



INSTRUCTION MANUAL

VHF P25 TRUNKING
MOBILE TRANSCEIVER

IC-F9511HT



This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Icom Inc.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL — This instruction manual contains important operating instructions for the **IC-F9511HT VHF MOBILE TRANSCEIVER**.


✓ **When the optional UT-125 AES/DES ENCRYPTION UNIT is installed:**


When you attempt to re-export this product and/or AES encryption of this product is activated, you must comply with the export regulations of your country, which can be highly restrictive. YOUR FAILURE TO COMPLY WITH EXPORT REGULATIONS MAY SUBJECT YOU TO FINES OR PENALTIES. AES encryption products including this software fall under the control of the Japanese Government as described in Appendix I: Export Legal Controls and Appendix: Exchange Legal Controls. Please consult with your dealer or sales representative for details.

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All other products or brands are registered trademarks or trademarks of their respective holders.

EXPLICIT DEFINITIONS

WORD	DEFINITION
 WARNING!	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

 See the operating guide for details of Analog, MDC and APCO P25 system operations. Consult your Icom dealer or system operator for details concerning your transceivers programming.

FCC INFORMATION

• FOR CLASS B UNINTENTIONAL RADIATORS:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ABOUT IPR

This device is made under license under one or more of the following U.S. Patents: #4,590,473; #4,636,791; #5,148,482; #5,185,796; #5,271,017; #5,377,229; #4,716,407; #4,972,460; #5,502,767; #5,146,497; #5,164,986; #5,185,795; #5,164,986, #5,185,795, and #5,146,497.

* IPR means 'Intellectual Property Rights.'

VOICE CODING TECHNOLOGY

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form. U.S. Patent Nos. #8,595,002, #8,359,197, #8,315,860, #8,200,497, #7,970,606, and #6,912,495 B2.

PRECAUTIONS

⚠ 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 or use reverse polarity. This could cause a fire or damage 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 may be damaged.

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

CAUTION: NEVER allow children to touch the transceiver.

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

USE the specified 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 -30°C (-22°F) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$), or in areas subject to direct sunlight, such as the dashboard.

DO NOT place the transceiver in excessively dusty environments.

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 against walls. This will obstruct heat dissipation.

DO NOT use harsh solvents such as benzine or alcohol when cleaning, as they damage the transceiver surfaces.

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

KEEP the transceiver away from heavy rain, and never immerse it in the water.

When the supplied/optional microphone*, the front/rear plate(s) and the speaker jack cover of the controller are attached, the main unit and the controller meet IP54 requirements for dust-protection and splash resistance.

However, once these items have been dropped, dust-protection and splash resistance cannot be guaranteed because of possible damage to these cases or the waterproof seal.

* The microphone is not dust-protection and splash resistance.

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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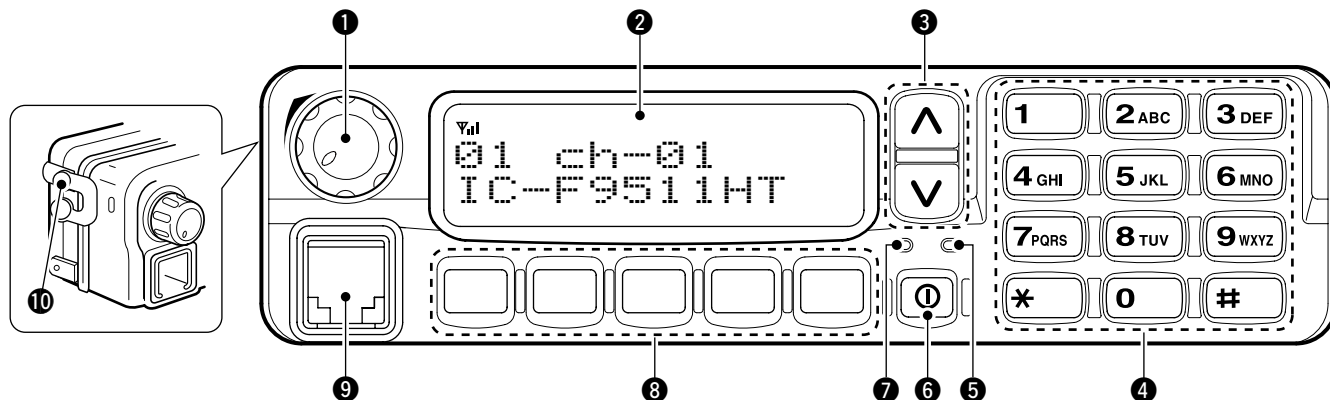
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■ Front panel— Controller



① AF VOLUME CONTROL KNOB

- Rotate the knob to adjust the audio output level.
- Minimum audio level is pre-programmed.

② FUNCTION DISPLAY (p. 3)

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

③ UP/DOWN KEYS

Push to select an operating channel, etc.

*The desired function can be assigned by your dealer. (p. 4)

④ 10-KEYPAD

The keypad allows you to enter digits to:

- Select memory channels, tone channels and DTMF codes (when in the DTMF code channel selection mode)
- Start up with a password
- Input the Individual ID code during P25 mode operation. (Depending on the pre-setting)

⑤ BUSY INDICATOR

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

6 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

7 TRANSMIT INDICATOR

Lights red while transmitting.

8 DEALER-PROGRAMMABLE KEYS

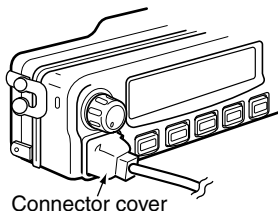
Desired functions can be programmed independently by your dealer. (p. 4)

/// In this instruction manual, these keys are from the left, called [P0]/[P1]/[P2]/[P3]/[P4].

9 MICROPHONE CONNECTOR

Connect the supplied or optional microphone.

- When you connect a microphone, be sure to fit the connector cover of the microphone into the connector to maintain the controller's dust protection and splash resistance.



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

◇ MICROPHONE

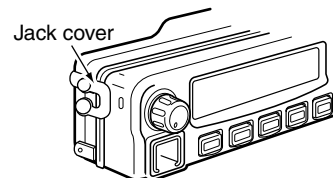
The supplied microphone has a PTT switch and a hanger hook.

- The following functions are available when the microphone is on or off hook (depending on the setting):
 - Automatic scan starts when it is on hook.
 - Scan is cancelled when it is off hook.
 - Scan is paused when it is off hook.
 - Automatic priority channel selection is available when it is off hook.
 - Sets to 'Inaudible' condition (mute condition) when it is on hook.
 - Sets to 'Audible' condition (unmute condition) when it is off hook.

10 SPEAKER JACK

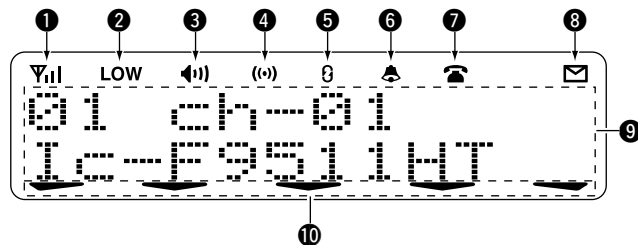
Connect a 4–8 Ω external speaker.

- Max. input power: 7 W
- Attach the jack cover when no external speaker is connected.



1 PANEL DESCRIPTION

■ Function display— Controller



① RECEIVED SIGNAL STRENGTH INDICATOR

Indicates relative signal strength level.



Weak ← Receive Signal level ⇒ Strong

② LOW POWER INDICATOR

Appears when low output power is selected.

- When high output power is selected, no indicator appears.

③ AUDIBLE INDICATOR

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

④ COMPANDER INDICATOR

Appears when the compander function* is activated.

* Analog mode operation only

⑤ SCRAMBLER INDICATOR

Appears when the voice scrambler or encryption function is activated.

⑥ BELL INDICATOR

Appears/blinks when a matched signal is received, depending on the pre-programming.

⑦ TELEPHONE INDICATOR

Appears when a phone call* is received.

* P25 operation only

⑧ SHORT MESSAGE INDICATOR

Appears when an Status message or Short message is received.

⑨ ALPHANUMERIC DISPLAY

Displays an operating channel number, channel name, Set mode contents, DTMF code, etc.

⑩ ACTIVATED KEY INDICATOR

Appears above the key assigned as [Scan Add/Del (Tag)] key when that key has been activated.

See the operating guide for details of Analog, MDC and P25 Trunking/Conventional system operations. Consult your Icom dealer or system operator for details concerning your transceiver's programming.

Count on us!

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