

# IC-F110 IC-F210



- **8-Character Alphanumeric Display**  
The alphanumeric LCD indicates channel, bank name and decoded text, etc. Various status icons for such functions as an S-meter and output power, etc., enhance the array of information available to the user.
- **128 Memory Channels with 8 Memory Banks**  
Up to 128 channels with 8-character channel names can be stored and divided into 8 banks for flexible channel management.
- **6 Prog. Buttons and Independent Volume Knob**  
The up/down and P0–P3 buttons allow you to customize the use of the IC-F110/F210 meet your specific needs. The independent volume knob provides quick and easy operation. An advanced radio that is simple to use.
- **Built-in 2-Tone, 5-Tone, CTCSS, DTCS Encoder and Decoder and DTMF Encoder**  
Multiple signaling systems are equipped as standard. 8 DTMF auto-dialing memories are available. The optional DTMF decoder UT-108 provides ANI function.
- **4W (typ.) Front-mounted Speaker**
- **Programmable Wide/Narrow Channel Spacing for Each Channel**
- **Optional Voice Scrambler, UT-109/UT-110**



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
- Reduced chassis length (117.5mm) allows for easier installation
- External I/O terminal socket with optional OPC-617
- 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-F110 136–174MHz
  - IC-F210 400–430MHz
  - 440–490MHz
- Number of channels : Max. 128, 8 banks
- Channel Spacing : 12.5/25kHz, 12.5/20kHz
- PLL channel step : 2.5, 3, 125kHz (VHF)
- 5, 6.25kHz (UHF)
- Frequency stability : ±1.5kHz
- Operating temp. range : -25°C to +55°C
- Power supply voltage : 13.2V DC
- Current drain : Tx at 25W 7A
- Rx Max. audio 1200mA
- Stand-by 300mA
- Antenna impedance : 50Ω (SO-239)
- Dimensions : 150(W)×40(H)×117.5(D) mm
- Weight : 800g

TRANSMITTER

- Output power : 25W (at 13.2V DC)
- Max. frequency deviation : ±5.0kHz (wide)
- ±4.0kHz (middle)
- ±2.5kHz (narrow)
- Spurious emissions : 0.25μW (below 1GHz)
- Adjacent channel power : 70dB (wide, middle)
- 60dB (narrow)
- Mic. impedance : 600Ω (8-pin modular)

RECEIVER

- Sensitivity : -4dBμV typ. (emf) (at 20dB SINAD)
- Squelch sensitivity : -4dBμV typ. (emf, threshold)
- Adjacent channel selectivity : 75dB typ. (wide, middle)
- 65dB typ. (narrow)
- Spurious response : 75dB
- Intermodulation : 67dB typ.
- Audio output power : 4.0W typ. at 10% dist./4Ω load
- Ext. SP connector : 2-conductor 3.5(d)mm/4Q

Applicable U.S. Military Specifications

The IC-F110/F210 meets MIL-STD requirements and strict environmental standards as follows.

Standard	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	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	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-
Dust	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

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

Measurements made in accordance with ETS 300 086. 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 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-111** LTR® Trunking UNIT  
LTR is a registered trademark of E.F. Johnson Company.



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