# O ICOM

**VHF AND UHF TRANSCEIVERS** 



IC-F14S (VHF transceiver, toggle type) IC-F24S (UHF transceiver, toggle type)







# Basic & Rugged







**ÎCOM** 

# Built to last, built to work!

**UHF TRANSCEIVERS** 



IC-F14 |IC-F24 IC-F14S |IC-F24S

**VHF TRANSCEIVERS** 

The IC-F14/S series shows Icom<sup>2</sup> sign. Simple operation for everyor for your daily business. Its very d shock and vibration. The dual rai battery pack to the radio. Wide r battery pack, loud and clear aud unit connector combined with Ic 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.





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

#### Lithium-Ion battery standard

The IC-F14/S series comes with a high capacity 2000mAh Li-Ion battery pack, BP-232N, as standard. Li-Ion batteries have virtually no memory issues and allows you flexible charging.

#### **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**

- MDC PTT ID and MDC emergency call functions are available (Transmit only)
- 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
- PC programming capability

#### **OPTIONS**

BATTERY PACKS AND CAS

#### A BP-230N ▲ BP-232N

#### REGULAR CHARGER



**BC-171 DESKTOP CHARGER** + BC-147 AC ADAPTER Charges the BP-232N in 10 hours (approx.).

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

BE		
3P-232N	▲ BP-240	

#### Operating time (VHF/UHF) Output power Battery Type and packs capacity (VHF/UHF) Li-lon **BP-230N** 7.35 hours 5\\//4\\/ 7.4V/ 980mAh Li-lon BP-232N 16/15 hours 5W/4W 7.4V/2000mAh AAA (LR03) BP-240 1W batteries × 6

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

#### RAPID CHARGER



BC-160 DESKTOP CHARGER + BC-145 AC ADAPTER



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



A BC-121N+AD-106 (6 pcs.) 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 3 hours (approx.) when BP-232N is attached. OPC-656 DC POWER CABLE : For use with the BC-121N. (12-20V DC required).

▲ MB-93 MB-93 : Swivel type belt clip. MB-94 : Alligator type. Same as supplied.

MB-96N : Swivel type belt hanger. MB-96F : Fixed type belt hanger.



HS-94 : Earhook headset with flexible boom microphone. HS-95 : Behind-the-head headset with flexible boom microphone.

pat microphone fits around your neck and picks up speech vibration. VS-1L : PTT/VOX unit. Required when using these headsets with the transceiver



- UT-108 : Provides DTMF, Selective call and ANI capabilities.
- UT-109 : Up to 32 scrambling codes are available. Version 01 is required.

tal position for a preset time.

- UT-110 : Up to 1020 scrambling codes are available. Version 01 is required. UT-124 : Automatically sends an emergency signal when the transceiver is left in a horizon-



HM-153L : Durable earphone-microphone with revolving clip

- HM-158L : Compact and durable body with plug screw connector. HM-159L : Full size durable speaker microphone.
- HM-166L : Light-weight earphone microphone with revolving clip.
- SP-13 : EARPHONE Provides clear audio in noisy environments.

#### **STUBBY ANTENNAS**

- FA-SC56VS : 150-162MHz • FA-SC57VS : 160–174MHz
- FA-SC73US: 450–490MHz

#### **CUT ANTENNAS**

• FA-SC61VC : 136–174MHz • FA-SC61UC : 380–520MHz Cut the antenna element to tune to a specific center frequency.

#### ANTENNAS

- FA-SC25V : 136–150MHz FA-SC55V : 150–174MHz
- FA-SC25U : 400-430MHz • FA-SC57U : 430-470MHz
- FA-SC72U : 470-520MHz

#### Charges the BP-232N in 3 hours (approx.). BC-119N + AD-106 + BC-145 is also available. : Charges the BP-232N in 3 hours (approx.).



#### VHF AND UHF TRANSCEIVERS

## IC-F14/S·IC-F24/S

#### **SPECIFICATIONS**

	GENERAL		
<ul> <li>Frequency range</li> </ul>	·		
IC-F14/IC-F14S IC-F24/IC-F24S	136–174MHz (U.S.A. and General) 400–470MHz (U.S.A. and General) 450–512MHz (U.S.A.) 450–520MHz (General)		
Number of channels	: 16 (IC-F14, IC-F24) 4 (Max., IC-F14S, IC-F24S)		
<ul> <li>Channel spacing</li> </ul>	: 12.5kHz/25kHz		
PLL channel step	: 2.5kHz, 3.125kHz (VHF) 5kHz, 6.25kHz (UHF)		
Power supply requirement : 7.2V DC			
Current drain (at 7.2V DC; a Transmit High Low (1W) Receive stand-by rated output	1.5A 0.7A 70mA		
• Antenna impedance : 50Ω			
<ul> <li>Usable temperature range : −30°C to +60°C; −22°F to +140°F</li> </ul>			
<ul> <li>Dimensions (with BP-232N) : 53 (W) ×120 (H) ×42.4 (D) mm; (projections are not included) 2<sup>3</sup>/<sub>32</sub> (W) ×4<sup>23</sup>/<sub>32</sub> (H)×1<sup>21</sup>/<sub>32</sub> (D) in</li> </ul>			
• Weight	: 296g; 10.4oz (approx. with BP-232N)		

#### TDANSMITTED

<ul> <li>Output power</li> </ul>	: 5W (VHF), 4W (UHF)			
Max. frequency deviation : ±5.0/2.5kHz (Wide/narrow)				
<ul> <li>Frequency error</li> </ul>	: ±2.5ppm			
<ul> <li>Spurious emissions</li> </ul>	: 80dB typ.			
• Adjacent channel power VHF UHF	: 80/70dB typ. (Wide/narrow) 75/68dB typ. (Wide/narrow)			
• FM Hum and Noise	: 46dB typ. (Wide) 40dB typ. (Narrow)			
• Audio harmonic distortion : 3% typ. (AF 1kHz, 40% deviation)				
<ul> <li>Modulation limiting</li> </ul>	: 60–100% of max. deviation			

Ext. 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.

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#### RECEIVER : 0.25µV typ. (at 12dB SINAD)

- : 0.25µV tvp. (at threshold)
- Adjacent channel selectivity : 75dB typ. (Wide)

Sensitivity

Squelch sensitivity

Spurious response

Hum and noise ratio

Audio output power

Intermodulation

- 65dB typ. (Narrow)
- : 70dB
- : 74dB typ.
  - : 50dB typ. (Wide) 45dB typ. (Narrow)
  - : 500mW typ.

(at 5% distortion with an  $8\Omega$  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 810F	
Standard	Method	Procedure
Low Pressure	500.4	I, II
High Temperature	501.4	I, II
Low Temperature	502.4-3	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

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

SUPPLIED ACCESSORIES (May differ according to version) VHF Antenna • UHF Antenna 100 Belt clip, MB-94
 Unit cover Battery pack, BP-232N