

ICOM

144 MHz FM TRANSCEIVER

UHF FM TRANSCEIVER

IC-T22A

(144 MHz U.S.A. version)

IC-T42A

(440 MHz U.S.A. version)

IC-T22E

(144 MHz Europe version)

IC-T42E

(430 MHz Europe version)

The IC-T22A/E and IC-T42A/E are mono band handhelds packed with features you would expect to find in a handheld twice the size. From alphanumeric display to the new microphone simple remote control function these handhelds utilize the latest in Icom technology. And they look great!

High performance that easily fits in your hand

With slim dimensions of 57(W) x 110(H) x 27(D) mm*, including BP-171, these handhelds fit comfortably in the palm of your hand—carry them around in your shirt pocket or a small bag. However, there is nothing small about their performance.

*U.S.A. version with BP-180: 2 1/4(W) x 4 1/4(H) x 1 1/4(D) in.

Alphanumeric memory channels

Available memory channels are expandable from 40 to 80* (not including scan edges and call channel) and channels can be tagged with a 6-character alphanumeric name such as a call sign, repeater name, etc. for operating convenience. Nothing is more frustrating than losing all your channel information when your battery goes dead. EE-PROM memory backup ensures that this won't happen. Now you have memory to memory transfer for convenient memory management.

*Memory names cannot be used when memories are expanded to 80.

Alphanumeric message pager

5 transmit and 5 receive message memories are available independently from regular memory channels allowing you to use the transceiver as a simple message pager (up to six characters per message). This paging function is compatible with the paging functions for other Icom handhelds and mobiles.

Microphone simple remote control function

This new function allows you to change the default functions of the optional HM-75A's switches: squelch monitor, call channel, memory channel 1 and memory channel 2. Doing so makes operation via the HM-75A simple for driving, hiking—especially convenient for group operation.

And more...

- MOS-FET power module
- Accepts 4.5 to 16 V external DC power supply
- log memory and repeater memory for auto storage of the last-transmitted frequencies
- 50 frequency CTCSS tone encoder (optional for Europe and Italy versions)
- 5 DTMF (30 digits each) memories for auto dialing
- Numerous scans available
- LCD backlighting for easy night operation
- An antenna, battery pack* and battery charger* are included with the transceiver.

*Some versions include a battery case instead of these.



▲ IC-T22A

◀ IC-T42E

Icom Inc.

SPECIFICATIONS

GENERAL

- Frequency coverage : (Unit: MHz)

Version	IC-T22A/E	IC-T42A/E
U.S.A.	Tx: 144-148 Rx: 136-174**	Tx: 440-450 Rx: 400-470**
Europe	144-146	430-440
Asia	Tx: 144-148 Rx: 140-150**	430-440
Italy	Tx: 144-148 Rx: 136-174**	Tx: 430-440 Rx: 400-470**

Guaranteed range (MHz): **144-148, *440-450, **430-440

- Mode : FM
- Acceptable power supply : 4.5 to 16 V DC
- Number of memory channels: 87 (max.)
- Tuning steps (kHz) : 5, 10, 12.5, 15, 20, 25, 30 or 50
- Dial select steps : 100 kHz or 1 MHz
- Usable temperature range : -10°C to +60°C (+14°F to +140°F)

- Current drain (at 13.5 V, typical):

Transmit	High	1.4 A
	Low	500 mA
Receive	Rated audio	150 mA
	Power saved	15 mA (average)

- Dimensions (with BP-171) : 57(W) x 110(H) x 27(D)
(with BP-180) : 2¼(W) x 4¼(H) x 1¼(D)
- Weight (w/BP-171 and antenna) :
IC-T22A/E : 310 g (10.9 oz)
IC-T42A/E : 300 g (10.6 oz)

TRANSMITTER

- Output power (at 13.5 or 9.6 V) : 5 W or 500 mW (approx.)
(at 7.2 V) : 3.5 W or 500 mW
- Modulation system : Variable reactance frequency modulation
- Max. frequency deviation : ±5.0 kHz
- Spurious emissions : Less than -60 dB
- Microphone impedance : 2 kΩ

RECEIVER

- Receive system : Double conversion superheterodyne
- Intermediate frequencies : 1st 30.85 MHz
2nd 450 kHz
- Sensitivity (typical) : Less than 0.16 µV
- Squelch sensitivity : Less than 0.16 µV (at threshold)
- Spurious and image rejection :
IC-T22A/E : Less than -60 dB
IC-T42A/E : Less than -50 dB (Except ½ of image freq.)
- Audio output power (at 13.5 V) : More than 200 mW (10% distortion with an 8 Ω load)
- Audio output impedance : 8 Ω

All stated specifications are subject to change without notice or obligation.

OPTIONS

BATTERY PACKS AND CASE

BP-171

4.8 V, 700 mAh
BP-172
4.8 V, 960 mAh



BP-173

9.6 V, 650 mAh
BP-180
7.2 V, 600 mAh



BP-170

R6 (AA)
batteries x 4



Approx. output powers and operating times.
(at 20°C, Tx High power, Rx Standby=1:1:3)

	BP-171	BP-172	BP-173	BP-180
IC-T22A/E	1.5 W/3h	1.5 W/3h	5 W/3h 20m	3.5 W/3h
IC-T42A/E	1.3 W/4h 30m	1.3 W/6h 10m	5 W/2h 20m	3.5 W/3h 30m

SPEAKER-MICROPHONES



HM-46

HM-54

HM-75A

HM-46: Compact/light weight. Equipped with an earphone jack.
HM-54: Durable full-sized speaker-microphone.
HM-75A: Allows you to remotely select memory channels, operating frequency, etc.

BC-119 DESKTOP CHARGER +
AD-56 DESKTOP CHARGER ADAPTER

Rapidly charges battery packs BP-171, BP-172, BP-173 or BP-180. Both AC and DC can be used to power the charger. Some BC-119 versions require the AD-75 additionally.

Allows you hands-free operation. Includes VOX, PTT, "one-touch PTT" (TOT). Low voltage type.

CP-12L CIGARETTE LIGHTER
CABLE WITH NOISE FILTER
OPC-254L DC POWER CABLE

Allows you to operate the transceiver through a 12 V cigarette lighter socket or 4.5 to 16 V external DC power supply with the CP-12L or OPC-254L, respectively. The connected battery pack is charged simultaneously (12 to 16 V DC necessary).

Provides clear audio in noisy environments.

UT-94
TONE SQUELCH UNIT

Provides tone squelch, pocket beep and tone scan functions.

MB-30 MOBILE
MOUNTING BRACKET

For mounting the transceiver on the inside door panel of a vehicle.

WALL CHARGERS

BC-110A/D/V
Regularly charge battery packs. The same as supplied with some versions.

CARRYING CASES

LC-125
For use with the BP-170, BP-171 or BP-172.
LC-126
For use with the BP-173 or BP-180.