



## INSTRUCTION MANUAL

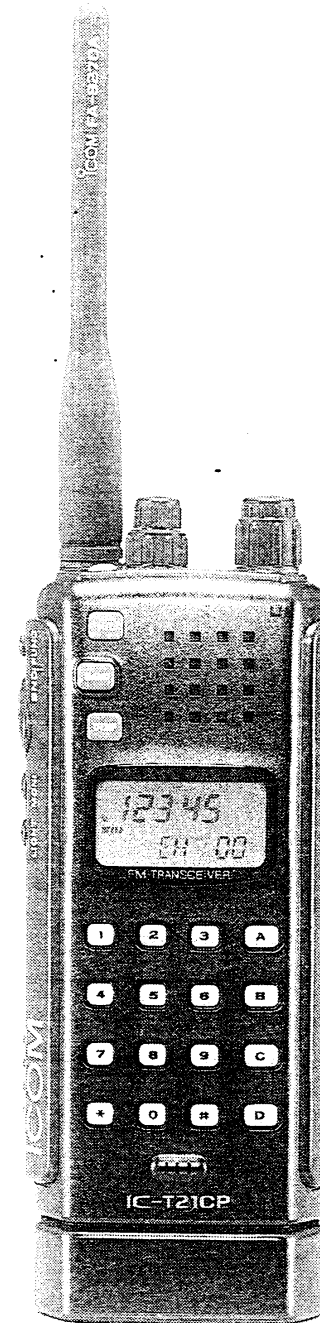
VHF FM TRANSCEIVER

**IC-T21CP**

UHF FM TRANSCEIVER

**IC-T31CP**

icom inc.



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## IMPORTANT

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**READ ALL INSTRUCTIONS** carefully and completely before using the transceiver.

**SAVE THIS INSTRUCTION MANUAL.** This instruction manual contains important safety and operating instructions.

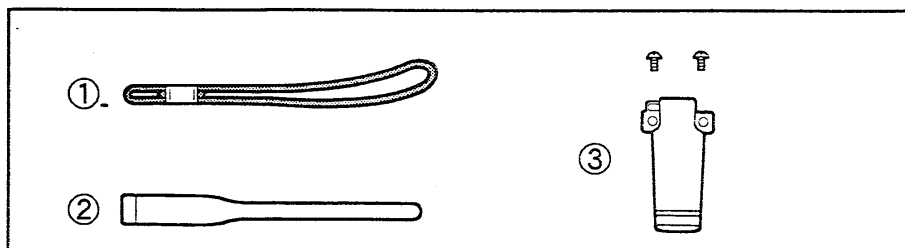
For telephone operation, the OPB (OPTION Board) is required. Otherwise, only talk around operation is available. Ask your system operator or Icom Dealer for details.

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## UNPACKING

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- ① Handstrap ..... 1
- ② Flexible antenna (FA-S270A) ..... 1
- ③ Belt clip and screws ..... 1 set



The BP-152 BATTERY PACK is attached to the transceiver.

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## CAUTIONS

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**NEVER** connect the transceiver to an AC outlet. This connection will ruin the transceiver.

**NEVER** allow children to touch the transceiver.

**DO NOT** turn the power ON while a wall charger is connected to [DC 13.5V] on the top panel. This jack is used for charging only.

**AVOID** using or placing the transceiver in areas with temperatures below  $-10^{\circ}\text{C}$  or above  $+60^{\circ}\text{C}$ .

**AVOID** placing the transceiver in direct sunlight.

**BE CAREFUL!** When transmitting for a long time at high output power, the rear panel will become hot.

**BE CAREFUL!** The use of non-Icom battery packs and chargers may impair transceiver performance and invalidate the warranty.

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# PANEL DESCRIPTION

## Front and side panels

### FUNCTION SWITCH [FUNC]

When pushed and held, some other switches perform secondary functions. "Push [FUNC] + a switch" means "while pushing [FUNC], push the switch."

### SEND SWITCH [SND]

- While in telephone operation: Push to call or to answer back to a call. Push again to end communicating. (pgs. 8, 9)
- While in talk around operation: Push to transmit and release to receive. (p. 12)

### MONITOR SWITCH [MONI]

- While in telephone operation: No function.
- While in talk around operation: Monitors the channel. (p. 13)

### LIGHT SWITCH [LIGHT]

Turns the lighting ON and OFF. (p. 11)

### KEYBOARD (p. 2)

### TRANSMIT/RECEIVE INDICATOR

- While in telephone operation: Lights up in red while communicating. (p. 8)
- While in talk around operation: Lights up in red while transmitting. Lights up in green while receiving. (p. 12)

### HIGH/LOW SWITCH [H/L]

Selects high or low output power level. (pgs. 8, 12)

