



VHF AND UHF TRANSCEIVERS

# IC-F310 IC-F410



The photo shows actual size.

## ● Tough rugged construction

The highly dependable diecast aluminum chassis and polycarbonate front panel are resistant to impact.

## ● Flexible signalling capabilities

CTCSS and DTCS encoder/decoder and DTMF, 2-tone and 5-tone encoder are standard. Of course, 2-tone and 5-tone decoder functions are optionally available to suite a wide variety of signalling requirements. In addition, the IC-F310/F410 are compatible with the SmarTrunk II™ system\*.

\*Optional UT-105 SmarTrunk II™ Logic Board is required.

## ● Programmable key assign function

A limited number of switches (4) provide simple operation. Moreover, functions can be assigned to switches providing customization to suit specific needs.

## ● Selectable channel spacing

Versions are available that allow wide/narrow switching independently for each channel.

## ● Alphanumeric display

## ● Advanced programming package for IBM® PC

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**ADDITIONAL FEATURES**

- Key backlight helps night operation
- 32 channels for 5-tone encoder
- Emergency call with single and repeat function
- 8 identities + group code for 5-tone decode (optional)
- Selectable digits for 5-tone decode indication
- Automatic ID transmission linked to PTT
- 51 frequencies for CTCSS (plus 1 programmable)
- Polarity selectable for DTCS
- 7 autodialing memories for DTMF
- Up to 5 characters for memory name indication
- Bank separation capability
- 5 scan channel groups
- 2 priority channels
- Automatic scan start and/or receive mute when mic. is on hook
- Automatic priority channel selection and/or mute release when mic. is off hook

- Normal and priority scan
- Scan start at power on
- Adjustable transmission release period to prevent noise burst at end of transmission when using CTCSS
- Remote monitoring capability (optional UT-96 required)
- Optional PIN code input to prevent operation by unauthorised persons
- Programmable minimum level for audio output
- Talk around function (temporary simplex operation on a duplex channel)
- Time-out timer
- Time-out ID transmission
- Penalty timer
- Transmit lockout (channel busy / repeater / reverse repeater)
- 2 selectable 'stun' functions (optional UT-96 required)
- Compact body provides easy installation

**SPECIFICATIONS**

**GENERAL**

- Frequency coverage\* (Unit; MHz):
 

IC-F310	136-155	146-174
IC-F410	400-430	440-470
	470-490	490-520

\*Varies according to versions.
- Number of channels : 32 (16 ch x 2 banks)
- Type of emission : 8K50F3E (12.5 kHz; narrow)  
16K0F3E (25 kHz; wide)
- PLL channel step : 5 kHz, 6.25 kHz and 7.5 kHz
- Frequency stability : ±1500 Hz
- Operating temp. range: -20°C to +55°C
- Power supply voltage: 13.2 V DC (negative ground)
- Current drain (approx.):
 

Tx at 25 W	6.0 A (IC-F310)
	7.0 A (IC-F410)
Rx max. audio standby	700 mA
	200 mA
- Antenna connector : SO-239 (50 Ω)
- Dimensions : 140(W) x 40(H) x 170(D) mm
- Weight : 1.2 kg

**TRANSMITTER**

- Output power : 25 W (at 13.2 V DC)
- Max. freq. deviation : ±2.5 kHz (narrow)  
±5.0 kHz (wide)
- Spurious emissions : 0.25 µV
- Adjacent ch. power : 60 dB (narrow) 70 dB (wide)
- Mic. connector : 8-pin modular (600 Ω)

**RECEIVER**

- Sensitivity : -4 dBµV (emf; IC-F310)  
(at 20 dB SINAD) -2 dBµV (emf; IC-F410)
- Squelch sensitivity : -7 dBµV (emf; IC-F310)  
-5 dBµV (emf; IC-F410)
- Adj. ch. selectivity : 60 dB (narrow) 70 dB (wide)
- Spurious response : 70 dB
- Intermodulation : 65 dB
- Audio output power : 3 W typical at 5% distortion  
with a 4 Ω load
- Ext. SP connector : 2-conductor 3.5 (d) mm  
(1/8")/4 Ω

**Applicable U.S. Military Specifications**

Icom makes rugged products that meet MIL-STD requirements and strict environmental standards as follows.

Standard	MIL 810 C		MIL 810 D		MIL 810 E	
	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II
High Temp.	501.1	I	501.2	I, II	501.3	I, II
Low Temp.	502.1	I	502.2	I, II	502.3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I
Solar Radiation	505.1	I	505.2	I	505.3	I
Rain	506.1	II	506.2	II	506.3	II
Humidity	507.1	I, II	507.2	II, III	507.3	II, III
Salt Fog	509.1	I	509.2	I	509.3	I
Dust	510.1	I	510.2	I	510.3	I
Vibration	514.2	VIII, X	514.3	I	514.4	I
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV

**Supplied Accessories**

- Hand microphone\*
- Mounting bracket kit
- Fuses
- DC power cable
- Key assign stickers
- \*depending on version

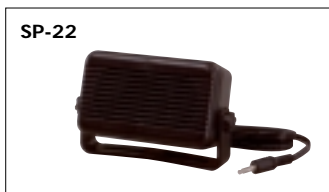
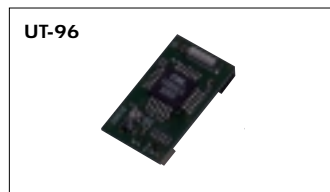
Measurement made in accordance with ETS 300 086. All stated specifications are subject to change without notice or obligation.

**OPTIONS**

- **UT-96 5-TONE UNIT**  
Provides the transceiver with 2-tone and 5-tone decoder capabilities
- **UT-105 SmarTrunk II™ Logic Board\***  
Provides SmarTrunk II™ capabilities.  
\*SmarTrunk II™ is a trademark of SmarTrunk Systems Inc.

- **SP-5/SP-10/SP-22 EXTERNAL SPEAKERS**  
Input impedance: 4 Ω; Max. input power: 5 W
- **UT-109/UT-110 VOICE SCRAMBLER UNITS**  
Provides operating privacy. Ask your local dealer for details about usable version, etc.  
UT-109: Non rolling type, UT-110: Rolling type

- **OPC-617 ACC CABLE**  
For external terminal connection.
- **HM-100TN DTMF MICROPHONE**
- **UT-111 TRUNKING UNIT**  
Provides trunking capabilities. Ask your local dealer for details about usage.



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