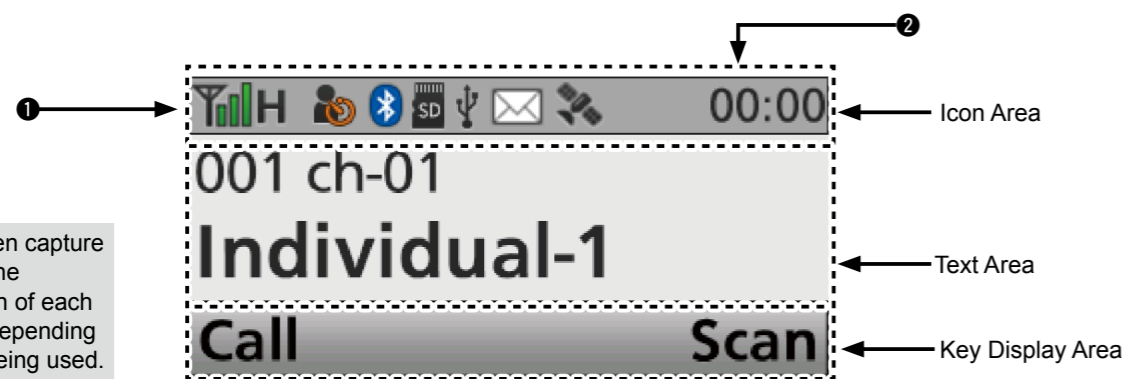


## FUNCTION DISPLAY



**NOTE:** The screen capture is an example. The displayed position of each icon may differ, depending on the function being used.

### ◇ Icon Area

#### Indicators

##### ① SIGNAL STRENGTH INDICATOR

Displays the relative received signal strength.

##### ② CLOCK

Displays the current time.

① "AM" or "PM" is displayed beside the time display when the 12 hour display format is selected.

① "--:--" is displayed instead of the current time when the internal clock is not set.

#### Icons

##### POWER ICON

- "L1" is displayed when the output power is set to low.
- "L2" is displayed when the output power is set to mid.
- "H" is displayed when the output power is set to high.

##### AUDIBLE ICON

Displayed when the channel is in the 'audible' (unmute) mode.

##### MESSAGE ICON

- Blinks after messages (Message or Status Message) have been received.
- Stops blinking when the screen is changed, or any key is pushed, but is displayed if unread messages are still in the Message memory.
- Disappears when all messages in the Message memory have been read.

##### BELL ICON

Displayed when a matching signal is received, depending on the presetting.

##### SCAN ICON

- Displayed when a scan is paused.
- Blinks while a scanning.

##### SCAN TARGET CHANNEL ICON

- Displayed when the channel is selected as a scan target channel.

##### SCRAMBLER/ENCRYPTION ICON

#### In the Analog mode:

Displayed when the Voice Scrambler function is ON.

#### In the Digital mode:

- Displayed when the Voice Encryption function is ON.
- Blinks when decoding an encrypted signal.

##### GPS ICON

- Displayed when valid position data is received.
- Blinks when searching for satellites or calculating position data.

##### RECORD ICON

- Displayed when the Record function is ON.
- Blinks while recording audio.
- ① "△" is displayed when there is no microSD card free space and you cannot record audio.

##### TALK AROUND ICON

Displayed when the Talk Around function is ON.

##### PHONE ICON

- Displayed when the transceiver is connected to a telephone network on the selected channel.
- Blinks while receiving a phone call.

##### SITE LOCK ICON

Displayed when the Site Lock function is ON.

##### LONE WORKER ICON

Displayed when the Lone Worker function is ON.

##### NOISE CANCEL ICON

Displayed when the Noise Cancel function is ON.

##### SURVEILLANCE ICON

Displayed when the Surveillance function is ON.

##### VOX ICON

Displayed when the VOX function is ON.

##### Bluetooth® ICON

- Displayed when Bluetooth® is activated.
- Lights Blue when a Bluetooth® device is connected.
- Does not light when no Bluetooth® device is connected.

##### microSD ICON

Displayed when a microSD card is inserted.

① "△" is displayed when the microSD card has not been formatted.

##### USB ICON

Displayed when a USB device is connected.

### ◇ Text Area

Displays the selected Zone number, Channel number, and Channel name, if set.

### ◇ Key Display Area

Displays the assigned function of [P1] and [P2].

① Ask your dealer about the assigned Software key function.

# ICOM INSTRUCTIONS

VHF P25 TRANSCEIVER

## IC-F7510

UHF P25 TRANSCEIVER

## IC-F7520

Thank you for choosing this Icom product.  
**READ ALL INSTRUCTIONS** carefully and completely before using this product.

## IMPORTANT

This instruction sheet includes some functions that are usable only when they are preset by your dealer. The transceiver may have other functions and operations that are not described in this instruction sheet. Ask your dealer for preset function details.

## ANTENNA

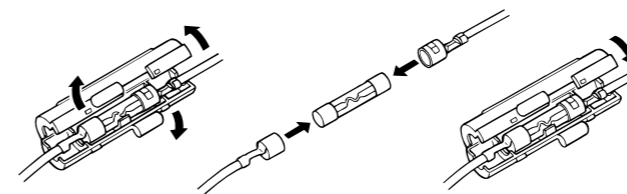
A key element in the performance of any communication systems is the antenna. Contact your dealer for information regarding antennas and how to install them.

## FUSE REPLACEMENT

Fuses are installed in the supplied DC power cable. If a fuse blows, track down the source of the problem, repair it, and then replace the damaged fuse with a new rated one.

① Fuse rating: 20A

**USE** only 20 A fuses



## CLEANING

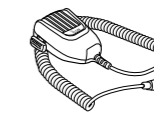
If the transceiver becomes dusty or dirty, wipe it clean with a soft, dry cloth.



**DO NOT** use harsh solvents such as Benzine or alcohol, as they may damage the transceiver's surfaces.

## SUPPLIED ACCESSORIES

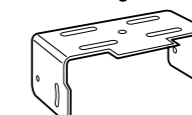
Microphone (Self-grounding type)



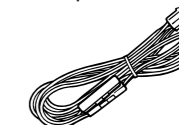
Microphone hanger and screw set



Mounting bracket



DC power cable



Bracket bolts



Mounting screws (M5×12)



Self-tapping screws (M5×16)



Flat washers



Spring washers



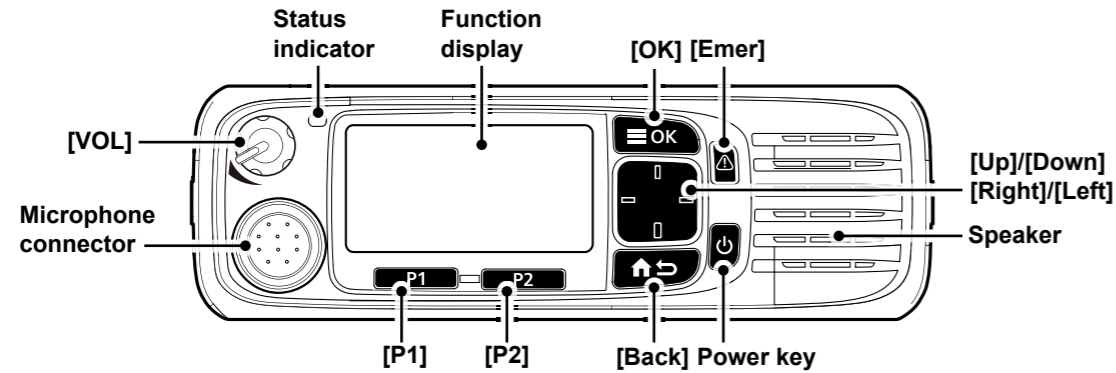
Nuts



**NOTE:** Some accessories may not be supplied, or the shape may be different, depending on the transceiver version.

## PANEL DESCRIPTION

**NOTE:** Different functions may have been assigned to the keys by your dealer, except for the Power key.



### ◇ About the Status indicator

- Lights red while transmitting.
- Lights green while receiving a signal, or when the squelch is open.

### ◇ About the Microphone connector

Connect the supplied or optional microphone.

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

## OPTIONS

### • RMK-5 SEPARATION KIT + separation cable\*1

Enables you to separately install the transceiver's main unit from the front panel for convenient operation.

### • HM-218 HAND MICROPHONE + separation cable\*2

Command microphone with a built-in speaker  
① You need the RMK-5 to connect the HM-218 to the transceiver.

### • RMK-7 DUAL HEAD KIT + separation cable\*1

Enables you to connect two control heads to the transceiver's main unit for dual head operation.

\*1 OPC-2364, OPC-2365, OPC-2366 or OPC-2367 SEPARATION CABLE is used to connect between the control head and the transceiver's main unit.

- OPC-2364: 1.9 m / 6.3 ft
- OPC-2365: 3 m / 9.9 ft
- OPC-2366: 5 m / 16.4 ft
- OPC-2367: 8 m / 26.3 ft

\*2 OPC-2373 or OPC-2374 SEPARATION CABLE for command microphone is used to connect between the HM-218 and RMK-5.

- OPC-2373: 1.9 m / 6.3 ft
- OPC-2374: 8 m / 26.3 ft

### • SP-30, SP-35, SP-35L EXTERNAL SPEAKERS

Input impedance: 4 Ω

SP-30: Rated input= 20 W, Maximum input = 30 W

SP-35/SP35L: Rated input= 5 W, Maximum input = 7 W

### • HM-220, HM-220T, HM-221, HM-221T HAND MICROPHONES

HM-220: Self-grounding heavy duty microphone

HM-220T: Self-grounding heavy duty DTMF microphone

HM-221: Hand microphone

HM-221T: DTMF microphone

### • SM-29 DESKTOP MICROPHONE

### • UX-241 GPS ANTENNA

Enables you to use the GPS function.

