

# bhi



## Radio Mate

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## Radio Mate

Compact Keypad for  
Yaesu FT-817, FT-857 and FT-897

### Operating Instructions



1090-107D  
Issue B

## Important Information

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	Bank 1		Bank 2	
Memory	Frequency (MHz)	Modulation	Frequency (MHz)	Modulation
1				
2				
3				
4				
5				
6				
7				
8				
9				
0				

	Bank 1		Bank 2	
Memory	Frequency (MHz)	Modulation	Frequency (MHz)	Modulation
1				
2				
3				
4				
5				
6				
7				
8				
9				
0				

## Appendix A - Blank frequency tables

Memory	Bank 1		Bank 2	
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1				
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## 1. Set up.

Connecting and setting up the Radio Mate. (See your radio user manual for more information on setting up the CAT interface).

- Turn the Radiomate off
- Turn the radio on

### **FT-817 - only**

- Press Func button to enter sub menu set cat rate to 9600 Baud.
- Press and hold Func to store.

### **FT857 & FT897**

- For the FT857, and FT897 press func button to enter submenu and set the radio to CAT mode. Check baud rate is 9600.

### **All models**

- Turn off radio
- Plug Radio mate into cat socket (being very careful not to bend the pins) Turn on the radio. Turn on the Radio Mate.
- The LED on the Radio Mate will glow red and a beep should be heard approx 3 seconds after power up.
- With the LED glowing RED the Radio mate is in Memory/Band change mode.

### **Note:**

The CAT port remains powered on the FT-817, even when the radio is switched off. When the radio or keypad is not in use, switch the keypad off.

## **NES10-2 MKII Noise Eliminating speaker.**

DSP noise cancellation built into a compact speaker unit. The unit provides an easy to install solution to noise reduction and easily connects to the extension speaker socket or headphone socket of your equipment. Supplied with a fused power lead.



## **NEIM1031 In-line module.**

The **NEIM1031** provides a flexible solution to noise reduction and easily fits between your equipment and speaker.

The unit is also equipped with line level inputs and outputs, and a 3.5mm mono headphone socket. Supplied with a fused power and audio lead.



## **ANEM Noise Away.**

**New ANEM "Noise Away"**  
**DSP Noise Cancelling as Easy as 1-2-3**

- 1 - Plug in Audio**
- 2 - Connect Loudspeaker**
- 3 - Connect Power**

Easy to use, simply fits between your equipment and extension speaker. Audio bypasses module when the power is switched or removed. All the DSP functions are controlled by a single button. The unit is compact and can be mounted out of the way.

Supplied with hook and loop fastener, fused power cable and audio lead.



## 5. VFO operation.

- VFO operation can be set as follows:
- to Swap VFO A/B press the . key
- VFO A=B long press of the . key
- Split VFO mode by pressing the **Clr** key.

## 6. Tune function.

Pressing and holding the **Ent** key will enter tune mode. When in Tune mode, all the current modes of operation are read from the radio, and stored in the keypad. The radio is put in to transmit for 10 seconds to tune an ATU.

After the tune is complete the radio is returned to its previous settings.

## 7. Other bhi Products.

bhi design and manufacture a range of Digital Signal Processing (DSP) products to remove unwanted noise and interference leaving only the speech. The amount of noise removed is dependant on the filter level setting (65% - 98%). The resulting speech signal remains virtually unaltered even when high levels of noise are present. If there is no noise present at all, the speech passes through unaltered. The system is fully adaptive and adjusts itself continuously to changing environmental conditions.

There are noise elimination speakers that fit into base station or mobile environment, in-line modules that can be integrated into the communications system, or PCB modules that can be retrofitted internally into the equipment. The products work just as well in the transmit or receive path.

## 2. Memory Function

20 memories are available as 2 banks of 10 memories. When the **Mem** button is pressed a beep will be heard. One beep for bank 1, and 2 beeps for bank 2. The 10 memories in each bank are numbered 0 - 9. Pressing the **Mem** button will put the keypad in **Memory** mode. The LED will illuminate RED.

### Storing a memory:

Press and the **Mem** key until the beep is heard, change memory bank press the **Mem** button again. The current frequency and mode will be stored in this memory.

### Recalling a memory:

Press and release memory buttons 0 - 9 to recall stored frequency and mode.

The Radio Mate is pre-programmed with the following useful frequencies. On page 10 there are blank forms to record your own frequencies.

Memory	Bank 1		Bank 2	
	Frequency (MHz)	Modulation	Frequency (MHz)	Modulation
1	1.850	CW	144.030	CW
2	3.530	CW	144.300	CW
3	3.600	LSB	144.800	FM
4	7.030	CW	145.450	FM
5	7.080	USB	145.475	FM
6	14.030	CW	145.500	FM
7	14.200	USB	145.525	FM
8	18.040	USB	145.550	FM
9	21.010	USB	145.575	FM
0	28.500	USB	145.800	FM

### 3. Modulation.

In this mode the keypad will select an operating mode at the single press of a button.

Press the **Mod** for **Modulation** mode. The LED will illuminate **YELLOW**.

Pressing the appropriate button i.e. USB, AM, FM etc. will change the radio over to that mode.

Press:

- **1** for **USB**
- **4** for **LSB**
- **7** for **AM**
- **2** for **FM**
- **5&0** for **FMN**
- *(not on FT817 it will lock up - battery removal required)*
- **8** for **PKT**
- **3** for **CW**
- **6** for **CW-R**
- **9** for **DIG**

### 4. Direct frequency input.

The operating frequency can be entered directly using the numeric keypad. To enter the direct frequency input mode - press **Dir**, the LED will illuminate **GREEN**.

To illustrate the use of the mode is illustrated by the examples on the following pages.

For example with the radio reading 145.500  
to change to 145.400  
press **.4 Ent** new reading is 145.400

**Note:**

Entering .400 would also give same result.

To change to 144.300  
press **4.3 Ent** new reading 144.300

(entering 4.300 would also give same result)

For example with radio reading 144.300  
press **5.5 Ent** and you are back to 145.500

entering **.525** new reading 145.525

**Note:**

When entering 3 digits after the decimal point there is no need to press the enter button on pressing the third digit a double beep is heard and radio is automatically updated.

To go to HF

press **007 Ent** new reading 7.525  
press **.010** new reading 7.010  
entering **14 Ent** new reading 14.010

To change from 14.010 to 3.500 you need to remove the 10 from the 14 this is done by using a leading zero

enter **03.500** new reading 3.500