

# MAGNETIC LOOP FOR 80m - 40m

## EVOLUTION OF A PROJECT ...



**December 2002:**

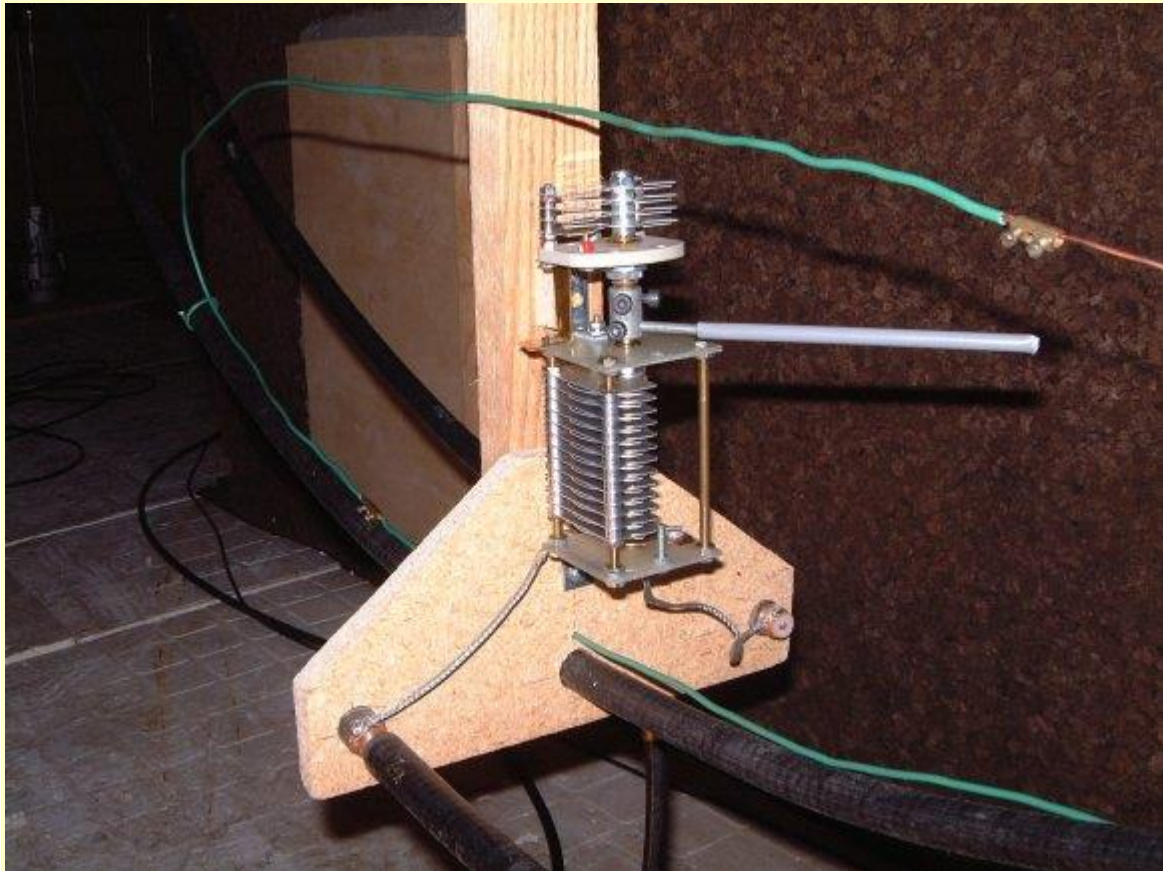
Two turn CELLFLEX 1/2"-CABLE-LOOP for 80m - 40m, Diameter 1.6m, Spacing 0.1m, Capacitor 150pF max.





