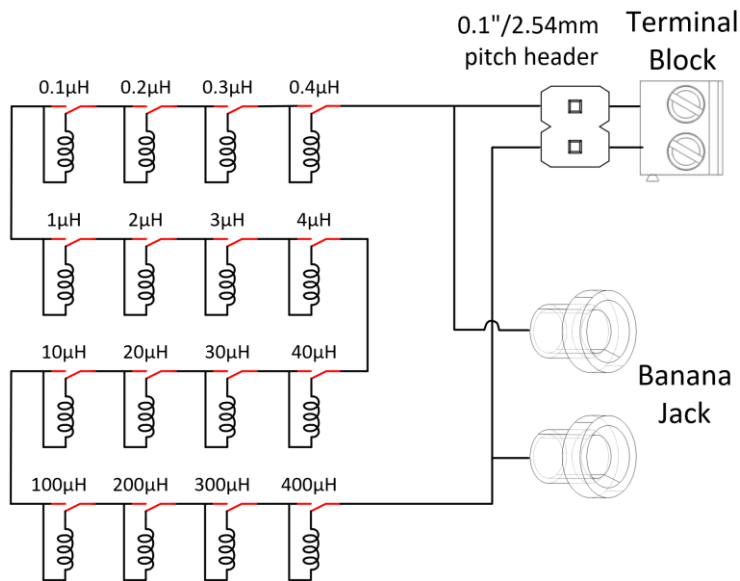
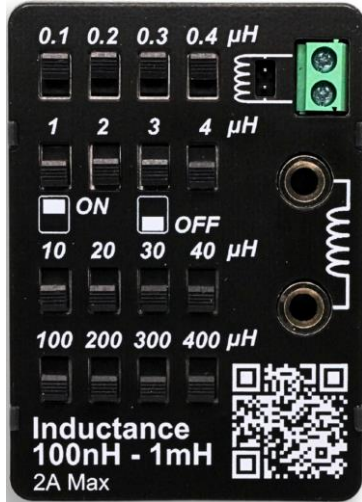


4 Decade Inductance 100nH – 1mH



Applications

- Audio amplifier LC tuning
- DCDC converter tuning
- General purpose calibration
- Power filter
- Teaching tool
- Antenna design and testing
- Impedance matching
- Low pass, band pass, high pass filters
- Harmonic oscillators and LC tank circuits

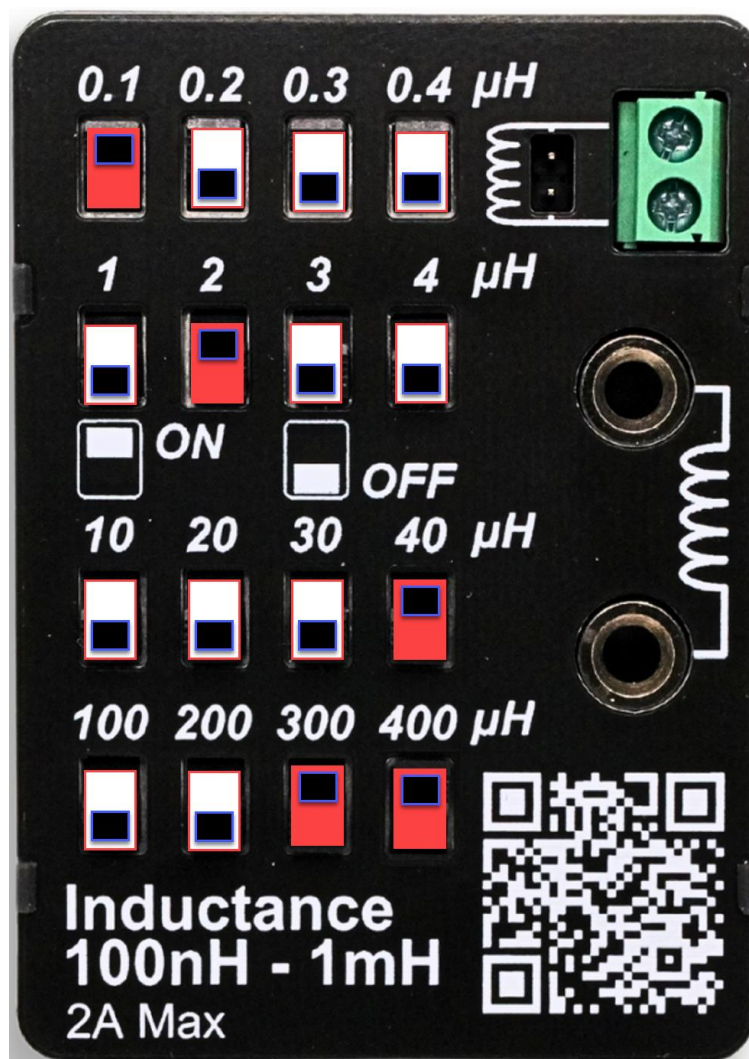


Description

The Four Decade Inductance box has four decades from 0.1 μ H to 1mH. Each switch in the “ON” position will add its inductance value to the total inductance to the banana jack/terminal block/headers. When the switch is “OFF”, its inductance value is disconnected to the circuit. The box is a general-purpose tool to be used in design, development, debugging or educational purposes. It provides user with many options to interface with the box. It can handle up to 2A from inductance values of 0.1 μ H to 100 μ H. Above 100 μ H, max current values are shown in *Table 1*. Apply no more than 100V to the box.

Operation

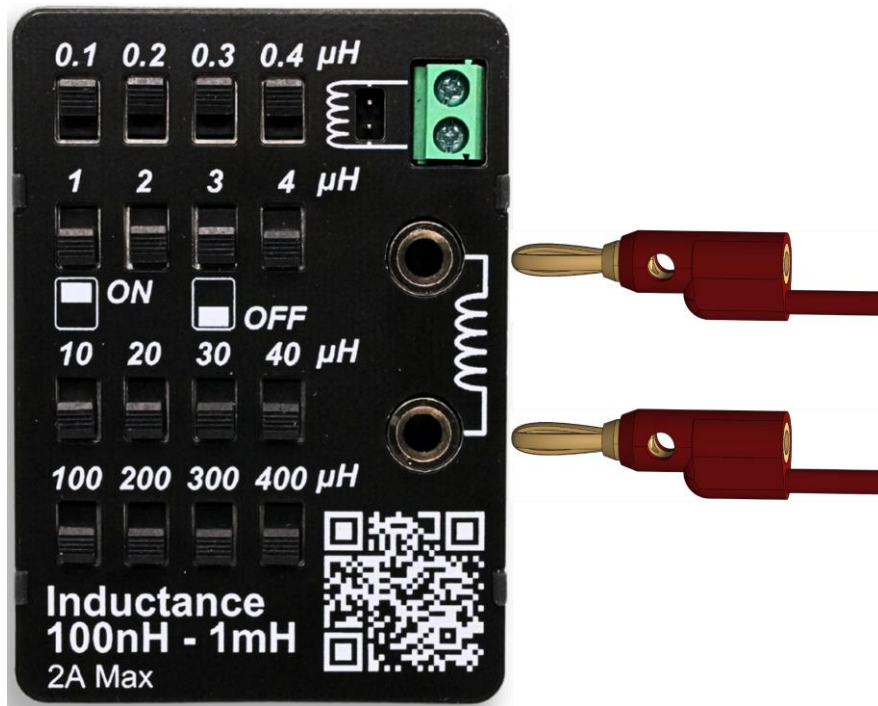
To select a desired inductance value, make sure that all switches are in the “OFF” position except for the values wanted. For example, for 742.1 μ H output, the following switches (*Shown Below*) should be in the “ON” position. Any switch in the “ON” position adds to the total output inductance value.



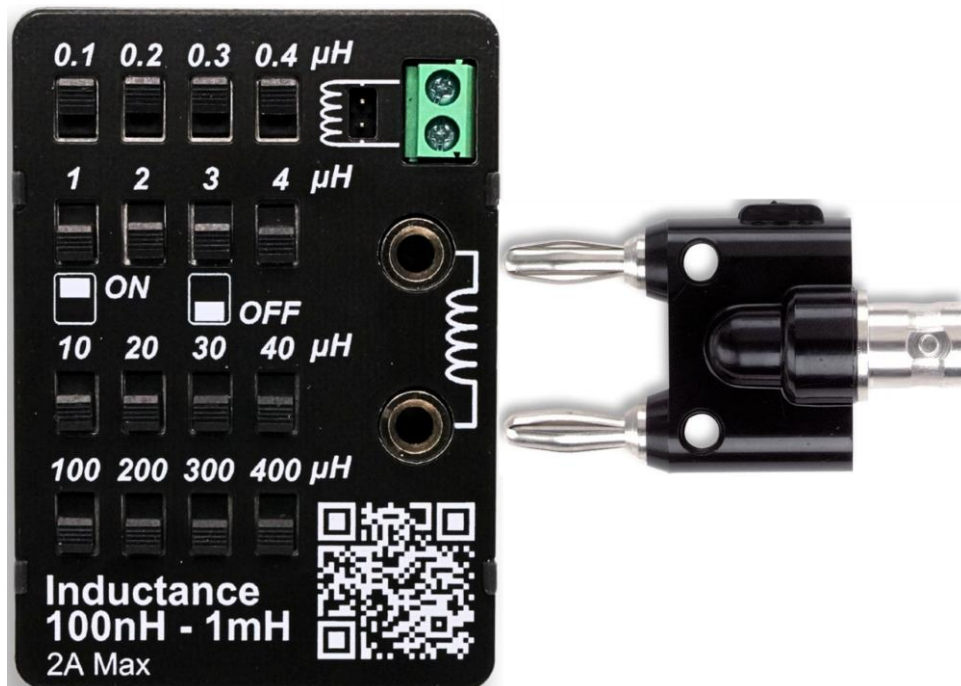


How to Interface

There are several ways to interface with the box. The Banana terminals are 4mm and can be used with off-the-shelf banana plug cables.

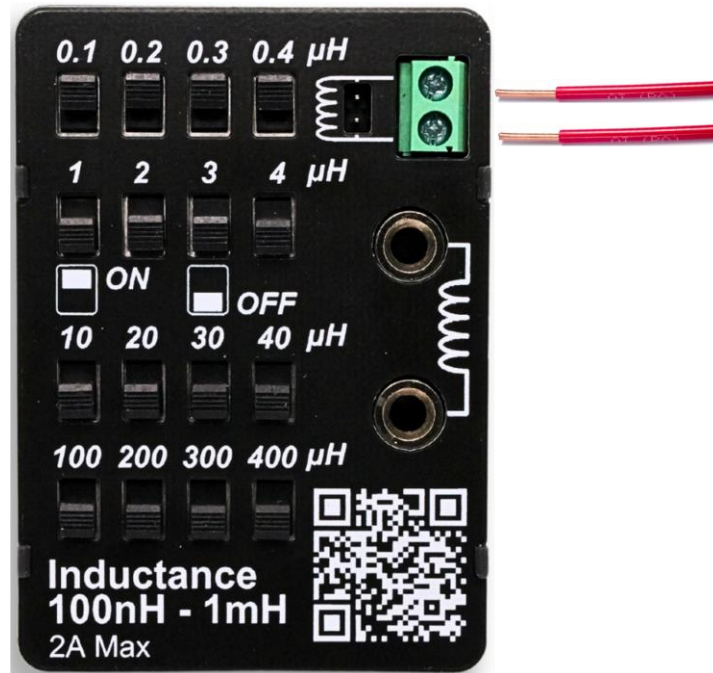


The banana terminal's can accommodate common Banana to BNC adaptor.

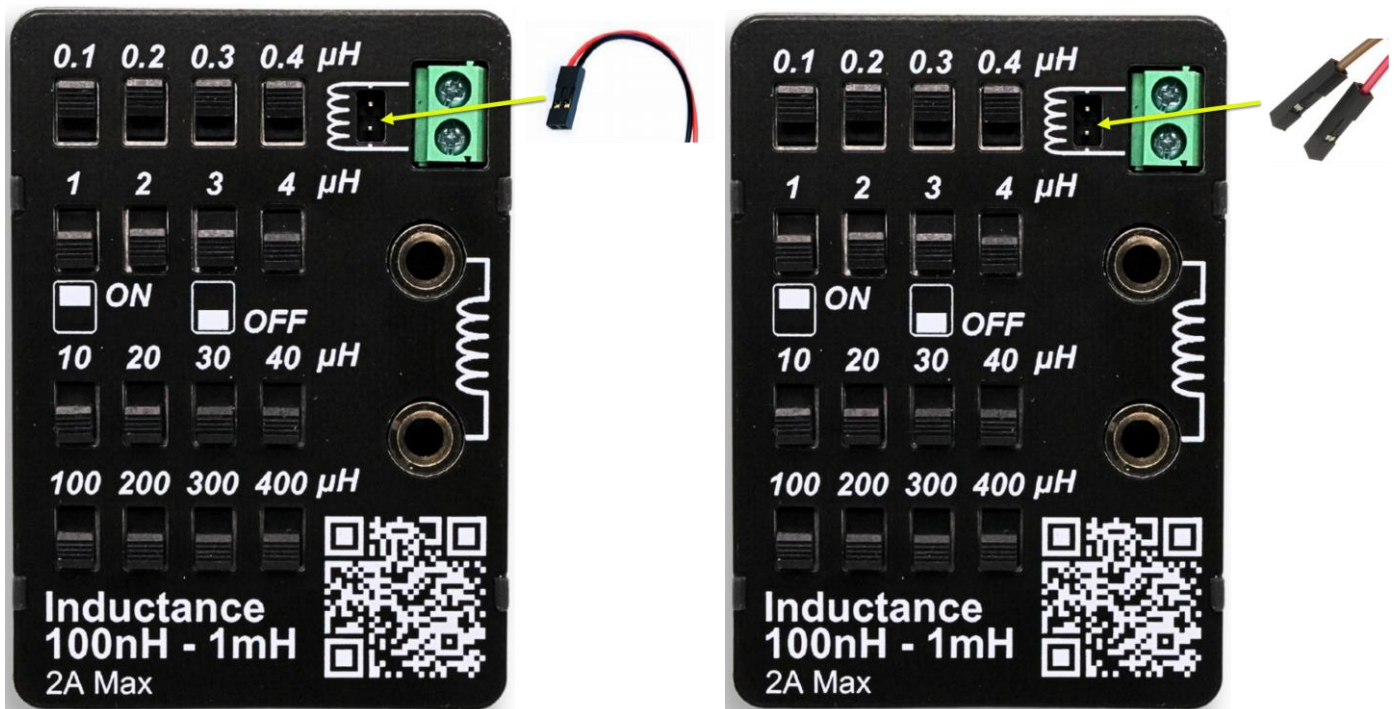




Can use solid core wire between 26-14AWG and connect to the terminal block. The terminal block has a pitch of 5mm.



Can use a 2.54mm 2-pin female header to connect or individual female pin headers





Specifications

<i>Range</i>	<i>Tolerance</i>	<i>DC Resistance Typical (DCR)</i>	<i>Max Current</i>
0.1μH	20%	7mΩ	2A
0.2μH	20%	14mΩ	2A
0.3μH	20%	21mΩ	2A
0.4μH	20%	28mΩ	2A
1μH	20%	41mΩ	2A
2μH	20%	82mΩ	2A
3μH	20%	123mΩ	2A
4μH	20%	164mΩ	2A
10μH	20%	64mΩ	2A
20μH	20%	128mΩ	2A
30μH	20%	192mΩ	2A
40μH	20%	256mΩ	2A
100μH	20%	272mΩ	2A
200μH	20%	544mΩ	1.8A
300μH	20%	816mΩ	1.6A
400μH	20%	1.088Ω	1.4A
<i>Higher Inductance Settings</i>			
500μH	400μH+100μH		1.2A
600μH	400μH+200μH		1.1A
700μH	400μH+300μH		1A
800μH	400μH+300μH+100μH		0.9A
900μH	400μH+300μH+200μH		0.85A
1mH	400μH+300μH+200μH+100μH		0.8A

Switch Resistance 100mΩ Max

Max DC/AC Voltage

100V

Unit weight	3.3oz ±94g
Dimensions	2.96x2.11x0.8" 75.1x53.6x20.7mm

Table 1.

Note: Do not exceed listed currents for the given settings!



Mechanical Dimensions

