Review

Icom ID-52E VHF/UHF dual band D-Star transceiver

I was excited to have the chance to take a look at the new Icom ID-52E. D-Star was the first digital mode that I tried out, back in 2009, with a purchase of an IC-E92, which is still in my shack and working well. What would one of the newer models of D-Star portables have to offer, I wondered.

As ever, let's take a look at what Icom have to say about the ID-52E.

The ID-52E VHF/UHF dual-band digital transceiver is the latest in a long line of D-Star handportables from Icom and succeeds the popular ID-51EPLUS2. Two versions will be available globally, the ID-52A for the USA and ID-52E for Europe.

The radio features a large transflective colour display that makes it easy to see outdoors, even in bright sunlight. The size of the display has also been increased to 2.3 inches from 1.7 inches which was adopted on the ID-51E. The ID-52E supports Bluetooth communication as standard. You can wirelessly connect to Android devices with the ST-4001A/ST-4001I Picture Utility Software when the RS-MS1A Remote Control Software installed. The optional VS-3 Bluetooth headset is also available, for hands-free operation.

Features

- *Simultaneous reception in V/V, U/U, V/U as well as DV/DV.*
- *Airband reception is expanded from VHF to UHF (225 to 374.995MHz).*
- *Can be charged via a micro USB connector.*
- *Audio output has been increased from 400mW to 750mW.*
- *The latest D-STAR functions allow you to send, receive and view saved photos on an installed microSD card using only the ID-52EE.*
- Accessories for the ID-51E, including battery packs and microphones, can be used.

In addition to the above, the ID-52E has a variety of other features including DR function with easy set-up, built-in GPS receiver, micro SD card slot, IPX7 waterproof construction (1-metre depth of water for 30 minutes), and Terminal/Access Point modes.

First impressions

Unpacking the ID-52E, the first impression is of a more sizable unit than I'd somehow expected. The build construction feels solid and it's well finished. The front of the unit is dominated by the colour display, which is nice and bright even in sunlight. There are six buttons and a menu/rocker control in the centre of the unit. There is a slot for the micro SD card (make sure you insert the card with the connections facing forward). There's a DC input jack (a charger is supplied), micro USB connector as well as microphone/speaker jacks.

Getting started

Although a good quality instruction manual is provided (for a full manual, you need to go online and download it), I found it relatively straightforward to get started with the radio. Because I do not have a local D-Star repeater in range, my first test for the ID-52E was to get it talking to my digital hotspot and try some D-Star QSOs.

This was a simple matter of entering my callsign into the appropriate field in the rig (the manual guides you through this), changing to the frequency of my hotspot and engaging DV (digital) mode. Having done this, I started to hear the D-Star stations coming through from reflector REF030C that I had set up on the hotspot.

When I tried to call stations, I noticed that the hotspot didn't seem to hear me. Then I remembered a quirk that I've seen on other Icom D-Star radios when using a hotspot. You need to enable duplex, but set the repeater offset to 0. I don't know why this works, but it does and I have seen reference to it elsewhere, so I don't think it's just me. Having sorted that out, I was soon making QSOs.

By chance, one of my first QSOs was with Jonathan, M0JSX who was also using an Icom ID-52E and in fact, you might enjoy taking a look at his YouTube video all about the rig that you can find at https://youtu.be/YeexzvS3dQI. Jonathan was enthusiastic about his ID-52EE and mentioned a couple of features that he loved, which as he put it, that he hadn't realised he needed; the auto-answer feature and the scope. I'll make sure to have a look at those later.

The ID-52E has GPS built in, so can determine your position. You can set it up to send your location

The first utility I tried was the ST-4001I Share Pictures utility, transferring pictures from my iPhone and adding my callsign.

periodically. In fact, I noticed receiving these type of beacons when I was 'tuned' to REF030C, with stations sending these locations that are then displayed on the screen of the ID-52E while the rig announces the callsign in speech. I wondered whether I would find this annoying, but decided I liked it, particularly if you were working or not paying attention to the screen of the ID-52E. This digital version of APRS is called DPRS. In addition, there is plenty of GPS functionality. You can save locations to GPS memories and there's even a GPS alarm, so that if a station comes into a particular area, transmitting a DPRS beacon, an alarm will sound!