### SPEAKER

### BAND SWITCH [BAND]

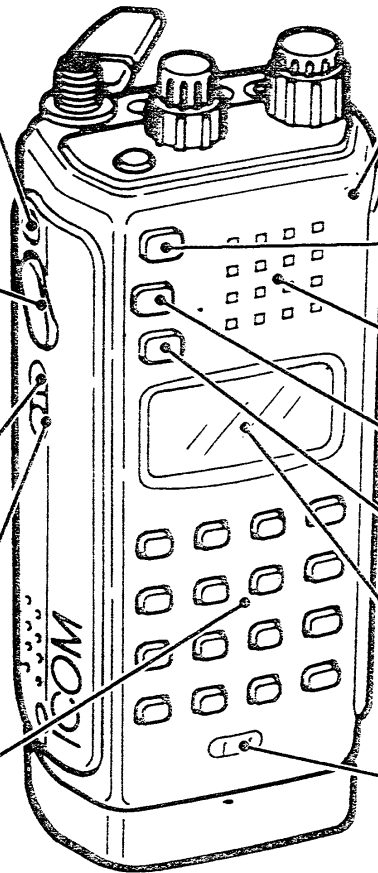
No function.

### DTMF SWITCH [DTMF]

Selects DTMF MEMORY mode. (p. 10)

### FUNCTION DISPLAY (p. 4)

### MICROPHONE



## Keyboard

### ◇ While in telephone operation

Key	Function
<div> <div>1</div> <div>2</div> <div>3</div> </div> <div> <div>4</div> <div>5</div> <div>6</div> </div> <div> <div>7</div> <div>8</div> <div>9</div> </div> <div> <div>*</div> <div>0</div> <div>#</div> </div>	- Input a telephone number. (p. 8) - While in DTMF MEMORY mode: Select a DTMF memory channel. (p. 10)
<div>A</div>	- Cancels re-dialing function. (p. 9) - Exits DTMF MEMORY mode. (p. 10)
<div>C</div>	Cancels telephone number. (p. 8)
<div>D</div>	Allows you to re-dial. (p. 9)
FUNC <div> <div></div> <div>+</div> <div>8</div> </div>	While in DTMF MEMORY mode: Allows you to program a DTMF memory channel. (p. 10)

### ◇ While in talk around operation

Key	Function
<div> <div>1</div> <div>2</div> <div>3</div> </div> <div> <div>4</div> <div>5</div> <div>6</div> </div> <div> <div>7</div> <div>8</div> <div>9</div> </div> <div> <div>*</div> <div>0</div> <div>#</div> </div>	While in code channel setting display: Program a code channel. (p. 14)
FUNC <div> <div></div> <div>+</div> <div>2</div> </div>	Activates or cancels the pager or code squelch function. (p. 15)
FUNC <div> <div></div> <div>+</div> <div>3</div> </div>	While in code channel setting display: Sets a code channel for "receive inhibit" or "receive accept." (p. 14)
FUNC <div> <div></div> <div>+</div> <div>5</div> </div>	Selects code channel setting display for pager or code squelch. (pgs. 14, 15)
FUNC <div> <div></div> <div>+</div> <div>8</div> </div>	Selects SET mode to turn the beep tones ON or OFF. (p. 13)
FUNC <div> <div></div> <div>+</div> <div>#</div> </div>	Start the scan forward direction. (p. 13)
FUNC <div> <div></div> <div>+</div> <div>*</div> </div>	Start the scan reverse direction. (p. 13)
<div>A</div>	- Exits SET mode. (p. 13) - Cancels scanning. (p. 13) - Exits the code channel setting display. (pgs. 14, 15)

**NOTE:** For telephone operation, the OPB (OPTION Board) is required. Otherwise, only talk around operation is available. Ask your system operator or Icom Dealer for details.

# 1 PANEL DESCRIPTION

## ■ Top and rear panels

### CHARGING JACK

[DC13.5V]

Connects the optional BC-74A/E/D/V WALL CHARGER for regular charging. (p. 6)

### CAUTION:

**DO NOT** turn the power ON while charging. This jack is used for charging only.

**DO NOT** connect the wall charger while operating with dry cell batteries using the optional BP-159 BATTERY CASE. Otherwise, battery leakage may occur.

### ANTENNA CONNECTOR

SMA-type connector. Connects the supplied antenna. (p. 5)

### POWER SWITCH [POWER]

- Turns the power ON and OFF. (p. 8)
- With -[FUNC] + [A] when turning the power ON: Selects talk around operation. (p. 12)

### BATTERY PACK

RELEASE BUTTON (p. 7)

### EXTERNAL SPEAKER AND

MICROPHONE JACKS [SP], [MIC]

Not used.

