

Soft Iron Core (rod, must fit tightly)

Diagram showing a soft iron core (rod, must fit tightly) with two windings. The top winding has 20 turns, and the bottom winding has 10 turns.

[illegible]

3 3 From sensor head
Shielded cable > ÜÄÄÄÄÄÄÄ¿
ÜÄÄÄÄÄÄÄÄ' 3

R4	1	10 Meg ohm 1/4 W
R5	1	1 Meg ohm 1/4 W
R6, 10	2	4.7 K ohm 1/4 W
R7	1	1 K ohm 1/4 W
R8	1	10 K ohm 1/4 W
R9	1	100 ohm 1/4 W
R11, 14	2	100 K ohm potentiometer (trimpot)
R12, 13	2	5 K ohm potentiometer with switch
C1	1	4.7 uf 25V electrolytic (E) capacitor
C2	1	1 uf 50V E cap
C3, 4, 5, 6, 7, 8	6	.1 uf 25V (ceramic disk type good)
A1	1	LM4250 nano-amp amplifier
A2	1	UA741 op-amp
Q1	1	PN2907 PNP
Q2, 3	2	PN2222 NPN
D1, 2, 3, 4	4	1N914 signal diodes
T1	1	Matching transformer/ 1K/8 ohm (audio)
	2	Phono plugs
	2	Phono jacks
	2	Battery holders (4 "AA")
	1	Battery holder (2 "AA")
M1	1	100 uA (microampere) Panel meter
SPK1	1	8 ohm speaker (small)
CORE	1	Soft iron (ferrite) core. LONG (2 - 3 ft)
Batteries		
Project boxes to suit your needs		

* L1 is the high voltage secondary of a transformer. Find an oil burner, an old flyback from a TV, any coil with as many windings as you can find. The more windings the better. (Thousands are in flyback secondaries). The CORE fits snugly into the center of L1 (or must be secured with glue).

Adjust R11 for ZERO volts on pin 6 of "A2" (referenced to ground).

Adjust R12 to control meter deflection (may also hook jack to voltage sensor type trigger circuit).

Adjust R13 for desired sensitivity of audio alarm (if used).

Adjust R14 for clean tone (if audio section used).

This circuit, although I have used portions of it many times, is considered (by me anyway) untested. The principles are sound and I have found the sections I have used quite effective when modified for my own purposes.

This circuit will, when properly constructed (shielding VERY important) will detect any nearby disturbance of the earth's magnetic field. A vehicle passing by, for example, will cause an audible tone and send the meter to max deflection. I suppose

it would also have no problem, if placed on a path in the bush, detecting persons walking nearby, if, of course, they carried any fair amount of metallic objects. (HINT HINT!)

I recommend that you orient this device (the CORE) in an EAST to WEST direction. That will pick up the best disturbance of the field. Also, use the shielded cable idea to separate the head as far away from the amplifier box as possible/practical, and find as LARGE a piece of ferrite rod (or soft iron) as you can (3 feet good). This unit is very sensitive when assembled/installed/adjusted properly. Do not attempt to use this circuit near airports, as the device, under the proper conditions, may constantly trigger because of the low flying aircraft (ANOTHER HINT!).

***** DISCLAIMER DISCLAIMER DISCLAIMER *****

BUILDERS- If you have any comments (constructive please, life's enough of a pain in my ass already) please forward them to the system operator or individual you obtained these schematics from.

"COMMANDERS" this circuit contains what could be considered 'proprietary' designs. It is submitted as anonymous (sp?!) I would, however, be interested in any constructive feedback. Have fun. Stay safe. Survive.

"ALL" I have tried to be as faithful as I could transposing these plans to a plain ascii form. There are NO guarantees however. Use this AT YOUR OWN RISK. If you build this and it turns out to be a subspace phase shifter and your entire world goes PFZZZT when you turn it on..... Oh WELL !

ah