MANUAL ADDENDUM AND INSTRUCTION SHEET FOR BL538K SCREEN AND FIRMWARE KIT AND MP538K FIRMWARE KIT FOR THE JUPITER.

The CW personality for the Jupiter transceiver allows both decoding of received CW signals on the HF ham bands on the transceiver screen and the ability to send CW characters from a standard PS/2 computer keyboard plugged into the rear panel.

Existing Jupiter transceivers will need to have a PLD update and the new version of the firmware installed. Visit the Ten-Tec firmware update site at http://radio.tentec.com/downloads/transceivers/538 for instructions on how to do so.

After PLD update and new firmware has been installed, connect a computer keyboard with a PS/2 connector to the jack marked ACC 2 on the rear panel. Please note that USB keyboards utilizing a USB-to-PS/2 adapter may or may not work with the Jupiter and we recommend a direct PS/2 connection.

After the keyboard is connected, turn the transceiver power on.   The default mode of the Jupiter is standard transceiver operation.   To load the CW personality, press and hold the MODE button. At the bottom left of the screen the legend GO , 538 , CW will appear above the AF and RF buttons.   Release the MODE button.   To select the CW personality, select "CW" from the screen choices by pressing the RF button directly under it. A beep will be heard through the speaker and the Jupiter firmware will re-boot in CW personality mode.

The CW personality allows both CW and SSB operation.   FM and AM modes are disabled, and the CW reader and keyboard transmit feature are activated.

To return to standard transceiver operation, press and hold the MODE button. At the bottom left of the screen the legend GO   538   CW will appear above the AF and RF buttons.   Release the MODE button.   To select standard operation, select "538" from the screen choices by pressing the AF button directly under it. A beep will be heard through the speaker and the Jupiter firmware will re-boot in standard transceiver mode.

Press ALT and then VOX to activate the CW reader and keyboard transmit buffer readout. There are 3 lines of 30 characters each of text that can be visible. The top 2 lines are CW receive decode, the bottom line is a transmit buffer so you can "type ahead" and read what you are sending.   The buffer is 30 characters. If you get more than 30 character including spaces ahead in the transmit buffer it will start to overwrite and only what is shown on the screen will be sent (and your message will be garbled).   To clear the transmit buffer and stop keyboard CW in the middle of a transmitted message, press the ESC key on the keyboard.

Note: Keyboard CW transmit is always "live". Even if you are not seeing the transmit buffer on the screen you can transmit CW characters with the keyboard.   To transmit CW with the keyboard, start typing and the rig will transmit. You must have the CW keyer turned on or the rig will not respond to input from the keyboard. Keyer speed

works for both the keyboard or a paddle plugged into the transceiver. Both a keyboard and your CW paddle can be connected simultaneously and either can be used for CW transmitting.   Speed of transmitted CW with the keyboard is determined by the speed the transceiver keyer is set to.

To decode received signals on the screen, tune in a CW signal. Under the S-meter indication on the bargraph meter, a separate bargraph for decoder strength will appear. Tune in the received signal for maximum deflection to the right of received signals on the bargraph meter. Decoded CW will start to appear on the screen.

A couple of operation notes on decoded CW. The ability of the CW decoder to accurately decode received signals drops off for signals below the S-6 level on the S-meter.   The CW decoder also is only as good as the CW being sent by the other station, meaning a "sloppy fist" sending CW to you won't be decoded accurately.

TROUBLESHOOTING

No CW transmit from keyboard: 1) Some USB-to-PS/2 adapter equipped keyboards will not work with Jupiter. 2) If using correct keyboard, did you plug the keyboard in before turning rig power on?   3) The CW keyer in the rig must be turned on or rig will not respond to typing on the keyboard.

No CW decode on weak signals: The CW decoder performance drops off on signals of less than S-6.   On stronger signals, tune signal for maximum deflection on bargraph meter.

No CW decode or transmit buffer after pressing SWEEP: You must press ALT then VOX again to re-engage the text characters appearing on the screen.