o ICOM VHF/UHF DUAL BAND TRANSCEIVER

IC-92AD

D-STAR: Take It To the Field!



Offers position reporting. (With optional GPS speaker-microphone)



COM

Includes DV mode digital voice and low-speed data.

Submersible

Equivalent to IPX7 protection. (1 meter depth for 30 minutes)

Take It To the Field! Tough, Submersible Col

Rugged Submersible Protection

The IC-92AD and HM-175GPS have superior waterproof protection and is equivalent to IPX7 (1m depth of underwater for 30 minutes). The aluminum diecast chassis and gasketsealed housing provide performance you can count on in harsh outdoor environments; when hiking, mountain biking, touring and for alpine activities.



Optional GPS Speaker-microphone

ΓT ΠΝ

Used with the GPS speaker-microphone, HM-175GPS, the IC-92AD shows your position data on the display and offers automatic position reporting in DV mode. The IC-92AD shows the direction to a received D-STAR station or to a memory stored with a compass-like display pointer. In addition, the GPS-A mode assists in easy D-PRS system operation.

Examples of GPS functions







Compass information



Direction and distance to RX station





VHF/UHF DUAL BAND TRANSCEIVER



nstruction!

With the IC-92AD, exchanging position information[•] is easy! D-STAR repeaters use the Internet to carry your signals anywhere!



Feature-rich Functions

Wideband receiver with dualwatch capability

The IC-92AD has dualwatch receiver capability, allowing you to receive* on two bands simultaneously (including the same band). By pushing and holding the [Main/Dual] button, you can easily turn dualwatch on and off, while a single press toggles the active VFO channels (A band/B band).

* See specifications for receive range coverage.

5 Watts (typical) output

Icom's original wideband PA circuit and supplied lithium-ion battery pack provides 5W (typ.) output power on both VHF and UHF bands. The supplied BP-256 provides up to 6/5.5 hours* of operating time. When you don't need full power operation, you can reduce output power to 2.5/0.5/0.1W (typ.) to reduce battery consumption.

Output	High	Mid	Low	S-Low
power	(5W typ.)	(2.5W typ.)	(0.5W typ.)	(0.1W typ.)
VHF	6 hrs.	8.5 hrs.	14.5 hrs.	19 hrs.
UHF	5.5 hrs.	7.5 hrs.	14.5 hrs.	19 hrs.

* VHF/UHF single mode, Tx high: Rx: Stand-by duty ratio= 1: 1: 8

Simple bandscope

Spectrum activity is displayed on the screen and audio is heard while sweeping. The bandscope is useful for finding new or interfering signals.



Built-in voice recorder function

The built-in voice recorder* records an incoming call for up to 30-seconds (approx.), (or 15 sec. \times 2 tracks, 10 sec. \times 3 tracks). For automated outgoing calls, you can pre-record up to 10 seconds of your callsign and/or CQ message in the IC-92AD's voice memory. (* Available in DV mode only)

Convenient Operation

Large dot-matrix Display

Using a large full dot-matrix display (37.8×20 mm; $1^{1/2} \times 2^{25/32}$ in), the IC-92AD clearly shows two-line frequency settings, alphanumeric channel name, bandscope, received message and position infor-

mation, etc. You can change the display setting to show frequency or memory name in the center of the display. In addition, automatic LCD and keypad backlighting provides bright illumination for night time operation.



Memory name large setting

One touch reply button

The one-touch reply [CALL RX->CS] button memorizes the received callsign(s) with a single touch. This function allows you to respond to the calling station without hassle. In addition, up to 20 received callsigns are stored in a received call history.

Keypad navigation

The four cursor direction buttons on the keypad give you quick and intuitive access to many settings. The dual volume/channel knob provides convenient channel selection and volume control.

Optional PC remote control capability

When connected to a PC via RS-232C, most functions of the IC-92AD can be controlled from the PC with the optional RS-92 software. In DV mode operation, you can send and receive short messages of 20 characters (max.) on the PC.



Other features

• Total of 1304 memory channels • External DC power jack (10–16V DC acceptable) • 10 channel DTMF memory (16-digit) • Squelch disable function to monitor a weak signal • Built-in CTCSS/DTCS tone encoder and decoder (FM mode) • Auto power save, power off and power on • 26 memory banks with selected bank and bank link scanning • 10dB (approx) built-in attenuator • Automatic repeater function* • Weather channel with weather alert* (* USA and Canada versions only)

SPECIFICATIONS

GENERAL				
Frequer	ocv coverage	and Mode :	(Unit: MHz)	
	· · ·	Receive (Working range)	Mode	
		A band: 0.495–999.990*3	FM/WFM*4/AM*4	
U.S.A.		3 band: 118-174, 350-470	FM/FM-N/AM*4/DV	
Canada	144–148, A	hand: 0.495–999.990	FM/WFM*4/AM*4	
Canada	420-450*1 E	3 band: 118–174, 350–470		
Export		hand: 0.495–999.990	FM/WFM*4/AM*4	
SEA	400-470*2 E	3 band: 118–174, 350–470	FM/FM-N/AM*4/DV	
		I–148, 440–450MHz. * ³ Cellul I–148, 430–440MHz. * ⁴ Recei		
Memory channels : 1304 channels (including 100 program scan edges and 4 call channels) Useable temp. range : −20°C to +60°C; −4°F to +140°F Tuning steps : 5*, 6.25*, 8.33*, 9*, 10, 12.5, 15, 20, 25, 30, 50, 100, 125, 200 KHz *Available depending on the operating bands.				
	ncy stability	: ±2.5ppm (-20°C to +60°	C)	
Power s		: 7.4V DC (with BP-256)		
		10-16V DC		
• Digital Tx speed : 4.8kbps				
Voice coding speed : 2.4kbps Current drain (at 7.4V DC):				
Tx High (VHF/UHF) 1.8/2.1A typ.				
Rx F F	M (Single) M/FM (Dual) M/DV (Dual) V (Single)	Power save(Duty= 1:4)/Ra 38mA/150mA/65mA ty 43mA/180mA/90mA ty	p. typ.	

• Dimensions (W×H×D) : 59×112×34.2 mm; 25/16×413/32×111/32 in. (projections not included)

 Weight (approx.) : 325g; 11.5oz (with antenna and BP-256)

TRANSMITTER

Output power		5W typ. 0.5W typ.		2.5W typ. 0.1W typ.
	: Less than –60dBc (High, Mid) : ±5.0/2.5kHz (FM wide/narrow)			

RECEIVER

Ext. MIC impedance : $2k\Omega$				
ntermediate frequencies :				
A band (1st/2nd) 61.65MHz	/450kHz (Except WFM)			
WFM (1st/2nd/3rd) 59.25MHz	/13.35MHz/1.95MHz			
B band (1st/2nd) 46.35MHz	/450kHz			
Sensitivity (typical, except spurious points) :				
FM (at 12dB SINAD, 3.5kHz DEV)				
1.625– 29.995MHz 0.4µV	30.000- 75.995MHz 0.25µV			
76.000-117.995MHz 0.25µV	118.000–173.995MHz 0.14µV			
174.000–259.995MHz 0.32µV	260.000–349.995MHz 0.32µV			
350.000–469.995MHz 0.16µV	470.000–599.995MHz 0.32µV			
600.000–999.995MHz 0.56µV				
WFM (at 12dB SINAD, 52.5kHz DEV)				
175.000-221.995MHz 1.8µV	470.000-770.000MHz 2.5μV			
AM (at 10dB S/N, 30% Mod.)	0.495– 4.995MHz 1.3µV			
5.000- 29.995MHz 0.56µV	118.000–137.000MHz 0.5µV			
222.000-246.995MHz 0.79µV	247.000-329.995MHz 1µV			

0.22µV UHF (Ham band) Selectivity AM/FM Wide More than 50dB FM-Narrow, DV More than 45dB WFM More than 300kHz/-3dB Less than 700kHz/-20dB Spurious and image rejection : VHF (Ham band) More than 60dB More than 50dB (IF; more than 60dB) UHF (Ham band)

POWER SUPPLY

CABLES

- Less than -57dBm Spurious radiation · Audio output power More than 200mW at 10% distortion
- (7.4V DC) with an 8Ω load
- Ext. speaker impedance: 8Ω

DV (at BER 1%, 4.8kbps)

VHF (Ham band)

