



## INSTRUCTION MANUAL

VHF AIR BAND TRANSCEIVER

# IC-A110EURO



Icom Inc.

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## FOREWORD

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**READ ALL INSTRUCTIONS** carefully and completely before using the transceiver.

**SAVE THIS INSTRUCTION MANUAL** — This instruction manual contains important operating instructions for the IC-A110EURO.

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## EXPLICIT DEFINITIONS

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The explicit definitions below apply to this instruction manual.

WORD	DEFINITION
<b>⚠ WARNING!</b>	Personal injury, fire hazard or electric shock may occur.
<b>CAUTION</b>	Equipment damage may occur.
<b>NOTE</b>	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

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## CAUTIONS

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**⚠ WARNING! NEVER** operate the transceiver with a headset or other audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume level or discontinue use.

**NEVER connect** the transceiver **to an AC** outlet or to a power source of **more than 32 V DC**. Such a connection will damage the transceiver.

**NEVER** connect the transceiver to a power source that is DC fused at more than 5 A. Accidental reverse connection will be protected by this fuse, higher fuse values will not give any protection against such accidents and the transceiver will be ruined.

**DO NOT** operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

**DO NOT** connect the transceiver to a power source using reverse polarity. This connection will not only blow fuses but also may damage the transceiver.

**DO NOT** place unit in a non-secure place to avoid inadvertent use by children.

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**DO NOT** push [PTT] when not actually desiring to transmit.

**DO NOT** use or place the transceiver in direct sunlight or in areas with temperatures below  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) or above  $+60^{\circ}\text{C}$  ( $+140^{\circ}\text{F}$ ).

**DO NOT** place the transceiver in excessively dusty environments.

**DO NOT** place the transceiver against walls. This will obstruct heat dissipation.

**DO NOT** use harsh solvents such as benzine or alcohol to clean the transceiver, as they can damage the transceiver's surfaces.

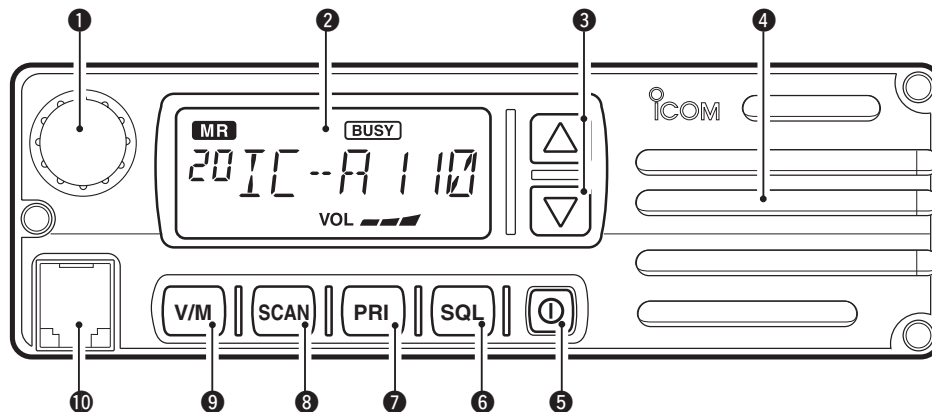
**BE CAREFUL!** The transceiver will become hot when operating continuously for long periods of time.

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# 1

## PANEL DESCRIPTION

### ■ Panel description



#### 1 TUNING [DIAL] [TS](DIAL)

- ➔ Changes the operating frequency; memory channel in the Memory mode; set mode contents in the Set mode, etc.
- ➔ Push to toggle the dimmer control OFF, Low or High.
- ➔ Hold down for 1 second to select the Tuning Step [TS]; 1 MHz or 10 kHz are selectable. (p. 5)

#### 2 FUNCTION DISPLAY (p. 3)

Displays the operating frequency, memory channel name, etc.

#### 3 VOLUME UP [▲] DOWN [▼] KEY

Adjusts the audio output level.

#### 4 LOUD SPEAKER

Front mounted loud speaker.

#### 5 POWER SWITCH [POWER]

Hold down 0.5 seconds to turn the power ON and OFF.

- At Power ON, the Initial Set mode (p. 10) or the Cloning mode (p. 14) can optionally be selected.

**6 SQL SWITCH [SQL]**

- Push to turn ON the squelch adjust mode. (p. 6)
- Hold down this switch for 1 second to turn the both internal and external speaker output ON or OFF. (p. 4)


**7 PRIORITY SWITCH [PRI]**

- Push to select the priority channel. (p. 11)
  - “Pr” appears on the display.

**8 SCAN SWITCH [SCAN]**

- Starts and stops the scan function:
  - VFO mode: VFO scan function. (p. 6)
  - Memory mode: Memory channel scan function. (p. 6)
- Hold down this switch for 5 seconds to set the displayed channel as a memory lock-out channel. (p. 8)
  - “LOCK OUT” appears on the display.

