ICOM

IC-F43TR

Meets
MIL-STD 810

**LTR
PassPort**

Icom Inc.

The IC-F43TR is the perfect subscriber for PMR and SMR systems. This light weight radio is a heavy weight when it comes to features, allowing you to take full advantage of the options your PMR or SMR system.

PMR systems are often heavily protected against power and other system failures, allowing emergency communications to get through where national carriers fail. PMR systems offer maximum cost effectiveness — pay for the IC-F43TR once, and escape monthly charges. And PMR systems are extremely flexible, allowing you to configure the system according to your needs, not the needs of a distant national carrier.

SMR systems can provide reliable and flexible communications, all at a low monthly cost. Where the cell phone hybrids of many national carriers discourage fleet dispatch (one to many) with their pricing structures, SMR systems are built to optimize fleet dispatch. Often over large areas. And, by design, SMR systems are less likely to be abused by employees. SMR systems offer such advanced capabilities as selective call, caller ID and AVL.

No matter if you choose the PMR or SMR route, the IC-F43TR is the radio to take you there.

UHF TRUNKED RADIO
IC-F43TR

▼ IC-F43TR
(10-keypad)

▲ IC-FR4000

▲ IC-F43TR
(4-keypad)

▲ IC-F621TR

Multiple modes
Conventional, basic LTR and PassPort features are built-in. Operating modes are selectable from rotary selector or up/down buttons. Flash memory enables future system upgrades.

LTR features
The IC-F43TR offers maximum flexibility to program up to 50 systems or up to 250 groups per system.

PassPort features
Individual Selective Call (MIN call) allows private call between individual members within a fleet. Primary Talk Group (All call) allows individual users to call all groups in the fleet. The calling party's names are shown in the display, while in group conversation. The built-in receive signal strength indicator (RSSI) enables seamless roaming under the PassPort protocol. Site Lock function locks the radio onto the current site to avoid roaming.

Conventional features
Up to 250 channels either 12.5kHz or 25kHz channel spacing, CTCSS, DTCS and alphanumeric names are programmable.

PTT over tone
PTT over tone sends a beep sound when you release the PTT, instead of saying "Over".

Wideband coverage
Two bandwidth versions (400–470MHz, 450–512MHz) all have switchable 12.5/25kHz width by channel, and 5/6.25kHz frequency pitch making all the new UHF channels available for trunking.

Take advantage of Icom's integrated design that offers a value alternative for trunking systems. The IC-F621TR and IC-FR4000* are designed companions to the IC-F43TR.
(* External trunking controller is required for LTR and PassPort trunking.)

Lithium-Ion battery pack

The battery is a lightweight yet high capacity 2000mAh Li-Ion unit. There's virtually no memory charging issues with Li-Ion technology. Your subscribers will love the compact size and charging flexibility! In addition, economy type battery packs, BP-230 and BP-231 are optionally available.

MIL grade durability

This commercial-grade portable offers MIL STD construction, including easy to grab control knobs and a large easy to see display. A rugged dual-rail guide securely locks the battery to the back of the radio – it's nearly impossible to knock loose.

Alphanumeric display

The backlit 8-character LCD display has 11 icons that indicate system status and operational selections, including battery condition. The improved alphanumeric 14 segment display indicates system/group identification in both upper and lower case.

Voice scrambler function

A built-in inversion type voice scrambler provides secure communication in all operating modes. With an optional voice scrambler unit, UT-109, more secure non-rolling type encryption is possible.

Man down function*

Automatically sending an emergency signal when the transceiver is left in the horizontal position for a pre-set time. This function also works in all operating modes.

* Optional man down unit, UT-113 is required.

Advanced PC programming

You may assign operating modes, default talk group for home button, power-ON home or previous group, network roaming, 5/3MHz offset by channel, LTR polarity by system, home channel and area bit by system, Tx and Rx ID, and UID for PassPort.

Multiple scan mode

Conventional, system and group scan enable continuous contact under multi system operation without any action by the end-user. Both priority and non-priority scan modes are available in conventional use.
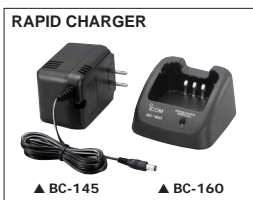
Other features

- Simple 4-keypad version available
- Programmable buttons
- Powerful 4W output
- Built-in audio compander
- Time-out timer functions available
- PC programming capabilities
- Optional DTMF decoder unit, UT-108 for DTMF selective call
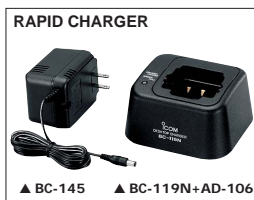- Expanded Black list capability, Site lock, forced roaming and stun/kill, and more...

OPTIONS

▼ BP-230   ▼ BP-231   ▼ BP-232   ▼ BP-240

Battery packs	Type and capacity	Duration*	Power
BP-230	Li-Ion 7.4V/ 800mAh	4 hours	4W
BP-231	Li-Ion 7.4V/1150mAh	6 hours	4W
BP-232	Li-Ion 7.4V/2000mAh	11 hours	4W
BP-240	AAA (LR03) batteries × 6	–	1W

* Operating time is approximate time (at 20˚C). Tx: Rx: standby=5:5:90.

RAPID CHARGER

▲ BC-145   ▲ BC-160

BC-160 DESKTOP CHARGER
+ **BC-145A/E/V** AC ADAPTER
Rapidly charges the battery pack. Charges the BP-232 in 3 hours (approx.)

