

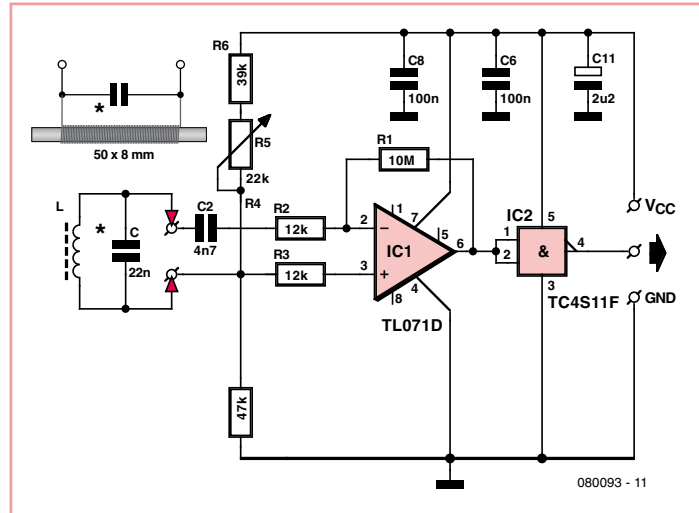
Pulse Receiver

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The compact circuit presented here is perfect for receiving the signals from pulsed fixed-frequency transmitters. Chest straps from several well-known brands (Polar, Huger, Kettler, Crane, Outbreaker, ...) transmit a short signal burst with a frequency of 5.3 kHz. These signals can be received and used in your own projects, as the author shows on his website ^[1].

The circuit uses a ferrite rod with 1000 turns of 0.2 mm enamelled copper wire and a (tuning) capacitor to receive the signals. The value of the capacitor (22 nF) has been selected for use at a frequency of about

5.3 kHz, but this can of course be adapted for use at different frequencies. The received



signals are amplified by opamp (IC1), after which a NAND gate (IC2) turns them into a nice waveform with straight edges. For the supply you can use any DC voltage source in the range of 9 to 18 V. There is a board layout available ^[2], which can be ordered via ThePCBShop ^[3].

(080093)

Web links

[1] <http://peterborst.gmxhome.de/sigiborst>

[2] <http://www.elektor.com/080093>

[3] www.thepcbshop.com