

# Icom Inc.

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## IMPORTANT

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**READ ALL INSTRUCTIONS** carefully and completely before using the receiver.

**SAVE THIS INSTRUCTION MANUAL** — This instruction manual contains important safety and operating instructions for the IC-R100.

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## FOREWORD

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Thank you for purchasing Icom's **IC-R100 COMMUNICATIONS RECEIVER**. An advanced wideband receiver, the IC-R100 has the following features:

- Wideband frequency coverage 0.1 ~ 1856 MHz\* continuously with FM, AM and Wide FM modes.  
\*Guaranteed range: 0.5 ~ 1800 MHz. Some versions are restricted within certain frequency ranges.
- Compact size for mobile operation capability.
- Multiple scan functions including auto memory write scan.
- 24-hour clock system with multiple timer functions.
- A variety of tuning steps corresponding to any operating band.

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## CAUTIONS

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**WARNING!** When you hear lightning while using an outside antenna, disconnect the antenna connectors and the AC adapter or AC power cable from the AC outlet.

**NEVER** connect a non-recommended AC adapter. This may result in a fire hazard or electric shock.

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

**AVOID** placing the receiver in direct sunlight, such as on the dashboard.

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## OPERATING NOTES

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Information overheard but not intended for you cannot lawfully be used in any way.

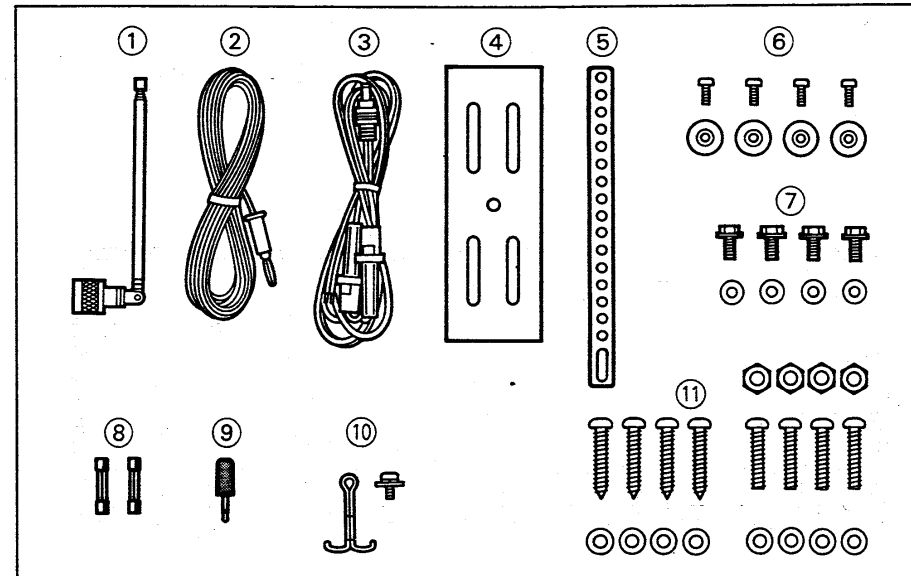
The IC-R100 may receive its own oscillated frequency resulting in no reception or noise-only reception on some frequencies.

When an excessively strong signal is received, for example a signal transmitting within 1 m, the receiver may malfunction. Use an attenuator in this case.

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# UNPACKING

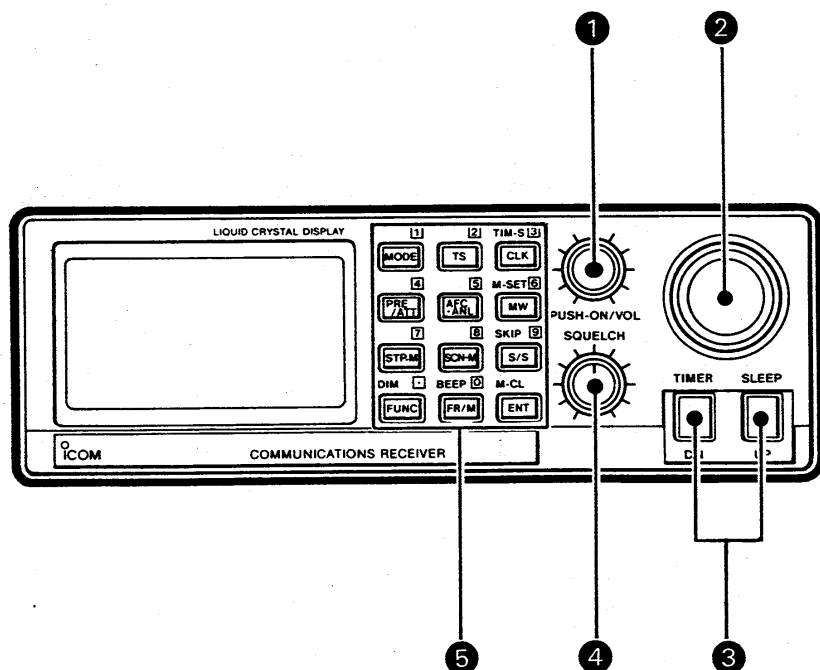


## Accessories included with the IC-R100:

- |   |  |
|---|--|
| ① VHF/UHF telescoping antenna               | ⑨ Speaker plug (AP-313)  |
| ② HF wire antenna (OPC-069)                 | ⑩ Cable tie and set screw (C3 x 6)   |
| ③ DC power cable (OPC-131)                  | ⑪ Mounting screw set   |
| ④ Mounting bracket                          | (M5 x 20 screws, B0 M5 x 20 screws, M5 nuts, M5 flat washers, M5 spring washers) |
| ⑤ Mounting support bracket                  |  |
| ⑥ Rubber feet and screws (M2.6 x 6)         |  |
| ⑦ Bracket bolts and M4 flat washers (4 pcs) |  |
| ⑧ Fuses (FGB 2 A; 2 pcs)                    |  |

# PANEL DESCRIPTION

## ■ Front panel



### ❶ POWER SWITCH/VOLUME CONTROL [PUSH-ON/VOL] (p. 9)

Turns power ON and OFF when pushing the control.

Adjusts the audio output level when rotating the control.

### ❷ TUNING CONTROL (p. 9)

Sets the frequency or memory channel. The [FR/M] key sets the tuning control for frequency or memory channel changes.

### ❸ UP/DOWN SWITCHES [UP]/[DN]















Change the frequency or memory channel.

Activate the clock timer or sleep timer after pushing [FUNC].

### ❹ SQUELCH CONTROL [SQUELCH]

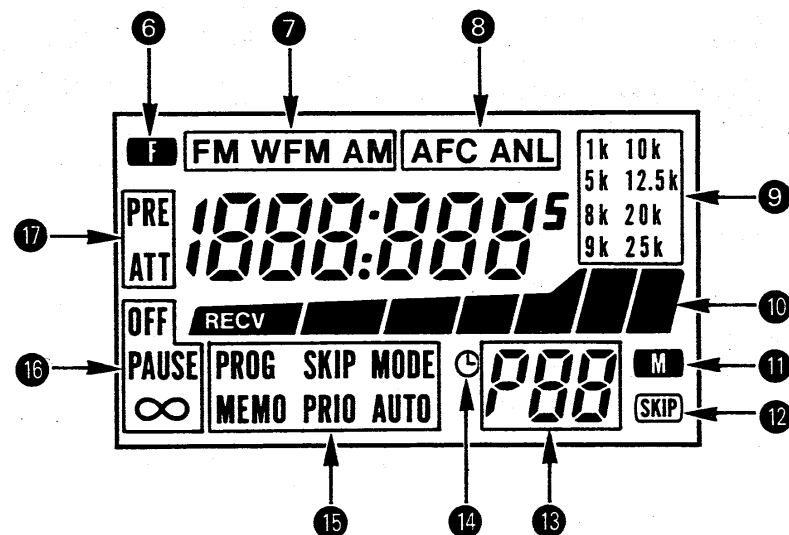
Sets the squelch threshold level. Rotate this control clockwise to cut noise and weak signals.

# 5 KEYBOARD

	When the frequency and memory channels appear.				When the frequency and memory channels disappear (after pushing [ENT].)
	When  disappears for primary functions.		When  appears (after pushing [FUNC]) for secondary functions.		
	Selects FM, WFM or AM.	p. 11	—	—	Input digits for frequency or memory channel setting. (pgs. 10 and 12)
	Selects a tuning step.	p. 9	—	—	
	Displays time in 24-hour system.	p. 20	Enters CLOCK mode.	p. 20	
	Activates preamp or attenuator.	p. 11	—	—	
	Activates the AFC or ANL function.	p. 11	—	—	
	Writes the displayed contents into a memory channel.	p. 13	Changes a memory channel number using the tuning control while holding this key.	p.14	
	Selects a scan resume condition.	p. 17	—	—	
	Selects a scan type.	p. 15	—	—	
	Starts and stops a scan.	p. 18	Sets the displayed memory channel as a skip channel.	p. 19	
	Selects the secondary function of another key.	—	Dims the display backlight.	p. 10	
	Selects FREQUENCY mode or MEMORY mode.	pgs. 9, 12	Turns ON/OFF beep tones.	p. 10	
	Clears the displayed frequency or memory channel number. Enters the digit input as the frequency or memory channel.	pgs. 10, 12	Clears the contents of the displayed memory channel.	p. 14	Retrieve the previous number when no digit is input.

# 1 PANEL DESCRIPTION

## ■ Function display



### 6 FUNCTION INDICATOR

Appears when the [FUNC] key is pushed.  
• Disappears when no switch is pushed for 5 sec.

### 7 MODE INDICATORS (p. 11)

Indicate the receive mode.

### 8 AFC/ANL INDICATORS (p. 11)

Appear when the AFC (Automatic Frequency Control) or ANL (Automatic Noise Limiter) function is activated.

### 9 TUNING STEP INDICATORS (p. 9)

Indicate the selected tuning step increment.

### 10 S-INDICATOR (p. 11)

Shows the relative received signal strength.

### 11 MEMORY INDICATOR (p. 12)

Appears when MEMORY mode is selected and disappears when FREQUENCY mode is selected.

- The [FR/M] key turns ON/OFF the indicator.

### 12 SKIP INDICATOR (p. 19)

Appears when the memory channel is set as the skip channel.

### 13 MEMORY CHANNEL READOUT (p. 12)

Shows the selected memory channel number.

### 14 TIMER INDICATOR (p. 22)

Appears when a timer function is activated.

### 15 SCAN TYPE INDICATORS (p. 15)

Indicate the selected scan type.

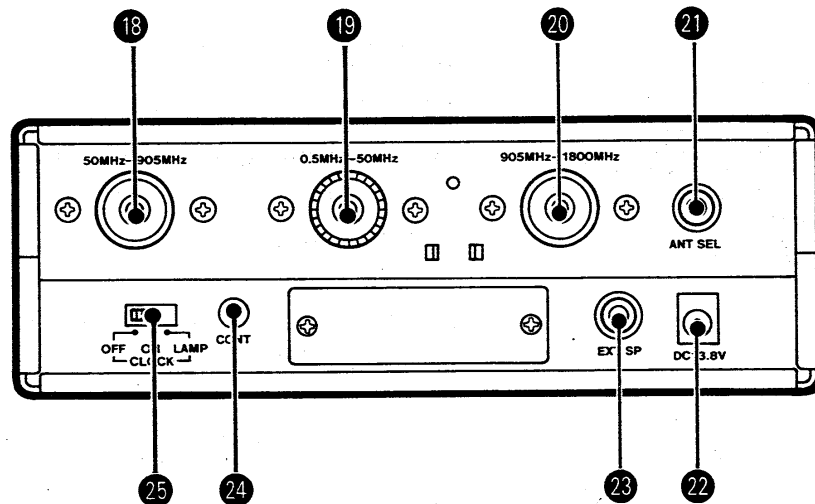
### 16 SCAN RESUME INDICATORS (p. 17)

Indicate the selected scan resume condition.

### 17 PREAMP/ATTENUATOR INDICATORS (p. 11)

Appear when the preamp or attenuator is activated.

## ■ Rear panel



### 18 ANTENNA CONNECTOR [50MHz ~ 905MHz] (p. 7)

Connects to the supplied telescoping antenna or a 50 ~ 1000 MHz wideband antenna to suit your need with a Type-N connector.

### 19 ANTENNA CONNECTOR [0.5MHz ~ 50MHz] (p. 7)

Connects to the supplied wire antenna or 0.5 ~ 50 MHz antenna to suit your need with PL-259 connector.

### 20 ANTENNA CONNECTOR [905MHz ~ 1800MHz] (p. 7)

Connects to the supplied telescoping antenna or a 900 ~ 1800 MHz antenna to suit your need with a Type-N connector.

### 21 ANTENNA SELECTOR JACK [ANT SEL]

Outputs voltage corresponding to the selected band.

- An external antenna selector may be used with this output voltage.

### 22 DC POWER JACK [DC13.8V] (p. 5)

Accepts 13.8 V DC using the supplied DC power cable.

### 23 EXTERNAL SPEAKER JACK [EXT SP]

Accepts a 4 ~ 8  $\Omega$  speaker for connection.

### 24 CONTRAST POT [CONT] (p. 10)

Adjusts the LCD contrast.

### 25 CLOCK SELECTOR SWITCH [CLOCK] (p. 5)

Selects the function display indication when the power is OFF.

“LAMP” : Clock time with backlight is displayed.

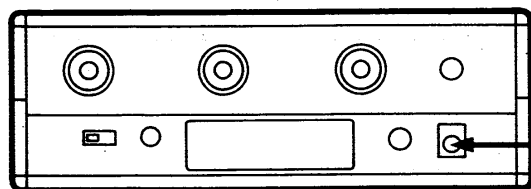
“ON” : Clock time without backlight is displayed.

“OFF” : No clock time is displayed.

## Power connection

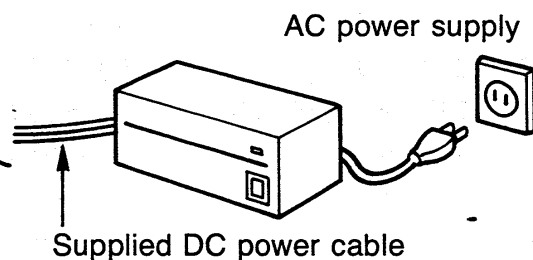
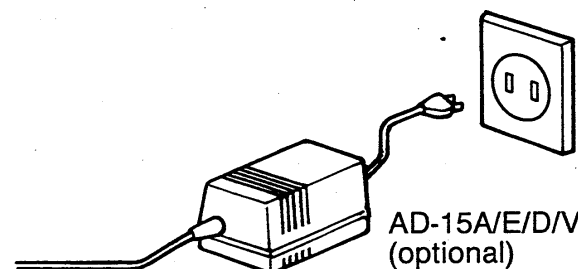
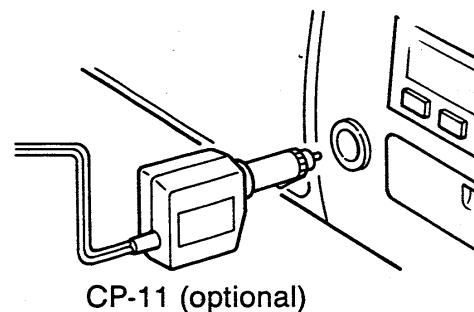
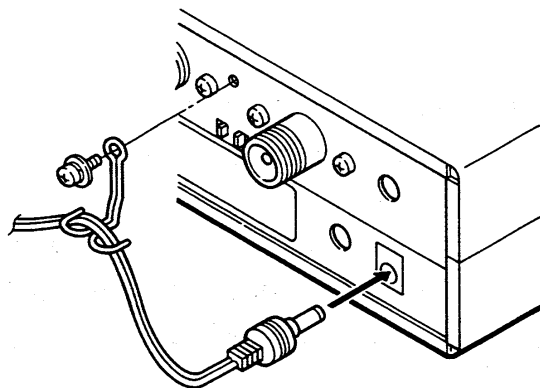
**CAUTION:** NEVER connect the receiver directly to a 24 V battery.

IC-R100 rear panel



### CABLE TIE

Use the supplied cable tie to prevent the power cable from accidentally becoming unplugged.



⊕white ⊖black Fuse (FGB 2 A)

### IN YOUR VEHICLE

**BE CAREFUL!** Set the [CLOCK] switch on the rear panel to "OFF" when directly connecting to a 12 V battery. When [CLOCK] is set at "LAMP" or "ON," the receiver consumes some electricity even if the power is OFF.

### IN YOUR HOME

An optional AD-15A/E/D/V AC ADAPTER is available for AC operation

### USING AN EXTERNAL AC POWER SUPPLY

Connect to a 13.8 V DC power source using the supplied DC power cable.



**Count on us!**

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