

**ICOM**

**INSTRUCTION MANUAL**

DUAL BAND FM TRANSCEIVER  
**IC-2350H**



**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-2350H.

---

## EXPLICIT DEFINITIONS

---

The following explicit definitions apply to this manual.

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

---

## CAUTIONS

---

**⚠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. This connection will ruin 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** let objects touch the cooling fan on the rear panel.

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

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

**USE** Icom microphones only (supplied or optional). Other manufacturers' microphones have different pin assignments and may damage the transceiver.

**DO NOT** connect the transceiver to a power source using reverse polarity. This connection will not only blow fuses but also damage the transceiver.

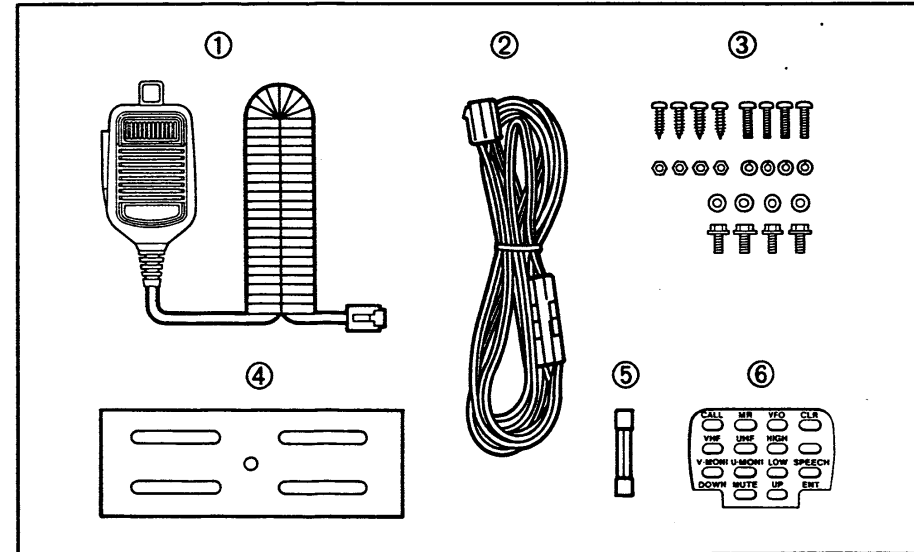
**DO NOT** use or place the transceiver in areas with temperatures below  $-10^{\circ}\text{C}$  ( $+14^{\circ}\text{F}$ ) or above  $+60^{\circ}\text{C}$  ( $+140^{\circ}\text{F}$ ) or, in areas subject to direct sunlight, such as the dashboard.

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

**AVOID** the use of chemical agents 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.

## UNPACKING



### Accessories included with the transceiver:

	<b>Qty.</b>
① Microphone* .....	1
② DC power cable (OPC-346) .....	1
③ Mounting screws, nuts and washers .....	1 set
④ Mobile mounting bracket .....	1
⑤ Fuse (20 A) .....	1
⑥ Microphone sheet (U.S.A. version only) .....	1

\* U.S.A. version : HM-95 DTMF MICROPHONE  
 Europe and Italy versions : HM-97 HAND MICROPHONE  
 (with 1750 Hz tone)  
 Asia version : HM-96 HAND MICROPHONE

---

# TABLE OF CONTENTS

---

<b>IMPORTANT</b> .....	i	<b>4 BASIC OPERATION</b> .....	14–15
<b>EXPLICIT DEFINITIONS</b> .....	i	■ Receiving .....	14
<b>CAUTIONS</b> .....	i–ii	■ Transmitting .....	15
<b>UNPACKING</b> .....	ii	<b>5 REPEATER OPERATION</b> .....	16–18
<b>TABLE OF CONTENTS</b> .....	iii–iv	■ Accessing .....	16
<b>1 PANEL DESCRIPTION</b> .....	1–6	■ Tone frequency .....	17
■ Front panel .....	1	■ Offset frequency .....	17
■ Function display .....	3	■ Auto repeater .....	18
■ Rear panel .....	5	■ Tone scan .....	18
■ Microphone .....	6	<b>6 MEMORY AND CALL CHANNELS</b> .....	19–23
<b>2 INSTALLATION</b> .....	7–10	■ General description .....	19
■ Location .....	7	■ Memory channel selection .....	19
■ Mounting .....	7	■ Programming without checking the overwriting channel .....	20
■ Battery connection .....	8	■ Programming after selecting a memory or call channel .....	21
■ DC power supply connection .....	8	■ Transferring memory contents into the VFO .....	21
■ Antenna installation .....	9	■ Transferring memory or call channel contents .....	22
■ Optional unit installation .....	10	■ Auto channel advance .....	23
<b>3 FREQUENCY SETTING</b> .....	11–13	■ Calling up a call channel .....	23
■ Pre-operation .....	11	<b>7 SCRATCH PAD MEMORY</b> .....	24
■ Using the tuning dials .....	12	■ What is a scratch pad memory .....	24
■ Using [UP]/[DN] switches .....	12	■ Calling up a scratch pad memory .....	24
■ Frequency lock function .....	13		
■ Tuning step selection .....	13		

