



INSTRUCTION MANUAL

MULTIBAND FM TRANSCEIVER **IC-T81A/E**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Icom Inc.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL—This instruction manual contains important operating instructions for the IC-T81A/E.

EXPLICIT DEFINITIONS

The explicit definitions below apply to this instruction manual.

WORD	DEFINITION
⚠ WARNING	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.



Versions of the IC-T81A/E which display the “CE” symbol on the serial number seal, comply with the European harmonised standard ETS300 684 (EMC product standard for Commercially Available Amateur Radio Equipment).

CAUTIONS

⚠ WARNING! NEVER hold the transceiver so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting. The transceiver will perform best if the microphone is 5 to 10 cm (2 to 4 in) away from the lips and the transceiver is vertical.

⚠ WARNING! NEVER operate the transceiver with a headset or other audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume or discontinue use.

NEVER connect the transceiver to an AC outlet or to a power source of more than 16 V DC. Such a connection will damage the transceiver.

NEVER connect the transceiver to a power source that is DC fused at more than 5 A. Accidental reverse connection will be protected by this fuse, higher fuse values will not give any protection against such accidents and the transceiver will be ruined.

NEVER attempt to charge alkaline or dry cell batteries. Beware that external DC power connections will charge batteries inside the battery case. This will damage not only the battery case but also the transceiver.

DO NOT push the PTT when not actually desiring to transmit.

Place unit in a secure place to avoid inadvertent use by children.

DO NOT operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

AVOID using or placing the transceiver in direct sunlight or in areas with temperatures below -10°C ($+14^{\circ}\text{F}$) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$).

The use of non-Icom battery packs/chargers may impair transceiver performance and invalidate the warranty.

Even when the transceiver power is OFF, a slight current still flows in the circuits. Remove the battery pack or case from the transceiver when not using it for a long time. Otherwise, the battery pack or installed Ni-Cd batteries will become exhausted.

For USA only:

Caution: Changes or modifications to this transceiver, not expressly approved by Icom Inc., could void your authority to operate this transceiver under FCC regulations.

SUPPLIED ACCESSORIES

Accessories included with the transceiver:

① Battery pack (BP-199 or BP-200)	1
② Antenna	1
③ Handstrap	1
④ Belt clip	1

*Some versions are supplied with a wall charger.

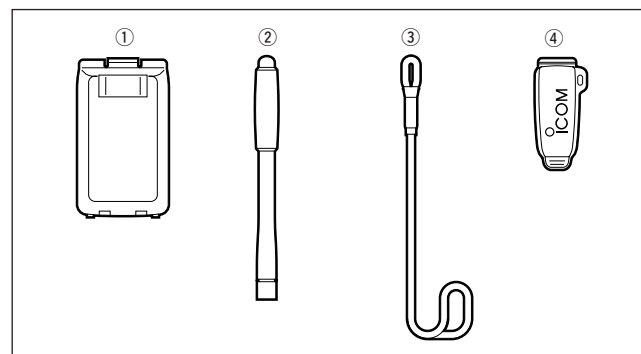


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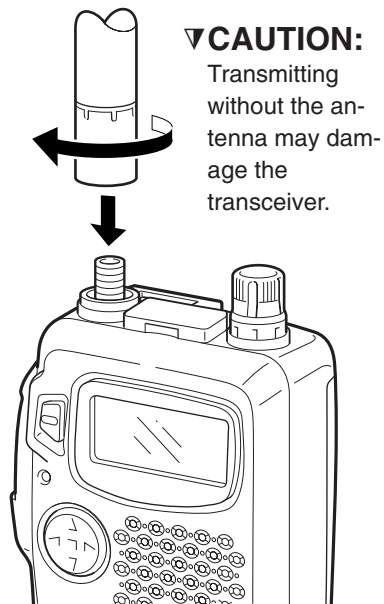
ACCESSORY ATTACHMENT

1

◇ Antenna

Screw the supplied antenna onto the antenna connector as shown in the diagram below.

Keep the jack cover attached when jacks are not in use to avoid bad contacts.

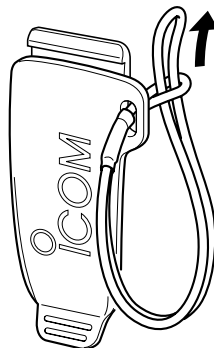


▼CAUTION:

Transmitting without the antenna may damage the transceiver.

