



SPM-420 Station Paging Microphone

1. Intent & Scope

This document describes the installation procedure for the SPM-420 Station Paging Microphone when used with a DXL system.

2. Description

The SPM-420 is used with the MicroComm DXI and DXL intercom systems to provide a stand alone microphone that can be used for paging. The handheld push-to-talk switch allows the operator to establish and maintain a page to a specified page zone.

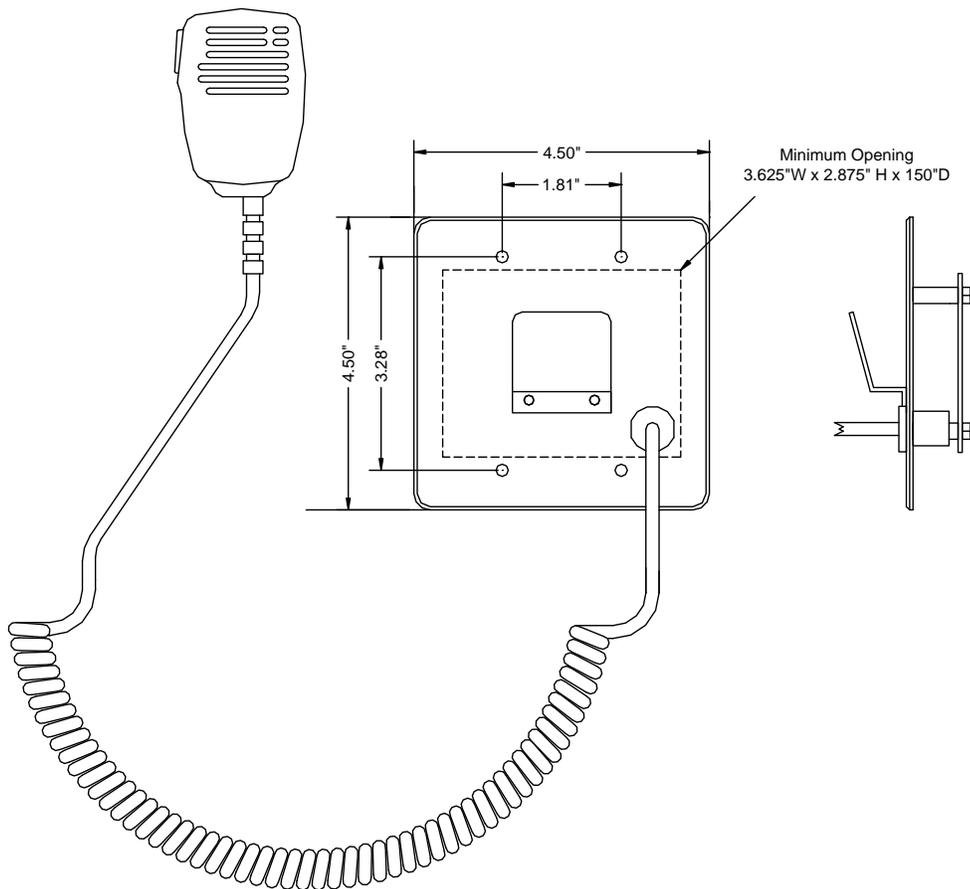


Figure 1 SPM-420 Station Paging Microphone

3. Installation

A simplified diagram of the back view of the SPM-420 is shown below. The header CN1 is used to connect audio and switch information from the station to the intercom system. The audio lines are connected to pins 1 and 2 of CN1 with a 4-pin MTA-100-04 connector.

The maximum recommended distance to run 22-gauge twisted-pair shielded cable from a SPM-420 station to an SCC-400 (or SAB-400) is 2500 feet (750 meters).

Due to possible latency problems it is recommended that the SPM-420 be used for page zones consisting of 6 stations or less.

