ELECTRICAL SPECIFICATIONS

DC Voltage Measurement

Range	Resolution	Accuracy
200mV	0.1mV	± (0.5% + 3 digits)
2V	0.001V	
20V	0.01V	
200V	0.1V	
600V	1V	

Overload Protection: 600V RMS
Input Impedance (Nominal): > 1MΩ.

AC Voltage Measurement

Range	Resolution	Accuracy
200V	0.1V	± (1.2% + 5 digits)
600V	1V	

Overload Protection: 600V RMS
Frequency: 50 ~ 60Hz
Input Impedance (Nominal): > 1MΩ.
Response: Averaging

DC Current Measurement

Range	Resolution	Accuracy
200µA	0.1µA	± (1.0% + 3 digit)
20mA	0.01mA	
200mA	0.1mA	
10A	0.01A	± (3.0% + 5 digits)

Overload Protection:
- **mA Input:** F250mA / 250V fast fuse
- **10A Input:** F10A / 500V fast fuse

Max Input Current:
- **mA Input:** 200mA DC / AC RMS
- **10A Input:** 10A DC / AC RMS

Resistance Measurement

Range	Resolution	Accuracy
200Ω	0.1Ω	± (0.8% + 4 digit)
2kΩ	0.001kΩ	
20kΩ	0.01kΩ	
200kΩ	0.1kΩ	
2MΩ	0.001MΩ	

Overload Protection: 600V RMS

Battery Test

Type	Resolution	Test Current
1.5V	0.01V	Appx. 15mA
9V	0.01V	Appx. 30mA

Overload Protection: F250mA / 250V fast fuse

Diode Test

Overload Protection	Test Current	Open Circuit Voltage
600V RMS	Appx. 1mA	Appx. 3.0V DC

Continuity Test

Overload Protection	Open Circuit Voltage
600V RMS	Appx. 3.0V

WARRANTY

www.kleintools.com/warranty

CLEANING

Turn instrument off and disconnect test leads. Clean the instrument by using a damp cloth. Do not use abrasive cleaners or solvents.

STORAGE

Remove the batteries when instrument is not in use for a prolonged period of time. Do not expose to high temperatures or humidity. After a period of storage in extreme conditions exceeding the limits mentioned in the Specifications section, allow the instrument to return to normal operating conditions before using it.

DISPOSAL / RECYCLE

Caution: This symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal.

Test Equipment Depot
1-800-517-8431
99 Washington Street
Melrose, MA 02176
Phone 781-665-1400
Toll Free 1-800-517-8431
Visit us at www.TestEquipmentDepot.com

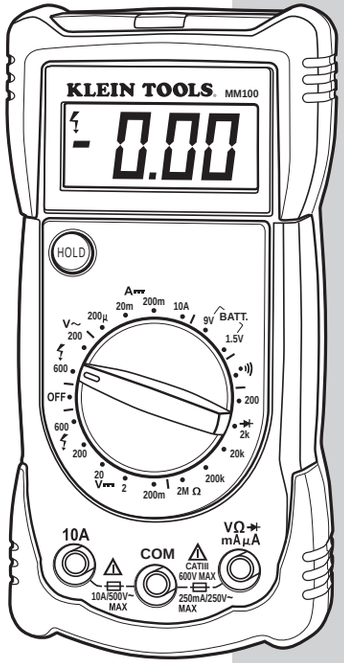
139569T Rev. 11/13 C

MM100

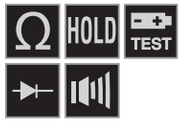
Instruction Manual

ENGLISH

- 3-1/2 DIGIT 1999 COUNT LCD
- DATA HOLD
- BATTERY TEST
- KICKSTAND
- LEAD HOLDER



600V ≂
10A ⎓



KLEIN TOOLS®
For Professionals... Since 1857® USA

CAT III 600 V

CE

C ETL US LISTED Intertek 3194551

ENGLISH

MM100
Instruction Manual

GENERAL SPECIFICATIONS

The Klein Tools MM100 is a manual ranging multimeter. It measures AC/DC voltage, DC current, and resistance. It can also test batteries, diodes, and continuity.

- **Operating Altitude:** 2000 meters
- **Relative Humidity:** 75% max operating
- **Operating Temperature:** 0°C / 32°F to 40°C / 104°F < 75% R.H.
- **Storage Temperature:** -20°C / -4°F to 60°C / 140°F < 80% R.H.
- **Accuracy Temperature:** 18°C / 64°F to 28°C / 82°F < 75% R.H.
- **Temperature Coefficient:** 0.1*(specified accuracy) / °C
- **Sampling Frequency:** 3 samples per second
- **Dimensions:** 5.91" x 2.76" x 1.97" (150 mm x 70 mm x 50 mm)
- **Weight:** 8.36 oz. (237 g)
- **Calibration:** Accurate for one year
- **Safety Rating:** CAT III 600V
- **Listing:** ETL & cETL standard UL 3111-1 listed
- **Pollution Degree:** 2
- **Accuracy:** ± (% of reading + # of least significant digits)

⚠WARNINGS

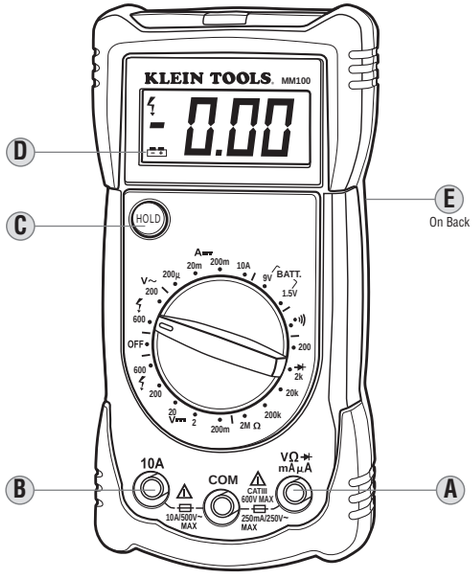
To ensure safe operation and service of the tester, follow these instructions. Failure to observe these warnings can result in severe injury or death.

- Before each use, verify meter operation by measuring a known voltage or current.
- Never use the meter on a circuit with voltages that exceed the category based rating of this meter.
- Do not use the meter during electrical storms, or in wet weather.
- Do not use the meter or test leads if they appear to be damaged.
- Ensure meter leads are fully seated, and keep fingers away from the metal probe contacts when making measurements.
- Do not open the meter to replace batteries while the probes are connected.
- Use caution when working with voltages above 60V DC, or 25V AC RMS. Such voltages pose a shock hazard.
- To avoid false readings that can lead to electrical shock, replace batteries if a low battery indicator appears.
- Unless measuring voltage or current, shut off and lock out power before measuring resistance or capacitance.
- Always adhere to local and national safety codes. Use individual protective equipment to prevent shock and arc blast injury where hazardous live conductors are exposed.

SYMBOLS

~ AC Alternating Current	⚠ Warning or Caution
⎓ DC Direct Current	Dangerous Levels
≂ DC/AC Voltage or Current	⧈ Double Insulated Class II
⏚ Ground	AC Source

FEATURE DETAILS



A.B. Use properly safety rated leads.

A. Do not attempt to measure more than 600V or 200mA.

B. Do not attempt to measure more than 10A.

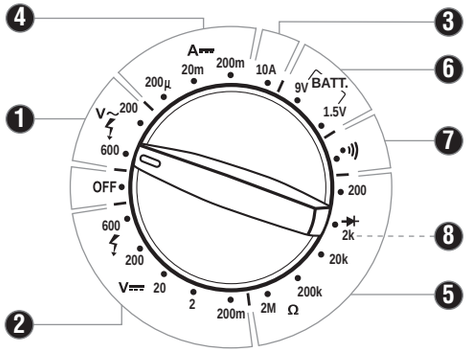
C. Data Hold

- Press to hold the current input on the display.
- Press again to return to live reading.

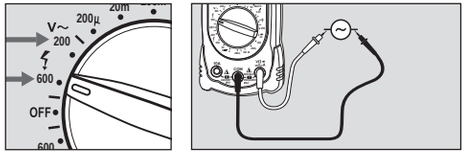
D.E. Battery / Fuse Replacement

- When +− indicator is displayed on the LCD, batteries must be replaced.
- Remove rubber boot, back screw, and replace 9V battery.
- If more than 200mA is applied to (A), replace with 250mA/250V fast-blow fuse.
- If more than 10A is applied to (B), replace with respective 10A / 500V fast-blow fuse.

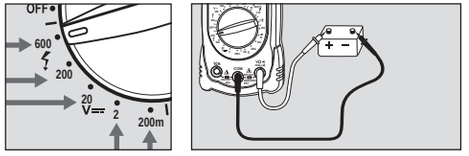
FUNCTION INSTRUCTIONS



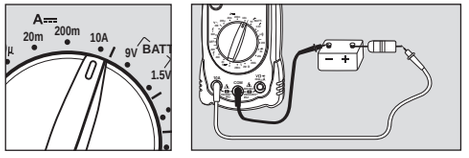
1. AC Voltage: < 600V



2. DC Voltage: < 600V

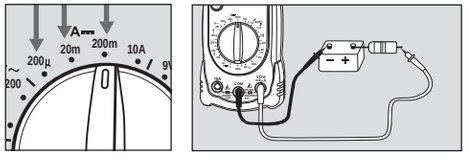


3. DC Current (large): < 10A



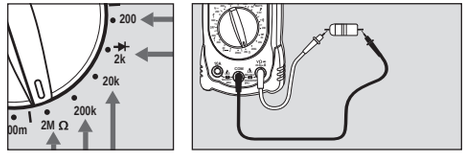
- Start with this setting if current level is unknown.
- Attach red lead to “10A” input.
- Current above 10A will require fuse replacement.

4. DC Current (small): < 200mA



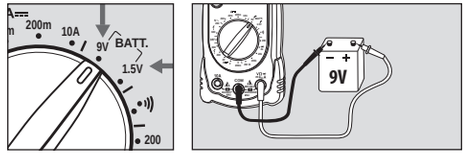
- Attach red lead to “mAμA” input.
- Current above 200mA will require fuse replacement.

5. Resistance < 2MΩ

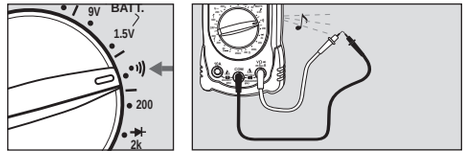


- ⚠ Do not attempt resistance measurement on a live circuit.

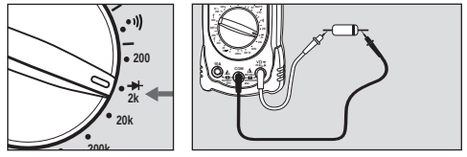
6. Battery Test



7. Continuity < 100Ω



8. Diode Test



SYMBOLS USED ON LCD

!	Overload: Range Exceeded	A	Current in Amps
−	Negative DC Value	▶|	Diode Test
+−	Low Battery	)))	Continuity Test
H	Hold Active	M	Mega 10^6
V	Voltage Measurement	k	Kilo 10^3
Ω	Resistance in Ohms	μ	Micro 10^{-}
m	Milli 10^{-3}	⚡	Dangerous Levels

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