Here we go loopty loop

Practical magnetic loop antennas for the frugal QRPer

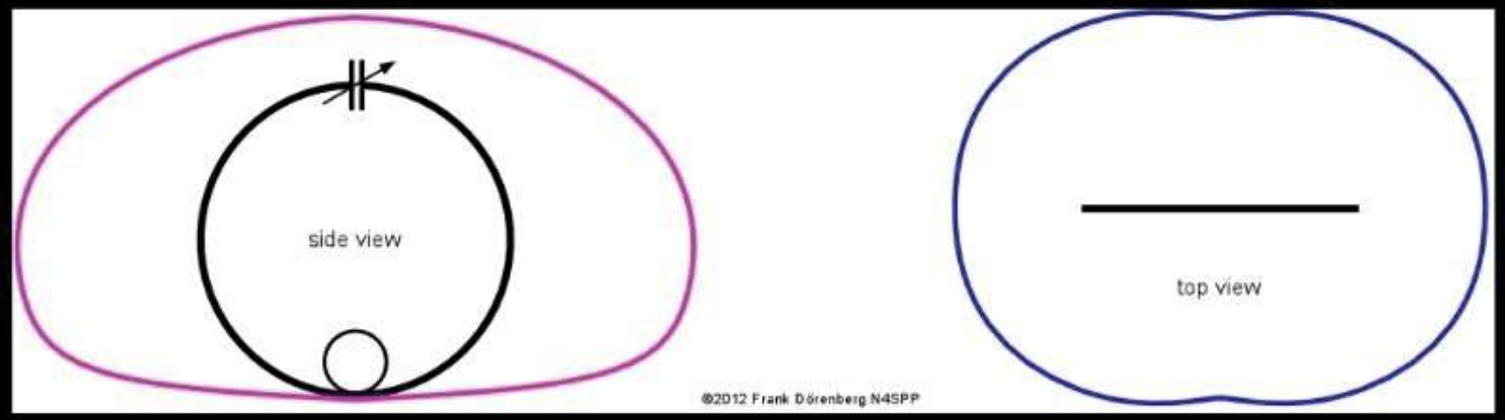
FDIM 2017, adapted for MARA 2026

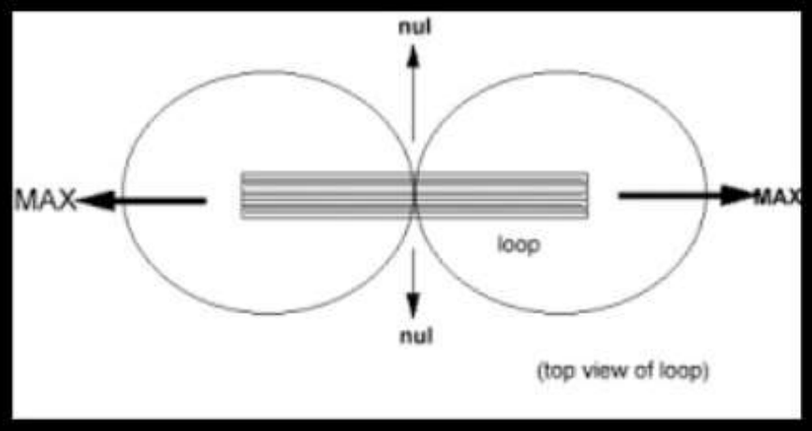
Howard Zehr K4LXY

Why a small loop?

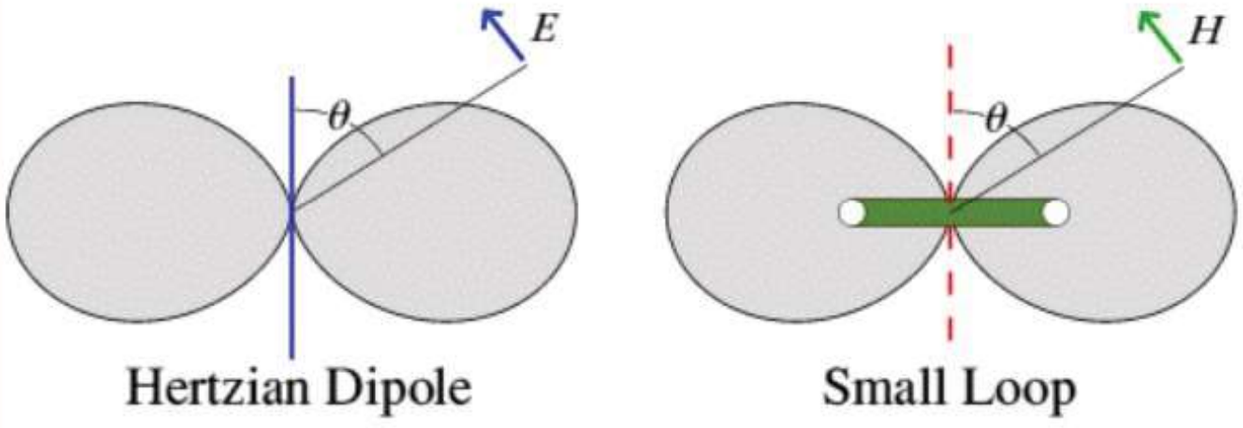
- Portable, quick-setup
- No radials/counterpoise
- Practical & inexpensive to build
- Not too dependent on height
- Low noise and ability to null noise

- ahars.com: if well-built, equals other antennas on 10/15/10M (VK5KLT)


side view
top view
©2012 Frank Dörenberg N4SPP


nul
MAX
MAX
loop
nul
(top view of loop)

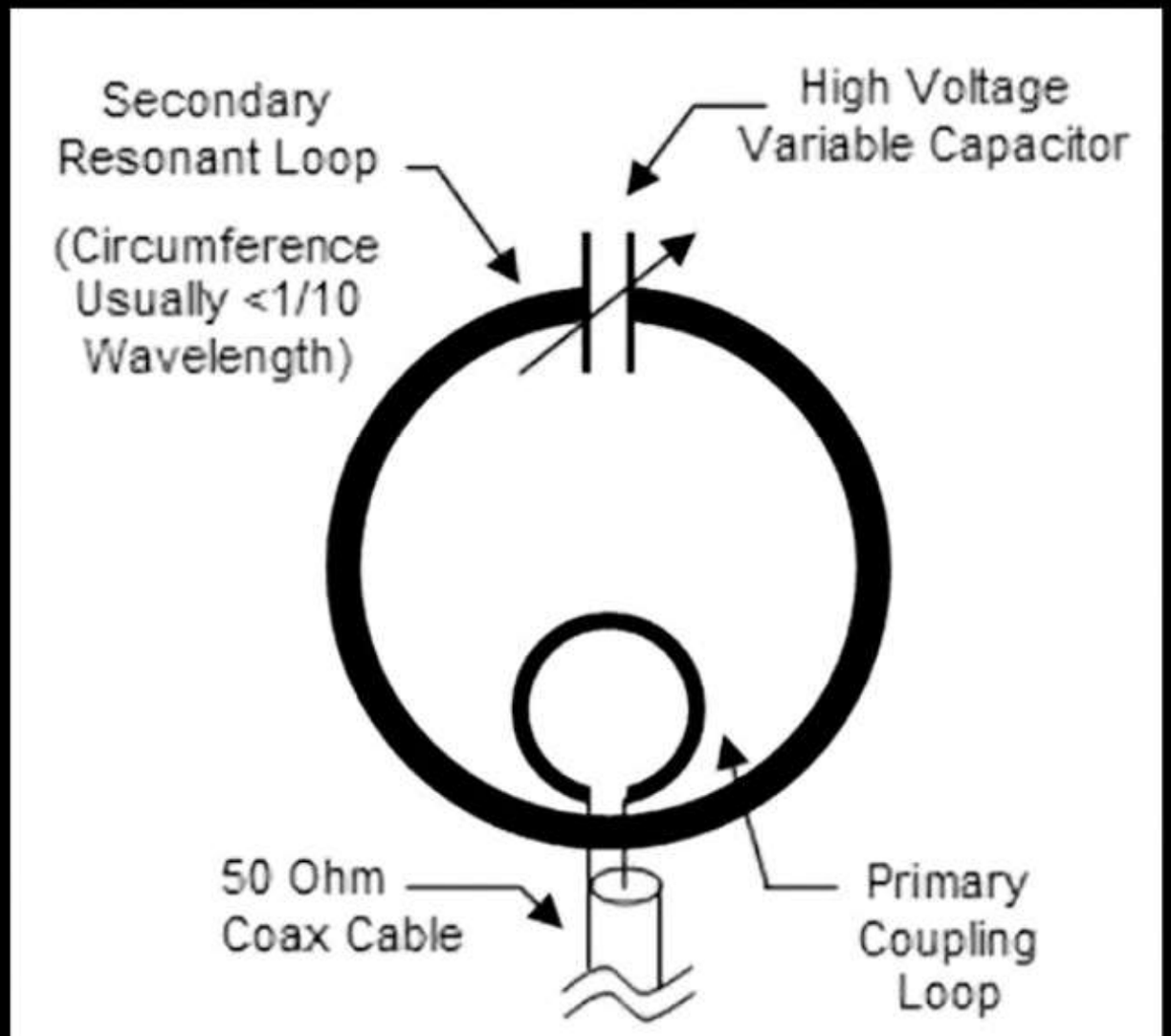
Power patterns shown shaded.

