

Inductance Decade Box

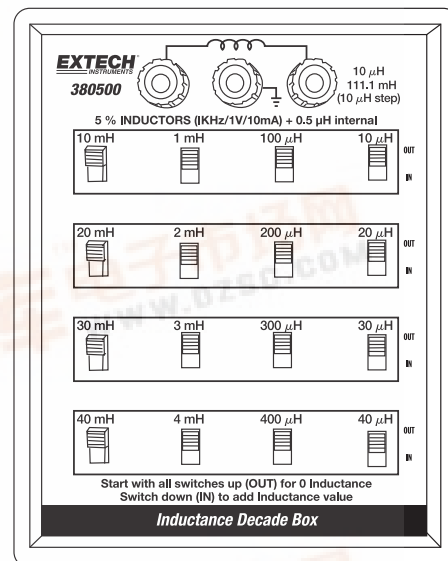
Model 380500

Introduction

Congratulations on your purchase of the Extech 380500 Inductance Decade Box. This device offers 4 decades of inductance ranges from 10 μ H to 111.1mH (in 10 μ H steps). Slide switches allow easy addition and subtraction of inductance values. Binding posts (3) offer simple and secure connections. Careful use of this decade box will provide years of reliable service.

Specifications

Capacitance ranges	10 μ H to 111.1mH in 10 μ H steps
Internal Inductance:	1.2 μ H
Connection	Three (3) binding posts
Test Conditions:	1kHz/1V/10mA
Accuracy	\pm (5% rdg \pm 0.5 μ H)
Operating conditions	Temperature: 32 to 122°F (0 to 50°C) / Humidity: < 80%RH
Dimensions/Weight	5.79 x 4.61 x 2.16" (14.7 x 11.7 x 35.5cm) / Approx. 0.89 lbs. (402g)



Operation

Binding Post Connections

The binding posts can be used for connections in several ways:

1. A banana plug can be inserted directly into the posts.
2. Bare wire can be threaded through the post after it has been unscrewed. Once the bare wire is threaded, tighten the posts as necessary.
3. Alligator clips can be used but use caution not to strip the post threads or plastic post housing.

The Inductance output is available on the RED and the BLACK binding posts. The WHITE post is case ground and is typically not used. Connect the positive lead of the device under test to the RED post. Connect the negative lead to the BLACK post. Use the WHITE grounding post only if the device under test will be grounded to the 380500 case.

Range Selection

The 16 front panel switches are used to select the inductance that will be output on the RED and BLACK terminals. When a switch is set to the IN position, the value printed above the switch is added to the total inductance available at the posts. When the switch is set to OUT it is excluded from the total inductance. If all of the switches are set to OUT, the total output inductance will be zero (+ 1.2 μ H residual inductance – approx).

For example, if the desired output value is 32.1mH, set the following switches to the IN position: 30mH, 2mH, and 100 μ H.

Testing

This device can be used to verify the calibration integrity of multimeters, LCR meters, calibrators, etc. Connect as described in the Binding Post Connections section above, and then set the inductance switches to output the desired inductance. The device under test should read the value of inductance selected on the tester. If it does not, the device under test may need calibration, adjustment, or repair.

Calibration and Repair Services

Extech offers repair and calibration services for the products we sell. Extech also provides NIST certification for most products. Call the Customer Service Department for information on calibration services available for this product. Extech recommends that annual calibrations be performed to verify meter performance and accuracy.

Warranty

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for three years from date of shipment (a six month limited warranty applies on sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website at www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.