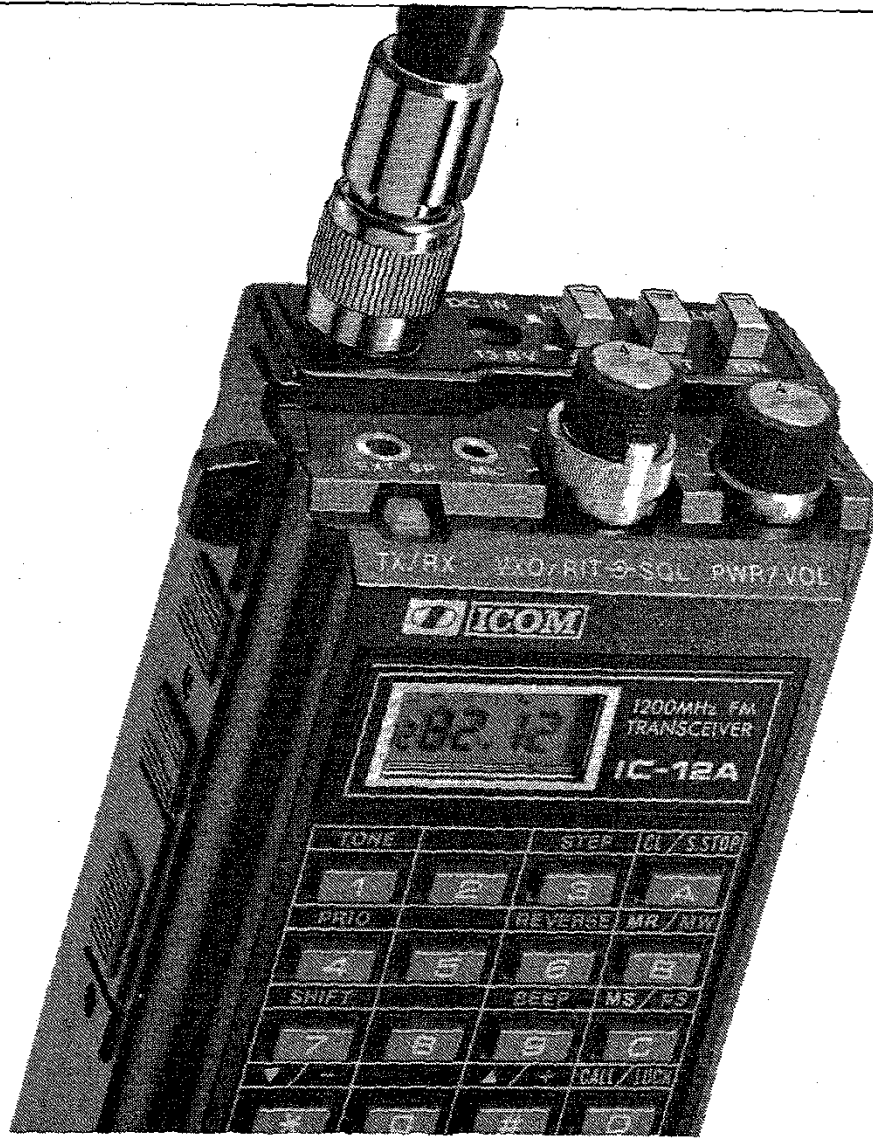


# IC-12A/AT/E

1200MHz FM TRANSCEIVER

## INSTRUCTION MANUAL



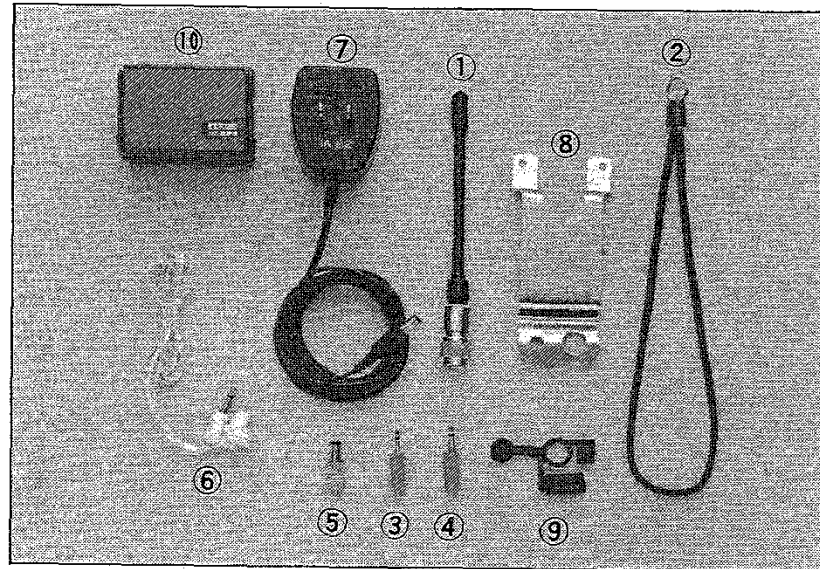
## FOREWORD

ICOM announces the debut of the first 1.2GHz handheld transceiver to enter the Amateur radio field, the **IC-12A/AT/E**.