**NOTE: DO NOT** any equipment while telephone operation.

### TUNING DIAL [DIAL]

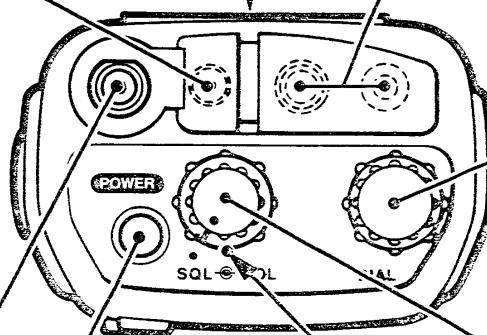
- While in telephone operation: No function.
- While in talk around operation: Selects a channel. (p. 12)

### VOLUME CONTROL [VOL]

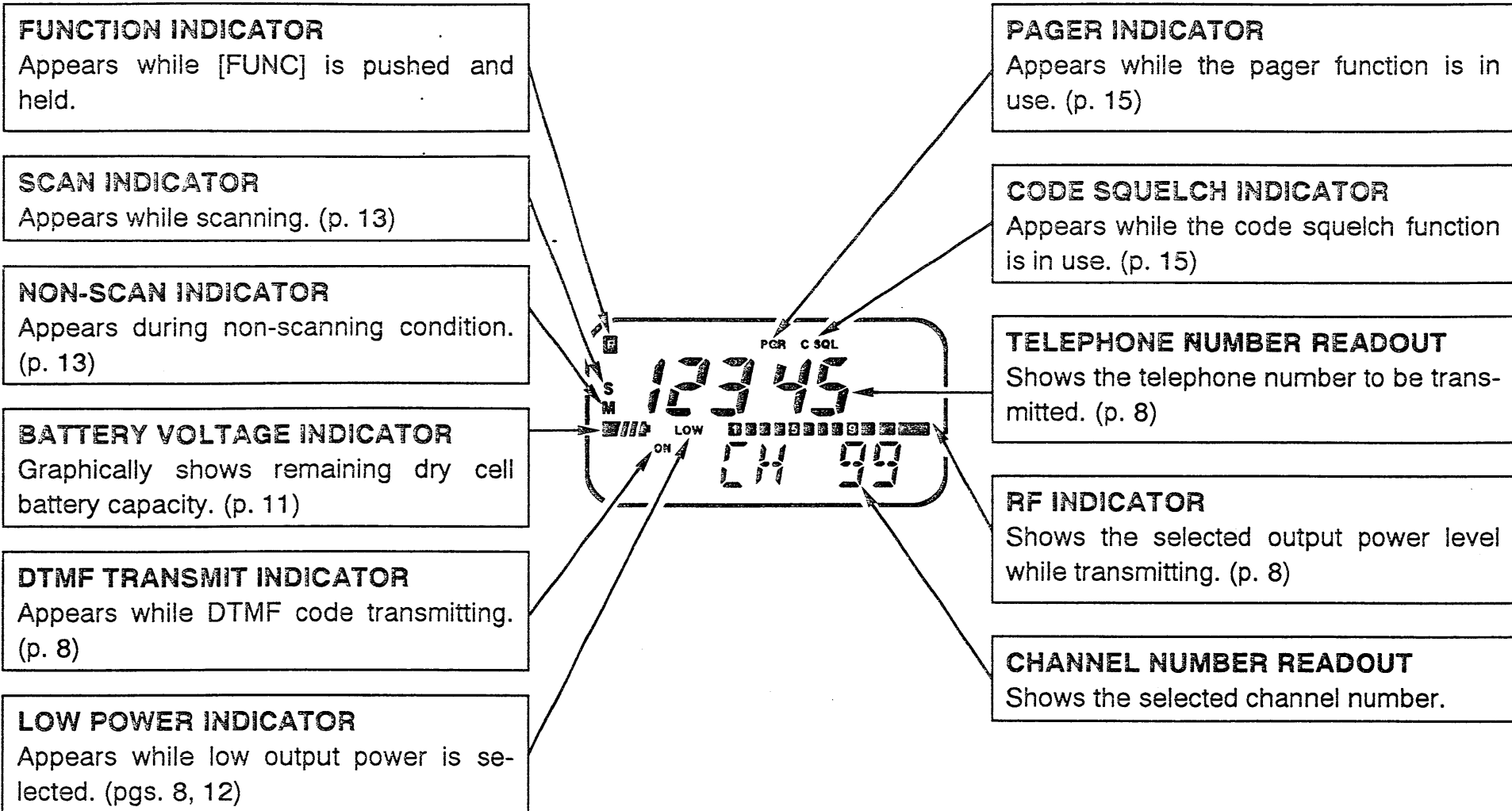
Adjusts the audio level. (pgs. 8, 12)

