

INSTRUCTION MANUAL

28/50MHz ALL MODE TRANSCEIVER

IC-575A IC-575H



Icom Inc.

### **FOREWORD**

Thank you very much for choosing this Icom product.

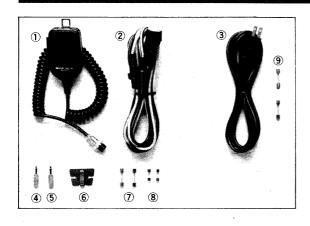
The most sophisticated, 28MHz/50MHz dual band all mode transceiver on the market today, the IC-575A/H is the result of both advanced Icom engineering and state-of-art computer interface technology from Icom. In addition, the IC-575A/H is equipped with Icom's pioneering new DDS (Direct Digital Synthesizer) System, an advanced, computer-developed innovation that enhances the PLL circuit.

To fully understand and appreciate the uses of your new IC-575A/H please study this instruction manual carefully prior to operation. Feel free to contact any authorized Icom Dealer or Service Center if you have questions regarding the operation or capabilities of the IC-575A/H.

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### **UNPACKING**



Accessories included with the IC-575A/H					
1	Microphone*1				
2	DC Power Cable (for IC-575H)	. '			
3	AC Power Cable (for IC-575A)*2				
	External Speaker Plug				
	Key Plug				
6	Microphone Hanger				
	Spare Fuses (DC cable, 20A for IC-575H)				
_	Spare Fuses (PA unit, 3A for IC-575H)				
	Spare Fuses (Rear panel)*3				
_					
× 1	HM-15 for LLK vargions HM-12 for LLS A and Australia vargion	_			

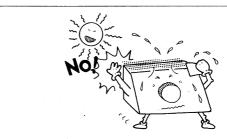
- \*2 Plug type depends on transceiver version
- \*3 5A for IC-575A U.S.A. version 3A for IC-575A Europe and Australia versions

# 1. PRECAUTIONS AND PREPARATIONS

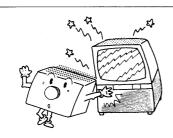
#### **■ INSTALLATION LOCATIONS**



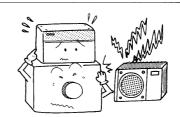
• DO NOT place in excessively hot, humid, or dusty environments.



• DO NOT use in direct sunlight.



• DO NOT place near radios or TV sets where unwanted noise or signals may be received.

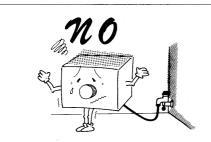


 DO NOT place an AC power supply on the transceiver or vice versa.

#### **■** GROUNDING

To prevent electrical shocks, TVI, BCI and other problems, be sure to ground the transceiver through the GROUND TERMINAL. For best results, use the heaviest gauge wire or strap available and make the connection as short as possible.

**ONLY** use a city water pipe as a good earth point if the pipe is well grounded and made of metal. **NEVER** use a gas pipe or electrical conduit pipe for grounding.



 NEVER use a gas pipe or electrical conduit pipe for grounding.



• **USE** the heaviest gauge wire or strap available and make the connection as short as possible.

#### ■ OPERATING TEMPERATURE NOTE

The IC-575A/H especially may become hot while transmitting for long periods of time.

**WARNING: DO NOT** allow babies or small children to touch the IC-575A/H during operations.

### 2. FEATURES

#### ■ ICOM'S NEWLY DEVELOPED STATE-OF-THE-ART FREQUENCY SYNTHESIZER

The newly developed frequency synthesizer system, the Icom DDS (Direct Digital Synthesizer) unit, provides rapid lockup time. One of the fastest transmit/receive switching times on market, it makes the IC-575A/H ideal for packet and AMTOR communications.

#### ■ HIGH OUTPUT POWER (IC-575H)

The final transistors (2SC2782  $\times$  2) ensure continuous 100W\* output power and low IMD (Inter Modulation Distortion) for SSB, CW and FM.

\*U.K. version: 50W

#### ■ 28MHz/50MHz DUAL BANDER

The IC-575A/H is compact — only  $9.5^{\prime\prime}(241\text{mm})\text{W} \times 3.7^{\prime\prime}(95\text{mm})\text{H} \times 9.4^{\prime\prime}(239\text{mm})\text{D}$  — and includes both 28MHz and 50MHz bands. Having dual band capability in one compact unit completely simplifies installation in every mobile and portable situation.

The IC-575A/H can also receive continuously from 26MHz to 56MHz. For example, Public Service Broadcasting (30  $\sim$  50MHz) can also be heard with the IC-575A/H.

#### ■ NEWLY DEVELOPED ICOM CPU INSTALLED

Built-in 99-channel large memory capacity

Ninety-nine programmable memories are provided in the IC-575A/H to store frequency, mode, subaudible tone frequency, subaudible tone function ON/OFF, duplex direction, and offset frequency information. These memories are backed up by a lithium backup battery for up to five years.

Advanced remote control system

Full communications using a personal computer equipped with an RS-232C port are possible by using the serial port mounted on the rear panel of the IC-575A/H. The computer controls frequency, mode, VFO A/B selection, and memories when an appropriate interface is used. The serial port uses a standard 1200bps data transfer.

● Easy-to-read display

An LCD (Liquid Crystal Display) in the IC-575A/H uses a soft orange illumination for easy visibility when operating on bright days. This display indicates the VFO in use, operating mode, memory channel, split mode, scan mode and other information.

Scanning versatility

The IC-575A/H incorporates a total of four separate scanning functions for easy access to a wide range of frequencies.

- MEMORY SCAN repeatedly scans the entire 99-channel memory in sequence.
- PROGRAMMED SCAN offers detailed coverage of a specific frequency range through repeated scanning.
- SELECTED MODE MEMORY SCAN automatically monitors all memories which contain programmed frequencies with the same mode.
- SKIP SCAN allows you to continuously scan your favorite programmed memory channels.

#### **■ OUTSTANDING RECEIVER PERFORMANCE**

• Excellent NOTCH control Icom's superb notch filter system ensures strong receiver perfor-

mances. Clear operating reception is possible even in the presence

of a single tone noise.

● High sensitivity, high dynamic range The IC-575A/H RF amplifier uses high quality FETs (2SK125) in

parallel connection. These FETs are also used as a balanced-type mixer in the mixer stage, providing high sensitivity and ensuring a

very high dynamic range.

●Built-in RF preamplifier The IC-575A/H's built-in RF preamplifier uses a high grade noise

figure-type J-FET (2SK152). This ensures RF gain of approximately

10dB and increases receiver ability.

#### ■ COMPLETE 28/50MHz TRANSCEIVER

● Packet, AMTOR operations The rear panel of the IC-575A/H has an easy-to-access terminal

socket for AFSK (Audio Frequency Shift Keying) operation. Use the [DATA] SWITCH to rapidly switch between receive and transmit operations. This convenient function is made possible in the IC-575A/H by Icom's exclusive new DDS (Direct Digital Synthesizer)

System.

An antenna switching circuit in the IC-575A/H uses a high speed relay for use with data communications such as packet and AMTOR.

For CW operators, both semi break-in and full break-in are provided for smooth, fast, and natural CW conversations.

■ OPTIONS AVAILABLE

● Full break-in function

●EX-20 AUTOMATIC ANTENNA SELECTOR Selects two antennas with the band voltage from the IC-575A/H

antenna connector.

•UT-36 VOICE SYNTHESIZER UNIT Announces the displayed frequency.

•UT-34 TONE SQUELCH UNIT Provides you with interference-free communications.

●CT-16 SATELLITE INTERFACE UNIT Satellite communication interface until with IC-275A/E/H or

IC-271A/E/H. (The optional UX-14 is required when using CT-16

with IC-271A/E/H.)

