



# DIGITAL CLAMP METER

## MODEL : DT3150

### INSTRUCTION MANUAL

## 1. SPECIFICATIONS

### 1.1 General Specification

- Display** ■ 3½ digit liquid crystal display (LCD) with a maximum reading of 3999.
- Polarity** ■ Automatic, positive implied, negative polarity indication.
- Overrange** ■ (OL) or (-OL) is displayed.
- Zero** ■ Automatic.
- Low battery indication** ■ “ ” is displayed when the battery voltage drops below the operating level.
- Measurement rate** ■ 3 times per second, nominal.
- Operating Environment** ■ 0°C to 50°C at < 70% relative humidity.
- Storage Temperature** ■ -20°C to 60°C, 0 to 80% R.H. with battery removed from meter.
- Power** ■ Two 1.5V ‘AAA’ Size Battery
- Battery life** ■ 200 hours typical
- Dimensions** ■ 247mm (H) X 76mm (W) X 39mm (D)
- Weight** ■ 465 grams approx.
- Accessories** ■ One pair of test leads, instruction manual, 1.5V battery (installed), Carrying Case,
- Maximum Jaw Opening** ■ Can measure round cables upto 43mm dia & Flats (Bus Bar) 65mm x 16mm

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### 1.2 Electrical Specification

Accuracies are ± (% reading + number of digits) at 27 ± 5°C and humidity of less than 75% RH.

#### AC CURRENT (50-60Hz)

Range	Accuracy	Overload Protection
40A	±(3% + 4dgt)	1000A AC Max. for 1 minute
400A / 1000A	±(2% + 4dgt)	

#### DC VOLTAGE (Auto Ranging)

Ranges : 4V, 40V, 400V, 1000V

Accuracy : ± (0.5% rdg + 4 dgt) on 4V  
± (0.7% rdg + 4 dgt) on 40V & 400V  
± (1% of rdg + 4 dgt) on 1000V

Resolution : 1mV to 1V

Input Impedance : 10MΩ on all ranges except,  
11MΩ on 4V

Overload Protection : 1200V DC/800V AC

#### AC VOLTAGE (Auto Ranging) 40-500Hz

Range : 4V, 40V, 400V, 750V

Accuracy : ± (1.0% rdg + 8 dgt) on all ranges except,  
± (1.5% rdg + 8 dgt) on 750V

Resolution : 1mV to 1V

Input Impedance : 10MΩ on all ranges except, 11MΩ on 4V

Overload Protection : 1200V DC/800V AC

#### RESISTANCE (Auto Ranging)

Range : 400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ

Accuracy : ± (0.7% rdg + 4 dgt) on all ranges except  
± (1.2% of rdg + 4 dgt) on 4MΩ  
± (2.5% of rdg + 4 dgt) on 40MΩ

Resolution : 0.1Ω to 0.01MΩ

Test Current : 0.7mA on 400Ω, 0.1mA on 4KΩ,  
30μA on 40KΩ, 4μA on 400KΩ

Overload Protection : 500V DC/AC

#### Continuity Check

Threshold Level : 40Ω Approx.

Response Time : 1m Sec. Approx.

Open Circuit Voltage : 0.4V Approx.

Indication : ‘’ is displayed on LCD and buzzer sounds at continuity.

Overload Protection : 500V DC / AC

#### Diode Test

Measurement Current : 1.0 ± 0.6 mA Approx.

Open Circuit Voltage : 0.4V Approx.

