



VHF AND UHF TRANSCEIVERS

IC-F121S (VHF transceiver)
IC-F221S (UHF transceiver)



- Powerful 50W (VHF), 45W (UHF) Output
- Simple Operation with Large Buttons and Volume Knob
- 4W typ. Front-mounted Speaker
- 8 Memory Channels with LED Display
- Interactive LED Lighting and 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
 - LED lighting 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)
- Ten 2-tone codes or eight 5-tone codes can be decoded on a channel
- Three call codes are programmable

Other features

- Hook scan function and Hook scan ON/OFF button are assignable
- 24-digit DTMF autodial memory
- Automatic ID (DTMF code) transmission linked to PTT
- Busy lockout and repeater lockout
- Power on password
- External I/O terminal socket with optional OPC-617
- Optional Voice Scrambler, UT-109/UT-110
- Meet MIL-STD 810 C, D, E and F Specification

SPECIFICATIONS

GENERAL

- Frequency coverage : IC-F121S 136–174MHz
IC-F221S 440–490MHz
- Number of channels : 8 channels (4 channels × 2 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
standby 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 : 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-F121S and IC-F221S 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).

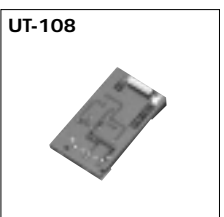
Supplied Accessories

- 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-108** DTMF DECODER UNIT
Provides DTMF decode and ANI capabilities.
- **UT-109** VOICE SCRAMBLER UNIT (Version 02)
- **UT-110** VOICE SCRAMBLER UNIT (Version 02)
The scrambler systems of the UT-109 and UT-110 are not compatible with each other. Ask your dealer for details.
UT-109: Non-rolling type. UT-110: Rolling type.



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Certificate Number Q14190

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

Your local distributor/dealer: