HHK-136 Handset Hookswitch Kit

1   Intent & Scope

This document describes the installation procedure for the HHK-136 Handset Hookswitch Kit.

2   Description

The panel mount HHK-136 Handset/Hookswitch kit is used with the MAI-625 Master Audio Interface to provide an audio channel between the handset and the DXI system. The hookswitch provides a pair of wires from the contacts of a magnetic switch that closes when the handset is off hook.

The HHK-136 can be used with the TMM-441, TMM-641 as well as the MAI-625

Note: The magnetic hookswitch will only be activated when the handset is placed in the cradle in a vertical position.

3   Installation

The HHK-136 Handset/Hookswitch kit facilitates a handset with hookswitch to be connected to the MAI-625. The kit comes complete with the following items:

- handset with coil cord and PTT
- hookswitch cradle with four #10-32 x 0.375" mounting screws included
- coil cord strain relief
- surface mount RJ-25 jack with adhesive pad and two mounting screws included
- 7 foot RJ-25 parch cable
- one (1) 2" black lead
- one (1) Marrette connector

A HHK-136 kit has a handset with a hookswitch that closes when the handset is off hook. The handset/hookswitch connects to the MAI-625 via a 6-pin female RJ-25 jack.

3.1   Panel Preparation

Either drill or punch the mounting holes indicated on the following diagram. Note the position shown for the handset cable strain relief is typical only and may be relocated as necessary.
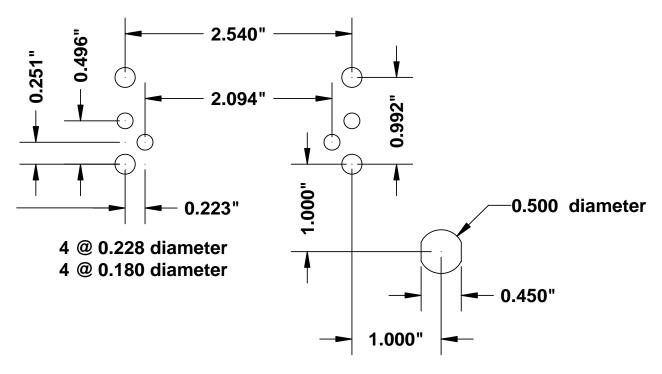
Figure 1 Panel Cut-outs for Mounting HHK-136

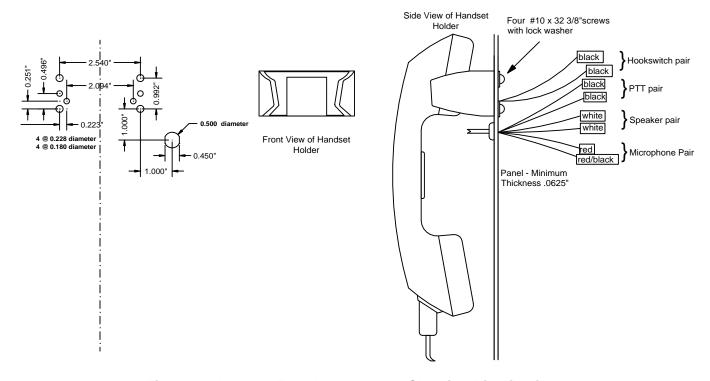Details for the cutout for the cable strain relief connection are shown in the above diagram.

Figure 2 Mounted Telephone Hanger Showing Pigtail Wires

3.2 Handset Hanger Mounting

1.   Feed the two (hookswitch pair) black leads from the hanger through the access hole in the panel.

2.   Install the handset hanger onto the panel using the four screws provided.

3.3 Handset Cable Installation

3.   Feed the six wires from the handset through the strain relief cut-out in the panel.

4.   Place the strain relief onto the handset cable near the first coil in the cord and press it into the panel cut out.

3.4 Surface Mount Wall Jack (RJ-25) Installation

1.   Locate a position for the RJ-25 wall jack within reach of both the handset and hookswitch wires. Use the adhesive pad on the junction box and press it into place. Alternatively you can use the two screws provided to mount the unit. (Note the screws that are supplied with the RJ-25 jack are meant to screw into a wood surface.)

2.   A common configuration of the surface mount RJ-25 is shown in the following diagram. The colors indicated are the colors of the wires that run from the screw terminals to the RJ-25 female jack.

.Note: the wire color indicates which RJ-25 pin is connected to that wire, not the terminal position. If there is any question then check continuity with an ohmmeter. Different manufacturers use different conventions for the internal wiring of the junction box.
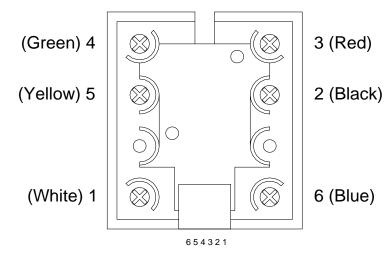

(Green) 4   3 (Red)

(Yellow) 5   2 (Black)

(White) 1   6 (Blue)

6 5 4 3 2 1

Figure 3 Surface Mount RJ-25 – Cover Removed

3.5 Handset Connection

Connect the handset and hookswitch to terminals 1 through 6 as indicated in the table shown below. Note that the hookswitch (HKSW), press to talk (PTT), and the Speaker (Spk) pair of wires are not polarity sensitive. The microphone (Mic) pair, Mic + and Mic – wires are polarity sensitive. The Mic + wire will be red and the Mic – wire will be black or red with a black marker stripe.

The following table shows how the various leads are to be connected to the junction box.

RJ-25 Pins	RJ-25 Wire Color	Signal	Wire Colors of Pigtail Leads
1	White	Mic +	Red
2	Black	Push to Talk (PTT+)	Black
3	Red	Spk +	White
4	Green	Spk -	White
5	Yellow	HKSW +	Black
6	Blue	Mic -, PTT -, HKSW -	Mic – (Red/Black) ,PTT-, (Black), HKSW – (Black)

Table 1 RJ-25 Female Jack

Note that three wires are connected to the terminal with the RJ-25 blue wire. Use the 2″ black wire lead supplied with the kit to connect to the RJ-25 terminal and within the box connect the 3 pigtail wires to this wire using the Marrette connector.

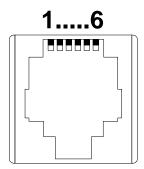The 6-pin female RJ-25 jack and its pin numbers is shown in the following diagram.

Figure 4 RJ-25 Female Jack

A seven foot 6 conductor RJ-25 patch cable is supplied with the HHK-136 Handset/Hookswitch kit and connects the surface mount RJ-25 wall jack and the RJ-25 jack located on the the MAI-625.