



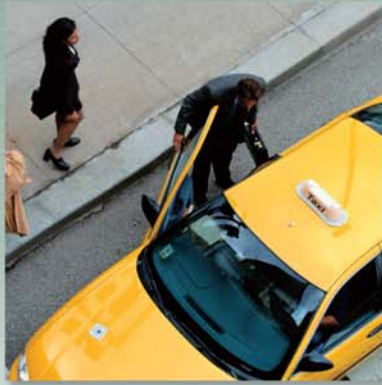
## VHF AND UHF TRANSCEIVERS

# IC-F5022

VHF TRANSCEIVER

# IC-F6022

UHF TRANSCEIVER



# One Step Up



Limited Functions only.

128 ch (Max.) / 8 zones

2-Tone, 5-Tone CTCSS, DTCS

MDC PTT ID & MDC emergency call

25W Output Power

8-character LCD display

Optional voice scrambler



# Features, Performance, Value For the Everyday PMR User

The IC-F5022 series is ideal for small-to-mid sized systems for public safety, large industry to light commercial users.

The IC-F5022 series offers multiple signaling, advanced scanning, improved external channel control capability and wide frequency coverage packed in a compact body. This rugged mobile easily exceeds your expectations with its reliable performance and communication quality.



VHF TRANSCEIVER 25 W

## IC-F5022

UHF TRANSCEIVER 25 W

## IC-F6022



## 128 memory channels

128 channels (Max.) separated into 8 memory zones. Memory channels can be identified with the 8-character channel name and selected easily with the up/down buttons.



## Front mounted speaker

4 watts (typ.) front mounted speaker delivers clear and loud audio. With the speaker facing the operator, audio can be clearly heard without impediment during operation.

## 6 programmable buttons

A pair of up/down and P0–P3 function assignable buttons allow you to customize functions to meet specific needs. An independent volume knob offers simple, convenient operation.

## MIL grade rugged construction

The tough aluminum die-cast chassis and polycarbonate front panel have been tested to the MIL standard 810F. With this heavy-duty construction, the IC-F5022 series provides reliable operation over the long term in all manners of rugged environments.

## Most popular signalings built-in

Use the built-in 2-Tone, 5-Tone, CTCSS and DTCS capabilities as standard to set up your own talk groups, PTT ID and quiet stand-by when others are talking. The IC-F5022 series has added CTCSS/DTCS high speed decode.

## MDC 1200 compatible

The following MDC features are available with the built-in MDC signaling.

- PTT ID (TX/RX)
- Radio check (RX)
- Radio stun (RX)
- Radio revive (RX)
- Emergency TX/RX (No ACK)
- 5 alias table (Max.)

## Multiple 2-Tone, Multiple 5-Tone

Up to ten 2-Tone and eight 5-Tone codes can be decoded on a channel. When a matched tone is received, the following items are programmable for each code.

- Beep sound
- Answer back
- Scan
- Bell icon
- Radio stun/kill/revive

## Radio kill, stun and revive

The radio kill/stun functions disable a lost or stolen radio over the air, eliminating security threats from undesired listeners. When the stun command is received, all functions will be temporary locked out until the revive command is received or the unlock password is entered.

## Lone worker function

When the radio is not operated for a preset period, the radio sounds a beep and requires you to push any button. If the radio is still not operated for a specified wait period, an emergency signal automatically transmits and informs co-workers that something may have happened to the individual worker.

## Mode dependent scan

In the mode dependent setting, the scanning setting is dependent on the operating channel. When you change the operating channel, the scanning list automatically changes to the list set for that channel. It is convenient when you move to a different operating area and change operating channel, you don't have to change the scanning setting.

## Tx channel setting and Talk back function

The Tx channel setting allows you to program a transmission channel while scanning. Start channel, last detected channel, priority and preprogrammed channel are selectable. Prior to the Tx channel setting, the talk back function allows you to talk on the last detected channel, while scanning resumes after a preset time. The user can easily make a quick response with this function.

## Wide frequency coverage

The IC-F5022 series covers a wide frequency range in one version (VHF 136–174, UHF 400–470 MHz).

## Compatible with IC-F3032/F4032 series handheld

The IC-F5022/F6022 series is designed to be a companion to our IC-F3032/F4032 series handheld transceiver. The number of channels and banks, signaling formats, programming software and voice scrambler are compatible. Take advantage of the shared functionality to complete your communications requirements.



## Optional internal units

The IC-F5022 series has a 40-pin option slot for adding an optional internal unit. Optional voice scrambler units, UT-109R or UT-110R provide secure private conversation.

## External memory channel control with optional ACC cable

With the optional OPC-1939 D-SUB 15-pin ACC cable, the IC-F5022 series can be programmed to control an operating channel from an external device (up to 16 preprogrammed channels). The ACC connector also provides an ignition sensing function, external PTT, PC command, horn honk, audio output and modulated signal input depending on programming.