Overload Protection : 500V DC / AC

#### Frequency (Auto Ranging)

Range : 10.00Hz, 50.00Hz, 500.0Hz, 5.000kHz,  
50.00kHz, 500.0kHz

Accuracy : ± (0.5% rdg + 2 dgt)

Sensitivity : 3V

Overvoltage Protection : 200V DC or AC peak

#### % Duty Cycle (Auto Ranging)

Range : 1% to 90%

Accuracy : ± (0.5% rdg + 5 dgt)

Resolution : 0.1%

Overvoltage Protection : 200V DC or AC peak

#### Capacitance (Auto Ranging)

Range : 40nf, 400nf, 4μf, 40μf, 100μf

Accuracy : ± (5% rdg + 10 dgt)

Resolution : 0.01nf to 0.1μf

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## 2. OPERATION

Before taking any measurements, read the safety information section. Always examine the instrument for damage, contamination (excessive dirt, grease, etc.) and defects. Examine the test leads for cracked or frayed insulation. If any abnormal conditions exist do not attempt to make any measurements.

### SELECT BUTTON

In ACV Range it will select ACV / Hz/Duty function. In  $\Omega/\rightarrow/\rightarrow/\rightarrow$  range it will select resistance or diode or continuity function. In Hz it will select Hz/Duty function.

### DATA HOLD BUTTON

Press Data Hold button to toggle in and out of Data Hold mode, In the Data Hold mode, the "H" annunciator is displayed.

### 2.1 Current Measurements

1. Set the Function / Range switch to the highest 1000A AC range.
2. Press the trigger to open transformer jaws, clamp onto one conductor only and release trigger. Jaws should be completely closed. Read the current directly on the display. It is recommended that the conductor be placed at the center of the closed jaws for maximum accuracy (Fig. - 1).

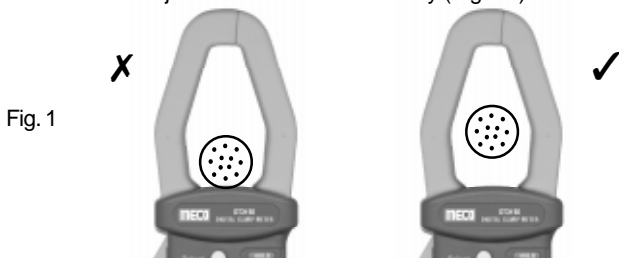


Fig. 1

3. When the reading is lower than 400 counts, set the range switch to the next lower range position. For maximum accuracy, select the lowest range possible without over ranging the meter.
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4. Touch probes to the diode. A forward-voltage drop is about 0.6V (typical for a silicon diode).
5. If the digital display overrange "OL", reverse the lead connections. The placement of the test leads when the forward reading is displayed indicates the orientation of the diode. The red lead is positive and the black lead is negative. If overrange "OL" is displayed with both lead connections, the junction is open. If a low reading (less than 1000) is obtained with both lead connections, the junction is shorted internally or (if junction is measured in a circuit) the junction is shunted by a resistance less than 1K $\Omega$ . In the latter case the junction must be disconnected from the circuit in order to verify its operation.

### 2.5 Continuity Measurement

In continuity test, the beeper sounds continuously, if the resistance is less than 40 $\Omega$ .

### 2.6 Frequency & Duty Cycle Measurement

There are 2 positions for Frequency & Duty cycle measurements.

- a) "Hz" position (Not for line frequency measurement.)
- b) "ACV" position ( for line frequency measurement.)

#### 2.6a "Hz" position (Not for line frequency measurement.)

Sensitivity : 3V  
Frequency Range : 10Hz to 500kHz  
Duty Cycle : 1% to 90%  
Overvoltage Protection : 200V DC or AC peak

1. Connect test lead to "Hz" and "COM" terminal.
2. Set rotary switch to "Hz" position.
3. Select Frequency or Duty cycle by pressing "Select" key.
4. Connect the test leads across the source or load under measurement.

### 2.2 Voltage Measurements

1. Connect the red test lead to the "V $\Omega$ " jack and the black test lead to the "COM" jack.
2. Set the Function/Range switch to the desired Voltage type (AC or DC)
3. Connect the test leads to the device or circuit being measured.
4. For DC, a (-) sign is displayed for negative polarity; positive polarity is implied.

