ICOM
Icom Inc.
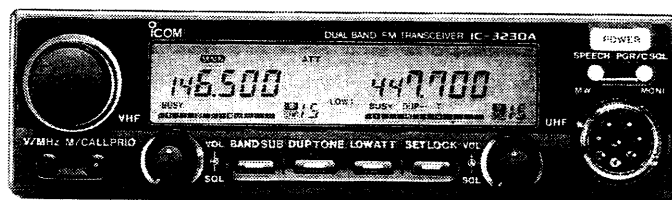
DUAL BAND
FM TRANSCEIVER
IC-3230H
IC-3230A
IC-3230E

Icom Inc.

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-3230A/E/H**.

FOREWORD

Thank you for choosing this Icom product.

The **IC-3230A/E/H** is a 144 and 430 (440) MHz dual band mobile transceiver. The **IC-3230A/E/H** is a compact, easy-to-operate, multi-function transceiver designed using Icom's state-of-the-art technology.

TABLE OF CONTENTS

CAUTIONS

NEVER connect the transceiver to an AC outlet or to a power source of more than 16 V DC. These connections will ruin the transceiver.

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

NEVER place the transceiver where normal operation of the vehicle may be hindered or where it could cause bodily injury.
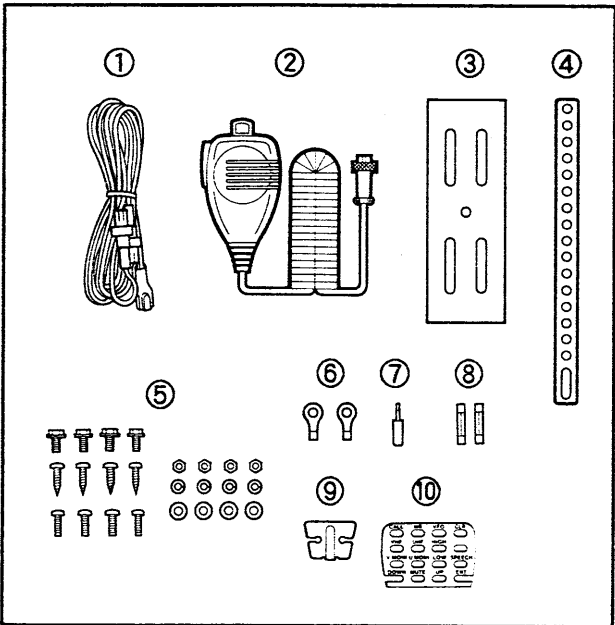
NEVER allow children to touch the transceiver.

DO NOT use or place the transceiver in areas with temperatures below −10℃ (+14℉) or over +60℃ (+140℉).

AVOID placing the transceiver in areas of direct sunlight, such as the dashboard.

BE CAREFUL! The heatsink may become hot when operating the transceiver continuously for long periods.

UNPACKING

Included accessories: **Qty.**

① DC power cable (OPC-044B) 1
② Microphone* 1
③ Mounting bracket 1
④ Mounting support bracket 1
⑤ Mounting screws,
    nuts and washers .... 1 set
⑥ Cable lugs 2
⑦ External speaker plug 1
⑧ Fuses (15 A) 2
⑨ Microphone hanger 1
⑩ Microphone sheet for HM-56/A 1

* U.S.A. version: HM-56A
    Australia and Asia versions: HM-58
    Europe and Italy versions: HM-59

1 PANEL DESCRIPTION

■ Front panel

VHF VOLUME CONTROL [VOL] (p. 17)
Adjusts the VHF band audio output level.

VHF SQUELCH CONTROL [SQL] (p. 17)
Adjusts the VHF band squelch threshold level.

TUNING CONTROL
Selects the operating frequency (p. 14), the memory channel (p. 28), the contents of the SET mode display (p. 12) and the scanning direction (pgs. 34, 35).

VFO/MHz SWITCH [V/MHz]
Selects VFO mode. (p. 13)

Selects the 1 MHz tuning step in VFO mode. (p. 15)

Selects the 10 MHz tuning step when pushed and held. Some versions do not have this tuning step. (p. 15)

MEMORY/CALL CHANNEL SWITCH [M/CALL/PRIO]
Selects MEMORY mode or call channel. (pgs. 28, 31)

Activates the priority watch function when pushed and held. (pgs. 39, 40)

Cancels the priority watch function when the function is activated. (pgs. 39, 40)

BAND SWITCH [BAND/SUB]
Selects either VHF or UHF for the MAIN band.