Over the next few days, I found myself enjoying using the D-Star reflectors and making QSOs around the world. Audio quality both on transmit and receive using D-Star seemed to be excellent. When using the hotspot, I used the Super Low Power setting of 0.1W, which meant that the battery life was very good indeed. High power is 5W, Medium 2.5W, Low2 1W, Low1 0.5W and SLO 0.1W. A useful range of power levels depending on how you want to use the radio.

The battery can be charged using the supplied charger through the DC in jack, or it is possible to charge using the micro USB connector. USB charging is definitely a plus point as most of us carry a USB charger around to supply our phones. Just make sure you have the correct lead.

In use

The ID-52E has the dualwatch feature that allows you to monitor two frequencies at the same time. It's not full duplex (sorry satellite operators!) but even so, you could monitor the 2m FM calling frequency on one side of the radio and your digital hotspot on the other

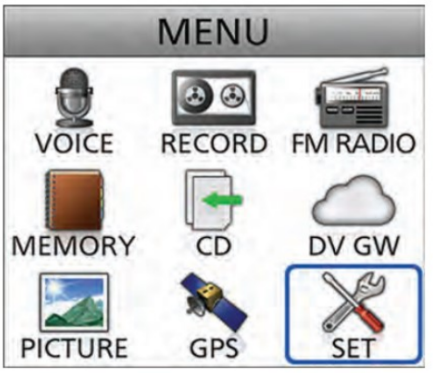
One of the excellent features of the ID-52E is the built-in repeater directory. Long press the DR button and you'll see the repeater directory displayed. You can page through to find the repeater you want, using the select wheel on top of the radio. You'll go through the D-Star repeaters first, organised by band and then the analogue (FM) repeaters.

A really handy feature uses both the GPS and repeater directory to find your closest repeater. Simply press the Select button, click on Near Repeater and then indicate whether you want to search all repeaters, FM repeaters or D-Star repeaters. You'll then be shown a list of repeaters sorted by distance from where you are.

My only minor criticism was that as far as I could see, the repeater directory only included UK repeaters. If, like me, you're lucky enough to live close to the coast, then your most accessible repeaters may not actually be in the UK! Mine are in the Republic of Ireland and I'm sure there are places on the channel coast where it's easier to work a repeater in France than in the UK. Of course, in this situation, there is nothing to stop you adding your own repeaters into the directory, which is easiest done on the computer. Software is available to do this and in fact, if you look at the latest TX Factor video, Bob, GOFGX shows how to do this. You can also add stations into the repeater list, without a computer, from the keypad.

If you have a D-Star repeater close to you, then you will be able to use the ID-52E to link and unlink different reflectors- it's all quite straightforward once you get used to it.

As Jonathan, MOJSX had mentioned the Auto Reply feature, I thought I'd see how this worked. The idea is that if someone calls you on D-Star and you are not available, then you can configure the ID-52E to either play a recorded voice message of up to 10 seconds (assuming you've put a micro-SD card in the rig) or to send a position report based on your GPS co-ordinates. Clearly, the rig needs to be switched on to do this, but if the rig was on in the shack with the volume turned down because you were busy, this could be a good way of telling people you are around, but they should call back later.



Menu display of the Icom ID-52E.

Jonathan also mentioned the scope function. This is a bit like a simple pan adapter and allows you to take a look at a chunk of the RF spectrum so that you can see where there is activity. There are various modes available that allow you to determine what part of the band you want to look at. It could certainly be useful in areas that you are unfamiliar with.

The ID-52E features both a QSO Recorder and Voice Recorder function. The QSO recorder can be set to record all QSOs onto the Micro SD card. Both outgoing and incoming transmissions are recorded. The files are organised by folder based on date. Once you switch the QSO recorder on, it remains on, even if you switch the ID-52E off and back on again. The Voice Recorder function allows you to use the ID-52E as a Dictaphone (remember those?), you press the PTT to record. As with the QSO Recorder the files are stored on the Micro SD card.

Tim Kirby, GW4VXE
longworthtim@gmail.com