	1.625- 29.995MHz 0.4µV 76.000-117.995MHz 0.25µV 174.000-259.995MHz 0.22µV 350.000-469.995MHz 0.16µV	30.000- 75.995MHz 0.25µV 118.000-173.995MHz 0.14µV 260.000-349.995MHz 0.32µV 470.000-599.995MHz 0.32µV	
ated output/Stand-by p. p.	600.000–999.995MHz 0.56μV WFM (at 12dB SINAD, 52.5kHz DEV) 175.000–221.995MHz 1.8μV AM (at 10dB S/N, 30% Mod.)	76.000–108.000MHz 1μV 470.000–770.000MHz 2.5μV 0.495– 4.995MHz 1.3μV	Supplied accessories (*depending on version) ● Battery pack (BP-256) ● Wall charger* (BC-167A/D) ● Antenna (FA-S270C) ● Belt clip (MB-111) ● Hand strap
typ. yp.	5.000– 29.995MHz 0.56μV 222.000–246.995MHz 0.79μV	118.000–137.000MHz 0.5µV 247.000–329.995MHz 1µV	All stated specifications are subject to change without notice or obligation.

BC-167A/D WALL CHARGER

Charges the BP-256 in 6 hours (ap-

prox.). Same as supplied with some

versions

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

• Ex • Inte 4

• Se FΝ

BATTERY PACK AND CASE



BP-256 BP-256 7.4V/1620mAh Li-Ion BATTERY PACK

Provides 6/5.5 hours* operating time (approx.).

* VHF/UHF FM single mode typical operation with Tx (Hi): Rx: standby=1:1:8) BP-257 BATTERY CASE for AA (LR6)×2 alkaline cells. Output power: 0.1W tvp. BP-257 is not waterproof.



HM-174 : Waterproof speaker microphone. Equivalent to IPX7.

HM-175GPS : Waterproof speaker microphone with GPS receiver. Equivalent to IPX7. HM-75A, HM-131, HM-153 and HM-166 speaker microphones

are also available with the OPC-1797 plug adapter cable.



with the BC-177.

REMOTE CONTROL SOFTWARE AND

BC-177 DESKTOP CHARGER

Rapidly charges battery pack BP-256. Charging

time (approx.): 2.5 hours. AC adapter is supplied

OPC-1799 : RS-232C type PC connection cable. 13.



OPC-1797 PLUG

LC-168 CARRYING CASE

Helps protect the transceiver from scratches, etc.

OPC-254L CP-19R CP-19R : Cigarette lighter cable with DC-DC con-

verter. 10-16V DC required. OPC-254L : For use with an external power supply.

10-14V DC required for high power output. CP-12L : Cigarette lighter cable is also available.

AD-92SMA ANTENNA CONNECTOR ADAPTER Allows you to connect a BNC-type antenna. HS-85 HEADSET Allows you hands-free operation. Includes VOX, PTT, "one-touch PTT" with time out timer (TOT). OPC-1797 is required. MB-111 BELT CLIP Same as supplied. **OPC-474** CLONING CABLE Used for handheld-to-handheld data cloning. Two OPC-1797s are required.

Provides clear audio in noisy environments.

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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

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 : http://www.icomcanada.com URL

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 Final : +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 Disseldorf, Germany Phone: +49 (0211) 346047 Fax : +49 (0211) 333639 E-mail : info@icomeurope.com URL : http://www.icomeurope.com

Icom Spain S.L.

Ctra, Rubi, No. 88 "Edificio Can Castanver 08190, 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 Findle : +44 (01227) 741741 Fax : +44 (01227) 741742 E-mail : info@icomuk.co.uk URL : http://www.icomuk.co.uk

Icom France s.a.s.

Fax :+33 (5) 61 36 03 00 E-mail : 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 : icompolska@icompolska.com.pl URL : http://www.icompolska.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.

10007, Long Silver Mansion, No.88, Yong Ding Road, Haidian District, Beijing, 100039, China Phone: +86 (010) 5889 5391/5392/5393 Fax: +1-86 (010) 5889 5395 E-mail: bjicom@bjicom.com URL : http://www.bjicom.com

Your local distributor/dealer:

SP-13 EARPHONE

OPC-1797 is required.

Count on us!

IC-92AD

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