

ICOM

IC-T81A IC-T81E

Amazingly compact 4-bander

The IC-T81A/E multiband transceivers are compact, built tough, offer a wide variety of functions and yet are as simple to operate as single band handhelds.

Ultra-compact and water-resistant

The IC-T81A/E includes the 50*, 144, 430(440) MHz and 1.2 GHz bands and yet is surprisingly compact, measuring only 58(W) × 106(H) × 28.5(D) mm[†]. The newly designed power amplifier circuit provides a powerful 5 W** of output power. And water-resistant (JIS grade 4) means safe operation out of doors.

* Depending on country; **2⁹/₁₀(W) × 4³/₁₆(H) × 1¹/₁₆(D) in.
† at 13.5 V DC typ. (1 W for 1.2 GHz)

Multi-function 'joy-stick' switch

A 'joy-stick' style multi-function switch is adopted and can be toggled left/right, up/down or pushed straight on (5-way action). This allows quick and easy changing of bands, volume, set mode contents, etc. Operation is so simple you might be fooled into thinking you're using a single band transceiver rather than a full function, multiband one!



Wide FM and AM receive modes

Wide FM and AM receive allows you to monitor FM broadcasting and VHF air band* communications.

* Depending on version.

Tone squelch standard

Tone squelch and pocket beep functions are standard, providing quiet stand-by. Pocket beep also provides a 'pager-like' function. In addition, a tone scan function is standard, allowing you to determine subaudible tones required to access repeaters.

Other features

- RIT and VXO functions for 1200 MHz band
- Ni-MH battery standard (depending on version)
- Durable, commercial-grade construction
- 124 memory channels with name capability (except call channels)
- Excellent frequency stability of ± 3 ppm
- Narrow FM capability (Italy and Europe versions)
- Auto repeater function (USA version only)
- Simultaneous charging and operating capability
- PC programmable (optional cloning software and cable are required)
- 9 DTMF memories
- Built-in guide function and more...

Icom Inc.



SPECIFICATIONS

GENERAL

• Frequency coverage (Unit: MHz)

Version	30 MHz	144 MHz	430(440) MHz	1.2 GHz	WFM**
USA	Rx: 118-173.995* Tx: 144-148	Rx: 118-173.995* Tx: 144-148	Rx: 430-440 Tx: 430-450*	1240-1300	76-107.995
	Europe UK	80-52	144-148	430-440	1240-1300
Italy	80-52 (Rx only)	Rx: 118-173.995* Tx: 144-148	Rx: 430-440 Tx: 430-440	1240-1300	88-107.995
	Asia	50-53.995	Rx: 118-173.995* Tx: 144-148	Rx: 430-440 Tx: 430-440	1240-1300
General	50-52	Rx: 118-173.995* Tx: 144-148	Rx: 430-440 Tx: 430-440	1240-1300	88-107.995

*Guaranteed 144-148 MHz only. **Guaranteed 440-450 MHz only.
 *Guaranteed 430-440 MHz only. **Not guaranteed.

- Mode : FM, AM (Rx. only), WFM (Rx. only)
- No. of memory ch. : 124 (100 reg., 20 scan edges, 4 call)
- Frequency stability : ±3 ppm (-10°C to +60°C)
- Useable temp. range : -10°C to +60°C; +14°F to +140°F
- Power supply : 4.5 to 16 V DC or specified battery pack
- Current drain (at 13.5 V DC):
 Tx max. power : 1.4 A (0.8 A at 1200 MHz)
 Rx rated audio power saved : 220 mA
 standby : 40 mA
 70 mA (90 mA at 1200 MHz)
- Tuning steps (kHz) : 5*, 10, 12.5, 15*, 20, 25, 30, 50, 100
 *Not available for 1200 MHz band.

- Antenna connector : SMA (50 Ω)
- Dimensions : 58(W)×106(H)×28.5(D) mm
 (projections not included) : 2 3/8(W)×4 1/8(H)×1 1/8(D) in
- Weight (approx. weight) : 290 g; 10.2 oz (w/BP-197)
 270 g; 9.5 oz (w/BP-199)
 280 g; 9.9 oz (w/BP-200)

TRANSMITTER

- Output power : High 5.0 W (1.0 W at 1200 MHz)
 (at 13.5 V DC) : Low 0.5 W (0.1 W at 1200 MHz)
- Modulation system : Variable reactance freq. modulation
- Spurious emissions : Less than -60 dB
 (-50 dB for Europe version at 1200 MHz; -40 dB for others at 1200 MHz)
- Max. freq. deviation : ±5 kHz
- Ext. MIC connector : 3-conductor 2.5 (d) mm (1/8")/2 kΩ

RECEIVER

- Receive system : Double conversion superheterodyne
- Intermediate freq. : 1st 69.45 MHz (13.35 MHz WFM)
 2nd 450 kHz

• Sensitivity* (except spurious points):

	50 MHz	144 MHz	430(440) MHz	1.2 GHz	91.5 MHz
FM	0.18 μV	0.18 μV	0.18 μV	0.25 μV	---
AM	0.56 μV	---	---	---	---
WFM	---	---	---	---	2.0 μV

- SOL sensitivity (threshold) : 0.18 μV (FM) 0.25 μV at 1200 MHz
 5.6 μV (WFM)
 0.56 μV (AM)
- Selectivity (except WFM): More than 15 kHz/-9 dB
 Less than 30 kHz/-60 dB
- Spurious and image rejection ratio :
 50, 144 MHz : Less than -60 dB
 430(440) MHz : Less than -50 dB
 1200 MHz : Less than -50 dB
 (except half IF, 2nd image, 50 MHz band IF and WFM)
- Audio output power : 250 mW typ. at 10% distortion (S.U. load)
 (at 13.5 V DC)

Supplied accessories

- Battery pack/case* • Wall charger*
- Antenna • Belt clip *depending on version

All stated specifications are typical and subject to change without notice or obligations.

OPTIONS

BATTERY PACKS AND CASE

- BP-197** : R6(AA) batteries × 3
- BP-198** : Ni-MH 4.8 V/700 mAh
- BP-199** : Ni-MH 6.0 V/700 mAh
- BP-200** : Ni-MH 9.6 V/680 mAh

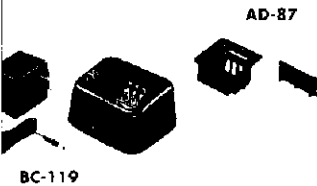


Approx. output powers and operating times (Tx high, Rx, Stand-by=5:5:90)

BATTERY PACK	OUTPUT POWER	BATTERY LIFE
BP-198	1 W (0.3 W*) typical	6 hrs.
BP-199	1.5 W (0.5 W*) typical	5 hrs.
BP-200	4 W (0.5 W*) typical	4 hrs.

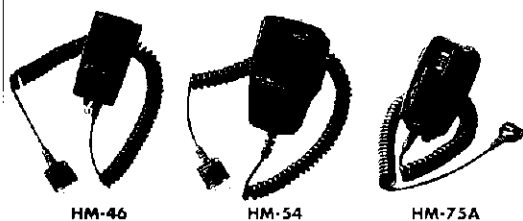
*1200 MHz

BC-119 DESKTOP CHARGER + AD-87 DESKTOP CHARGER ADAPTER



Rapidly charges battery packs BP-198, BP-199 or BP-200. Both AC (using an AC adapter) and DC can be used to power the charger. The AD-88 must be purchased separately.

SPEAKER-MICROPHONES



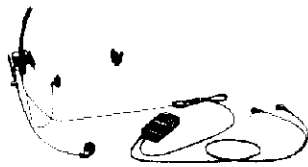
HM-46 : Compact and lightweight. Equipped with an earphone jack.
 HM-54 : Durable, full-sized speaker-microphone.
 HM-75A : Allows you to remotely select memory channels, operating frequency, etc. Simple remote and normal remote are selectable.

LC-148 CARRYING CASE



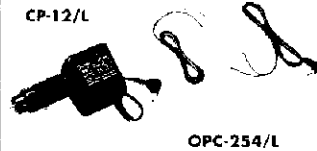
Helps protect the transceiver from scratches, etc. Fits any battery pack.

HS-85 HEAD SET



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

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



Allows you to operate the transceiver through a 12 V cigarette lighter socket or a 4.5 to 16 V external DC power supply with the CP-12/L or OPC-254/L, respectively. The connected battery pack is charged simultaneously (13.5 to 16 V necessary).

SP-13 EARPHONE



Provides clear audio in noisy environments.

BC-110A/C/D/V WALL CHARGER

Regularly charges battery packs. The same as supplied with some versions.

CS-T81 CLONING SOFTWARE + OPC-478 CLONING CABLE
 Provides quick and easy programming of memory channels, memory names and set more contacts for local repeater frequencies, etc.

OPC-474 CLONING CABLE
 Used for handheld-to-handheld data cloning.

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Certificate Number: 014790

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

Your local distributor/dealer: