



VHF AND UHF TRANSCEIVERS

IC-F3162T

(UHF transceiver with 10-keypad)

IC-F4162T

(UHF transceiver with 10-keypad)

IC-F3162S

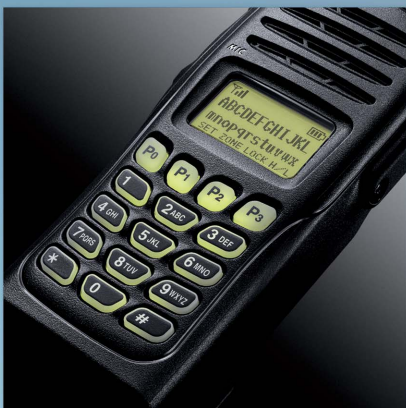
(UHF transceiver without 10-keypad)

IC-F4162S

(UHF transceiver without 10-keypad)



Complete Analog Conventional IDAS Digital



- 512 ch / 128 zones
- Conventional/BIIS 1200 mode
- IDAS digital (With UT-126H)
- 2-Tone, 5-Tone CTCSS, DTCSS
- VHF 5W, UHF 5W output
- 14 hrs. operating time with BP-232N
- Full dot-matrix LCD

ADVANCED TECHNOLOGY FOR THE FUTURE



▲ IC-F3162T

▲ IC-F4162S

VHF TRANSCEIVERS

IC-F3162T

With 10-keypad

IC-F3162S

Without 10-keypad

UHF TRANSCEIVERS

IC-F4162T

With 10-keypad

IC-F4162S

Without 10-keypad

IP55 Dust-protection and water jet resistance

The IC-F3162 series meets IP55 requirements for dust-protection and water jet resistance. Its durable construction is backed up by the aluminum die-cast chassis and polycarbonate casing, allowing reliable operation under harsh weather and environmental conditions.

Lithium-Ion battery pack

The supplied 2000mAh Li-Ion battery pack, BP-232N, provides 14 hours* of operating time. Icom's rugged dual-rail guide securely locks the battery to the radio. The optional battery case BP-240 provides a convenient back up and great reassurance in an emergency.

* Typical operation Tx:Rx:Stand-by=5:5:90, power save on

Most popular signalings built-in

The 2-Tone, 5-Tone, CTCSS, DTCS and BISS signaling capabilities are built-in for group communication or selective calling. Also, the IC-F3062 series can decode ten 2-Tone codes or eight 5-Tone codes on a channel. When a matched tone is received, the following actions are programmable for each code.

- Beep sound
- Bell icon
- Auto TX
- Answer back call
- Scan
- Radio stun/kill/revive

Wide frequency range and large channel capacity

The IC-F3162 series covers a wide frequency range in one version (VHF 136–174 MHz, UHF 400–470MHz). The 512 memory channel capacity with 128 zones allows you to divide and store a variety of flexible channel groupings. Memory channel selection can be made with a simple rotation of the rotary channel knob. Wide, middle and narrow channel bandwidth (25/20/12.5kHz)* is also programmable.

* Programmable 25/12.5kHz or 20/12.5kHz

Voting mode scanning

The Voting mode scanning detects the S-meter level of repeater stations and automatically selects the strongest station, useful for roaming between 2 or more repeater sites. Once you program the voting mode to a memory zone, you can easily start voting mode operation by changing the zone setting.

UTURE NOW!

Full dot-matrix LCD

Using a large full dot-matrix LCD (32 × 18 mm), the IC-F3162 series shows upper and lower case characters clearly. The display setting is selectable from 1 line, 12 characters or 2 lines 24 characters via programming. The bottom row shows assigned functions to the [P0] to [P3] buttons.



Enhanced audio

The IC-F3162 series employs a BTL amplifier that increases the audio output and the built-in audio compander provides clear, low noise communications.

Built-in inversion-type voice scrambler

The built-in inversion type voice scrambler* provides secure conversation as standard. When a more secure system is required, optional voice scrambler UT-109R or UT-110R are available.

* Inversion type voice scrambler is not compatible with UT-109/UT-110 voice scrambler.

BIIS 1200 compatible

The following selective calling and data features are available with the built-in BIIS system.

