FUNCTION DISPLAY

LCD type

❶ →
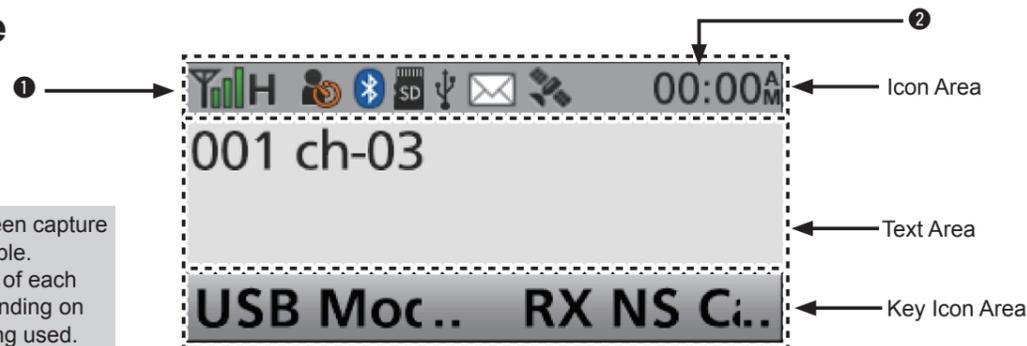❷

Icon Area

001 ch-03

Text Area

USB Moc..   RX NS C..

Key Icon Area

NOTE: The screen capture shows an example. Display position of each icon differ, depending on the function being used.

◇ Icon Area

Indicators

❶ SIGNAL STRENGTH INDICATOR
Displays the relative received signal strength.

❷ CLOCK
Displays the current time.

Icons

POWER ICON L1 L2 H
• "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
• Displayed when a received message (Short Data Message or Status Message) is stored in the message memory.
• Blinks when an unread message is in the message memory.

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

SCAN ICON
• Displayed while scanning.
• Blinks while a scan is paused.

SCAN TARGET CHANNEL ICON
• Displayed when the channel is selected as a scan target channel.

SCRAMBLER ICON
// for the Analog mode //
• Displayed when the Voice Scrambler function is ON.
• Blinks when receiving a scrambled signal.
// for the Digital mode //
• Displayed when the Voice Encryption function is ON.
• Blinks when receiving an encrypted signal.

GPS ICON
• Displayed when a valid position data is received.

RECORD ICON
• Displayed when the Record function is ON.
• Blinks while recording the 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.

BROADCAST CALL ICON
• Displayed when the Broadcast Call function is ON.
• Blinks while receiving a Broadcast 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 VOX
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 there is no Bluetooth® device connected.

microSD ICON
Displayed when a microSD card is inserted.
① "⚠" is displayed when the microSD card has not been formatted.

USB ICON
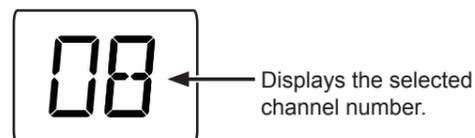Displayed when a USB device is connected.

◇ Text Area

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

◇ Key Icon Area

Displays the assigned function of [P1] and [P2].
① Ask your dealer about the assigned Software key function.

Segment type

Displays the selected channel number.

ICOM INSTRUCTIONS

VHF DIGITAL TRANSCEIVERS
IC−F5400D series
UHF DIGITAL TRANSCEIVERS
IC−F6400D series

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
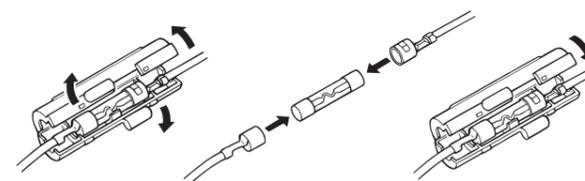
CLEANING

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

Non-self-grounding type — Microphone

OR

Self-grounding type — Microphone

Microphone hanger and screw set   Microphone hanger cable   Microphone hanger and screw set
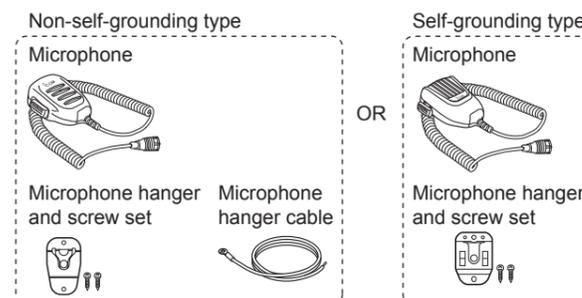
Mounting bracket   DC power cable

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

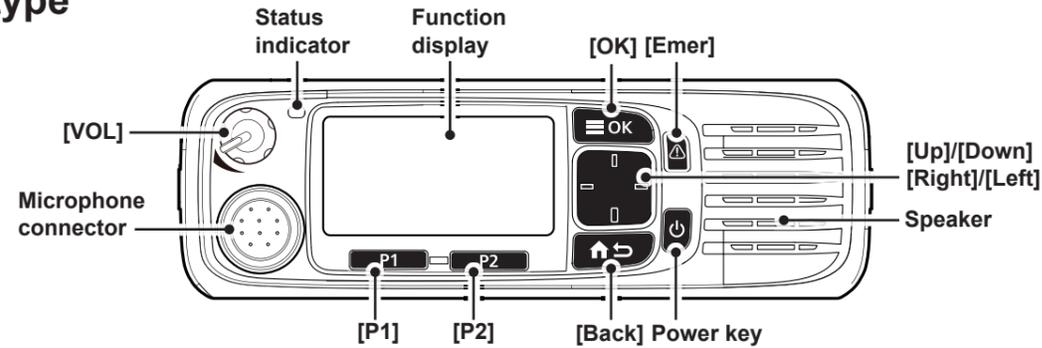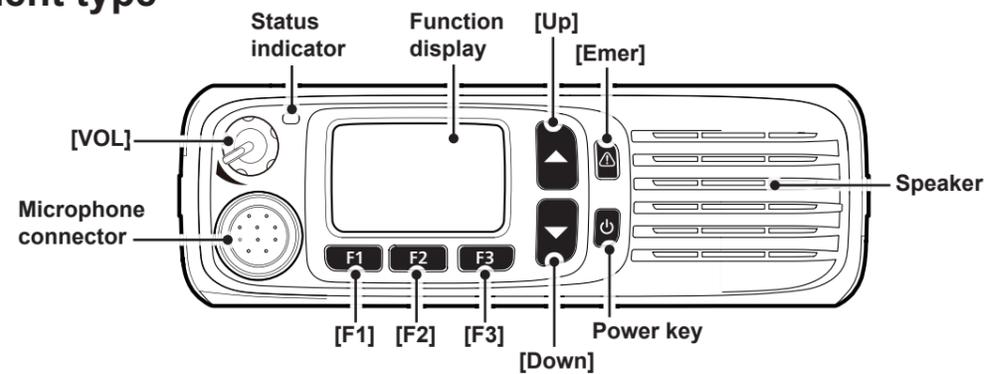**NOTE:** Different functions may have been assigned to the keys by your dealer, except for the Power key.

LCD type

Status indicator
Function display
[OK] [Emer]
[VOL]
Microphone connector
[Up]/[Down]
[Right]/[Left]
Speaker
[P1] [P2]
[Back] Power key

