

VHF/UHF DUAL BAND DIGITAL TRANSCEIVER

## **Innovation** and **Mobility** Taken to the Next Level

45.500



### Touch Screen Operation DV/DV Dualwatch Integrated GPS Receiver

DV/FM Repeater List D-STAR DV Mode Bluetooth® Android™



# **Innovation** and **Mobility Taken to the Next Level**

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D-1 RX>CS

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pove photo shown with optional MBF-1 mount base and MBA-2 controller bracket. Some photos (screen shots) shown with optional UT-133/A Bluetooth® unit installed.

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## **Intuitive Touch Screen Operation**

The intuitive touch screen interface provides quick and smooth operation. The large 5.5 inch display (320 × 128 pixels) responds naturally to the touch allowing you to change settings, enter frequencies, edit memory channels with ease.





## **DV/DV** Dualwatch

The ID-5100E can receive both FM/FM and FM/DV mode signals simultaneously. Two DV mode signals can be monitored for receive on either channel. You can check other

repeaters or other channel activities while waiting for the main repeater.

\* Main band audio has priority, if two DV signals come in at the same time





FM/DV dualwatch example

#### **DV/FM Repeater List Function**

The DV/FM repeater list function assists you in accessing nearby repeaters, even when you are visiting an area for the first time. The function searches for a nearby repeater using the repeater memories and GPS position information. To use the automatic repeater list function, the position data of the repeater is required. The ID-5100E will be shipped with a limited number of repeater memories preprogrammed

#### **Dplus Reflector Linking**

Dolus reflector link commands are added to the DR function

to allow easy reflector operation. Use Reflector, link/unlink to Reflector, echo test and repeater information commands are selectable.



#### SD Card Slot for Voice and Data Storage

When used with an SD card, the SD card can store various contents including voice memory, DV auto reply message, TX voice message, QSO log, RX history log and GPS log data. Memory channels, repeater memories and other personal settings can be saved to the SD card and can be loaded to the transceiver

#### VS-3 Bluetooth<sup>®</sup> Headset

The optional Bluetooth® headset, VS-3 provides hands-free communication and can remotely control the ID-5100E with three programmable buttons.

ID-5100

MONT

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DR

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DUAL BAND TRANSCEIVER

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HOME

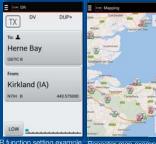


Volume UP Volume DOWI PTT swit Bluetooth® headset, VS-3 (option)



#### **RS-MS1A** Android<sup>™</sup> Application (Free download application from Google Play<sup>™</sup>)

The RS-MS1A allows you wirelessly connect to the ID-5100E and remotely set DR functions, link with a map application and send/receive messages over the DV mode. In addition, pictures taken by the Android<sup>™</sup> device can be transmitted in the DV Fast Data mode or DV mode.



**DV Fast Data Mode\*** 

By using data in place of voice frames, the ID-5100E can transfer data 3.5 times faster (3480 bps) than in the conventional DV mode (with voice). \* The DV Fast Data mode is not compatible with the DV mode low-speed dat

#### Steps to send a picture over the DV Fast Data mode



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(Using optional MBF-1 mount base and MBA-2 controller bracket

## **Integrated GPS Receiver**

The ID-5100E has an integrated GPS receiver in the controller and shows own position, course, speed and altitude on the display. The GPS position information can be used for exchanging position reports, tracing the GPS log and searching for nearby repeater sites.



#### **Other Features**

- Enhanced D-PRS functions with object, position, items and weather formats
- Convenient memory contents management using CSV format
- Speech function announces operating frequency, mode and received callsign (DV mode)
- Independent main dial, volume and SQL knobs for A/B bands
- AM airband dualwatch
- CS-5100, programming software supplied
- 50W output power on both VHF and UHF bands



#### SPECIFICATIONS

		GENERAL				
Frequency coverage		(Unit: MHz)				
	Version	Transmit Receiver				
	EUR	144-146, 430-440	118-174, 375-5501			
	ITR	144-146,	118-136.9916, 144-146,			
		430-434, 435-438	430-434, 435-438*2			
	Guar	anteed range: "144-146, 430-440MHz. "2144-146, 430-434, 435-438MH				
Type of emission		F2D, F3E, F7W				
Mode		DV, FM, FM-N, AM AM (RX only), AM-N (RX only)* Depending on versi				
Operating temperature r	ange	-10°C to +60°C; +14°F to +140°F				
Frequency stability		±2.5ppm (-10°C to +6	60°C on the basis of 25°C)			
Digital TX speed		4.8kbps				
Voice coding speed		2.4kbps				
Antenna impedance		50Ω (SO-239)				
Number of memory cha	nnels	1000 regular channels, 4 call channels, 50 programs scan edges and 1200 repeater memories				
Power supply requireme	ents	13.8V DC ±15%				
Current drain	RX Stand-by	1.2A				
	Max. audio	1.8A (Dualwatch, with Ext. SP $8\Omega$ load)				
	ТХ	13.0A				
Dimensions	Main unit	150×40×172.6 mm; 5.91 × 1.57 × 6.8 in				
W×H×D, projections not included)	Controller	182.2×81.5×24.7 mm; 7.17 × 3.21 × 0.97 in				
Weight (approx.)	Main unit	1.3kg; 2.87 lb				
	Controller	260g; 9.17 oz				
	Т	RANSMITTER				
Output power		50W, 15W, 5W				
Modulation system	FM, FM-N	FM reactance modulation				
	DV	GMSK reactance modulation				
Max. frequency deviatio	n	±5.0kHz/±2.5kHz (FM/FM-N)				
Spurious emissions		Less than -60dBc	. ,			
Microphone impedance		600Ω (8-pin modular	iack)			
		RECEIVER	Jare			
	A band	-				
Intermediate frequencies		38.85MHz/450kHz (1st /2nd)				
	B band	46.35MHz/450kHz (1st/2nd)				
Sensitivity	FM/FM-N (12dB SINAD)	Less than 0.18µV (amateur bands only)				
<b>D</b> 1 11 11	DV (1% BER)	Less than 0.28µV				
Receiver sensitivity (Not guaranteed, for your	FM/FM-N (12dB SINAD)	137-159.995MHz Less than 0.32µV				
reference only, Except	(120D OIINAD)	160-174.000MHz Less than 0.56µV				
amateur bands.)		375-399.995MHz Less than 0.56µV				
		400-499.995MHz Less than 0.32µV				
		500-550.000MHz Less than 0.56µV				
<u> </u>	AM (10dB S/N)	118-136.9916MHz Less than 1µV				
Squelch sensitivity		Less than 0.13µV (at threshold)				
Selectivity	FM	More than 60dB				
	FM-N	More than 55dB				
0	DV	More than 50dB				
Spurious and image	A band	More than 60/55dB (VHF/UHF)				
rejections	B band	More than 60/60dB (VHF/UHF)				
Audio output power		More than 2.0W (with $8\Omega$ load, 10% distortion) 2-condcutor 3.5 (d) mm ( $\frac{1}{8}$ ")/8 $\Omega$				
External speaker conne						

Supplied accessories (\* May differ, depending on version)

• Hand microphone, HM-207

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• DC power cable, OPC-1132 • Controller cable, OPC-837 (3.5 m; 11.4 ft) Microphone hanger

• CD (CS-5100 and instruction handbook PDF) • Spare fuse

For ID-5100E owners, the latest firmware is available for free download from http://www.icom.co.jp/world/support/index.html



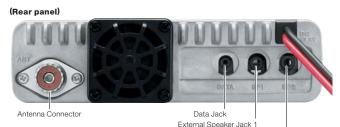


•OPC-1529R DATA COMMUNICATION CABLE RS-232C cable for connection with a PC.

Main unit (Front panel)



SD Card Slot Controller Connector



Microphone Connector

External Speaker Jack 2

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