

Anytone

AT-779UV 2m/70cm

dual band transceiver



Measuring just 124mm (W) x 101mm (D) x 36mm (H) the Anytone AT-779UV is still a dual band VHF/UHF 25/10/5W transceiver.

The Anytone AT-779UV is a tiny radio and, with a 12V accessory plug, it would be very easy to put in and out of a car.

Anytone is a brand that, five years ago, few of us would have heard of. But, they have developed a reputation for radios that do what they should, without the quirkiness that we have seen from some manufacturers. Chris Taylor told me about the AT-779UV a few weeks ago and that he was working with Anytone to have it sent out from the factory with all the UK simplex channels and repeaters pre-programmed. I was very interested to get a chance to see the rig and try it out.

Something that Anytone have done in the last 12 months or so is upped the game on their packaging. I'm sure that many of us wouldn't worry terribly about the 'unboxing experience', but on the other hand, first impressions do count! The box is nicely printed and constructed and the rig is neatly packaged. Getting the rig out of the box, the

next impression is 'that's small!' I'm fairly sure that I've had handhelds that have been bigger.

Out of the box

The power cable is terminated in what I'd call a 'cigar-lighter plug', making it easy to install quickly in a car and, of course, many 12V power supplies have a suitable socket on them. The rig feels reasonably substantially made and the microphone is also nicely finished.

The rig switches on with the large dial on the right of the rig, which you might instinctively think of being the channel change knob! It's not, it's On/Off/Volume. Channel change is achieved with the up/down keys on the front panel, or perhaps more conveniently, from the microphone. In fact, all the front panel controls, with the exception of On/Off/Volume, are accessible from the microphone.

The colour 1.44 inch TFT display is quite attractive and is easy to read. The AT-779UV has a single receiver, but you can easily set the set up with a Priority Channel. For

example, I am writing this whilst listening to the local repeater GB3SP, on 70cm, with the rig checking 145.500MHz as the priority channel. I have set up 145.500 on the second VFO, so if I hear someone I want to call on simplex, I can quickly press the 'Main' button, to switch over to that VFO, call them and then move to another simplex channel, by means of the Up/Down buttons.

Chris Taylor from Moonraker has spent considerable time, working with Anytone, on the 'codeplug' to go into the AT-779UV. All UK repeaters and simplex channels are programmed up (tell Chris if there's something missing!). As you might hope, all the repeaters have the correct CTCSS tone assigned to them, so you can just find the channel for your local repeater, hit the PTT and you should be able to access the repeater.

The AT-779UV has three power levels. The specification quotes the narrow band power as being greater than 20 watts and wide band power as greater than 18W. I measured the highest power level on 2m at around 20W, the medium power at about 7W and the low power setting at about 3W,



You can change the power level to high from the microphone control at the touch of the button.

with the 70cm power being just slightly less. What makes the AT-779UV in this configuration particularly great for Foundation licence holders is that the default power for all the repeaters has been set to medium (ie the '10W' level). If you are an Intermediate or Full licensee, then you can change the power level to high from the microphone control at the touch of the button, or, if you always want to use high power on a particular repeater, you can read the config from the radio back to your computer, adjust the setting and then write the config back to the radio. As it was, I found that most of the time I could quite happily stick at using the 10W level for most of my VHF/UHF FM activity. There's no cooling fan on the AT-779UV and I found that the heatsink got quite hot at the higher power level if I 'went on a bit'. On the lower power settings this was less noticeable.

All the UK repeaters are programmed in, as are the simplex channels as well as the PMR446. PMR446 channels are set to receive only (there is a Tx Off check box that can be configured to do this on each channel). To find out what is going on at your location, just hit the scan button (Function and 4 on the microphone keypad) and the rig will start scanning through the channels. It will stop where it finds activity. Slightly curiously initially, although the repeater channels had been programmed to require the correct CTCSS tone, I found the rig would sometimes stop on a channel where there was a repeater, albeit with a different CTCSS tone. A little investigation later, it turned out that 'Squelch Type' needed to be changed from 'Carrier' to 'CTCSS/DCS' for

each channel. By the time you read this, the Moonraker 'codeplug' should have been changed to reflect this.

I found the rig one of the more sensitive that I'd looked at recently, doing a good job of receiving weak signals on both 2m and 70cm. I looked at Adjacent Channel Rejection, which was quite acceptable, but if you have some strong signals locally and are using a big aerial you may notice some issues. If you are mobile or in a quieter RF landscape you shouldn't see any issues.

On transmit, there's always a lot of interest in the spurious emissions of the cheaper radios. I had a quick look at the Anytone AT-779UV using some basic test equipment. It was certainly poorer than a more expensive radio from one of the big three that I had on the bench at the same time, although not bad enough to raise serious alarm bells. It's probably unlikely that anyone would consider running an AT-779UV through an amplifier – but I'd advise against it.

Programming software

Although the rig comes ready programmed, it may be that you would like to change some settings or even add a new repeater. The rig comes supplied with a USB programming cable. At the rig end, the cable plugs into the microphone socket. Windows programming software for the AT-779UV can be downloaded from the Moonraker site (other versions of the AT-779UV software exist but seem to be aimed at a low band version of the rig). I found the software installed without any problems. The programming

cable requires the Prolific drivers to be present on your computer, which as you may know, can be problematic at times. Fortunately, the correct drivers were already installed on my machine, so the programming software recognised the presence of the rig straight away and I was able to read the configuration from the radio into the software, inspect it, make any amendments and then write it back.

On the air

Transmitted audio reports using the AT-779UV were good (thank you to Steve, GW7FBV). Received audio was easy to listen to. The speaker is on the bottom of the rig, so depending on how you plan to mount or place the rig, an extension speaker may be of help. You will find that 2W of audio is available from the rig, which should hopefully be enough for all but the noisiest environments. I enjoyed having all the channels available to scan easily and, as ever, discovered some new channels to listen to. Depending on where you are, PMR446 and the marine band may be interesting to listen to – the Anytone works well as a receiver in these bands.

Overall

The Anytone AT-779UV is a tiny radio! The fact that it is supplied with a 12V accessory plug means that it would be very easy to put in and out of a car, even a hire car for some listening as you were travelling around. With Moonraker's 'codeplug' of all UK repeaters and simplex channels pre-loaded, scanning is very straightforward and you should soon find any activity. With the ability to scan all channels, you should have the fun of noticing repeater channels which are normally quiet coming into life as conditions improve.

RF performance on receive is remarkable value for the money, with very good sensitivity. With only basic RF testing facilities available for my review, I felt the level of spurious outputs on transmit was acceptable but it would be nice to see it lower.

Foundation licensees may find the default power level of 10W as set in the Moonraker codeplug in the AT-779UV very convenient.

I enjoyed the AT-779UV. It's well set up out of the box to allow you to make the most of the VHF/UHF FM activity in your area – and beyond! Many thanks to Chris Taylor of Moonraker for the opportunity to look at the rig. It's available at £89.95 from Moonraker Ltd, www.moonraker.eu.

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