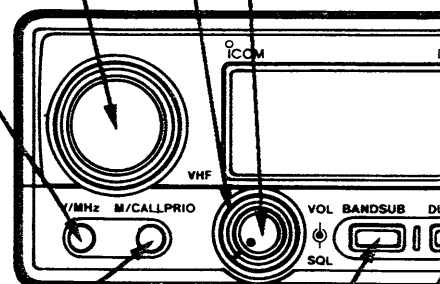Activates the SUB band access function when pushed and held.

DUPLEX/TONE SWITCH [DUP/TONE]
Selects simplex, − duplex or + duplex. (p. 25)

Activates the subaudible tone encoder*[1] (p. 26); optional*[2] pocket beep or tone squelch function (p. 48) when pushed and held.

*[1] U.S.A. version: Built-in.
  Other versions: Optional except for 88.5 Hz.
*[2] The UT-67 TONE SQUELCH UNIT is neccessary.

MEMORY WRITE SWITCH [SPEECH/MW]
Programs a memory channel or a call channel. (pgs. 29, 31)

Transfers the contents of a memory channel or a call channel to the VFO. (pgs. 30, 32)

Announces the operating band frequency in a synthesized voice when an optional UT-66 VOICE SYNTHESIZER UNIT is installed. (p. 22)

POWER SWITCH [POWER]
Turns the power ON and OFF.

MONITOR SWITCH [PGR/C SQL/MONI]
Opens the accessing band squelch and monitors the transmit frequency when pushed and held. (pgs. 23, 25)

Activates the pager or code squelch function when an optional UT-55 DTMF ENCODER/DECODER UNIT is installed. (pgs. 42~47)

MICROPHONE CONNECTOR (p. 4)
Connects the supplied microphone or another suitable microphone.

UHF SQUELCH CONTROL [SQL] (p. 17)
Adjusts the UHF band squelch threshold level.

UHF VOLUME CONTROL [VOL] (p. 17)
Adjusts the UHF band audio output level.

SET MODE SWITCH [SET/LOCK]
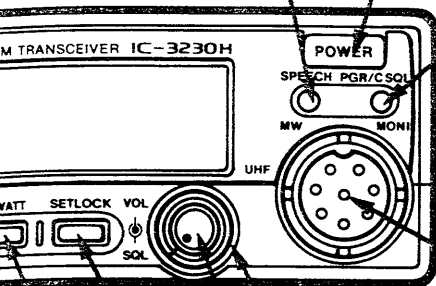Accesses SET mode and advances the SET mode display. (p. 12)

Activates the lock function when pushed and held. (p. 13)

TRANSMIT POWER SWITCH [LOW/ATT]
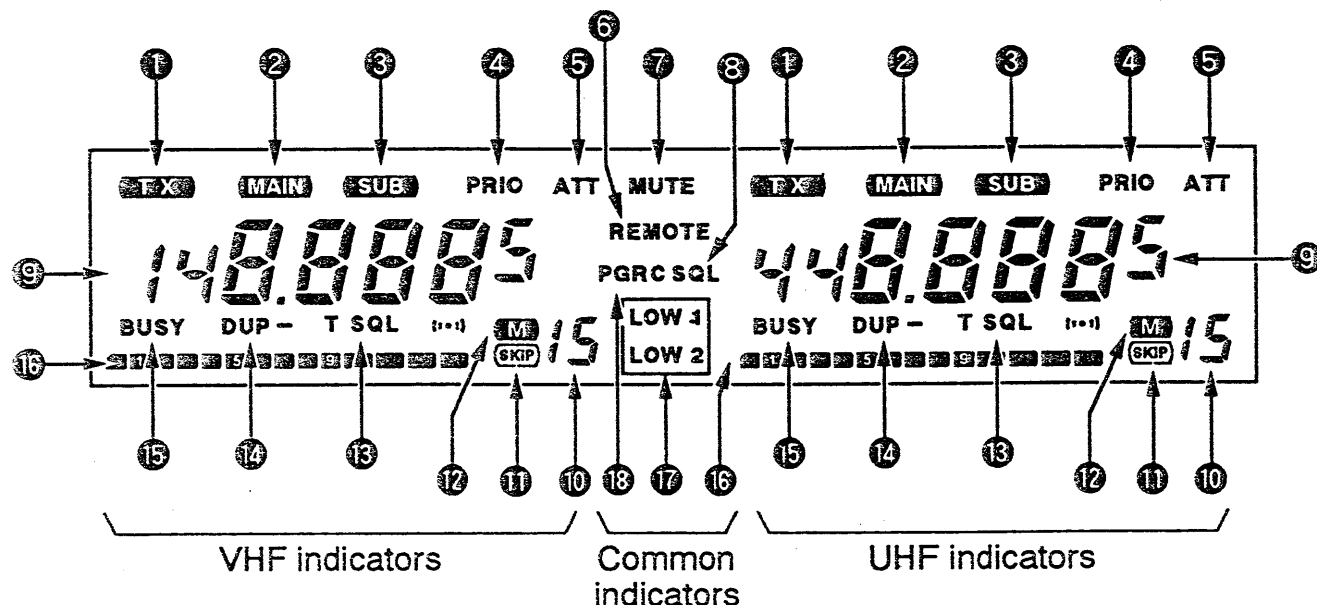Selects 1 of the 3 transmit output power levels. (p. 23)

