


ICOM

VHF/UHF DIGITAL TRANSCEIVER

ID-51A

D-STAR Continues to Evolve



D-STAR
Dualwatch
GPS
Submersible
Broadcast Radio

Actual size

D-STAR

Broadcast Receiver, IPX7 Submersible... Function Digital Transceiver

Integrated GPS

Integrated GPS Receiver

The integrated GPS receiver provides fast start-up time and accurate position. Your current position and altitude are shown on the display and offers a position reporting function in DV mode. The GPS-A mode assists in easy D-PRS operation.



GPS receiver transparent image

Automatic Reply Function (DV Mode)

When receiving a call addressed to your call sign, the ID-51A can automatically reply your current position information*. Between ID-51A's communication, replied position information can pop up on the caller's display.

* Function not available on all D-STAR networks



GPS Log Function*

The GPS log function logs your position information at regular intervals (1 second-60 seconds, depending on the setting) and memorizes this in the microSD card to export to your PC. The GPS logger only mode turns on the GPS logger function with the radio in sleep mode.

* microSD card required



Durability and Easy Operation

IPX7 Submersible Construction

The ID-51A has superior IPX7 waterproof protection (1m depth of water for 30 minutes). It can be used in harsh outdoor environments, when hiking, mountain biking, touring and mountain sports.



Menu-Driven User Interface

The directional keypad and quick menu button help you with quick and intuitive access to many settings and speeds up the operation. The large full dot-matrix display with easy-to-read characters increases the amount of information.



Other Features

5W Output Power

Using a highly-efficient PA amplifier, the ID-51A generates 5W of RF output power from this compact body.

Long Lasting Battery Pack

The supplied BP-271 provides up to 4.5 hours* of operating time, and the optional large capacity battery pack, BP-272 provides up to 7.5 hours*.

* Typical operation with 1:1:8 duty cycle in DV mode. (Power save ON)

- Total 1,304 memory channels including 700 D-STAR repeater memories
- Analog FM mode with CTCSS/DTCS code squelch
- Automatic repeater function* automatically turns on/off duplex operation and tone encoder
* USA, Korea and Export versions only
- 16 DTMF memory channels (24 digits)
- Auto power save • Auto power off • Clock function
- Priority watch • Key lock function

Direct Rapid Charging

Recharge the ID-51A by plugging the supplied wall charger directly in the radio. The BP-271 can be charged in 3 hours (approx.) when the power is OFF.

CS-51 Cloning Software Supplied

The CS-51 cloning software is supplied with the ID-51A for editing various memory settings from a PC. (Supplied with the application CD)

- CI-V level converter for remote radio control
- Squelch release function to monitor a weak signal
- External DC power jack
- Earphone code antenna for FM broadcast
- LCD and keypad backlighting
- Weather channels and VHF air band and other utility communication can be listened to*
* Weather channels are available for USA version only.
See specifications page for receiver range details.



SPECIFICATIONS

GENERAL			
• Frequency coverage (Unit: MHz)			
Version	Transmit	Receiver	Broadcast
USA	144-148, 430-450 ^{*)}	(A) 136-174, 380-479 ^{*)} (B) 108-174, 380-479 ^{*)}	0.52-1.71 88.0-108.0
	EXP	(A) 136-174, 380-479 ^{*)} (B) 108-174, 380-479 ^{*)}	0.52-1.71 76.0-108.0
EXP-01	144-148, 430-440	(A) 136-174, 380-479 ^{*)} (B) 108-174, 380-479 ^{*)}	0.52-1.71 76.0-108.0
	AUS	(A) 136-174, 380-479 ^{*)} (B) 108-174, 380-479 ^{*)}	0.52-1.71 76.0-108.0

(A) means A Band, (B) means B band.
Guaranteed range: ^{*)} 144-148, 440-450MHz ^{**)} 144-148, 430-440MHz.

• Type of emission	F2D, F3E, F7W
• Mode	DV, FM, FM-N
• Number of memory channels	1304 channels (including 500 regular channels, 700 D-STAR repeater, 100 program scan edges and 4 call)
• Frequency resolution	1*, 5, 6.25, 8.33*, 9*, 10, 12.5, 15, 20, 25, 30, 50, 100, 125 and 200kHz * Selectable depending on the operating band.
• Operating temperature range	-20°C to +60°C; -4°F to +140°F
• Frequency stability	±2.5ppm (-20°C to +60°C on the basis of 25°C)
• Power supply requirement	7.4V DC (with BP-271, BP-272) Alkaline cells External DC power 10-16V DC
• Current drain (at 7.4V DC)	Tx High Rx Internal SP (16Ω) External SP (8Ω) Less than 2.5A Less than 450mA/350mA (DV/FM, FM-N) Less than 300mA/200mA (DV/FM, FM-N)
• Antenna impedance	50Ω (SMA)
• Dimensions (W×H×D, projections not included)	58×105.4×26.4 mm; 2.28×4.15×1.04 in
• Weight (approx.)	170g; 6oz (without battery), 255g; 8.99oz (with BP-271 & antenna)

TRANSMITTER	
• Modulation system DV, FM, FM-N	GMSK reactance modulation, FM reactance modulation
• Output power (at 7.4V DC)	5W, 2.5W, 1.0W, 0.5W, 0.1W (High, Mid, Low2, Low1, S-low)
• Spurious emissions	Less than -80dBc (High, Mid), Less than -13dBm (Low2, Low1, S-low)
• Max. frequency deviation	±5.0/2.5kHz (FM/FM-N)
• Ext. Mic impedance	2.2kΩ

RECEIVER	
• Sensitivity DV, FM, FM-N	Less than 0.28μV (at 1% BER) Less than 0.18μV (at 12dB S/NAD)
• Selectivity DV FM FM-N	More than 50dB More than 55dB More than 50dB
• Spurious rejection	More than 60dB
• Audio output power	(at 7.4V DC, 10% distortion) Internal SP (16Ω load) External SP (8Ω load) More than 400mW More than 200mW

- Supplied accessories** (* Depending on version)
- Battery pack, BP-271
 - Wall charger, BC-167SA/SD/SV*
 - Antenna, FA-S270C
 - Belt clip, MB-127
 - Cloning software, CS-51
 - Hand strap

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

<p>BATTERY PACKS AND CASE</p>  <table border="1"> <thead> <tr> <th>Battery packs</th> <th>Type</th> <th>Capacity</th> <th>Operating time* (Approx.)</th> </tr> </thead> <tbody> <tr> <td>BP-271</td> <td>Li-Ion, 7.4V</td> <td>1150mAh (min.), 1200mAh (typ.)</td> <td>4.5 hours (DV/FM)</td> </tr> <tr> <td>BP-272</td> <td>Li-Ion, 7.4V</td> <td>1880mAh (min.), 2000mAh (typ.)</td> <td>7.5 hours (DV/FM)</td> </tr> <tr> <td>BP-273</td> <td>LR6 (AA) batteries×3</td> <td></td> <td>-</td> </tr> </tbody> </table> <p>* Tx: Rx: standby = 1:1.3. Power save function ON, GPS OFF.</p>	Battery packs	Type	Capacity	Operating time* (Approx.)	BP-271	Li-Ion, 7.4V	1150mAh (min.), 1200mAh (typ.)	4.5 hours (DV/FM)	BP-272	Li-Ion, 7.4V	1880mAh (min.), 2000mAh (typ.)	7.5 hours (DV/FM)	BP-273	LR6 (AA) batteries×3		-	<p>WALL CHARGER</p>  <p>BC-167S*</p>
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<p>RAPID CHARGER</p>  <p>BC-202 Charges BP-271/BP-272 in 2/3.5 hours</p> <p>BC-123S**</p>	<p>DC POWER CABLE</p>  <p>OPC-254L/LR</p>	<p>CIGARETTE LIGHTER CABLES</p>  <p>CP-19R CP-12L</p>															
<p>SPEAKER-MICROPHONES</p>  <p>HM-75LS HM-186LS</p>	<p>EARPHONE-MICROPHONES</p>  <p>HM-153LS HM-166LS</p>	<p>SLIM L-TYPE PLUG ADAPTER CABLE</p>  <p>OPC-2144 Required when using either HM-75A, HM-153, HM-166 or SP-13.</p>															
<p>HEADSETS and PLUG ADAPTER CABLE</p>  <p>HS-94 Earhook type HS-95 Behind-the-head type HS-97 Throat type OPC-2006LS Required when using any of these headsets</p>	<p>DATA CABLE</p>  <p>OPC-2218LU USB cable</p>																
<p>CI-V LEVEL CONVERTER</p>  <p>CT-17</p>	<p>CARRYING CASE</p>  <p>LC-179</p>	<p>SILICONE JACKET CASE</p>  <p>SJ-1</p>															

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

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