



INSTRUCTION MANUAL

VHF MOBILE TRANSCEIVER

IC-F1710

IC-F1810

UHF MOBILE TRANSCEIVER

IC-F2710

IC-F2810

BIIS 1200
Compatible



Above photo shows the IC-F1810 or IC-F2810.

Icom Inc.


IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL — This instruction manual contains important operating instructions for the **IC-F1710, IC-F1810, IC-F2710 and IC-F2810 VHF/UHF MOBILE TRANSCEIVERS**.

/// See the operating guide for details of MDC 1200 system operation. Consult your Icom dealer or system operator for details concerning your transceivers programming.

EXPLICIT DEFINITIONS

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

Icom, Icom Inc. and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia and/or other countries.

All other products or brands are registered trademarks or trademarks of their respective holders.

PRECAUTIONS

⚠ WARNING! NEVER connect the transceiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

⚠ WARNING! NEVER connect the transceiver to a power source of more than 16 V DC such as a 24 V battery. This connection will ruin the transceiver.

⚠ WARNING! NEVER cut the DC power cable between the DC plug and fuse holder. If an incorrect connection is made after cutting, the transceiver might be damaged.

⚠ WARNING! NEVER place the transceiver where normal operation of the vehicle may be hindered or where it could cause bodily injury.

CAUTION! NEVER allow children to touch the transceiver.

CAUTION! NEVER expose the transceiver to rain, snow or any liquids.

USE the specified microphone only. Other microphones have different pin assignments and may damage the transceiver.

DO NOT use or place the transceiver in areas with temperatures below -25°C or above $+55^{\circ}\text{C}$, or in areas subject to direct sunlight, such as the dashboard.

DO NOT operate the transceiver without running the vehicle's engine. The vehicle's battery will quickly run out if the transceiver transmits while the vehicle's engine OFF.

DO NOT place the transceiver in excessively dusty environments.

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

DO NOT use chemical agents such as benzine or alcohol when cleaning, as they damage the transceiver surfaces.

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

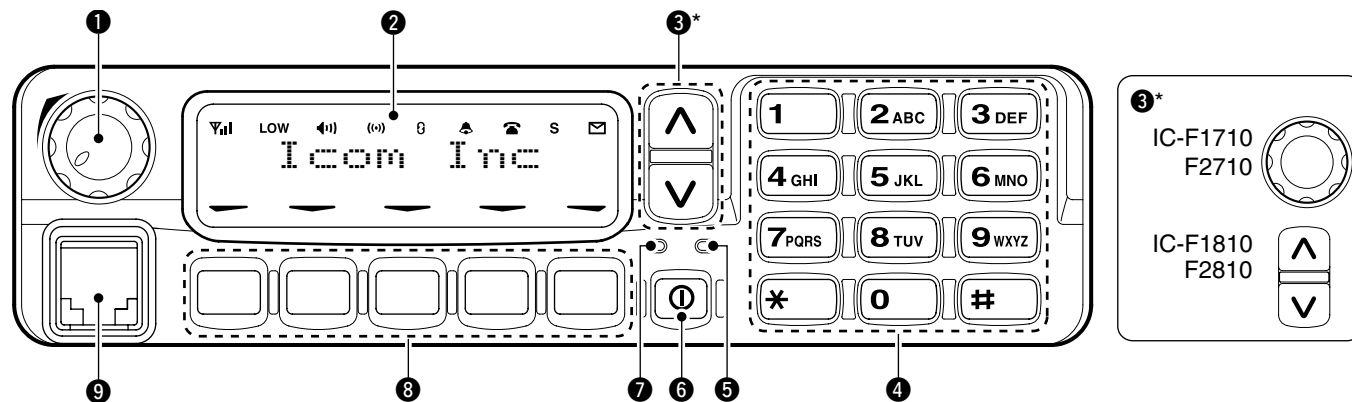
Approved Icom optional equipment is designed for optimal performance when used with an Icom transceiver.

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.

TABLE OF CONTENTS

IMPORTANT	i	■ Printer connection	23
EXPLICIT DEFINITIONS	i	■ Digital ANI	23
PRECAUTIONS	ii	■ Auto emergency transmission	23
TABLE OF CONTENTS	iii	■ Stun function	24
1 PANEL DESCRIPTION.....	1-7	■ BIIS indication	24
■ Front panel	1	■ Priority A channel selection	24
■ Function display	2	■ Horn output	24
■ Programmable function keys	3	4 CONNECTION AND MAINTENANCE	25-29
2 BASIC OPERATION.....	8-13	■ Rear panel connection	25
■ Turning power ON	8	■ Supplied Accessories	26
■ Channel selection	8	■ Mounting the transceiver	27
■ Call procedure	9	■ Optional UT-109 or UT-110 installation	27
■ Receiving and transmitting	9	■ Optional OPC-617 installation	28
■ Scrambler function	12	■ Antenna	29
■ User set mode	13	■ Fuse replacement	29
3 BIIS OPERATION	14-24	■ Cleaning	29
■ Default setting	14	■ Options	29
■ Receiving a call	14	5 DOC	30-31
■ Transmitting a call	16		
■ Receiving a message	18		
■ Transmitting a status	20		
■ Transmitting an SDM (Short Data Message)	21		
■ Position data transmission	23		

■ Front panel



1 AF VOLUME CONTROL KNOB

Rotate the knob to adjust the audio output level.

- Minimum audio level is pre-programmed.

2 FUNCTION DISPLAY (p. 2)

Displays a variety of information, such as an operating channel number/name, 5-tone code, DTMF numbers and audible condition, etc.

3 DIAL or UP/DOWN KEYS

- IC-F1710, F2710: **DIAL**

Rotate to select an operating channel, etc.

- IC-F1810, F2810: **UP/DOWN Keys**

Push to select an operating channel, etc.

*The desired function can be assigned by your dealer. (p. 3)

4 10-KEYPAD (IC-F1810 or IC-F2810 only)

The keypad allows you to enter digits to:

- Select memory channels, tone channels and DTMF codes (when in the DTMF code channel selection mode)
- Set TX codes and BISS status number
- Input text message for SDM operation
- Start up with a password

5 BUSY INDICATOR

Lights green while receiving a signal, or when the squelch is open.

1 PANEL DESCRIPTION

6 POWER SWITCH [POWER]

Push to turn the power ON and OFF.

- The following functions are available at power ON as options:
 - Automatic scan start
 - Password prompt
 - Set mode

7 TRANSMIT INDICATOR

Lights red while transmitting.

8 DEALER-PROGRAMMABLE KEYS

Desired functions can be programmed independently by your dealer. (p. 3)

/// In this instruction manual, these keys are from the left, called [P0]/[P1]/[P2]/[P3]/[P4].

9 MICROPHONE CONNECTOR

Connect the supplied microphone or optional DTMF microphone.

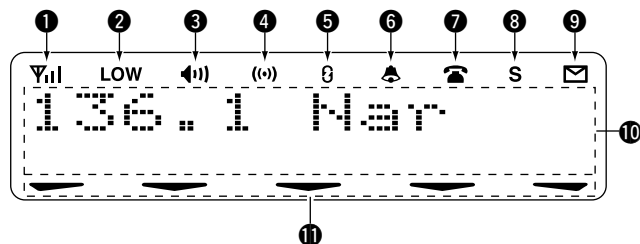
/// **NEVER** connect non-specified microphones. The pin assignments may be different and the transceiver may be damaged.

◇ MICROPHONE

The supplied or optional microphone has a PTT switch and a hanger hook.

- The following functions are available when the microphone is on or off hook:
 - Automatic scan start when on hook.
 - Automatic priority channel selection when off hook.
 - Sets to 'Inaudible' condition (mute condition) when on hook.
 - Sets to 'Audible' condition (unmute condition) when off hook.

■ Function display



1 SIGNAL STRENGTH INDICATOR

Indicates relative signal strength level.

2 LOW POWER INDICATOR

Appears when low output power is selected.

3 AUDIBLE INDICATOR

- Appears when the channel is in the 'audible' (unmute) condition.
- Appears when the specified 5-tone/BIIS code is received.

4 COMPANDER INDICATOR

Appears when the compander function is activated.

5 SCRAMBLER INDICATOR

Appears when the voice scrambler function is activated.

⑥ BELL INDICATOR

Appears/blinks when the specific 5-tone/BIIS code is received, according to the pre-programming.

⑦ CALL CODE MEMORY INDICATOR

Appears when the call code memory is selected.

⑧ SDM MEMORY INDICATOR

Appears when the SDM memory is displayed.

⑨ SDM INDICATOR

Appears when an SDM is received, or a transmit SDM is selected.

⑩ ALPHANUMERIC DISPLAY

Displays an operating channel number, channel name, Set mode contents, DTMF code, etc.

The indication mode can be selected from 1 line or 2 lines. Ask your dealer for details.

In this instruction manual, the LCD illustration is described using the 2 lines indication mode.

⑪ ACTIVATED KEY INDICATOR

Appears above the key assigned as [DIGITAL] key when that key has been activated.

■ Programmable function keys

The following functions can be assigned to [DIAL]*, [UP], [DOWN], [P0], [P1], [P2], [P3] and [P4] programmable function keys.

Consult your Icom dealer or system operator for details concerning your transceivers programming.

If the programmable function names are bracketed in the following explanations, the specific key is used to activate the function depends on the programming.

*The functions you can assign to [DIAL] are limited.

(Only functions marked with ☆ can be assigned.)

☆ CH UP AND DOWN KEYS

- ➡ Push (or Rotate)* to select an operating channel.
- ➡ Push (or Rotate)* to select a transmit code channel after pushing [TX Code CH Select].
- ➡ Push (or Rotate)* to select a DTMF channel after pushing [DTMF Autodial].
- ➡ Push (or Rotate)* to select a scan group after pushing and holding [Scan A Start/Stop]/[Scan B Start/Stop].
- ➡ Push (or Rotate)* to select a BIIS code, status number or SDM after pushing [Digital].

*Rotate when this function is assigned to [DIAL].


☆ **ZONE UP AND DOWN KEY** (This function is for [DIAL] only)

Rotate to select the desired zone.

1 PANEL DESCRIPTION

ZONE KEY

Push this key, then select the desired zone using [CH Up]/[CH Down].

 **What is “zone”?**—The desired channels are assigned into a zone according to the intended use for grouping. For example, ‘Staff A’ and ‘Staff B’ are assigned into a “Business” zone, and ‘John’ and ‘Cindy’ are assigned into a “Private” zone.

SCAN A START/STOP KEY

➡ This key’s operation depends on the Power ON Scan setting.

When the power ON scan function is turned OFF;

Push to start and cancel scanning operation. In case of transmission during scan, cancels scanning.

When the power ON scan function is turned ON;

Push to pause scanning. Scanning resumes after a specified time period has passed. In case of transmission during scan, pauses scanning. Scanning resumes after a specified time period has passed after the transmission is finished.

➡ Push and hold this key for 1 sec. to indicate the scan group, then select the desired group using [CH Up]/[CH Down].

SCAN B START/STOP KEY

➡ Push to start and cancel scanning operation. In case of transmission during scan, pauses scanning. Scanning resumes after a specified time period has passed after the transmission is finished.

➡ Push and hold this key for 1 sec. to indicate the scan group, then select the desired group using [CH Up]/[CH Down].

SCAN ADD/DEL (TAG) KEY

Push to add or delete the selected channel to/from the scan group.

PRIO A/B KEYS

➡ Push to select Priority A or Priority B channel.

➡ Push and hold [Prio A (Rewrite)] to rewrite the Prio A channel.


MR-CH 1/2/3/4 KEYS

Push to select an operating channel directly.

MONI (AUDI) KEY

Activates one of (or two of) the following functions on each channel independently:

- Push and hold to un-mute the channel (audio is emitted; ‘Audible’ condition).
- Push to mute the channel (sets to ‘Inaudible’ only).
- Push to un-mute the channel (sets to ‘Audible’ only).
- Push after the communication is finished to send a ‘reset code’.

 **NOTE:** The un-mute condition (‘Audible’ condition) may automatically return to the mute condition (‘Inaudible’ condition) after a specified period depending on programming.

Count on us!

< Intended Country of Use >

☐ GER ☐ FRA ☐ ESP ☐ SWE
☐ AUT ☐ NED ☐ POR ☐ DEN
☐ GBR ☐ BEL ☐ ITA ☐ FIN
☐ IRL ☐ LUX ☐ GRE ☐ SUI
☐ NOR

A-6407H-1EU-③
Printed in Japan
© 2004–2009 Icom Inc.

Printed on recycled paper with soy ink.

Icom Inc.

1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan