IC-03AT

220MHz FM TRANSCEIVER



INSTRUCTION MANUAL



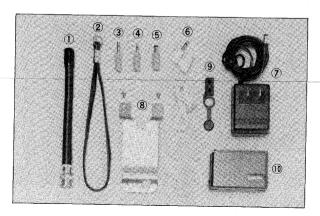
FOREWORD

Thank you very much for choosing this ICOM product.

The IC-03AT is a complete VHF handheld transceiver in one small, compact package developed by ICOM utilizing the latest computer technology and precision VHF engineering.

To fully enjoy the benefits of this high-performance transceiver, please study the instruction manual thoroughly prior to operation. Also, feel free to contact an authorized ICOM dealer if you have any questions relating to the operation of this model.

UNPACKING



Accessories included with the IC-03AT	TV
① Flexible antenna	
②Hand strap	
③Earphone plug	. 1
Microphone plug	
⑤DC power plug	. 1
© Earphone	. 1
⑦BC-25U WALL CHARGER	. 1
8 Belt clip	. 1
	. 1
(1) IC-BP3 BATTERY PACK	. 1

TABLE OF CONTENTS

	WARNINGS	5 - 6 MEMORY READING 27
SECTION	1 FEATURES 2	5- 7 CALL CHANNEL
SECTION	2 CONTROL FUNCTIONS 3	OPERATION 28
SECTION	3 PRE-OPERATION	5 - 8 PRIORITY FUNCTION29
	3 - 1 BATTERY INSTALLATION 11	5 - 9 SCANNING OPERATION 30
	3 - 2 ANTENNA CONNECTION13	5-10 LOCK FUNCTION 33
	3-3 FOR OUTDOOR USE 13	5-11 BEEP TONE ON/OFF
SECTION	4 GENERAL OPERATION 14	FUNCTION
SECTION	4-1 RECEIVING	5-12 DTMF OPERATION34
		5-13 SETTING SUBAUDIBLE TONE
	4-2 TRANSMITTING	ENCODER FREQUENCY 34
	4-3 KEY FUNCTIONS17	SECTION 6 MAINTENANCE
SECTION	5 FUNCTIONS OPERATION 19	6-1 CAUTIONS
	5-1 DIAL MODE AND	6-2 MALFUNCTIONS
	MEMORY MODE19	SECTION 7 INSIDE VIEWS
	5-2 SETTING FREQUENCY 20	SECTION 8 TROUBLESHOOTING41
	5-3 SETTING FREQUENCY STEP	SECTION 9 BLOCK DIAGRAM
	RATE 21	
	5-4 DUPLEX OPERATION22	SECTION 10 SPECIFICATIONS
	5-5 MEMORY WRITING 23	SECTION 11 SCHEMATIC DIAGRAMSEPARATE
		SEFANATE

WARNINGS

- AVOID using the transceiver under the following conditions:
 - In places subject to excessive heat or cold. (Usable temperature: $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$)
 - In places subject to excessive dust.
 - In places subject to excessive humidity, including bathrooms.
 - In places subject to excessive vibrations.

•BATTERY PACK NOTE

The full charge capacity of NiCd rechargeable batteries may be reduced if repeatedly charged with only partial discharge periods. This is called the battery memory effect. If the battery capacity seems lower than when new, discharge the pack completely through normal use, then charge fully using the proper charger.

• EXTERNAL POWER SOURCE NOTE

If the IC-03AT is used continuously for 15 hours or more with an external DC power source connected to the top panel EXTERNAL DC POWER JACK; be sure to remove the battery pack from the transceiver to prevent overcharging.

SECTION 1 FEATURES

•MOISTURE PROOF

The IC-03AT is ruggedly constructed with rubber gaskets between the transceiver covers and chassis, ensuring that moisture will never be a problem when operating in practically any environment.

•SLIDE-ON BATTERY PACK

The supplied IC-BP3 BATTERY PACK easily slides off and on the transceiver body for quick removal or attachment. Once attached it will stay in place due to a quick-release lock button designed to prevent accidental removal.

●10 MEMORY CHANNELS

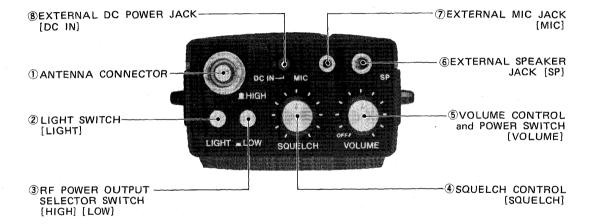
The IC-03AT has ten memory channels which store operating frequency as well as duplex/simplex, duplex offset frequency, and subaudible tone frequency information for your operating convenience.

•MULTI-PURPOSE SCANNING

Memory scan allows you to monitor all memory channels. Programmed scan provides scanning between two programmed frequencies. Auto-stop is also provided which stops the scan when a signal is received, but allows the scan to resume when the signal goes away.

SECTION 2 CONTROL FUNCTIONS

TOP PANEL



FRONT PANEL

REAR PANEL



■ TOP PANEL

1) ANTENNA CONNECTOR

Connect the supplied flexible antenna. All antennas connected to the transceiver must be 50Ω and have a BNC connector.

CAUTION: Transmitting without an antenna may damage the transceiver.

2 LIGHT SWITCH [LIGHT]

Press this switch down to turn ON the backlight for the FRE-QUENCY DISPLAY.

③ RF POWER OUTPUT SELECTOR SWITCH [HIGH] [LOW] Switches the output power of the transceiver between HIGH and LOW. In the HIGH (out) position, the output power is 2W at 8.4V. In the LOW (locked in) position, the output power is 0.5W at any voltage between 5.5 and 16V.

(4) SQUELCH CONTROL [SQUELCH]

Raises the threshold level.



Sets the squelch threshold level. Rotate this control completely counterclockwise to turn OFF the squelch function, and clockwise to raise the threshold level.

(5) POWER/VOLUME CONTROL [VOLUME]

Rotate this control clockwise to turn the transceiver ON and increase the audio level.