**9 VFO/MEMORY SWITCH [V/M] [MW](V/M)**

- Push to toggle between the VFO mode and the Memory mode. (p. 4)
  - “” and memory channel number appear when the Memory mode is selected.
  - The transceiver has 99 memory channels.
- When the VFO mode is selected;
  - Hold down this switch for 5 seconds to enter the VFO frequency into memory channel. (p. 8)
- When the Memory mode is selected;
  - Hold down this switch for 5 seconds to turn ON the “Memory name write mode.”

**10 MICROPHONE CONNECTOR**

Connects to the supplied microphone or optional.  
**NEVER** connect other microphones. The pin assignments may be different and the transceiver may be damaged.

**MICROPHONE**

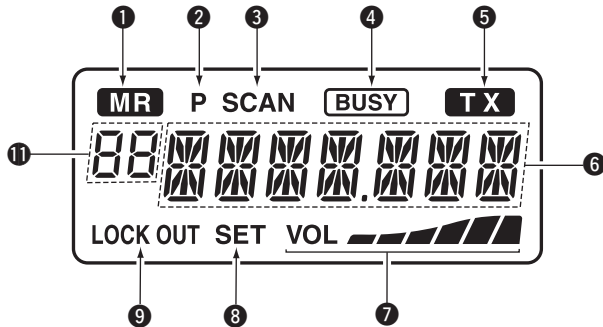
The supplied microphone has a PTT switch and a cradle. The following functions are available when the microphone is taken off the hook or put back on the hook:

- Automatic scan starts when the microphone is put ON Hook. (p. 7)
- Automatic scan stops when the microphone is taken OFF Hook. (p. 7)

**NOTE:** Optional functions vary with transceiver version. In this manual, optional functions are indicated by an “OPTION” Icon.  
 Please contact your dealer for details.

# 1 PANEL DESCRIPTION

## ■ Function display



- 1 MEMORY MODE INDICATOR** (p. 5)  
Appears when the Memory mode is selected.
- 2 DUALWATCH INDICATOR** (p. 7)  
Appears when the dualwatch function is activated.
- 3 SCAN INDICATOR** (p. 8)  
Appears when the scan function is selected.
- 4 BUSY INDICATOR** (p. 6)  
“BUSY” appears when receiving a signal or when the squelch is open. (p. 6)

- 5 TX INDICATOR** (p. 5)  
Appears while transmitting.

- 6 FREQUENCY DISPLAY** (p. 11)
  - Shows the operating frequency.
  - Shows the channel name when the memory name function is selected. (p. 10)

- 7 VOLUME LEVEL INDICATORS**
  - Shows the AF volume level (while receiving).

- 8 SET MODE INDICATOR**
  - Appears when the Initial Set mode is selected. (p. 12)

- 10 LOCK OUT INDICATOR**
  - Appears when the channel is set as a ‘LOCK OUT’ channel. (p. 10)

- 11 MEMORY CHANNEL INDICATOR**
  - Indicates the selected memory channel number
  - ‘Pr’ appears when the priority channel is selected.

### OPTION

\***NOTE:** The VFO/memory switch [V/M] and the memory write switch [MW](V/M) functions may not be available, depending on version.

## ■ Power ON

- ① Push [POWER] to turn ON the power.



- ② Operate the transceiver as described in the following sections.
- ③ Select the desired memory channel (or VFO frequency) with the [V/M] keys.
  - When receiving a signal, **BUSY** appears and audio is heard from the speaker.
  - Further adjustment of the audio level may be necessary at this point.
  - Push [SQL] to adjust the squelch level. (p. 6)
  - Hold down [TS](DIAL) for 1 second to select the tuning step. 1MHz or 10 kHz are selectable. (p. 7)
- ④ Hold down [PTT] to transmit, then speak into the microphone at your normal voice level.
  - Transmit indicator **T X** lights.
- ⑤ Release [PTT] to receive.

## ■ Channel selection

### ◇ VFO/Memory selection

Push [V/M] to select the Memory mode or the VFO mode.

- ➔ Rotate [DIAL] to select a desired frequency or channel.



### ◇ External speaker output control

External speaker output can be turned OFF, if desired.

- ① Hold down [SQL] for 1 second.
- ② Rotate [DIAL] to select "SP OFF".
- ③ Push [SQL] to return to the previous mode.

**NOTE:** This function is available both internal and external speakers.



## 2 BASIC OPERATION

### ■ Squelch function

The transceiver has a noise squelch circuit to mute undesired noise while receiving no signals.

#### ◇ Setting the squelch level

- ① Push [SQL] to turn ON the level adjusting mode.
- ② Rotate [DIAL] to select the squelch level.
  - ‘SQ 01’ is loose squelch and ‘SQ 25’ is tight squelch. (Initial level is ‘SQ 01’)
  - ‘SQ 01’ indicates that the squelch circuit is turned off.
  - “**BUSY**” appears on the display.
- ③ Push [SQL] to return to regular operation.