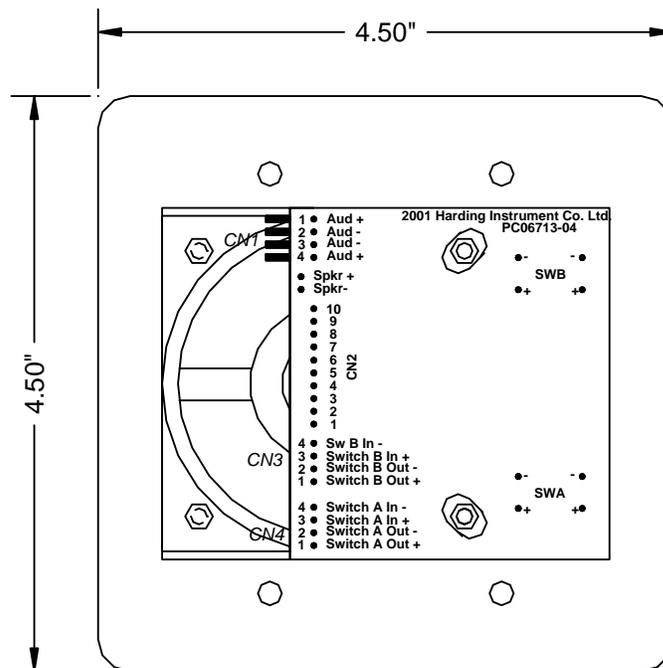


Figure 2 Rear View of SPM-420 Printed Circuit Board Showing Header Positions

3.1 Audio Connection from System to Intercom Station

Each SPM-420 station is connected to the exchange with a single shielded twisted pair. This pair is connected to terminals on the field interface terminal block. All shields are terminated at the field interface terminal block. The shields are grounded through the cable that connects the terminal block to the connector on the SCC-400 (or SAB-400). The shields are left unconnected at the station end.

The connections to the intercom station are made with an AMP MTA-100 series connector. The intercom pair should connect to pins 1 and 2 on a female 4-pin AMP MTA-100 series connector that plugs onto the header labeled CN1 on the printed circuit board of the intercom station. To make these connections you should use an AMP Handle Assy 58074-1 tool with a 58246-1 head. The cable should be cut to length and the shield and outer jacket should be trimmed back about 1/2 inch. Ensure that the shield is not exposed or it may short out exposed contacts on the intercom PCB when it is installed. The pin configuration of the station connector is:

MTA Pin	Signal
1	Audio +
2	Audio -
3	N/C
4	N/C

Figure 3 MTA Pin Signals

To insert the signal wires into the connector you remove the white cover from the connector, insert the connector into the tool from the left side (it will travel through the tool in the direction indicated by the arrow), pull the trigger once to load the connector. Then insert the signal wire for pin 1 (do not strip the wire) into the hole on the top of the tool and pull the trigger to insert the wire into the connector. Then repeat to install the other signal wire. Finally, remove the connector from the tool, replace the cover, and then slide the connector onto the pins on the intercom station.

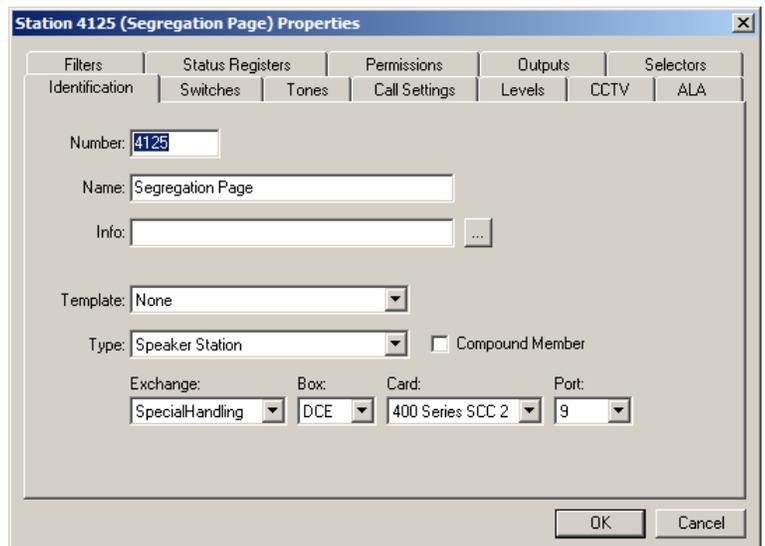
3.2 Mounting SPM-420

The SPM-420 Station Paging Microphone is designed to mount to a standard 2-gang electrical box, with the faceplate connected to the box by four #6-32 mounting screws. The box must have a minimum opening of 3.625"W x 2.875"H x 1.5"D (as shown in the Figure1).

4.0 Configuring the DXL Administrator Software

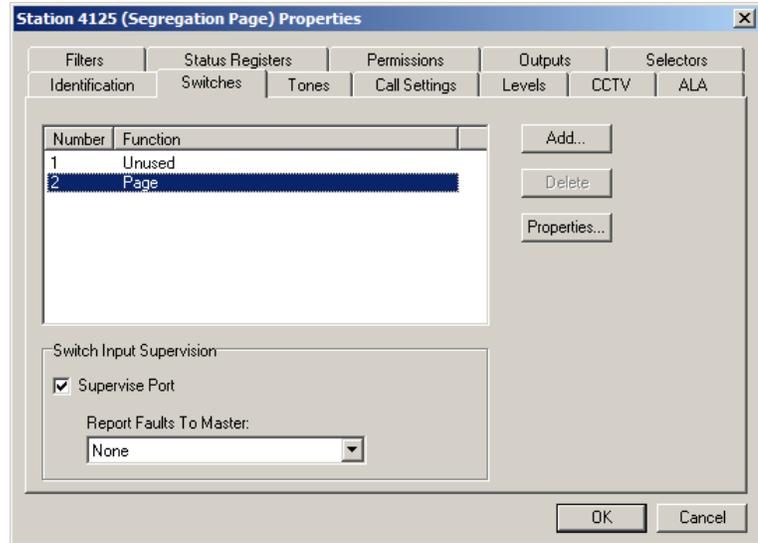
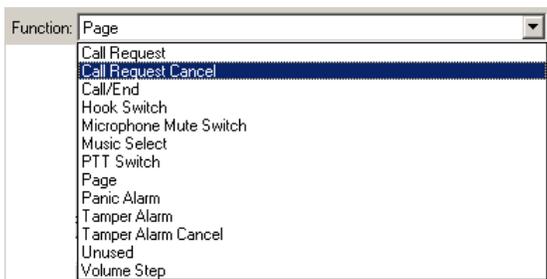
Configuring a SPM-420 requires that you specify the SCC-400 port that the station is connected to, designate the push-to-talk switch as a Page switch and finally specify the page zone that will be paged.

The **Identification** tab of the **Station Properties** dialog box has entries for **ID Number:** and **Name:** for the station. The SPM-420 is specified as a **Type:** Speaker Station. The port that the SPM-420 is connected to is indicated by the **Exchange:**, **Box:**, **Card:**, and **Port:** entries.

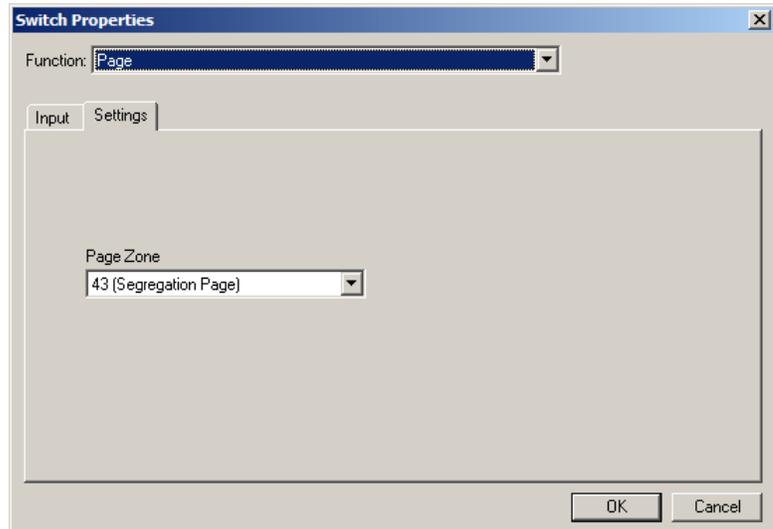
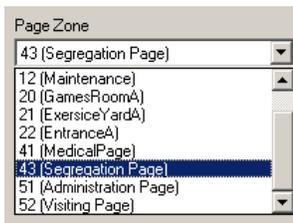


SPM-420 Station Paging Microphone

The **Switches** tab allows you to designate the switches and their purpose. The SPM-420 has only one switch, the push-to-talk switch, which is hard wired as switch 2. Initially the switch is labeled as **Unused** but by selecting it and clicking on **Properties...** box a **Switch Properties** dialog box with two tabs **Input** and **Setting** pops up. The **Function:** pull-down menu is used to designate the switch function, as **Page**.



In the **Settings** tab of the **Switch Properties** dialog box the **Page Zone** pull-down menu is used to select the page zone that will be connected to the SPM-420 when the press-to-talk switch is depressed. The **Page Zone** pull-down menu lists all the page zones that have been defined in the Administrator Software.



The remaining tabs in the **Station Properties** dialog box are discussed in detail in the Administrator Software & Local User Interface.