

Recorder for use with bat detectors – Edirol R-1 solid state
By Richard Fox

Are you pondering over the question of which recording system to use with your bat detector(s)? Unless of course you are rich or lucky enough to possess one of those ‘new’ detectors with their built-in recorders!

Having struggled with a Sony NetMD MP3 recorder for the last two ‘seasons’ and not easily able to transfer the recordings via Batsound to produce Sonograms, I ventured into the Ebay world to try and successfully bid for a cassette recorder such as the Marantz CP430 but always outbid. Looking deeper into recorders and the new solid-state models, I was very interested in the Edirol R-1, which claimed to be just what I needed for wildlife recordings.

I ordered one from Nusystems via the Internet at an all-inclusive cost of £320 and upon receipt two days later set about getting to grips with the recorder, not that it was difficult, on the contrary, a very easy to understand and use recorder. Lucky as I needed it for an emergence survey the same night as day of delivery!



The dimensions are 99mm wide by 130mm high with a depth of 28mm so even with the headphones and detector to recorder cables fitted, the unit fits into most pockets! More to the point, is capable of single handed use.

The unit comes with an AC adapter, 2 x AA batteries, 64Mb compact flash card, USB connector, a very comprehensive manual and a soft carry case (useful for protection in gadget bags).

For use with bat detectors, the only buttons you need are those along the bottom row, from left to right - stop – play/pause – record. All these can be reached by your thumb whilst still holding the unit in the same hand. Just remember to adjust the volumes of both line in and microphone leads – the unit comes with both at their lowest setting.

The manual is very easily understood (thank goodness as I hate complicated ones!) and once the compact flash card has been formatted and some initial settings tweaked, away you go! Settings for the LCD display, backlighting and other operation modes can be user defined and easily carried out with reference to the manual.

For bat detector use there are two wav. file settings and the 64Mb card will give you 3 mins recording time at 24bit wav setting or 5 mins at 16bit, however I use the 1Gb card from my digital camera, which provides a more realistic 90 mins recording time at the 16bit setting, more than enough for a night's recording as a set of batteries will last about two hours. There are a further seven MP3 settings, but these are mainly for non-wildlife use as the recorder is also for music enthusiasts.

Ease of use – could not be more simple! Connect your detector (I use Petterson D100, D230 and a Tranquillity transect) to the line in socket on the side of the recorder and a set of headphones (MP3 player ones will do) to the 'phones socket on the top then press the large white button on the right on the bottom row. The recorder displays 'record standby' and the button pulses red until you either run out of 'sleep time' as set by you or press the button again when recording starts instantly. To stop, either press the stop button (on the left same row) or the pause button – the middle one. To record again either repress the pause button if that's the one you used, or press the record button twice (the first press will enter the standby mode). Do not be put off with reference to 'optical' in relation to the 'phones, standard mini jack phones are compatible.

Now that you have some recordings from whatever detector used, transfer to the computer is just as easy. Connect the recorder via the USB cable to a USB port (2.0 preferred). You must use the AC adapter here otherwise battery drain will be excessive, my only criticism. Once connected the computer will recognize the Edirol R-1 as a 'mass storage device'.

In Batsound, you can access the recordings direct from the recorder without downloading or you can record the sounds onto a CD or the hard drive using your preferred program(s).

The quality of sonograms has been excellent from the Tranquillity Transect. I have yet to fully test the combination of Edirol R-1 and the D230 although I would expect similar quality given the limitations of Frequency Division sonograms. Recordings from the D100 to CD have been of a professional quality.

There are several recorders on the market capable of being used for ultrasonic recordings and it is a case of 'horses for courses' and of course how much one is prepared to pay. I can say that even with the limited use I have been able to have this 'season', I have purchased a thoroughbred, not only for the quality of the unit, both build and sound reproduction, but its versatility for use with all forms of wildlife with the use of its in-built stereo microphones or specialist microphones.