

## **ICOM IC-T81E Operating Guide**

### **NOTE IN THIS GUIDE**

Push [MULTI] means push circular multifunction button directly

Push [MULTI (v^)] means push circular multifunction button up or down

Push [MULTI (<->)] means push circular multifunction left or right

### **SETTING A FREQUENCY**

Via the keypad (p.9.)

- 1) Push [VFO] to select VFO mode
- 2) Push digital keys corresponding to the desired frequency; or, push [\*] to leave the MHz setting axis and input from the kHz digits (please note: when inputting a frequency in the 50 MHz band it is necessary to input the decimal point).

Using the set tuning steps (p.10)

Push [VFO] to select VFO mode; then rotate [DIAL].

Push [MULTI<->] to change bands.

Using the MHz step function (p.10)

Push [(VFO)MHz] for 1 sec., then rotate [DIAL].

### **SCAN OPERATION**

Full/Programmed scan (p.23)

- 1) Push [VFO] to select VFO mode, if necessary.
- 2) Push [MULTI(<->)] for 1 sec. to start the scan, then while continuing to push, rotate [DIAL] to select the scan range.
- 3) Push [VFO] again to stop the scan.

Memory/skip scan (p.23)

- 1) Push [MR] to select memory mode, if necessary.
- 2) Push [MULTI (<->)] for 1 sec. to start the scan, then while continuing to push, rotate [DIAL] to select the scan range.
- 3) Push [VFO] to stop the scan.

### **DTMF MEMORY OPERATION (p.21)**

Programming a DTMF code

- 1) Push [(MR)MW] for 1 sec., then push [MULTI(v^)].
- 2) Rotate [DIAL] to select the desired channel.
- 3) Push [MULTI] to enter DTMF programming mode.
- 4) Push digital keys to enter the desired DTMF character, then push [MULTI(<->)] to advance to the next character.
- 5) Push [MULTI] to input the digits, then push [VFO] to exit DTMF programming mode.

Transmitting a DTMF code

- 1) Push [(MR)MW] for 1 sec., then push [MULTI(v^)].
- 2) Rotate [DIAL] to select the desired channel.
- 3) While pushing [PTT], push [SQL] to transmit the selected DTMF channel's contents.

### **MEMORY OPERATION**

Selecting a memory (call) channel (p.11)

- 1) Push [MR] to select memory mode; push [CALL] to select a call channel.
- 2) Select a memory channel by rotating [DIAL].

Memory programming (p.18)

- 1) Push [VFO] to select VFO mode.
- 2) Set the desired frequency.
- 3) Set other data, such as repeater info, as required.
- 4) Push [(MR)MW] for 1 sec.
- 5) Rotate [DIAL] to select the desired channel.
- 6) Push [(MR)MW] for 1 sec. to program.

Transferring a memory (call) channel's contents (p.19)

- 1) Select the memory/call channel to be transferred.
- 2) Push [(MR)MW] for 1 sec.  
=> To transfer the contents to VFO:
- 3) Push [(MR)MW] for 1 sec.  
=> To transfer the contents to another memory (call) channel:
- 4) Rotate [DIAL] to select the memory (call) channel to be transferred to.
- 5) Push [(MR)MW] for 1 sec.

Memory clear (p.19)

- 1) Push [MR] to select memory mode.
- 2) Rotate [DIAL] to select a channel to be cleared.
- 3) Push [VFO] to select VFO mode.
- 4) Push [(MR)MW] for 1 sec.
- 5) Push [Multi(v^)] to display "CLR".
- 6) Push [(MR)MW] for 1 sec. to clear the previously selected memory channel.
- 7) Push [VFO] to return to VFO mode.

### **SUBAUDIBLE TONE OPERATION**

Tone squelch operation (p.25)

- 1) Set the operating frequency.
- 2) Set the desired subaudible tone in set mode.
- 3) Push [MULTI] - if „D“ appears push [MULTI (v^)] to select „T“.
- 4) Rotate [DIAL] until „TSQL“ appears, then push [VFO]..
- 5) Operate the transceiver in the normal way.
- 6) To cancel the tone squelch, repeat steps 3) and 4) so that no tone indicator appears.

