# ICOM

# IC-F5063 (VHF transceiver)
# IC-F6063 (UHF transceiver)

Rugged
**MIL-STD 810**

F5063
F6063

512ch / 128zones

Conventional / LTR mode

2-Tone, 5-Tone CTCSS, DTCS

VHF 25W, UHF 25W Output

IP54 (Controller only)

Full dot-matrix LCD

ch-01
Icom Inc.

ch-01
Icom Inc.

# Conventional/LTR/Digital*—
# Multi-Mode Professional Mobile

*With UT-119H

The IC-F5063/F6063 is ideal for public safety, transportation and delivery service users. It offers a full dot-matrix display, improved scanning and flexible installation suitable for mobile and base stations.

**VHF TRANSCEIVER**
## IC-F5063  `25W`

**UHF TRANSCEIVER**
## IC-F6063  `25W`

The above photo includes optional separation kit, RMK-3, and separation cable, OPC-609.

## Detachable front panel

With the optional remote control kit, RMK-3 and separation cable, the front panel of the radio can be detached from the main unit. It allows you flexible installation even in limited installation space.

## Dot matrix, multi-function LCD

With a high contrast dot matrix display, upper and lower case characters can be easily distinguished. You can change the display setting to show one line and 12 characters, or two lines and 24 characters via programming. LCD backlighting is standard.

Two line setting display example.

## Front mounted speaker

4 watts (typ.) front mounted speaker delivers clear and loud audio. The built-in audio compander improves the signal to noise ratio.

## IP54 dust-protection and splash resistance (Controller only)

The rugged die-cast chassis and polycarbonate front panel are resistant to shock and vibration. When used with the optional separation kit, the remote control head has dust-protection and splash resistant construction, equivalent to IP54.

## Basic LTR/ Conventional mode operation

Both conventional and LTR mode channels are programmable in a radio. MDC signaling is also available on LTR mode.

## Multiple 2-Tone, 5-Tone signalings

The built-in 2-Tone and 5-Tone capabilities allow you to send a tone code with your call and decode multiple tone codes on a channel. 40 pairs of CTCSS/ DTCS memory channels are also available.

## MDC 1200 compatible

The following selective calling and ANI features are available with the built-in MDC 1200 signaling.
- PTT ID
- Radio check
- Caller ID
- Emergency, emergency mic monitoring
- Selective call
- Radio stun/revive
- 500 Aliases
- Status/message
- Call alert
- Call log

## BIIS 1200 compatible

The following selective calling and data features are available with the built-in BIIS system.
- 32 abbreviated call memories
- 7 group IDs
- 24-status Messages
- Send 12-character SDM (Short Data Message)
- Receive up to 95 characters of text

## Mode slave scan

In the normal mode scan, you can select a scanning list independent to the channel setting. In the mode slave setting, the scanning list is automatically selected according to the operating channel. It is convenient when you change operating channels or move to a different operating area, you don't need to change the scanning setting.

## Voting scan

The voting scan detects the S-meter level of repeater stations and automatically selects the strongest station or the first station to exceed the preset S-meter level, useful for roaming between two or more repeater sites.

## Wide frequency range and large channel capacity

The IC-F5063 series covers a wide frequency range in one version (VHF 136–174MHz, UHF 400–470 or 450–520MHz). The 512 memory channel capacity with 128 zones allows you to divide and store a variety of flexible channel groupings.

## Built-in inversion-type voice scrambler

The built-in inversion type voice scrambler provides secure conversation. When a more secure system is required, the 32 code non-rolling-type voice scrambler UT-109R and 1020 code rolling type UT-110R are available as an option.

## D-sub accessory connector

The IC-F5063 series has a D-SUB 25 pin ACC connector for connecting various external devices.

## Other features
- 8 DTMF autodial memories and ANI function with DTMF
- Optional heavy duty, dynamic microphone HM-148
- Power on password
- Radio stun and kill functions disable a lost or stolen unit over the air
- Busy repeater lockout function
- Surveillance function temporarily turns off the LED backlight and beep sound
- Convenient key assign stickers are supplied
- Microphone hanger action programmable
- Ignition sensing line
- Embedded ESN
- Flash CPU for future upgrade
- The IC-F3063/ F4063 series is the handheld equivalent model

and more...

## DIGITAL

### 6.25kHz Digital mode ready*

With the optional UT-119H, the IC-F5063 series provides 6.25kHz digital narrow mode communication, and increases efficiency of channel allocation and use of spectrum.

The IC-F5063 series provides 2 optional slots: one optional slot for the UT-119H digital unit and one for another option board.

*This option may not be available in some countries. Please ask your dealer for details.

## SPECIFICATIONS

### GENERAL

- Frequency range :
  - IC-F5063     136–174MHz
  - IC-F6063     400–470MHz
  -             450–520MHz
- Number of channels : Max. 512 channels/ 128 zones
- Channel spacing : 12.5/25kHz, 6.25kHz (option)
- PLL channel step : 2.5, 3.125kHz
- Antenna impedance : 50Ω nominal
- Power supply requirement : 13.2V DC
- Current drain (approx) :
  - Tx   at 25W    7.0A
  - Rx   Max. audio   1200mA
  -       Stand-by    300mA
- Operating temperature range : –30˚C to +60˚C
- Dimensions (W×H×D) : 160×45×150 mm (Projections are not included)
- Weight (approx.) : 1.3kg

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

### TRANSMITTER

- Output power : 25W
- Max. frequency deviation : ±5.0/2.5kHz (Wide/ narrow)
- Frequency error : ±1.5kHz
- Spurious emissions : 75dB typ.
- Adjacent channel power : 70/60dB (Wide/ narrow)
- Audio harmonic distortion : 3% typ. (40% deviation)
- FM Hum and Noise : 45/40dB typ. (Wide/Narrow)
- Limiting character of modulator : 70–100% of Max. deviation
- External microphone impedance : 600Ω (8-pin modular)

**Supplied Accessories**
- Hand microphone, HM-152   • DC power cable
- Microphone hanger   • Mounting bracket kit
- Key assign stickers

### RECEIVER

- Sensitivity : 0.25µV typ. (at 12dB SINAD)
- Squelch sensitivity : 0.25µV typ. (at threshold)
- Adjacent channel selectivity : 85/75dB typ. (Wide/ narrow)
- Spurious response : 90dB typ.
- Intermodulation : 77dB typ.
- Hum and Noise : 50/45dB typ. (Wide/Narrow)
- Audio output power : 4W typ. at 10% distortion with a 4Ω load
- External speaker impedance : 4Ω

**Applicable U.S. Military Specifications**
The IC-F5063/F6063 and RMK-3 have been tested to and passed the following MIL-STD requirements and strict environmental standards.

| Standard | MIL 810 C | | MIL 810 D | | MIL 810 E | | MIL 810 F | |
|---|---|---|---|---|---|---|---|---|
| | Method | Proc. | Method | Proc. | Method | Proc. | Method | Proc. |
| High Temp. | 501.1 | I | 501.2 | I, II | 501.3 | I, II | 501.4 | I, II |
| Low Temp. | 502.1 | I | 502.2 | I, II | 502.3 | I, II | 502.4 | I, II |
| Temp. Shock | 503.1 | I | 503.2 | I | 503.3 | I | 503.4 | I |
| Rain Blowing* | 506.1 | I | 506.2 | I | 506.3 | I | 506.4 | I |
| Rain Drip* | 506.1 | II | 506.2 | III | 506.3 | III | 506.4 | III |
| Humidity | 507.1 | I, II | 507.2 | II, III | 507.3 | II, III | 507.4 | – |
| Vibration | 514.2 | VIII, X | 514.3 | I | 514.4 | I | 514.5 | I |
| Shock | 516.2 | I, II, V | 516.3 | I, IV | 516.4 | I, IV | 516.5 | I, IV |

\* Rain blowing and drip tests were performed on the controller and RMK-3 only.

## OPTIONS
Some options may not be available in some countries. Please ask your dealer for details.

### HAND MICROPHONES



HM-152    HM-152T    HM-148

- **HM-152** : Regular microphone. Same as supplied.
- **HM-152T** : DTMF microphone.
- **HM-148** : Dynamic microphone for heavy duty use.

### EXTERNAL SPEAKERS



SP-5    SP-10    SP-22

- **SP-5** : Large external speaker.
- **SP-10** : Mid sized external speaker.
- **SP-22** : Compact and easy-to-install external speaker.

### SEPARATION KIT    SEPARATION CABLES



RMK-3    OPC-609 (1.9m)    OPC-607 (3m)    OPC-608 (8m)

**RMK-3** : For front panel detachment installation.
Use with one of the following cables: **OPC-609** (1.9m), **OPC-607** (3m), or **OPC-608** (8m).

### DESKTOP MICROPHONE



SM-25

**SM-25** : Convenient for dispatching, equipped with monitor switch.

### INTERNAL UNITS



UT-109R VOICE SCRAMBLER UNIT    UT-110R VOICE SCRAMBLER UNIT    UT-119H DIGITAL UNIT

- **UT-109R** : Non-rolling type voice scrambler.
- **UT-110R** : Rolling type voice scrambler.
- **UT-119H** : Digital unit. Provides 6.25kHz digital capability.

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