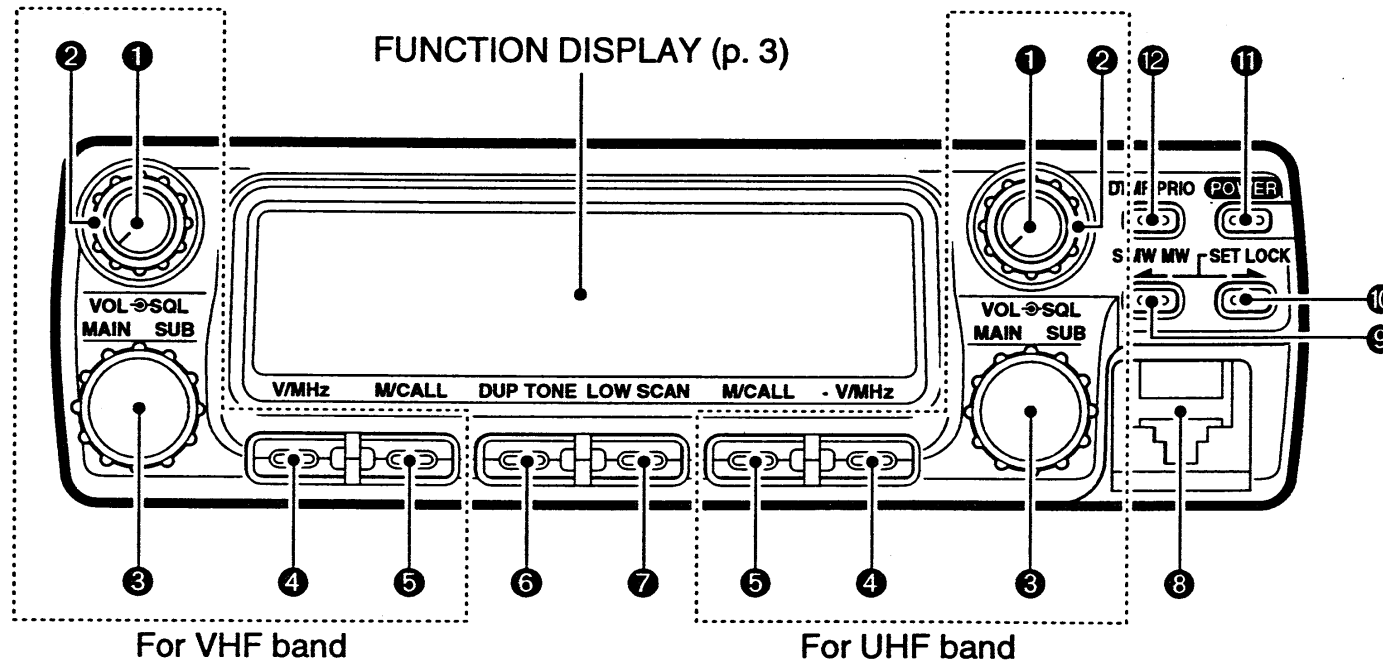
<b>8</b>	<b>SCAN OPERATION</b>	<b>25–30</b>
■	Scan types	25
■	Full scan and programmed scan	26
■	Programming scan edges	27
■	Scan type selection	28
■	Memory scan	28
■	Skip channel setting	29
■	Scan resume condition	30
<b>9</b>	<b>PRIORITY WATCH</b>	<b>31–32</b>
■	Priority watch types	31
■	Priority watch operation	32
<b>10</b>	<b>SUB BAND FUNCTIONS</b>	<b>33</b>
■	Sub band access	33
■	Sub band mute/sub band busy beep	33
<b>11</b>	<b>UP/DN SWITCH REMOTE</b>	<b>34</b>
■	Assigning a function to the [UP] or [DN] switch	34
<b>12</b>	<b>PAGER AND CODE SQUELCH</b>	<b>35–38</b>
■	General description	35
■	Code programming	36
■	Pager operation	37
■	Code squelch operation	38
<b>13</b>	<b>POCKET BEEP AND TONE SQUELCH</b>	<b>39</b>
■	Pocket beep operation	39
■	Tone squelch operation	39

<b>14</b>	<b>OPTIONAL DTMF REMOTE</b>	<b>40–43</b>
■	General description	40
■	Mic DTMF remote operation	40
■	External DTMF remote presetting	41
■	External DTMF remote operation	41
■	Remote function table	42
■	Remote operation examples	43
<b>15</b>	<b>OTHER FUNCTIONS</b>	<b>44–46</b>
■	Display dimmer setting	44
■	Beep tones	44
■	Time-out timer	45
■	Auto power-off	45
■	Cooling fan setting	46
■	Mono band operation	46
■	Demonstration display	46
<b>16</b>	<b>MODE ARRANGEMENT CHART</b>	<b>47–48</b>
<b>17</b>	<b>MAINTENANCE</b>	<b>49–51</b>
■	Troubleshooting	49
■	Fuse replacement	50
■	Partial resetting	51
■	Total resetting	51
<b>18</b>	<b>SPECIFICATIONS</b>	<b>52</b>
<b>19</b>	<b>OPTIONS</b>	<b>53–54</b>
■	Options	53

# PANEL DESCRIPTION

## ■ Front panel

Most switches have primary and secondary functions. When pushed momentarily, the primary function is selected. When pushed for 2 sec., the secondary function is selected.



### ① VOLUME CONTROLS [VOL]

- Adjust the audio level. (p. 14)
- Open the squelch and monitor the transmit frequency when pushed and held. (pgs. 14, 16)

### ② SQUELCH CONTROLS [SQL]

- Adjust the squelch threshold level.
- Activate the RF attenuator (10 dB max.) when rotated further than 12 o'clock. (p. 14).

### ③ TUNING DIALS [MAIN•SUB]

- Select an operating frequency or memory channel. (pgs. 12, 19)
- Select a scratch pad memory when a call channel is selected. (p. 24)
- Assign the main band when pushed. (p. 11)
- Activate and cancel the sub band access function when pushed for 2 sec. (p. 33)

**④ VFO/MHz SWITCHES [V/MHz]**

- Select VFO mode when a memory channel, call channel or scratch pad memory is selected. (p. 11)
- Select the 1 MHz tuning step while in VFO mode is selected. For some versions, select the 10 MHz tuning step and 1 MHz tuning step. (p. 12)

**⑤ MEMORY/CALL CHANNEL SWITCHES [M/CALL]**

Select memory mode or a call channel. (pgs. 19, 23)

**⑥ DUPLEX/TONE SWITCH [DUP•TONE]**

- Selects simplex, “DUP–” or “DUP.” (p. 16)
- Activates the subaudible tone encoder when pushed for 2 sec. (p. 16)
- After installing an optional UT-89, alternately selects the subaudible tone encoder, pocket beep and tone squelch function when pushed for 2 sec. (pgs. 16, 39)

**⑦ LOW POWER/SCAN SWITCH [LOW•SCAN]**

When pushed momentarily		Alternately selects low power 1, 2 and high power. (p.15)
When pushed and held	While in VFO mode	Starts full scan or programmed scan. (p. 26)
	While in memory mode	Starts memory scan. (p. 28)
	While the optional tone squelch is in use	Starts the tone scan function. (p. 18)

**⑧ MICROPHONE CONNECTOR** (See p. 6 for details.)

**⑨ SELECT MEMORY WRITE/MEMORY WRITE SWITCH [S.MW•MW]**

- Selects the desired memory channel number to be programmed when pushed momentarily. (p. 20)
- Programs a memory channel or call channel when pushed for 2 sec. while in VFO mode. (pgs. 20, 21)
- Transfers a memory channel, call channel or scratch pad memory contents into the VFO when pushed for 2 sec. (pgs. 21, 22)

**⑩ SET/LOCK SWITCH [SET•LOCK]**

- Selects SET mode. (p. 48)
- Selects full or programmed scan while scanning in VFO mode. (p. 26)
- Activates and cancels the frequency lock function when pushed for 2 sec. (p. 13)

**⑪ POWER SWITCH [POWER]**

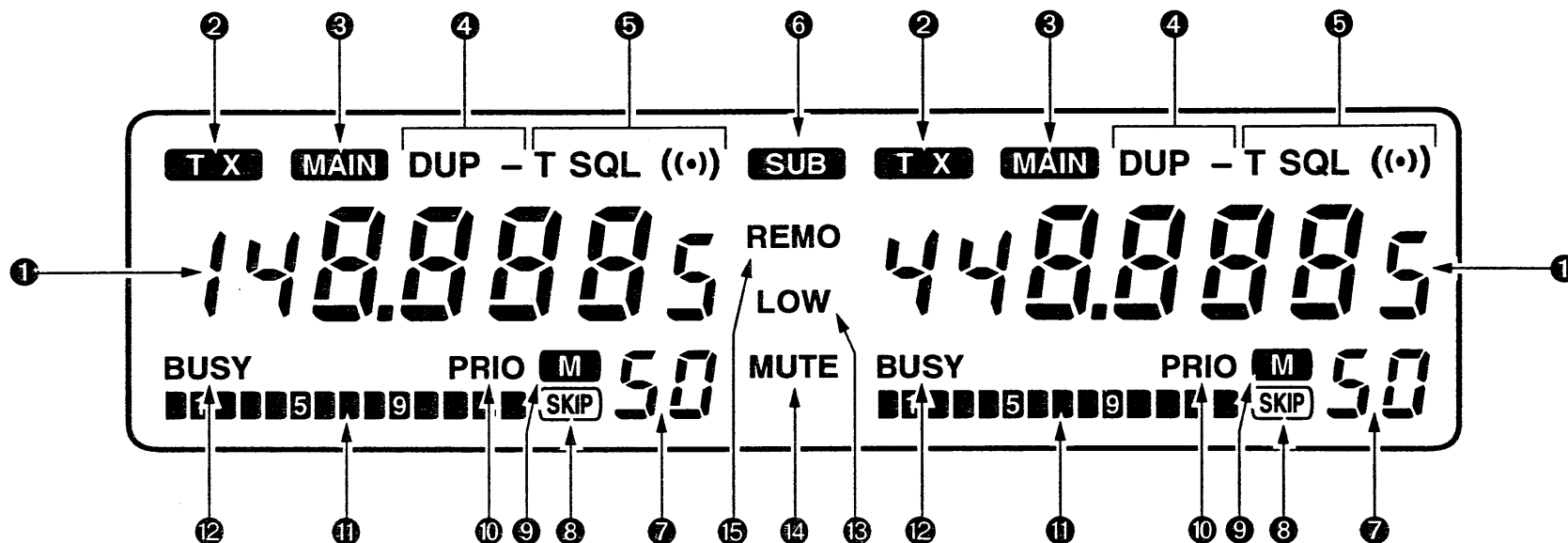
- Turns the power ON and OFF when pushed for 2 sec. (p. 11)
- Some settings can be performed at power ON when other switches are pushed simultaneously. (pgs. 18, 44–46)

**⑫ DTMF/PRIORITY WATCH SWITCH [DTMF•PRIO]**

- Activates and cancels the optional pager, code squelch function or remote standby condition. (pgs. 37, 38, 40)
- Activates the priority watch function when pushed for 2 sec. (p. 32)
- Cancels the priority watch function. (p. 32)

# 1 PANEL DESCRIPTION

## ■ Function display



### ① FREQUENCY READOUTS

Show the operating frequency, set mode contents, etc.

- The decimal point of the frequency flashes while scanning. (pgs. 26; 28)
- "P" or "C" appears in place of the 100 MHz digit while the optional pager or code squelch function is in use, respectively. (pgs. 37, 38)

### ② TRANSMIT INDICATORS (p. 15)

Appear while transmitting.

### ③ MAIN BAND INDICATORS (p. 11)

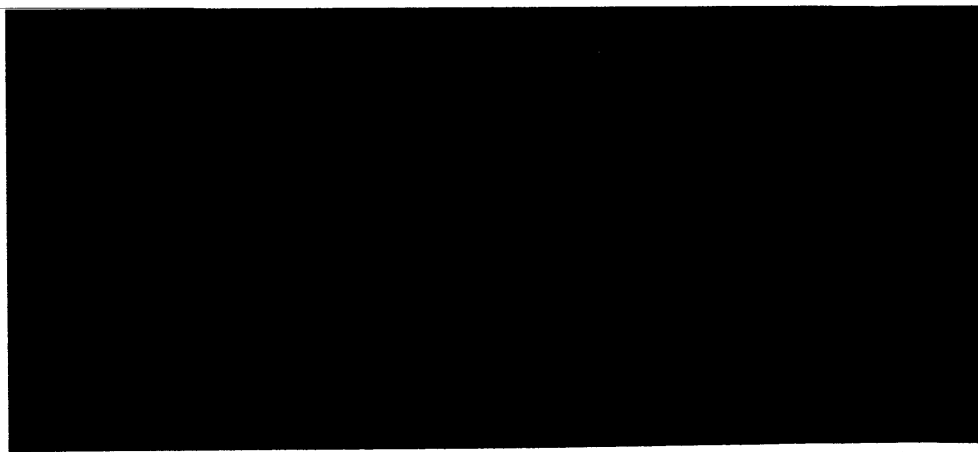
Appear above a frequency readout to show the main band for transmitting and function control.

### ④ DUPLEX INDICATORS (p. 16)

"DUP-" or "DUP" appear during semi-duplex operation (repeater operation).



**Count on us!**



A-5357S-1EX  
Printed in Japan  
Copyright © 1995 by Icom Inc.

**Icom Inc.**  
6-9-16 Kamihigashi, Hirano-ku, Osaka 547 Japan