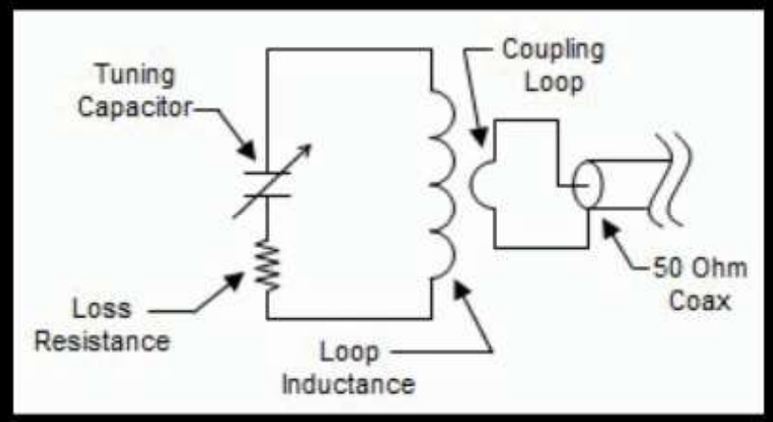


Hertzian Dipole

Small Loop

Inductive coupling



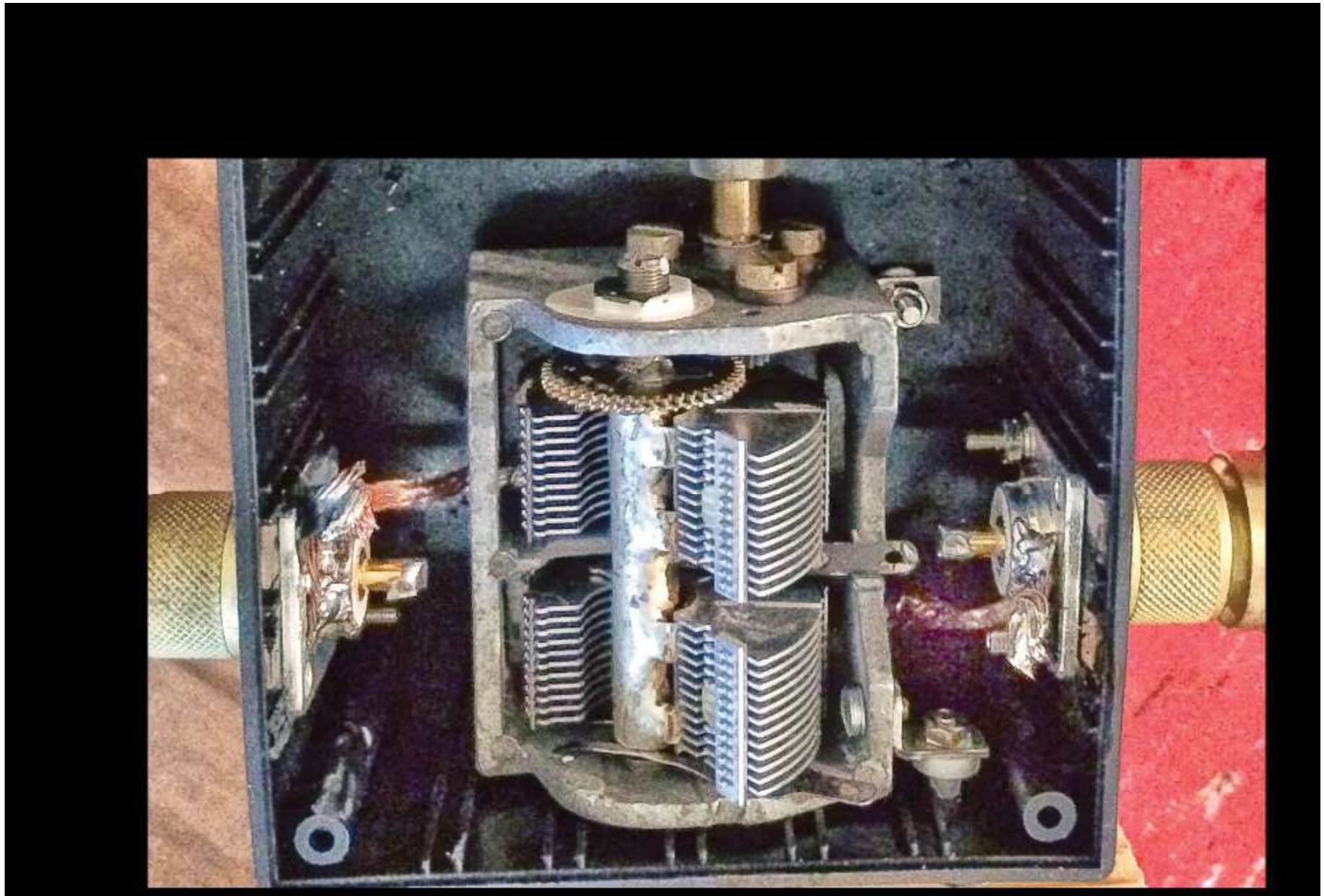

Tuning
Capacitor
Coupling
Loop
50 Ohm
Coax
Loss
Resistance
