



ICOM

VHF FM TRANSCEIVER

IC-V85

(U.S.A. Version)

IC-V85E

(Europe Version)

**Compact, and
7W of
power!**

Rugged
MIL-STD 810

Compact body

While the IC-V85/E provides a full 7 watts of output power, its 110mm* body height is compact enough to allow for easy carrying.

* 4¹/₂ in (projections are not included)

7W of high output power

Let the power of 7 watts extend your communications range. With its large capacity Lithium-Ion battery pack, BP-227, the IC-V85/E provides a practical 7 hours* of operating time. Reduced power (4W/0.5W) settings are also available for even longer operating time.

* Typical operation with Tx: Rx: standby=1:1:8.

External DC power jack

An external DC power jack allows for operation when used with the external DC power supply (11.0V DC). Your IC-V85/E receives and transmits as it charges.



DC power jack

Water resistant construction

The water resistant construction, equivalent to IPX4 rating, provides reliable operation in wet conditions for practical outdoor usage.

107 memory channels and 10 memory banks

Up to 107 memory channels can be stored. Use the 5-character display capabilities to assign your own individual channel names, then store those channels in any of the 10 memory banks. The DMS (Dynamic Memory Scan) system allows you to scan selected memory banks by simply adding and deleting bank links.

Built-in CTCSS/DTCS

Built-in CTCSS/DTCS tone codes provide quiet stand-by and allows you to use tone-access repeaters. The pocket beep alerts you when a matching tone frequency is received. The tone scan detects the tone frequency used in the received signal.

DTMF memory and optional DTMF decoder

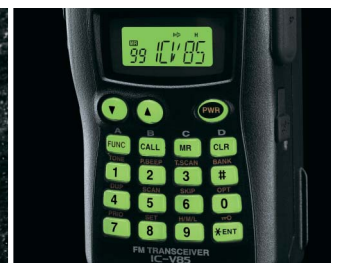
16 DTMF memory channels with up to 24 DTMF codes enable you to perform remote control operation. The optional DTMF decoder unit, UT-108, provides code squelch operation and pager function.

Other features

- Weather channel receive with weather alert* (* USA version only)
- Automatic repeater function* (*USA version only)
- Reversible control knob and up/down button assignment



Water resistance, equivalent to IPX4



Backlit LCD and keypad

SPECIFICATIONS

GENERAL

• Frequency coverage (unit : MHz):

Version	Tx	Rx (Working range)
USA	144-148	136-174 ^{*1}
Europe, UK	144-146	136-174 ^{*2}

Guaranteed range ^{*1} 144-148MHz, ^{*2} 144-146MHz

- Mode : FM
- No. of memory Ch. : 107 (incl. 6 scan edges and 1 call)
- Operating Temp. range : -10°C to +60°C ; +14°F to +140°F
- Frequency stability : ±2.5ppm (-10°C to +60°C)
- Power supply : BP-226/BP-227 or requirement 11.0V ± 15% (External DC in)
- Current drain (at 7.2V DC):
 - Tx High (7W) : 2.6A
 - Rx Max. audio : 250mA
 - Stand-by : 80mA
 - Power save : 30mA
- Antenna impedance : 50Ω (BNC)
- Dimensions (W×H×D) : 56 × 110 × 34.4 mm; (Projections not included) 2⁷/₃₂ × 4¹/₃₂ × 1¹/₃₂ in
- Weight (approx.) : 310g; 12.5oz (with BP-227 and Ant.)

TRANSMITTER

- Output power (at 7.2V) : 7.0/4.0/0.5W (High/mid/low)
- Spurious emissions : Less than -60dBc
- Max. freq. deviation : ±5.0kHz
- External microphone connector : 3-conductor 2.5(d)mm (1/16") /2.2kΩ

RECEIVER

- Intermediate freq. : 46.35MHz/450kHz (1st/2nd)
- Sensitivity : Less than 0.2μV (at 12dB SINAD)
- Squelch sensitivity : Less than 0.16μV (threshold)
- Selectivity : More than 55dB
- Spurious and image rejection : More than 60dB
- Intermodulation : More than 55dB
- Audio output power : More than 300mW with an 8Ω load
- Ext. speaker connector : 3-conductor 3.5(d)mm (1/8")/8Ω

Applicable U.S. Military Specifications

The IC-V85/E has been tested to and passed the following MIL-STD requirements and strict environmental standards.

Standard	MIL 810 F	
	Method	Procedure
Temperature Shock	503.4	I
Vibration	514.5	I
Shock	516.5	I, IV

Also meets equivalent MIL-STD-810-C, -D and -E.

Supplied accessories (*Not supplied with some versions)

- Battery case or battery pack*
- Wall charger*
- Antenna
- Belt clip
- Hand strap

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

OPTIONS

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



BP-226 BATTERY CASE
AA (LR6)×5 alkaline cells.
BP-227 Li-Ion BATTERY PACK
7.2V/1700mAh. Provides 7 hours operating time* (approx.).
* Tx: Rx: standby=1:1.8.



BC-119N DESKTOP CHARGER + AD-100 CHARGER ADAPTER + BC-145A/E/V AC ADAPTER
Rapidly charges the BP-227 in 2-2.5 hours. (approx.)



BC-121N MULTI-CHARGER + AD-100 CHARGER ADAPTER + BC-157 AC ADAPTER
Rapidly charges up to 6 battery packs (Six AD-100s are required) in 2-2.5 hours.



CP-19R : Cigarette lighter cable with DC-DC converter. 11.7- 15.9V DC required.



LC-167 : Helps protect the transceiver from scratches, etc.



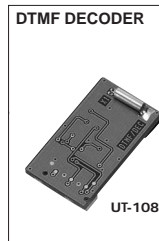
HM-75A : Allows you to remotely select operating channels, etc.
HM-158L : Compact and durable body with screw-type connector.
HM-159L : Full size durable speaker microphone.



HM-153L : Durable lapel-microphone with revolving clip.
HM-166L : Light weight and compact lapel-microphone with revolving clip.



HS-94 : Earhook headset with flexible boom microphone.
HS-95 : Behind-the-head headset with flexible boom microphone.
VS-1L : PTT/VOX unit. Required when using HS-94 or HS-95 with the transceiver.
HS-85 : For hands-free operation. Includes VOX, and "one-touch" PTT with a time-out timer.



UT-108 : Provides DTMF decode and pager capabilities.

BC-167A/D WALL CHARGER
Charges the BP-227 in 12-13 hours (approx.). Same as supplied with some versions.

CS-V85 CLONING SOFTWARE + OPC-478/UC CLONING CABLE
Provides quick and easy programming of memory channel, names, etc. OPC-478UC is a USB cable type.

OPC-474 CLONING CABLE
Use for transceiver-to-transceiver data cloning.

FA-B2E VHF ANTENNA
Same as supplied.

MB-98 BELT CLIP
Alligator type clip. Same as supplied.

SP-13 EARPHONE
Provides clear audio even in noisy environments.

* Note: For European version, the silk printing on the front panel indicates "IC-V85" only.

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