

ADD LONG WAVE TO SHORT WAVE SET

PARTS LIST FOR SHORT WAVE SET

- B1**—9VDC battery
- C1, C4**—470-pf capacitor
- C2**—.1-uF capacitor
- C3**—.001-uF capacitor
- C5**—50-pf capacitor
- L1**—Loopstick coil
- Q1**—PNP transistor, 2N3906 or equiv.
- R1**—470,000-ohm resistor
- R2**—330-ohm resistor
- RFC**—2.5 mH choke
- S1**—SPST Switch
- XTAL**—3.5 MHz crystal (see text)

Ever listen in on the long waves, from 25-500 kHz? It's easy with this simple converter. It'll put those long waves between 3.5 and 4.0 MHz on your SWL receiver.

Q1 acts as a 3.5 MHz crystal oscillator, mixing the crystal frequency with the long wave input from the antenna and forwarding the mix to your receiver.

L1 is a standard broadcast loop stick antenna coil. The crystal is available from many companies by mail order, or at a ham radio store. You could also use a 3.58 MHz TV color crystal.

Adjust the slug of L1 for your best signal after tuning to a strong station.

