# O ICOM

**VHF AND UHF TRANSCEIVERS** 









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Inc.

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LTR™ **Conventional IDAS<sup>™</sup> Digital IDAS<sup>™</sup>** Trunking

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Ruaae MIL-STD 810 MDC 1200 Compatible

512 ch/ 128 zones

Conventional/ LTR<sup>™</sup> mode

IDAS conventional (With UT-126H)

IDAS digital (With UT-126H)

2-Tone, 5-Tone CTCSS, DTCS

VHF 50W, UHF 45W Output

IP54 (Controller only)

Full dot-matrix LCD

LCOM 



## **Conventional/IDAS<sup>®</sup> Digital<sup>\*</sup>/ IDAS<sup>®</sup> Trunking<sup>\*</sup>/LTR<sup>®</sup> – Multi-Mode Land Mobile!**

\*With UT-126H installed. Already installed to IC-F5061, IC-F6061 "D" versions.

The IC-F5061/D series is ideal for public safety, business & industry, transportation and delivery service users. It offers advanced multi-mode operation, improved scanning and flexible installation that is suitable for mobile and base stations.

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



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#### MDC 1200 compatible

PTT ID, selective call (Selcall) and emergency call features are available with the built-in MDC signaling.

The PTT ID function sends your unit ID number when you push (or release) the PTT button. The received ID number can be decoded as a user name using the alias table. Selective calling enables you to call individuals or groups, depending on your needs. The emergency call feature allows you to send and repeat an emergency message to dispatch until the dispatch responds to it. In these situations, the radio can transmit anything the microphone hears and the dispatcher can monitor the background sounds. Radio check, status, message, radio stun/revive and call log features are also available.

#### IDAS<sup>™</sup> system digital mode ready

IDAS (Icom digital Advanced System) is Icom's digital conventional and trunking system using the NXDN<sup>™</sup> common air interface. It has useful calling features including selective calling, status message, radio stun/revive/kill, etc,. The IC-F5061 series provides 2 optional slots: one for the UT-126H digital unit and one for an additional option board. See the IDAS brochure for details.

#### 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 for flexible installation even in limited installation space. Separation cable length is selectable from 1.9m, 3.0m and 8.0m\*.

\* 6.2ft, 9.8ft and 26.2ft respectively.

#### **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.

## Wide frequency range and large channel capacity

The IC-F5061 series covers a wide frequency range in one version (VHF 136-174 MHz, UHF 400-470MHz or 450-512 MHz). The 512 memory channel capacity with 128 zones allows you to divide and store a variety of flexible channel groupings.

## Basic LTR<sup>®</sup>/Conventional mode operation

Group, selective, and phone calls are all available in LTR<sup>™</sup> mode. Get efficient trunking operation without the need for any optional module.

## Multiple 2-Tone, 5-Tone signalings

The built-in 2-Tone and 5-Tone capabilities allows 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 available.

#### **Voting operation**

The voting operation detects the signal strength level of repeater sites and automatically selects the strongest station or the first station to exceed the preset signal level. This is useful for roaming between 2 or more repeater sites.

#### **Enhanced scanning**

While scanning, you can program which Tx channel you want when you press PTT button. Start channel, last detected channel, priority or a preprogrammed channel are selectable. In addition, the nuisance delete function temporary removes a busy channel from the scanning list.

## 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.

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

#### **D-sub accessory connector**

The IC-F5061 series has a D-SUB 25 pin ACC connector for connecting various external devices.



#### Other features

- Advanced scanning functions including Tx channel, talk back and mode dependent scan
- 8 DTMF autodial memories and ANI function with DTMF
- Self-grounding microphone HM-148G
- Power on password 
   Embedded ESN
- 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 sticker is supplied
- Microphone hanger action programmable
- Ignition sensing line
- ±1ppm frequency stability
- Lone worker function
- Escalarting alert
- Flash CPU for future upgrade and more...

### IC-F5061/D · IC-F6061/D

#### **SPECIFICATIONS**

GENERAL				
<ul> <li>Frequency range</li> </ul>	:			
IC-F5061	136–174MHz			
IC-F6061	400–470MHz,			
	450–512MHz			
<ul> <li>Number of channels</li> </ul>	: 512 channels/ 128 zones			
<ul> <li>Channel spacing</li> </ul>	: 12.5/25kHz,15/30kHz			
	6.25kHz (option)			
<ul> <li>PLL channel step</li> </ul>	: 2.5kHz, 3.125kHz			
<ul> <li>Antenna impedance</li> </ul>	: 50Ω			
Operating Temp. range	: –30°C to +60°C			
	; –22°F to +140°F			
<ul> <li>Power supply requirement : 13.6V DC nominal</li> </ul>				
<ul> <li>Current drain (approx)</li> </ul>	:			
Tx 50W/45W	14.0A			
Rx Max. audio				
Stand-by	300mA			
<ul> <li>Dimensions (W×H×D)</li> </ul>	: 160×45×150 mm			
(projections not included)	; 6 <sup>5</sup> ⁄16 ×1 <sup>25</sup> ⁄32 ×5 <sup>29</sup> ⁄32 in			
<ul> <li>Weight (approx.)</li> </ul>	: 1.31kg; 2.9lb			

Measurements made in accordance with EIA-152C/204D,

TIA-603 (for Analog). All stated specifications are subject to

change without notice or obligation.

TRANSMITTER		
Output power (approx)	: 50W (VHF) 45W (UHF)	
Max. frequency deviatio	n : ±5.0/2.5kHz (Wide/Narrow)	
<ul> <li>Frequency error</li> </ul>	: ±1.0ppm	
<ul> <li>Spurious emissions</li> </ul>	: 75dB typ.	
<ul> <li>FM Hum and Noise</li> </ul>	: 46/40dB typ. (Wide/Narrow)	
<ul> <li>Adjacent channel powe</li> </ul>	r: 70/60dB min. (Wide/Narrow)	
<ul> <li>Audio harmonic distortio</li> </ul>	n: 3% typ. (40% deviation)	
<ul> <li>Modulation limiting</li> </ul>	: 70–100% of Max. deviation	
<ul> <li>Ext. microphone impedance</li> </ul>	$e$ : 600 $\Omega$ (8-pin modular)	

Standard Low Pressure High Temperature Low Temperature Temperature Shock Solar Radiation Rain (Blowing/Drip)\* Humidity Salt Fog Dust Blowing Vibration Shock

Also meets equiv

. / Oub typ			
: 46/40dB	typ. (Wide/Narrow)	<ul> <li>Spurious response</li> </ul>	: 90dB typ.
	min. (Wide/Narrow)	<ul> <li>Intermodulation</li> </ul>	: 77dB typ.
rtion: 3% typ. (4	,	<ul> <li>Hum and noise ratio</li> </ul>	: 50/45dB typ. (Wide/Narrow)
1011. 3 /8 typ. (4	+0% deviation)		
: 70–100%	6 of Max. deviation	<ul> <li>Audio output power</li> </ul>	: 4W typ. at 5% distortion with a
nce : 600Ω (8-	nin modular)		4Ω load
100 . 00012 (0-	pin modular)	<ul> <li>External speaker connect</li> </ul>	or : 2-conductor 3.5 (d) mm
			( <sup>1</sup> / <sub>8</sub> ")/4Ω
ary Specificat	ions & IP Rating		(78)/422
MIL 810 F			
Method	Proc.		
500.4	I, II		
501.4	I, II		
502.4	I, II		
503.4	I		
505.4	I		
506.4	I, III		
507.4	-		
509.4	-		
510.4	I		•
514.5	I	Supplied Accessor	les
516.5	I, IV	Hand microphone	HM-148G • DC power cable
D-810-C, -D, and -E.			
		Microphone hanger	<ul> <li>Mounting bracket kit</li> </ul>

Sensitivity

selectivity

· Squelch sensitivity

Adjacent channel

Also meets equivalent million Ingress Protection Standard Dust & Water IP54\* (Dust protection and water resistant For the controller and RMF

nt MIL-STD

RECEIVER

: 0.25µV typ. (at 12dB SINAD)

: 0.20µV typ. (at 5% BER)

: 0.25µV typ. (at threshold)

: 85/75dB typ. (Wide/Narrow)

FM (W/N)

Digital

- Microphone hanger · Mounting bracket kit
- · Key assign stickers



OPC-608 (8m; 26.2ft).

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Icom Inc. 1-1-32, Kami-minami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013

#### Icom America Inc.

2380 116th Avenue NE. Bellevue, WA 98004, U.S.A. Phone : +1 (425) 454-8155 Fax : +1 (425) 454-1509 -mail : sales@icomamerica.com E-mail : sales@icomamerica.com URL : http://www.icomamerica.com

#### Icom Canada

Glenwood Centre #150-6165 Highway 17, Delta, B.C., V4K 5B8, Canada Phone : +1 (604) 952-4266 Fax :+1 (604) 952-0090 E-mail : info@icomcanada.com : http://www.icomcanada.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

146A Harris Road, East Tamaki, 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

#### Icom (Europe) GmbH

Communication Equipment Himmelgeister Str. 100, D-40225 Düsseldorf, Germany Phone: +49 (0211) 346047 Fax : +49 (0211) 333639 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 : +34 (93) 589 04 46 Fax E-mail : icom@icomspain.com URL : http://www.icomspain.com

#### Icom (UK) Ltd.

Unit 9. Sea St., Herne Bay, Kent CT6 8LD LLK Phone : +44 (01227) 741741 Fax : +44 (01227) 741742 E-mail : info@icomuk.co.uk URL : http://www.icomuk.co.uk

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

Zac de la Plaine, 1 Rue Brindejonc des Moulinais, BP 45804, 31505 Toulouse Cedex 5, France Phone: +33 (5) 61 36 03 03 Fax : +33 (5) 61 36 03 00 E-mail : icom@icom-france.com URL : http://www.icom-france.com

#### Icom Polska

81-850 Sopot, ul. 3 Maja 54, Poland Phone : +48 (58) 550 7135 Fax : +48 (58) 551 0484 E-mail : icompolska@icompolska.com.pl URL : http://www.icompolska.com.pl

#### Asia Icom Inc.

6F No. 68, Sec. 1 Cheng-Teh Road. Taipei, Taiwan, B.O.C Phone : +886 (02) 2559 1899 Fax : +886 (02) 2559 1874 E-mail : sales@asia-icom.com URL : http://www.asia-icom.com

#### Beijing Icom Ltd.

10:07, Long Silver Marsion, No.88, Yong Ding Road, Haidian District, Beijing, 100039, China Phone: +86 (010) 5889 5395 1/5392/5393 Fax: +86 (010) 5889 5395 E-mail: bjicom@bjicom.com UBL : http://www.biicom.com

#### Your local distributor/dealer:

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