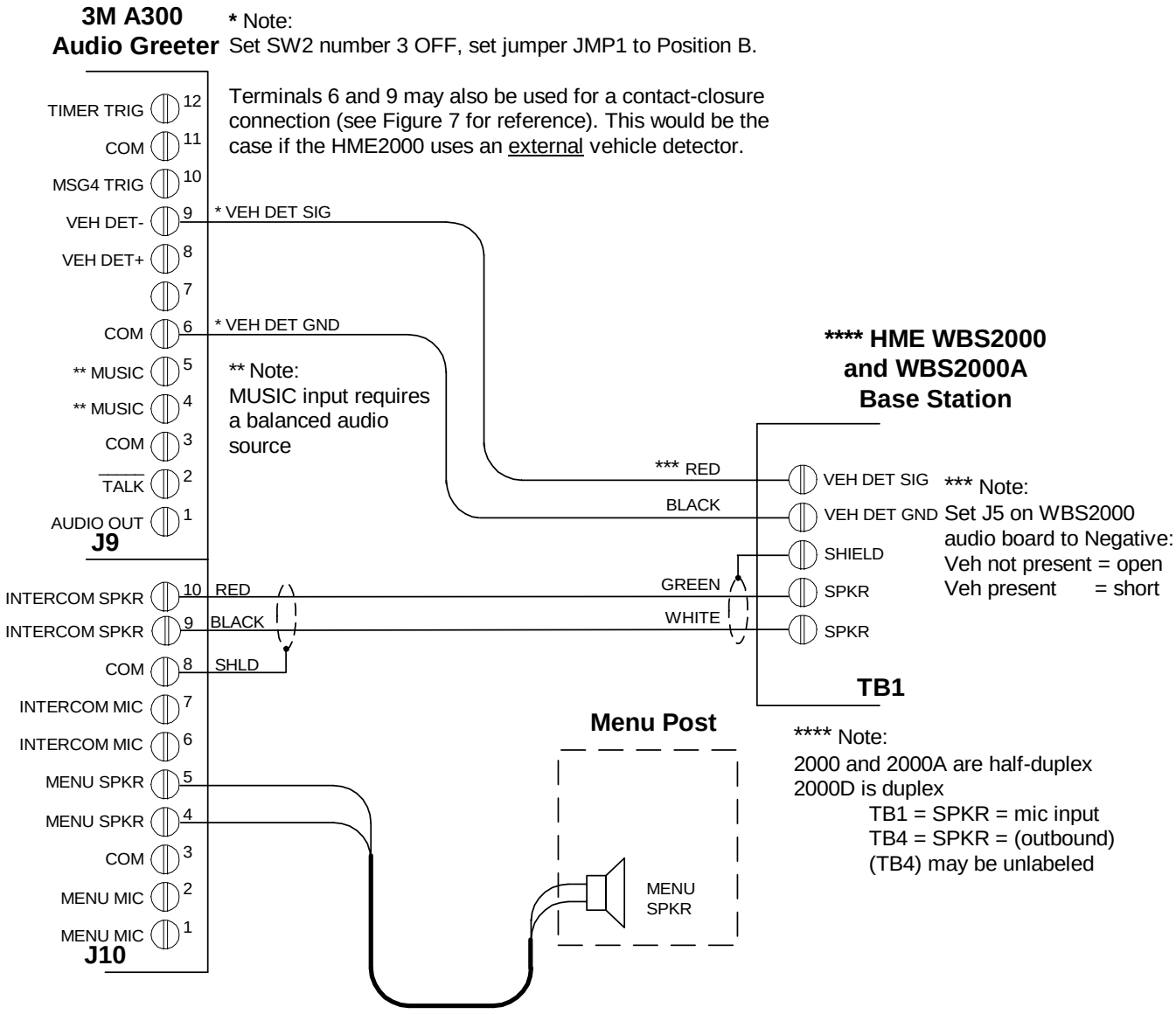


Figure 6. Installing the A300 Audio Greeter with the WBS2000 Base Station

