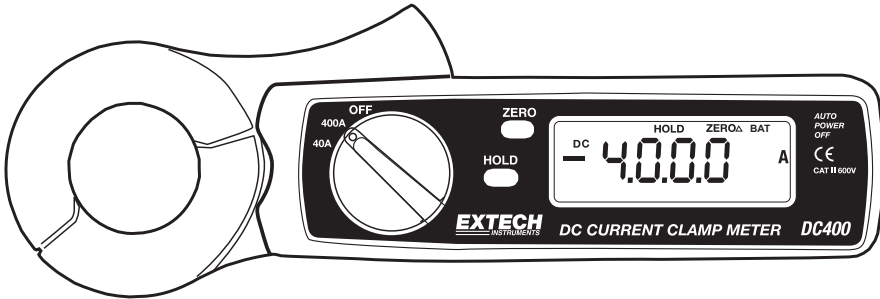# 400A Mini DC Clamp Meter

Model DC400

Introduction

Thank you for selecting the Extech Instruments Model DC400 clamp meter that measures up to 400A DC. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service. Please visit our website (www.extech.com) to check for the latest version of this User Guide.

Features

- High Accuracy and Resolution
- Large 4000 count LCD display
- One touch "Auto Zero"
- Data Hold and Auto Power Off functions
- 1.2" (30mm) Jaw diameter

Safety

International Safety Symbols

⚠ This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.

⚡ This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present

▢ Double insulation

Safety Notes

- Do not exceed the maximum allowable input range.
- Set the function switch OFF when the device is not in use.
- Remove the battery if the device is to be stored for longer than 60 days.
- Never dispose of batteries in a fire. Batteries may explode or leak.
- Never mix battery types. Always install new batteries of the same type.

Warnings

- Set function switch to the appropriate position before measuring.
- Do not measure current on a circuit whose voltage exceeds 600V.

Cautions

- Improper use of this meter can cause damage, shock, injury or death. Read and understand this user manual before operating the meter.
- Inspect the condition of the meter for any damage before operating the meter. Repair any damage before use.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
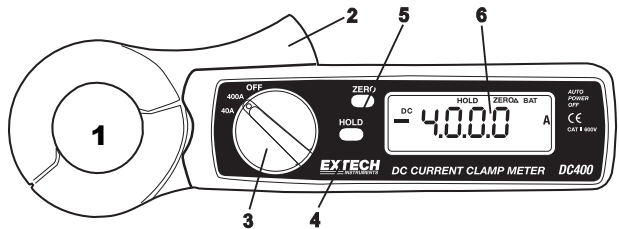
Specifications

General Specifications

Display	3-3/4 digit (4000 count) LCD
Functions	Amperes DC
Polarity	'-' indicates negative polarity
Current sensor	Hall effect sensor
Overload indication	"OL"
DCA zero adjust	One touch zero button
Auto Power Off	After approx. 15 minutes
Display rate	2 updates per second (approx)
Battery	One 9V Battery
Operating temp.	4^oF to 122^oF (-10^oC to 50^oC)
Operating Humidity	< 85% RH
Power consumption	14mA (typical)
Weight	10.3 oz. (290g) including battery
Dimensions	8.2 x 1.7 x 1.2" (208 x 43 x 30mm) (HWD)
Jaw opening	1.2" (30mm)
Safety rating	IEC 1010 Category II 600V

Range Specifications

Function	Range	Resolution	Accuracy (% of reading)	Overload protect
DC Current	40.00A	10mA	± (3.5% + 3digits)	400A DC
	400.0A	100mA		

Description

1. Current sensing jaw
2. Measurement trigger
3. Function switch
4. Data Hold button
5. One-touch DCA zero button
6. LCD Display

Operation

DC Current Measurements

1. Set the Function switch to the 40A or 400A DC range.
2. With no conductor in the jaws, press the ZERO button to null the meter display.
3. Press the Trigger to open the current sense Jaw.
4. Fully enclose one conductor to be measured. Do not allow a gap between the two halves of the jaw.
5. Read the DCA value on the display.

Data Hold

To freeze the current reading on the LCD, press the HOLD button. To release the Data Hold function and return the meter to normal operation, press the HOLD button again.

Maintenance

Battery Replacement

1. When the low battery symbol appears on the LCD the battery must be replaced.
2. Remove the orange rubberized cover.
3. Remove the battery compartment screw.
4. Lift off the battery compartment cover and replace the 9V battery.
5. Replace compartment cover and secure the screw.

Cleaning

Use only a dry cloth to clean the plastic case.

Warranty

FLIR Systems, Inc. warrants this Extech Instruments brand device *to be free of defects in parts and workmanship for* *one year* *from date of shipment (a six month limited warranty applies to 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 for authorization. Visit the website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned. 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. FLIR Systems, Inc. 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. FLIR'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.*

Calibration, Repair, and Customer Care Services

FLIR Systems, Inc. offers repair and calibration services for the Extech Instruments products we sell. NIST certification for most products is also provided. Call the Customer Service Department for information on calibration services available for this product. Annual calibrations should be performed to verify meter performance and accuracy. Technical support and general customer service is also provided, refer to the contact information provided below.

Support Lines: U.S. (877) 439-8324; International: +1 (603) 324-7800

Technical Support: Option 3; E-mail: support@extech.com

Repair & Returns: Option 4; E-mail: repair@extech.com

Product specifications are subject to change without notice

Please visit our website for the most up-to-date information

www.extech.com

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ISO 9001 Certified