

ICOM

INSTRUCTION MANUAL

SUPER MULTI-BANDER
SYSTEM

IC-900A
IC-900E

Icom Inc.

FOREWORD

ICOM has been listening carefully to the many ideas of Amateur Radio enthusiasts worldwide, and the result, built with the very latest in optical technological know how, is an engineering marvel: ICOM's advanced new **IC-900A/E** FM SUPER MULTI-BANDER SYSTEM transceiver.

The **IC-900A/E** is a multi-bander system transceiver that allows the mobile user to completely customize in creating a communications system with a distinctly personal touch. Up to 6 separate BAND UNITS can be installed and used with the **IC-900A/E**, systematically upgrading the degree of transceiver versatility with every new BAND UNIT added.

The **IC-900A/E** is equipped with a superb assortment of deluxe ICOM features such as all VHF/UHF band operation capability (above 28MHz), a separate multi-function REMOTE CONTROLLER, durable and advanced optical fiber connections, simultaneous dual band receive and full duplex capability, and more.

To fully appreciate and understand the capabilities of your new **IC-900A/E** FM SUPER MULTI-BANDER SYSTEM, please study this instruction manual thoroughly prior to operation. Also feel free to contact your nearest authorized ICOM Dealer or Service Center if you require assistance or information regarding the operation of your new **IC-900A/E**.

1. FEATURES

SELECTABLE ONE TO SIX BAND OPERATION

A total of up to six optional BAND UNITS can be installed in the IC-900A/E for instant access to a wide range of frequencies from the 28MHz HF band to the 1200MHz UHF band. And only a small and light REMOTE CONTROLLER is necessary for control of all these bands.

OPTICAL FIBER CABLE

A durable and flexible optical fiber cable is used between the INTERFACE UNIT-A and the INTERFACE UNIT-B to ensure reliable, interference-free communications.

FULL DUPLEX CAPABILITY

The IC-900A/E has independent, full duplex capability on all bands, providing simultaneous receive and transmit operation on separate bands. Monitoring the bands is simple too because of the convenient FUNCTION DISPLAY on the REMOTE CONTROLLER which shows two separate operating frequencies simultaneously.

A VARIETY OF ADVANCED FUNCTIONS AVAILABLE

MEMORY CHANNEL CAPABILITY

The IC-900A/E MULTI-BANDER SYSTEM transceiver is equipped with 10 fully programmable memory channels in each BAND UNIT. The system can therefore store information in up to 60 different memory channels. (Each BAND UNIT can memorize all frequencies which the particular BAND UNIT covers).

5 SEPARATE USER-PROGRAMMED TUNING STEPS

Tuning steps can be selected in 5kHz, 10kHz, 15kHz, 20kHz and 25kHz steps in the IC-900A version and in 12.5kHz and 25kHz steps in the IC-900E version.

OPTIONAL UNIT OPERATIONS

Either the UT-28 DIGITAL CODE SQUELCH UNIT or the UT-29 TONE SQUELCH UNIT can be used to ensure clear, interference-free communications from other stations using the same frequency.

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2. CONSTRUCTION

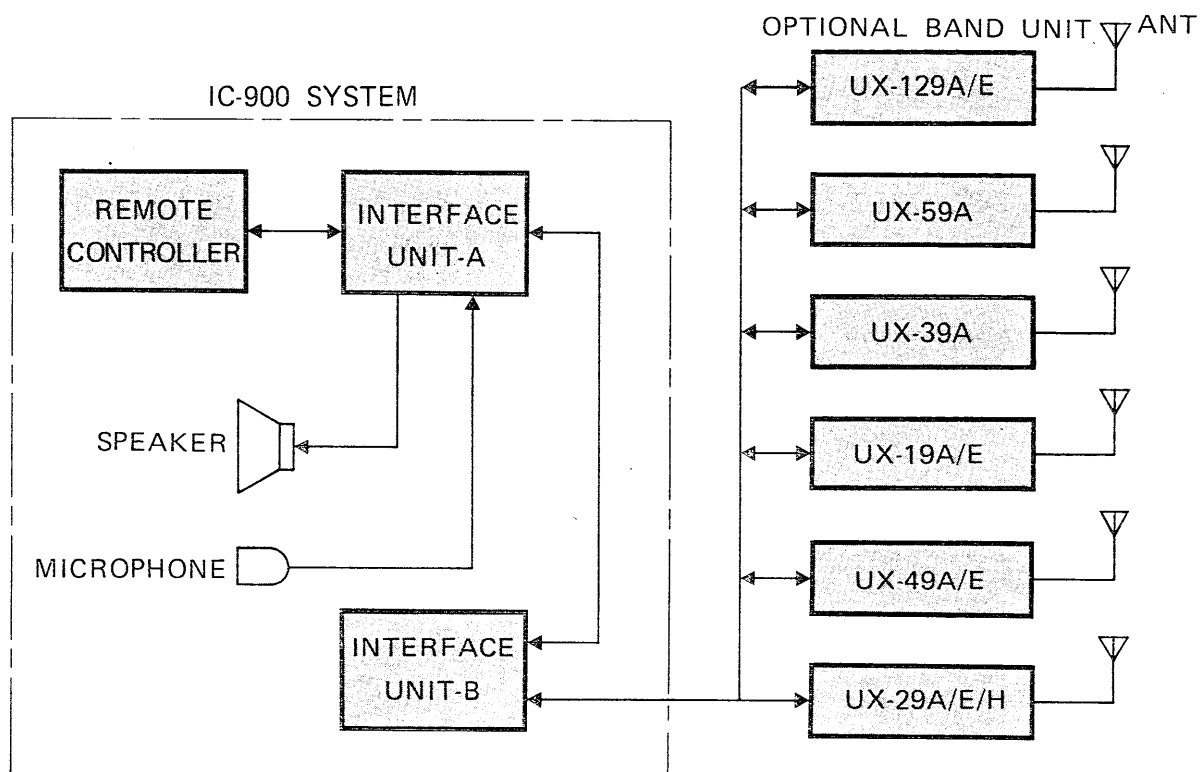
■ CONSTRUCTION OF THE IC-900 MULTI-BANDER SYSTEM

The IC-900A/E MULTI-BANDER SYSTEM consists of a REMOTE CONTROLLER, INTERFACE UNIT-A, INTERFACE UNIT-B, and a series of specially designed, attachable BAND UNITS for upgrading your transceiver system.

MODEL	- FREQUENCY RANGE	OUTPUT POWER		SELECTABLE TUNING STEP
		HIGH	LOW	
UX-19A/E	28.00 ~ 30.00MHz	10W	1W	5, 10, 15, 20, 25kHz
UX-59A	50.00 ~ 54.00MHz	10W	1W	5, 10, 15, 20, 25kHz
UX-29A (USA, Asia)	*1 138.00 ~ 174.00MHz (Receive) 140.10 ~ 150.00MHz (Transmit)	25W	5W	5, 10, 15, 20, 25kHz
UX-29A (Australia)	144.00 ~ 148.00MHz	25W	5W	5, 10, 15, 20, 25kHz
UX-29E (Europe)	144.00 ~ 146.00MHz	25W	5W	12.5, 25kHz
UX-29E (Italy)	*1 140.00 ~ 150.00MHz	25W	5W	12.5, 25kHz
UX-29H (USA, Asia)	*1 138.00 ~ 174.00MHz (Receive) 140.10 ~ 150.00MHz (Transmit)	45W	5W	5, 10, 15, 20, 25kHz
UX-29H (Australia)	144.00 ~ 148.00MHz	45W	5W	5, 10, 15, 20, 25kHz
UX-29H (Europe)	144.00 ~ 146.00MHz	45W	5W	12.5, 25kHz
UX-29H (Italy)	*1 140.00 ~ 150.00MHz	45W	5W	12.5, 25kHz
UX-39A	*2 216.00 ~ 236.00MHz (Receive) 220.00 ~ 225.00MHz (Transmit)	25W	5W	5, 10, 15, 20, 25kHz
UX-49A (USA)	440.00 ~ 450.00MHz	25W	5W	5, 10, 15, 20, 25kHz
UX-49A (Australia, Asia)	430.00 ~ 440.00MHz	25W	5W	5, 10, 15, 20, 25kHz
UX-49E	430.00 ~ 440.00MHz	25W	5W	12.5, 25kHz
UX-129A	1240.00 ~ 1300.00MHz	10W	1W	10, 20kHz
UX-129E	1240.00 ~ 1300.00MHz	10W	1W	12.5, 25kHz

