



## INSTRUCTION MANUAL

VHF TRANSCEIVER

**IC-F111**  
**IC-F121**

UHF TRANSCEIVER

**IC-F211**  
**IC-F221**



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 operating instructions for the **IC-F111/F121 VHF TRANSCEIVERS** and **IC-F211/F221 UHF TRANSCEIVERS**.

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## EXPLICIT DEFINITIONS

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

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## PRECAUTIONS

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**⚠ WARNING! NEVER** connect the transceiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

**⚠ WARNING! NEVER** connect the transceiver to a power source of more than 16 V DC such as a 24 V battery. This connection will ruin the transceiver.

**⚠ WARNING! NEVER** cut the DC power cable between the DC plug and fuse holder. If an incorrect connection is made after cutting, the transceiver might be damaged.

**⚠ WARNING! NEVER** place the transceiver where normal operation of the vehicle may be hindered or where it could cause bodily injury.

**CAUTION! NEVER** touch the transceiver (especially the **heat sink**) when transmitting continuously for long periods. It will become hot.

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

**CAUTION! NEVER** expose the transceiver to rain, snow or any liquids. The transceiver may be damaged.

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**USE** the supplied microphone only. Other microphones have different pin assignments and may damage the transceiver.

**DO NOT** use or place the transceiver in areas with temperatures below  $-22^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$ ) or above  $+140^{\circ}\text{F}$  ( $+60^{\circ}\text{C}$ ), or in areas subject to direct sunlight, such as the dashboard.

**DO NOT** operate the transceiver without running the vehicle's engine. The vehicle's battery will quickly run out if the transceiver transmits while the vehicle's engine OFF.

**DO NOT** place the transceiver in excessively dusty environments.

**DO NOT** place the transceiver against walls. This will obstruct heat dissipation.

**DO NOT** use chemical agents such as benzine or alcohol when cleaning, as they damage the transceiver surfaces.

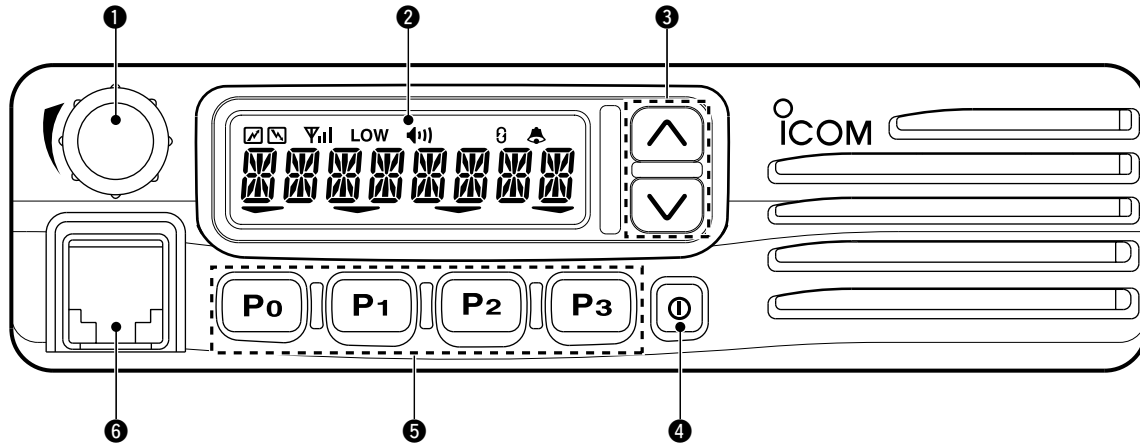
***For U.S.A. only***

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

# 1

## PANEL DESCRIPTION

### ■ Front panel



#### 1 AF VOLUME CONTROL KNOB

Rotate the knob to adjust the audio output level.

- Minimum audio level is pre-programmed.

#### 2 FUNCTION DISPLAY

Displays a variety of information, such as an operating channel number/name, 5-tone code, DTMF numbers and audible condition, etc.

**NOTE:** The above functions depend on pre-programming.

#### 3 UP/DOWN [^]/[v] KEYS

➤ Push to select the operating channel.

- Can be programmed for one of several functions by your dealer. (Same as [P0] to [P3] keys)

#### 4 POWER SWITCH [POWER]

Push to turn the power ON and OFF.

• The following functions are available at power ON as options:

- Automatic scan start
- Password prompt
- Set mode

**5 DEALER-PROGRAMMABLE KEYS [P0] to [P3]**

Desired functions can be programmed independently by your dealer.

**6 MICROPHONE CONNECTOR**

Connect the supplied or optional microphone.

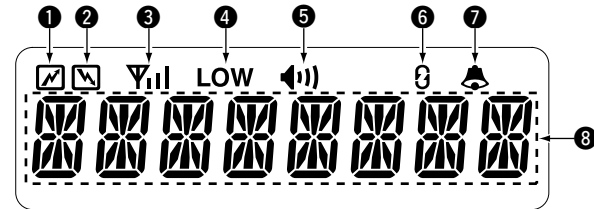
**NEVER** connect non-specified microphones. The pin assignments may be different and the transceiver may be damaged.

**◇ MICROPHONE**

The supplied or optional microphone has a PTT switch and a hanger hook.

- The following functions are available when the microphone is on or off hook:
  - Automatic scan start when on hook.
  - Automatic priority channel selection when off hook.
  - Sets to 'Inaudible' condition (mute condition) when on hook.
  - Sets to 'Audible' condition (unmute condition) when off hook.

**Function display**



**1 TRANSMIT INDICATOR**

Appears while transmitting.

**2 BUSY INDICATOR**

Appears while the channel is busy.

**3 SIGNAL STRENGTH METER**

Indicates relative receive signal strength level.

**4 LOW POWER INDICATOR**

Appears when low output power is selected.

**5 AUDIBLE INDICATOR**

Appears when the channel is in the 'Audible' condition (unmute condition).

**6 SCRAMBLER INDICATOR**

Appears when the scrambler function is activated. (Optional UT-109 (#02)/UT-110 (#02) SCRAMBLER UNIT is required.)

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# 1 PANEL DESCRIPTION

## 7 2/5TONE INDICATOR

Appears when the specified 2/5-tone call is received.

## 8 ALPHANUMERIC DISPLAY

Displays the CH number, 5-tone indication, DTMF numbers, Audible indication, etc.

## ■ Programmable function keys

The following functions can be assigned to [P0], [P1], [P2], [P3], [^] and [V] programmable function keys.

Consult your Icom dealer for details concerning your transceiver's programming.

In the following explanations, programmable function names are bracketed. The specific switch used to activate the function depends on programming.

### • CH UP AND DOWN KEYS

- Select an operating channel.
- Select a transmit code channel after pushing the [TX CH] key.
- Select a DTMF channel after pushing the [DTMF] key.
- Select a scan group after pushing and holding the [SCAN] key.

### • BANK KEY

- Select and determine a bank number.

**Count on us!**

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