micro CM-100

RIDGID

RIDGE TOOL COMPANY

Table of Contents

Original instructions

micro CM-100
Digital Clamp Meter

⚠ WARNING

Read this Operator's Manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.

micro CM-100 Digital Clamp Meter	
Record Serial Number below and retain product serial number which is located on nameplate.	
Serial No.	

Safety Symbols

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE NOTICE indicates information that relates to the protection of property.

This symbol means read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.

This symbol indicates the risk of electrical shock.

This symbol indicates the presence of a high voltage hazard.

General Safety Rules

⚠ WARNING

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE THESE INSTRUCTIONS!

Work Area Safety

- **Keep your work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate equipment in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Equipment can create sparks which may ignite the dust or fumes.
- **Keep children and by-standers away while operating equipment.** Distractions can cause you to lose control.

Electrical Safety

- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electrical shock if your body is earthed or grounded.
- **Do not expose equipment to rain or wet conditions.** Water entering equipment will increase the risk of electrical shock.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating equipment. Do not use equipment while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating equipment may result in serious personal injury.

- **Use personal protective equipment.** Always wear eye protection. Protective equipment such as as protective gloves and clothing, dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the equipment in unexpected situations.

Equipment Use and Care

- **Do not force equipment. Use the correct equipment for your application.** The correct equipment will do the job better and safer at the rate for which it is designed.
- **Do not use equipment if the switch does not turn it ON and OFF.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Store idle equipment out of the reach of children and do not allow persons unfamiliar with the equipment or these instructions to operate the equipment.** Equipment can be dangerous in the hands of untrained users.
- **Maintain equipment.** Check for missing parts, breakage of parts and any other condition that may affect the equipment's operation. If damaged, have the equipment repaired before use. Many accidents are caused by poorly maintained equipment.
- **Use the equipment and accessories in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the equipment for operations different from those intended could result in a hazardous situation.
- **Use only accessories that are recommended by the manufacturer for your equipment.** Accessories that may be suitable for one piece of equipment may become hazardous when used with other equipment.
- **Keep handles dry and clean; free from oil and grease.** Allows for better control of the equipment.

Service

- **Have your equipment serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the tool is maintained.

Specific Safety Information

⚠ WARNING

This section contains important safety information that is specific to this tool.

Read these precautions carefully before using the RIDGID® micro CM-100 Digital Clamp Meter to reduce the risk of electrical shock or other serious injury.

SAVE THESE INSTRUCTIONS!

Keep this manual with the tool for use by the operator.

Digital Clamp Meter Safety

- **Use caution when working with voltages above 30 V AC RMS, 42 V AC peak or 60 V DC.** These voltages pose serious shock hazard. High-voltage circuits, both DC and AC, are very dangerous and should be measured with great care. Avoid working alone.
- **Do not connect to voltages that exceed 600 VAC or VDC relative to earth ground.** This may damage the meter and expose the operator to a shock hazard.
- **When using the probes, keep your fingers behind the finger guards on the probes.** This reduces the risk of electric shock.
- **Never ground yourself when taking electrical measurements.** Do not touch ex-

posed metal pipes, outlets, fixtures, etc., which might be at ground potential. Keep your body isolated from ground using appropriate methods.

- **Disconnect the test leads from the meter before making current clamp measurements.** This reduces the risk of electric shock.
- **When measuring resistance, disconnect all power (remove batteries, unplug cord, discharge all capacitors, etc.) to the circuit being measured.** This reduces the risk of electric shock.
- **After resistance test, the capacitive circuits must be discharged.** This will help protect against electric shock.
- **Use extreme caution when working near bare conductors and bus bars.** Accidental contact with conductors could result in electrical shock.
- **Turn OFF power to the circuit under test before cutting, unsoldering, or breaking the circuit.** Small amount of current can expose the operator to a shock hazard.

The EC Declaration of Conformity (890-011-320.10) will accompany this manual as a separate booklet when required.

If you have any question concerning this RIDGID® product:

- Contact your local RIDGID distributor.
- Visit www.RIDGID.com or www.RIDGID.eu to find your local RIDGID contact point.
- Contact RIDGID Technical Services Department at rtctechservices@emerson.com, or in the U.S. and Canada call (800) 519-3456.

Description, Specifications And Standard Equipment

Description

The RIDGID® micro CM-100 Digital Clamp Meter is a handheld digital instrument with clamp-on current measuring capability. The unit can measure DC and AC Voltage and Current, Resistance, Capacitance, Frequency, Temperature, Continuity (audible signal) and Test Diodes.

The unit has data hold, peak hold and DC Amps zero adjustment functions. Overload protection and low battery indication are provided in the unit. The unit has a four Digit backlight LCD.

The Clamp Meter is powered by a 9V battery and has auto power-off function after 20 minutes of inactivity.

Specifications

Display	4-Digit backlight LCD
Clamp Size	1.2" (30 mm) Opening
Overvoltage Category	CAT III 600 V, CAT II 1000 V
Safety Compliance	IEC 61010-1, EN 61010-1
Measurement Rate	2 per Second, Nominal
Power Supply	9V Battery, NEDA 1604, IEC 6F22 or 6LR61
Operating Temperature	0°C to 50°C (32°F to 122°F)
Weight	0.67 lbs (304 g)
Dimension	9.0" x 3.1" x 1.9" (229 x 79 x 48 mm)

Input Limits

Function	Maximum Input
Voltage V DC/AC	600 V DC/AC
Current A DC/AC	1000 A DC/AC
Frequency, Duty Cycle	600 V DC/AC

Accuracy is given at 18°C to 28°C (65°F to 83°F), less than 70% RH

DC Current

Range	Resolution	Accuracy
40 A	0.01 A	±2.8% of Reading ± 10 Digits
400 A	0.1 A	±2.8% of Reading ± 8 Digits
1000 A	1 A	±3.0% of Reading ± 8 Digits

AC Current

Range	Resolution	Accuracy
40 A	0.01 A	±2.8% of Reading ± 10 Digits
400 A	0.1 A	±2.8% of Reading ± 8 Digits
1000 A	1 A	±3.0% of Reading ± 8 Digits

DC Voltage (Autoranging)

Range	Resolution	Accuracy
400 mV	0.1 mV	±0.8% of Reading ± 2 Digits
4 V	0.001 V	±1.5% of Reading ± 2 Digits
40 V	0.01 V	
400 V	0.1 V	
600 V	1 V	±2.0% of Reading ± 2 Digits

Input Impedance.....10.0 MΩ

AC Voltage (Autoranging)

Range	Resolution	Accuracy
400 mV	0.1 mV	±1.0% of Reading ± 10 Digits
4 V	0.001 V	±1.5% of Reading ± 8 Digits
40 V	0.01 V	
400 V	0.1 V	
600 V	1 V	±2.0% of Reading ± 8 Digits

Input Impedance.....10.0 MΩ

Resistance (Autoranging)

Range	Resolution	Accuracy
400 Ω	0.1 Ω	±1.0% of Reading ± 4 Digits
4 kΩ	1 Ω	±1.5% of Reading ± 2 Digits
40 kΩ	10 Ω	
400 kΩ	100 Ω	
4 MΩ	1 kΩ	±2.5% of Reading ± 5 Digits
40 MΩ	10 kΩ	±3.5% of Reading ± 10 Digits

Capacitance (Autoranging)

Range	Resolution	Accuracy
4 ηF	0.001 ηF	±5.0% of Reading ± 30 Digits
40 ηF	0.01 ηF	±5.0% of Reading ± 20 Digits
400 ηF	0.1 ηF	±3.0% of Reading ± 5 Digits
4 µF	0.001 µF	
40 µF	0.01 µF	
400 µF	0.1 µF	±4.0% of Reading ± 10 Digits
4 mF	0.001 mF	±4.5% of Reading ± 10 Digits
40 mF	0.01 mF	±5.0% of Reading ± 10 Digits

Frequency (Autoranging)