RAPID CHARGER
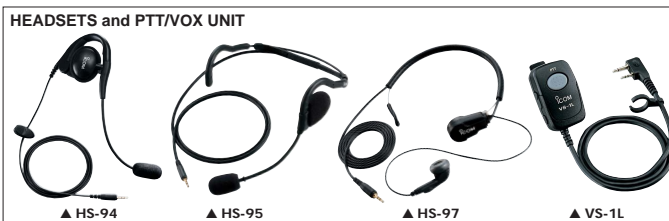
▲ BC-145   ▲ BC-119N+AD-106

BC-119N DESKTOP CHARGER
+ **AD-106** CHARGER ADAPTER
+ **BC-145A/E/V** AC ADAPTER
Rapidly charges the battery pack.

MULTI-CHARGER

▲ BC-124

▲ BC-121N+AD-106 (6 pcs.)   ▲ OPC-656

BC-121N MULTI-CHARGER + **AD-106** CHARGER ADAPTER
+ **BC-124** AC ADAPTER
Rapidly charges up to 6 battery packs (Six AD-106s are required).
OPC-656 DC POWER CABLE; For use with the BC-121N. (12–20V DC required).

SPEAKER-MICROPHONE

HM-131L

HM-131L: Durable body. Equipped with an earphone jack and revolving clip.

HEADSETS and PTT/VOX UNIT

▲ HS-94   ▲ HS-95   ▲ HS-97   ▲ VS-1L

HS-94: Earhook 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 speech vibration.
VS-1L: PTT/VOX unit. Required when using these headsets with the transceiver.

EARPHONE

SP-13

SP-13: Provides clear audio in noisy environments.

▲ CP-17L   ▲ OPC-515L

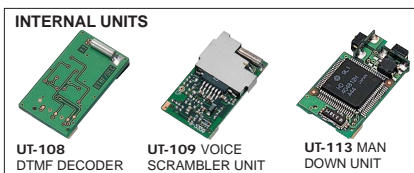**CP-17L** : CIGARETTE LIGHTER CABLE
OPC-515L : DC POWER CABLE
For use with the BC-119N. (12–16V DC required)

BELT CLIPS

▼ MB-93

▲ MB-94

MB-93 : Swivel type. Prevents accidental dropping from your belt.
MB-94 : Alligator type. Same as supplied.

LEATHER BELT HANGER

▲ MB-96N   ▲ MB-96F

MB-96N: Swivel type belt hanger. Swivel joint of the MB-93 supplied.
MB-96F : Fixed type belt hanger. For use with MB-94.

INTERNAL UNITS

UT-108 DTMF DECODER   **UT-109** VOICE SCRAMBLER UNIT   **UT-113** MAN DOWN UNIT

UT-108 : Provides DTMF Selective call and ANI capabilities.
UT-109 (Version 02) : Up to 32 scrambling codes are available.
UT-110 (Version 02) : Rolling type voice scrambler. Available in conventional mode only.
UT-113 : Provides a man down function.

STUBBY ANTENNA

FA-SC73US

FA-SC73US : 60 mm stubby antenna. Frequency range: 450–490MHz

ANTENNAS
- **FA-SC25U**: 400–430MHz
- **FA-SC57U**: 430–470MHz
- **FA-SC72U**: 470–520MHz

Some options may not be available in some countries. Please ask your dealer for details.

SPECIFICATIONS

GENERAL

- Frequency range : 400–470MHz,
  450–512MHz
- Channel spacing : 12.5kHz
  25kHz
- PLL channel step : 5kHz, 6.25kHz
- Antenna impedance : 50Ω
- Usable temperature range : −30˚C to +60˚C; −22°F to +140°F
- Power supply requirement : 7.2V DC
- Current drain (at 7.2V DC; approx.):
Transmit	at 4W	1.7A
	at 1W	0.8A
Receive	stand-by	85mA
	rated output	300mA
- Dimensions (With BP-232) : 53 (W) ×120 (H) ×36.5 (D) mm;
  (projections are not included) $2^3\!/_{32}$ (W) ×$4^{23}\!/_{32}$ (H)×$1^7\!/_{16}$ (D) in
- Weight (with BP-232) : 320g; 11.3oz

TRANSMITTER

- Output power : 4W, 1W
- Max. frequency deviation : ±5kHz (Wide)
  ±2.5kHz (Narrow)
- Frequency error : ±2.0ppm
- Spurious emissions : 70dB typical
- Adjacent channel power : 70dB (Wide)
  60dB (Narrow)
- Audio harmonic distortion : 3% typ. (AF 1kHz, 40% Deviation)
- Modulation limiting : 60–100% of max. deviation
- External microphone connector :
  3-conductor 2.5 (d) mm ($1\!/_{10}$″)/2.2 kΩ

Measurements made in accordance with EIA/TIA-603. All stated specifications are typical and subject to change without notice or obligation.

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RECEIVER

- Intermediate frequency : 1st   46.35MHz
  2nd   450kHz
- Sensitivity : 0.25µV typ. (at 12dB SINAD)
- Squelch sensitivity : 0.25µV typ. (at threshold)
- Adjacent channel selectivity : 75dB typ. (Wide)
  65dB typ. (Narrow)
- Spurious response : 70dB
- Intermodulation : 74dB typ.
- Hum and noise ratio : 45dB typ. (Wide)
  40dB typ. (Narrow)
- Audio output power : 500mW typ.
  (at 5% distortion with an 8Ω load)
- External speaker connector: 2-conductor 3.5 (d) mm ($1\!/_8$″)/8Ω

Applicable U.S. Military Specifications

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

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
	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	II	506.2	II	506.3	II	506.4	III
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	–
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

- Antenna
- Belt clip, MB-94
- Battery pack, BP-232