

## **The Watch-O-Matic Single-Hander's Watch-keeping Alarm**

Now that I'm sailing single-handed aboard Tystie, I need a good alarm to enable me to cat-nap effectively. I was using a clockwork kitchen timer for a long time, until it became unreliable, but in any case, with both this and the digital kitchen timers, they only sound for a short period. If you wake up and the timer is no longer counting down, but you didn't hear it sound, you are left wondering "did I fail to set it going, or did I sleep through it, and if so, for how long?" So I've devised an alarm which keeps sounding until I get up to the watch-keeping position and silence it, and which is loud enough to wake me. The title pays homage to Wallace and Gromit's "Cracking Contraptions". Here's a mail-order shopping list for the components at a UK source:

The main component is the run-back timer:

<http://uk.rs-online.com/web/p/time-delay-relays/5362779/>

Also at RS components:

part no 706-4073 pushbutton on/off switch

part no 287-6411 6" x 3" x 2" enclosure

part no 535-8310 slow pulse piezo buzzer (you could substitute 622-1477 high/low tone buzzer, or 622-1506 fast pulse buzzer)

part no 336-176 12v green LED

part no 336-081 12v red LED

The layout can look something like this:



The Watch-O-Matic counting down to zero



### The run-back timer

All components are mounted in the lid of the enclosure. The run back timer is central, with the pushbutton switch to the left hand side, the buzzer to the right hand side, and the red and green LEDs wherever you like. The wiring is simple - the timer is a double pole double throw switch, and the 12v +ve and -ve supply can be taken to each pole (the +ve via the pushbutton switch). Then connect the buzzer and red LED between the two contacts that make when the timer is at zero, and the green LED between the two contacts that make when the timer is counting down.

The Watch-O-Matic has proved to be very successful on the overnight and ocean passages that I've made with it.