- 32 abbreviated call memories
- 7 group IDs • 24-status Messages
- Send 12-character SDM (Short Data Message)
- Receive up to 95 characters of free text
- GPS position reporting function with optional HM-170GP

Other features

- Built-in basic LTR™ trunking capability.
- 8 DTMF autodial memories
- 2 step reduced power setting
- Power on password
- Busy, repeater lockout functions
- Surveillance function temporarily turns off the LED backlight and beep sound
- Powerful 5W output both VHF and UHF
- Flash CPU for future upgrade and more...

OPTIONS

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

BATTERY PACKS AND CASE

▲ BP-230N ▲ BP-232N ▲ BP-240

Battery packs	Type and capacity	Operating time*	Output power
BP-230N	Li-Ion 7.4V/ 980mAh	7.35 hours	5W
BP-232N	Li-Ion 7.4V/2000mAh	14 hours	5W
BP-240	AAA (LR03) batteries × 6	—	1W

* Operating time is approximate time (at 20°C). Tx: Rx: standby=5:5:90. Power save on.

REGULAR CHARGER

▲ BC-147 ▲ BC-171

BC-171 DESKTOP CHARGER + BC-147 AC ADAPTER
Charges the battery pack in 8–10 hours (approx.).

RAPID CHARGER

▲ BC-145 ▲ BC-160

BC-160 DESKTOP CHARGER + BC-145 AC ADAPTER
Charges the BP-232N in 3 hours (approx.).
BC-119N + AD-106 + BC-145 is also available.

POWER SUPPLY CABLES

▲ CP-17L ▲ OPC-515L

CP-17L CIGARETTE LIGHTER CABLE, OPC-515L DC POWER CABLE
For use with the BC-160 or BC-119N. (12–16V DC required).

MULTI-CHARGER

▲ BC-121N+AD-106 (6 pcs.) ▲ OPC-656 ▲ BC-157

BC-121N MULTI-CHARGER + AD-106 CHARGER ADAPTER + BC-157 AC ADAPTER
Rapidly charges up to 6 battery packs (Six AD-106s are required).
Charging time: 3 hours (approx.) when BP-232N is attached.
OPC-656 DC POWER CABLE :For use with the BC-121N. (12–20V DC required).

BELT CLIPS AND LEATHER BELT HANGERS

▲ MB-93 ▲ MB-96F

MB-93 : Swivel type belt clip.
MB-94 : Alligator type. Same as supplied.
MB-96N : Swivel type belt hanger.
MB-96F : Fixed type belt hanger.

SPEAKER-MICROPHONES

IPX7 IP57 GPS IP57

HM-168 HM-169 HM-170GP HM-159SC

HM-168: Compact type speaker-microphone. Equivalent to IPX7.
HM-169: Rugged type speaker-microphone. Equivalent to IP57.
HM-170GP: GPS speaker-microphone. Equivalent to IP57.
HM-159SC: Full size durable speaker microphone with revolving clip.
HM-131SC: Compact type speaker microphone.

INTERNAL UNITS

UT-109R UT-110R UT-124R UT-126H

UT-109R: Non-rolling type voice scrambler.
UT-110R: Rolling type voice scrambler.
UT-124R: Man down unit. Automatically sends an emergency signal when the transceiver is left in a horizontal position for a preset time.
UT-126H: IDAS Digital unit.

HEADSETS AND PTT/VOX UNIT

HS-94 HS-95 HS-97 VS-1SC

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-1SC: PTT/VOX unit. Required when using these headsets.

EARPHONE

AD-52 SP-13

SP-13: EARPHONE.
AD-52: EARPHONE ADAPTER
Provides clear audio even in noisy environments.

STUBBY ANTENNAS
• FA-SC56V: 150–162MHz
• FA-SC57V: 160–174MHz
• FA-SC73US: 450–490MHz

CUT ANTENNAS
• FA-SC61VC: 136–174MHz
• FA-SC61UC: 380–520MHz
Cut the antenna element to tune to a specific center frequency.

ANTENNAS
• FA-SC25V: 136–150MHz
• FA-SC55V: 150–174MHz
• FA-SC25U: 400–430MHz
• FA-SC57U: 430–470MHz
• FA-SC72U: 470–520MHz

IDAS system digital mode ready

The IDAS (Icom Digital Advanced System) is Icom's digital PMR system using the NXDN™ common air interface. It has useful calling features including selective calling, status message, radio stun/kill/revive, etc with spectrum efficient 6.25kHz channel spacing.

The IC-F3162 series provides 2 optional slots: one optional slot for the UT-126H digital unit and one for an additional option board. See the IDAS brochure for details.

DIGITAL



SPECIFICATIONS

GENERAL

- Frequency range :
IC-F3162T/S 136–174MHz
IC-F4162T/S 400–470MHz
- Number of channels : 512 channels/128 zones
- Channel spacing : 12.5kHz/20kHz/25kHz
6.25kHz (with UT-126H)
- PLL channel step : 2.5kHz, 3.125kHz
- Antenna impedance : 50Ω
- Power supply requirement : 7.2V DC nominal
- Current drain (at 7.2V DC; approx.):
Transmit at 5W/5W 1.5A/1.8A (VHF/UHF)
Receive Stand-by 100mA
150mA (with UT-126H)
Rated output 600mA
- Usable temperature range : –25°C to +55°C
- Dimensions : 53 (W) × 136 (H) × 38.5 (D) mm
(projections are not included)
- Weight (approx.) : 340g (with BP-232N)

TRANSMITTER

- Output power : 5W (VHF), 5W (UHF)
- Max. frequency deviation : ±5.0/4.0/2.5kHz (Wide/middle/narrow)
- Frequency error : ±1.0ppm
- Spurious emissions : 0.25μW (≤1GHz)
1.0μW (>1GHz)
- Adjacent channel power : 70dB min. (Wide, middle)
60dB min. (Narrow)
- Audio harmonic distortion : 3% typ. (AF 1kHz, 40% deviation)
- Modulation limiting : 60–100% of max. deviation
- Ext. microphone connector: 9-pin multi connector/ 2.2kΩ

Measurements made in accordance with EN 300-086.
All stated specifications are subject to change without notice or obligation.

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RECEIVER

- Intermediate frequency : 46.35MHz/2nd 450kHz
- Sensitivity :
FM –4dBμV typ. (emf, at 20dB SINAD)
Digital (with UT-126H) –8dBμV typ. (emf, at 5% BER)
- Squelch sensitivity : –4dBμV typ. (emf, at threshold)
- Adjacent channel selectivity : 75/75/68dB typ. (Wide/middle/narrow)
- Spurious response : 70dB min.
- Intermodulation : 67dB typ.
- Audio output power : 500mW typ.
(at 5% distortion with an 8Ω load)
- External speaker connector: 9-pin multi connector/ 8Ω

Applicable U.S. Military Specifications & IP Rating

Icom makes rugged products that have been tested to and passed the following MIL-STD requirements and Ingress Protection standards.

Standard	MIL 810F	
	Method	Procedure
Low Pressure	500.4	I, II
High Temperature	501.4	I, II
Low Temperature	502.4-3	I, II
Temperature Shock	503.4	I
Solar Radiation	505.4	I
Rain Blowing/Drip	506.4	I, III
Humidity	507.4	–
Salt Fog	509.4	–
Dust Blowing	510.4	I
Vibration	514.5	I
Shock	516.5	I, IV

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

Ingress Protection Standard

Dust & Water IP55 (Dust-protection and water jet resistance)

SUPPLIED ACCESSORIES (May differ according to version)



• VHF Antenna

• UHF Antenna

• Battery pack, BP-232N

• Belt clip, MB-94

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
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
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
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
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
URL: <http://www.icomeurope.com>

Icom Spain S.L.

Ctra. Rubi, No. 88 "Edificio Can Castanyer"
Bajos A 08174, Sant Cugat del Valles,
Barcelona, Spain
Phone: +34 (93) 590 26 70
Fax: +34 (93) 589 04 46
E-mail: 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
URL: <http://www.icomuk.co.uk>

Icom France s.a.s.

Zac de la Plaine,
1 Rue Brindejonc des Moulains, 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
URL: <http://www.icom-france.com>

Icom Polska

81-850 Sopot, ul. 3 Maja 54, Poland
Phone: +48 (58) 550 74 35
Fax: +48 (58) 551 0484
E-mail: icompolksa@icompolksa.com.pl
URL: <http://www.icompolksa.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
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
URL: <http://www.bjicom.com>

Your local distributor/dealer:

Apex Radio Systems Ltd.
102 Tantobie Road
Denton Burn
Newcastle upon Tyne
NE15 7DQ

Tel 0191 228 0466
Fax 0191 228 0467
Email info@apexradio.com