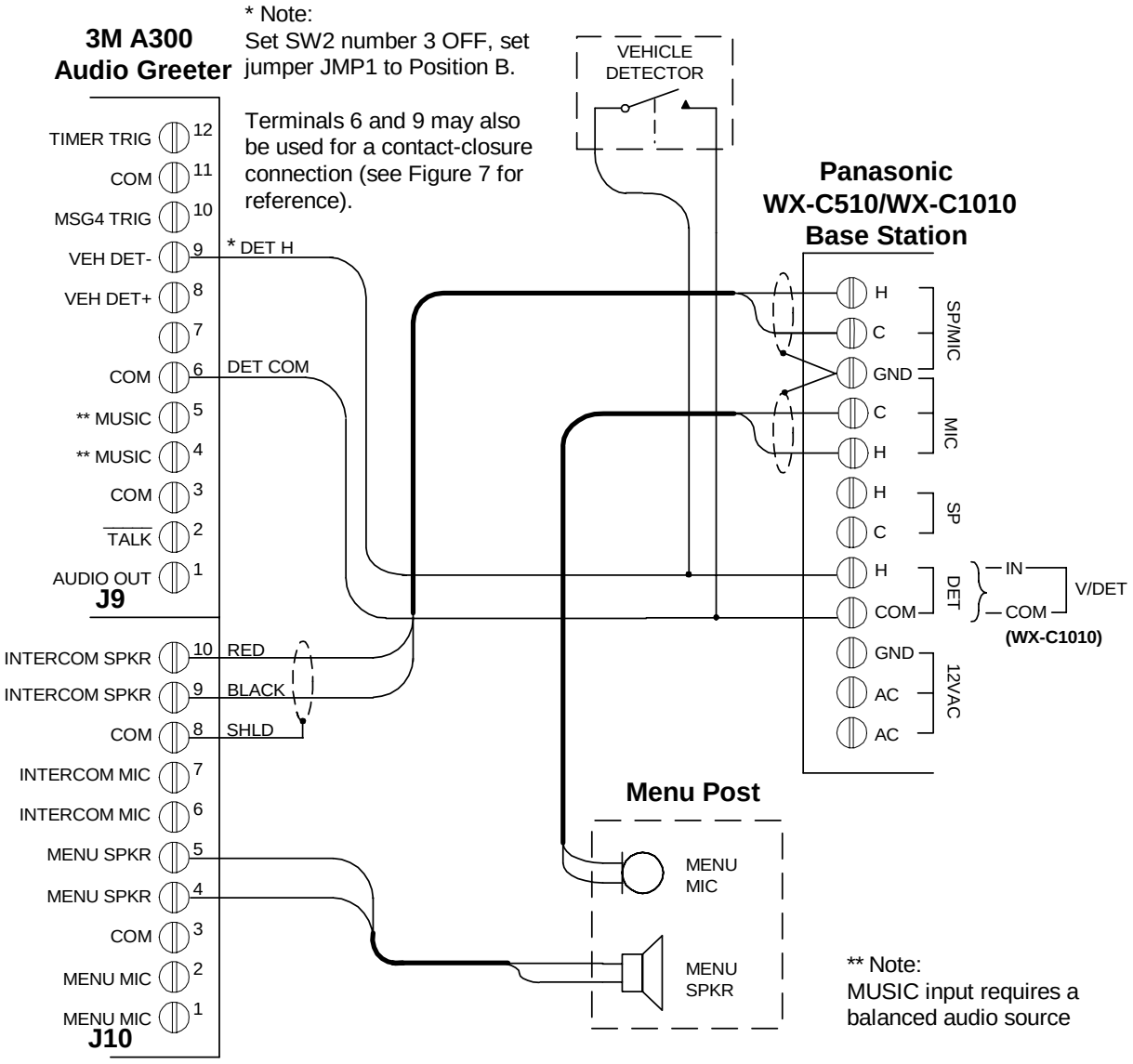


Figure 7. Installing the A300 Audio Greeter with the Panasonic WX-C510/WX-C1010 Base Station

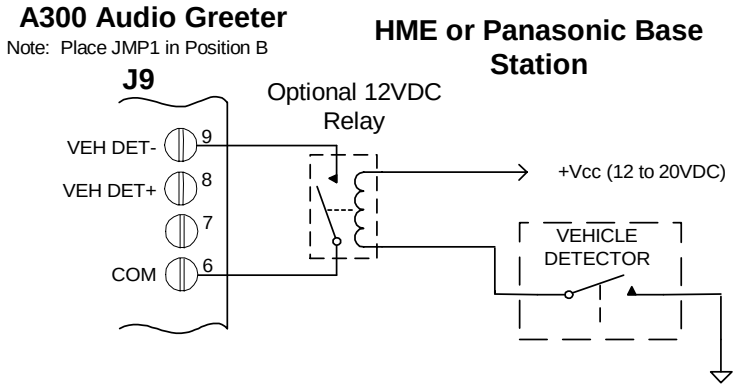


Figure 8. Optional Installation with the HME or Panasonic Base Station

Below is an example of the A300 connected to a typical intercom using an Outside Speaker/Microphone (OSM): Use the appropriate vehicle detector connections to complete the installation.

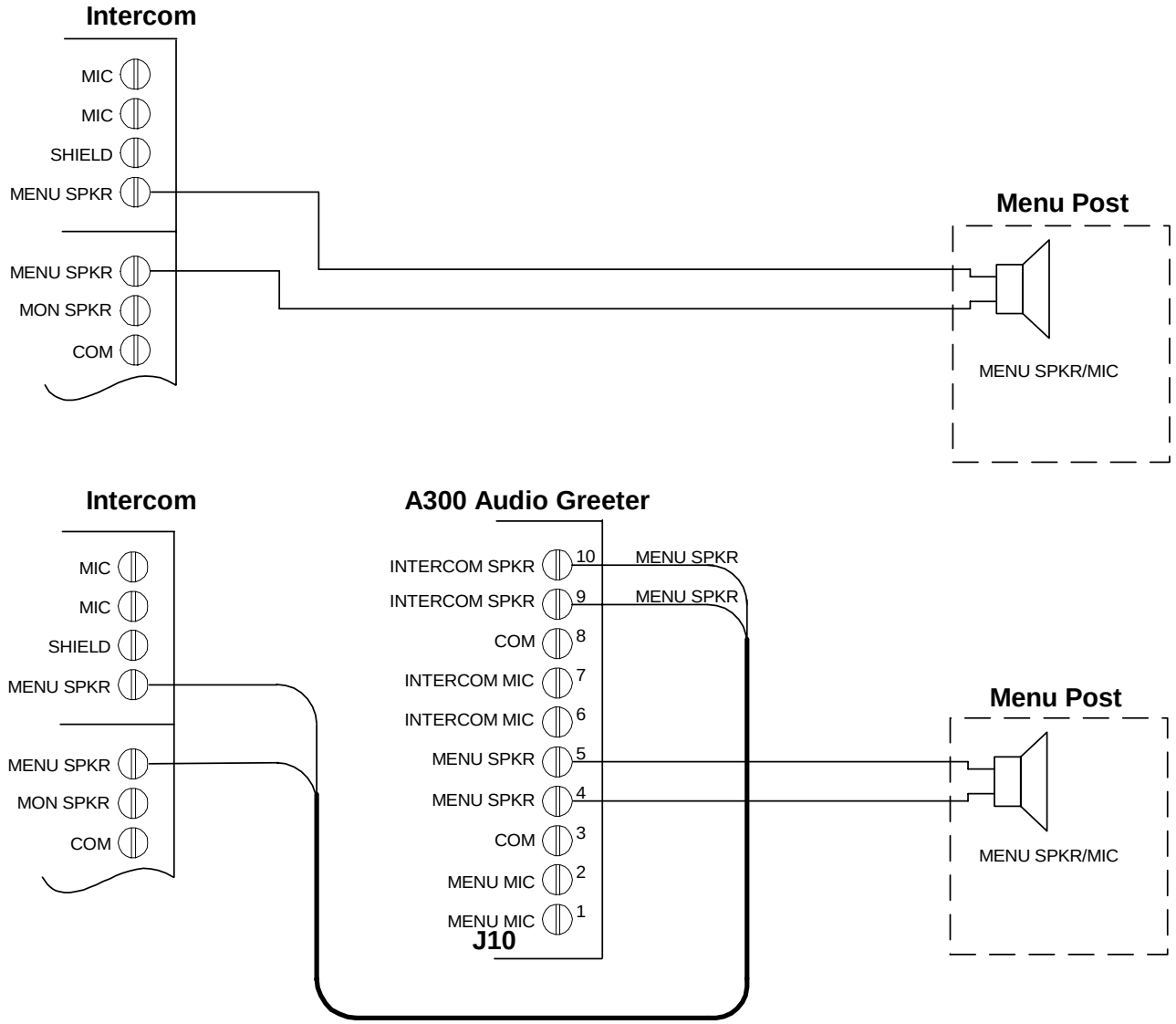


Figure 9. Installing the A300 Audio Greeter with an Intercom Using an Outside Speaker/Microphone

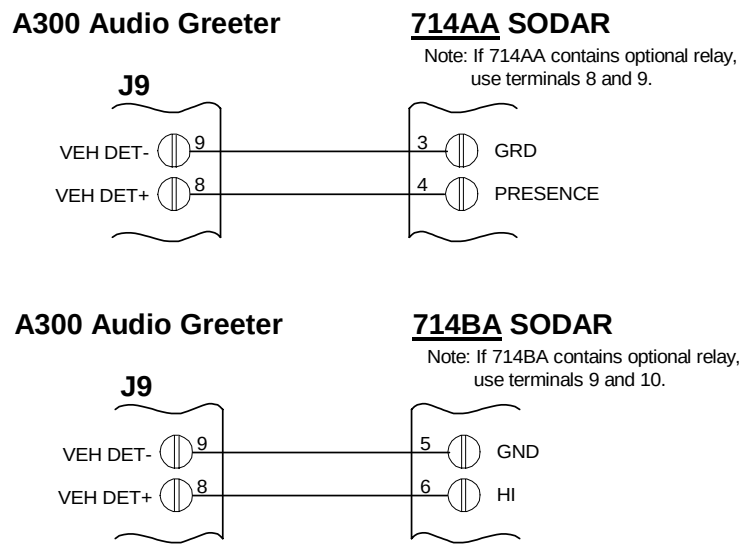


Figure 10. Installing the A300 Audio Greeter with the 3M Sodar Vehicle Detector

A300 Audio Greeter Troubleshooting Guide

Problem	Possible Cause	Solution
1. Low outbound volume to the menu sign speaker.	1. The NIGHT STATUS light on. 2. The MENU SPKR VOL potentiometer is set too low. 3. Defective menu speaker or A300.	1. Press the DAY/NIGHT button until the NIGHT STATUS goes off. 2. Increase the setting of the MENU SPKR VOL potentiometer, located on the left side of the A300. 3. Measure resistance of speaker and verify that it works properly. If not call for authorized service.
2. Cannot record message.	1. External microphone not connected. 2. External microphone defective.	1. Verify that external microphone plug is fully inserted into microphone jack J6. 2. Use internal microphone (internal microphone is automatically selected when external microphone is unplugged).

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Printed in U.S.A.
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78-6912-0717-5 Rev. G