

## OPTIONS

# IC-F3400D • IC-F4400D Series

### BATTERY PACKS

**BP-283:** Rechargeable Li-Ion 7.2 V/2010 mAh (typ.), 1910 mAh (min.), IP68 protection.  
**BP-284:** Rechargeable Li-Ion 7.2 V/3210 mAh (typ.), 3070 mAh (min.), IP68 protection.

### BATTERY CHARGERS

**BC-226:** Connectable type charger (connects up to six BC-226 units). Charges the BP-283/BP-284 in 2.7/4.3 hours.

**+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.).

**+ BC-123SA/SE/SV:** AC adapter.

**RS-BC225:** Intelligent charger software for Windows® PC.

**BC-227:** Compact type desk top charger. Charges the BP-283/BP-284 in 2.7/4.3 hours.  
**+ BC-123SA/SE/SV:** AC adapter.

**BC-219N:** Desk top charger. Charges the BP-283/BP-284 in 3/4.5 hours.

**+ BC-123SA/SE/SV:** AC adapter.

**BC-214:** Multi-charger. Charges up to six BP-283/BP-284 batteries in 3/4.5 hours (approx.).  
**+ BC-157S:** AC adapter.

\*AD-132N charger adapter is supplied with the BC-214, depending on version.

### 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-856:** DC power cable for use with the BC-214.



### SPEAKER-MICROPHONE

**HM-222:** Speaker microphone with emergency button and 3.5 mm earphone jack. IP68 protection.



### 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, HS-97.



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### 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 MBB-3.

**MB-96FL:** Long fixed type leather belt hanger. For use with the MBB-3.

**LC-184:** Hard type carrying case. Charging is possible while the case is attached.

**LC-186:** Hard type carrying case. Charging is possible while the case is attached.



### 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:** OTPM manager software.

**CS-OTAR1:** OTAR manager software.

**CS-F3400D:** Programming software.

**CS-KLD2:** Key-loader for UT-134.

**ISL-UGMTR:** NXDN™ Type-D trunking upgrade key.

**ISL-UGMD3:** dPMR™ Mode 3 trunking upgrade key.

**ISL-AKAES:** AES activation key.

**ISL-CHEX:** Channel expansion key.

**ISL-AK25K:** 25 kHz activation key.

**ISL-AKSTM:** Dealer sat 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.

# 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®, 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®, voice recording, active noise cancelling functions

### Motion/stationary detection, man down and lone worker functions

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



**iDAS™** **NXDN™** **dPMR™**  
ICOM DIGITAL ADVANCED SYSTEM

**General Features**

- 136–174, 380–470, 450–520 MHz versions
- 1024 Channels / 128 Zones, 32 Channels / 2 Zones (Non-display type)\*
- \* IC-F3400D/F4400D/F3400DP/F4400DP (Non-display type): Up to 32 selected channels out of 1024 can be allocated to the channel knob.
- 4000 Channels with optional license key, ISL-CHEX
- High-resolution transreflective color LCD\*
- \* For IC-F3400D/F3400DS/F3400DPT/F3400DPS/F4400D/F4400DS/F4400DPT/F4400DPS (Display type)
- 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 loom 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-283 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 1/2 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\*
- \* OTAP manager (CS-OTPM) 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



Check our web site to know more about 6.25 kHz FDMA narrow band. [www.icom.co.jp/world/fdma/](http://www.icom.co.jp/world/fdma/)

**Analog Functions**

- CTCSS and DTCSS tone
- 2-Tone and 5-Tone
- MDC functions (Depending on version)
- BIIS 1200 functions
- 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
- A third-party wireless Bluetooth® headset (for example, 3M™ Peltor™ WS™ 5 series) can be used\*
- \* Compatibility with third-party Bluetooth® headsets cannot be guaranteed.
- Wireless radio programming over Bluetooth®
- 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

	IC-F3400D/DS/D NXDN Version	IC-F3400DPT/DPS/DP dPMR Version	IC-F4400D/DS/D NXDN Version	IC-F4400DPT/DPS/DP dPMR Version
<b>GENERAL</b>				
Frequency coverage* (* Depending on 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)* <sup>1</sup> 32 channels / 2 zones (Non-display type) <sup>2</sup>			
Type of emission* (* Depending on version)	16K0F3E <sup>3</sup> , 14K0F3E, 11K0F3E, 8K50F3E, 8K30F1E/D, 4K00F1E/D	16K0F3E <sup>3</sup> , 14K0F3E, 8K50F3E, 4K00F1E/D	16K0F3E <sup>3</sup> , 14K0F3E, 11K0F3E, 8K50F3E, 8K30F1E/D, 4K00F1E/D	16K0F3E <sup>3</sup> , 14K0F3E, 8K50F3E, 4K00F1E/D
Power supply requirement	7.5 V DC nominal			
Current drain (approx.)	Tx 1.5 A		1.8 A	
Antenna impedance	50 Ω			
Operating temperature range	–30 °C to +60 °C; –22 °F to +140 °F (Radio specifications)			
Dimensions (W x H x D) Projections not included	53.6 x 123.5 x 29.3 mm; 2.1 x 4.9 x 1.2 in (With BP-283)			
Weight (approx.)	180 g; 6.4 oz (main unit)		300 g; 10.6 oz (BP-283, MB-193, FA-S81US)	
<b>TRANSMITTER</b>				
Output power (H, L2, L1)	5 W, 2 W, 1 W			
Frequency stability	±1.0 ppm			
Spurious emissions	90 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)			
Audio harmonic distortion	0.5% typical (AF 1 kHz, 40% deviation)			
FSK error	1% typical (@DVN/DN)			
<b>RECEIVER</b>				
Sensitivity	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 (1% BER)	–5.5 dBμV emf typical (0.26 μV typical) (@DVN), –4.0 dBμV emf typical (0.32 μV typical) (@DN)		–4.0 dBμV emf typical (0.32 μV typical) (@DVN), –4.0 dBμV emf typical (0.32 μV typical) (@DN)
	Analog	80 dB typical (@25/20 kHz), 76 dB typical (@12.5 kHz)		75 dB typical (@25 kHz), 72 dB typical (@12.5 kHz)
Spurious response rejection	Digital	71 dB typical (@DVN), 70 dB typical (@DN)		66 dB typical (@DVN), 66 dB typical (@DN)
	Analog	81 dB typical		76 dB typical
Intermodulation rejection	Analog	75 dB typical (USA) 67 dB typical (EUR)		74 dB typical (USA) 69 dB typical (EUR)
	Digital	72 dBμV emf typical (@DVN), –41 dBm typical (@DN)		73 dBμV emf typical (@DVN), –41 dBm typical (@DN)
Audio output power	Internal SP	1300 mW typical (at 5% distortion with 8 Ω load)		
	External SP	1000 mW typical (at 5% distortion with 8 Ω load)		

Measurements made in accordance with TIA-603, EN300 086, EN301 156, EN300 113. All stated specifications are subject to change without notice or obligation.

\*<sup>1</sup> Optional license key (ISL-CHEX) required.  
\*<sup>2</sup> IC-F3400D/F4400D/F3400DP/F4400DP (Non-display type): Up to 32 selected channels out of 1024 can be allocated to the channel knob.  
\*<sup>3</sup> 25 kHz bandwidth is no longer available for FCC Part 90 licensees for USA versions.  
DVN: Digital Very Narrow (6.25 kHz), DN: Digital Narrow (12.5 kHz), DN is for NXDN version only.

**Applicable U.S. Military Specifications & IP Rating**

Standard	MIL-810G	
	Method	Procedure
Low Pressure	500.5	I, II
	501.5	I, II
High Temperature	501.5	I, II
	502.5	I, II
Low Temperature	501.5	I, II
	502.5	I, II
Temperature Shock	503.5	I, C
	505.5	I
Solar Radiation	505.5	I
	506.5	I, III
Rain Blowing/Drip	507.5	II
	509.5	–
Humidity	510.5	I
	510.5	I
Salt Fog	512.5	I
	514.6	I
Dust Blowing	514.6	I
	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	3350 mAh (typ.), 3120 mAh (min.)	16.5 hours (Approx.)

\* Tx: Rx; standby = 5.5/90 duty cycle. Power save function ON.

Supplied accessories: (May differ depending on version)
• BP-283 battery pack • MB-193 belt clip