### 2.3 Resistance Measurements

1. Connect red test lead to the "V $\Omega$ " jack and black test lead to the "COM" jack.
2. Set function / Range switch to  $\Omega/\rightarrow/\rightarrow/\rightarrow$  position.
3. If the resistance being measured is connected to a circuit, turn off power to the circuit being tested and discharge all capacitors.
4. Connect test leads across the resistance being measured. When measuring high resistance, be sure not to contact adjacent points even if insulated because some insulators have a relatively low insulation resistance, causing the measured resistance to be lower than the actual resistance.
5. Read resistance value on digital display. If a high resistance value is shunted by a large value of capacitance allow display to stabilize.

### 2.4 Diode Test

1. Connect the red test lead to the "V $\Omega$ " jack and black test lead to the "COM" jack.
2. Set the Function / Range switch to the  $\Omega/\rightarrow/\rightarrow/\rightarrow$  position, select " $\rightarrow$ " by pressing select key.
3. Turn off power to the circuit under test.

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#### 2.6b "ACV" position (For line frequency measurement.)

Sensitivity : 2V  
Frequency Range : 40Hz to 500Hz  
Duty Cycle : 10% to 90%  
Overvoltage Protection : 1000V DC or 750V AC peak

1. Connect test lead to "V $\Omega$ " and "COM" terminal.
2. Set rotary switch to "ACV" position.
3. Select Frequency or Duty cycle by pressing "Select" key.
4. Connect the test leads across the source or load under measurement.

### 2.7 Capacitance measurement

1. Set function/Range Switch to " $\rightarrow$ " position
2. Short the leads of the capacitor to be tested together to ensure that there is no charge on the capacitor.
3. Insert the capacitor leads into the capacitor test socket.
4. Read the capacitance value in the display.

## 3. MAINTENANCE

### WARNING

Remove test leads before changing battery or servicing.

### Battery Replacement

Power is supplied by two 1.5V 'AAA' size battery or Equivalent.

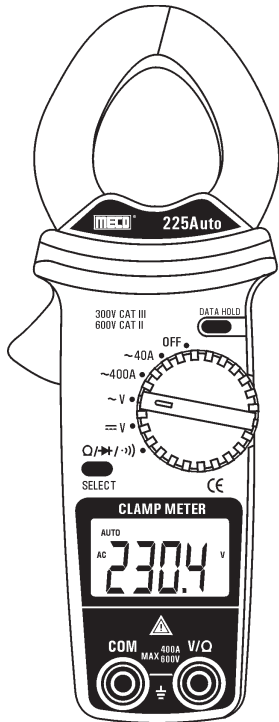
The " $\rightarrow$ " appears on the LCD display when replacement is needed. To replace the battery, remove the screw from the battery cover and lift off the battery case. Remove the batteries & replaced with new batteries.





# DIGITAL CLAMP METER

MODEL : 225AUTO



## INSTRUCTION MANUAL

## 1. SPECIFICATIONS

### 1.1 General Specification

- Display** ■ 3½ digit liquid crystal display (LCD) with a maximum reading of 3999.
- Polarity** ■ Automatic, positive implied, negative polarity indication.
- Overrange** ■ (OL) or (-OL) is displayed.
- Zero** ■ Automatic.
- Low battery indication** ■ “ ” is displayed when the battery voltage drops below the operating level.
- Measurement rate** ■ 3 times per second, nominal.
- Operating Environment** ■ 0°C to 50°C at < 70% relative humidity.
- Storage Temperature** ■ -20°C to 60°C, 0 to 80% R.H. with battery removed from meter.
- Accuracy** ■ Stated accuracy at 27°C ± 5°C, <75% relative humidity.
- Power** ■ Two 1.5V ‘AAA’ Size Battery
- Battery life** ■ 200 hours typical
- Dimensions** ■ 186mm X 58mm X 30mm
- Weight** ■ 165 grams approx.
- Accessories** ■ One pair of test leads, instruction manual, 1.5V batteries (installed), Carrying Case,
- Maximum Jaw Opening** ■ 32mm

### 1.2 Electrical Specification

Accuracies are ± (% reading + number of digits) at 27 ± 5°C and humidity of less than 75% RH.

