

# INSTRUCTION MANUAL

VHF AIR BAND TRANSCEIVER

# IC-A22E

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Icom Inc.



The IC-A22 and IC-A22E VOR functions are supplemental aids to navigation only and are not intended to be a substitute for accurate VOR equipments.

#### **IMPORTANT**

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

**SAVE THIS INSTRUCTION MANUAL** – This instruction manual contains important safety and operating instructions for the IC-A22 and IC-A22E.

### **EXPLICIT DEFINITIONS**

WORD	DEFINITION
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

#### **CAUTIONS**

12 V ONLY! NEVER connect the transceiver to a 24 V socket or to an AC outlet. More than 15 V DC will damage the transceiver.

**NEVER** connect the transceiver to a power source using reverse polarity. This connection will ruin the transceiver.

**NEVER** allow children to touch the transceiver.

**AVOID** using or placing the transceiver in direct sunlight or in areas with temperatures below  $-10^{\circ}\text{C}$  (+14°F) or above +50°C (+122°F).

**BE CAREFUL!** When transmitting for a long time, the rear panel will become hot.

**BE CAREFUL!** The use of non-loom battery packs and chargers may impair transceiver performance and invalidate the warranty.

**UNPLUG** the external DC plug immediately when "OVER V" is displayed as shown at right, indicating more than approx. 18 V DC is connected.

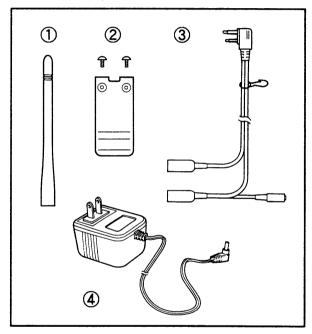
DIVER IV

# TABLE OF CONTENTS

	MPORTANT ·····i
E	XPLICIT DEFINITIONSi
C	AUTIONSi
T	ABLE OF CONTENTS ii
	NPACKING ·····ii
1	PANEL DESCRIPTION 1-6
	■ Front and side panels ······ 1
	■ Top panel ····· 2
	■ Keypad ····· 3
	■ Function display ····· 5
	1
2	PRE-OPERATION 7-10
	■ Battery pack charging ····· 7
	■ Battery pack precautions ······ 7
	■ About the battery pack ······ 7
	■ Charging connections ····· 8
	■ External power source connection · · 9
	■ Alkaline battery installation ······ 9
	Accessory attachment ·········· 10
	= 710000001 attachment
3	BASIC OPERATION 11-13
	■ Accessing the 121.5 MHz
	emergency frequency
	Setting a frequency
	Lock function
	<del>-</del>
	Receiving
	■ Transmitting ······ 13
	■ Side tone function ····· 13

4	MEMORY OPERATION 14	
	■ Memory channel selection ·······	14
	■ Transferring memory contents ·····	14
	■ Programming a memory	
	channel ·····	15
	■ Programming a comment ······	15
	■ Clearing memory contents ·······	16
5	SCAN OPERATION 17	-18
	■ Scan types ·····	17
	■ COM band scan ·····	17
	■ Memory scan ······	17
	■ Weather channel scan ······	18
	■ Lockout channels ·····	18
6	VOR NAVIGATION 19	^-
•	TOTTINATION	-23
Ū	■ VOR indicators ·····	
	■ VOR indicators ·····	19
	■ VOR indicators ·······	19 20
•	■ VOR indicators ····································	19 20 21
•	■ VOR indicators ····································	19 20 21 23
•	■ VOR indicators ····································	19 20 21 23 23
	■ VOR indicators  ■ VOR functions  ■ Flying to a VOR station  ■ Entering a desired course  ■ Crosschecking position	19 20 21 23 23 25
7	■ VOR indicators  ■ VOR functions  ■ Flying to a VOR station  ■ Entering a desired course  ■ Crosschecking position  ■ Duplex operation	19 20 21 23 23 25