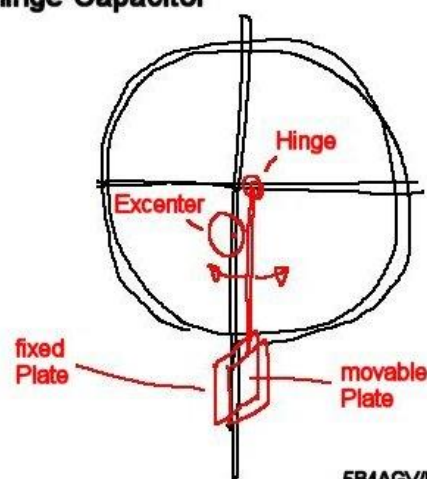
**June 2003:**

Same loop at final place in attic



Detail of coupling loop and experimental capacitor  
(theoretically 128 pF/3.2 kV for 80m, 14 pF/5.6 kV for 40m at 50 W)

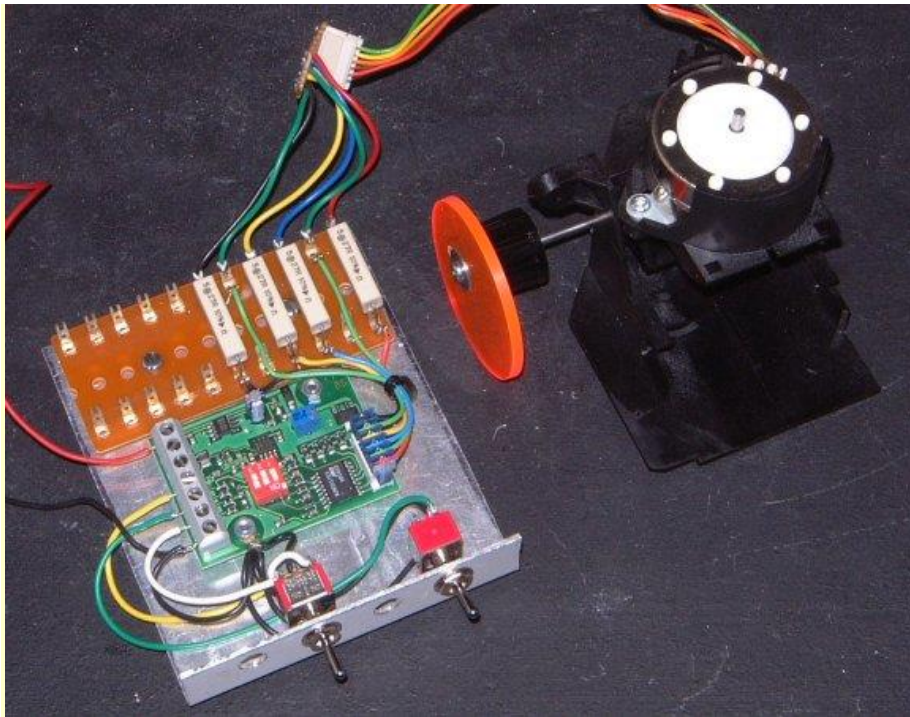
**Hinge-Capacitor**



**October 2003:**

Planned Hinge-Capacitor, Remote Control via Motor-driven Excenter  
(Plates 25x25cm, Spacing at 80m =  $625 \text{ cm}^2 / 128 \text{ pF} = 4.88 \text{ mm}$ ,  
Spacing at 40m =  $625 \text{ cm}^2 / 14 \text{ pF} = 44.64 \text{ mm}$ )





**December 2003:**

Stepper Motor Remote Control Experimental Hookup

(saia-burgess Unipolar Stepper motor Driver SAMOtronic 101, 4 Series Resistors,

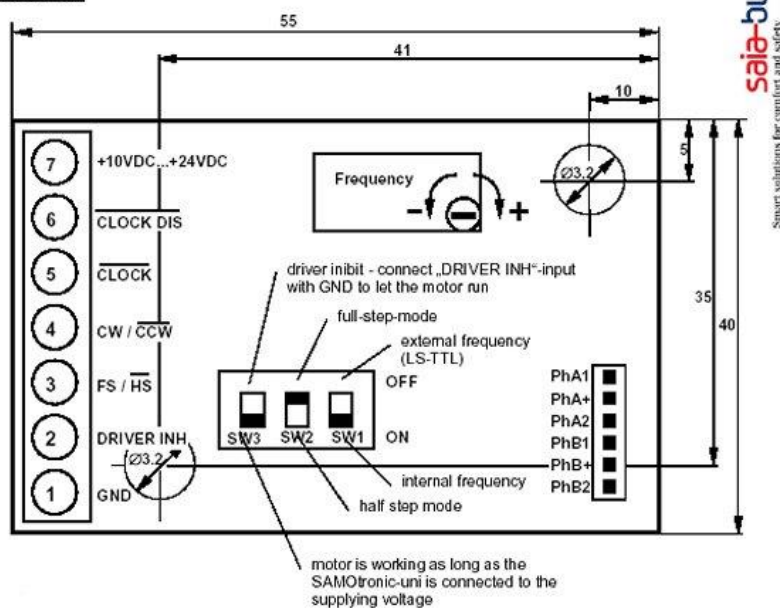
Excenter Disk, attached to Stepper Motor and Worm Drive Gear from dismantled HP DeskJet-Printer.

Full Step Mode: 2 R/min, Half Step Mode: 1 R/min, adjustable)