Range	Resolution	Accuracy
4 kHz	0.001 kHz	±1.5% of Reading ± 2 Digits

Sensitivity.....>5 V RMS minimum

Temperature

Range	Resolution	Accuracy
-40°C to +1000°C	1°C	±2.5% of Reading ± 3°C
-40°F to +1832°F	1°F	±2.5% of Reading ± 5°F

Diode Test

Range	Resolution	Accuracy
0.3 mA Typical	1 mV	±10% of Reading ± 5 Digits

Open Circuit Voltage .....1.5 V DC

Audible Continuity

Audible Threshold .....< 35 Ω
Test Current .....< 1.0 mA

Standard Equipment

The RIDGID® micro CM-100 Digital Clamp Meter comes with the following items:

- micro CM-100 Digital Clamp Meter
- Test Leads with Covers, Black and Red
- K Type Adapter and Temperature Probe
- User Manual and Instruction CD
- Carrying Case

Figure 1 – micro CM-100 Digital Clamp Meter

Figure 2 – Back of micro CM-100 Digital Clamp Meter

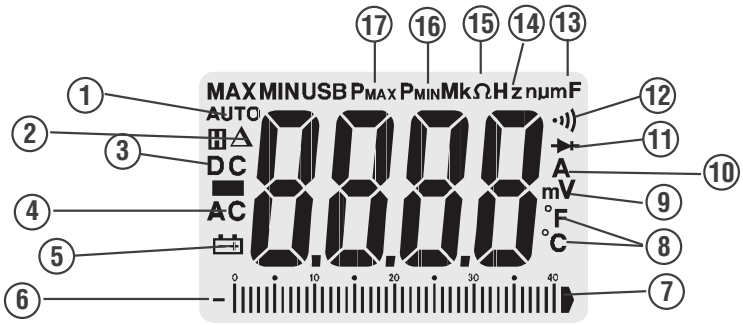
Controls

1. Transformer Jaws
2. Jaw Trigger
3. Rotary Function switch
4. Data hold pushbutton HOLD
5. Mode pushbutton MODE
6. Peak hold pushbutton PEAK
7. Backlight pushbutton
8. DC amps zero adjustment pushbutton DC ZERO
9. 4-Digit Liquid Crystal Display
10. Positive Input Terminal for DC/AC Voltage Measurement, Resistance Measurement, Continuity Check, Diode Test, Frequency Measurement, Capacitance Measurement and Temperature Measurement V·Ω·CAP TEMP·Hz
11. COM (Negative) Terminal for all measurements (COM)

Figure 3 – micro CM-100 Digital Clamp Meter Controls

Icons

Screen Icons



Icon Number	Icons on Screen	Description
1	AUTO	Autoranging.
2	Δ	DC Amps Zero Adjustment.
3	DC	Direct Current or Voltage.
4	AC	Alternating Current or Voltage.
5		Low Battery.
6	—	Polarity Indicator.
7		Analog Display of Voltage
8	°C and °F	Temperature Mode (Degree Celsius, Degree Fahrenheit).
9	V, mV	volts, millivolts
10		amperes (amps), microamp, milliamp
11		Diode Test Mode.
12		Continuity Check Mode.
13	μF, ηF, F, mF	microfarad, nanofarad, farad, millifarad
14	kHz	kilohertz
15	Ω, kΩ , MΩ	ohm, kilohm, Megohm
16	P MIN	Peak Minimum Value.
17	P MAX	Peak Maximum Value.
	OL	Overload Condition. (Shows in Numeric Display.)

Figure 4 – Screen Icons

On Product Icons

	Double Insulation Symbol		
	Earth Ground Symbol		9V Battery Symbol
CAT III	IEC Overvoltage Category III CAT III equipment is designed to protect against transients in equipment in fixed equipment installations, such as distribution panels, feeders and short branch circuits, and lighting systems in large buildings.	CAT II	IEC Overvoltage Category II CAT II equipment is designed to protect against transients from energy-consuming equipment supplied from the fixed installation, such as TVs, PCs portable tools, and other household appliances.
CE	Conforms to European Union directives.		Do not dispose of electrical equipment with household waste!

NOTICE This equipment is used to make electrical measurements. Incorrect use or improper application may result in incorrect or inaccurate measurements. Selection of appropriate measurement methods for the conditions is the responsibility of the user.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Electromagnetic Compatibility (EMC)

The term electromagnetic compatibility is taken to mean the capability of the product to function smoothly in an environment where electromagnetic radiation and electrostatic discharges are present and without causing electromagnetic interference to other equipment.

NOTICE The RIDGID micro CM-100 Digital Clamp Meter conforms to all applicable EMC standards. However, the possibility of it causing interference in other devices cannot be precluded.

Changing/Installing Batteries

The RIDGID micro CM-100 Digital Clamp Meter is supplied without the battery installed. When the low battery [] icon appears on the display screen, replace the battery. Operating the clamp meter with a low battery can cause incorrect readings. Remove the battery prior to long-term storage to avoid battery leakage.

1. Switch OFF the device and disconnect test leads.

2. Use a Phillips head screwdriver to loosen the battery compartment cover screw and remove the cover. Remove existing battery.
3. Install 9V alkaline battery (NEDA 1604, IEC 6F22 or 6LR61), observing the correct polarity as indicated on the battery compartment.
4. Securely install the battery compartment cover. Do not operate without the battery cover secured.

Figure 5 – Changing Battery

Pre-Operation Inspection

⚠ WARNING

Before each use, inspect your tool and correct any problems to reduce the risk of serious injury from electric shock and other causes and prevent tool damage.

1. Make sure the unit is OFF and the leads are not connected.
2. Clean any oil, grease or dirt from the equipment. This aids inspection and helps prevent the tool from slipping from your grip.
3. Inspect the tool.
   - For any broken, worn, missing or binding parts or any condition which may prevent safe and normal operation.
   - Confirm that battery compartment cover and back cover are properly secured.
   - Inspect the test leads for damaged insulation or exposed wire. Check the test leads for continuity.
   - Check that the markings and warning label are present, firmly attached and readable.

   If any issues are found during the inspection, do not use the tool until it has been properly serviced.
4. Verify the meter operation (following the *Operating Instructions*)
   - Turn the unit ON and confirm that the Low Battery icon is not ON.
   - Perform a continuity test.
5. Do not use the meter if it operates abnormally. When in doubt, have the meter serviced.

Set-Up and Operation

⚠ WARNING

Set up and operate the micro CM-100 Digital Clamp Meter according to these procedures to reduce the risk of injury from electric shock and other causes, and prevent tool damage.

Use caution when working with voltages above 30 V AC RMS, 42 V AC peak or 60 V DC. These voltages pose serious shock hazard. High-voltage circuits, both DC and AC, are very dangerous and should be measured with great care. Avoid working alone.

Do not connect to voltages that exceed 600 VAC or VDC relative to earth ground. This may damage the meter and expose the operator to a shock hazard.

When using the probes, keep your fingers behind the finger guards on the probes. This reduces the risk of electric shock.

Never ground yourself when taking electrical measurements. Do not touch exposed metal pipes, outlets, fixtures, etc., which might be at ground potential. Keep your body isolated from ground using appropriate methods.

Use extreme caution when working near bare conductors and bus bars. Accidental contact with conductors could result in electrical shock.

1. Check for an appropriate work area as indicated in the *General Safety* section.
2. Inspect the work to be done and confirm that you have correct equipment for the application. See the *Specifications* section for range, accuracy and other information.
   - To select a function, turn the rotary function switch to the appropriate position.
   - Select the proper function and range for your measurement.
   - Determine the voltage to be measured. Do not apply more than the rated voltage, as marked on the meter, between terminals or between any terminal and earth ground.
   - Check the clamps for full closure. Do not use the meter if the clamps do not operate properly.
   - Turn the function switch to the OFF position after inspection.
3. Make sure all equipment being used has been properly inspected.
4. Use correct accessories for the application. Select the proper terminals, function, and range for all measurements.
5. When making electrical connections, connect the common test lead (black) before connecting the live test lead (red); when disconnecting, disconnect the live test lead (red) before disconnecting the common test lead (black).
6. If "OL" appears in the display during a measurement, the value exceeds the range you have selected, change to a higher range. On some low DC and AC voltage ranges, with the test leads not connected to a device, the display may show a random, changing reading. This is normal and is caused by the high-input sensitivity. The reading will stabilize and give a proper measurement when connected to the circuit.
7. Always turn the function switch to the OFF position when the meter is not in use. The meter will automatically shut OFF if not used for 20 minutes.

Rotary Function Switch

The Rotary Function switch permits the user to select a measurement function by positioning the rotary switch to one of the icons around its perimeter.

Switch Position	Function
1000A	DC/AC Current Measurement up to 1000 A
400A	DC/AC Current Measurement up to 400 A
40A	DC/AC Current Measurement up to 40 A
Ω	Continuity/Diode Test & Resistance Measurement
V Hz	Voltage and Frequency Measurement
CAP	Capacitance Measurement
Temp	Temperature Measurement in °C or °F
OFF	Switch OFF the Clamp Meter

Figure 6 – Rotary Function Switch

Input Terminals

The black test lead plugs into the negative (COM) terminal and the red test lead plug the positive terminal. The Transformer Jaw Clamp is used for DC/AC current measurement.

Terminals	Description
V / Ω / CAP / TEMP /Hz	Input Positive Terminal for Voltage, Resistance, Continuity Test, Diode Test, Capacitance, Temperature and Frequency Measurement
COM	Negative Terminal for all measurements

Figure 7 – Input Terminals

Pushbuttons

Mode Button MODE

The Mode Button is used to select Ohms/Diode/Continuity, DC/AC Current and Voltage, Degrees F/C in the appropriate rotary switch settings.

1. In Current measurement function, pressing the Mode button will select the AC range from the default DC range.
2. In Voltage/Frequency measurement function, pressing the Mode button once will select the AC range from the default DC range. If the button is pressed for 3 seconds, the meter will enter Frequency measurement function.
3. In Resistance/Diode/Continuity function, pressing the Mode button will change from default Resistance function to Diode test and then Continuity test function.
4. In Temperature measurement function, pressing the Mode button will change from default °C to °F units.

Peak Hold Button PEAK

The Peak Data Hold function records the maximum and minimum readings for current and voltage on the display.

1. Press the Peak Hold button once to record the peak maximum value. The meter beeps and indicator “P MAX” appears on the display.
2. Press the Peak Hold button again to record the peak minimum value. The meter beeps and indicator “P MIN” appears on left-upper corner of the display.
3. Press the Peak Hold button for 3 seconds to deactivate.

Data Hold Button HOLD

The Data Hold function allows the meter to freeze a measurement for later reference.

1. Press the Data Hold button to freeze the reading on the display. The meter beeps and indicator “HOLD” appear on the display.
2. Press the Data Hold button to return to normal operation.

DC Zero Button DC ZERO

The DC Zero Button is used in case of DC current measurement to zero the clamp current for accurate measurement.

Backlight Button

1. Press the Backlight button for 3 seconds to turn the display light ON.
2. Press Backlight button again for 3 seconds to exit the backlight mode.

DC/AC Voltage Measurement

NOTICE Do not measure voltage if motor (or other high current equipment) on the circuit is being switched ON and OFF. Large voltage surge may occur that can damage the meter.

1. Set the function switch to V≅Hz position. The meter automatically defaults to DC Voltage.
2. Press MODE button to select the AC voltage range if desired.
3. Insert black test lead plug into the "COM" terminal and red test lead plug into the "V Ω CAP TEMP Hz" terminal.
4. Touch the test probe tips to the circuit under test. Be sure to observe the correct polarity (red lead to positive, black lead to negative).

   The probe tips may not be long enough to contact the live parts inside some fixtures because the contacts are deeply recessed. The reading may show 0 volts when the outlet actually has voltage on it. Make sure the probe tips are touching metal contacts before assuming that no voltage is present
5. Read the voltage in the display. The display will indicate the proper value with decimal point and symbol (DC/AC and V). If the polarity is reversed, the display will show minus (-) before the value.

DC/AC Current Measurement

⚠ WARNING To reduce risk of electric shock, ensure that the test leads are disconnected from the meter before making current measurements.

1. Set the function switch to 40A, 400A or 1000A position according to the measurement range. The meter automatically defaults to DC current.
2. Press MODE button to select the AC current range from default DC mode.
3. In DC mode, press the DC ZERO button once, the ⊿ symbol will appear indicating the display is zero.
4. Press the trigger to open up the transformer jaws and clamp around the single conductor that needs to be tested.
5. Read the display. The display will indicate the proper value with decimal point and symbol.

NOTE! During measurement, keep the jaws fully closed for accurate measurement. When measuring large currents, the jaws may buzz. This is not a fault and does not affect the accuracy.

Correct Current Measurement **Incorrect Current Measurement**

Figure 8 – Correct Way of Current Measurement

Resistance Measurement

⚠ WARNING To reduce risk of electric shock, disconnect all power (remove batteries, unplug cord, discharge all capacitors, etc.) to the circuit being measured before taking any resistance measurement.

1. Set the function switch to position.
2. Insert the black test lead plug into the “COM” terminal and the red test lead plug into the “V Ω CAP TEMP Hz” terminal.
3. Touch the test probe tips across the circuit or part under test. It is good practice to disconnect one side of the part under test so the rest of the circuit will not interfere with the resistance reading.
4. Read the resistance in the display. The display will indicate the proper value with decimal point and symbol.
5. After resistance test, the capacitive circuits must be discharged. This will help protect against electric shock.

Diode Test

WARNING To reduce the risk of electric shock, do not test any diode that has voltage on it.

1. Set the function switch to position.
2. The meter automatically defaults to Resistance range. Press MODE button once to select the diode test range.
3. Insert the black test lead plug into the “COM” terminal and the red test lead plug into the the “V Ω CAP TEMP Hz” terminal.
4. Touch the test probe tips to the diode or semiconductor junction to test. Note the meter reading.
5. Reverse the probe polarity by switching probe position. Note this reading.
6. The diode or junction can be evaluated as follows:
   - If one reading shows a value and the other reading shows OL, the diode is good.
   - If both readings show OL, the device is open.
   - If both readings are very small or 0, the device is shorted.

NOTE! The value indicated in the display during the diode check is the forward voltage.

Continuity Check

WARNING To reduce risk of electric shock, never measure continuity on circuits or wires that have voltage on them.

1. Set the function switch to position.
2. The meter automatically defaults to Resistance range. Press MODE button twice to select the continuity test range.
3. Insert black test lead plug into the “COM” terminal and red test lead plug into the “V Ω CAP TEMP Hz” terminal.
4. Check meter operation by touching probe tips together. An audible signal should sound.
5. Touch the test probe tips to the circuit or wire to check.
6. If the resistance is less than approximately 35 Ω, an audible signal will sound. The display will also show the actual resistance.

Capacitance Measurement

WARNING To reduce risk of electric shock, disconnect all power (remove batteries,

unplug cord, discharge all capacitors, etc.) to the circuit being measured before taking any capacitance measurement. Use the DC Voltage function to confirm that the capacitor is discharged.

1. Set the function switch to CAP position.
2. Insert the black test lead plug into the “COM” terminal and the red test lead plug into the “V Ω CAP TEMP Hz” terminal.
3. Touch the test leads to the capacitor to be tested. The display will indicate the proper value with decimal point and symbol.

Frequency Measurement

1. Set the function switch to V≅Hz position.
2. The meter automatically defaults to DC voltage. Press and hold MODE button for 3 seconds to select the frequency range.
3. Insert black test lead plug into the “COM” terminal and red test lead plug into the “V Ω CAP TEMP Hz” terminal.
4. Touch the test probe tips to the circuit under test.
5. Read the frequency in the display. The digital reading will indicate the proper value with decimal point and symbol.

Temperature Measurement

⚠ WARNING To reduce the risk of electric shock, disconnect both test probes from any source of voltage before making a temperature measurement.

1. Set the function switch to Temp position. The meter automatically defaults to °C range.
2. Insert the temperature adapter in **“COM”** and “**V Ω CAP TEMP Hz”** terminal with –ve side in **“COM”** and +ve side in **“V Ω CAP TEMP Hz”** terminal.
3. Insert the Temperature Probe into the adapter.
4. Touch the Temperature Probe head to the part whose temperature is to be measured. Keep the probe in contact with the part under test until the reading stabilizes (about 30 seconds).
5. Read the temperature in the display. The digital reading will indicate the proper value with decimal point.
6. Press MODE button to change from °C to °F unit.

Figure 9 – Temperature Probe

⚠ WARNING To reduce risk of electric shock, be sure the thermocouple has been removed before changing to another measurement function.

Maintenance Instructions

⚠ WARNING

To reduce risk of electric shock, disconnect the test leads from any source of voltage before performing any maintenance activity.

Cleaning

- Do not immerse the clamp meter in water. Wipe off dirt with a damp soft cloth. Do not use aggressive cleaning agents or solutions. Gently clean the display screen with a clean dry cloth. Avoid rubbing too hard.
- Use only alcohol swabs to clean the test lead connections.

Calibration

The calibration of the meter should be checked once a year to ensure that it performs according to the specifications. Take to a RIDGID Service Center for calibration check.

Accessories

⚠ WARNING

To reduce the risk of serious injury, only use accessories specifically designed and recommended for use with the RIDGID micro CM-100 Digital Clamp Meter such as those listed below. Other Accessories suitable for use with other tools may be hazardous when used with this meter.

Catalog Number	Description
44748	Test Leads with Covers, Black and Red
44758	K Type Adapter and Temperature Probe

Further information on accessories specific to this tool can be found in the RIDGID Catalog and online at www.RIDGID.com or www.RIDGID.eu

Storage

The RIDGID micro CM-100 Digital Clamp Meter must be stored in a dry secure area between -30°C (-22°F) and 60°C (140°F) and humidity less than 85% RH.

Store the tool in a locked area out of the reach of children and people unfamiliar with the meter.

Remove the battery before any long period of storage or shipping to avoid battery leakage.

The clamp meter should be protected against hard impacts, moisture and humidity, dust and dirt, extreme high and low temperatures and chemical solutions and vapors.

Service and Repair

⚠ WARNING

Improper service or repair (or calibration) can make the micro CM-100 Digital Clamp Meter unsafe to operate.

Service and repair of the micro CM-100 Digital Clamp Meter must be performed by a RIDGID Independent Authorized Service Center.

For information on your nearest RIDGID Independent Service Center or any service or repair questions:

- Contact your local RIDGID distributor.
- Visit www.RIDGID.com or www.RIDGID.eu to find your local RIDGID contact point.
- Contact RIDGID Technical Services Department at rtctechservices@emerson.com, or in the U.S. and Canada call (800) 519-3456.

Disposal

Parts of the RIDGID micro CM-100 Digital Clamp Meter contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally. Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.

For EC Countries: Do not dispose of electrical equipment with household waste!

According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national legislation, electrical equipment that is no longer usable must be collected separately and disposed of in an environmentally correct manner.

Battery Disposal

For EC countries: Defective or used batteries must be recycled according to the guideline 2006/66/EEC.

Troubleshooting

SYMPTOM	POSSIBLE REASON	SOLUTION
Meter does not work properly.	Battery low on power.	Replace battery.
	Meter needs calibration.	Send the unit for calibration to the RIDGID Independent Authorized Service Center.
	Meter not set for proper measurement.	Move the Rotary Function Switch according to the correct measurement.
	Use of incorrect input terminal, range or mode for measurement.	Use proper input terminal, range or mode for measurement. See *Tool Set-up and Operating Instructions*.
Unit will not turn ON.	Dead battery.	Replace battery.