# **UNPACKING**

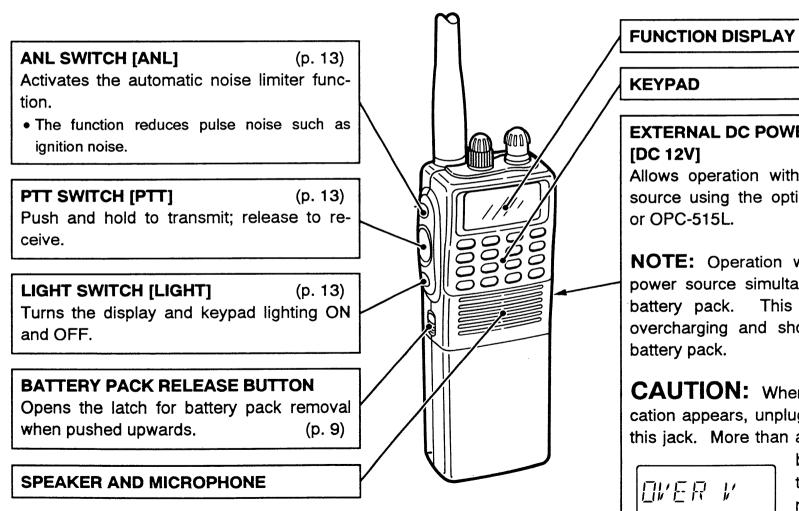


Included accessories:	
① Antenna (FA-B01AR) ······	1
② Belt clip and screws ·····	1 set
③ Headset adapter cable (OPC-499)*	1
4 Wall charger* ······	1
<ul> <li>Ni-Cd battery pack* (CM-166)</li> </ul>	
(attached to the transceiver) ·······	1
• Carrying case (LC-122)*	1
• Charger adapter cable (OPC-507)*	1

<sup>\*</sup> Not included with some versions.

# PANEL DESCRIPTION

# Front and side panels



(p. 5)

(p. 3)

#### **EXTERNAL DC POWER JACK**

(p. 9)

Allows operation with a 12 V DC power source using the optional cables, CP-17L

NOTE: Operation with an external DC power source simultaneously charges the battery pack. This may cause battery overcharging and shorten the life of the

CAUTION: When the following indication appears, unplug the connector from this jack. More than approx. 18 V DC has

> been connected, so the transceiver may need checking at a service center.

# Top panel

# ANTENNA CONNECTOR (p. 10)

Connects the supplied antenna.

#### **VOLUME CONTROL [VOL]**

(p. 13)

Turns the power ON and OFF, and adjusts the audio level.

#### SQUELCH CONTROL [SQL]

(p. 13)

Varies the squelch threshold point for noise mute.



Connect a headset of the David Clark Co. via the OPC-499, if desired. The transmit voice can be monitored from the headset. The internal speaker will not function when connected. Note that previous headset adapters, the HS-61 and HS-20SB, cannot be used.

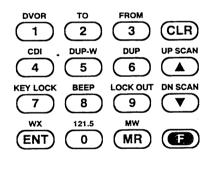
#### **TUNING DIAL [DIAL]**

- Sets an operating frequency, memory channel, weather channel\* or duplex frequency.\*
- Sets the 1 MHz digit after pushing [F] in frequency mode.
- Functions as an omni bearing selector (changes course indicator) in CDI mode.

<sup>\*</sup> Weather channel and duplex function: U.S.A. version only.

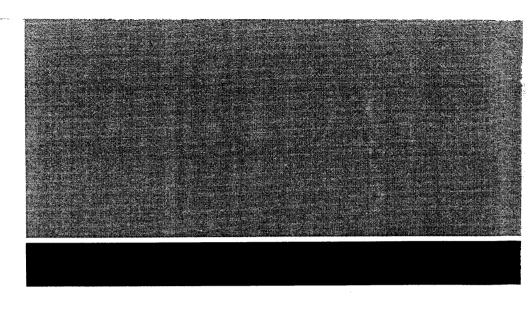
# 1 PANEL DESCRIPTION

# ■ Keypad



KEY	FUNCTION	SECONDARY FUNCTION (After pushing [F	=])
DVOR 1	- Sets the desired frequency or channel.  (pgs. 11, 12, 14) - Selects the desired character for memory channel	Selects the DVOR display from the CDI display band.	in NAV (p. 19)
TO 2		<ul> <li>Changes the course indicator characteristics flag in the DVOR display in NAV band.</li> <li>Corrects the deviation while using "TO" flag.</li> </ul>	to "TO" (p. 19) (p. 23)
FROM 3		<ul> <li>Changes the course indicator characteristics to 'flag in the DVOR display in NAV band.</li> <li>Corrects the deviation while using "FROM" flag.</li> </ul>	'FROM" (p. 19) (p. 23)
CDI 4		Selects the CDI display from the DVOR display band.	in NAV (p. 19)
DUP-W 5	comments while program- ming a memory channel.	Sets the duplex frequency* in NAV band.	(p. 25)
DUP 6	(p. 15) - Inputs the degrees of the desired course in CDI	Turns the duplex function* ON and OFF in NAV ba	and. (p. 25)
KEY LOCK	mode. (p. 21)	Turns the lock function ON and OFF.	(p. 12)
BEEP 8		Turns the beep tone ON and OFF.	(p. 13)
LOCK OUT		Sets the displayed memory or weather chann lockout channel.	el as a (p. 18)
121.5		Selects the 121.5 MHz emergency frequency.	(p. 11)

#### Count on us!



Icom Inc.

6-9-16, Kamihigashi, Hirano-ku, Osaka 547, Japan