Exceptionally versatile yet surprisingly compact and easy to handle, the **IC-12A/AT/E** is a complete, high performance UHF handheld - the beneficiary of the very latest in ICOM technical know-how and state-of-the-art UHF engineering.

To fully enjoy the many features of your new **IC-12A/AT/E** handheld, please study the instruction manual thoroughly prior to operation. Also, feel free to contact your nearest authorized ICOM dealer if you have any questions relating to the operation of this transceiver.

## UNPACKING



### Accessories included with the IC-12A/AT/E. QTY.

1. Flexible antenna . . . . .	1
2. Hand strap . . . . .	1
3. Microphone plug . . . . .	1
4. Earphone plug. . . . .	1
5. DC power plug . . . . .	1
6. Earphone. . . . .	1
7. Wall charger* . . . . .	1
8. Belt clip . . . . .	1
9. Rainproof cap. . . . .	1
10. IC-BP3 battery pack . . . . .	1

\*BC-25U for U.S.A. version  
 BC-27 for Australia version  
 BC-26E for Europe version

# TABLE OF CONTENTS

<b>SECTION 1</b>	<b>FEATURES</b> . . . . .	<b>1</b>		
<b>SECTION 2</b>	<b>CONTROL FUNCTIONS</b> . . . . .	<b>2</b>		
	2- 1 TOP PANEL . . . . .	2		
	2- 2 FRONT AND SIDE PANELS . . .	3		
	2- 3 REAR PANEL . . . . .	4		
	2- 4 BOTTOM VIEW . . . . .	4		
	2- 5 FREQUENCY DISPLAY . . . . .	10		
<b>SECTION 3</b>	<b>PRE-OPERATION</b> . . . . .	<b>13</b>		
	3- 1 BATTERY INSTALLATION . . .	13		
	3- 2 ANTENNA CONNECTION . . .	16		
	3- 3 FOR OUTDOOR USE . . . . .	16		
<b>SECTION 4</b>	<b>GENERAL OPERATION</b> . . . . .	<b>17</b>		
	4- 1 RECEIVING . . . . .	17		
	4- 2 TRANSMITTING . . . . .	18		
	4- 3 KEY FUNCTIONS . . . . .	18		
<b>SECTION 5</b>	<b>FUNCTIONS OPERATION</b> . . . . .	<b>21</b>		
	5- 1 DIAL MODE AND MEMORY MODE . . . . .	21		
	5- 2 SETTING FREQUENCY . . . . .	22		
	5- 3 SETTING FREQUENCY STEP RATE . . . . .	25		
	5- 4 DUPLEX OPERATION . . . . .	26		
	5- 5 MEMORY WRITING . . . . .	29		
	5- 6 MEMORY READING . . . . .	32		
	5- 7 CALL CHANNEL OPERATION . . . . .	33		
	5- 8 PRIORITY FUNCTION . . . . .	34		
	5- 9 SCANNING OPERATION . . . . .	36		
	5-10 LOCK FUNCTION . . . . .	38		
	5-11 BEEP TONE ON/OFF FUNCTION . . . . .	39		
	5-12 DTMF OPERATION . . . . .	39		
	5-13 SETTING SUBAUDIBLE TONE ENCODER FREQUENCY . . . . .	39		
	5-14 TRANSMITTING TONE-BURST . . . . .	41		
<b>SECTION 6</b>	<b>MAINTENANCE</b> . . . . .	<b>42</b>		
	6-1 CLEANING . . . . .	42		
	6-2 MALFUNCTIONS . . . . .	42		
<b>SECTION 7</b>	<b>INSIDE VIEWS</b> . . . . .	<b>44</b>		
	7-1 MAIN UNIT . . . . .	44		
	7-2 PLL UNIT . . . . .	45		
	7-3 TONE UNIT . . . . .	46		
<b>SECTION 8</b>	<b>TROUBLESHOOTING</b> . . . . .	<b>47</b>		
<b>SECTION 9</b>	<b>BLOCK DIAGRAM</b> . . . . .	<b>50</b>		
<b>SECTION 10</b>	<b>SPECIFICATIONS</b> . . . . .	<b>51</b>		
<b>SECTION 11</b>	<b>SCHEMATIC DIAGRAM</b> . . . . . <b>SEPARATE</b>			

## SECTION 1 FEATURES

### ●MOISTURE PROOF

The IC-12A/AT/E 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.

### ●POWER MODULE OPERATION

Appearing for the first time in any 1.2GHz handheld from ICOM, the IC-12A/AT/E utilizes an internal power module designed to provide stable and continuous high power output.

### ●10 MEMORY CHANNELS

The IC-12A/AT/E has ten memory channels which store operating frequency as well as duplex/simplex, duplex offset frequency, and subaudible tone frequency (IC-12AT only) information for your operating convenience.

## SECTION 2 CONTROL FUNCTIONS

### 2-1 TOP PANEL

