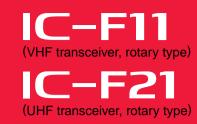
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# VHF AND UHF TRANSCEIVERS















IC-F21S Toggle type radio

# Perfect for Business, Big or Small

# The on-site communications solution

For small business, hotels, hospitality, landscape, nursery, etc. who need economical and instant two-way communications. Also a wireless intercom solution for large retailers, warehouses, etc.

# Keep in touch without interruption

Keep all your associates in-touch instantly without the interruption of a public address system or the expense and complication of a cell phone. Answer customer inquiries, check stock, arrange special handling, and provide better service to your customers right from the retail sales floor. Increase productivity at the same time you improve service.

# Twice as much power than other models

Use a full 5/4 watts when you need it, or select a lower setting if you don't ... you decide. Increase the range of your transmissions out-doors, and indoors where obstacles and walls offer challenges to your current equipment. Crystal clear communications.

# Simple controls, easy to use

Transmit button, volume control and channel selector are all you need. All three controls may be operated without removing from your belt. The perfect business tool that doesn't require training to use. Great for high turnover or retail shift situations.

# Military rugged construction

Don't let the light weight or compact body fool you. This is a military spec. rugged radio that can take abuse and keep working. Don't worry about special training. Just put them out in the workplace and let them do their job.

# Wide/narrow capability - a good investment

May be operated on 12.5 or 25kHz wide channels. Easy transition to the new narrow channels as regulations will move in that direction in several years. A good investment that will adapt to the future. Won't be obsolete as the rules change.

# Multiple group and individual selective calling

Use the built-in signaling capability (2-tone, 5-tone, CTCSS, DTCS) to set up your own talk groups and quiet the radio when others are talking. You can set up selective calls to individuals too. Keep private communications private and eliminate unnecessary interruptions and gossip in the workplace.

# **Other features**

- Compact and lightweight carry all day with no fatigue
- Ni-Cd battery and drop-in battery charger\* included
- (\* depending on versions) • Optional speaker mic, VOX headset, and much more
- Optional alkaline or Ni-MH battery pack



IC-F21 Rotary type radio

# IC-F11/S·IC-F21/S

# SPECIFICATIONS

GENERAL						
• Frequency coverage (MHz)						
IC-F11/IC-F11S	: 146–174					
IC-F21/IC-F21S	: 400–430 440–470					
<ul> <li>Channel spacing</li> </ul>	: 12.5/25 kHz					
<ul> <li>Number of channels</li> </ul>	: 16 (IC-F11, IC-F21)					
	Max. 4 (IC-F11S, IC-F21S)					
<ul> <li>PLL channel step</li> </ul>	: 2.5kHz, 3.125kHz (VHF)					
	5kHz, 6.25kHz (UHF)					
<ul> <li>Power supply requirement</li> </ul>	:7.2V DC					
<ul> <li>Current drain (approx.)</li> </ul>						
Tx High (5W/4W)						
Rx Rated audio	: 250mA					
Standby	: 70mA					
<ul> <li>Frequency stability</li> </ul>	: ±5ppm (VHF), ±2.5ppm (UHF)					
<ul> <li>Operating temperature ran</li> </ul>						
-30°C	to +60°C ; -22°F to +140°F					
<ul> <li>Dimensions (W×H×D)</li> </ul>	:54×128×37 mm					
(proj. not included)	; 21⁄8×51⁄32×115⁄32 in					
<ul> <li>Weight (with BP-209N)</li> </ul>	: 310g; 10.9oz					
1						

TRANSMITTER					
•Output power (at 7.2V DC)	: 5W, 2W or 1W (VHF)				
<b>NA C N N N</b>	4W, 2W or 1W (UHF)				
<ul> <li>Max. frequency deviation</li> </ul>	:±5.0kHz (at 25kHz) ±2.5kHz (at 12.5kHz)				
<ul> <li>Spurious emissions</li> </ul>	:73dBc typ.				
<ul> <li>Adjacent channel power</li> </ul>	:70dB typ. (at 25kHz)				

60dB typ (at 12 5kHz) : 3-conductor 2.5 (d) mm External mic. connector (1/10")/2.2kΩ

# RECEIVER

<ul><li>Sensitivity</li><li>Squelch sensitivity</li></ul>	y :0	.25μV typ. (at 12dB SINAD) .3μV typ. (at threshold)					
<ul> <li>Adjacent channel</li> </ul>	selectivity : 70	DdB typ. (at 25kHz)					
		5dB typ. (at 12.5kHz)					
<ul> <li>Spurious response</li> </ul>	e rejection : 70	JdB typ.					
Intermodulation re	ejection : 70	OdB typ. All stated					

 Audio output power (at 7 2V DC)

•External speaker connector :2-conductor 3.5 (d) mm

:500mW (typical at 5% distortion with an 80 load) (<sup>1</sup>/8")/8Ω

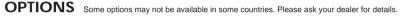
Supplied accessories: Battery pack; BP-209N\*

Belt clip; MB-103 Antenna (varies from versions) \* depending on version

# Applicable U.S. Military Specifications

	MIL 810 C		MIL 810 D		MIL 810 E		MIL 810 F	
	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	Ι	501.2	I, II	501.3	I, II	501.4	I, II
Low Temp.	502.1	Ι	502.2	I, II	502.3	I, II	502.4	I, II
Temp. Shock	503.1	Ι	503.2	Ι	503.3	Ι	503.4	Ι
Solar Radiation	505.1	I	505.2	I	505.3	Ι	505.4	Ι
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, II
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	-
Salt Fog	509.1	Ι	509.2	Ι	509.3	Ι	509.4	-
Dust	510.1	Ι	510.2	Ι	510.3	Ι	510.4	Ι
Vibration	514.2	VIII, X	514.3	Ι	514.4	Ι	514.5	Ι
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV

leasurements made in accordance with EIA-152-C/204D or TIA-603. All stated specifications are subject to change without notice or obligation.



BP-209N Ni-Cd 7.2V/1100mAh **BP-208N BP-210N BP-211N** Ni-MH AA (LR6) BP-222N Ni-Cd Li-lor 7.2V/1650mAh 7.4V/1800mAh batteries × 6 7 2V/600mAh

BATTERY PACKS AND CASE BP-208N BP-209N BP-210N BP-211N BP-222N 1W typ. 5/4W typ. 5/4W typ. 5/4W typ. 5/4W typ. OUTPUT POWER BATTERY LIFE 8.5 hours 13hours 14hours 4.5hours Battery life is approx, time: (Tx (Hi): Rx: standby=5:5:90)

▲ HM-158L

HM-158L: Compact and durable body with screw-type connector

HM-159L: Full size durable speaker microphone with revolving clip.

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

SPEAKER-MICROPHONES

▲ HM-153L

type connector

HM-46L : Slim dimensions speaker microphone.



# + BC-147 AC ADAPTER

Charges the Ni-Cd or Ni-MH battery pack, BP-209N, BP-210N, BP-222N with/without transceiver in 12, 18.5, 6.5 hours (approx.), respectively. The BC-147 AC adapter is additionally required. Cannot charge Li-Ion battery pack, BP-211N.

HS-94 : Earbook 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 a speech vibration.

VS-1L : PTT/VOX unit. Required when using these headsets with the transceiver.

HS-51 : Headset HS-51 is also optionally available. Includes VOX. PTT and "one-

touch" PTT with a time-out timer. (UHF only in U.S.A. and Canada)

▼ HS-95

▲ HS-97

HEADSETS and PTT/VOX UNIT



BC-144N DESKTOP CHARGER + BC-145A/E/V AC ADAPTER

BELT CLIP

▲ MB-86

MB-103: Alligator type.

Same as supplied.

MB-86: Swivel type belt clip.

For rapid charging of battery pack, BP-209N, BP-210N or BP-222N. An AC adapter, BC-145, is supplied with the charger depending on version. Charging time: 1.5 to 2 hours. Cannot charge Li-lon battery pack, BP-211N. BC-119N+AD-101+BC-145A/E/V rapidly charges BP-211N as well as other battery packs. BC-121N MULTI-CHARGER + AD-101 CHARGER ADAPTER + BC-157 AC ADAPTER For rapid charging of up to 6 battery packs (including BP-211N) in 1.5 to 2 hours. Six AD-101s are required. OPC-656 DC POWER CABLE; For use the BC-121N with a DC power supply (12–20 V DC).

### ANTENNA CONNECTOR ADAPTER

AD-98FSC: Allows you to connect a BNC-type antenna. (For maintenance use only)

# LEATHER BELT HANGERS MB-96N: Swivel type belt hanger. MB-96F: Fixed type belt hanger. Use with MB-103.

FARPHONE

### SP-13 Provides clear audio in noisy environment.

# STUBBY ANTENNAS

FA-SC56VS: 150–162MHz, 80mm FA-SC57VS: 160–174MHz, 80mm FA-SC73US: 450-490MHz, 60mm

Count on us!

A fast and easy way to remove the radio from your belt. CUT ANTENNAS

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

Icom Inc. 1-1-32, Kami-minami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 URL: http://www.icom.co.ip/world/index.html

▲ HS-94

# 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 Canada

Glenwood Centre #150-6165 Highway 17, Delta, B.C., V4K 5B8, Canada Phone: +1 (604) 952-4266 Fax : +1 (604) 952-0090 mail : info@icomcanada.com RL : http://www.icomcanada.com URL

# Icom (Australia) Pty. Ltd. Unit 1 / 103 Garden Road, Clayton, VIC 3168 Australia Phone: +61 (03) 9549 7500 Fax : +61 (03) 9549 7505 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

▲ HM-159L

Communication Equipment Himmelgeister Str. 100, D-40225 Düsseldorf, Germany Phone : +49 (0211) 346047 Fax : +49 (0211) 336039 E-mail : info@icomeurope.com URL : http://www.icomeurope.com

# Icom Spain S.L.

Ctra. Rubi, No. 88 "Edificio Can Castanyer" 08190, Sant Cugat del Valles, Barcelona, Spain Phone: +34 (93) 590 26 70 :+34 (93) 589 04 46 Fax -mail : icom@icomspain.com RL : http://www.icomspain.com URI

# 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.s.

Zac de la Plaine, 1 Rue Brindeionc 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

# 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, 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

▲ VS-1L

# 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 : biicom@biicom.com : http://www.bjicom.com URL

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