## **Multiple Base Stations**

This mode of operation can be used to expand the number of users communicating through multiple HME Base Stations operating in the same portion of the 2.4 GHz to 2.48 GHz frequency band. Two or more base stations can be "daisy-chained" together with cables connected to the 2-wire connectors (**#27** and **#29**) on the rear panel of each base station, following Clear-Com<sup>®</sup>/RTS<sup>®</sup> standards.

**NOTE:** The base station does not provide or require 2-wire line power.

If "daisy-chaining" multiple base stations, you must do the following:

The cable connectors must
be 3-pin XLR type with the
following pin connections:

RTSModeClear-Pin 1 = CommonPin 1 =Pin 2 = Channel 1Pin 2 =Pin 3 = Channel 2Pin 3 =

<u>Clear-Com<sup>®</sup> Mode</u> Pin 1 = Common Pin 2 = N/C Pin 3 = Audio





- Step 2. For each base station, follow all the steps under Equipment Connections on page 7.
- **Step 3.** Follow the procedures on pages 9 and 10 to set each base station as primary or secondary, select frequency bands and initialize each base station.



# **Primary and Secondary Base Station Settings**

One base station must be designated as "primary" while the others are designated as "secondary". You may have only one primary and up to 3 secondary base stations. Secondary base stations are assigned numbers 1, 2, or 3 during initialization, to differentiate them in frequency offset.

- Label the base stations as "Primary," "1," "2" and "3."
- Start with every base station and Beltpac/Headset/Speaker Station power off.

#### Configure each secondary base station as follows:

- First, remove the six screws from the top and three screws from each side of the top cover, and lift the cover off and set it aside.
- Locate the DIP switch on the transceiver circuit board inside the base station. Set DIP switch #4 to the **ON** position. Leave #s 1 and 3 in the **OFF** position.



- Replace the cover and screws on the base station.
- The **primary** base station DIP switch #4 should be in the **OFF** position.

## **Base Station Initialization**

For multiple HME base stations to operate without interference, they must all be properly initialized before performing any other setups. After initializing each base station, register each Beltpacs/Headsets/Speaker Station that will be used with that base according to the procedures on pages 11 - 18.

**NOTE:** Base stations must be set up for split-band operation prior to initialization. If a different frequency band needs to be selected to avoid interference, the primary base station must be set to this frequency band before base station initialization is started. (See Interference Avoidance on page 8.)

### Initialize each base station and register all Beltpacs/Headsets/Speaker Stations as follows:

- Turn the primary base station power on. Register any Beltpacs/Headsets/Speaker Stations to be used with the primary base station (See pages 11 18). Turn each Beltpac/Headset/Speaker Station off after registering it.
- Power on one **secondary** base station. The **STATUS** display will show a double bar, indicating the secondary base is ready to be initialized.



Base station ready to be initialized



Small "o" indicates primary base is open for registration

• Press the **REGISTER** button on the primary base. The **STATUS** display will show a small "o."

• To assign a number to a secondary base station and initialize it, press the **REGISTER** button on the secondary base. Pressing the button repeatedly causes it to cycle through the numbers 1, 2, and 3. When the desired number appears, stop pressing and wait. While the secondary base initializes using the displayed number, the **STATUS** display will continue showing the secondary number selected. When initialization of the secondary base station is finished, the display will show one bar, to indicate the secondary has initialized to the primary.



Secondary 2 searching for primary



Secondary is initialized to primary

- Press the **REGISTER** button on the primary. The **STATUS** display will go blank.
- Register Beltpacs/Headsets/Speaker Stations to the secondary (See pages 11 18). After registration, turn off the secondary base and all Beltpacs/Headsets/Speaker Stations.
- Repeat these steps for each remaining secondary base. Use a different number for each. Only the primary base and the secondary base you are working with should have power on during initialization. All other equipment should be off.
- After all secondary bases are initialized and Beltpacs/Headsets/Speaker Stations are registered power up all bases. Press reset on the primary base and let it recover. Turn on the primary Beltpacs/Headsets/Speaker Stations and let them link. Press the reset on each secondary base one at a time and let it initialize to the primary, as indicated by a single bar. Turn on the Beltpacs/Headsets/Speaker Stations associated with the secondary bases. Do one group at a time until they have all linked. Then do the next group. At this point all bases and Beltpacs/Headsets/Speaker Stations should be powered up and linked, ready for use.
- Now proceed with normal system configuration, setting functions and levels as required.
- If it becomes necessary to replace a secondary base, use the procedure above to initialize the new secondary with the same number as the old secondary. After initialization you will have to register any Beltpacs/Headsets associated with the old secondary to the new secondary.
- If it becomes necessary to replace a primary base, follow the above procedure completely. Before initialization of the secondary bases, clear the previous secondary initialization as follows. For each secondary, press the **CLEAR/BAND** button and the **RESET** button at the same time. Continue holding the **CLEAR/BAND** button after you release the **RESET** button, until the clear code "c" (lower case) appears on the **STATUS** display. Any Beltpacs/Headsets/Speaker Stations associated with the old primary will have to be registered to the new primary after secondary base initialization. All Beltpacs/Headsets/ Speaker Stations associated with secondary base stations also have to be registered again.
- If the primary base is shut down or if the primary base is powered off for more than 30 seconds, all secondary bases will drop their Beltpac/Headset/Speaker Station connections and begin searching for the primary. If the primary is not found in 30 seconds, the secondary will automatically revert to primary-mode operation and reconnect the Beltpacs/ Headsets/Speaker Stations. At this point the secondary **STATUS** displays will show three bars. If the primary is turned back on it will be necessary to press **RESET** on all secondary bases to allow them to find and initialize to the primary again. It is therefore important to have all bases connected to the same AC circuit to prevent this situation when the system is shut down after hours and powered up again the next day.



Secondary base operating in primary mode when no primary base is found

**NOTE:** You cannot register Beltpacs/Headsets/Speaker Stations to a base that is set to primary mode, and then switch the base mode to secondary for initialization. Once in secondary mode, the base cannot recognize the Beltpacs/Headsets/Speaker Stations registered during primary operation. For secondary bases, the Beltpacs/Headsets/Speaker Stations must always be registered after secondary base initialization, with the primary base remaining active and the secondary base displaying one bar.