

Pinpointer metal detector - "PETRAPIN-A07" rev.2 (SMD version)

Document revision: 2007 august 27

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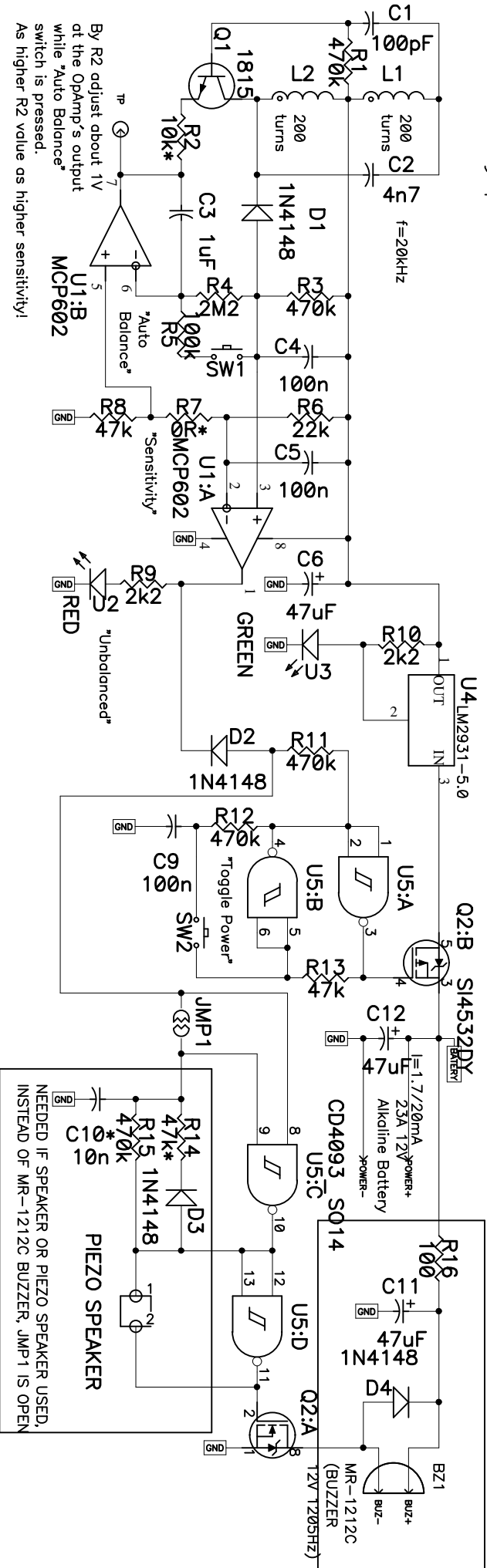
home page: www.bypetrucho.narod.ru

PRODUCTION FOR PROFIT IS GIVEN WHILE NAME "PETRAPIN-A07"
WILL BE PRESENT ON THE DEVICE BODY ONLY!



Pinpointer "PETRAPIN-A07" rev.2

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By R2 adjust about 1V at the OpAmp's output while "Auto Balance" switch is pressed. As higher R2 value as higher sensitivity!

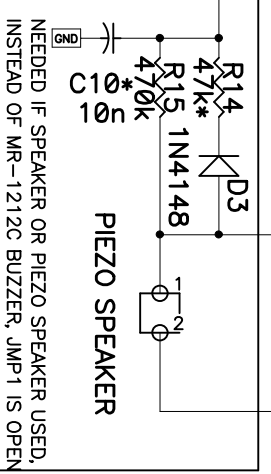
Description:

Operates as autobalancing Q-meter, sensitive to all kinds of metals. L1, L2 has 200 turns of 0.14mm copper wire, above D=10mm L=100mm ferrite core (as an old AM radio has)

ATTENTION! C2, C3 should be termostable, and C3 additionally with low leakage current. General purpose SMD capacitors is not suitable for C2, C3 (I used through hole type). If after assembly your device loosing balance you should replace C3 by better one, or reduce value of R4. Or reduce sensitivity by increasing value of R7. The circuit is sensitive to leakage currents on the PCB surface, after soldering clean it out by solvent and well dry.

Assembly options depends on speaker type:

- 1) BZ1 is active BUZZER, with embedded oscillator.
 - make short JMP1
 - do not install - D3, D4, C10, R14, R15, PIEZO SPEAKER
- 2) BZ1 is passive BUZZER, or 832 Ohm SPEAKER
 - JMP1 is open
 - do not install PIEZO SPEAKER
 - By value R14 - adjust VOLUME (PWM duty)
 - by value C10 - adjust sound frequency
- 3) PIEZO SPEAKER similar as an electronic watch has
 - JMP1 is open
 - do not install - R15, C11, D4, BZ1

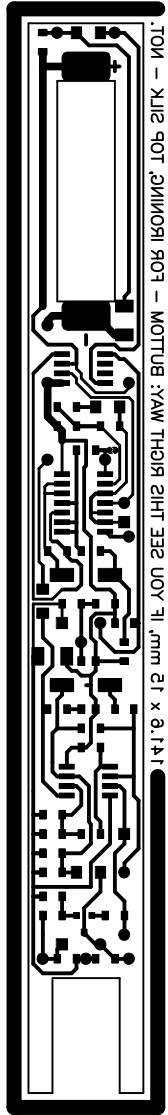


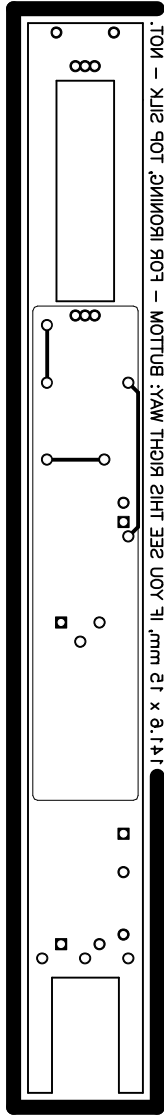
B

C

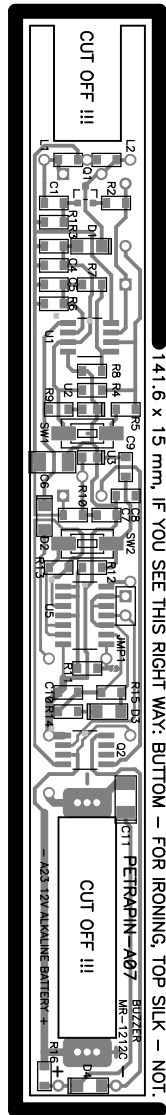
D

Title	PINPOINT METAL DETECTOR *PETRA-PIN A07*	
Size	Number	Rev
A3	2007.06.10.07:52	2
Date	Mon Aug 27, 2007	Drawn by Petrucho
Filename	q-pinpoint updated.sch	Sheet 1 of 1





NOT - 2020 - 12 - 10 - 14



141.6 x 15 mm, IF YOU SEE THIS RIGHT WAY: BUTTOM - FOR IRONING, TOP SILK - NOT.