



VHF AND UHF TRANSCEIVERS

IC-F51

(VHF Transceiver)

IC-F61

(UHF Transceiver)

Waterproof

1m depth for 30 minutes

Meets
MIL-STD 810



BIIS 1200
Compatible



Photo includes optional speaker-microphone, HM-138.

Icom Inc.



Superior Water Supports De

Firefighters, Police, Security professionals face unique challenges, but all have the same need for reliable communications. Icom's IC-F51/F61 is rugged, easy to use. Rain or shine, it's your best friend.

Dust and Waterproof protection equivalent to IP67*

The gasket sealed waterproof housing provides superior dust and waterproof** protection, equivalent to IP67. Reliable and dependable use in harsh conditions under water or dust, make the IC-F51/IC-F61 the radio for all situations.



* The IC-F51/F61 is equivalent to IP67 of the corresponding international standard IEC 529 (1989). ** 1m depth for 30 minutes.

Built-in Tone signaling

Use the built-in CTCSS, DTCS, 2-Tone and 5-Tone capability to set up your own talk groups and quiet stand-by when other groups are talking. You can also set up selective calls to individuals or control a repeater.

Multiple 5-Tone

Up to 8 5-Tone codes can be decoded on a single memory channel. This is perfect for professionals who require multiple district paging on one channel. When a matched tone is received, the following items are programmable for each code.

- Bell icon
- Answer back
- Stun
- Beep sound
- Auto transmit
- Scan
- ID decode
- Emergency cancel

VHF AND UHF TRANSCIVERS

IC-F51

VHF Transceiver

IC-F61

UHF Transceiver



Waterproof Protection Demanding Communication

Police and Public utilities. Each profession has its own requirements. They all have one thing in common: the need for reliable communication. The IC-F51 offers a compact waterproof, MIL STD package, that's rugged enough so that this radio keeps you in contact in nearly any environment.



Li-Ion battery pack

The large capacity 1700mAh Lithium-Ion (Li-Ion) battery pack, BP-227 provides a practical 10 hours* of operating time. Li-Ion batteries allow flexible charging and have almost no memory effect.

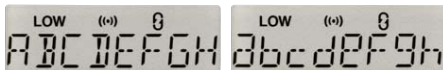
* Typical operation Tx:Rx:Stand-by=5:5:90

Up to 7 programmable buttons

The [P0]–[P3], [Red] and [Up], [Down] buttons are programmable to meet specific needs. The [Red] button on the top panel can be assigned as an emergency trigger.

Alphanumeric display

The 8-character alphanumeric display shows channel, bank, tone code and scanning channel names on the display. 7 operational icons on the sub-line show various status at a glance.



Upper and lower case characters available.

Wide range coverage and large channel capacity

The IC-F51 covers 136–174MHz and the IC-F61 covers 400–470MHz in one version. The 128 memory channels with 8 memory banks allows you to divide and store a variety of channels from local to wide area network channels. Wide, middle and narrow* channel bandwidth is programmable to each channel.

(* Programmable 25/12.5kHz or 20/12.5kHz Ch.)

Compact body

56(W)×97(H)×36.4(D) mm compact body with durable, dependable construction, meets MIL standard specifications. The compact design fits comfortably in your palm, and is easy to carry around.

Built-in voice scrambler

The IC-F51/F61 has a built-in inversion type voice scrambler in all versions. When a more secure system is required, versions with a rolling type voice scrambler* equivalent to the UT-110 are available.

* Built-in, optional unit not required.

BIIS 1200 Compatible

The following selective calling and data features are available with the BIIS system.

- 32 abbreviated call memories
- 7 group IDs
- 24-status Messages
- 8-character SDM (Short Data Message)
- RS-232C interface
- Position data transmission with a GPS

Waterproof microphone

An optional waterproof* speaker-microphone, HM-138 provides reliable operation, even with the radio securely on your belt.