Segment type

Status indicator
Function display
[Up]
[Emer]
[VOL]
Microphone connector
Speaker
[F1] [F2] [F3]
[Down]
Power key
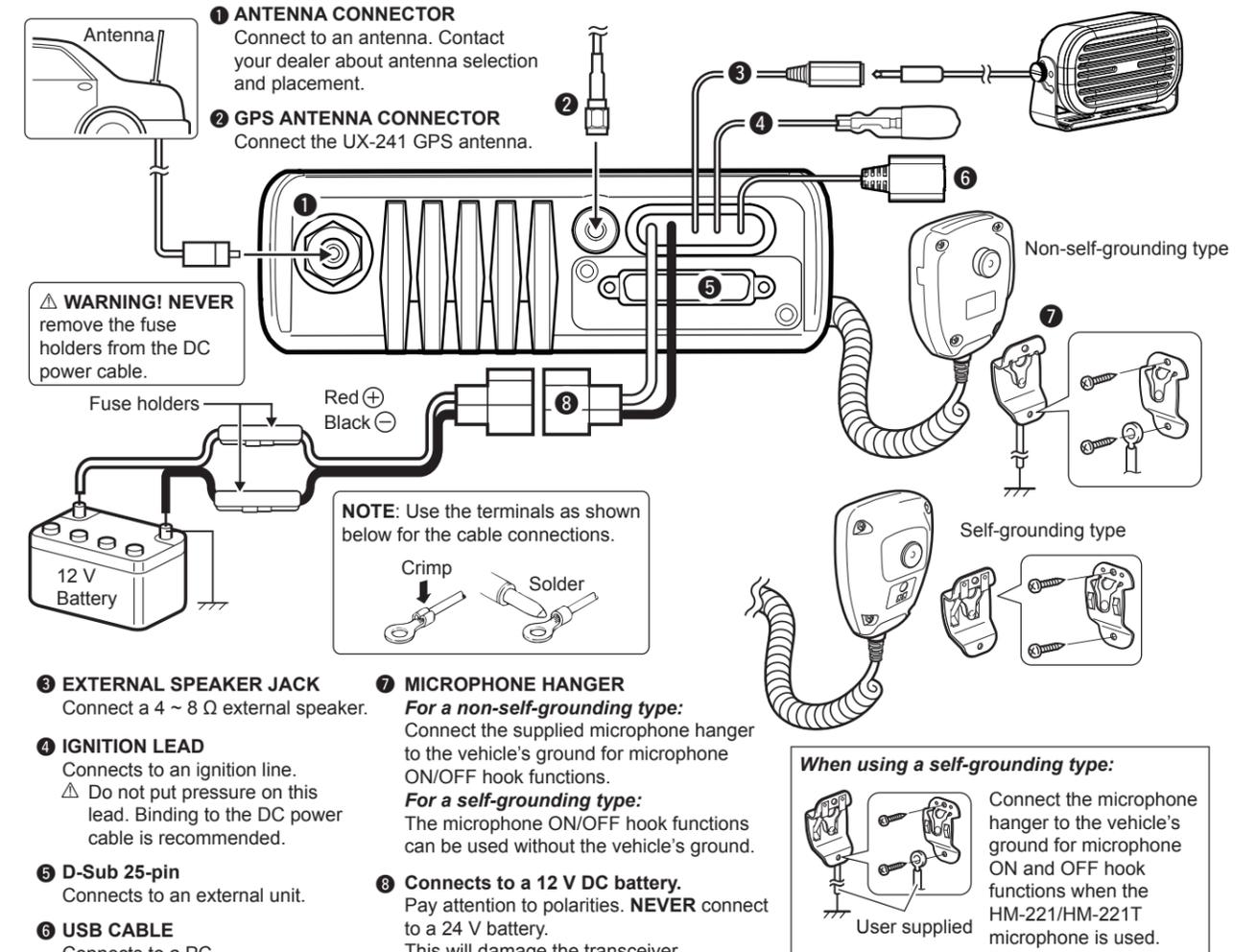
◇ About the Status indicator

• 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.

REAR PANEL CONNECTION

❶ **ANTENNA CONNECTOR**
Connect to an antenna. Contact your dealer about antenna selection and placement.

❷ **GPS ANTENNA CONNECTOR**
Connect the UX-241 GPS antenna.

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

Antenna
Fuse holders
12 V Battery
Red ⊕
Black ⊖

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

Non-self-grounding type
Self-grounding type

When using a self-grounding type:
Connect the microphone hanger to the vehicle's ground for microphone ON and OFF hook functions when the HM-221/HM-221T microphone is used.
User supplied

❸ **EXTERNAL SPEAKER JACK**
Connect a 4 ~ 8 Ω external speaker.

❹ **IGNITION LEAD**
Connects to an ignition line.
⚠ Do not put pressure on this lead. Binding to the DC power cable is recommended.

❺ **D-Sub 25-pin**
Connects to an external unit.

❻ **USB CABLE**
Connects to a PC.

❼ **MICROPHONE HANGER**
For a non-self-grounding type:
Connect the supplied microphone hanger to the vehicle's ground for microphone ON/OFF hook functions.
For a self-grounding type:
The microphone ON/OFF hook functions can be used without the vehicle's ground.

❽ **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

Hold down [⏻] for 2 seconds 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.

OPTIONS

• **RMK-5** SEPARATION KIT + **OPC-2364** SEPARATION CABLE
Enables you to separately install the transceiver's main unit from the front panel for convenient operation.

• **RMK-7** DUAL HEAD KIT + **OPC-2364** SEPARATION CABLE
Enables you to separately install the transceiver's main unit from the front panel for convenient operation.

• **SP-30, SP-35, SP-35L** EXTERNAL SPEAKERS
Input impedence: 4 Ω
SP-30:   Rated input= 20 W, Maximum input = 30 W
SP-35/SP35L: Rated input= 5 W, Maximum input = 7 W

• **HM-218, HM-220, HM-220T, HM-221, HM-221T**
HAND MICROPHONES
HM-218:   Command microphone with a built-in speaker
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.