

OPTIONS

- **CM-80 BATTERY PACK**
Same type as the supplied one.
 - **BM-71U/E DESKTOP CHARGER**
Rapidly charges the battery pack in 1 hour (approx.).
 - **CM-80A MULTI-CHARGER**
Simultaneously charges up to 8 separate battery packs. The AD-10 CHARGER ADAPTER is required for each charging slot.
 - **EM-74 SPEAKER-MICROPHONE**
Conveniently allows you to operate the transceiver without holding it.
 - **UT-68 2-TONE UNIT***
 - **UT-69 DTCS ENCODER/DECODER UNIT***
 - **UT-77 DTMF ENCODER UNIT***
- * Ask your dealer when you need tone operation capability.

SPECIFICATIONS

	IC-U28	IC-H28
Frequency coverage	403-430 MHz	136-150 MHz
	450-480 MHz	150-174 MHz
	480-512 MHz	
Number of channels	Up to 16	
Dimensions (with CM-80)	58(W) x 149(H) x 29(D) mm; 2.3(W) x 5.9(H) x 1.1(D) in	
Weight (with CM-80)	440 g (15.5 oz)	
Output power	5 W (high) 2 W (pre-programmed low) 1 W (low)	

Count on us!

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INSTRUCTION MANUAL

UHF TRANSCEIVER
IC-U28
VHF TRANSCEIVER
IC-H28



Icom Inc.



IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL. This manual contains important safety and operating instructions for the IC-U28 and IC-H28.

CAUTIONS

NEVER use an unauthorized battery pack with this transceiver. Use only the Icom CM-80 BATTERY PACK. The use of non-Icom battery packs/chargers may reduce the performance of and possibly damage 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 an electric shock.

NEVER allow children to touch the transceiver.

FOREWORD

Congratulations on your purchase of Icom's new **IC-U28 UHF/IC-H28 VHF TRANSCEIVER**. These meet U.S. Government Military Standards Specifications 810C and 810D for use in harsh environments that include:

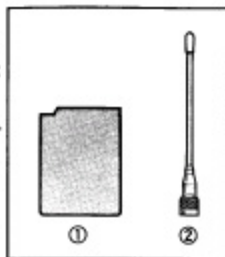
- Low pressure
- Humidity
- Low temperature
- Solar radiation
- Rain
- High temperature
- Dust
- Shock
- Vibration

UNPACKING

Accessories included with the IC-U28 or IC-H28:

	Qty.
① Battery pack (CM-80).....	1
② Flexible antenna.....	1

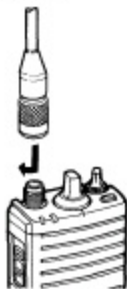
(the IC-H28's antenna differs from the one shown)



1 PRE-OPERATION

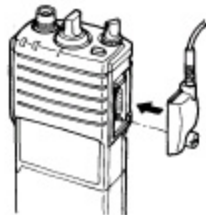
Antenna connection

Connect the supplied flexible antenna to the antenna connector on the top panel of the transceiver. Make sure it is attached securely.



Optional speaker-microphone

An optional speaker-microphone (EM-74) can be attached to the transceiver. The speaker-microphone connects to the side of the transceiver and can be attached to a suit pocket or lapel with the supplied alligator clip.



Battery pack replacement

Before replacing the battery pack, [PWR/VOL] MUST be rotated fully counterclockwise, until a click is heard, to turn the power OFF.

- To REMOVE the battery pack from the transceiver:
Push and hold the battery pack release button upwards, then slide the battery pack to the right (with the front panel facing you).
- To ATTACH the battery pack to the transceiver:
Mate the notched ends between the battery pack and the transceiver, then slide the battery pack until a click sound is heard from the latch.

See diagram below.



Battery pack life

If your battery pack seems to have no capacity even after being fully charged, completely discharge it by leaving the power ON overnight. Then, fully charge the battery pack again.

If the battery pack still does not retain a charge (or very little), a new battery pack must be purchased.

Cautions

NEVER discard a battery pack into a fire. Internal battery gas may cause an explosion.

NEVER immerse the battery pack in water. If the battery pack becomes wet, be sure to wipe it dry.

NEVER short terminals of the battery pack. Internal components may be damaged. Current may flow into nearby metal objects so be careful when placing battery packs in handbags, etc.

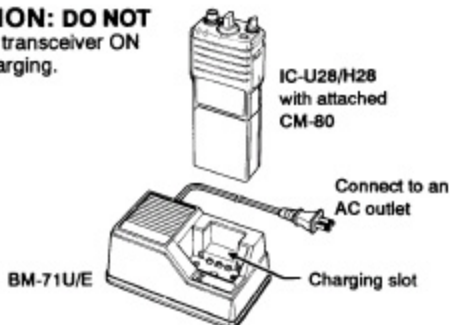
AVOID charging the battery pack in extreme cold (under 0 °C) or extreme heat (over + 40 °C). The battery pack may not fully charge under these conditions.

Charging

Prior to using the transceiver for the first time, the battery pack **MUST** be fully charged with the optional BM-71U/E DESKTOP CHARGER.

- 1) Connect the AC adapter to a domestic AC power outlet.
- 2) Insert the battery pack (with or without transceiver) into the charging slot.
- 3) Make sure the green charging indicator stays ON.
- 4) When charging is finished the green indicator turns OFF.

CAUTION: DO NOT
turn the transceiver ON
while charging.



• charging period: 1 hour (approx.)

3 PANEL DESCRIPTION

ANTENNA CONNECTOR

Connects the supplied flexible antenna.

CALL INDICATOR [CALL]

Lights up in yellow when receiving an optional 2-tone signal.

TRANSMIT/BUSY INDICATOR [TX/BUSY]

Lights up in red while transmitting and green while receiving.

FUNCTION SWITCH [FUNCTION]

Push [FUNCTION] and [PTT] simultaneously to output 1 W of low output power.

PTT (PUSH-TO-TALK) SWITCH [PTT]

Push to transmit, release to receive.

BATTERY PACK RELEASE

Allows the battery pack to be removed from the transceiver.

CHANNEL SELECTOR

Selects a channel. **DO NOT** try to rotate beyond the channel lock point. (Channels can be locked by your nearest authorized Icom Dealer.)

POWER SWITCH/VOL CONTROL [PWR/VOL]

Turns power ON and OFF, and adjusts the audio level.

SQUELCH CONTROL [SQL]

Varies the squelch threshold point for noise mute while receiving.

MONITOR SWITCH [MONITOR]

Push when trying to receive weak signals. Opens the squelch manually.

TERMINAL PLATE COVER

Terminals for the speaker-microphone are located under this cover. Connection information is described in section 1.



■ Turning power ON and OFF

Rotate [PWR/VOL] clockwise to turn the power ON and counter-clockwise to turn the power OFF.

■ Receiving

- 1) Set [PWR/VOL] to the 10 o'clock position.
 - Power comes ON.
- 2) Set [SQL] to the center position.
 - [SQL] is usually closed by the tone function (CTCSS, DTCS, etc.) and does not need further adjustment.
- 3) Set the channel selector to the desired channel.
- 4) When receiving a call, adjust [PWR/VOL] to the desired listening level, if necessary.
- 5) When the channel is busy (green indicator lights but no audio), the [MONITOR] switch allows you to monitor the channel.

■ Transmitting

CAUTION:

Transmitting without an antenna may damage the transceiver.

- 1) Make sure power is ON and that the channel selector, [VOL] and [SQL] have been set the same as for receiving.
- 2) When [BUSY] lights up in green, wait until the channel is clear before transmitting.
- 3) After confirming that the channel is clear, push and hold [PTT] and speak into the microphone.
 - [TX] lights up in red.
 - **DO NOT** hold the transceiver too close to your mouth or speak too loudly. This may distort the signal.
- 4) Release [PTT] to receive.

■ Low battery condition

When the [TX/BUSY] indicator goes out or does not light up while transmitting, the battery pack should be charged or replaced with a fully charged battery pack.

[TX/BUSY]
indicator

