



Installation Instructions

Microphone Duplex System With Bracket

(78-6911-4400-6)

Introduction

Please review these instructions before you begin the installation. The instructions provided are general in nature, describing component installation in a "typical" menu sign and speaker post. The menu sign or speaker post you are working with may be different than those shown in these instructions and you may therefore need to make some modifications to the procedures.

Additional Materials Required:

- A sufficient length of shielded, twisted pair audio cable for connecting the duplex microphone assembly to the interconnect module (if used) or the base station in the store.

 Important
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The twisted pair of wires for the microphone connection <u>must be shielded</u> for proper operation. In duplex systems, microphone and speaker cannot be in the same jacket unless specifically designed for duplex such as 3M cable, 3-pair, twisted, 140° (78-8095-0180-8).
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- Wire nuts or crimp connectors for connecting audio cable to the microphone assembly cable and/or the speaker assembly cable.

Recommendations:

A separate speaker post is recommended for optimum audio quality.

The microphone should be located in a closed housing with a perforated grille.

For optimum performance, microphone height should be 42 to 54 inches above the pavement.

Use microphone brackets as required for your type of installation.

The speaker must be at least 24 inches from the microphone if full-duplex operation is desired.

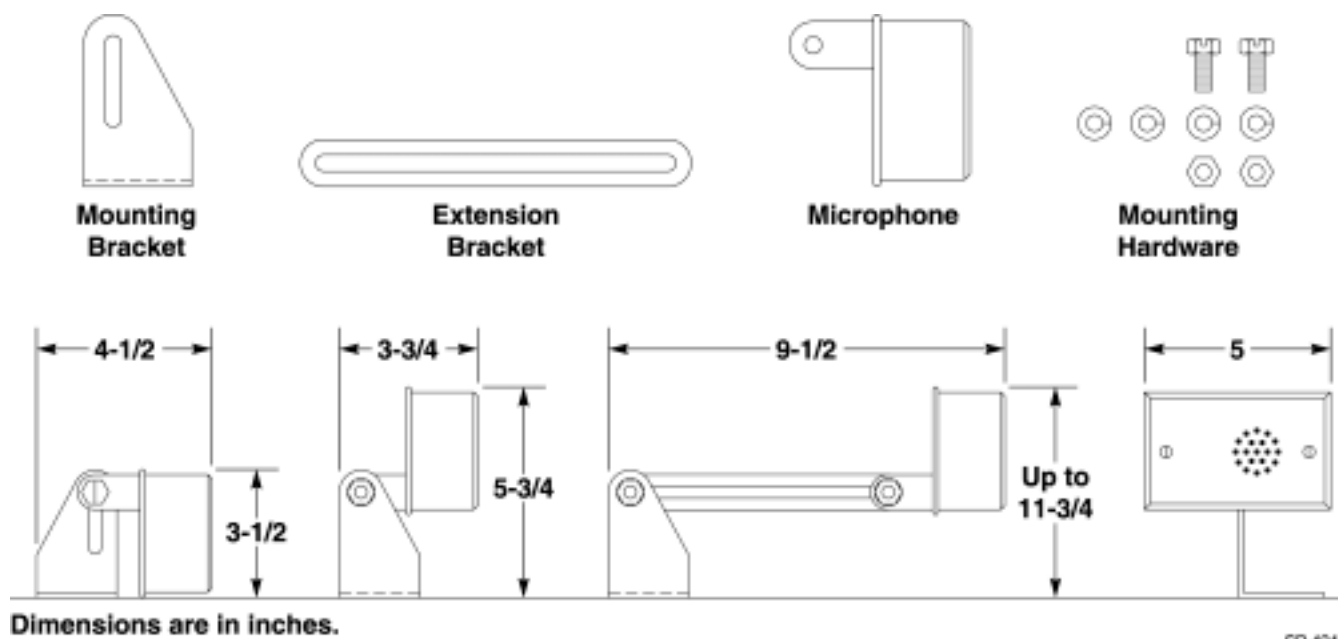
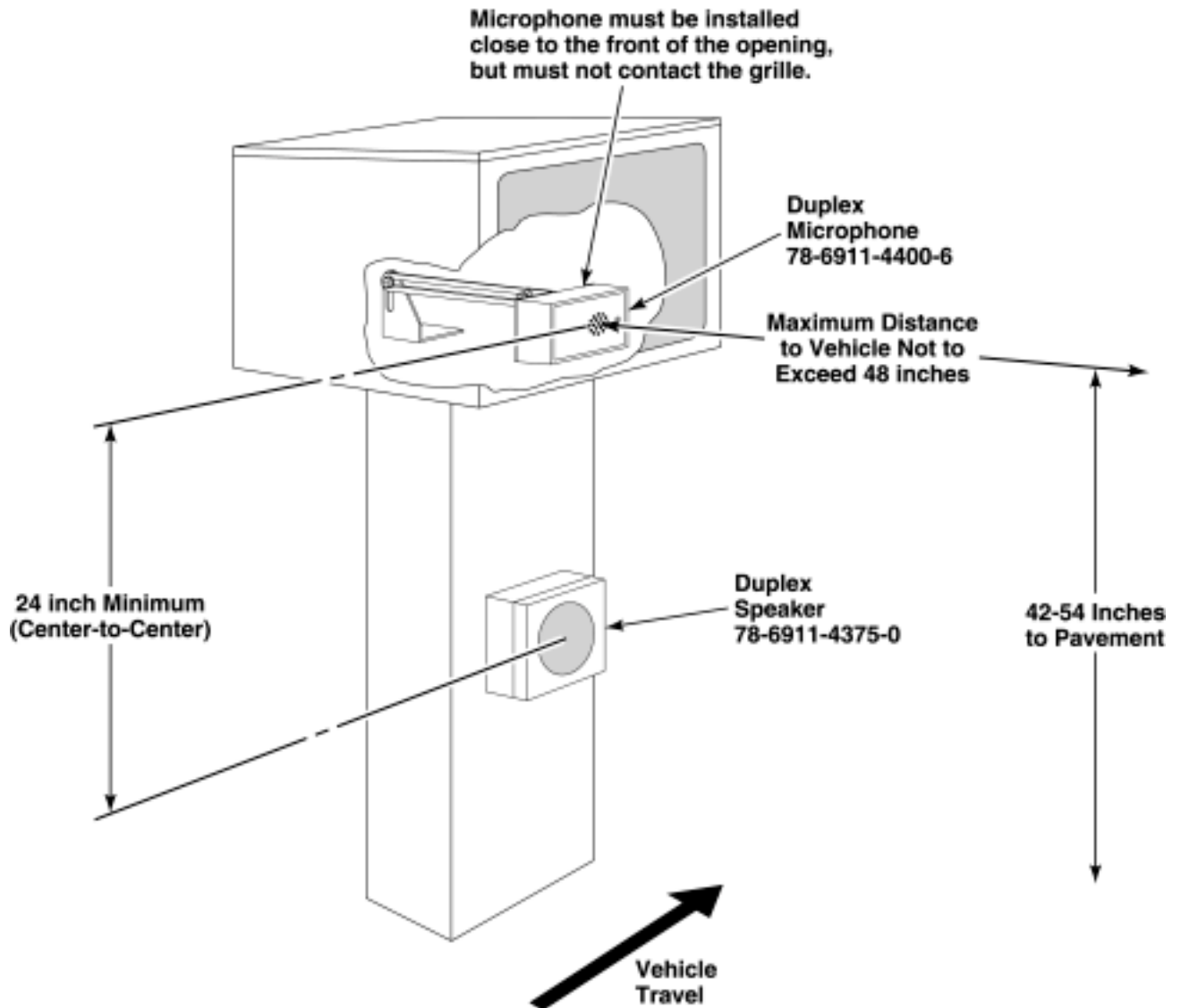


Figure 1. Duplex Microphone Assembly and Assembly Variations

Installation:

1. Run **separate**, shielded twisted pair audio cable (not supplied) for the microphone and the speaker from the speaker post to the interconnect module (if used) or the base station in the store.

⚠ Important
The twisted pair of wires for the microphone connection <u>must be shielded</u> for proper operation. In duplex systems, microphone and speaker cannot be in the same jacket unless specifically designed for duplex such as 3M 78-8095-0180-8.



SP-423A

Figure 2. Duplex Speaker and Microphone Speaker Post Installation

2. Install the duplex microphone assembly as follows:
 - Place the microphone 42 to 54 inches above the pavement.
 - Center the microphone fully forward in its enclosure.

