# O ICOM

**VHF AND UHF TRANSCEIVERS** 









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ch-01 Icom Inc.

P0 P1 P2 P3 P4 0





512 ch/ 128 zones

Conventional/ BIIS 1200 mode

IDAS" dPMR" IDAS" NXDN"

2-Tone, 5-Tone CTCSS, DTCS

25W Output IP54 (Controller only)

Full dot-matrix LCD



TCOM

FELLECS TECH Ihr Partner für Funktechnik www.fellecs-tech.com inbox@fellecs-tech.com

## Analogue/Digital<sup>®</sup> Multi-Mode Professional Mobile

\* With IC-F5062D/IC-F6062D "D" version.



The above photo includes optional seperation 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 useful for night time operation.



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.

## Wide frequency range and large channel capacity

The IC-F5062/D series covers a wide frequency range in one version (VHF 136–174 MHz, UHF 400–470MHz). The 512 memory channel capacity with 128 zones allows you to divide and store a variety of flexible channel groupings. Wide, middle and narrow channel bandwidth (25/20/ 12.5kHz)\* is also programmable.

\* Programmable 25/12.5kHz or 20/12.5kHz.

#### 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.

#### 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

#### Voting operation

The voting mode scanning detects the signal strength level of repeater stations and automatically selects the strongest station, useful for roaming between 2 or more repeater sites. Once you program the voting mode to a memory zone, you can easily start voting mode operation by changing the zone setting.

#### Mode dependent scan

In the normal mode scan, you can select a scanning list independent to the channel setting. In the mode dependent 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.

## 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

#### IDAS digital mode ready

IDAS (Icom Digital Advanced System) is Icom's digital land mobile system using the 6.25kHz narrowband FDMA technology. IDAS has choice of an NXDN<sup>™</sup> protocol or an ETSI dPMR<sup>™</sup> protocol. See the IDAS brochure for details.

code non-rolling-type voice scrambler UT-109R and 1020 code rolling type UT-110R are available as an option.

\* Inversion type voice scrambler is not compatible with UT-109R/UT-110R voice scrambler.

#### D-sub accessory connector

The IC-F5062/D series has a D-SUB 25 pin ACC connector for connecting various external devices.



#### Other features

- 8 DTMF autodial memories
- Optional heavy duty, dynamic microphone HM-148
- · Power on password
- Radio stun, kill and revive functions disable or re-enable 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
- Microphone hanger action programmable
- Ignition sensing line
- Built-in basic LTR™ trunking and MDC 1200 capability\* (\* Depending on version)
- The IC-F3162/D, F4162/D series is the handheld equivalent model
- Escalating alarm
- Lone worker function
- Advanced scanning functions including Tx channel, talk back and nuisance delete and more...



## IC-F5062/D · IC-F6062/D

#### **SPECIFICATIONS**

|   | IC-F5062D/IC-F5062                     | IC-F6062D/IC-F6062          |  |
|---|--|-----------------------------|--|
| GENERAL   |  |                             |  |
| Frequency coverage  | 136–174MHz                             | 400–470MHz                  |  |
| Number of channels  | Max 512 chan                           | Max 512 channels /128 zones |  |
| Type of emission  | 16K0F3E, 14K0F3E, 8K50F3E, 4K00F1E/F1D |                             |  |
| Channel spacing   | 25/20/12.5kHz,                         |                             |  |
| PLL channel step  | 6.25kHz (Digital)<br>2.5/3.125kHz      |                             |  |
| Power supply requirement  |  |                             |  |
| Current drain (approx.)   | 13.2V DC                               |                             |  |
| Tx 25W  | 7                                      | 'A                          |  |
| Rx Max. audio   | 120                                    | 1200mA                      |  |
| Standby   | 300mA                                  |                             |  |
| Antenna impedance   | 50Ω (SO-239)                           |                             |  |
| Operating temperature range                                       | -25°C to +55°C                         |                             |  |
| Dimensions (W×H×D)  | 160-45                                 | v150mm                      |  |
| (Projections not included)  | 160×45×150mm                           |                             |  |
| Weight (approx.)  | 1.3                                    | 3kg                         |  |
| TRANSMITTER   |  |                             |  |
| Output power (at 13.2V DC)  | 25W, 10W, 2.                           | 5W (Hi, L2, L1)             |  |
| Max. frequency deviation  | ±5.0kHz/±4.0kHz                        | z/±2.5kHz (W/M/N)           |  |
| Frequency stability   | ±1.5                                   | 5kHz                        |  |
| Spurious emissions  | 0.25µW                                 | 25µW (≤1GHz)                |  |
| Spurious emissions  | 1.0µW                                  | (>1GHz)                     |  |
| Audio harmonic distortion   | 3% typ. (AF 1kF                        | Iz 40% deviation)           |  |
| FSK error   | 5% Max                                 | . (Digital)                 |  |
| Ext. microphone impedance   | $600\Omega$ (8-pin modular)            |                             |  |
| RECEIVER  |  |                             |  |
| Sensitivity (at 20dB SINAD)                                       | –4dBµV                                 | typ. (emf)                  |  |
| (at 5% BER)   |  | typ. (emf)                  |  |
| Adjacent channel selectivity                                      |  | 3 typ. (W/M/N)              |  |
| Spurious response rejection                                       | 90d                                    | B typ.                      |  |
| Intermodulation   |  | 70dB typ.                   |  |
| Audio output power  | 4W typ. (at 5% d                       | listortion, 4Ω load)        |  |
| Ext. speaker connector  |  | (d) mm (1/8")/4Ω            |  |
| Measurements made in accorda<br>All stated specifications are sub |  | or obligation.              |  |

#### VERSION COMPARISON

|                             | IC-F5062D<br>IC-F6062D<br>(IDAS dPMR<br>version)  | IC-F5062D<br>IC-F6062D<br>(IDAS NXDN<br>version) | IC-F5062<br>IC-F6062<br>(FM version) |
|-----------------------------|---|--|--------------------------------------|
| CTCSS/DTCS (Analogue)       | <ul> <li>Image: A start of the start of</li></ul> | <ul> <li>V</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| 5-Tone enc/dec (Analogue)   | <ul> <li>✓</li> </ul>   | <ul> <li>V</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| 2-Tone enc/dec (Analogue)   | <ul> <li>✓</li> </ul>   | <ul> <li>V</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| DTMF autodial (Analogue)    | <ul> <li>✓</li> </ul>   | <ul> <li>V</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| DTMF decoder (Analogue)     | <ul> <li>✓</li> </ul>   | <ul> <li>V</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| BIIS 1200 (Analogue)        | <ul> <li>✓</li> </ul>   | <ul> <li>✓</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| MDC 1200 (Analogue)         | -   | <ul> <li>✓</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| LTR trunking (Analogue)     | -   | <ul> <li>V</li> </ul>                            | <ul> <li>✓</li> </ul>                |
| Voice scrambler (Analogue)  |   |  |                                      |
| Inversion                   | <ul> <li>Image: A start of the start of</li></ul> | <ul> <li>✓</li> </ul>                            | ✓                                    |
| Non-Rolling                 | UT-109R   | UT-109R  | UT-109R                              |
| Rolling                     | UT-110R   | UT-110R  | UT-110R                              |
| IDAS dPMR                   |   |  |                                      |
| Tier 2 Mode 1/2             |   |  |                                      |
| Tier 2 Mode 3               |   | _  | _                                    |
|                             | •   | -  |                                      |
| IDAS NXDN                   |   |  |                                      |
| Conventional mode           | -   | ✓*   | UT-126H                              |
| Type-D single-site trunking | -   | ✓*   | UT-126H                              |
| Type-D multi-site trunking  | -   | ✓*   | UT-126H                              |

\* UT-126H is already installed in the IDAS NXDN version.

#### Applicable U.S. Military Specifications & IP Rating

| Standard           | MIL 810 F |           |  |
|--------------------|-----------|-----------|--|
|                    | Method    | Procedure |  |
| Low Pressure       | 500.4     | I, II     |  |
| High Temperature   | 501.4     | I, II     |  |
| Low Temperature    | 502.4     | I, II     |  |
| Temperature Shock  | 503.4     | I         |  |
| Solar Radiation    | 505.4     | I         |  |
| Rain Blowing/Drip* | 506.4     | I, III    |  |
| Humidity           | 507.4     | -         |  |
| Salt Fog           | 509.4     | -         |  |
| Dust Blowing       | 510.4     | I         |  |
| Vibration          | 514.5     | I         |  |
| Shock              | 516.5     | I, IV     |  |

Hand microphone (HM-152) • DC power cable Mounting bracket kit

• Microphone hanger · Key assign stickers

tion Standard Dust & Water\* IP54 (Dust-protection and water resistant)

\* Rain blowing, drip and IP54 tests were performed on the controller and RMK-3 only.

NXDN CAI-based

www.icom.co.jp/world

IDAS digital unit

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



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Non-rolling type

#### ICOM Inc. 1-1-32, Kami-minami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302

Icom America Inc. 
 Idaditions
 Road NE,

 Idaditions
 Road NE,

 Kirkland, WA 98034, U.S.A.
 Phone: +1 (425) 454-8155

 Fax : +1 (425) 454-1509
 E-mail : sales @ icomamerica.com

 URL : http://www.icomamerica.com
 URL : http://www.icomamerica.com

**Supplied Accessories** 

#### Icom Canada

Glenwood Centre #150-6165 Highway 17A, Delta, B.C., V4K 558, Canada Phone :+1 (604) 952-4266 Fax :+1 (604) 952-0090 E-mail : infc@icomcanada.com URL : http://www.icomcanada.com

#### Icom Brazil

Rua Itororó, 444 Padre Eustáquio Belo Horizonte MG, CEP: 30720-450, Brazil Phone: +55 (31) 3582 8847 Fax: +55 (31) 3582 8987 E-mail: sales@icombrazil.com

#### Icom (Europe) GmbH

SP-30

Communication Equipment Auf der Krautweide 24 65812 Bad Soden am Taunus, Germany 
 bb812 Bad Soden am Taunus, Germ

 Phone : +49 (6196) 76685-0

 Fax : +49 (6196) 76685-50

 E-mail : info@icomeurope.com

 URL : http://www.icomeurope.com

#### Icom Spain S.L.

Ctra. Rubi, No. 88 "Edificio Can Castanyer" Bajos A 08174, Sant Cugat del Valles, Barcelona, Spain Phone : +34 (93) 590 26 70 Findine : +34 (93) 590 26 70 Fax : +34 (93) 589 04 46 E-mail : icom@icomspain.com URL : http://www.icomspain.com

#### Icom (UK) Ltd.

Blacksole House, Altira Park, Herne Bay, Kent, CT6 6GZ, U.K. Phone : +44 (0) 1227 741741 Fax : +44 (0) 1227 741742 E-mail : info@icomuk.co.uk : http://www.icomuk.co.uk URL

#### Icom France s.a.s.

SP-35: 2m cable

SP-35L: 6m cable

 
 Zac de la Plaine,
 1

 1 Rue Brindejonc des Moulinais, BP 45804,
 31505 Toulouse Cedex 5, France

 Phone : +33 (5) 61 36 03 03
 5

 Franz : +33 (5) 61 36 03 00
 5

 =-mail : icom @icom-france.com
 5
 : http://www.icom-france.com URI

#### Icom (Australia) Pty. Ltd.

Unit 1 / 103 Garden Road, Clayton, VIC 3168 Australia Phone: +61 (03) 9549 7500 Fax: +61 (03) 9549 7505 E-mail: sales@icom.net.au URL: http://www.icom.net.au

#### Icom New Zealand

39C Rennie Drive, Airport Oaks, Auckland, New Zealand Phone: +64 (09) 274 4062 Fax : +64 (09) 274 4708 E-mail : inquiries@icom.co.nz URL : http://www.icom.co.nz

#### Asia Icom Inc.

Rolling type

Fax: +81 (06) 6793 0013

voice scramble

GF No. 68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C. Phone: +886 (02) 2559 1899 Fax: +886 (02) 2559 1874 E-mail: sales@asia-icom.com URL: http://www.asia-icom.com

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#### FELLECS TECH

Ihr Partner für Funktechnik www.fellecs-tech.com inbox@fellecs-tech.com