### ■ Side tone function

When using an optional headset, such as those from the David Clark Co. using the OPC-871 HEAD SET ADAPTER, the transceiver outputs your transmitted voice to the headset for monitoring. (p. 17)

### ■ LCD backlight control

The backlight of the LCD can be set to OFF, Low or High.

- ➡ Push [DIAL] to toggle the backlight control; OFF, Low or High are selectable.

### ■ Dial select function OPTION

Use the dial select function to adjust the tuning step of the [DIAL] keys. Use 1 MHz tuning when you want to change the frequency in large increments; use regular tuning (25 kHz or 8.33 kHz) when you want to change the frequency in smaller increments.

- ① Push [V/M] to select the VFO mode.
- ② Hold down [TS](DIAL) for 1 second to select the desired tuning increment.
  - 1 MHz tuning or regular tuning steps can be selected. (See the diagrams to the right.)
- ③ Hold down [TS](DIAL) for 1 second to return to normal operation.



1 MHz tuning selected



Regular tuning selected

**NOTE:** Large tuning steps should be used only when you want to change the frequency in large increments. Please select regular tuning steps for normal operation.



## ■ Scan operation OPTION

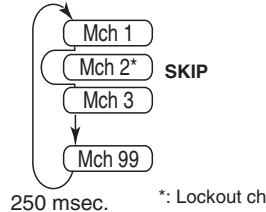
- ① Push [V/M] to select the Memory mode or the VFO mode, if necessary.
  - “MR” appears when in the Memory mode.
- ② Make sure the squelch level is set to the threshold point.
  - Set the squelch level (01 to 25) where the noise is just muted.
- ③ Push [SCAN] to start the scan.
  - To change the scan direction, turn [DIAL].
  - “SCAN (or P SCAN)” flashes while scanning.
- ④ Push [SCAN] again to stop the scan.

/// **NOTE:** Normal scan or Priority scan is pre-programmed by cloning. Please ask your dealer or system operator for details.

### ◇ NORMAL SCAN

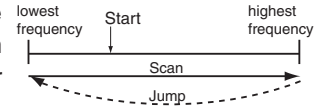
#### • Memory lock scan

Repeatedly scans memory channels except skip (lockout) channels.



#### • VFO scan

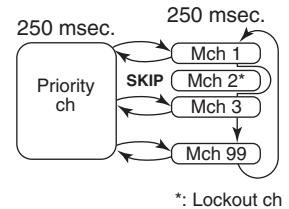
Repeatedly scans all frequencies over the entire band. Scan step is minimum channel spacing. (e.g. 25 kHz or 8.33 kHz)



### ◇ PRIORITY SCAN

#### • Priority memory scan

While scanning in the Memory mode, priority watch checks for a signal on the selected priority channel every 250 msec. and skips the lockout channel(s).



### 3 SCAN OPERATION

#### ■ ON–Hook scan OPTION

An ON–Hook scan (Hanger scan) stops when taking the microphone off its hanger (OFF–Hook) and resumes when putting it back on the hanger (ON–Hook).

- ➔ Push [SCAN] to start scanning.
  - When a signal is received, the scan pauses until the signal disappears.
  - The scan resumes 2 seconds after the signal disappears, unless you pushed [PTT] and transmitted.
- Take the microphone off the hanger to stop the scan.
- Put the microphone back on the hanger to resume scanning.

When you take the microphone OFF Hook during the scan operation.

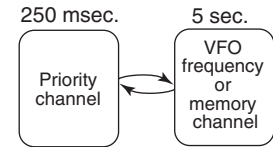
- In VFO scan;  
the scan stops on the last frequency that was scanned.
- In memory scan;  
the scan stops on the last memory channel that was scanned.
- In priority memory scan;  
the scan stops on the priority channel.

/// **NOTE:** Be sure to connect the supplied microphone hanger to the vehicle's ground for ON and OFF Hook microphone functions. (p. 12)

#### ■ Dualwatch

Dualwatch monitors the priority channel while you are receiving another channel (VFO or memory channel).

- If a signal is received on the priority channel, dualwatch pauses on the priority channel until the signal disappears.
- To transmit on the selected channel during dualwatch, hold down [PTT].



/// See page 11 for details of the priority channel setting.

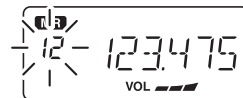
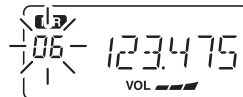
#### ◇ Operation

- ① Select the desired operating channel (VFO or Memory channel).
- ② Hold down [PRI] for 1 second to start dualwatch. 'P' blinks during dualwatch.
- ③ To cancel dualwatch, push [PRI] again.

## ■ Programming a memory channel OPTION

The transceiver has 99 memory channels for storage of often-used frequencies.

- ① Push [V/M] to select the VFO mode, if necessary.
- ② Rotate [DIAL] to select the desired frequency.
  - Push [TS](DIAL) one or more times to use the dial select function, if desired.
- ③ Hold down [MW](V/M) for 5 seconds to enter the memory programming mode.
  - “MR” and the memory channel number appear.
- ④ Rotate [DIAL] to select the desired memory channel number.
- ⑤ Hold down [MW](V/M) for 1 second to program the information into the channel and return to the VFO mode.
  - To cancel the memory information, hold down [SQL] for 1 second.



## ◇ Setting lockout channels

In order to speed up the scan periods, you can set memory channels you don't wish to be scanned as lockout channels.

- ① Push [V/M] to select the Memory mode, if necessary.
  - “MR” appears.
- ② Rotate [DIAL] to select a memory channel to set as a lockout channel.
- ③ Hold down [SCAN] for 5 seconds to toggle the lockout setting ON or OFF.
  - “LOCK OUT” appears when the channel is set as a lockout channel.



Memory channel 8 is set as the lockout channel.

### OPTION

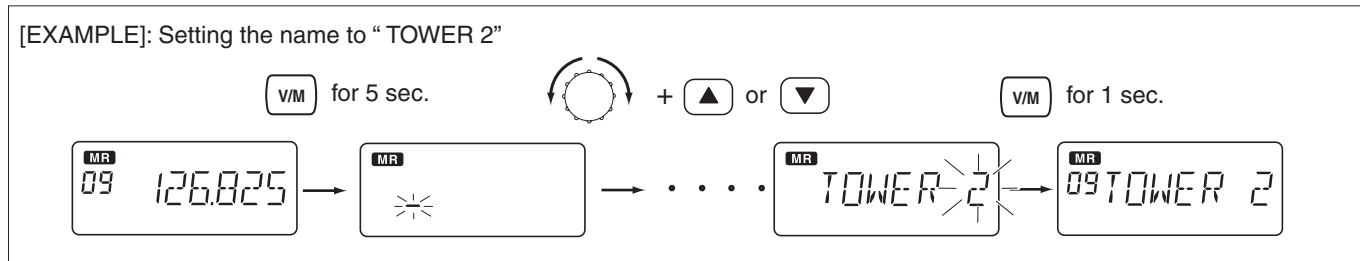
**NOTE:** The VFO/memory switch [V/M] and the memory write switch [MW] functions may not be available, depending on version.

## 4 MEMORY PROGRAMMING

### ■ Memory names OPTION

#### ◇ Programming memory names

- ① Select the memory channel to be programmed:
    - ➔ Push [V/M] to select the Memory mode.
    - ➔ Rotate [DIAL] to select the memory channel.
  - ② Hold down [MW](V/M) for 5 seconds to enter memory name writing mode.
    - The first digit blinks.
  - ③ Repeatedly rotates [DIAL] to select the desired character.
    - To erase a character, overwrite with a space (displayed as \_).
    - To move the cursor forwards or backwards, push [▲] or [▼].
    - Hold down [SQL] for 2 seconds to erase all characters.
  - ④ Hold down [MW](V/M) for 2 seconds to input the entered name.
    - The character stops blinking.
    - Memory channels can be programmed with names of up to 7 characters in length.
    - When no name is programmed, the display shows the operating frequency.
- NOTE:** Push [PTT] to cancel the memory name programming.
- The following characters can be used in names:
    - ➔ 0 to 9, A to Z (capitals), (space), \$, %, ', (, ), \*, +, “, ”, -, /, <, =, >, ?, @, [, \, ], ^, \_ and `.



## ■ Initial Set mode

The Initial Set mode is accessed at Power ON, and allows you to set seldom-changed settings. In this way you can the “customize” the transceiver operations to suit your preferences and operating style.

### ◇ Entering Initial Set mode

- ① While holding down [V/M] + [TS](DIAL), push [POWER] to turn ON the power.
  - The transceiver enters the Initial Set mode and “MN”, “BP”, “ST” or “PR” (p. 11) appears on the display.
- ② Push [TS](DIAL) to select the desired item as described below and to the right.
- ③ Rotate [DIAL] to select the desired option or setting.
- ④ Push [SCAN] to exit the Initial Set mode and return to the previous operating mode.



### ◇ Memory names

This item allows you to display a memory name instead of the frequency.

- When a memory channel has not been programmed with a name, the frequency appears instead.

### ◇ Beep tones ON/OFF

Confirmation beep tones normally sound when you push a key. These can be turned ON or OFF, as you prefer.



### ◇ Side tones ON/OFF

When using an optional headset such as those from the David Clark Co. using an adapter, the transceiver outputs your transmitted voice to the headset for monitoring.

- Optional **OPC-871 HEADSET ADAPTER** is required.



## 5 OTHER FUNCTION

### ◇ Priority channel OPTION

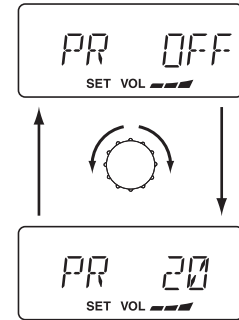
The priority channel is used to store your most often-used channel for quick recall. In addition, the priority channel is monitored during priority scan modes. The default setting for the priority channel will differ, depending on pre-programming.

- ➔ Push [PRI] to toggle the priority channel mode or previous mode.



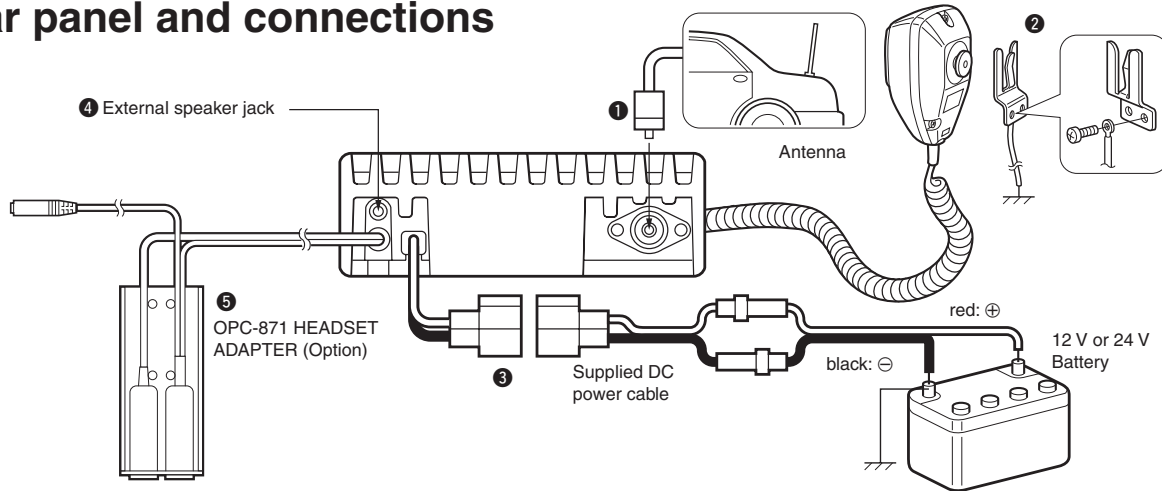
### • Setting the priority channel

- ① While holding down [V/M] and [TS](DIAL), push [POWER] to turn ON the power.
  - The transceiver enters the Initial Set mode.
- ② Push [TS](DIAL) to select the priority channel Set mode.
- ③ Rotate [DIAL] to select the desired channel number as a priority channel or OFF.
- ④ Hold down [POWER] to turn OFF the power.



/// **NEVER** select the blank memory channel as the priority channel. In such a case the priority function is automatically set to the OFF position.

## ■ Rear panel and connections



### 1 Connects to an antenna

Ask your dealer about antenna selection and best installation location. (Standard 50  $\Omega$  antenna with an SWR <3.0)

### 2 MICROPHONE HANGER

Connect the supplied microphone hanger to the vehicle's ground for to use the hanger scan function when hanging or removing the microphone.

### 3 DC POWER RECEPTACLE

Connects to a 12 or 24 V DC battery. Pay attention to polarities.

- 12 V or 24 V automatic selectable.

### 4 EXTERNAL SPEAKER JACK

Connect an 8  $\Omega$ , 30 W (Min.) external speaker, if desired.

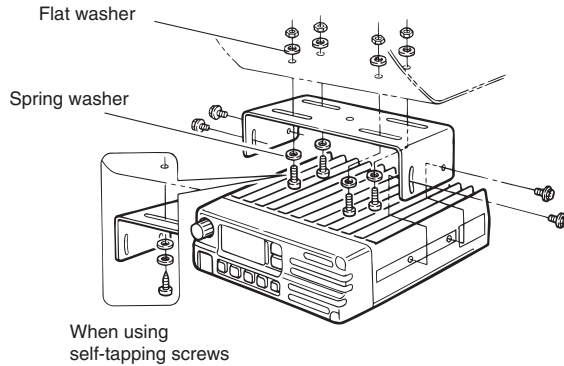
**CAUTION: DO NOT** use an external speaker whose power input rating is less than 30 W or whose impedance is less than 8  $\Omega$ . Using a speaker of less than 30 W power rating, or less than 8  $\Omega$  impedance, could cause damage to the external speaker or to the transceiver itself.

### 5 OPC-871 OPTIONAL HEADSET ADAPTER

Connect an optional headset. (See p. 17)

## 6 CONNECTION AND INSTALLATION

### ■ Mounting



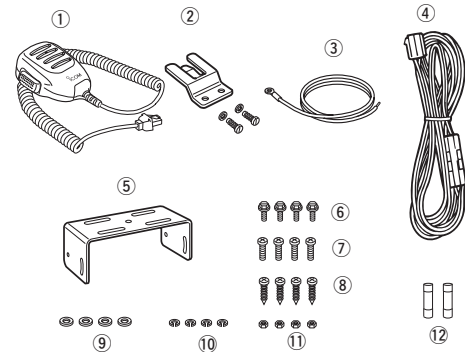
The universal mounting bracket supplied with your transceiver allows overhead or dashboard mounting. Please read the following instructions carefully.

- Mount the transceiver securely with the 4 supplied screws (M5 × 20) to a surface which is more than 10 mm thick and can support more than 5 kg.
- Mount the transceiver so that the face of the transceiver is at 90° to your line of sight when operating.

#### /// IMPORTANT!

Detailed installation notes for Icom mobile transceivers to be fitted into vehicles are available. Contact your Icom dealer or distributor.

### ■ Supplied accessories



① Microphone .....	1
② Microphone hanger and screw set.....	1 set
③ Microphone cable.....	1
④ DC power cable (OPC-1091) .....	1
⑤ Mounting bracket.....	1
⑥ Bracket bolts .....	4
⑦ Mounting screws (M5 × 12).....	4
⑧ Self-tapping screws (M5 × 20) .....	4
⑨ Flat washers.....	4
⑩ Spring washers .....	4
⑪ Nuts.....	4
⑫ Fuses (10 A) .....	2



### ◇ Data cloning

Cloning allows you to quickly and easily transfer the programmed contents from one transceiver to another transceiver or data from a PC to a transceiver using the optional CS-A110EURO cloning software.

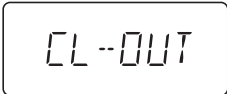
AT POWER ON

### ◇ Transceiver to transceiver cloning

- ① Connect the OPC-591 CLONING CABLE with adapter plugs to the [MIC] jack of the master and sub-transceivers.
  - The master transceiver is used to send data to the sub-transceiver.
- ② While holding down [▲] + [▼] + [V/M], push [POWER] to enter cloning mode (master transceiver only—power ON only for sub-transceiver).
  - “CLONE” appears and the transceivers enter the clone standby mode.
- ③ Push [POWER] on the master transceiver.
  - “CL-OUT” appears in the master transceiver’s display.
  - “CL-IN” appears automatically in the sub-transceiver’s display.
- ③ When cloning is finished, turn power OFF, then ON again to exit the cloning mode.



CLONE



CL-OUT



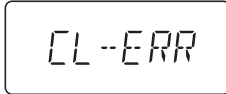
CL-IN

### ◇ Cloning using PC

Data can be cloned to and from a PC using the optional CS-A110EURO CLONING SOFTWARE and the optional OPC-478 CLONING CABLE+ OPC-592 CLONING CABLE ADAPTER. Consult the CS-A110EURO CLONING SOFTWARE HELP message for details.

### ◇ Cloning error

When the display to the right appears, a cloning error has occurred.



CL-ERR

- In this case, both transceivers automatically return to the clone standby mode and cloning must be repeated.

## ◇ General

- Frequency coverage : 118.000 to 136.975 MHz
- Channel spacing : 25/8.33 kHz
- Mode : AM (6K00A3E)
- No. of memory channels : 99
- Acceptable power supply : 13.75 V\* or 27.5 V\* DC  
(negative ground) (\*Automatic selection)
- Usable temp. range : -20°C to +55°C
- Frequency err : ±1 ppm (0 to +40°C)
- Current drain (at 13.75 V DC):
  - Tx : 5 A (at max. power)
  - Rx : 4 A ( at max. AF)
  - 0.5 A (at stand by)
- Antenna impedance : Standard 50 Ω with SWR<3:1
- Dimensions : 150 (W) × 50 (H) × 180 (D) mm  
(projections not incl.)
- Weight (approx.) : 1.5 kg

## ◇ Transmitter

- Output power : 9 W ±1.5 dB (+15 to +35°C)  
9 W +2 dB, -3 dB (-20 to +55°C)
- Modulation depth : More than 85%
- Modulation compression : Linear: 85%, Max. : 95%
- Amplitude mod. distortion : Less than 10%
- Audio frequency response : +2 dB to -4 dB from  
350 to 2500 Hz  
More than -25 dB at 5000 Hz  
(at 25 kHz channel spacing)  
More than -25 dB at 3200 Hz  
(at 8.33 kHz channel spacing)
- Adjacent channel power : Less than 60 dB  
(at 25 kHz channel spacing)  
Less than 50 dB  
(at 8.33 kHz channel spacing)
- Conducted spurious emissions:
  - Less than -46dBm  
(9 kHz to 30 MHz)
  - Less than -36 dBm for  
harmonics
  - Less than -46 dBm for non-  
harmonics (30 MHz to 1 GHz)
  - Less than -30 dBm for  
harmonics
  - Less than -40 dBm for non-  
harmonics (1 GHz to 4 GHz)

◇ **Receiver**

- Receive system : Double conversion superheterodyne
- Intermediate frequencies : 1st 38.85 MHz  
2nd 450 kHz
- Sensitivity (at 12 dB SINAD) : Less than 5 dB $\mu$ V
- Squelch sensitivity : Less than -6 dB $\mu$ V (Threshold)
- Harmonic distortion : Less than 5% (at 30% mod.)  
Less than 10% (at 90% mod.)
- Audio frequency response : +2 dB to -4 dB from  
350 to 3000 Hz  
(at 25 kHz channel spacing)  
+2 dB to -4 dB from  
350 to 2500 Hz  
(at 8.33 kHz channel spacing)
- Audio noise : More than 40 dB
- Adjacent channel rejection : More than 60 dB
- Spurious response rejection : More than 70 dB
- Intermodulation response : More than 64 dB  
rejection
- Blocking or desensitisation : More than 70 dB
- Conducted spurious emissions : Less than -57 dBm  
(9 kHz to 1 GHz)  
Less than -47 dBm  
(1 GHz to 4 GHz)
- Cross modulation rejection : More than 70 dB
- Receiver dynamic range : Less than 6 dB

- Audio output power : More than 10 W (at 13.75 V  
DC with 8  $\Omega$  load 60 % MOD.  
10% distortion)
- Side tone : More than 100 mW (with 500 $\Omega$   
load 60% MOD. 10 % distortion)
- Audio output impedance : Ext. SP 8  $\Omega$   
Side tone 500  $\Omega$

**All stated specifications are subject to change without notice or obligation.**

## 8 SPECIFICATIONS (VFO CHANNEL ID LIST)

- Channel spacing: 25 kHz (Actual frequency is displayed.)

Operating Freq. (MHz)	Channel spacing (kHz)	Channel ID (Displayed Freq.)
118.0000	25	118.000
118.0250	25	118.025
118.0500	25	118.050
118.0750	25	118.075
118.1000	25	118.100

- Channel spacing: 8.33 kHz

Operating Freq. (MHz)	Channel spacing (kHz)	Channel ID (Displayed Freq.)
118.0000	8.33	118.005
118.0083	8.33	118.010
118.0167	8.33	118.015
118.0250	8.33	118.030
118.0333	8.33	118.035
118.0417	8.33	118.040
118.0500	8.33	118.055
118.0583	8.33	118.060
118.0667	8.33	118.065
118.0750	8.33	118.080
118.0833	8.33	118.085
118.0917	8.33	118.090
118.1000	8.33	118.105

- Channel spacing: 8.33/ 25 kHz auto selection mode

Operating Freq. (MHz)	Channel spacing (kHz)	Channel ID (Displayed Freq.)
118.0000	25	118.000
118.0000	8.33	118.005
118.0083	8.33	118.010
118.0167	8.33	118.015
118.0250	25	118.025
118.0250	8.33	118.030
118.0333	8.33	118.035
118.0417	8.33	118.040
118.0500	25	118.050
118.0500	8.33	118.055
118.0583	8.33	118.060
118.0667	8.33	118.065
118.0750	25	118.075
118.0750	8.33	118.080
118.0833	8.33	118.085
118.0917	8.33	118.090
118.1000	25	118.100
118.1000	8.33	118.105

These tables show just the display examples between 118.0000 MHz and 118.1000 MHz, not show all frequencies in the band.

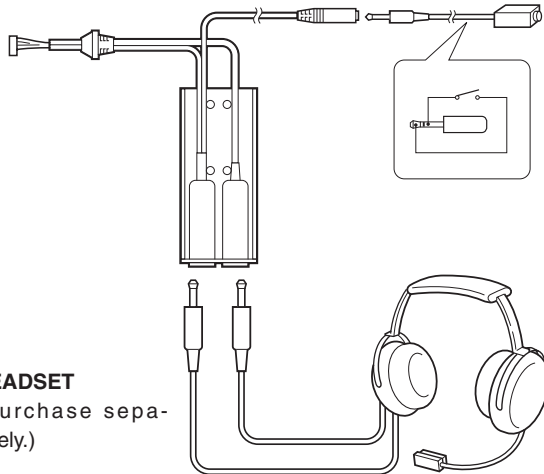
## ■ OPC-871 Headset adapter

When using an optional headset, such as those from the David Clark Co. with the adapter, the transceiver outputs your transmitted voice to the headset for monitoring. (pp. 5, 10)

### ◇ Connection

#### PTT switch

Use a PTT switch with a 3.5 mm diameter plug, if required.



**HEADSET**  
(Purchase separately.)

### ◇ Installation

The optional OPC-871 HEADSET ADAPTER is installed as follows.

- ① Turn OFF the power, then disconnect the DC power cable.
- ② Unscrew the 4 screws, then remove the bottom cover. (Fig. 1)
- ③ Insert the connector as shown below. (Fig. 2)
- ④ Mount the phone plug attachment together with the mobile mounting bracket with 2 supplied screws. (Fig. 3)

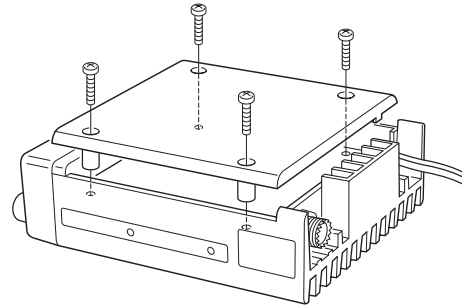


Fig. 1

## 9 OPC-871/OPTIONS

- Bend the plastic dust cover down before installing the strain relief into the notch.