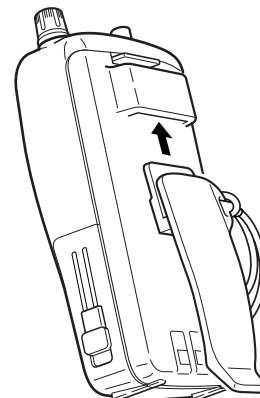
◇ Handstrap

Attach the handstrap to the belt clip, before attaching the belt clip to the transceiver, as below.

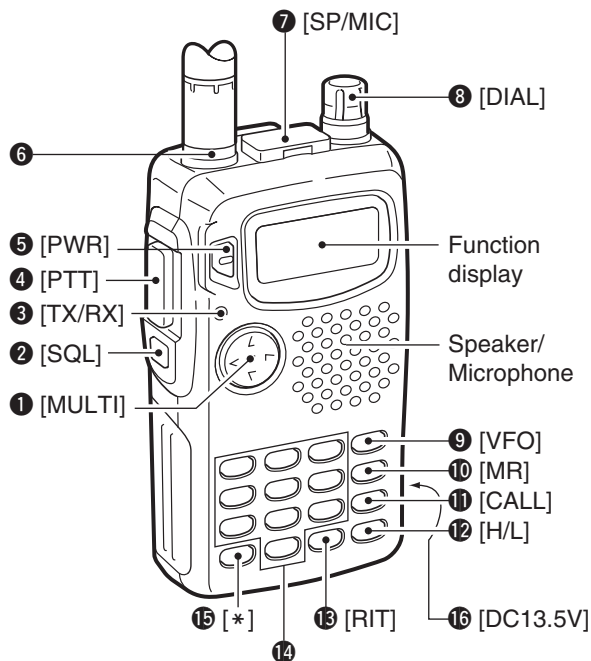


◇ Belt clip

Attach the belt clip to the transceiver as illustrated below.



■ Switches, controls, keys and connectors



NOTE: In this manual—

Push [MULTI] means push \oplus directly;

Push [MULTI(\updownarrow)] means push \oplus up or down; and

Push [MULTI(\leftrightarrow)] means push \oplus left or right. See ①

① MULTIFUNCTION SWITCH [MULTI]

- ➔ Push to select the tone or duplex menu. (pgs. 15–17); push for 1 sec. to enter set mode (p. 35).
- ➔ Push \updownarrow to increase/decrease the volume (p. 11).
- ➔ Push \leftrightarrow to change the operating band; push for 1 sec. to start a scan (p. 22).

② SQUELCH SWITCH [SQL] (p. 11)

- ➔ Push and hold to open the squelch.
- ➔ While pushing, rotate [DIAL] to adjust the squelch setting.

③ TX/RX INDICATOR (p. 11)

Lights red while transmitting; green while receiving (or when the squelch is open).

④ PTT SWITCH [PTT] (p. 11)

Push and hold to transmit; release to receive.

⑤ POWER SWITCH [PWR] (p. 9)

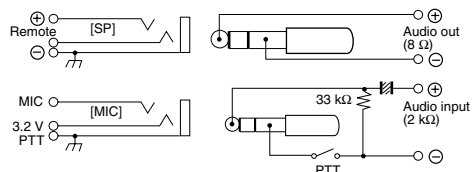
Push for 1 sec. to turn power on and off.

⑥ ANTENNA CONNECTOR (p. 1)

Connects the supplied antenna.

⑦ EXTERNAL SPEAKER AND MICROPHONE JACKS [SP/MIC]

Connect an optional speaker-microphone or headset, if desired. The internal microphone and speaker will not function when either is connected. (See p. 33 for options.)



This connection does not apply when a condenser microphone is connected.

NOTE: When connecting or disconnecting an external speaker-microphone, first turn off power to the transceiver.

8 TUNING CONTROL [DIAL]

Changes the operating frequency; memory channel in memory mode; set mode contents in set mode, etc.

9 VFO/CLEAR KEY [VFO(CLR/MHz)A]

- ➔ Push to select VFO mode. (p. 9)
- ➔ Cancels some functions such as digit input before entry, scans, etc.
- ➔ Push and hold for 1 sec., then rotate [DIAL] to change the MHz digit. (p. 10)
- ➔ While pushing [PTT], this key sends a DTMF “A.” (p. 21)

10 MEMORY MODE KEY [MR(MW)B]

- ➔ Push to select memory mode. (p. 11)
 - “MR” appears while in memory mode.
- ➔ Push for 1 sec. to enter memory write mode. (p. 18)
- ➔ While pushing [PTT], this key sends a DTMF “B.” (p. 21)

11 CALL KEY [CALLC]

- ➔ Push to select the call channel. (p. 19)
- ➔ While pushing [PTT], this key sends a DTMF “C.” (p. 21)

12 OUTPUT POWER KEY [H/L(LOCK)D]

- ➔ Push to toggle between low and high power. (p. 11)
 - “LOW” appears while low power is selected.
- ➔ Push for 1 sec. to toggle the lock function on/off. (p. 11)
 - “L” appears while the lock function is activated.
- ➔ While pushing [PTT], this key sends a DTMF “D.” (p. 21)

13 RIT KEY [RIT(TSCAN)#] (p. 13)

- ➔ Push, then rotate [DIAL] to change the RIT/VXO setting.
 - This function is only available for the 1.2 GHz band and RIT or VXO must be activated in set mode (p. 13).
- ➔ Push for 1 sec. to turn the tone scan function on/off. (p. 26)
- ➔ While pushing [PTT], this key sends a DTMF “F.” (p. 21)

14 DIGIT KEYS

- ➔ Input the specified digit during frequency input, memory channel selection, etc.
- ➔ Transmit the DTMF code of the specified digit while pushing [PTT]. (p. 21)

15 MHz KEY [• (*)]

- ➔ Used as a shortcut for inputting frequencies. (p. 10)
- ➔ Transmits an “E” for DTMF operation while pushing [PTT]. (p. 21)

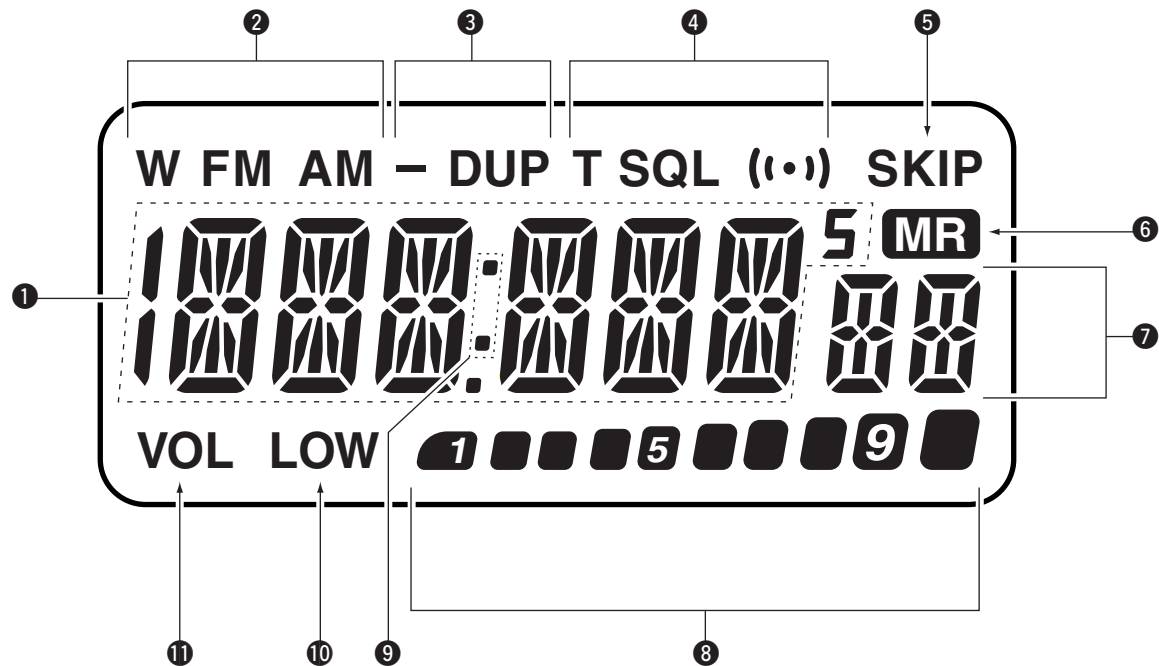
16 EXTERNAL DC POWER JACK [DC13.5V]

Allows you to operate the transceiver with a 4.5 to 16 V DC power source using optional cables, CP-12L or OPC-254L.

CAUTION: DO NOT connect when a battery case is attached.

2 PANEL DESCRIPTION

■ Function display



Count on us!

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