SPECIFICATIONS

GENERAL

Frequency Coverage	1240-1300MHz
Type of emission	FM,GMSK (Digital)
Transmission speed (theoretical value)	
Data	128kbps
Digital voice	4.8kbps
Codec	AMBE
Number of memory channels	105 (inc. 2 scan edges and 3 calls)
Frequency resolution	5, 6.25, 10, 12.5, 20, 25, 50, 100kHz
Operating temperature range	-10°C to +60°C; +14°F to +140°F
Frequency stability	+/- 2.5ppm (-10°C to +60°C)
Current drain (at 13.8 V DC:approx)	
Transmit	at 10 W Less than 7 A
Receive	max. audio Less than 1.5 A
Antenna connector	Type-N (50 W)
Dimensions (proj. not included)	
Main Unit	141(W) x 40(H) x 165.8(D) mm
	$5^1/_2$(W) x 1 $^9/_{16}$(H) x 6 $^{17}/_{32}$(D) in
Remote controller (RC-24)	150(W) x 50(H) x 49.5(D) mm
	5 $^{29}/_{32}$(W) x 1 $^{31}/_{32}$(H) x 1 $^{15}/_{16}$(D) in
Weight (approx)	
Main unit	1.2kg; 2 lb 10 oz
Remote controller	220g; 7.7 oz

Supplied accessories

- Hand microphone • External speakers (SP-22)
- Remote Controller Unit (RS-24)
  (RS-24 includes: mounting bracket and mic extension cables)

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

RECEIVER

Receiver system	
FM, Digital voice	1st: 243.95MHz
	2nd: 31.05MHz
	3rd: 450kHz
Data	1st: 243.95MHz
	2nd: 10.7MHz
Sensitivity (FM: at 12dB SINAD/Digital: at BER 1x10-2)	
FM	Less than 0.18uV
Digital voice	Less than 0.35uV
Data	Less then 1.58uV
Squelch sensitivity (threshold)	Less than 0.18uV (FM only)
Selectivity (typical)	
FM	More than 12kHz/6dB
	Less than 30kHz/60dB
Digital voice	More than 6kHz/6dB
	Less than 18kHz/50dB
Data	More than 140kHz/6dB
	Less than 520kHz/40dB
Spurious and image rejection	More than 50 dB
AF output power (at 13.8 V DC)	More than 2.0W at 10% distortion
	with an 8 Ω load
Ext. speaker connections	2-conductor 3.5 (d) mm (1/8˝) 8Ω

TRANSMITTER

Modulation system	
FM	Variable reactance frequency modulation
Digital	Quadrature modulation
Output power	10/1 W
Max. frequency deviation	+-5.0kHz
Spurious emissions	Less than –50dB
Microphone connector	8-pin modular (600 Ω)

OPTIONS

RC-24 REMOTE CONTROLLER UNIT
(same as supplied)
MB-17A MOBILE MOUNTING BRACKET

ID-RP2C REPEATER CONTROLLER
ID-RP2V 1.2GHz LOCAL VOICE REPEATER
ID-RP2D 1.2GHz LOCAL DATA REPEATER

AH-107 1-METER 10GHz DISH

OTHER OPTIONS NOT PICTURED:

HAND MICROPHONES
HM-118N HAND MICROPHONE
(same as supplied)
HM-118T DTMF MICROPHONE
(not needed for D-STAR)

CONNECTION CABLES
OPC-647 2.5m (8.2 ft.) (same as supplied)
OPC-440 5.0m (16.4 ft.)

EXTERNAL SPEAKERS
SP-7
SP-10
SP-22

APRS is a registered trademark of APRS Software and Bob Bruninga, WB4APR.

Icom Inc.　1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan　　Phone: 06 6793 5302　　Fax: 06 6793 0013　　**URL: http://www.icom.co.jp/world/index.html**

Count on us!

ISO 9001
Certificate Number Q14190
Icom Inc. (Japan), is an ISO9001 certification acquired company.

Your local distributor/dealer:

DIGITAL 1.2GHz AMATEUR RADIO TRANSCEIVER

ICOM®

ID−1 D-STAR

- **Digital voice (D-STAR standard)**
- **High-speed data**
- **Analog FM**
- **"Traditional", Full-Featured 1.2GHz Amateur Operation**

Icom Inc.

D-STAR: The Future Is Now

The ID-1 is a blend of new and traditional operations, all in one box. New is its D-STAR communications standard compliance – looking to become the likely possible "future" data language of amateur radio. Icom is the first major manufacturer to offer a D-STAR compliant rig. The ID-1 also offers the best of traditional amateur operations, usable on the current repeaters. This is an advanced amateur transceiver, whether for D-STAR or traditional operations.

High Speed Internet

Use the ID-1 and your laptop to gain wireless 128 Kbps speed access to the Internet from remote locations – all via the free amateur radio bands. Now you may surf the Web from your vacation cabin. In your car. On your boat. D-STAR repeaters and base stations offer reliable, long range 1.2GHz voice and data communications.

Auto Call Sign Identification

With every transmit in digital voice mode, the ID-1 automatically incorporates a programmed call sign along in the data stream. When talking on the air, and the reception is picked up on another ID-1, the sender's call sign is automatically displayed on the unit's backlit LCD or software interface. You'll immediately know who's calling!

Simultaneous Digital Voice and Data

While you are transmitting in digital voice mode, the ID-1 is capable of sending a slow speed data stream. Now you can use a single channel for voice and data! APRS® like operation or other new software operations can now be utilized simultaneously while a conversation is underway.

Digital Clarity

Eliminate nearly all background signal interference with Digital Signal Processing (DSP). DSP offers pindrop clear reception. Any signal received in a digital mode must match codec in order to be heard. Intermod is virtually eliminated from your communications!

Super Narrow Bandwidth

Create higher density repeater groups using the ID-1 to access a D-STAR repeater network. More repeaters means greater coverage. More coverage means more reliable communications. Emergency communications is more efficient, and mobile amateur operations "dead spots" are reduced or eliminated.

Complete Software Control

Before the ID-1, there was no way to FULLY control your transceiver from a PC. Now, the functionality of your radio is limited only by the software used to control it, for every single ID-1 feature is ultimately PC controllable. Potential software applications could be full voice control via speech recognition, or frequency hopping. Customize your communications to best serve your wants or needs!
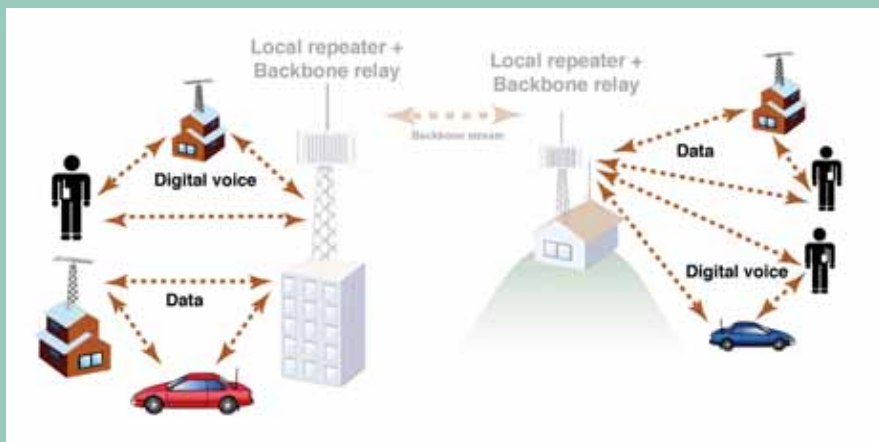
What is D-STAR?

The D-STAR system is an off-the shelf, 128K open protocol DATA system that combines the analog and digital worlds into a seamless communications network at 1.2 and 10GHz. Picture being in your vehicle, helping with emergency communications with the 128K DATA – you can visually communicate what is happening simply by emailing a photo or live video. The power of the D-STAR system is limited only by your imagination!

Increase ARES® Efficiency

Out in the field, fast emergency information is key. Send pictures and weather charts at high speeds to or from a remote location with the ID-1. "A picture is worth a thousand words", and the fast send/receive opens up your repeater for other emergency communications.

Features of the D-STAR System

- Open Ethernet compatible TCP/IP structure
- Digital voice and data
- Data 128kbps (130k bandwidth)
- Multi-site capability with high-speed microwave backbone 10Mbps
- ATM multiplex (on the backbone)
- Internet linking capability

Roam Anywhere, Easily

One of the limitations of traditional repeater linking over the Internet is having to know where a remote repeater is, or a node number to link to it. With D-STAR your long distance communications can be seamless. You can simply enter a call sign into a D-STAR radio, and the system will automatically route your call to the remote station. When users travel between repeaters, they can register with the local system, and communications can follow them.

Advanced, "Traditional" ID-1 Features

- REMOTE CONTROL HEAD with long connection cable. Plug the mic into the head or the radio body.
- CTCSS ENCODE/DECODE
- FULL 10 WATT OUTPUT on 1.2GHz
- LARGE HEAT SINK. One piece, die cast aluminum chassis
- CTCSS and tone encode/decode
- 3 SCAN MODES, including 1 priority watch
- ALPHANUMERIC CHANNEL NAMES, front panel or PC programmable

And More

- ICOM SOFTWARE INTERFACE CONTROL comes with the ID-1
- USB CONNECTION POINT on back of radio. USB extensions cable included.
- ETHERNET CONNECTION POINT on back of radio. Ethernet extensions cable included.

- EMERGENCY MODE. Activation of emergency button causes all squelch to drop, allowing station calls to come in. (Digital Modes)
- AUTO REPLY to D-STAR station calls, even if away from transceiver
- DIGITAL CODE. Squelch for use in the digital mode
- DIGITAL MONITOR. With the push of a button, hear analog signals while operating in digital modes
- AUTO RXCALL REG incoming call signs are stored automatically while in digital modes. Lets you know who called while you were away.
- OPTIONAL DTMF MIC available (not needed with D-STAR)

1291.100   00
Caller:KB7TSE