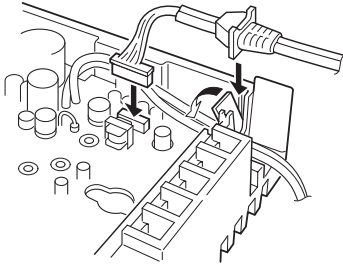


Fig. 2

- Use the upper side mounting hole.
- You can mount the attachment on either side of the transceiver.

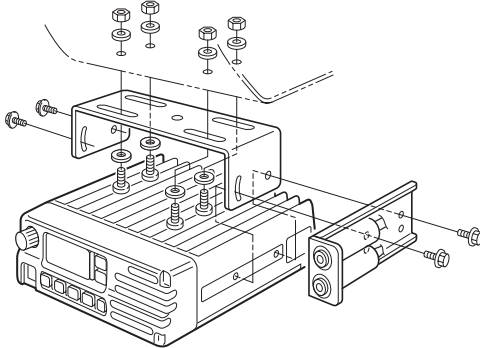


Fig. 3

## ■ Other options

**OPC-871** HEADSET ADAPTER (See pp. 18–19)

**CS-A110EURO** CLONING SOFTWARE

Provides quick and easy programming of items, including private channels, scan settings, etc. to the transceiver, using a PC.

**OPC-478** CLONING CABLE

**OPC-592** CLONING CABLE ADAPTER

These three components work as one set and provide for quick and easy programming of items, including memory channels, memory names and set mode contents, etc. with a PC.

**OPC-591** CLONING CABLE

Cloning cable for transceiver to transceiver cloning. Very convenient to transfer of programmed contents from one transceiver to another.

Approved Icom optional equipment is designed for optimal performance when used with an Icom transceiver.

Icom is not responsible for the destruction or damage to an Icom transceiver in the event the Icom transceiver is used with equipment that is not manufactured or approved by Icom.



We Icom Inc. Japan  
1-1-32, Kamiminami, Hirano-ku  
Osaka 547-0003, Japan

Declare on our sole responsibility that this equipment complies with the essential requirements of the Radio and Telecommunications Terminal Equipment Directive, 1999/5/EC, and that any applicable Essential Test Suite measurements have been performed.

**Kind of equipment:** VHF AIR BAND TRANSCEIVER

**Type-designation:** IC-A110EURO

**Version (where applicable):**

This compliance is based on the following harmonised standards, specifications or documents:

- i) EN301 489-1\*
- ii) EN301 489-22\*
- iii) EN300 676
- iv) EN60950
- v) \_\_\_\_\_

\* \*Relevant EC Type Examination Certificate: reference CR 01-9781 issued by EMITECH (N.B number 0725) dated 20 July 2001\*

## DECLARATION OF CONFORMITY

**CE0341** ⚠

Düsseldorf 9th Nov. 2001  
Place and date of issue

Icom (Europe) GmbH  
Himmelgeisterstraße 100  
D-40225 Düsseldorf

Authorized representative name

T. Maebayashi  
General Manager

Signature

Icom Inc.

### • List of Country codes (ISO 3166-1)

	Country	Codes		Country	Codes
1	Austria	AT	18	Liechtenstein	LI
2	Belgium	BE	19	Lithuania	LT
3	Bulgaria	BG	20	Luxembourg	LU
4	Croatia	HR	21	Malta	MT
5	Czech Republic	CZ	22	Netherlands	NL
6	Cyprus	CY	23	Norway	NO
7	Denmark	DK	24	Poland	PL
8	Estonia	EE	25	Portugal	PT
9	Finland	FI	26	Romania	RO
10	France	FR	27	Slovakia	SK
11	Germany	DE	28	Slovenia	SI
12	Greece	GR	29	Spain	ES
13	Hungary	HU	30	Sweden	SE
14	Iceland	IS	31	Switzerland	CH
15	Ireland	IE	32	Turkey	TR
16	Italy	IT	33	United Kingdom	GB
17	Latvia	LV			



CE Versions of the IC-A110EURO which display the “CE” symbol on the serial number label, comply with the essential requirements of the European Radio and Telecommunication Terminal Directive 1999/5/EC.



This warning symbol indicates that this equipment operates in non-harmonised frequency bands and/or may be subject to licensing conditions in the country of use. Be sure to check that you have the correct version of this radio or the correct programming of this radio, to comply with national licensing requirement.

**Count on us!**

**<Intended Country of Use>**

- AT  BE  CY  CZ  DK  EE  
 FI  FR  DE  GR  HU  IE  
 IT  LV  LT  LU  MT  NL  
 PL  PT  SK  SI  ES  SE  
 GB  IS  LI  NO  CH  BG  
 RO  TR  HR