

ADDENDUM TO MODEL 800 MANUAL

Your Model 800 has been equipped with an Input Level pot installed in the cover. This feature has been incorporated for Morse reception and to provide RTTY reception in the "limiterless" mode.

To receive Morse Code, set your receiver to either UPPER or LOWER SIDEBAND not CW. Most CW filters have a different center frequency than the filters in the Model 800 and would not allow proper reception. Receivers that have "IF" shift capability may be able to use their CW filter. However, the Model 800 has a built-in 90 Hz filter, so a CW filter does little to improve performance. Enter the Morse receive mode by holding down the "CTRL" key while pressing the "2" key. Tune the receiver to a quiet, no signal, spot on the band and set the receiver audio gain to a comfortable level. Adjust the input level pot clockwise until the Model 800 just starts printing E's and T's and the sidetone starts "clicking". Now, decrease the input level pot (counter clockwise) until the Model 800 sidetone is quiet and the unit stops printing E's and T's. Once the input level has been set, the Model 800 will be ready to receive Morse Code. It may be necessary to reset the input level when changing bands or if you readjust your receiver audio or RF gain controls. Now, tune the receiver to a moderately strong CW station. A good station to practice tuning on is W1AW, as it is usually quite strong and has a good "fist". Tune the receiver such that the Model 800 starts repeating the incoming code through it's sidetone oscillator and the tuning bar is at maximum length on dots and dashes and minimum on spaces. It will be easiest if you tune down on the signal (e.g. as you tune across the CW station the pitch changes from high to low). Be sure to tune slowly as the Model 800 filters are quite narrow. Once properly tuned, the Model 800 will take a few characters to "lock on" to the incoming code before it starts copying properly.

The Input Level control also provides for linear operation of the Model 800 input amplifier, allowing the Model 800 to function as a limiterless or "AM" demodulator. This eliminates errors due to FM capture problems associated with limiting or "FM" type demodulators. The Model 800 tuning indicator bar

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provides a convenient indication of the input level to assure true limiterless operation. FM or limiting type reception, if desired, can still be attained by turning the input level control fully clockwise. It is suggested for limiterless reception of RTTY that the input level be set such that the tuning bar is at about 75% amplitude while copying a properly tuned signal. Limiterless operation will provide superior performance during selective fading or weak signal reception. FM or limiting type operation must be used in AUTOSTART or SELCOM modes. Proper tuning of the Model 800 is accomplished by tuning the signal for maximum amplitude of the tuning bar.

Note:

When Programming the "who are you" and SELCAL code,  
first hit the Return, then the 8 digit code ie (HORNBECK) then a Return

The keyboard should be in SELCOM for receiving

# Q U I C K R E F E R E N C E G U I D E

## PROGRAMMING

HERE IS messages  
ID memory  
WRU memory  
SELCAL memory  
Printer mode

## KEYSTROKES

CTRL-H; (message); RETURN \*  
CTRL-I; (call); RETURN  
CTRL-W; (code); RETURN  
CTRL-S; (code); RETURN  
CTRL-P; RETURN \*

## RTTY FUNCTIONS

Select RTTY mode  
TRANSMIT  
RECEIVE  
Change SHIFT  
REVERSE Shift Polarity  
RY Test Message  
QUICK BROWN FOX Test Message  
Change SPEED  
Disable Split Screen  
Enable Split Screen  
Disable STATUS Line  
Enable STATUS Line  
Lock CW Key  
Unlock CW Key  
Send ID  
CONTINUOUS Transmit  
WORD Transmit  
LINE Transmit  
AUTOSTART  
SELCOM  
HERE IS message #(0-9)  
Automatic CQ  
ASCII Operation  
Carriage RETURN, Line Feed  
Backspace and DELETE  
REPEAT a Letter or Function  
BELL  
Send Baudot LTRS Character  
Send Baudot FIGS Character  
Send Baudot BLANK Character

## KEYSTROKES

CTRL-RTTY  
CTRL-XMIT or ESC  
CTRL-RCV or ESC  
CTRL-SHIFT  
CTRL-REVERSE  
CTRL-RY  
CTRL-QBF  
CTRL-SPEED \*  
CTRL-/ (fraction bar)  
CTRL-/ (fraction bar)  
CTRL-STATUS  
CTRL-STATUS  
CTRL-TUNE  
CTRL-TUNE  
CTRL-ID  
CTRL-XMIT \*  
CTRL-XMIT \*  
CTRL-XMIT \*  
CTRL-RCV \*  
CTRL-RCV \*  
HERE IS; (number 0-9)  
CTRL-C  
CTRL-SPEED \*  
RETURN  
DELETE  
REPEAT + desired key  
CTRL-BELL  
CTRL-L  
CTRL-F  
CTRL-B

\* This feature is enabled by repeated depressions of the key indicated. The status line shows which mode has been selected.