Loop
Inductance

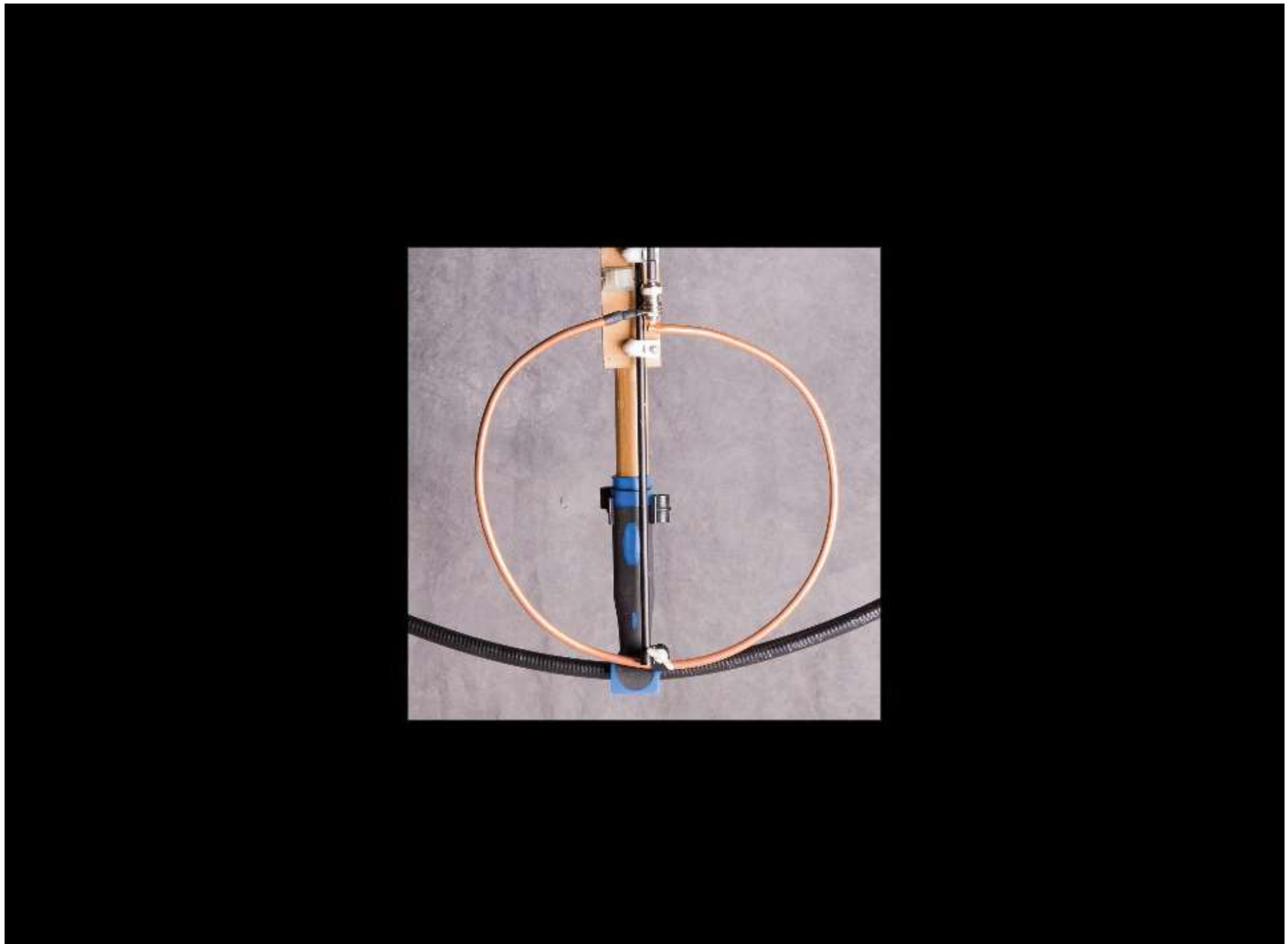
Coil sizes

- Circumference of outer coil 12ft (9-15).
- Coupling coil – 1/4 or 1/5 of outer coil
- (Note: for me, mostly 30M and 40M)

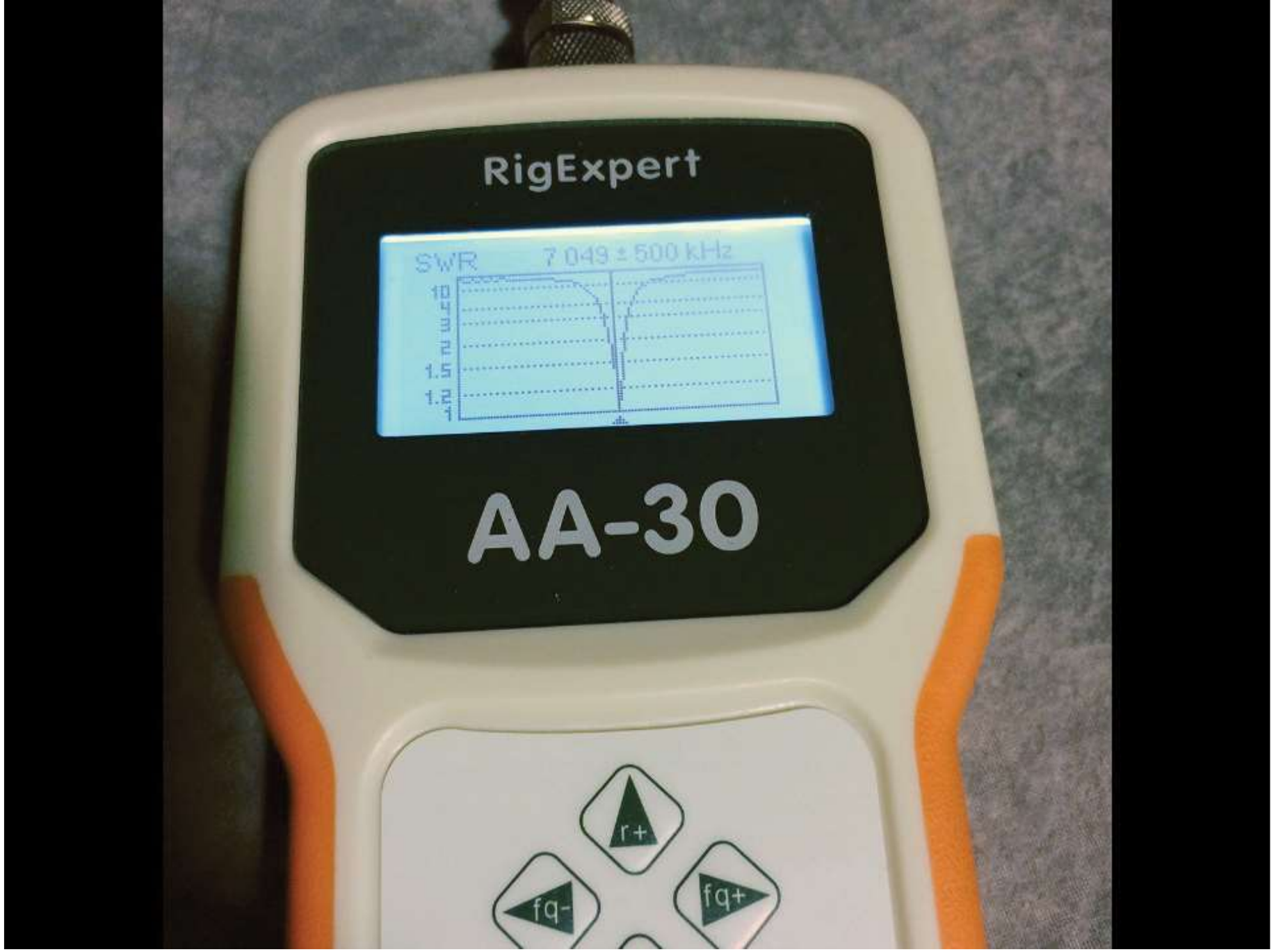
Challenges

- LC circuit with high Q, thus sharp tuning
- Low feedpoint impedence
- Potential for high loss if SWR above 1.5 or if poor connections, e.g. to/in capacitor
- Affected by nearby ferrous material

