

receiver change for the reverse direction of a bi-directional repeater.

1. Connect a suitable power source to supply "12 Vdc" to the two radios.
2. Before energizing the power supply or the radios, ensure that the "REPEATER ENABLE" switch of the R*I*C*K is in the released (out) position. Failure to "disable" the repeater will result in keying of the transmitter of the "transmitter" radio. Turn on the power supply and the radios.
3. Enable the repeater function by actuating the front panel "REPEATER ENABLE" switch of the R*I*C*K; the green "REPEATER ENABLE" LED should light.
4. Apply an on-channel signal from the RF Signal Generator to the "receiver" radio; modulate the signal with a 1 kHz tone at 3 kHz peak deviation. Adjust R23 on the R*I*C*K board for 3 kHz peak deviation of the "transmitter" radio.
5. If a bi-directional repeater is being setup, connect the RF Signal Generator to the antenna connector of the "transmitter" radio and the dummy load to the antenna connector of the "receiver" radio. Apply an on-channel signal to the receiver of the "transmitter" radio; modulate with a 1 kHz tone at 3 kHz peak deviation. Adjust R24 on the R*I*C*K board for 3 kHz peak deviation of the transmitter of the "receiver" radio.
6. Check the settings of the 12 positions of dip switch S2 for correctness.
7. Unplug all cables and connectors attached to the R*I*C*K board.
8. Place the R*I*C*K board into the housing. Attach the front panel with the two long screws; tighten the screws snugly.

Installation

1. Plug the microphone jack of the "receiver" radio with a shorting plug, 0180970X01, to enable the hook switch in the coded squelch mode. If it is desired to communicate on the frequency of the "receiver" radio, a mobile microphone in a hang-up clip or a desk microphone, may be substituted for the shorting plug.
2. Plug the microphone jack of the "transmitter" radio with a shorting plug, 0180970X01, to enable the hook switch in the coded squelch mode. If it is desired to communicate on the frequency of the "transmitter" radio, a mobile microphone in a hang-up clip or a desk microphone, may be substituted for the shorting plug.

NOTE: the I/O pins defined for coded squelch operation activate only with the reception of the proper tone or code regardless of the hook switch condition. The shorting plugs or the microphones allow the speakers of the two radios to remain muted to those signals without the proper tones or codes.

3. Mount the R*I*C*K in a convenient location with the trunnion and hardware provided in the HLN9839 Mounting Hardware Kit.
4. Reattach the cables and the 16-pin jumpered connector that were removed in step 7 of "R*I*C*K Adjustments".
5. Connect the antenna RF feedlines to the two radios. The cables may come from two separate antennas or from a duplexer if a common antenna is to be used for a single band repeater.
6. Connect a suitable power source to supply "12 Vdc" to the two radios. The "12 Vdc" may come from the "12 Vdc" vehicle battery supply for a mobile repeater or an ac operated power supply for a "fixed" repeater. Two tap connectors, 0982845L01, are provided to allow paralleling two Radius mobile power cables (HKN4137A or HKN9402A) or a mobile power cable and the HKN9455A "fixed" power cable.