## MORSE CODE FUNCTIONS

Select MORSE code mode  
 TRANSMIT  
 RECEIVE  
 QUICK BROWN FOX Test Message  
 Change transmit SPEED  
 Disable Split Screen  
 Enable Split Screen  
 Disable STATUS Line  
 Enable STATUS Line  
 Lock CW Key  
 Unlock CW Key  
 Send ID  
 CONTINUOUS Transmit Mode  
 WORD Transmit Mode  
 LINE Transmit Mode  
 RANDOM Transmit Mode  
 Disable SIDETONE Oscillator  
 Enable SIDETONE Oscillator  
 HERE IS Message #(0-9)  
 Automatic CQ  
 REPEAT a Letter or Function  
 AR (end of message)  
 AS (wait)  
 BT (pause)  
 KN (go ahead, station called)

## KEYSTROKES

CTRL-MORSE  
 CTRL-XMIT or ESC  
 CTRL-RCV or ESC  
 CTRL-QBF  
 CTRL-SPEED; (number); RETURN  
 CTRL-/ (fraction bar)  
 CTRL-/ (fraction bar)  
 CTRL-STATUS  
 CTRL-STATUS  
 CTRL-TUNE  
 CTRL-TUNE  
 CTRL-ID  
 CTRL-XMIT \*  
 CTRL-XMIT \*  
 CTRL-XMIT \*  
 CTRL-XMIT \*  
 CTRL-T  
 CTRL-T  
 HERE IS; number (0-9)  
 CTRL-C  
 REPEAT + desired key  
 CTRL-A  
 CTRL-W  
 CTRL-B  
 CTRL-S

## SSTV FUNCTIONS - MODE 1

Select SSTV Mode 1  
 Change CHARACTER Color  
 Change BACKGROUND Color  
 TRANSFER Graphics to Scan Converter  
 STORE Graphics in Memory #(1-8)  
 RECALL Graphics in Memory #(1-8)  
 Change Character SIZE  
 CLEAR Display  
 HOME Cursor to upper left  
 Move Cursor LEFT  
 Move Cursor UP  
 Move Cursor RIGHT  
 Move Cursor DOWN  
 Carriage RETURN and line feed  
 Backspace and DELETE

## KEYSTROKES

CTRL-SSTV  
 CTRL-C \*  
 CTRL-B \*  
 CTRL-T  
 CTRL-S; (number 1-8)  
 CTRL-R; (number 1-8)  
 CTRL-CHAR  
 CTRL-CLEAR  
 CTRL-HOME  
 CTRL-(left arrow)  
 CTRL-(up arrow)  
 CTRL-(right arrow)  
 LINE FEED  
 RETURN  
 DELETE

\* This feature is enabled by repeated depressions of the key indicated. The status line shows which mode has been selected.

## SSTV FUNCTIONS - Mode 2

## KEYSTROKES

Select SSTV Mode 2	CTRL-SSTV; CTRL-SSTV
Transmit GREY SCALE Pattern	CTRL-GRY SCL
Return to SSTV Keyboard	CTRL-GRY SCL
Transmit CHECKERBOARD Pattern	CTRL-CHECKER
Return to SSTV Keyboard	CTRL-CHECKER
Change Number of LINES Transmitted	CTRL-LINES; (number 1-6)
Black/White REVERSAL	CTRL-REVERSE
Change Character SIZE	CTRL-CHAR
CLEAR Display	CTRL-CLEAR
HOME Cursor to upper left	CTRL-HOME
Move Cursor LEFT	CTRL-(left arrow)
Move Cursor UP	CTRL-(up arrow)
Move Cursor RIGHT	CTRL-(right arrow)
Move Cursor DOWN	LINE FEED
Carriage RETURN and line feed	RETURN
Backspace and DELETE	DELETE