Photo includes optional OPC-1939

## Other features

- BIIS 1200 PTT ID transmission
- Microphone hanger action programmable
- Wide, middle and narrow channel spacing (25, 20, 12.5 kHz) programmable
- Optional DTMF microphone (HM-152T)
- Time-out-timer, lock-out penalty timer and more
- 8 DTMF autodial memories
- Power-on password function
- Nuisance delete function



**SPECIFICATIONS**

	IC-F5022	IC-F6022
<b>GENERAL</b>		
Frequency coverage	136–174 MHz	400–470 MHz
Number of channels	Max. 128 Ch/ 8 zones	
Type of emission	16K0F3E, 14K0F3E, 8K50F3E	
Channel spacing	25/20/12.5 kHz	
Power supply requirement	13.2 V DC	
Current drain (approx.)		
Tx	25 W	5 A
Rx	Max. audio	700 mA
Standby		250 mA
Antenna impedance	50 Ω (SO-239)	
Operating temperature range	–25 °C to +55 °C	
Dimensions (W × H × D) (Projections not included)	150 × 40 × 117.5mm	
Weight (approx.)	0.8 kg	
<b>TRANSMITTER</b>		
Output power (at 13.2 V DC)	25 W, 10 W, 2.5 W (Hi, L2, L1)	
Max. frequency deviation	±5.0 kHz/±4.0 kHz/±2.5 kHz (W/M/N)	
Frequency stability	±1.5 kHz	
Spurious emissions	0.25 μW (≤ 1 GHz) 1.0 μW (> 1 GHz)	
Residual modulation	55/53/50 dB typ. (W/M/N)	
Audio harmonic distortion	3% typ. (AF 1 KHz, 40% deviation)	
Modulation limiting	70–100% of Max. deviation	
Ext. microphone impedance	600 Ω (8-pin modular)	

Measurements made in accordance with EN 300-086.  
All stated specifications are subject to change without notice or obligation.

	IC-F5022	IC-F6022
<b>RECEIVER</b>		
Sensitivity (at 20 dB SINAD)	–4 dBμV typ. emf	
Adjacent channel selectivity	75/75/65 dB typ. (W/M/N)	
Spurious response	80 dB typ.	
Intermodulation	67 dB typ.	
Hum and noise	55/53/50 dB typ. (W/M/N)	
Audio output power	4W typ. (at 5% distortion, 4 Ω load)	
Ext. speaker connector	2-conductor 3.5 (d) mm (1/8")/4 Ω	

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**Applicable U.S. Military Specifications**

Standard	MIL 810F	
	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
Humidity	507.4	–
Settling Dust	510.4	III
Vibration	514.5	I
Shock	516.5	I, IV

Also meets equivalent MIL-STD-810-C, -D and -E.

**Supplied Accessories**

- Hand microphone (HM-152)
- DC power cable
- Microphone hanger
- Key assign stickers
- Mounting bracket kit

**OPTIONS**

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

**HAND MICROPHONES**

HM-152      HM-152T DTMF microphone      HM-148G Heavy duty microphone      HM-148T Heavy duty microphone with DTMF keypad

**DESKTOP MICROPHONE**

SM-26

**EXTERNAL SPEAKERS**

SP-35: 2 m cable  
SP-35L: 6 m cable

**VOICE SCRAMBLER UNITS**

UT-109R VOICE SCRAMBLER UNIT Non-rolling type      UT-110R VOICE SCRAMBLER UNIT Rolling type

**ACC CABLES**

OPC-1939 15-pin type      OPC-2078 25-pin type

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**Icom Inc.** 1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 [www.icom.co.jp/world](http://www.icom.co.jp/world) **Count on us!**

**Icom America Inc.**  
12421 Willows 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>

**Icom (Europe) GmbH**  
Communication Equipment  
Auf der Krautweide 24  
65812 Bad Soden am Taunus, Germany  
Phone: +49 (6196) 76685-0  
Fax: +49 (6196) 76685-50  
E-mail: info@icom-europe.com  
URL: <http://www.icomeurope.com>

**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>

**Asia Icom Inc.**  
6F 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>

Your local distributor/dealer:

**Icom Canada**  
Glenwood Centre #150-6165  
Highway 17A, Delta, B.C.,  
V4K 5B8, Canada  
Phone: +1 (604) 952-4266  
Fax: +1 (604) 952-0090  
E-mail: info@icomcanada.com  
URL: <http://www.icomcanada.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  
Fax: +34 (93) 589 04 46  
E-mail: icom@icomspain.com  
URL: <http://www.icomspain.com>

**Icom (Australia) Pty. Ltd.**  
Unit 1 / 103 Garden Road,  
Bajos A 08174, Sant Cugat del Valles,  
Barcelona, Spain  
Phone: +61 (03) 9549 7500  
Fax: +61 (03) 9549 7505  
E-mail: sales@icom.net.au  
URL: <http://www.icom.net.au>

**Shanghai Icom Ltd.**  
No.101, Building 9, Caifuxingyuan Park,  
No.188 Maoting Road, Chedun Town,  
Songjiang District, Shanghai, 201611, China  
Phone: +86 (021) 6153 2768  
Fax: +86 (021) 5765 9987  
E-mail: bjicom@bjicom.com  
URL: <http://www.bjicom.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@icombrasil.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  
URL: <http://www.icomuk.co.uk>

**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>