



VHF AND UHF TRANSCEIVERS

IC-F121 (VHF transceiver)

IC-F221 (UHF transceiver)



- Powerful 50W (VHF), 45W (UHF) Output
- 6 Prog. Buttons and Independent Volume Knob
- 4W typ. Front-mounted Speaker
- 128 Memory Channels with 8 Memory Banks
- 8-Character Alphanumeric Display
- Flexible Hanger Actions
- Built-in 2-Tone, 5-Tone, CTCSS, DTCS Encoder & Decoder
- Advanced Multi 2-Tone/5-Tone Systems (See overleaf for details)
- Standard DTMF Encoder and Optional DTMF Decoder with ANI Function
- Programmable Wide/Narrow Channel Spacing for Each Channel
- 2.5kHz Channel Step (U.S.A. VHF only)



Icom Inc.

ADDITIONAL FEATURES

Advanced Multi 2-Tone/5-Tone systems

- Programmable actions when a matched tone is received
 - Bell icon indication ON/OFF/Blink
 - Answer back calls
 - Beep sounds
 - Scan Start/Stop
 - Auto transmission
 - Stun/Kill functions (prevents use of a lost or stolen radio)
 - External out for horn drive (Optional OPC-617 is required)
- 32 Tx and 9 Rx 5-Tone codes available
- 11 Tx and Rx 2-Tone codes available

Other features

- Hook scan function and Hook scan ON/OFF button are assignable
- 10 scanning lists and normal/priority scan
- Power on password
- Optional Voice Scrambler, UT-109/UT-110
- SmarTrunkII™ or LTR® Trunking capability with optional UT-105 or UT-111, respectively
- Backlit LCD and keys for night time operations
- Meets MIL-STD 810 C, D, E and F specifications

SPECIFICATIONS

GENERAL

- Frequency coverage : IC-F121 136–174MHz
IC-F221 440–490MHz
- Number of channels : 128 channels/8 banks
- Channel spacing : 12.5/25kHz, 15/30kHz
- PLL channel step : VHF 2.5, 3.125kHz
UHF 5, 6.25kHz
- Frequency stability : VHF ±5.0ppm
UHF ±2.5ppm
- Operating temp. range : -30°C to +60°C; -22°F to +140°F
- Power supply voltage : 13.6V DC
- Current drain (approx.) : Tx VHF (50W) 14A
UHF (45W) 13A
Rx max. audio 1200mA
stand-by 300mA
- Antenna impedance : 50Ω (SO-239)
- Dimensions (W×H×D) : 150×40×167.5mm;
5²⁹/₃₂×1⁹/₁₆×6¹⁹/₃₂in
- Weight : 1.1kg ; 2.4lb

TRANSMITTER

- Output power : VHF 50W
(at 13.6V DC) UHF 45W
- Max. freq. deviation : ±5.0/2.5kHz (wide/narrow)
- Spurious emissions : 70dB typ.
- Adjacent Ch. power : 70/60dB (wide/narrow)
- Mic. impedance : 600Ω (8-pin modular)

RECEIVER

- Sensitivity : 0.25μV typ. (at 12dB SINAD)
- Squelch sensitivity : 0.25μV typ.
- Adjacent Ch. selectivity : 75/65dB typ. (wide/narrow)
- Spurious response : 75dB
- Intermodulation : VHF 74dB typ.
UHF 75dB typ.
- Audio output power : 4W typ. at 10% distortion with a 4Ω load
- Ext. SP connector : 2-conductor 3.5 (d) mm (1/8")/4Ω

Applicable U.S. Military Specifications

The IC-F121 and IC-F221 meet MIL-STD requirements and strict environmental standards for shock (MIL 810 C, D, E and F) and vibration (MIL 810 C, D, E and F).

Supplied Accessories

- Hand mic. (HM-100N) ○ DC power cable
- Mounting bracket kit ○ Hanger Kit
- Key assign stickers

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

OPTIONS

- **HM-100TN DTMF MICROPHONE**
- **OPC-617 ACC CABLE**
For external terminal connection.
- **SM-25 DESKTOP MICROPHONE**
Convenient for dispatching. Equipped with monitor switch.
- **SP-5/SP-10/SP-22 EXTERNAL SPEAKERS**
Compact and easy-to-install.
Input impedance: 4Ω; Max. input power: 5W
- **UT-105 SmarTrunk II™ LOGIC BOARD**
SmarTrunk II is a trademark of SmarTrunk Systems, Inc.
- **UT-108 DTMF DECODER UNIT**
Provides DTMF decode and ANI capabilities.
- **UT-109 VOICE SCRAMBLER UNIT (Version 01)**
Up to 32 non-rolling scrambling codes available.
- **UT-110 VOICE SCRAMBLER UNIT (Version 01)**
Up to 1020 (255 codes × 4 groups) rolling scrambling codes are available.
- **UT-111 LTR® TRUNKING BOARD**
LTR is a registered trademark of E.F. Johnson Company.



Icom Inc.

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan Phone: 06 6793 5302 Fax: 06 6793 0013 URL: <http://www.icom.co.jp/world/index.html>

Count on us!

Icom America Inc.

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

Icom Canada

Glenwood Centre #150-6165 Highway 17,
Delta, B.C., V4K 5B8, Canada
Phone: (604) 952-4266 Fax: (604) 952-0090
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: 03 9387 0666 Fax: 03 9387 0022
URL : <http://www.icom.net.au>

Icom New Zealand

146A Harris Road, East Tamaki, Auckland, New Zealand
Phone: 09 274 4062 Fax: 09 274 4708
URL : <http://www.icom.co.nz>

Icom (Europe) GmbH

Communication Equipment
Himmelgeister Str. 100, D-40225 Düsseldorf, Germany
Phone: 0211 346047 Fax: 0211 333639
URL : <http://www.icomeurope.com>

Icom Spain S.L.

Crta. de Gracia a Manresa Km. 14,750
08190 Sant Cugat del Valles Barcelona, SPAIN
Phone: (93) 590 26 70 Fax: (93) 589 04 46
URL : <http://www.icomspain.com>

Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K.
Phone: 01227 741741 Fax: 01227 741742
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
URL : <http://www.icom-france.com>

Asia Icom Inc.

6F No. 68, Sec. 1 Cheng-Teh Road,
Taipei, Taiwan, R.O.C.
Phone: (02) 2559 1899 Fax: (02) 2559 1874
URL : <http://www.asia-icom.com>

Beijing Icom Ltd.

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



Certificate Number Q14190

Icom Inc. (Japan), is an ISO9001 certification acquired company.

Your local distributor/dealer: