



IC-F3400D Series
IC-F4400D Series

VHF AND UHF DIGITAL TRANSCEIVERS

Look Smart, Work Smart

The IC-F3400D/F4400D series is Icom's new generation IDAS handheld radios. Incorporating cutting edge design, superb performance and a comprehensive range of features including built-in GPS and Bluetooth[®]*1, Active Noise Cancelling technology, digital voice playback and a USB port for easy programming and data transfer. Available in three versions for VHF and UHF, each radio features a high-resolution color LCD in a compact, IP68 waterproof body.

Small, slim and stylish with custom SoC (System-on-a-Chip)

Multiple operating modes (Available mode depending on version)

- NXDN™/dPMR™ conventional
- Upgradable to NXDN™ Type-D trunking
- Upgradable to dPMR™ Mode 3 trunking
- Analog FM

High-resolution transreflective color LCD

Icom's custom high power handling capacity speaker for 1300 mW of powerful audio

Built-in Bluetooth[®]*1, voice recording, active noise cancelling functions

*1 Version without Bluetooth also available. Ask your Dealer for details.

Motion/stationary detection, man down and lone worker functions

Standard DES encryption, optional AES with OTAR (Over-the-Air-Rekeying)



IC-F4400DT

IC-F3400DS

General Features

- 136–174, 380–470, 450–520 MHz versions
- 1024 Channels / 128 Zones
- 4000 Channels with optional license key, ISL-CHEX
- High-resolution transreflective color LCD
- Day and night mode display settings
- Programmable functions and menu items in a language other than English (For example French, Spanish, German, Russian and Turkish)
- Continuous rotary knob and ON/OFF volume knob
- Quick lever switch on the top panel programmable for various functions such as lock, scrambler/encryption, etc.
- 1300 mW large volume audio from Icom custom speaker
- Improved sound clarity
- MIL-STD-810 G shock, vibration, temperature and more
- IP68 waterproof (1 m depth water for 1 hour) and dust-tight protection
- AquaQuake™ prevents audio degradation from a water-logged speaker
- 29.3 mm (1.2 inch) slim dimensions (with BP-284 battery pack)
- Battery information display
- Flat sheet keypad offers large button space and protects the radio from dust
- DTMF autodial and decoder

Operating Mode (Available mode depending on version)

- NXDN or dPMR mode 1/mode 2 conventional
- NXDN or dPMR multi-site conventional over IP network
- NXDN Type-D single/multi-site trunking*
 - * License key (ISL-UGMTR) required.
- dPMR Mode 3 trunking*
 - * License key (ISL-UGMD3) required. Not available in all regions.
- 12.5 kHz digital mode (NXDN conventional)
- Analog mode
- Analog/digital mixed operation (conventional mode)

Digital Functions (Voice and Data)

- Over-the-Air Programming (OTAP) function*
 - * Optional OTAP manager (CS-OTPM1) required.
- Over-the-Air Alias (OAA) sends own name with a call
- Over-the-Air Update (OTAU) changes the repeater channel data and site code over the air (NXDN Type-D trunking)
- Individual, group and all call
- Late entry for group call
- Status call and polling
- Short data messages (Up to 100 characters)
- Call alert (NXDN)
- GPS position
- Transparent data mode (dPMR)

Analog Functions

- CTCSS and DTCS tone
- 2-Tone and 5-Tone
- MDC functions (Depending on version)
- BIIS 1200 (MSK)
- LTR™ trunking (Depending on version)

Security and Safety

- Encryption: DES (4-key, 64-key)*, AES
 - * 4-key standard. 64-key DES requires UT-134. AES requires UT-134 and ISL-AKAES.
- Over-the-Air-Rekeying (OTAR) function.
 - * OTAR manager (CS-OTAR1) required.
- Digital voice scrambler (Low level encryption)
- Analog voice scrambler (Inversion)
- Power ON password
- Tactical group temporarily reconfigures user talkgroups
- Remote Kill, Stun and Revive
- Remote monitor (NXDN)/ambience listening (dPMR)
- Emergency key for emergency call
- Man down function
- Lone worker function
- Motion/stationary detection

Scan Functions

- Priority scan
- Voting scan for site roaming

Voice/Audio Functions

- Voice announcement (Channel number and zone)
- VOX function for hands-free operation
- Voice recording/playback (Saves to a microSD card)*
 - * A microSD card is required separately.
- The following information can be embedded in the WAV file; user IDs, GPS position, frequency, AF volume, RSSI, etc. (Depending on setting).
- Customized channel announcement
- TX/RX active noise canceller
- TX/RX audio equalizer (Flat, high/mid/low boost, low cut)
- Audio compander (Analog mode)

Hardware Features

- Programmable vibration alert and ringer beep
- Built-in Bluetooth® for wireless audio and data*¹
- A third-party wireless Bluetooth® headset (for example, 3M™ Peltor™ WS™ 5 series) can be used*^{1*2}
- Wireless radio programming over Bluetooth®*¹
- USB connector for data transfer mode or card reader mode
- 14-pin accessory connector
- Integrated GPS with GPS position screen and auto log function
- Internal clock with time auto adjustment
- Battery life cycle management with optional intelligent charger, BC-225, and software, RS-BC225
- microSD card slot

*¹ Version without Bluetooth® also available. Ask your Dealer for details.

*² Compatibility with third-party Bluetooth® headsets cannot be guaranteed.



Check our web site to know more about 6.25 kHz FDMA narrow band.
www.icomjapan.com/explore/digital



SPECIFICATIONS

IC-F3400D • IC-F4400D Series

		IC-F3400DT/DS NXDN Version	IC-F3400DT/DS dPMR Version	IC-F4400DT/DS NXDN Version	IC-F4400DT/DS dPMR Version
GENERAL					
Frequency coverage (Depending on the version)		136–174 MHz	136–174 MHz	380–470 MHz, 450–520 MHz	380–470 MHz
Number of channels		1024 channels /128 zones 4000 channels /128 zones (Option)*1			
Type of emission (Depending on the version)	Analog	16K0F3E*2, 14K0F3E, 11K0F3E, 8K50F3E	16K0F3E*2, 14K0F3E, 11K0F3E, 8K50F3E	16K0F3E*2, 14K0F3E, 11K0F3E, 8K50F3E	16K0F3E*2, 14K0F3E, 11K0F3E, 8K50F3E
	Digital Narrow (DN)	8K30F1E/D	–	8K30F1E/D	–
	Digital Very Narrow (DVN)	4K00F1E/D	4K00F1E/D	4K00F1E/D	4K00F1E/D
Power supply requirement		7.5 V DC nominal			
Current drain (approx.)	Tx	1.5 A		1.8 A	
	Rx	580 mA /140 mA (Max. audio (internal SP)/Standby)		580 mA /140 mA (Max. audio (internal SP)/Standby)	
Antenna impedance		50 Ω			
Operating temperature range		–30 °C to +60 °C; –22 °F to +140 °F (Radio specifications)			
Dimensions (W × H × D; Projections not included)		53.6 × 123.5 × 29.3 mm; 2.1 × 4.9 × 1.2 in (with BP-284)			
Weight (approx.)		215 g; 7.6 oz (main unit)		340 g; 12.0 oz (with BP-284, MB-133 and FA-S81VS)	
				335 g; 11.8 oz (with BP-284, MB-133 and FA-S81US)	
TRANSMITTER					
Output power (Hi, L2, L1)		5 W, 2 W, 1 W			
Frequency stability		±1.0 ppm			
Spurious emissions		80 dB typical (USA) 0.25 μW (≤ 1 GHz), 1.0 μW (> 1 GHz) (EUR)			
FM Hum and noise		55 dB typical (@ 25 kHz), 55 dB typical (@ 12.5 kHz)(USA)		60 dB typical (@ 25 kHz), 59 dB typical (@ 12.5 kHz) (USA)	
Audio harmonic distortion		0.5% typical (AF 1 kHz 40% deviation)		0.4% typical (AF 1 kHz 40% deviation)	
FSK error		1% typical (@ DVN/DN*3)			
RECEIVER					
Sensitivity	Digital (1% BER)	–5.5 dBμV emf typical (0.26 μV typical) (@ DVN), –4.0 dBμV emf typical (0.32 μV typical) (@ DN*3)		–4.0 dBμV emf typical (0.32 μV typical) (@ DVN), –4.0 dBμV emf typical (0.32 μV typical) (@ DN*3)	
	Analog (12 dB SINAD)	0.22 μV typical		0.23 μV typical	
	Analog (20 dB SINAD)	–5.5 dBμV emf typical (@ 25/20 kHz), –2.5 dBμV emf typical (@ 12.5 kHz)		–5.0 dBμV emf typical (@ 25/20 kHz), –2.0 dBμV emf typical (@ 12.5 kHz)	
Adjacent channel selectivity	Digital	71 dB typical (@ DVN), 70 dB typical (@ DN*3)		66 dB typical (@ DVN), 66 dB typical (@ DN*3)	
	Analog	80 dB typical (@ 25 kHz), 76 dB typical (@ 12.5 kHz)		75 dB typical (@ 25 kHz), 72 dB typical (@ 12.5 kHz)	
Spurious response rejection		81 dB typical		76 dB typical	
Intermodulation rejection	Digital	72 dBμV emf typical (@ DVN), –41 dBm typical (@ DN*3)		73 dBμV emf typical (@ DVN), –41 dBm typical (@ DN*3)	
	Analog	75 dB typical (USA) 67 dB typical (EUR)		74 dB typical (USA) 68 dB typical (EUR)	
Audio output power	Internal SP	1300 mW typical (at 5% distortion, 8 Ω load)			
	External SP	1300 mW typical (with HM-222H at 5% distortion)*4 1000 mW typical (at 5% distortion, 8 Ω load)			

Measurements made in accordance with TIA-603, EN300 086, EN301 166, EN300 113. All stated specifications are subject to change without notice or obligation.

*1 Optional license key (ISL-CHEX) required. *2 25 kHz bandwidth is no longer available for FCC Part 90 licensees for USA versions.

*3 DVN: Digital Very Narrow (6.25 kHz), DN: Digital Narrow (12.5 kHz). DN is for NXDN version only. *4 For the transceiver with a "U" mark on the serial number label.

NXDN/dPMR modes are not compatible with each other. The radio protocol/mode cannot be changed after purchase.

Applicable U.S. Military Specifications & IP Rating

Standard	MIL 810G		
	Method		Procedure
Low Pressure	500.5		I, II
High Temperature	501.5		I, II
Low Temperature	502.5		I, II
Temperature Shock	503.5		I-C
Solar Radiation	505.5		I
Rain Blowing/Drip	506.5		I, III
Humidity	507.5		II
Salt Fog	509.5		–
Dust Blowing	510.5		I
Immersion	512.5		I
Vibration	514.6		I
Shock	516.6		I, IV

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

Ingress Protection Standard

Dust & Water IP68 (Dust-tight and waterproof protection)

Battery Life

Battery pack	Type	Capacity	Operating time*
BP-283	Li-ion 7.2 V	2010 mAh (typ.), 1910 mAh (min.)	10.5 hours (Approx.)
BP-284	Li-ion 7.2 V	3210 mAh (typ.), 3070 mAh (min.)	16.5 hours (Approx.)

* Tx: Rx: standby = 5:5:90 duty cycle. Power save function ON.

Supplied accessories: (May differ depending on the transceiver version)

- BP-284 battery pack
- MB-133 belt clip

OPTIONAL ACCESSORIES

IC-F3400D • IC-F4400D Series

■ BATTERY PACKS AND BATTERY CASE

BP-283: Li-ion 7.2 V/2010 mAh (typ.), 1910 mAh (min.). IP68 protection.
BP-284: Li-ion 7.2 V/3210 mAh (typ.), 3070 mAh (min.). IP68 protection.
BP-305: LR6 (AA) × 5 cells battery case (For USA version)



BP-305

■ BATTERY CHARGERS

BC-226: Multi-connectable rapid charger (connects up to six BC-226 units). Charges the BP-283/BP-284 in 2.7/4.3 hours (approx.). AC adapter for single unit.
 + **BC-123S:** AC adapter for single unit. The straight plug type is required.
 or **BC-228:** AC adapter. One AC adapter is required for up to six charger units.

BC-225: Intelligent charger. Shows the charging information with the LED lighting. Charges the BP-283/BP-284 in 3/4.5 hours (approx.).

AC adapter BC-123S supplied with the BC-225, depending on version.

RS-BC225: Intelligent charger software for Windows® PC

BC-227: Compact desktop charger. Charges the BP-283/BP-284 in 2.7/4.3 hours (approx.). AC adapter BC-123S supplied with the BC-227, depending on version.

BC-219N: Desktop charger. Charges the BP-283/BP-284 in 3/4.5 hours (approx.). AC adapter BC-123S supplied with the BC-219N, depending on version.

BC-214N: Multi-charger. Charges up to six BP-283/BP-284 batteries in 3/4.5 hours (approx.). AC adapter BC-157S supplied with the BC-214N, depending on version. BC-214N Version #61–#63 required.



BC-226

BC-123S

BC-228

(Connectable up to six BC-226)

BC-227

BC-225

BC-219N

BC-214N

CP-23L

OPC-515L

■ POWER SUPPLY CABLES

CP-23L: Vehicle charger cable for use with the BC-219N or BC-227.
OPC-515L: DC power cable for use with the BC-219N, BC-225 or BC-227.
OPC-656: DC power cable for use with the BC-214N.

■ HEADSETS AND PTT SWITCH CABLE

HS-94: Earphone-headset (Use with VS-4MC)
HS-95: Behind-the-head headset (Use with VS-4MC).
HS-97: Throat microphone (Use with VS-4MC).
VS-4MC: PTT switch cable. VS-4MC is required when using any of HS-94, HS-95 or HS-97.



HS-94



HS-95



HS-97



VS-4MC

■ SPEAKER-MICROPHONE

HM-222H: Large audio speaker microphone with emergency button and 3.5 mm earphone jack. IP68 protection.



HM-222H

■ BELT CLIPS, BELT HANGERS AND CARRYING CASES

MB-133: Alligator belt clip. Same as supplied.
MB-136: Swivel belt clip.
MB-96N: Swivel type leather belt hanger.
MB-96F: Fixed type leather belt hanger. For use with the MB-133.
MB-96FL: Long fixed type leather belt hanger. For use with the MB-133.
LC-184: Hard type carrying case. Charging is possible while the case is attached.



MB-133

MB-136

MB-96N

MB-96F

MB-96FL

LC-184

■ OTHER OPTIONS AND CABLES

AD-118: ACC adapter. For use with Hirose plug accessory.
UT-134: AES/DES encryption unit.
OPC-2338: Programming cable. USB–14-pin type.
OPC-1870: Zone copy cable. Handheld to handheld type.
OPC-2362: Zone copy cable. Handheld to mobile type.

■ SOFTWARE AND ACTIVATION KEYS

CS-OTPM1: OTAP manager software.
CS-OTAR1: OTAR manager software.
CS-KLD2: Key-loader for UT-134.
ISL-UGMTR: NXDN™ Type-D trunking upgrade key.
ISL-UGMD3: dPMR™ Mode 3 trunking upgrade key. (Not available in all regions.)
ISL-AKAES: AES activation key.
ISL-CHEX: Channel expansion key.
ISL-AK25K: 25 kHz activation key.
ISL-AKSTM: Dealer set mode activation key.

■ ANTENNAS

FA-S81V: 136–150 MHz
FA-S82V: 148–162 MHz
FA-S83V: 160–174 MHz
FA-S81U: 380–430 MHz
FA-S82U: 430–480 MHz
FA-S83U: 470–520 MHz

■ STUBBY ANTENNAS

FA-S81VS: 136–150 MHz
FA-S82VS: 148–162 MHz
FA-S83VS: 160–174 MHz
FA-S81US: 400–450 MHz
FA-S82US: 450–490 MHz

■ CUT-TYPE ANTENNAS

FA-S67VC: 136–174 MHz
FA-S76UC: 380–520 MHz

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

Use of these products are dependent on local regulations. Icom and Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand and/or other countries. NXDN is a trademark of Icom Incorporated and JVC KENWOOD Corporation. dPMR and the dPMR logo are trademarks of the dPMR MoU Association. IDAS and IDAS logo are trademarks of Icom Incorporated. LTR is a trademark of the E.F. Johnson Technologies, INC. Windows is either a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Icom Inc. is under license. 3M, Peltor, and WS are trademarks of 3M Company. All other trademarks are the properties of their respective holders.

Icom Inc.

1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013

www.icomjapan.comIcom America Inc.
www.icomamerica.comIcom (Europe) GmbH
www.icomeurope.comIcom (Australia) Pty. Ltd.
www.icom.net.au

Your local distributor/dealer:

Icom Canada
www.icomcanada.comIcom Spain S.L.
www.icomspain.comIcom Asia Co., Ltd.
www.icomasia.comIcom Brazil
E-mail: sales@icombrasil.comIcom (UK) Ltd.
www.icomuk.co.ukShanghai Icom Ltd.
www.bjicom.comIcom France s.a.s.
www.icom-france.com