HAMTRONICS® COR-4 MODULE MODIFIED FOR BEACON SERVICE

SPACED BEACON MODE.

To use the COR-4 in beacon mode and have it id periodically, keying the transmitter only while id'ing, the following mods are required. Note that, since the id is initiated by the normal reset signal, the first id will not occur until after the first timer period expires (up to 9 minutes).

a. Break traces under board at pins 1, 2, and 4 of U1. (U1-A will not be used.)

b. Add jumpers from pin 12 of U2 (for 9 minutes or another pin for different time period) to pin 11 of each of U1, U2, and U3. This jumper will cause the 9 minute reset pulse to reset the 4020's to address zero and clock U1-B to start the transmission of the cw id signal and key the carrier.

CONTINUOUS BEACON MODE.

To make the cwid repeat continuously, with no pause between id's other than that ordinarily programmed in eprom, do the following mods instead of those above.

a. Remove U1 (4013) from socket.

b. Use #22 bus wire pushed into socket of U1 to jumper pins 10 & 2 to loop reset pulse back to 4020's.

c. Use another #22 jumper between pins 12 & 8 to ground eprom chip enable line.

d. Remove C4 to speed up pulse. Doesn't reset well with time delay normally provided by C4.

CARRIER KEYING INSTEAD OF AUDIO TONE.

In order to key carrier of exciter instead of a modulated tone, do the following. This mod leaves the audio stages of the COR-4 in operation to monitor the tone for testing. After modification, the eprom output keys Q2 and Q3 on and off to key the carrier of the exciter.

a. Break the exciter voltage regulator B+ feed off the main B+ line and power it from the oven pin so on continuously for oscillator stability.

b. Run the rest of the stages connected to the main B+ input terminal from the keyed B+ output of the COR-4.

c. Remove R37 and R28 on the COR-4 board, and connect the upper lead of R28 to where it normally connects and the lower lead of R28 to the right hand (ungrounded) pad where R37 normally connects. This effectively connects R28 to the output of the eprom at U4-9.