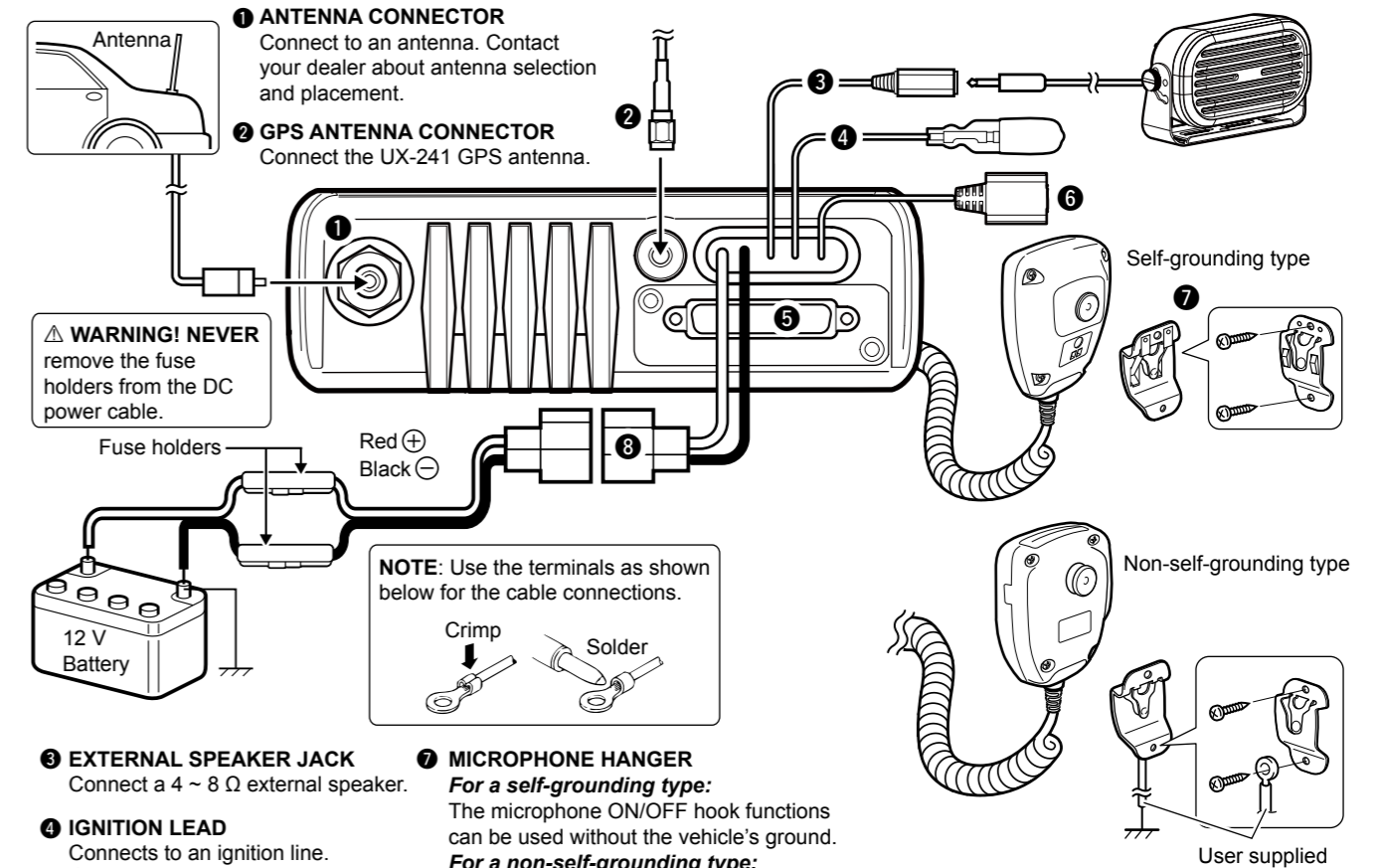
### • VS-3 Bluetooth® HEADSET

The Bluetooth® headset with a [PTT] switch.

### • About the third party Bluetooth® headsets:

Icom has checked the PTT operation with some 3M Peltor headsets such as the WS Headset XP, WS ProTac XP and WS Alert XP. (Compatibility not guaranteed.)

## REAR PANEL CONNECTION



### ① ANTENNA CONNECTOR

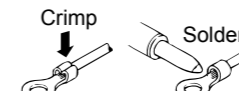
Connect to an antenna. Contact your dealer about antenna selection and placement.

### ② GPS ANTENNA CONNECTOR

Connect the UX-241 GPS antenna.

**WARNING! NEVER** remove the fuse holders from the DC power cable.

**NOTE:** Use the terminals as shown below for the cable connections.



### ③ EXTERNAL SPEAKER JACK

Connect a 4 ~ 8 Ω external speaker.

### ④ IGNITION LEAD

Connects to an ignition line.

⚠ Do not put pressure on this lead. Binding to the DC power cable is recommended.

### ⑤ D-Sub 25-pin

Connects to an external unit.

### ⑥ USB (Micro-B) CABLE

Connects to a PC.

### ⑦ MICROPHONE HANGER

**For a self-grounding type:**

The microphone ON/OFF hook functions can be used without the vehicle's ground.

**For a non-self-grounding type:**

Connect the microphone hanger to the vehicle's ground for microphone ON/OFF hook functions.

### ⑧ Connects to a 12 V DC battery.

Pay attention to polarities. **NEVER** connect to a 24 V battery. This will damage the transceiver.

## BASIC OPERATION

### ◇ Turning power ON

Push [⏻] to turn ON the transceiver.

### ◇ Receiving and Transmitting

#### Receiving:

1. Push [Up] or [Down] to select a channel.
2. When receiving a call, rotate [VOL] to adjust the audio output level to a comfortable listening level.

#### Transmitting:

1. Wait until the channel is clear to avoid interference.
2. While holding down [PTT], speak at your normal voice level.
3. Release [PTT] to receive.

#### IMPORTANT:

To maximize the readability of your signal:

1. After pushing [PTT], pause briefly before you start speaking.
2. Hold the microphone 5 ~ 10 cm (2 ~ 4 inches) from your mouth, then speak at your normal voice level.