Pocket beep operation (p.26)

- 1) Set the operating frequency.
- 2) Set the desired subaudible tone in set mode.
- 3) Push [MULTI] - if „D“ appears push [MULTI (v^)] to select „T“.
- 4) Rotate [DIAL] until „TSQL(\*)“ appears, then push [VFO]..
- 5) When receiving a call, push [PTT] to answer or push [VFO] to stop the beeps and flashing.

### **REPEATER OPERATION (p.15)**

- 1) Set the receive frequency (repeater output frequency).
- 2) Push [MULTI] - if „T“ appears push [MULTI (v^)] to select „D“.
- 3) Rotate [DIAL] to select „DUP“ or „-DUP“.
- 4) Rotate [MULTI (v^)] to „T“.
- 5) Rotate [DIAL] to activate the subaudible tone encoder, if necessary.

Operate the transceiver normally: push [PTT] to transmit; release to receive.

Push and hold [SQL] to check whether the other station's transmit signal can be received directly or not.

DTMF tones (p.16)

While pushing [PTT], push the desired digit key(s) to transmit DTMF tones.

1750Hz tone (Europe and Italy version only;p.15)

While pushing [PTT], push and hold [MULTI] for 1 to 2 sec. to transmit a 1750Hz tone signal.

Tone scan (p.26)

- 1) Set an operating frequency or select a memory channel.
- 2) Push [(RIT)SCAN] for 1 sec. to start the tone scan. When the tone frequency is decoded, the set mode contents are programmed with the tone frequency.
- 3) Push [TSCAN] (or [VFO]) to stop the scan.

### SET MODE

- 1) Push [MULTI] for 1 sec.
- 2) Push [MULTI (v^)] to select the desired item.
- 3) Push [MULTI(<->)] to select the desired condition.
- 4) Push [VFO] to exit set mode.

Contents

- CT: CTCSS tone frequency (p.25)  
Sets a tone frequency for tone squelch operation.
- rT: Repeater tone setting (p.15)  
Sets a tone frequency for repeater operation.
- MO: Receive mode (p.14)  
Sets a receive mode.
- TS: Tuning steps (p.10).  
Selects 1 of 8 tuning steps for frequency tuning.
- OW: Offset frequency (p.16).  
Selects an offset frequency for repeater use.
- SC: Scan resume condition (p.24).  
Selects the scan resume condition.
- rV: RIT/VXO (p.13; 1200 Mhz band only)  
Sets RIT/VXO function on or off.

### INITIAL SET MODE

- 1) While pushing [MULTI], push [PWR] to turn power on.
- 2) Push [MULTI (v^)] to select the desired item.
- 3) Push [MULTI(<->)] to select the desired condition.
- 4) Push [VFO] to exit initial set mode.

Contents

- MS: MIC simple mode (p.27).  
Changes switch assignments for the optional HM-75A.
- AO: Auto power OFF (p.28)  
Sets a time for automatic transceiver shutdown.
- LI: LCD backlighting (p.28)  
Selects the backlighting function.
- BE: Beep tones (p.28)  
Toggles beep tones on/off.
- Ar: Auto repeater function (p.17)  
Activates duplex or duplex and tone settings automatically for repeater use.
- PS: Power saver function (p.28)  
Toggles the power saver on/off.
- VO: Voltage indication (p.29)  
Toggles the voltage indication function on/off.

DT: DTMF speed (p.21)

100/fastest <-> 500/slowest

LC: LCD contrast (p.29)

2/high <-> 1/low.

### CPU RESETTING (p.29)

While pushing [SQL]+[VFO]+[MR] push [PWR] to turn power on and reset the transceiver's CPU.

CAUTION: resetting the CPU initializes all set mode, initial set mode and memory contents.

### MISCELLANEOUS

Call channel

- 1) Push [MULTI(<->)] to select the desired band.
- 2) Push [CALL] to select the call channel for the selected band.

Lock function (p.11)

Push [(H/L)LOCK] for 1 sec. to toggle the lock function on/off.

FM broadcast reception (p.12)

Push [MULTI(<->)] one or more times until „WFM“ appears; or set a frequency in the range 76-107.995 Mhz with the digit keys.

Airband reception (p.12)

Push [MULTI(<->)] one or more times until „AM“ appears; or set a frequency in the range 118-135.995 Mhz with the digit keys.

Adjusting volume (p.11)

Push [MULTI(v^)] to adjust the volume.

Changing bands

Push [MULTI(<->)] one or more times.