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## **SC110 MK 3 - FREQUENCY OUTPUT OPTION**

The setup of this option is different from the handbook.

To use this a connection must be made to the serial port and a terminal programme run on a computer. The setup is 9600,N,1 with no handshakes.

The unit accepts the required value as a 'PERIOD' for the required square wave. It is programmed by sending the string:

Pxxxx#

Where xxxxx is a decimal number between 230 microseconds and 65535 microseconds being the period of the waveform.

The *#* is a delimeter and it acts upon the information as soon as this is sent.

The stability and absolute accuracy is as good as the main clock. The resolution of the timebase is 1.2207 microseconds so not all values are settable. Internally the number you supply is multiplied by 256 and divided by 625 to give the number of counts for each half cycle. The remainder is ignored. Therefore you can work out the exact frequency it will output by doing the reverse calculation on the whole number of counts that it will work with.

It continues operation for as long as the clock is powered.

A terminal programme is available on the AWR Downloads page of the website called 'Windisp'. A configuration file used for the Microstep box can also be used for the clock.

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