●CT-17 CI-V LEVEL CONVERTER Allows connection of the IC-575A/H to a personal computer.

●FL-100 CW NARROW FILTER 500Hz/—6dB

●FL-101 CW NARROW FILTER 250Hz/—6dB

●FL-102 AM FILTER 6kHz/—6dB

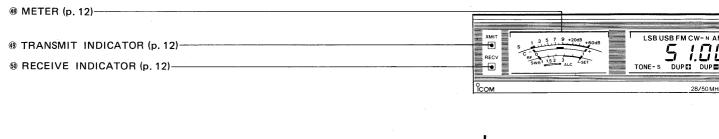
•CR-64 HIGH-STABILITY CRYSTAL UNIT  $\pm 0.5$ ppm ( $-30^{\circ}$ C  $\sim +60^{\circ}$ C).

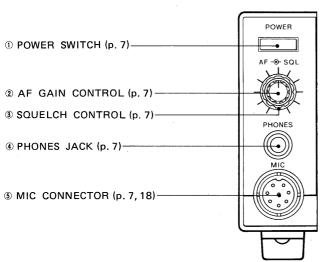
•AH-610 28MHz/50MHz DUAL BAND Covers 28MHz and 50MHz bands and operates with one antenna.

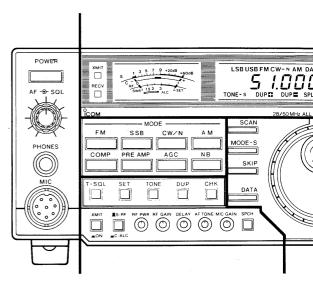
ANTENNA

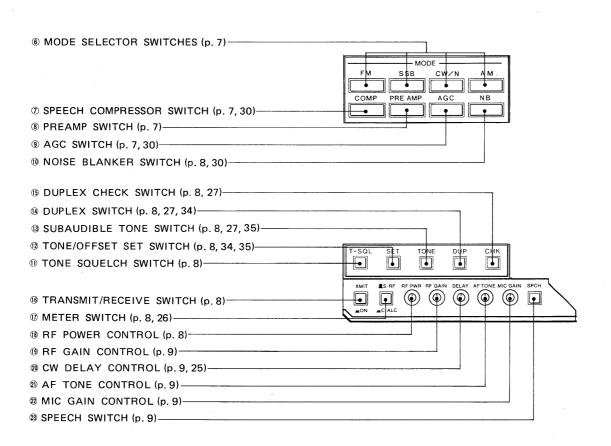
# 3. CONTROL FUNCTIONS

#### FRONT PANEL

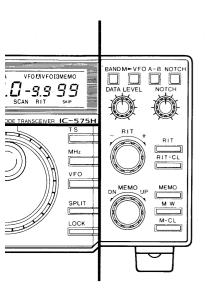


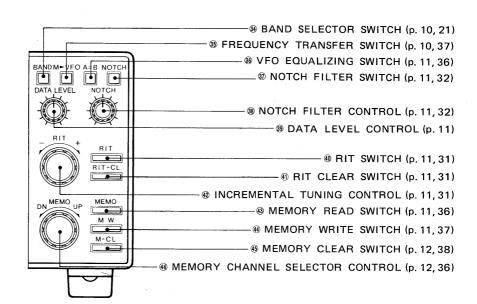


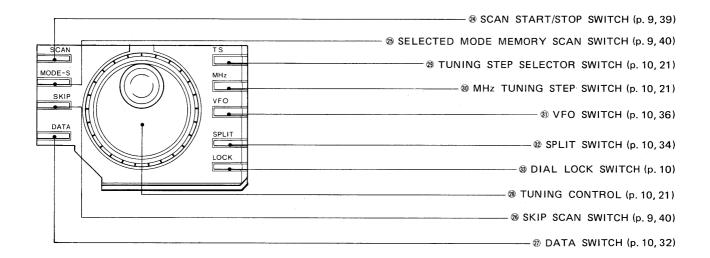












Count on us!	
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