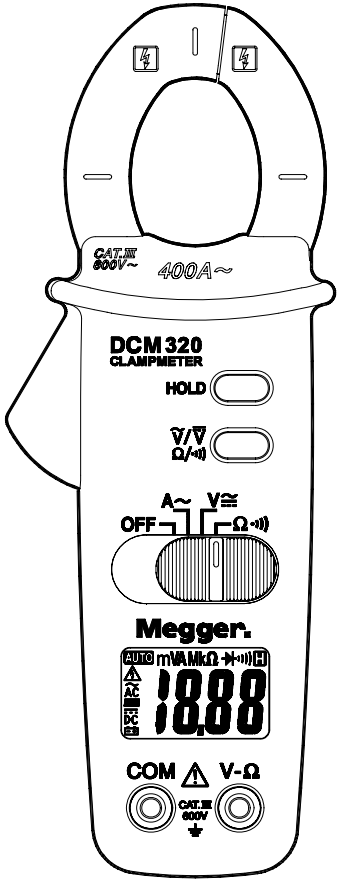
Megger.

DCM320 Clampmeter
User Guide



⚠ Read First

⚠ Safety Information

To ensure safe operation and service of the Meter, follow these instructions. Failure to observe warnings can result in severe **injury** or **death.**

- Avoid working alone so assistance can be rendered.
- To enhance safety, test leads should be disconnected from instrument when not in use.
- Do not use test leads or the Clamp Meter if they look damaged.
- Do not use the Meter if the Clamp Meter is not operating properly or if it is wet.
- Use the Clamp Meter only as specified in the Instruction card or the protection provided by the Clamp Meter might be impaired.
- Special precautions are necessary when operating in situations where exposed live parts at dangerous voltages may be encountered. Personal protective equipment (not supplied with this instrument) should be used.

Symbols as marked on the Tester and Instruction card

⚠	Risk of electric shock
⚠	See instruction card
⧈	Equipment protected by double or reinforced insulation
⎓	Battery
⏚	Earth
CE	Conforms to EU directives
⚡	Application around and removal from hazardous live conductors is permitted
⊠	Do not discard this product or throw away

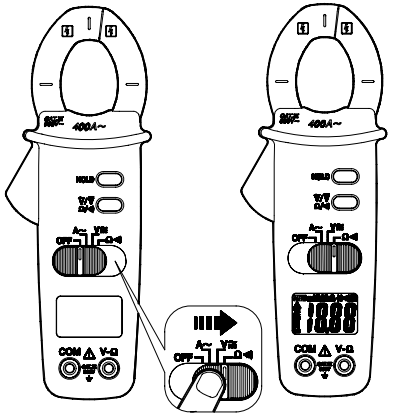
Maintenance

Do not attempt to repair this Clamp Meter. It contains no user-serviceable parts. Repair or serving should only be performed by qualified personal.

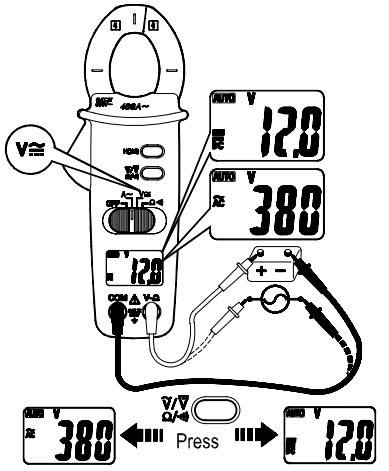
Cleaning

Periodically wipe the case with a dry cloth and detergent do not use abrasives or solvents.

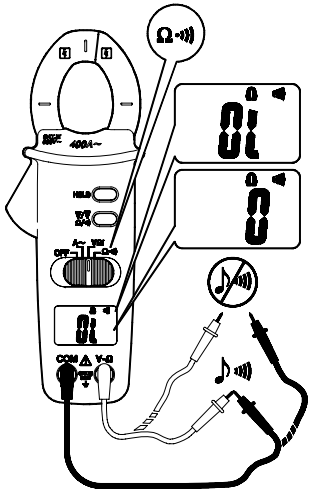
Power On / Off



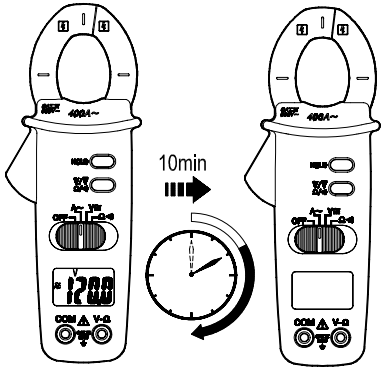
AC V / DC V



Continuity

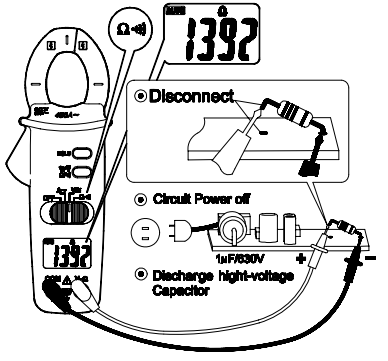


Auto Power Off

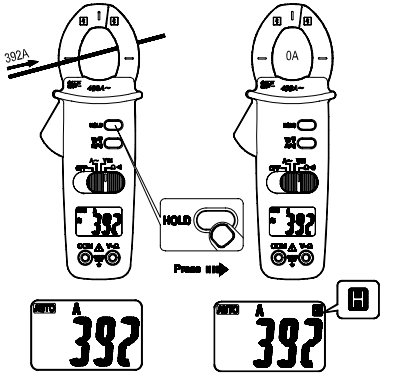


The meter will automatically shut itself off after approximately 10 minutes after power on.

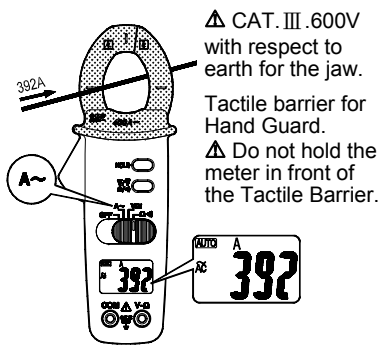
Resistance



Data Hold



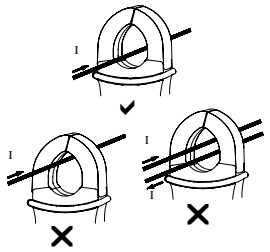
ACA



⚠ CAT.Ⅲ.600V with respect to earth for the jaw.

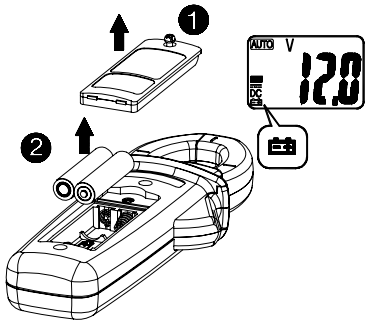
Tactile barrier for Hand Guard.

⚠ Do not hold the meter in front of the Tactile Barrier.



I + (-I) = 0

Battery Replacement



Specifications

1-1 General Specifications

LCD display digits :
3 1/2 digit large scale LCD readout.
Display count : 2000 counts.
Measuring rate : 1.5 times / sec.
Overrange display :
"OL" is displayed for "Ω" functions, shows the real value for "A" and "V" function.
Automatic power off time :
Approximately 10 minutes after power on.
Low battery indicator :
🔋 is displayed.
Power requirement :
1.5V AAA x 2 battery.
Rechargeable batteries are not suitable for use with this instrument.

1-2 Environmental Conditions

Indoor Use.
Calibration :
One year calibration cycle.
Operating temperature :
0°C ~ 30°C (≦80% RH)
30°C ~ 40°C (≦75% RH)
40°C ~ 50°C (≦45%RH)
Storage temperature :
-20 to +60°C, 0 to 80% RH (batteries not fitted).
Overvoltage category :
IEC 61010-1 600V CAT.Ⅲ.

CAT	Application field
Ⅰ	The circuits are not connected to mains.
Ⅱ	The circuits are directly connected to Low-voltage installation.
Ⅲ	The building installation.
Ⅳ	The source of the Low-voltage installation.

Operating altitude : 2000m (6562 ft)
Conductor Size : 27mm diameter.
Pollution degree : 2
EMC : EN 61326-1
Shock vibration :
Sinusoidal vibration per MIL-T-28800E (5 ~ 55 Hz, 3g maximum).
Drop Protection :
1.2m drop to hardwood on concrete floor.
Dimensions (W x H x D) :
56mm x 188mm x 28mm
Weight : 225g including battery.
Accessories : Battery (installed), Carrying case, Test lead and User manual.

1-3 Electrical Specifications

Accuracy is ±(% reading + number of digits) at 23°C ± 5°C < 80%RH.
Temperature coefficient :
Add 0.2 x (Specified accuracy) / °C, < 18°C, > 28°C .

DC / AC Volts

Range	DC Accuracy	AC Accuracy
200.0V	±(1.0% + 2dgt)	±(1.5% + 5dgt) 50Hz ~ 500Hz
600V		

Over voltage protection :
DC / AC 600V
Input Impedance :
10MΩ // less than 100pF.
CMRR / NMRR :
(Common Mode Rejection Ratio)
(Normal Mode Rejection Ratio)
V_{AC} : CMRR > 60dB at DC, 50Hz / 60Hz
V_{DC} : CMRR > 100dB at DC, 50Hz / 60Hz
NMRR > 50dB at DC, 50Hz / 60Hz
AC Conversion Type :
Average sensing rms indication.

AC Current

Function	Range	Accuracy
A~ (50~60Hz)	0.0 ~ 40.0A	±(1.9% + 10 dgt)
	40.0 ~ 200.0A	±(1.9% + 5 dgt)
	201 ~ 400A	±(1.9% + 5 dgt)

Overload protection : 600A rms
AC Conversion Type :
Average sensing rms indication.
Position Error : ±1.0% of reading.

Resistance

Range	Accuracy
200.0 Ω *3	±(1.0% + 5 dgt) *2
2.000 KΩ *3	±(0.7% + 2 dgt)
20.00 KΩ *3	
200.0 KΩ *3	
2.000MΩ *3	±(1.0% + 2 dgt)
20.00 MΩ	±(1.9% + 5 dgt) *1

Overload protection : 600V rms
Open circuit Voltage :
-1.3V approx.
* 1 < 100 dgt rolling.
* 2 < 10 dgt rolling.
* 3 The maximum LCD reading is 1400 counts.

Continuity :
Internal beeper activates if the resistance of the circuit under test is less than 20Ω. It will then turn off if the resistance is increased beyond 50Ω. Response time is approximately 50m sec.
Overload protection : 600V rms.

Limited Warranty

This Meter is warranted to the original purchaser against defects in material and workmanship for 1 year from the date of purchase. During this warranty period, manufacturer will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction.

This warranty does not cover , disposable batteries, or damage from abuse, neglect, accident, unauthorized repair, alteration, contamination, or abnormal conditions of operation or handling.

Any implied warranties arising out of the sale of this product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expense or economic loss. Some states or countries laws vary, so the above limitations or exclusions may not apply to you.

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