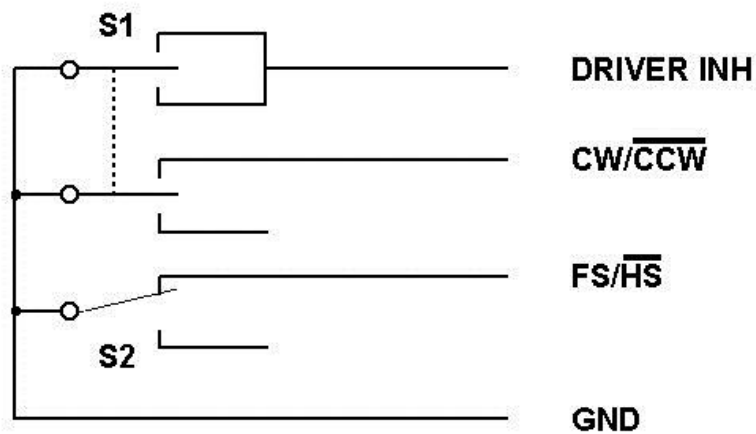
#### Short Reference

#### Unipolar Stepper Motor Driver SAMOtronic-uni

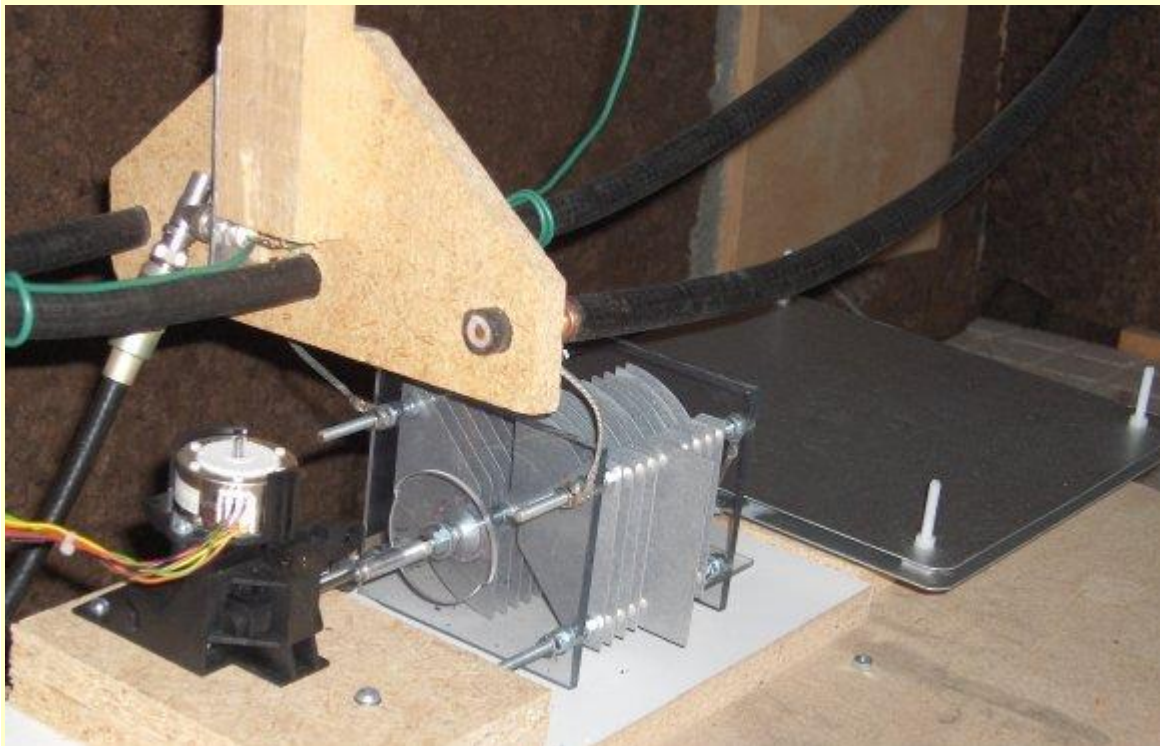
##### 1. Overview



[Download Short Reference SAMOtronic 101 from saia-burgess Page](#)

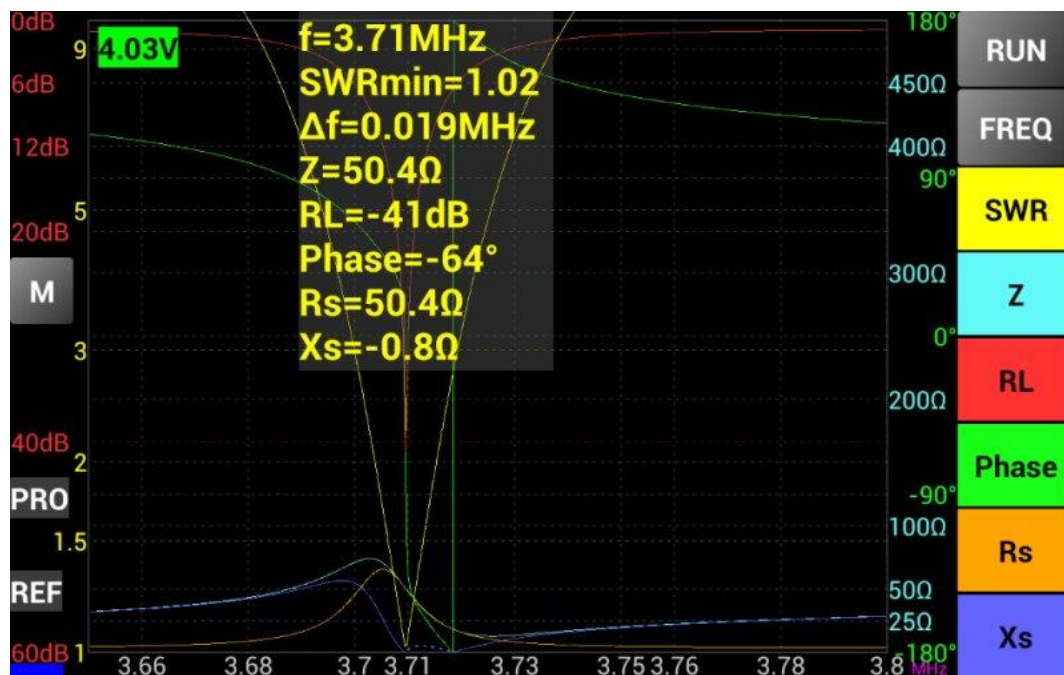


**S1** = FORWARD/REVERSE, **S2** = FAST/SLOW



**June 2005:**

Remote-controlled 68pF variable Capacitor + parallel 80pF fix  
 (For 80m only, I dropped the Hinge-Capacitor-Idea and added 40m to my [Indoor Multiband Dipole](#)!)



**Re-activation in 2015**

...does not look too bad, does it?