



## INSTRUCTION MANUAL

VHF TRANSCEIVER

# IC-F520

UHF TRANSCEIVER

# IC-F620

**BIIS 1200**  
**Compatible**



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-F520 VHF TRANSCEIVER and IC-F620 UHF TRANSCEIVER.

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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>	Recommended for optimum use. No risk of personal injury, fire or electric shock.


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## PRECAUTION

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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.

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

**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.

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

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

**NEVER** expose the transceiver to rain, snow or any liquids.

**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°F (–30°C) or above +140°F (+60°C) or, in areas subject to direct sunlight, such as the dashboard.

**AVOID** operating the transceiver without running the vehicle's engine. The vehicle's battery will quickly run out if the transceiver is in transmission while the vehicle's engine OFF.

**AVOID** placing the transceiver in excessively dusty environments.

**AVOID** placing the transceiver against walls. This will obstruct heat dissipation.

**AVOID** the use of chemical agents such as benzene or alcohol when cleaning, as they damage the transceiver surfaces.

**BE CAREFUL!** The transceiver will become hot when operating continuously for long periods.

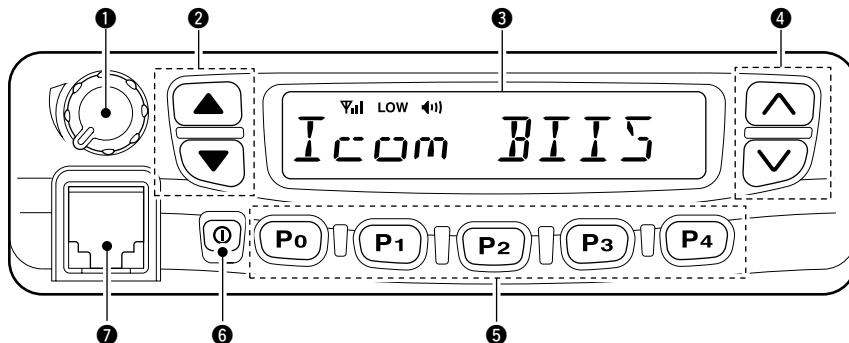
***For U.S.A. only***

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

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## ■ Front panel



### ① AF VOLUME CONTROL KNOB

Rotate the knob to adjust the audio output level.

- Minimum audio level is pre-programmed.

### ② STATUS UP/DOWN KEYS [▲]/[▼]

- ➔ During the standby condition, push to display the transmit status indication and select a status number.
- ➔ When a received SDM is displayed, push to cancel the automatic scroll and scroll the message manually.
- ➔ When an SDM that contains more than 10 characters is displayed, push to scroll the message manually.

### ③ FUNCTION DISPLAY (p. 3)

Displays a variety of information such as an operating channel number/name, code, status message.

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

### ④ CHANNEL UP/DOWN KEYS [^]/[v]

- ➔ During standby condition, push to select an operating channel.
- ➔ After pushing [TX CODE CH], push to select a TX code channel.
- ➔ After pushing [DTMF], push to select a DTMF channel.
- ➔ After pushing [SCAN], push to select a scan group.
- ➔ After pushing [DIGITAL], push to select a BIIS code, status number or SDM.

## ⑤ DEALER-PROGRAMMABLE KEYS [P0] to [P4]

Desired functions can be programmed independently by your Dealer. However, the following functions are assigned as the default for BIIS operation.

### [P0] : [CALL]

Push to transmit a 5-tone/BIIS call.

- Call transmission is necessary before you call another station, depending on your signalling system.

### [P1] : [DIGITAL]

➡ Push to select the call ID list, transmit message or standby condition. Toggles between queue channel and received message record after queue channel is selected.

➡ Push for 1 sec. to select queue channel indication.

### [P4] : [MONI]

Activates one of (or two of) the following functions on each channel independently.

- Push and hold to unmute the channel (audio is emitted; 'audible' condition).
- Push to toggle the mute and unmute conditions (toggles 'audible' and 'inaudible').
- Push to mute the channel (sets to 'inaudible' only).
- Push to unmute the channel (sets to 'audible' only).
- Push after communication is finished to send a 'reset code.'
- Push after communication is finished to send a 'clear down code' during BIIS operation on an MSK channel.

/// **NOTE:** The unmute condition ('audible' condition) may automatically return to the mute condition ('inaudible' condition) after a specified period.

\*No function is assigned for [P2] and [P3].

## ⑥ POWER SWITCH [⓪]

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

## ⑦ MICROPHONE CONNECTOR

➡ Connect the supplied microphone or optional DTMF microphone for SmarTrunk II™/SmarTrunk 3G™ operation here.

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

### MICROPHONE

➡ The supplied 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 (un-mute condition) when off hook.

**Count on us!**

A-6251D-1EX-②  
Printed in Japan  
© 2005–2006 Icom Inc.

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