



## VHF AND UHF TRANSCEIVERS

### IC-F14

(VHF transceiver, rotary type)

### IC-F14S

(VHF transceiver, toggle type)

### IC-F24

(UHF transceiver, rotary type)

### IC-F24S

(UHF transceiver, toggle type)



## *Built to last, built to work!*

- Tough and reliable construction
- Simple operation
- Wide range frequency coverage
- Lithium-ion battery standard
- Built-in CTCSS and DTCS
- Multiple 2-Tone, Multiple 5-Tone
- Optional voice scrambler, man down and DTMF decoder units
- Wide range of accessories available



icom Inc.



# Built to last, built to work!



*The IC-F14/S series shows Icom's design. Simple operation for everyone for your daily business. Its very durable construction resists shock and vibration. The dual rail battery pack to the radio. Wide range of frequency coverage, loud and clear audio, and a standard unit connector combined with Icom's rugged design. The IC-F14/S series will easily exc*



## **Tough and reliable construction**

The IC-F14/S series is built around an aluminum die-cast chassis and covered with tough polycarbonate casing. This radio is built to last. Its dual slide rail securely locks the battery to the radio. The battery terminal is covered with a non-corrosive rubber packing. The belt clip is clamped between the radio and the battery, making it nearly impossible to knock loose.

## **Simple operation**

Having only 3 buttons, volume and channel knobs, the IC-F14/S series does not require special training to use. Positive button action for sure operation even when wearing gloves, allows you to get down to the business of communicating without fuss.

## **Wide frequency coverage**

The IC-F14/S series covers a wide frequency range with one version (136–174, 400–470, 450–512 (520) MHz). Wide and narrow channel spacing (25, 12.5kHz) is programmable per channel.

## VHF TRANSCEIVERS

# IC-F14

# IC-F14S

## UHF TRANSCEIVERS

# IC-F24

# IC-F24S



**s new direction in LMR radio de-  
ne but a powerful and reliable tool  
urable construction is resistant to  
l guide design securely locks the  
ange frequency coverage, Li-Ion  
io, built-in signalings and option  
om grade electrical performance,  
eed your expectations.**

### Lithium-Ion battery standard

The IC-F14/S series comes with the BP-231 Li-Ion battery pack as standard. Li-Ion batteries have virtually no memory issues and allows you flexible charging. In addition, the optional BP-232 provides a high capacity 2000mAh for longer operating time.

### Optional board

The IC-F14/S series has an expansion socket for adding an optional board. Voice scrambler, man down and DTMF decoder features are available, depending on the installed board.

### 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 and quiet stand-by when others are talking.

### Multiple 2-Tone, Multiple 5-Tone

Up to 10 2-Tone/8 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
- Stun
- LED blink
- Scan

### Other features

- LED low battery alert
- TOT function and lock out penalty timer
- 2 step power saver
- Normal and priority scan
- 500mW loud and clear audio
- Optional VOX headset for hands free operation
- PC programming capability
- Embedded ESN (Electronic serial number)

## OPTIONS

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

### BATTERY PACKS AND CASE



▲ BP-230    ▲ BP-231    ▲ BP-232    ▲ BP-240

Battery packs	Type and capacity	Operating time* (VHF/UHF)	Output power (VHF/UHF)
BP-230	Li-Ion 7.4V/ 800mAh	6/6 hours	5W/4W
BP-231	Li-Ion 7.4V/1150mAh	9/8 hours	5W/4W
BP-232	Li-Ion 7.4V/2000mAh	16/15 hours	5W/4W
BP-240	AAA (LR03) batteries × 6	—	1W

\* Operating time is approximate time (at 20°C). Tx: Rx: standby=5:5:90. Power save on.

### RAPID CHARGER



▲ BC-145    ▲ BC-160    ▲ CP-17L    ▲ OPC-515L

**BC-160 DESKTOP CHARGER + BC-145 AC ADAPTER**  
Charges the BP-231 in 2 hours (approx.).

**BC-119N DESKTOP CHARGER + AD-106 CHARGER ADAPTER + BC-145 AC ADAPTER** : Charges the BP-231 in 2 hours (approx.).

**CP-17L CIGARETTE LIGHTER CABLE, OPC-515L DC POWER CABLE**  
For use with the BC-160 or BC-119N. (12–16V DC required).

### BELT CLIPS



▲ MB-93    ▲ MB-94

**MB-93** : Swivel type. A fast and easy way to remove the transceiver from your belt.  
**MB-94** : Alligator type. Same as supplied.

### MULTI-CHARGER



▲ BC-121N+AD-106 (6 pcs.)    ▲ OPC-656    ▲ BC-157

**BC-121N MULTI-CHARGER + AD-106 CHARGER ADAPTER + BC-157 AC ADAPTER** (Six AD-106s are required)  
Charges up to 6 battery packs in 2 hours (approx.) when BP-231 is attached.  
**OPC-656 DC POWER CABLE** : For use with the BC-121N. (12–20V DC required).

### LEATHER BELT HANGERS



▲ MB-96N    ▲ MB-96F

**MB-96N** : Swivel type belt hanger. Swivel joint of the MB-93 included.  
**MB-96F** : Fixed type belt hanger. For use with MB-94.

### HEADSETS and PTT/VOX UNIT



▲ HS-94    ▲ HS-95    ▲ HS-97    ▲ VS-1L

**HS-94** : Earhook headset with flexible boom microphone.  
**HS-95** : Behind-the-head headset with flexible boom microphone.  
**HS-97** : Throat microphone fits around your neck and picks up speech vibration.  
**VS-1L** : PTT/VOX unit. Required when using these headsets with the transceiver.

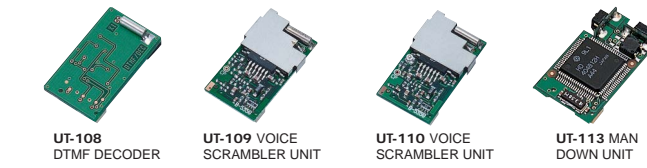
### SPEAKER-MICROPHONES



▲ HM-158L    ▲ HM-153L

**HM-158L** : Compact and durable body with screw-type connector.  
**HM-153L** : Durable earphone-microphone with revolving clip.

### INTERNAL UNITS



UT-108 DTMF DECODER    UT-109 VOICE SCRAMBLER UNIT    UT-110 VOICE SCRAMBLER UNIT    UT-113 MAN DOWN UNIT

**UT-108** : Provides DTMF, Selective call and ANI capabilities.  
**UT-109** : Up to 32 scrambling codes are available. Version 01 is required.  
**UT-110** : Up to 1020 scrambling codes are available. Version 01 is required.  
**UT-113** : Automatically sends an emergency signal when the transceiver is left in a horizontal position for a preset time.

**SP-13** : EARPHONE  
Provides clear audio in noisy environments.

**STUBBY ANTENNAS**  
• **FA-SC56VS** : 146–162MHz  
• **FA-SC57VS** : 160–174MHz  
• **FA-SC73US** : 450–490MHz

**ANTENNAS**  
• **FA-SC24V** : 136–150MHz  
• **FA-SC55V** : 146–174MHz  
• **FA-SC25U** : 400–430MHz  
• **FA-SC57U** : 430–470MHz  
• **FA-SC72U** : 470–520MHz



**SPECIFICATIONS**

- | GENERAL                                |   |
|--|---|
| • Frequency range                      | :<br>IC-F14/IC-F14S 136–174MHz (U.S.A. and General)<br>IC-F24/IC-F24S 400–470MHz (U.S.A. and General)<br>450–512MHz (U.S.A.)<br>450–520MHz (General)                              |
| • Number of channels                   | : 16 (IC-F14, IC-F24)<br>4 (Max., IC-F14S, IC-F24S)   |
| • Channel spacing                      | : 12.5kHz/25kHz   |
| • PLL channel step                     | : 2.5kHz, 3.125kHz (VHF)<br>5kHz, 6.25kHz (UHF)   |
| • Power supply requirement             | : 7.2V DC   |
| • Current drain (at 7.2V DC; approx.): |   |
| Transmit High                          | 1.5A  |
| Low (1W)                               | 0.7A  |
| Receive stand-by                       | 70mA  |
| rated output                           | 300mA   |
| • Antenna impedance                    | : 50Ω   |
| • Usable temperature range             | : –30°C to +60°C; –22°F to +140°F   |
| • Dimensions (with BP-231)             | : 53 (W) × 120 (H) × 38 (D) mm;<br>(projections are not included) 2 <sup>3</sup> / <sub>32</sub> (W) × 4 <sup>23</sup> / <sub>32</sub> (H) × 1 <sup>1</sup> / <sub>2</sub> (D) in |
| • Weight (approx. with BP-231)         | : 260g; 9.2oz   |

**TRANSMITTER**

- Output power : 5W (VHF), 4W (UHF)
- Max. frequency deviation : ±5.0/2.5kHz (Wide/narrow)
- Frequency error : ±2.5ppm
- Spurious emissions : 80dB typ.
- Adjacent channel power :  
VHF 80/70dB typ. (Wide/narrow)  
UHF 75/68dB typ. (Wide/narrow)
- FM Hum and Noise : 46dB typ. (Wide)  
40dB typ. (Narrow)
- Audio harmonic distortion : 3% typ. (AF 1kHz, 40% deviation)
- Modulation limiting : 60–100% of max. deviation
- External microphone connector :  
3-conductor 2.5 (d) mm (1/10")/2.2kΩ

Measurements made in accordance with EIA/TIA-603. All stated specifications are subject to change without notice or obligation.

**RECEIVER**

- Sensitivity : 0.25μV typ. (at 12dB SINAD)
- Squelch sensitivity : 0.25μV typ. (at threshold)
- Adjacent channel selectivity : 75dB typ. (Wide)  
65dB typ. (Narrow)
- Spurious response : 70dB
- Intermodulation : 74dB typ.
- Hum and noise ratio : 50dB typ. (Wide)  
45dB typ. (Narrow)
- Audio output power : 500mW typ.  
(at 5% distortion with an 8Ω load)
- External speaker connector: 2-conductor 3.5 (d) mm (1/8")/8Ω

**Applicable U.S. Military Specifications**

Icom makes rugged products that have been tested to and passed the following MIL-STD requirements and strict environmental standards.

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	I, II
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	502.4-3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain Blowing/Drip	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	–
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	–
Dust Blowing	510.1	I	510.2	I	510.3	I	510.4	I
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

**SUPPLIED ACCESSORIES**

(May differ according to version)



**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 NE,  
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>

**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 (UK) Ltd.**

Unit 9, Sea St., Herne Bay,  
Kent, CT6 8LD, U.K.  
Phone : +44 (0)1227 741741  
Fax : +44 (0)1227 741742  
E-mail : info@icomuk.co.uk  
URL : <http://www.icomuk.co.uk>

**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 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 (Europe) GmbH**

Communication Equipment  
Himmelgeister Str. 100,  
D-40225 Düsseldorf, Germany  
Phone : +49 (0)211 346047  
Fax : +49 (0)211 333639  
E-mail : info@icom-europe.com  
URL : <http://www.icomeurope.com>

**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>

**Beijing Icom Ltd.**

10C07, Long Silver Mansion, No.88, Yong Ding  
Road, Haidian District, Beijing, 100039, China  
Phone : +86 (010) 5889 5391/5392/5393  
Fax : +86 (010) 5889 5395  
E-mail : bjicom@bjicom.com  
URL : <http://www.bjicom.com>

**Icom (Australia) Pty. Ltd.**

A.B.N. 88 006 092 575  
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 Spain S.L.**

Ctra. Rubi, No. 88 "Edificio Can Castanyer"  
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 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>

