



ICOM

VHF FM TRANSCEIVER

**IC-V85**

(U.S.A. Version)

**IC-V85E**

(Europe Version)



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

#### 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.

\* 4<sup>1</sup>/<sub>2</sub> 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 <sup>*1</sup>
Europe, UK	144-146	136-174 <sup>*2</sup>

Guaranteed range <sup>\*1</sup> 144-148MHz, <sup>\*2</sup> 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

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

- Antenna impedance : 50Ω (BNC)
- Dimensions (W×H×D) : 56 × 110 × 34.4 mm; (Projections not included) 27/32 × 4 1/8 × 1 1/8 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

## Supplied accessories (\*Not supplied with some versions)

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

## OPTIONS

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

## BATTERY PACK AND CASE



**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.

## RAPID CHARGER



**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.

## CIGARETTE LIGHTER CABLE CP-19R



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

## CARRYING CASE LC-167



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

## SPEAKER-MICROPHONES



**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.

## EARPHONE-MICROPHONES



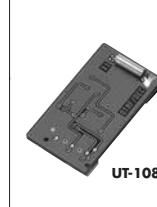
**HM-153L**: Durable lapel-microphone with revolving clip.  
**HM-166L**: Light weight and compact lapel-microphone with revolving clip.

## HEADSETS AND PTT/VOX UNIT



**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.

## DTMF DECODER UT-108



**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.

## Icom Inc.

1-1-32, Kami-minami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 URL: <http://www.icom.co.jp/world/index.html>

## Count on us!

## Icom America Inc.

2380 116th Avenue NE,  
Bellevue, WA 98004, U.S.A.  
Phone : +1 (425) 454-8155  
Fax : +1 (425) 454-1509  
E-mail : [sales@icomamerica.com](mailto:sales@icomamerica.com)  
URL : <http://www.icomamerica.com>

## Icom Canada

Glenwood Centre #150-6165 Highway 17,  
Delta, B.C., V4K 5B8, Canada  
Phone : +1 (604) 952-4266  
Fax : +1 (604) 952-0090  
E-mail : [info@icomcanada.com](mailto:info@icomcanada.com)  
URL : <http://www.icomcanada.com>

## Icom (Australia) Pty. Ltd.

Unit 1 / 103 Garden Road,  
Clayton, VIC 3168 Australia  
Phone : +61 (03) 9549 7500  
Fax : +61 (03) 9549 7505  
E-mail : [sales@icom.net.au](mailto:sales@icom.net.au)  
URL : <http://www.icom.net.au>

## Icom New Zealand

146A Harris Road, East Tamaki,  
Auckland, New Zealand  
Phone : +64 (09) 274 4062  
Fax : +64 (09) 274 4708  
E-mail : [inquiries@icom.co.nz](mailto:inquiries@icom.co.nz)  
URL : <http://www.icom.co.nz>

## Icom (Europe) GmbH

Communication Equipment  
Himmelgeister Str. 100,  
D-40225 Düsseldorf, Germany  
Phone : +49 (0211) 346047  
Fax : +49 (0211) 333639  
E-mail : [info@icom-europe.com](mailto:info@icom-europe.com)  
URL : <http://www.icomeurope.com>

## Icom Spain S.L.

Ctra. Rubi, No. 88 "Edificio Can Castanyer"  
08190, Sant Cugat del Valles, Barcelona, Spain  
Phone : +34 (93) 590 26 70  
Fax : +34 (93) 589 04 46  
E-mail : [icom@icomspain.com](mailto:icom@icomspain.com)  
URL : <http://www.icomspain.com>

## Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay,  
Kent, CT6 8LD, U.K.  
Phone : +44 (01227) 741741  
Fax : +44 (01227) 741742  
E-mail : [info@icomuk.co.uk](mailto:info@icomuk.co.uk)  
URL : <http://www.icomuk.co.uk>

## Icom France s.a.s.

Zac de la Plaine,  
1 Rue Brindejone des Moulinais, BP 45804,  
31505 Toulouse Cedex 5, France  
Phone : +33 (5) 61 36 03 03  
Fax : +33 (5) 61 36 03 00  
E-mail : [icom@icom-france.com](mailto:icom@icom-france.com)  
URL : <http://www.icom-france.com>

## Icom Polska

Sopot, 3 maja 54, Poland  
Phone : +48 (58) 550 7135  
Fax : +48 (58) 551 0484  
E-mail : [icompolkska@icompolkska.com.pl](mailto:icompolkska@icompolkska.com.pl)  
URL : <http://www.icompolkska.com.pl>

## Asia Icom Inc.

6F No. 68, Sec. 1 Cheng-Teh Road,  
Taipei, Taiwan, R.O.C.  
Phone : +886 (02) 2559 1899  
Fax : +886 (02) 2559 1874  
E-mail : [sales@asia-icom.com](mailto:sales@asia-icom.com)  
URL : <http://www.asia-icom.com>

## Beijing Icom Ltd.

10C07, Long Silver Mansion, No.88, Yong Ding  
Road, Haidian District, Beijing, 100039, China  
Phone : +86 (010) 5889 5391/5392/5393  
Fax : +86 (010) 5889 5395  
E-mail : [bjicom@bjicom.com](mailto:bjicom@bjicom.com)  
URL : <http://www.bjicom.com>

Your local distributor/dealer: