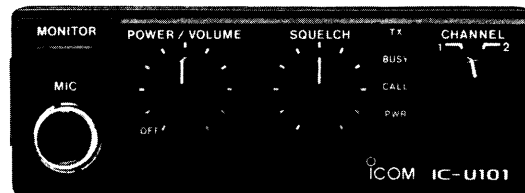


ICOM

INSTRUCTION MANUAL

UHF TRANSCEIVER  
**IC-U101**



Icom Inc.

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## IMPORTANT SAFETY PRECAUTIONS

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

**SAVE THIS INSTRUCTION MANUAL** - This instruction manual contains important safety and operating instructions for the IC-U101.

**NEVER** connect the transceiver to an AC outlet.

**NEVER** connect the transceiver to a 24 V DC car battery. Only a 12 V DC power source can be used.

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

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

**NEVER** disassemble the transceiver. Incorrect reassembly may result in a fire hazard or electric shock.

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

**DO NOT** place the transceiver in excessively humid or dusty environments, or in direct sunlight.

**DO NOT** use the transceiver when it is covered by objects which impede heat dispersal.

**DO NOT** use an accessory which Icom does not sell or recommend such as an extension power cable, as it could result in a fire hazard.

**AVOID** using or storing the transceiver in places with temperatures below  $-25^{\circ}\text{C}$  or above  $+55^{\circ}\text{C}$ .

**BE CAREFUL!** The heatsink may become hot when operating the transceiver for long periods.

## FOREWORD

Thank you for choosing the **IC-U101 UHF TRANSCEIVER**. Icom uses the most advanced, state-of-the-art engineering concepts and the latest technology.

The IC-U101 has the following features:

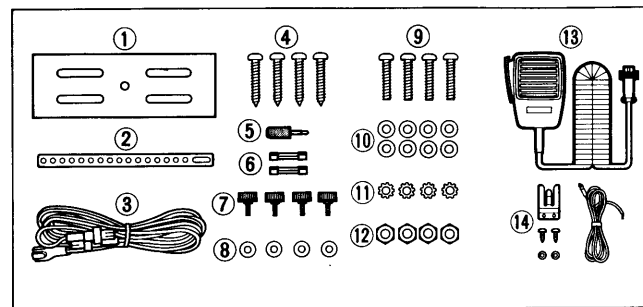
- Easy and simple operation
- Compact size
- 25 (10) W stable output power
- Receive high sensitivity
- Selective calling with 5-Tone capability (optional)

To fully appreciate the capabilities of the IC-U101, please read this instruction manual thoroughly. For further information, please feel free to contact your nearest Icom Dealer or Service Center.

## WARNING

For vehicles equipped with electronic ignition systems, check that the use of two-way radio equipment in the vehicle is suitable.

## UNPACKING



### Accessories included with the IC-U101:

	Qty.
① Mounting bracket (B) .....	1
② Mounting support plate.....	1
③ DC power cable (OPC-044A) .....	1
④ Self-tapping mounting screws (A0 5 × 16).....	4
⑤ External speaker plug (PJ-2240P).....	1
⑥ Fuses (10 A) .....	2
⑦ Mounting bracket knobs (B-1 M4 × 8) .....	4
⑧ Flat washers (M4).....	4
⑨ Mounting screws (M5 × 20).....	4
⑩ Flat washers (M5).....	8
⑪ Star washers (M5) .....	4
⑫ Mounting nuts (M5).....	4
⑬ Microphone (HM-33).....	1
⑭ Microphone hanger .....	1 set

# 1

## PANEL DESCRIPTION

### Front panel

#### POWER/VOLUME CONTROL [POWER/VOLUME]

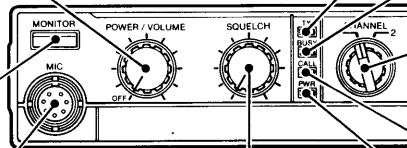
Turns transceiver power ON and OFF and varies the audio output level.

#### MONITOR SWITCH [MONITOR]

The function differs depending on your system application. Ask your Icom Dealer or Service Center.

#### MIC CONNECTOR [MIC]

Connects the supplied microphone.



#### SQUELCH CONTROL [SQUELCH]

Sets the squelch threshold level, muting incoming weak signals.

#### TRANSMIT INDICATOR [TX]

Lights while transmitting.

#### BUSY INDICATOR [BUSY]

Lights when the channel is busy.

#### CHANNEL SELECTOR [CHANNEL]

Selects an operating channel.

#### CALL INDICATOR [CALL]

Lights when receiving an individual call with a 5-Tone signal. (Optional)

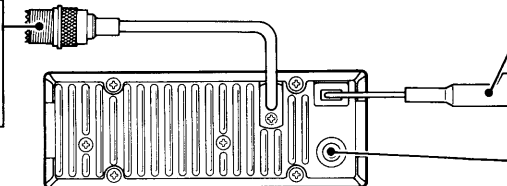
#### POWER INDICATOR [PWR]

Lights when the power is ON.

### Rear panel

#### ANTENNA CONNECTOR [ANT]

Connects an antenna through a coaxial cable with a PL-259 connector.



#### POWER CONNECTOR

Connects a 12 V DC power source using the supplied power cable.

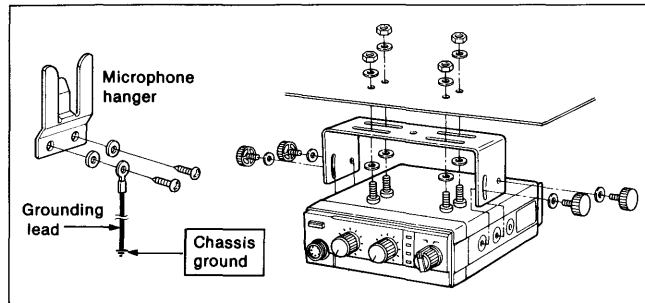
#### EXTERNAL SPEAKER JACK [EXT. SP]

Accepts an external speaker.

## Installation

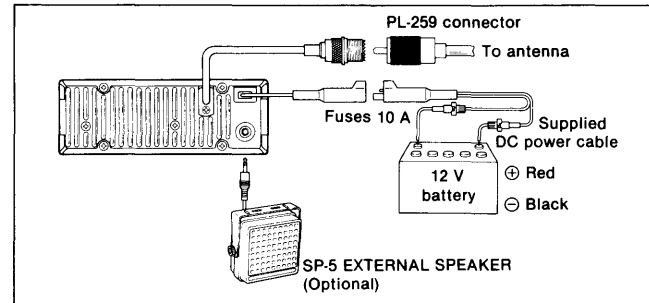
1. Select a location that can support the weight of the transceiver, and does not interfere with your driving in any way.
2. Place the mounting bracket in a suitable mounting location and mark the screw holes on the bracket. Make sure the controls and switches can be handled easily.
3. Drill the holes and mount the bracket as shown in the diagram. Tighten the screws.
4. Install the microphone hanger with a microphone hanger cable at the desired position near the transceiver. The cable **MUST** be grounded.

**NOTE:** DO NOT install the transceiver where hot or cold air blows directly on it.



## Connections

1. **ANTENNA**  
Ask your Icom Dealer or Service Center about the best location and antenna selection.
2. **DC POWER**  
Pay attention to polarities. **NEVER** connect a 24 V DC battery directly. This may damage the transceiver. For AC operation use, the PS-200 AC POWER SUPPLY is available.
3. **MICROPHONE**  
An optional desk microphone such as the SM-12 can also be connected for base station use.
4. **EXTERNAL SPEAKER**  
For clearer audio an optional external speaker can be used, if you desire.



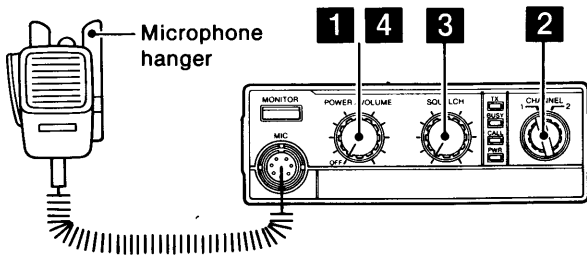
# 3

## BASIC OPERATION

### Receiving

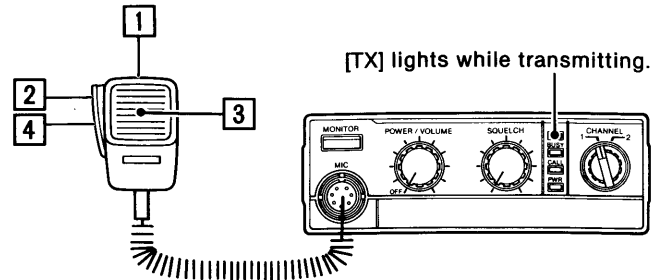
- 1 Rotate [POWER] to turn ON power.
- 2 Select the desired channel.
- 3 Set [SQUELCH] to the center position.
- 4 Adjust [VOLUME] to the desired listening level when a call is received.

**NOTE:** The microphone should be hung on the microphone hanger while you wait for a call. If not, undesired signals may be heard.



### Transmitting

- 1 Take the microphone from the microphone hanger.
  - If the channel is busy, a signal is heard. In this case, wait until the channel becomes clear.
- 2 Push and hold the PTT (Push-To-Talk) switch on the microphone.
  - The [TX] indicator lights.
- 3 Speak into the microphone.
  - **DO NOT** hold the microphone too closely to your mouth or speak too loudly. This may distort the signal.
- 4 To return to receive release the PTT switch.



## ■ Optional function

The transceiver ensures you a highly reliable selective calling 5-Tone system commonly used by land mobile stations. The transceiver receives signals only from specified stations when using the function.

For further information regarding the optional function, ask your nearest Icom Dealer or Service Center.

## ■ Options

- **HG-10 MICROPHONE HANGER BOX**

Provides monitoring when operating with the CTCSS function even if the microphone is left hanging on the microphone hanger.

- **HM-40 HAND MICROPHONE**

Heavy-duty hand microphone.

- **HM-44 HAND MICROPHONE**

Hand microphone with an L-shaped plug.

- **SM-12 DESKTOP MICROPHONE**

Has a flexible neck for your convenience. Equipped with a monitor switch which functions the same as the microphone hanger.

- **SP-5 EXTERNAL SPEAKER**

A heavy-duty, high output power external mobile speaker. Provides excellent audio clarity for reliable communications.

**Count on us!**



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