Activates the RF attenuator function when pushed and held. (p. 18)

Reverses the SET mode display in SET mode. (p. 12)

■ Function display

VHF indicators   Common indicators   UHF indicators

❶ TRANSMIT INDICATORS (p. 24)
Appear while transmitting.

❷ MAIN BAND INDICATORS
Appear above the frequency readout of the MAIN band.

❸ SUB BAND ACCESS INDICATORS
Appear when the SUB band access function is activated. (p. 19)

Blink when optional External DTMF Remote is activated. (p. 59)

❹ PRIORITY WATCH INDICATORS (pgs. 39, 40)
Appear when priority watch is activated.

❺ RF ATTENUATOR INDICATORS (p. 18)
Appear when the RF attenuator is in use.

❻ REMOTE INDICATOR
Appears when optional Mic or External DTMF Remote is on standby. (p. 56)

Blinks when optional Mic or External DTMF Remote is in use. (pgs. 57, 59)

❼ MUTE INDICATOR (p. 58)
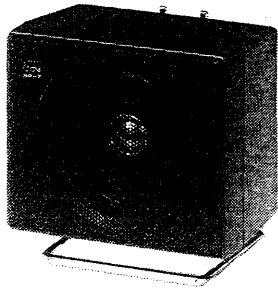Appears when the optional AF mute function is in use. The HM-56/A and the optional UT-55 are necessary.

❽ CODE SQUELCH INDICATOR (p. 47)
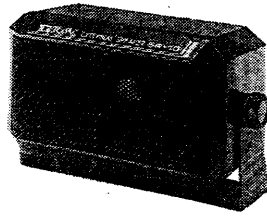Appears when the optional code squelch function is in use.

❾ FREQUENCY READOUTS
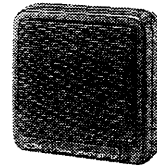Display the operating frequencies (except during SET mode).
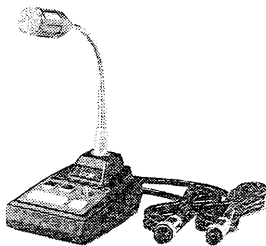
SP-7
EXTERNAL SPEAKER

SP-10
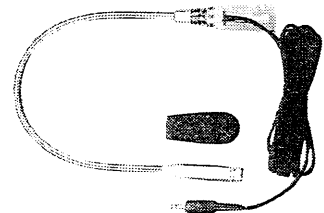**EXTERNAL SPEAKER**

SP-12
EXTERNAL SPEAKER

SM-8
DESKTOP MICROPHONE

SM-20
DESKTOP MICROPHONE

HS-15 FLEXIBLE MOBILE MICROPHONE

Used with the HS-15SB.

AH-32 144/430 (440) MHz DUAL BAND ANTENNA
Dual band mobile antenna.
Frequency range: 144~148 MHz
                 430~450 MHz
Max. input power: 150 W

AHB-32 TRUNK MOUNT
Trunk mount with a coaxial cable for the AH-32.

HM-56/A HAND MICROPHONE
Has a DTMF function and 14 DTMF memory channels. Necessary for Mic DTMF Remote. Also has a 1750 Hz tone call function.

HM-58 HAND MICROPHONE

HM-59 HAND MICROPHONE
Has a 1750 Hz tone call function.

HS-15SB SWITCHBOX
For the HS-15.

MB-27 MOBILE MOUNTING BRACKET
Same as the supplied one.

MB-34 JOINT PLATE
Stacks with the IC-1201A/E, etc.

OPC-044B DC POWER CABLE
Same as the supplied one.

IC-PS30 DC POWER SUPPLY
13.8 V DC, 25 A.

PS-45 DC POWER SUPPLY
13.8 V DC, 8 A. For IC-3230A/E. OPC-102 is necessary. Not available for IC-3230H.

SM-6 DESKTOP MICROPHONE

UT-55 DTMF ENCODER/DECODER UNIT
Provides pager and code squelch functions. Necessary for Mic or External DTMF Remote.

UT-66 VOICE SYNTHESIZER UNIT
Announces the operating band frequency.

UT-67 TONE SQUELCH UNIT
Provides pocket beep and tone squelch functions. Also functions as a subaudible tone encoder.