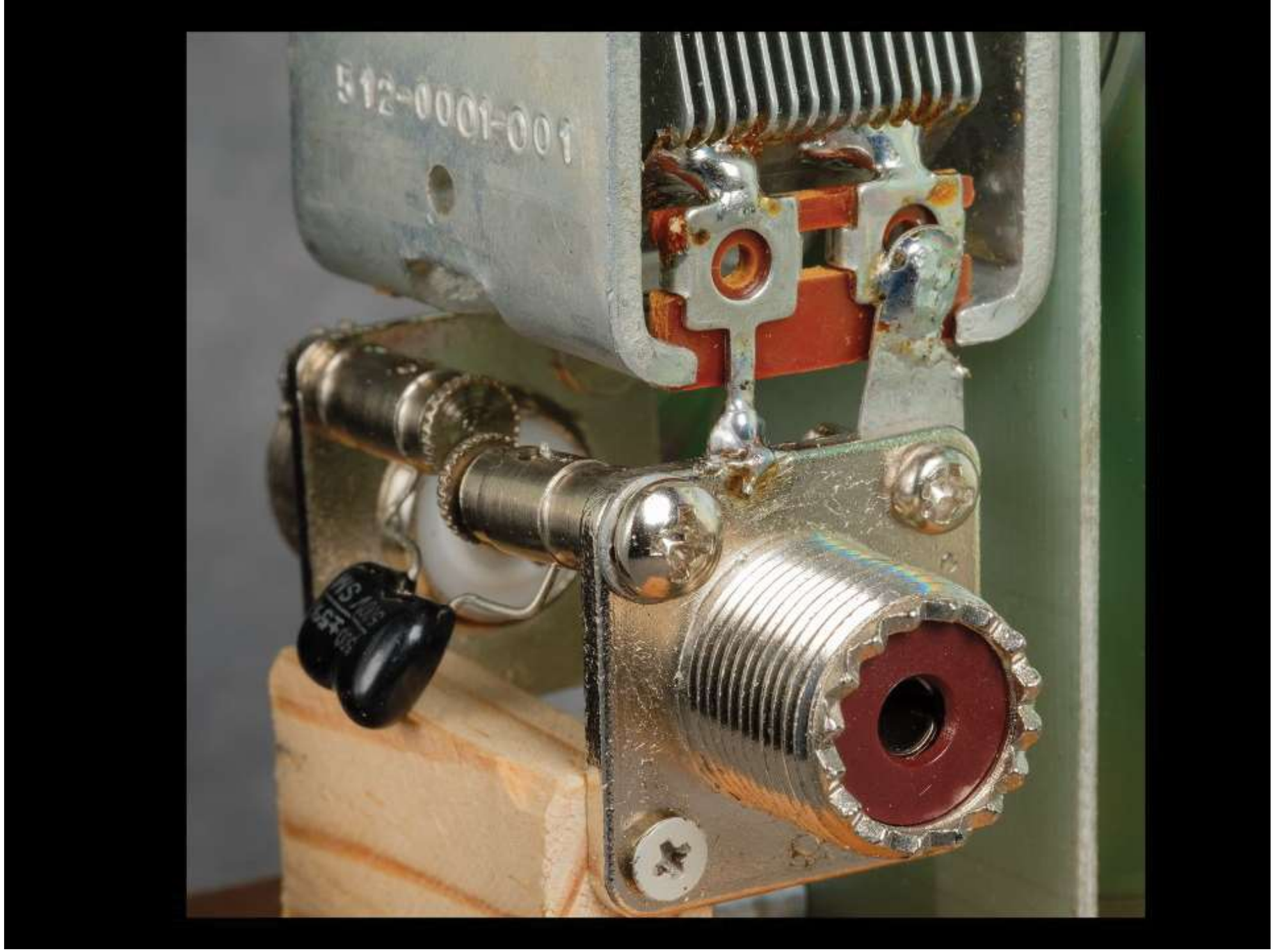





SEEKER
READ
RL
A


RigExpert
SWR
7 049 ± 500 kHz
AA-30
r+
fq-
fq+


AMATEUR RADIO
CLUB
5RP
INTERNATIONAL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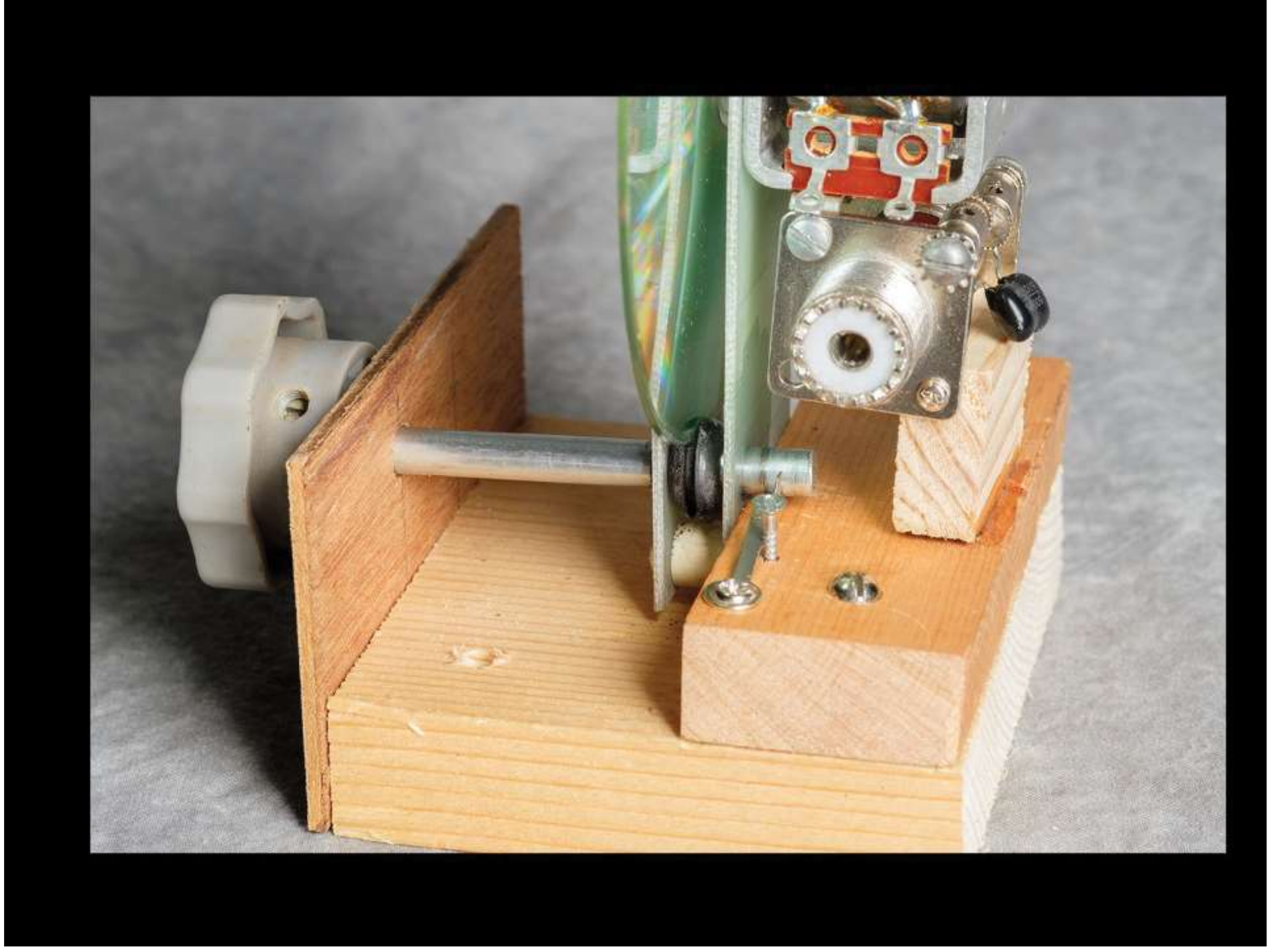


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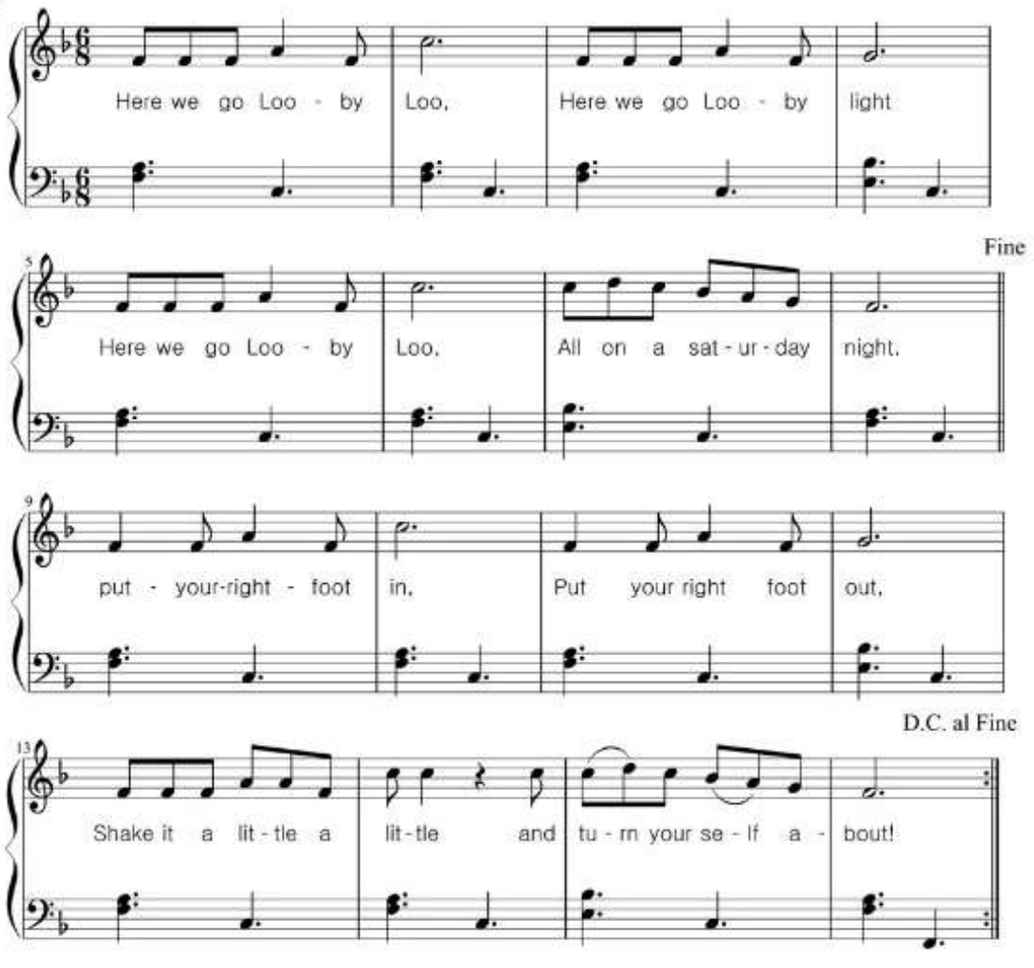
Here we go loopty loop

HERE WE GO LOOBY LOO

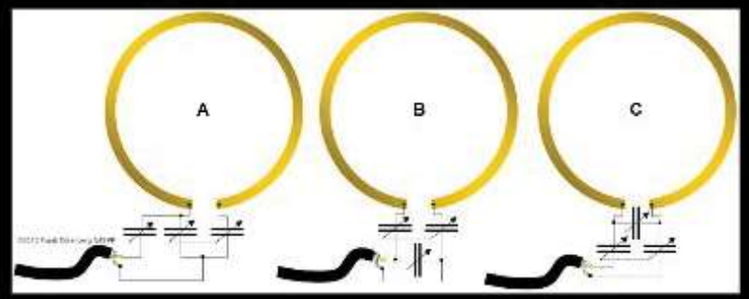


FOR THE EDUCATIONAL BENEFITS & ACTIVITY IDEAS FOR THIS CHILDREN'S SONG GO TO GC-MUSIC.COM/BLOG/HERE-WE-GO-LOOBY-LOO-ACTION-SONGS

Here we go loopty loop

Here we go loopty li

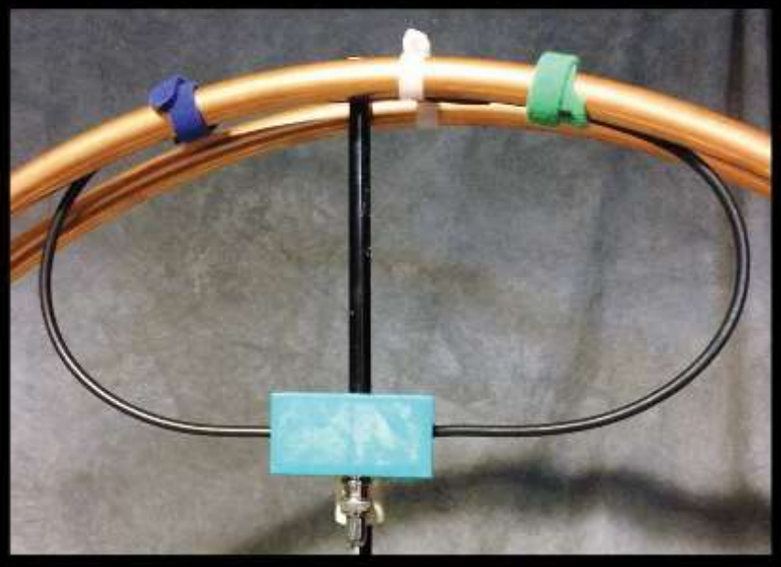
Here we go loopty loop



All on a QRP site!

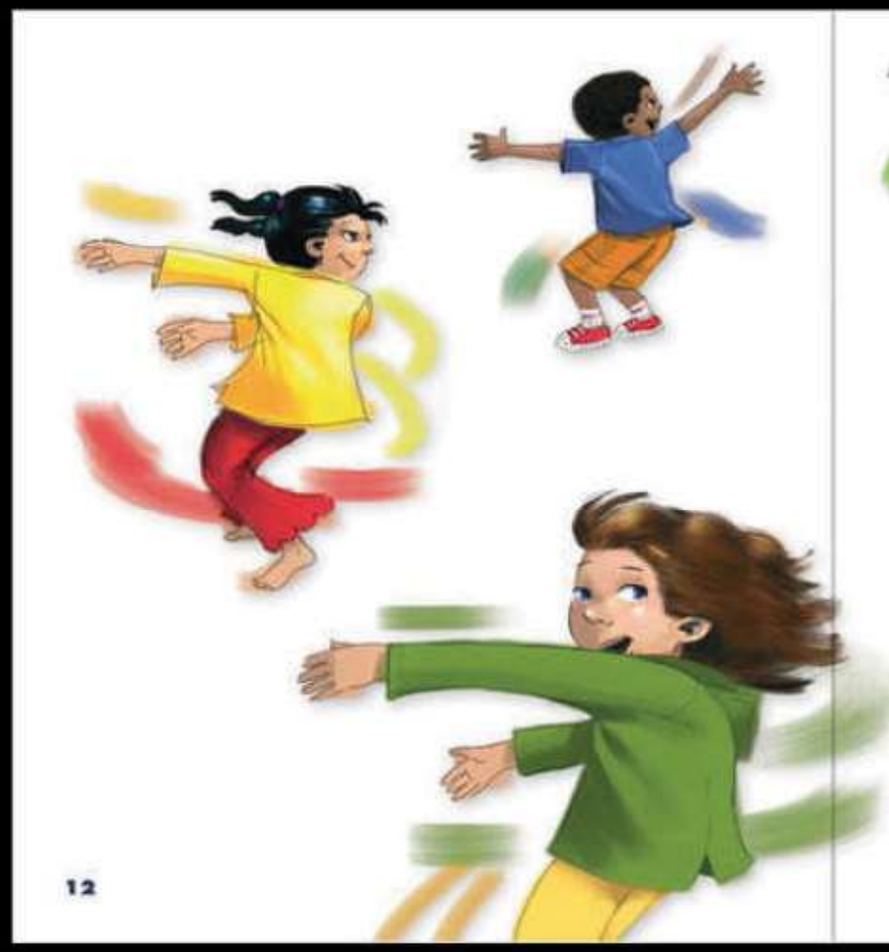
Use push your feed loop up

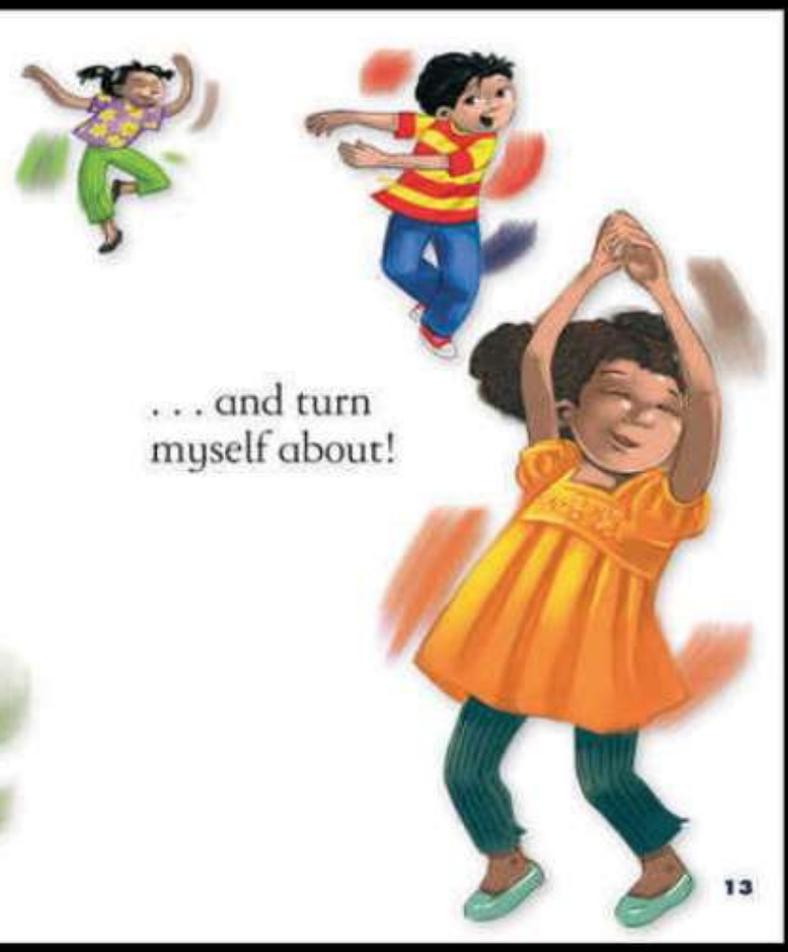
You squeeze your feed loop out



You give your cap a twist, twist, twist

And turn your loop about!





. . . and turn
myself about!

All on a QRP site!

K4LXY blog site:

https://k4lxycw.wixsite.com/blog/blog