iCOM

INSTRUCTION MANUAL

VHF/UHF DIGITAL TRANSCEIVER

IC-E92D

Icom Inc.

FOREWORD

Thank you for purchase of this fine Icom product. We understand you have a choice of many different radios in the market place. Many hours of research and development went into the design of your IC-E92D, following Icom's philosophy of "technology first."

The IC-E92D VHF/UHF DIGITAL TRANSCEIVER is designed with Icom's superior technology and craftsmanship combining traditional analog technologies with the new digital D-STAR technologies for a balanced packaged.

With proper care, this product should provide you with years of trouble-free operation. We want to take a couple of moments of your time to thank you for making your IC-E92D your radio of choice, and hope you agree with Icom's philosophy of "technology first."

EXPLICIT DEFINITIONS

WORD	DEFINITION
⚠-WARNING!	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	Recommended for optimum use. No risk of personal injury, fire or electric shock.

FEATURES

❍ *DV mode (Digital voice + Low-speed data communication) operation ready*
  – *Text message and call sign exchange*
  – *Transmitting position data with a third-party GPS receiver*
    (You can also use HM-175GPS)
❍ *Waterproof construction (IPX7)*
❍ *GPS receiver connectable*
  – *Optional HM-175GPS is required*
❍ *Simple band scope*
❍ *Dualwatch operation*
❍ *Optional PC remote control*

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-E92D.

PRECAUTIONS

⚠**WARNING RF EXPOSURE!** This device emits Radio Frequency (RF) energy. Caution should be observed when operating this device. If you have any questions regarding RF exposure and safety standards please refer to the Federal Communications Commission Office of Engineering and Technology's report on Evaluating Compliance with FCC Guidelines for Human Radio Frequency Electromagnetic Fields (OET Bulletin 65)

⚠**WARNING! NEVER** hold the transceiver so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting. The transceiver will perform best if the microphone is 5 to 10 cm away from the lips and the transceiver is vertical.

⚠**WARNING! NEVER** operate the transceiver with an earphone, headphones or other audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume level or discontinue use.

⚠**WARNING! NEVER** operate the transceiver while driving a vehicle. Safe driving requires your full attention—anything less may result in an accident.

NEVER connect the transceiver to a power source of more than 16 V DC. This will ruin the transceiver.

NEVER connect the transceiver to a power source using reverse polarity. This will ruin the transceiver.

DO NOT operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

DO NOT push the PTT when not actually desiring to transmit.

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

DO NOT use or place the transceiver in direct sunlight or in areas with temperatures below −20°C or above +60°C.

Place the unit in a secure place to avoid inadvertent use by children.

DO NOT use of chemical agents such as benzine or alcohol when cleaning, as they can damage the transceiver's surfaces.

PRECAUTIONS

◇ Important notes when using GPS receiver

• Please do not use the HM-175GPS close the TX antenna. The transmit signal may cause GPS receiver malfunction.

• The GPS signal cannot pass through the metal object. When using the HM-175GPS inside a vehicle, you may not receive GPS signal. We recommend to use it window side. Please avoid the areas shown in the following:

    1. DO NOT use where it will block the driver's view.
    2. DO NOT use where the air bags could deploy.
    3. DO NOT use it when becoming the obstacle of driving.

• The Global Positioning System (GPS) is built and operated by the U.S. Department of Defence. The Department is responsible for accuracy and maintenance of the system. Any changes by the Department may affect the accuracy and function of the GPS system.

• When the GPS receiver is activated, please do not cover the HM-175GPS with any object.

• The GPS receiver may not work if used in the following locations:

    1. Tunnels or high-rise buildings
    2. Underground parking lot
    3. Under a bridge or viaduct
    4. In remote forested areas
    5. Under bad weather condition (rainy or cloudy day)

SUPPLIED ACCESSORIES

The following accessories are supplied with the transceiver.
① Hand strap ·· 1
② Antenna ··· 1
③ Battery pack (BP-256) ··································· 1
④ Battery charger (BC-167D) ···························· 1
⑤ Belt clip (with screws) ································· 1 set
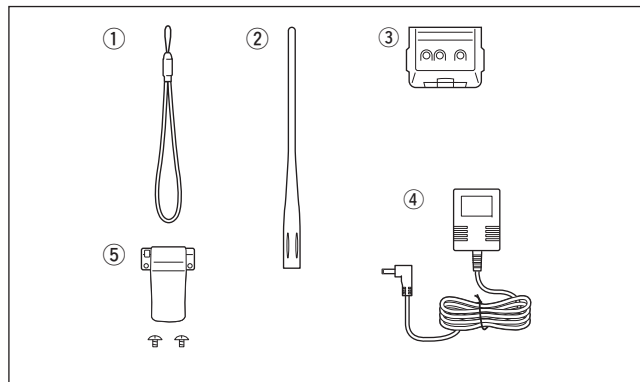
NOTICES

◇ Using the optional HM-175GPS

Noise signals from the HM-175GPS may interfere with the IC-E92D's AM radio or HF band reception.

In this case, set the HM-175GPS's microphone cable as distant to the antenna as far as possible, or turn off the HM-175GPS.

◇ Data output from HM-175GPS

The optional HM-175GPS outputs GPS data (position data, etc.) to the IC-E92D at intervals while receiving only.
Therefore, the transceiver is not updated GPS data while transmitting.
The transceiver transmits GPS data that was received just prior to the last transmission in the DV mode .

◇ About OPC-1797

• NEVER connect the optional OPC-1797 CONNECTION CABLE with non-Icom article specified.

• When connecting a 2.5 (d) mm monaural plug to the microphone jack, it acts as short and becomes a cause of failure.

• Turn power OFF when connecting or disconnecting the OPC-1797.

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WATERPROOF NOTICES

- **BE CAREFUL!** The transceiver employs waterproof construction, which corresponds to IPX7 of the international standard IEC 60529 (2001). However, once the transceiver has been dropped, waterproofing cannot be guaranteed due to the fact that the transceiver may be cracked, or the water-proof seal damaged, etc.
- **MAKE SURE** the [DATA/SP/MIC] connector cap, flexible antenna and battery pack are securely attached to the transceiver, and that the [DATA/SP/MIC] connector cap, antenna and battery pack are dry before attachment. Exposing the inside of the transceiver to water will result in serious damage to the transceiver. After exposure to water, clean the battery contacts thoroughly with fresh water and dry them completely to remove any water or salt residue.
- **NEVER** remove or insert the battery pack when the transceiver is wet or soiled. This may result water or dust getting into the transceiver/battery pack and may result in the transceiver being damaged.
- **IMPORTANT: KEEP** the transceiver's [DATA/SP/MIC] connector cap attached when the speaker-microphone is not in use. If the cover is not attached, water will get into the transceiver. More over, the terminals (pins) will become rusty, or the transceiver will function abnormally if the connector has become wet.
- **NEVER** immerse the connector in water. If the connector becomes wet, be sure to dry it BEFORE attaching it to the transceiver.

ACCESSORY ATTACHMENT
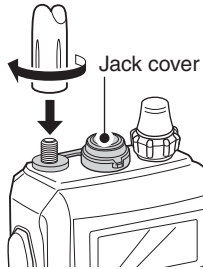
■ Antenna

Insert the supplied antenna into the antenna connector and screw down the antenna as shown at left.

Jack cover

NEVER carry the transceiver by holding the antenna.

KEEP the jack cover attached when jack is not in use to protect the connector from dust and water.

✔ For your information
Third-party antennas may increase transceiver performance. An optional AD-92SMA ANTENNA CONNECTOR ADAPTER is available to connect an antenna with a BNC connector.

■ Belt clip
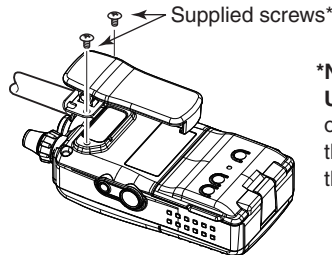
Supplied screws*

*NOTE:
USE the supplied screws only. Using screws longer than specified could damage the transceiver.
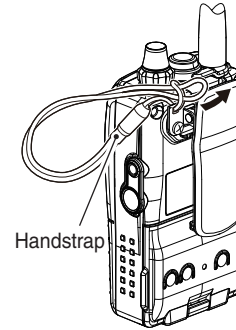
■ Hand strap

Slide the hand strap through the loop on the top of the belt clip as illustrated at left to facilitate carrying the transceiver.

Handstrap

■ Battery pack

Attach the Li-Ion battery pack (BP-256) or battery case (BP-257) as illustrated below.
• Charge the Li-Ion battery pack before use. (pgs. 10, 11)

Battery pack/Battery case

❶

❷
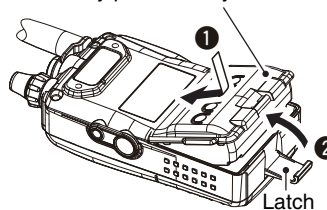
Latch

CAUTION!:
NEVER attach or detach the battery pack when wet.
Be careful when releasing the latch. Because the latch is tightly locked, don't use a finger nail to open it—you may injure yourself. Instead, use something relatively flat, like the edge of a coin or the tip of a screwdriver, to carefully release the latch.

2 PANEL DESCRIPTION

■ Front, top and side panels

Function display

Internal microphone

Speaker
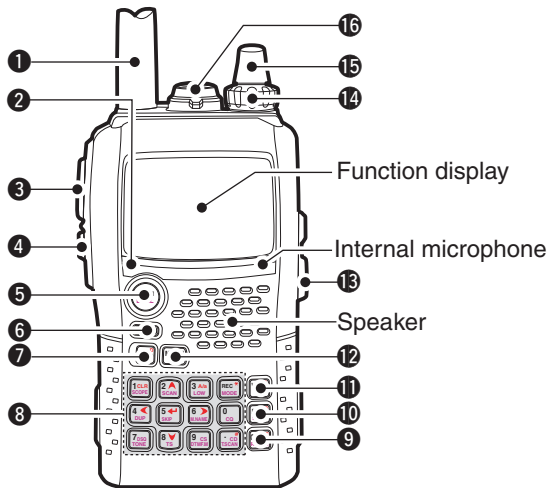
q ANTENNA CONNECTOR (p. 1)

Connects the supplied antenna.
• An optional AD-92SMA adapter (p. 135) is available for connecting an antenna with a BNC connector.

w TX/RX INDICATOR [TX/RX] (p. 24)

Lights green while receiving a signal or when the squelch is open; lights red while transmitting.

e PTT SWITCH [PTT] (p. 24)

Push and hold to transmit, release to receive.

r SQUELCH KEY [SQL]
➥ Push and hold to open the squelch temporarily and monitor the operating frequency. (p. 22)
➥ While pushing and holding this key, rotate **[DIAL]** to adjust the squelch level. (p. 21)

t MAIN/DUAL KEY [MAIN/DUAL]
➥ Push to toggle the main band between A and B bands. (p. 26)
➥ Push and hold for 1 sec. to toggle the dualwatch function ON and OFF. (p. 25)

y POWER KEY [PWR]

Push and hold for 1 sec. to turn the transceiver power ON and OFF. (p. 20)

u BAND KEY [BAND]
➥ During VFO mode operation, push to select an operating frequency band. (pgs. 16, 17)
➥ During memory bank mode, push to select a memory bank. (p. 76)
➥ Enters or sends the DTMF code 'D'. (pgs. 117, 119)

2

❽**KEYPAD** (pgs. 4, 5)

❾**CALL/RX→CS KEY [CALL]/[RX→CS](CALL)**
- ➥ Push to select the call channel/TV channel. (pgs. 16, 28)
- ➥ During DV mode operation, push and hold for 1 sec. to set the received call signs (station and repeaters) for operation. (p. 47)
- ➥ Enters or sends the DTMF code 'C'. (pgs. 117, 119)

❿**MEMORY/SELECT MEMORY WRITE KEY [MR]/ [S.MW](MR)**
- ➥ Push to select memory mode. (p. 15)
- ➥ During memory mode operation, push to toggle between memory and memory bank mode. (p. 76)
- ➥ Push and hold for 1 sec. to enter select memory write mode. (p. 74)
- ➥ Enters or sends the DTMF code 'B'. (pgs. 117, 119)

⓫**VFO/MHz KEY [VFO]/[MHz](VFO)**
- ➥ Push to toggle select VFO mode. (p. 15)
- ➥ During VFO mode operation, push and hold for 1 sec. to select and toggle 1 MHz and 10 MHz tuning steps. (p. 18)
- ➥ Enters or sends the DTMF code 'A'. (pgs. 117, 119)

⓬**MENU/LOCK KEY [MENU/LOCK]**
- ➥ Push to toggle menu screen indication ON and OFF. (p. 93)
- ➥ Push and hold for 1 sec. to toggle the lock function ON and OFF. (p. 25)

⓭**EXTERNAL DC IN JACK [DC IN]**
- ➥ Connects the supplied wall charger, BC-167D, to charge the attached battery pack. (p. 10)
- ➥ Connect an external DC power supply through the optional CP-12L, CP-19R or OPC-254L for external DC operation. (p. 13)

⓮**VOLUME CONTROL [VOL]**
Rotate to adjust the audio output level. (p. 20)

⓯**CONTROL DIAL [DIAL]**
- ➥ Rotate to tune the operating frequency. (p. 18)
- ➥ During memory mode, rotate to select the memory channel. (pgs. 15, 72)
- ➥ While pushing and holding **[BAND]**, selects the operating band in VFO mode. (p. 18)
- ➥ While scanning, changes the scanning direction. (p. 83)
- ➥ While pushing and holding **[SQL]**, sets the squelch level. (p. 21)
- ➥ While pushing and holding **[BAND]**, selects the programmed bank in memory mode. (p. 75)

The assigned function for **[VOL]** and **[DIAL** can be exchanged in menu screen operation. (p. 99)

⓰**EXTERNAL SPEAKER/MICROPHONE JACK [DATA/SP/MIC]**
Connect a communication cable, optional speaker microphone or headset, if desired.
See page 135 for a list of available options.

◇ KEYPAD

KEY	Pushed momentarily	Pushed and held for 1 sec.
1 CLR SCOPE	• Inputs digit '1' for frequency input, memory channel selection, etc. • While pushing [PTT], this key sends the DTMF code "1."	• Displays the simple band scope for a single sweep. (p. 23) • Displays the simple band scope for continuation sweep. (p. 23)
2 SCAN	• Inputs digit '2' for frequency input, memory channel selection, etc. • While pushing [PTT], this key sends the DTMF code "2."	• Starts a scan. (p. 83)
3 A/a LOW	• Inputs digit '3' for frequency input, memory channel selection, etc. • While pushing [PTT], this key sends the DTMF code "3."	• Toggles the transmit output power between high, mid, low and S-low (p. 24). - While pushing and holding this key, with [DIAL] rotation selects the output power.
4 DUP	• Inputs digit '4' for frequency input, memory channel selection, etc. • While pushing [PTT], this key sends the DTMF code "4."	• Activates the following duplex functions in order. - Minus duplex operation— "–DUP" appears. - Plus duplex operation— "+DUP" appears. - Simplex operation— no duplex indicator appears. - While pushing and holding this key, [DIAL] rotation selects the duplex function.
5 SKIP	• Inputs digit '5' for frequency input, memory channel selection, etc. • While pushing [PTT], this key sends the DTMF code "5."	• Turn the frequency skip function ON and OFF in VFO mode, or set the memory channel as the following skip channel in memory mode in order (p. 87). - Skip channel— "SKIP" appears. - Frequency skip channel— "PSKIP" appears. - Non-skip channel— no skip indicator appears.
6 M.NAME	• Inputs digit '6' for frequency input, memory channel selection, etc. • While pushing [PTT], this key sends the DTMF code "6."	• Turn the memory or bank name indication ON and OFF. (p. 78) • Memory name (normal), memory name (large), bank name and OFF are selectable.

Count on us!

#03 Europe

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