* Equivalent to JIS Grade 7 or IPX7 of the corresponding international standard IEC 529 (1989). 1m depth for 30 minutes.

Other features

- Built-in compander, compatible with the IC-F31G and IC-F510 series
- 8 DTMF autodial memories
- Powerful 5W output for IC-F51, 4W output for IC-F61
- Normal and priority scans
- 2 step power saver
- Optional AA alkaline battery case, BP-226
- Busy, repeater lockout functions
- Power ON password, and more...

OPTIONS

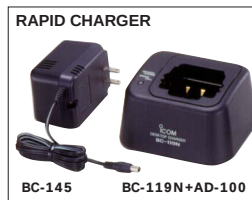
Some options may not be available in some countries. Please ask your dealer for details.



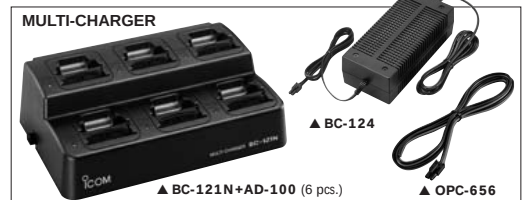
BP-226 BATTERY CASE: AA (R6)×5 alkaline cells. BP-226 is water-resistant, equivalent to JIS Grade 4.
BP-227 Li-Ion BATTERY PACK, 7.2V/1700mAh Provides 10 hours operating time* (approx.). Operating temp. range: -20°C to +60°C; -4°F to +140°F.
* Tx: Rx: standby=5:5:90.



BC-152 DESKTOP CHARGER + BC-147A/E AC ADAPTER Regularly charges the BP-227 in 9–10 hours.



BC-119N DESKTOP CHARGER + AD-100 CHARGER ADAPTER + BC-145A/E/V AC ADAPTER Rapidly charges the BP-227 in 2.5–3 hours.



BC-121N MULTI-CHARGER + AD-100 CHARGER ADAPTER + BC-124 AC ADAPTER Rapid charges up to 6 battery packs (Six AD-100s are required) in 2.5–3 hours.
OPC-656 DC POWER CABLE; For use with the BC-121N. (12–20V DC required).



HM-138: Full sized, waterproof construction corresponds to JIS Grade 7 and IPX 7. (1 m depth /30 min.).



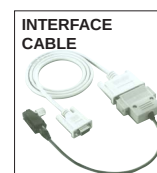
MB-86: Swivel type. Prevents accidental dropping from your belt.
MB-98: Alligator type. Same as supplied.



MB-96F: Fixed type belt hanger for use with MB-98.
MB-96: Swivel type belt hanger for use with MB-86.



CP-17L: CIGARETTE LIGHTER CABLE
OPC-515L: DC POWER CABLE For use with the BC-152 or BC-119N. (12–16V DC required)



OPC-966: RS-232C interface cable for connecting with a PC.



① **FA-S24V:** 136–150MHz (Blue ring)
② **FA-S59V:** 150–174MHz (Red ring)
③ **FA-S27U:** 400–470MHz (Green ring)
④ **FA-S56U:** 450–520MHz (Red ring)
⑤ **FA-S74U:** 490–520MHz (Blue ring)

SPECIFICATIONS

GENERAL			
• Frequency range	:		
IC-F51	:	136–174MHz	
IC-F61	:	400–470MHz	
• Number of Channels	:	Max. 128 channels/ 8 banks	
• Channel spacing	:	12.5/20/25kHz	
• Antenna impedance	:	50Ω (SMA Type)	
• PLL channel step	:		
IC-F51	:	2.5/3.125kHz	
IC-F61	:	5/6.25kHz	
• Power supply requirement	:	7.2V DC	
• Current drain (approx.)	:		
Transmit	at 5W	1.5A (IC-F51)	
	at 4W	1.5A (IC-F61)	
	at 1W	0.7A (IC-F51)	
	at 1W	0.8A (IC-F61)	
Receive	AF max.	300mA	
	Stand-by	85mA	
• Operating temperature range	:	–25°C to +55°C	
• Dimensions (W × H × D)	:	56 × 97 × 36.4mm	
	(projections not included)		
• Weight (approx.; With BP-227)	:	280g	

TRANSMITTER			
• Output power	:	IC-F51	5.0W
	:	IC-F61	4.0W
• Modulation system	:	Variable reactance frequency modulation	
• Max. frequency deviation	:	±5kHz (wide)	
	:	±4kHz (middle)	
	:	±2.5kHz (narrow)	
• Frequency error	:	±2.5ppm	
• Spurious emissions	:	0.25μW (and below 1GHz)	
	:	1.0μW (above 1GHz)	
• Modulation limiting	:	60–100% of Max. deviation	
• Audio harmonic distortion	:	3% typ. (AF 1kHz, 40% deviation)	
• Adjacent channel power	:	70dB Min. (wide, middle)	
	:	60dB Min. (narrow)	
• Residual modulation	:	55dB typ. (wide)	
(With CCITT filter)	:	53dB typ. (middle)	
	:	50dB typ. (narrow)	
• External MIC impedance	:	9-pin multi connector/2.2kΩ	

Measurements made in accordance with ETS 300-086.

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

RECEIVER

• Sensitivity	:	–4dBμV typ. (emf, at 20dB SINAD)
• Squelch sensitivity	:	–4dBμV typ. (emf, at threshold)
• Adjacent channel selectivity	:	75dB typ. (wide)
	:	73dB typ. (middle)
	:	65dB typ. (narrow)
• Spurious response	:	70dB
• Intermodulation	:	67dB typ.
• Hum and noise	:	55dB typ. (wide)
(With CCITT filter)	:	53dB typ. (middle)
	:	50dB typ. (narrow)
• Audio output power	:	0.5W typ. at 5% distortion with an 8Ω load
• External SP connector	:	9-pin multi connector/8Ω

Applicable U.S. Military Specifications

Icom makes rugged products that meet MIL-STD requirements and strict environmental standards as follows.

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Vibration	514.2	X	514.3	I	514.4	I	514.5	I
Shock	516.2	I, II, IV	516.3	I, IV	516.4	I, IV	516.5	I, IV

Supplied accessories:

- Antenna (Length may differ according to version)



- Alligator-type belt clip, MB-98

- Battery pack, BP-227

Icom Inc.

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013

URL: <http://www.icom.co.jp/world/index.html>

Count on us!

Icom America Inc.

2380 116th Avenue N.E., Bellevue,
WA 98004, U.S.A.
Phone : +1 (425) 454-8155
Fax : +1 (425) 454-1509
E-mail : sales@icomamerica.com
URL : <http://www.icomamerica.com>
<Customer Service> Phone : +1 (425) 454-7619

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
URL : <http://www.icomcanada.com>

Icom (Australia) Pty. Ltd.

A.B.N. 88 006 092 575
290-294 Albert Street, Brunswick,
Victoria, 3056, Australia
Phone : +61 (03) 9387 0666
Fax : +61 (03) 9387 0022
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@icom-europe.com
URL : <http://www.icom-europe.com>

Icom Spain S.L.

Ctra. de Gracia a Manresa Km. 14,750
08190 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 (UK) Ltd.

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

Icom France S.a

Zac de la Plaine, 1,
Rue Brindejonc des Moulinais BP 5804,
31505 Toulouse Cedex, 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

Sopot, 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, 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>

Beijing Icom Ltd.

1305, Wanshang Plaza, Shijingshan Road,
Beijing, China
Phone : +86 (010) 6866 6337
Fax : +86 (010) 6866 3553
E-mail : bjicom@bjicom.com
URL : <http://www.bjicom.com>



Icom Inc. (Japan), is an ISO 9001 and ISO 14001 certification acquired company.

Your local distributor/dealer: