



## 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 DTCSS
- 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 new direction in LMR radio design. Simple operation for everyone but a powerful and reliable tool for your daily business. Its very durable construction is resistant to shock and vibration. The dual rail guide design securely locks the battery pack to the radio. Wide range frequency coverage, Li-Ion battery pack, loud and clear audio, built-in signalings and option unit connector combined with Icom grade electrical performance, the IC-F14/S series will easily exceed your expectations.



## 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**





## NEW! MDC 1200 compatible

Transmit MDC1200 PTT ID and Emergency Calls with the F14 series. The MDC1200 encoding functions are compatible with fleets using existing MDC systems.

## NEW! Low Battery Beep

The Low Battery Beep adds an audible alert in addition to the LED blinking when the battery runs low. This feature is ideal for workers who wear their F14 on a belt.

## 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 x 6	—	1W

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

### REGULAR CHARGER



▲ BC-147 ▲ BC-171

**BC-171 DESKTOP CHARGER + BC-147 AC ADAPTER**  
Charges the battery pack in 8–10 hours (approx.). Coming soon.

### RAPID CHARGER



▲ BC-145 ▲ BC-160

**BC-160 DESKTOP CHARGER + BC-145 AC ADAPTER**  
Charges the BP-231 in 2 hours (approx.).  
**BC-119N + AD-106 + BC-145** is also available. : Charges the BP-231 in 2 hours (approx.).

### POWER SUPPLY CABLES



▲ CP-17L ▲ OPC-515L

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

### 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.

### BELT CLIPS AND LEATHER BELT HANGERS



▲ MB-93 ▲ MB-96F

**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.

### HEADSETS and PTT/VOX UNIT



▲ HS-94 ▲ HS-95 ▲ HS-97

**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-153L ▲ HM-158L ▲ HM-159L

**HM-153L** : Durable earphone-microphone with revolving clip.  
**HM-158L** : Compact and durable body with screw-type connector.  
**HM-159L** : Full size durable speaker microphone.

### INTERNAL UNITS



UT-108 DTMF DECODER UT-109 VOICE SCRAMBLER UNIT UT-110 VOICE SCRAMBLER UNIT UT-124 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-124** : 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-SC25V** : 136–150MHz
- **FA-SC55V** : 150–174MHz
- **FA-SC25U** : 400–430MHz
- **FA-SC57U** : 430–470MHz
- **FA-SC72U** : 470–520MHz

## SPECIFICATIONS

GENERAL			
• Frequency range	:		
IC-F14/IC-F14S		136–174MHz (U.S.A. and General)	
IC-F24/IC-F24S		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)	
• Channel spacing	:	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; approx.):			
Transmit	High	1.5A	
	Low (1W)	0.7A	
Receive	stand-by	70mA	
	rated output	300mA	
• Antenna impedance	:	50 ohm	
• Usable temperature range	:	–30°C to +60°C; –22°F to +140°F	
• Dimensions (with BP-231)	:	53 (W) × 120 (H) × 38 (D) mm;	
		(projections are not included) 2 <sup>3</sup> / <sub>32</sub> (W) × 4 <sup>23</sup> / <sub>32</sub> (H) × 1½ (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/2.2k ohm

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 8 ohm load)
- External speaker connector: 2-conductor 3.5 (d) mm (1/8")/8 ohm

## 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)



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