#### AC CURRENT (50-60Hz)

Range	Accuracy	Overload Protection
40A	±(1.5% rdg + 5dgt)	400A AC Max. for 1 minute
400A		

#### DC VOLTAGE (Auto Ranging)

Range	Accuracy	Overload Protection
600V	±(0.8% rdg + 1dgt)	AC voltage ranges 600V AC Resistance ranges 250V AC

#### AC VOLTAGE (Auto Ranging) 50-60Hz

Range	Accuracy	Overload Protection
600V	±(1.0% rdg + 3dgt)	AC voltage ranges 600V AC Resistance ranges 250V AC

#### RESISTANCE (Auto Ranging)

Range	Accuracy	Overload Protection
40MΩ	±(1.0% rdg + 2dgt)	AC voltage ranges 600V AC Resistance ranges 250V AC

### Continuity Check

- Threshold Level : 50Ω Approx.
- Response Time : 1m Sec. Approx.
- Open Circuit Voltage: 0.4V Approx.
- Indication : ‘’ is displayed on LCD and buzzer sounds at continuity.

### Diode Test

- Measurement Current : 1.0 ± 0.6 mA Approx.
- Open Circuit Voltage : 0.4V Approx.

## 2. OPERATION

Before taking any measurements, read the safety information section. Always examine the instrument for damage, contamination (excessive dirt, grease, etc.) and defects. Examine the test leads for cracked or frayed insulation. If any abnormal conditions exist do not attempt to make any measurements.

### SELECT BUTTON

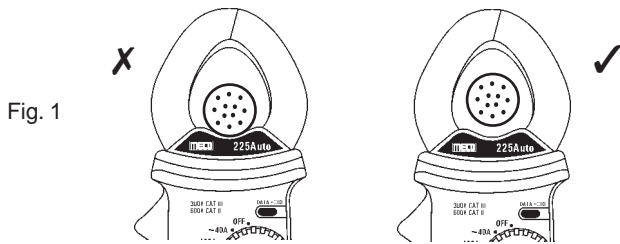
The Button is used for select Ω / / range.

### DATA HOLD BUTTON

Press Data Hold button to toggle in and out of Data Hold mode, In the Data Hold mode, the “**HOLD**” annunciator is displayed.

## 2.1 Current Measurements

1. Set the Function / Range switch to the highest 400A range.
2. Press the trigger to open transformer jaws, clamp onto one conductor only and release trigger. Jaws should be completely closed. Read the current directly on the display. It is recommended that the conductor be placed at the center of the closed jaws for maximum accuracy (Fig. - 1).



3. When the reading is lower than 40A, set the Function / Range switch to the next lower range position.

## 2.2 Voltage Measurements

1. Connect the red test lead to the "VΩ" jack and the black test lead to the "COM" jack.
2. Set the Function/Range switch to the desired Voltage type (AC or DC)
3. Connect the test leads to the device or circuit being measured.
4. For DC, a (-) sign is displayed for negative polarity; positive polarity is implied.

## 2.3 Resistance Measurements

1. Connect red test lead to the "VΩ" jack and black test lead to the "COM" jack.
2. Set Function / Range switch to the  $\Omega$  /  $\rightarrow$  /  $\bullet$  range.
3. Select resistance range by using Select Button.
4. If the resistance being measured is connected to a circuit, turn off power to the circuit being tested and discharge all capacitors.

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5. Connect test leads across the resistance being measured. When measuring high resistance, be sure not to contact adjacent points even if insulated because some insulators have a relatively low insulation resistance, causing the measured resistance to be lower than the actual resistance.
6. Read resistance value on digital display. If a high resistance value is shunted by a large value of capacitance allow display to stabilize.

## 2.4 Diode Test

1. Connect the red test lead to the "VΩ" jack and black test lead to the "COM" jack.
2. Set the Function / Range switch to the " $\Omega$  /  $\rightarrow$  /  $\bullet$ ".
3. Select Diode range by using Select Button.
4. Turn off power to the circuit under test.
5. Touch probes to the diode. A forward-voltage drop is about 0.6V (typical for a silicon diode).
6. If the digital display reads overrange "OL", reverse the lead connections. The placement of the test leads when the forward reading is displayed indicates the orientation of the diode. The red lead is positive and the black lead is negative. If overrange "OL" is displayed with both lead connections, the junction is open. If a low reading (less than 1000) is obtained with both lead connections, the junction is shorted internally or (if junction is measured in a circuit) the junction is shunted by a resistance less than 1KΩ. In the latter case the junction must be disconnected from the circuit in order to verify its operation.

## 2.5 Continuity Measurement

1. Connect red test lead to the "VΩ" jack and black test lead to the "COM" jack.
  2. Set Function / Range switch to the  $\Omega$  /  $\rightarrow$  /  $\bullet$  range.
  3. Select Continuity range by using Select Button.
- In the continuity test, the beeper sounds continuously, if the resistance is less than 50Ω.

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## 3. MAINTENANCE

### WARNING

Remove test leads before changing battery or servicing.

### Battery Replacement

Power is supplied by two 1.5V 'AAA' size battery or Equivalent. The " $\text{batt}$ " appears on the LCD display when replacement is needed. To replace the battery, remove the screw from the battery cover and lift off the battery case. Remove the batteries & replaced with new batteries.

## 4. SAFETY INFORMATION

The following safety information must be observed to ensure maximum personal safety during the operation of this meter:

1. Do not use the meter if the meter or test leads look damaged, or if you suspect that the meter is not operating properly.
2. This Clamp Meter is designed to take current measurements on circuits with a maximum voltage difference of 500VAC between any conductor and ground potential. Using the instrument for current measurements on circuits above this voltage may cause electric shock, instrument damage or damage to the equipment under test.  
Before measuring current make certain the test leads are removed from the instrument.
3. The instrument is protected for overload upto 600 VAC for 1 minute. Do not take current readings on circuits where the maximum current potential is not known. Do not exceed the maximum currents that this instrument is designed to measure.
4. Turn off power to the circuit under test before cutting, unsoldering, or breaking the circuit. Small amounts of current can be dangerous.
5. Use caution when working above 60V DC or 30V AC rms. Such voltages pose a shock hazard.
6. When using the probes, keep your fingers behind the finger guards on the probes.
7. Measuring voltage which exceeds the limits of the clamp meter may damage the meter and expose the operator to a shock hazard. Always recognize the meter voltage limits as stated on the front of the meter.



## CERTIFICATE OF CALIBRATION

We hereby certify that this product has been calibrated and found to be in accordance with the applicable SPECIFICATIONS and MECO STANDARDS.

Accuracies of the standard equipment used in this calibration are traceable to the National Standards.

### MECO METERS PVT. LTD.

Block 9, Plot 270, 2nd Floor, Rup-Udey Niwas, Sion (E), Mumbai - 400 022 (INDIA)

#### Correspondance Address :

Plot No. EL-1, MIDC Electronic Zone, TTC Industrial Area, Mahape, Navi Mumbai - 400710 (INDIA)

Tel : 0091-22-27673311-16, 27673300 (Board)

Fax : 0091-22-27673310, 27673330

E-mail : sales@mecoinst.com Web : www.mecoinst.com

SR. NO : \_\_\_\_\_

CHECKED BY : \_\_\_\_\_

DATE : \_\_\_\_\_

MODEL NO : \_\_\_\_\_

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# DIGITAL CLAMP METER

MODEL : 2250-Hz AUTO



## INSTRUCTION MANUAL

### 1. SPECIFICATIONS

#### 1.1 General Specification

- Display** ■ 3½ digit liquid crystal display (LCD) with a maximum reading of 3999.
- Polarity** ■ Automatic, positive implied, negative polarity indication.
- Overrange** ■ (OL) or (-OL) is displayed.
- Zero** ■ Automatic.
- Low battery indication** ■ “ ” is displayed when the battery voltage drops below the operating level.
- Measurement rate** ■ 3 times per second, nominal.
- Operating Environment** ■ 0°C to 50°C at < 70% relative humidity.
- Storage Temperature** ■ -20°C to 60°C, 0 to 80% R.H. with battery removed from meter.
- Accuracy** ■ Stated accuracy at 27°C ± 5°C, <75% relative humidity.
- Power** ■ Two 1.5V 'AAA' Size Battery
- Battery life** ■ 200 hours typical
- Dimensions** ■ 250mm X 98mm X 35mm
- Weight** ■ 400 grams approx.
- Accessories** ■ One pair of test leads, instruction manual, 1.5V batteries (installed), Carrying Case,
- Maximum Jaw Opening** ■ 55mm

#### 1.2 Electrical Specification

Accuracies are ± (% reading + number of digits) at 27 ± 5°C and humidity of less than 75% RH.

##### AC CURRENT (50-60Hz)

Range	Accuracy	Overload Protection
40A	±(3% + 4dgt)	1000A AC Max. for 1 minute
400A / 1000A	±(2% + 4dgt)	

##### DC VOLTAGE (Auto Ranging)

- Ranges : 4V, 40V, 400V, 1000V
- Accuracy : ± (0.5% rdg + 4 dgt) on 4V  
± (0.7% rdg + 4 dgt) on 40V & 400V  
± (1% of rdg + 4 dgt) on 1000V
- Resolution : 1mV to 1V
- Input Impedance : 10MΩ on all ranges except, 11MΩ on 4V
- Overload Protection : 500V DC/350V AC for 15 sec. on 4V range, 1200V DC/800V AC on all other ranges.

##### AC VOLTAGE (Auto Ranging) 40-500Hz

- Range : 4V, 40V, 400V, 750V
- Accuracy : ± (1.0% rdg + 8 dgt) on all ranges except, ± (1.5% rdg + 8 dgt) on 750V
- Resolution : 1mV to 1V
- Input Impedance : 10MΩ on all ranges except, 11MΩ on 4V
- Overload Protection : 500V DC/350V AC for 15 sec. on 4V range, 1200V DC/800V AC on all other ranges.

##### RESISTANCE (Auto Ranging)

- Range : 400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ
- Accuracy : ± (0.7% rdg + 4 dgt) on all ranges except ± (1.2% of rdg + 4 dgt) on 4MΩ  
± (2.5% of rdg + 4 dgt) on 40MΩ

- Resolution : 0.1Ω to 0.01MΩ
- Test Current : 0.7mA on 400Ω, 0.1mA on 4KΩ, 30μA on 40KΩ, 4μA on 400KΩ
- Overload Protection : 500V DC/AC
- Continuity Check**
- Threshold Level : 40Ω Approx.
- Response Time : 1m Sec. Approx.
- Open Circuit Voltage : 0.4V Approx.
- Indication : '••)' is displayed on LCD and buzzer sounds at continuity.
- Overload Protection : 500V DC / AC
- Diode Test**
- Measurement Current : 1.0 ± 0.6 mA Approx.
- Open Circuit Voltage : 0.4V Approx.
- Overload Protection : 500V DC / AC
- Frequency (Auto Ranging)**
- Range : 10.00Hz, 50.00Hz, 500.0Hz, 5.000kHz, 50.00kHz, 500.0kHz
- Accuracy : ± (0.5% rdg + 2 dgt)
- Sensitivity : 3V
- Overvoltage Protection : 200V DC or AC peak
- % Duty Cycle (Auto Ranging)**
- Range : 1% to 90%
- Accuracy : ± (0.5% rdg + 5 dgt)
- Resolution : 0.1%
- Overvoltage Protection : 200V DC or AC peak

## 2. OPERATION

Before taking any measurements, read the safety information section. Always examine the instrument for damage, contamination (excessive dirt, grease, etc.) and defects. Examine the test leads for cracked or frayed insulation. If any abnormal conditions exist do not attempt to make any measurements.

### SELECT BUTTON

In ACV Range it will select ACV / Hz/Duty function. In  $\Omega$  /  $\rightarrow$  /  $\rightarrow$  /  $\rightarrow$  range it will select resistance or diode or continuity function. In Hz it will select Hz/Duty function.

### DATA HOLD BUTTON

Press Data Hold button to toggle in and out of Data Hold mode, In the Data Hold mode, the "H" annunciator is displayed.

### 2.1 Current Measurements

1. Set the Function / Range switch to the highest 1000A AC range.
2. Press the trigger to open transformer jaws, clamp onto one conductor only and release trigger. Jaws should be completely closed. Read the current directly on the display. It is recommended that the conductor be placed at the center of the closed jaws for maximum accuracy (Fig. - 1).

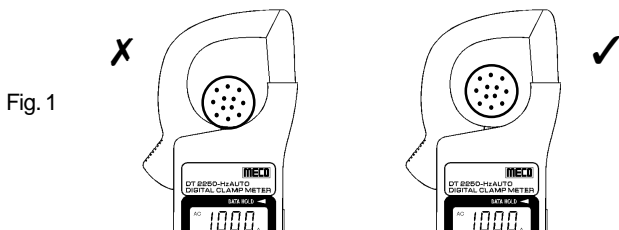


Fig. 1

3. When the reading is lower than 400 counts, set the range switch to the next lower range position. For maximum accuracy, select the lowest range possible without over ranging the meter.
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4. Touch probes to the diode. A forward-voltage drop is about 0.6V (typical for a silicon diode).
5. If the digital display reads overrange "OL", reverse the lead connections. The placement of the test leads when the forward reading is displayed indicates the orientation of the diode. The red lead is positive and the black lead is negative. If overrange "OL" is displayed with both lead connections, the junction is open. If a low reading (less than 1000) is obtained with both lead connections, the junction is shorted internally or (if junction is measured in a circuit) the junction is shunted by a resistance less than 1K $\Omega$ . In the latter case the junction must be disconnected from the circuit in order to verify its operation.

### 2.5 Continuity Measurement

In continuity test, the beeper sounds continuously, if the resistance is less than 40 $\Omega$ .

### 2.6 Frequency & Duty Cycle Measurement

There are 2 positions for Frequency & Duty cycle measurements.  
a) "Hz" position (Not for line frequency measurement.)  
b) "ACV" position.

#### 2.6a "Hz" position (Not for line frequency measurement.)

Sensitivity : 3V  
Frequency Range : 10Hz to 500kHz  
Duty Cycle : 1% to 90%  
Overvoltage Protection : 200V DC or AC peak

1. Connect test lead to "V $\Omega$ " and "COM" terminal.
2. Set rotary switch to "Hz" position.
3. Select Frequency or Duty cycle by pressing "Select" key.
4. Connect the test leads across the source or load under measurement.

### 2.2 Voltage Measurements

1. Connect the red test lead to the "V $\Omega$ " jack and the black test lead to the "COM" jack.
2. Set the Function/Range switch to the desired Voltage type (AC or DC)
3. Connect the test leads to the device or circuit being measured.
4. For DC, a (-) sign is displayed for negative polarity; positive polarity is implied.

### 2.3 Resistance Measurements

1. Connect red test lead to the "V $\Omega$ " jack and black test lead to the "COM" jack.
2. Set function / Range switch to  $\Omega$  /  $\rightarrow$  /  $\rightarrow$  /  $\rightarrow$  position.
3. If the resistance being measured is connected to a circuit, turn off power to the circuit being tested and discharge all capacitors.
4. Connect test leads across the resistance being measured. When measuring high resistance, be sure not to contact adjacent points even if insulated because some insulators have a relatively low insulation resistance, causing the measured resistance to be lower than the actual resistance.
5. Read resistance value on digital display. If a high resistance value is shunted by a large value of capacitance allow display to stabilize.

### 2.4 Diode Test

1. Connect the red test lead to the "V $\Omega$ " jack and black test lead to the "COM" jack.
2. Set the Function / Range switch to the  $\Omega$  /  $\rightarrow$  /  $\rightarrow$  /  $\rightarrow$  position, select " $\rightarrow$ " by pressing select key.
3. Turn off power to the circuit under test.

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#### 2.6b "ACV" position (For line frequency measurement.)

Sensitivity : 2V  
Frequency Range : 40Hz to 500Hz  
Duty Cycle : 10% to 90%  
Overvoltage Protection : 1000V DC or 750V AC peak


1. Connect test lead to "V $\Omega$ " and "COM" terminal.
2. Set rotary switch to "ACV" position.
3. Select Frequency or Duty cycle by pressing "Select" key.
4. Connect the test leads across the source or load under measurement.

## 3. MAINTENANCE

### WARNING

Remove test leads before changing battery or servicing.

### Battery Replacement

Power is supplied by two 1.5V 'AAA' size battery or Equivalent. The "  " appears on the LCD display when replacement is needed. To replace the battery, remove the screw from the battery cover and lift off the battery case. Remove the batteries & replaced with new batteries.

## 4. SAFETY INFORMATION

The following safety information must be observed to ensure maximum personal safety during the operation of this meter:

1. Do not use the meter if the meter or test leads look damaged, or if you suspect that the meter is not operating properly.
2. This Clamp Meter is designed to take current measurements on circuits with a maximum voltage difference of 500VAC between any conductor and ground potential. Using the instrument for current measurements on circuits above this voltage may cause electric shock, instrument damage or damage to the equipment under test.

Before measuring current make certain the test leads are removed from the instrument.

3. The instrument is protected for overload upto 500 VAC for 1 minute. Do not take current readings on circuits where the maximum current potential is not known.

Do not exceed the maximum currents that this instrument is designed to measure.

4. Turn off power to the circuit under test before cutting, unsoldering, or breaking the circuit. Small amounts of current can be dangerous.
5. Use caution when working above 60V DC or 30V AC rms. Such voltages pose a shock hazard.
6. When using the probes, keep your fingers behind the finger guards on the probes.
7. Measuring voltage which exceeds the limits of the clamp meter may damage the meter and expose the operator to a shock hazard. Always recognize the meter voltage limits as stated on the front of the meter.



# CERTIFICATE OF CALIBRATION

We hereby certify that this product has been calibrated and found to be in accordance with the applicable SPECIFICATIONS and MECO STANDARDS.

Accuracies of the standard equipment used in this calibration are traceable to the National Standards.

## MECO METERS PVT. LTD.

Block 9, Plot 270, 2nd Floor, Rup-Udey Niwas, Sion (E),  
Mumbai - 400 022 (INDIA)

### Correspondance Address :

Plot No. EL-1, MIDC Electronic Zone, TTC Industrial Area,  
Mahape, Navi Mumbai - 400710 (INDIA)

**Tel** : 0091-22-27673311-16, 27673300 (Board)

**Fax** : 0091-22-27673310, 27673330

**E-mail** : sales@mecoinst.com **Web** : www.mecoinst.com

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 CHECKED BY : \_\_\_\_\_  
 DATE : \_\_\_\_\_  
 MODEL NO : \_\_\_\_\_ 10

**NOTE**

**NOTE**