### SQUELCH CONTROL [SQL]

- While in telephone operation: No function.
- While in talk around operation: Adjusts the squelch level for noise mute. (p. 12)



## Function display



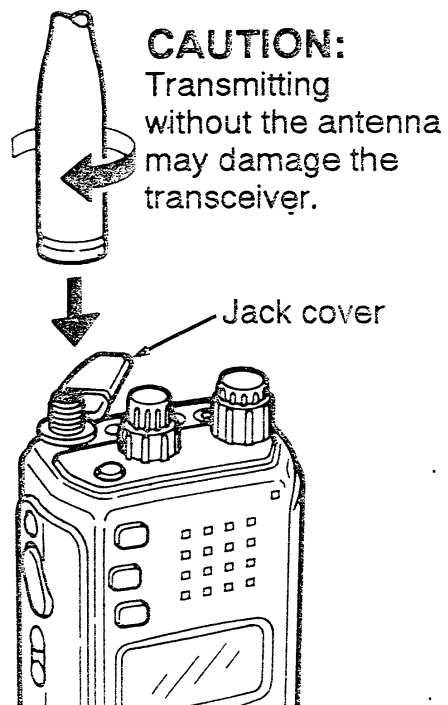
# 2

## ACCESSORY ATTACHMENT

### ◇ Antenna

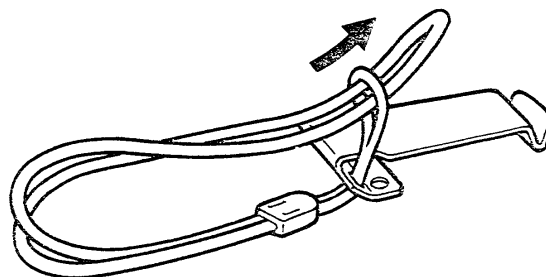
Insert the supplied antenna into the antenna connector and screw down the antenna.

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



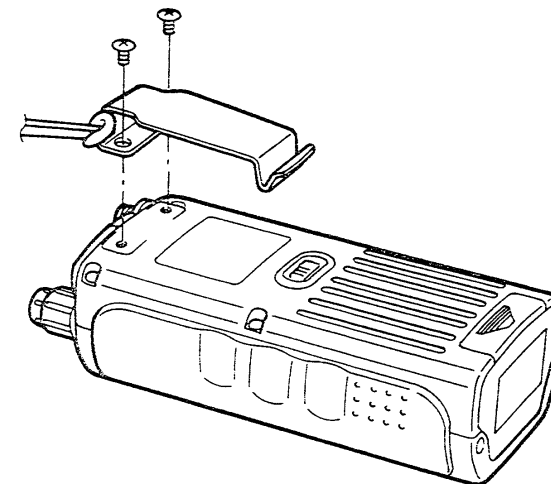
### ◇ Handstrap

Install the handstrap to the supplied belt clip. The handstrap facilitates carrying.



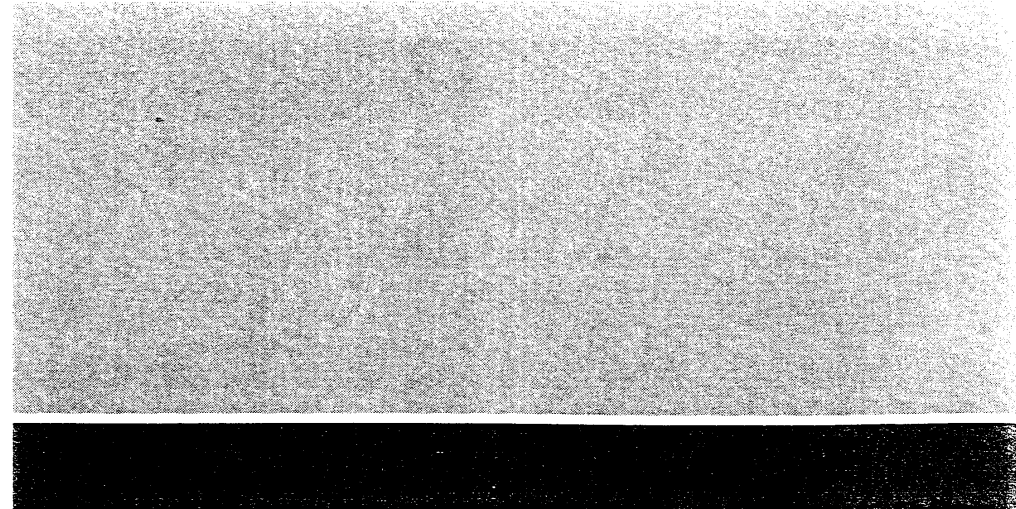
### ◇ Belt clip

Remove the plastic screws, then attach the belt clip with the supplied metal screws. Conveniently attaches to your belt.





**Count on us!**



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