Installation: (cont):

3. If a new speaker is to be installed, install the speaker on the outside of the speaker post or menu sign, making sure that it is *at least* 24 inches (center-to-center) from the microphone.

Special Note: It is not recommended that an intercom system mounted in a menu sign instead of a speaker post be set for full-duplex operation. It is recommended that the speaker be placed directly under the microphone so that the customer will stop in front of the microphone.

4. Use wire nuts or crimp connectors to connect the audio cables to the microphone and the speaker.
5. Connect the shielded audio cable pair (coming from the microphone) to the two OUTSIDE MIC terminals (#3 and #4) on the interconnect module, or to the two MIC terminals on the base station.

Connect the shield of the microphone audio cable to the SHLD terminal (#2) on the interconnect module or to the SHIELD terminal on the base station.

6. Complete the Base Station Configuration and Audio Level Adjustment procedures in the Base Station Installation Instructions (78-6912-0672-2).

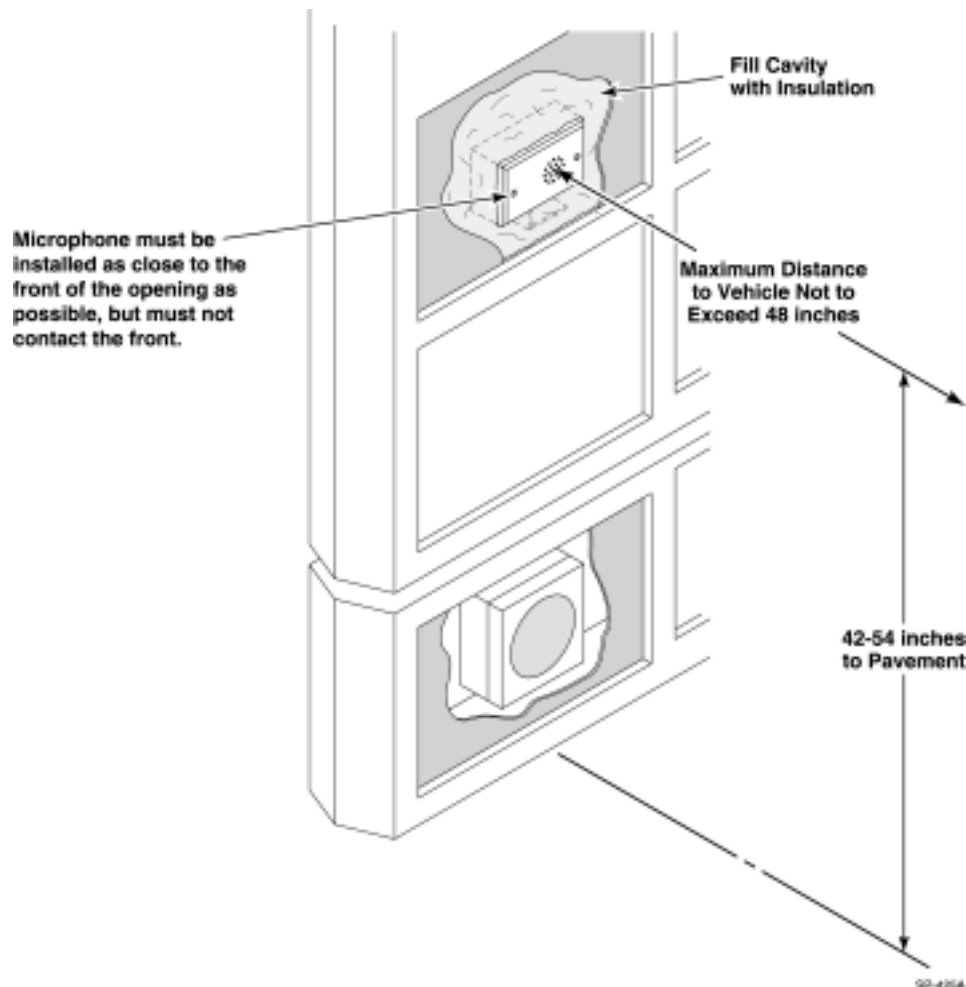


Figure 3. Duplex Microphone and Speaker Sign Installation

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