

**HB-3+ Headset Adapter
Connected to the IP-223
Operating as a Positional Intercom**

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1.0 General

This application note is intended to show how to configure and connect the Telex Radio Dispatch IP-223 Ethernet Adaptor Panel to a Telex HB-3+ Headset Adaptor. This connection provides **PTT** (Push-To-Talk) control and audio connections for an intercom position to listen and talk on a radio network that is crosspatched by a console position.

This type of configuration allows an IP-223 to be mounted anywhere on the network with an HB-3+ connected to one (1) of the I/O connectors, allowing up to two (2) per IP-223. The user sits at a desk and plugs a headset into the HB-3+. Once connected, the user can talk and receive audio from the console just like radio communications.

Dispatchers at any console can create a crosspatch between the intercom position and the desired radio net. A simple system layout is shown in Figure 1. Each HB-3+ intercom position requires a line on the console. The example in figure 1 requires four (4) lines on the C-Soft console (2 radios and 2 intercoms). The C-Soft dispatcher talks on either radio, but the intercom positions can only talk on the radio they are crosspatched to.

1.1 Cable Modification

Modify the modular cable supplied with the HB-3+.

To **modify the modular cable**, do the following:

1. Cut off **one end** of the modular cable.
2. Attach a **DB-25M connector** using the pin outs in Table 1.

TABLE 1. DB-25 Connector Pin Outs

IP-223 Signal	IP-223 25 Pin	Modular Cable 4-Pin	HB-3+ Signal
TX+	25	4	RX
RX+	24	1	TX
COR	20	3	PTT
GND	7 & 12 & 13	2	GND

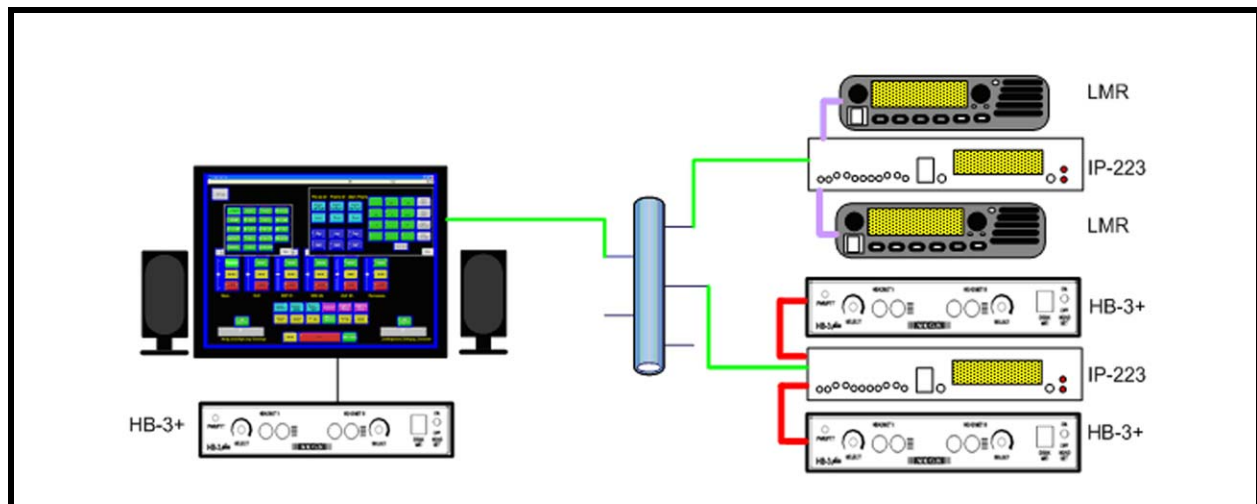


FIGURE 1. Intercom Design Layout

2.0 HB-3plus Setup

To **configure the jumper for console mode**, do the following:

- > Move **J8** to the B position.

3.0 IP-223 Setup

The IP-223 is configured for Local mode.

3.1 Multicast Setup Window

Both Unicast and Multicast Addressing are supported for this feature. A unique set of RX and TX ports are required and should match a line configured in the console.

To **configure the IP-223's operation mode**, do the following:

- > In the Multicast Address Setup window, select **Local Mode** from the Line Type drop down menu for the line you are configuring.

3.2 IP-223 Jumper Settings

To **configure the IP-223 jumper settings for use with an HB-3+**, do the following:

- > Set **jumpers** as indicated in Table 2.

TABLE 2.

Line 1	Jumper Setting	Line 2
J33, J34	B = 4-Wire	J5, J6
J16, J21	B = Balanced	J19, J20
J14	A = 600 Ohms	J24
J3, J9, J11	B = Balanced	J25, J26, J29
J13	B = High	J27
J17, J22	B = 600 Ohms	J10, J15

3.3 Per Line Setup Window

The **Per Line Setup** window is used to configure options on a per line basis. AxACG is required for use with an HB-3+

To **configure the line for HB-3+ use**, do the following:

- > On the Per Line Setup window for the line, select the **RxAGC** check box.

Revision History		
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