

of synchronising an internally generated 10 or 16Hz blanking signal with the actual Woodpecker signal. As the Woodpecker PRF (Pulse Repetition Frequency) is accurate to 10ppm, this meant that once synchronisation was achieved by means of a front panel control, the interference could be removed.

However, if the pulses were stretched, then the blanking pulse width had to be increased to cope — eventually resulting in audible loss of the desired signal. Also, with two Woodpeckers going at once, only one was likely to be blanked. Despite this, the unit was efficient most of the time — unfortunately even when the Woodpecker had gone if you forgot to switch the unit off!

The Datong Answer

Datong, not unreasonably, do not provide circuit diagrams with any of their products, desiring to protect their designs from being copied (the Woodpecker Blanker is the subject of a Patent), servicing their own products very quickly. However, it is a right pain for a reviewer! Mind you, AEA did not supply a circuit with their Woodpecker blanker either — so one gets used to it.

We will therefore have to limit ourselves to commenting on what they claim for the performance and what actually happens. As with most Datong products, these seem to be one and the same thing and Datong look set for another winner. Let me enlarge on this.

The SRB2 blanker is totally automatic, unlike the AEA model, and herein lies one of its main advantages. No synchronisation, pulse width, or other adjustments are needed in use. It connects into your system in two places — between the antenna and receiver (or transceiver — it copes with normal transceiver RF power outputs by RF sensing using an internal relay), and between the external speaker jack, and a speaker. Again, a difference to the AEA model which only blanked the receiver input, whereas the Datong blanks both RF and audio.

Power requirements are +11V to +16V at around 200mA and the unit comes with most of the required connectors (phono's for audio, DC coaxial connectors for the voltage supply, and SO239's for RF). It is housed in a very smart and durable black case, and as always with Datong



Rear view

products, is very neatly assembled and presented. The internal construction cannot be faulted, with two pcb's mounted back-to-back. A good set of instructions were supplied (although they looked temporary — this was an early release). Front panel controls are ON/OFF, 10 or 16Hz (usually left at 10Hz which is the more common), and IN/OUT (so that the unit can be left powered up, but not in circuit — as described later). A red LED shows when the unit is actually blanking.

Internally, the drop out time is adjustable, as is the threshold level of interference at which the blanker becomes active.

In Use

Datong claim that the blanker will remove virtually all forms of Woodpecker interference, including multiple Woodpeckers, stretched pulses, delayed pulses and even 'peckers that are the same strength as wanted signals. As I said, we don't have a circuit to analyse, but we do know that it compares an internally generated clock, running at either 10 or 16Hz (this is the only switch you might need to adjust), with the repetition rate of the interference. Once a match is found, the unit goes into action, tailoring the width, number and position of the blanking pulses to suit. In theory, this will be a great advantage over the AEA unit, which generates fixed width pulses which may have to be continuously varied manually by the user.

In practice, the Datong theory is upheld. With the unit connected in circuit, once the Woodpecker appeared it was a matter of a couple of seconds at the most before there was no sign of it. With "good" Woodpecker signals (i.e. not stretched or multiple) it was very difficult to even detect the blanking action of the device. With wider pulses, the blanking was still totally efficient, but you could hear a slight 'chuffing' noise as the holes of silence became apparent. Much more preferable than the Woodpecker signals though!

It even works on multiple Woodpecker signals, as claimed, and at near wanted-signal strength levels.

Datong do point out that it will also occasionally lock on to other forms of interference if the repetition rate looks 'right' to the internal circuitry — this isn't a disadvantage though, unless the interference happens to be extremely wide, when there will be so much blanking that the signal will suffer. In such cases, it is better to switch the unit out of circuit.

Conclusions

A marvellous product, well recommended if you have trouble with the Woodpecker — and who doesn't? It has a lot of advantages over other blankers, and the major extra that it is in essence, as claimed, automatic. At around £86 inc VAT it will probably save your frayed nerves when listening for that juicy DX.