Guaranteed frequency range: *1 144.00 ~ 148.00MHz *2 220.00 ~ 225.00MHz

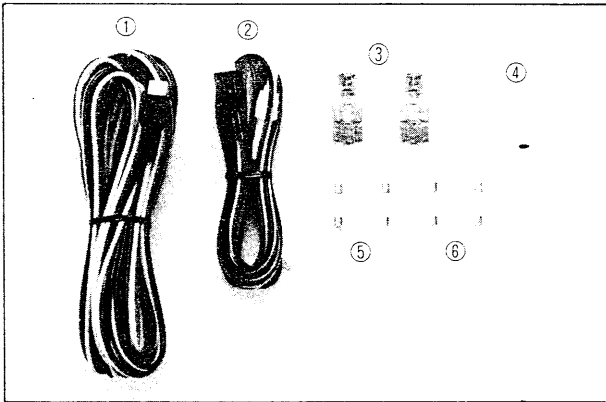
■ MULTI-BANDER SYSTEM BLOCK DIAGRAM



3. UNPACKING

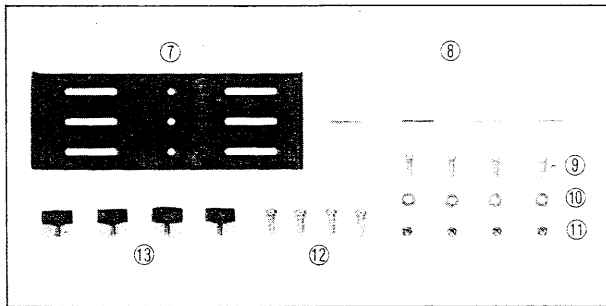
The following accessories come with the IC-900A/E. Check the accessories after removing them from the carton. Store unused accessories for future use as you build up your IC-900 SYSTEM.

●POWER SOURCE ACCESSORIES



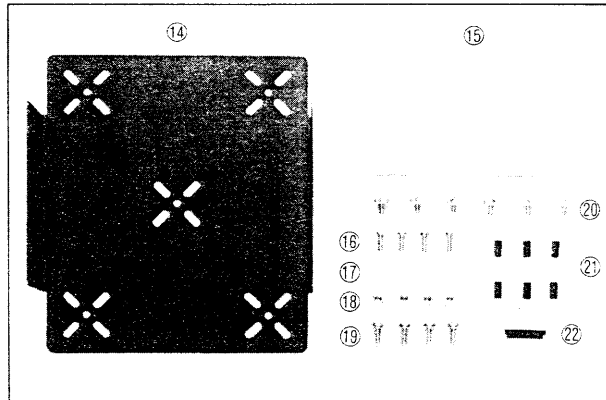
① OPC-170 POWER CABLE	1
② OPG-095 POWER CABLE	1
③ Cable separator sockets	2
④ Cable lugs	2
⑤ Fuses (15A)	2
⑥ Fuses (5A)	2

●INTERFACE UNIT-A ACCESSORIES



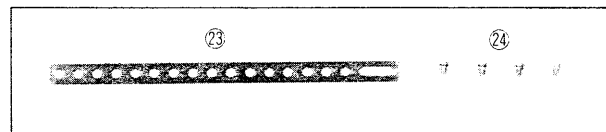
⑦ Mounting bracket (A)	1
⑧ Double-sided tape	4
⑨ Mounting screws (M4 x 12)	4
⑩ Flat washers (M4)	4
⑪ Nuts (M4)	4
⑫ Self-tapping mounting screws (A0 4 x 16)	4
⑬ Mounting bracket knobs	4

●INTERFACE UNIT-B ACCESSORIES



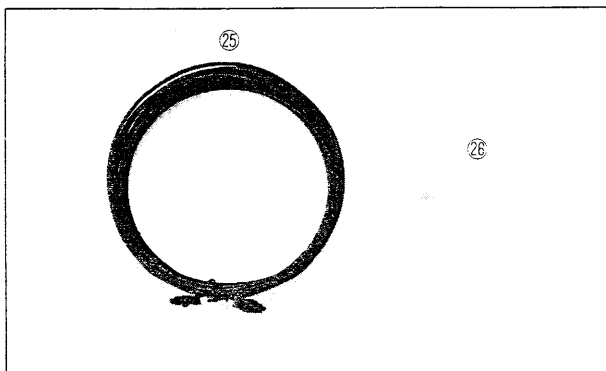
⑭ Mounting bracket (B)	1
⑮ Sponges	2
⑯ Mounting screws (M4 x 12)	4
⑰ Flat washers (M4)	4
⑱ Nuts (M4)	4
⑲ Self-tapping mounting screws (A0 4 x 16)	4
⑳ Unit mounting screws (M4 x 8)	6
㉑ Rubber bushings (S)	6
㉒ Rubber bushing (L)	1

●SUPPORT BRACKET



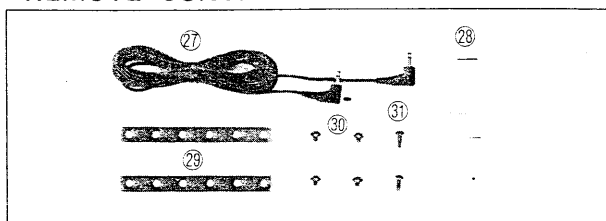
㉓ Support bracket	1
㉔ Set screws (A) (4 x 8)	4

●OPTICAL FIBER CABLE



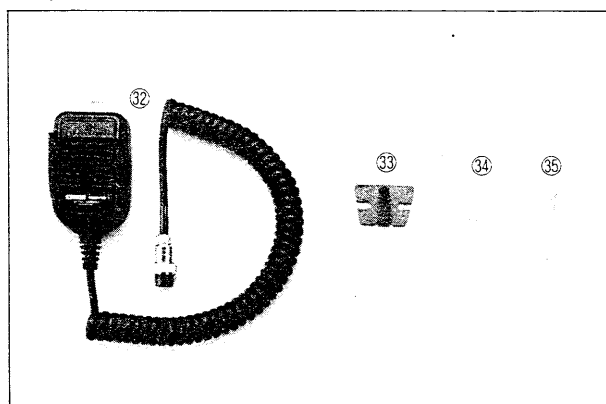
②⑤ OPC-172 OPTICAL FIBER CABLE 1
 ②⑥ Cable clamps 2

●REMOTE CONTROLLER ACCESSORIES



②⑦ OPC-177 CONTROLLER CABLE 1
 ②⑧ Double-sided tapes 2
 ②⑨ Controller support brackets 2
 ③⑩ Mounting screws (Button head) 4
 ③① Self-tapping mounting screws (A0 3 x 8) 2

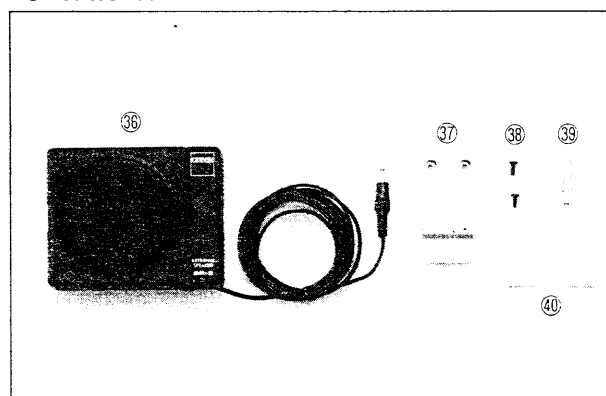
●MICROPHONE



③② *Microphone 1
 ③③ Microphone hanger 1
 ③④ Microphone connector support 1
 ③⑤ Self-tapping screw (A0 4 x 10) 1

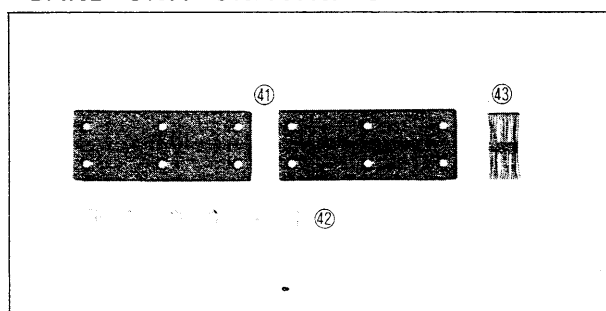
* HM-12 (IC-900A Australia, Asia)
 HM-14 (IC-900A USA)
 HM-15 (IC-900E)

●SPEAKER



③⑥ Speaker (SP-8) 1
 ③⑦ Mounting clip 1
 ③⑧ Self-tapping screws (B0 3 x 8) 2
 ③⑨ External speaker plug 1
 ④⑩ Double-sided tape 2

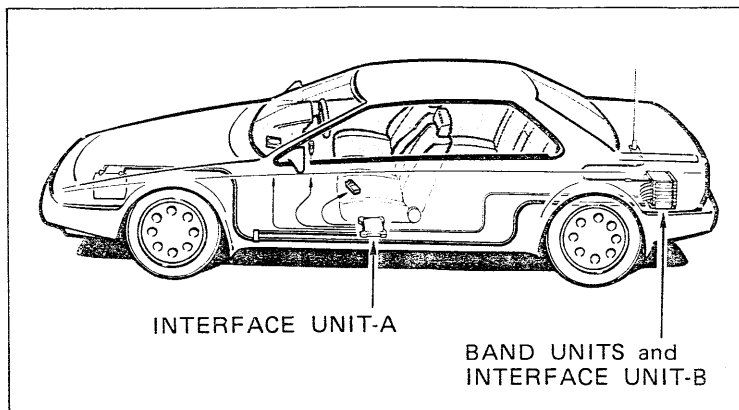
●BAND UNIT UNPACKING



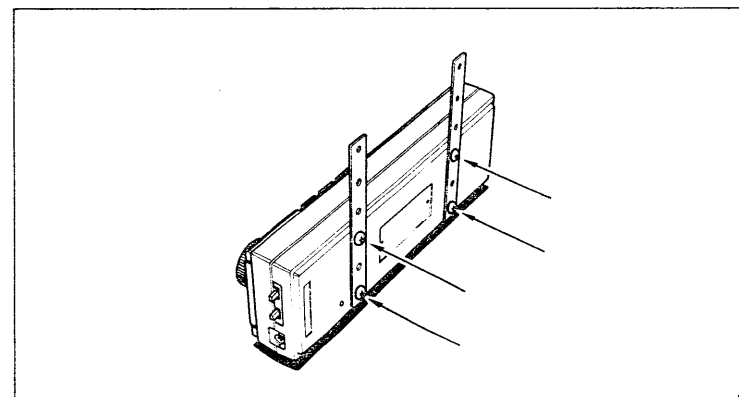
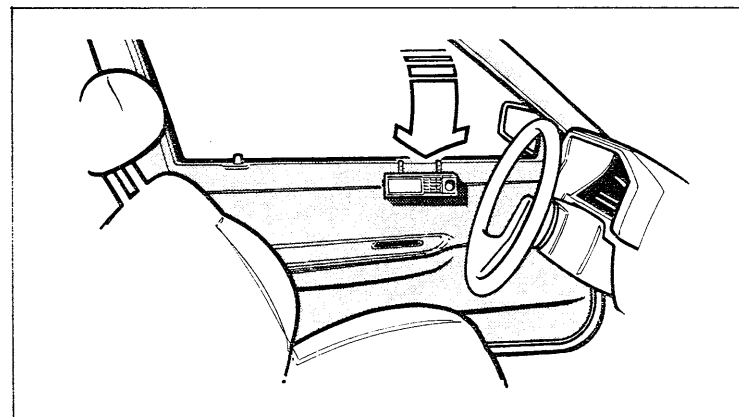
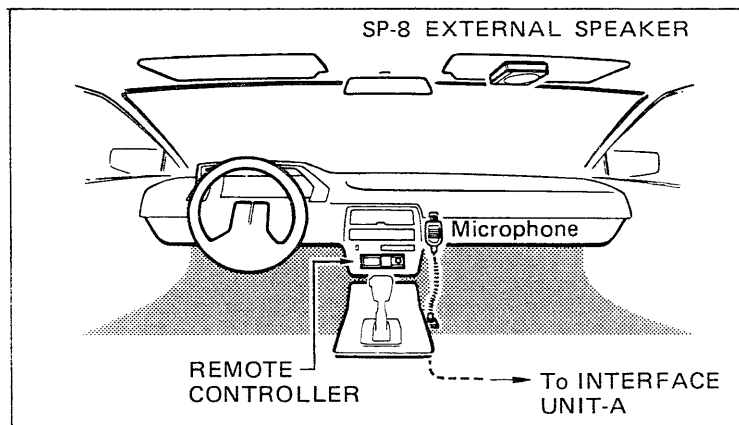
④① Mounting brackets 2
 ④② Mounting screws (M4 x 8) 6
 ④③ OPC-179 JOINT CABLE 1

4. INSTALLATIONS

4-1 UNIT INSTALLATIONS



• Near the driver's position



We recommend installing the IC-900A/E SUPER MULTI-BANDER SYSTEM in the following places:

INTERFACE UNIT-A:

Under or to the side of the driver's seat.

INTERFACE UNIT-B:

In the trunk near the antenna.

Each BAND UNIT:

Mount on INTERFACE UNIT-B.

Select locations for the REMOTE CONTROLLER, the microphone, and speaker that do not interfere with the driver in any way.

To protect the mic connector cable from damage, the mic connector **MUST** be attached to the microphone connector support.

The REMOTE CONTROLLER may be placed on your vehicle dashboard or in another convenient place using either the supplied double-sided tape or the remote controller support brackets.

CAUTION:

AVOID mounting the REMOTE CONTROLLER in hot or cold places such as in front of the car heater or air conditioner, or in direct sunlight.

Attach the remote controller support brackets to the REMOTE CONTROLLER using the 4 supplied screws.

The optional MB-21 MOUNTING BRACKET is available for easy mounting.

