Mastech MS8235

Mastech MS8235 Digital Multimeter with LAN Tester User Manual

Model: MS8235

Introduction

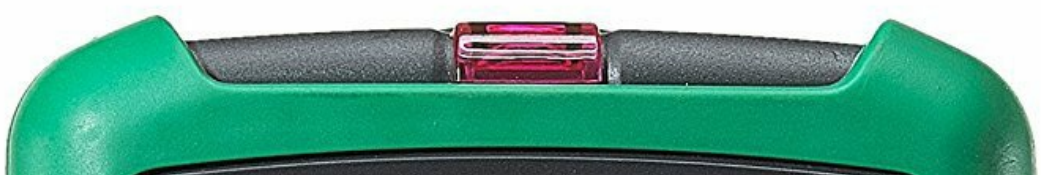
The Mastech MS8235 is a versatile 2-in-1 instrument combining a full-featured auto-ranging digital multimeter with a comprehensive LAN cable tester. This device is engineered for precision and safety, making it an essential tool for electricians, network technicians, and DIY enthusiasts. It provides accurate measurements for various electrical parameters and efficiently diagnoses common network cable issues.

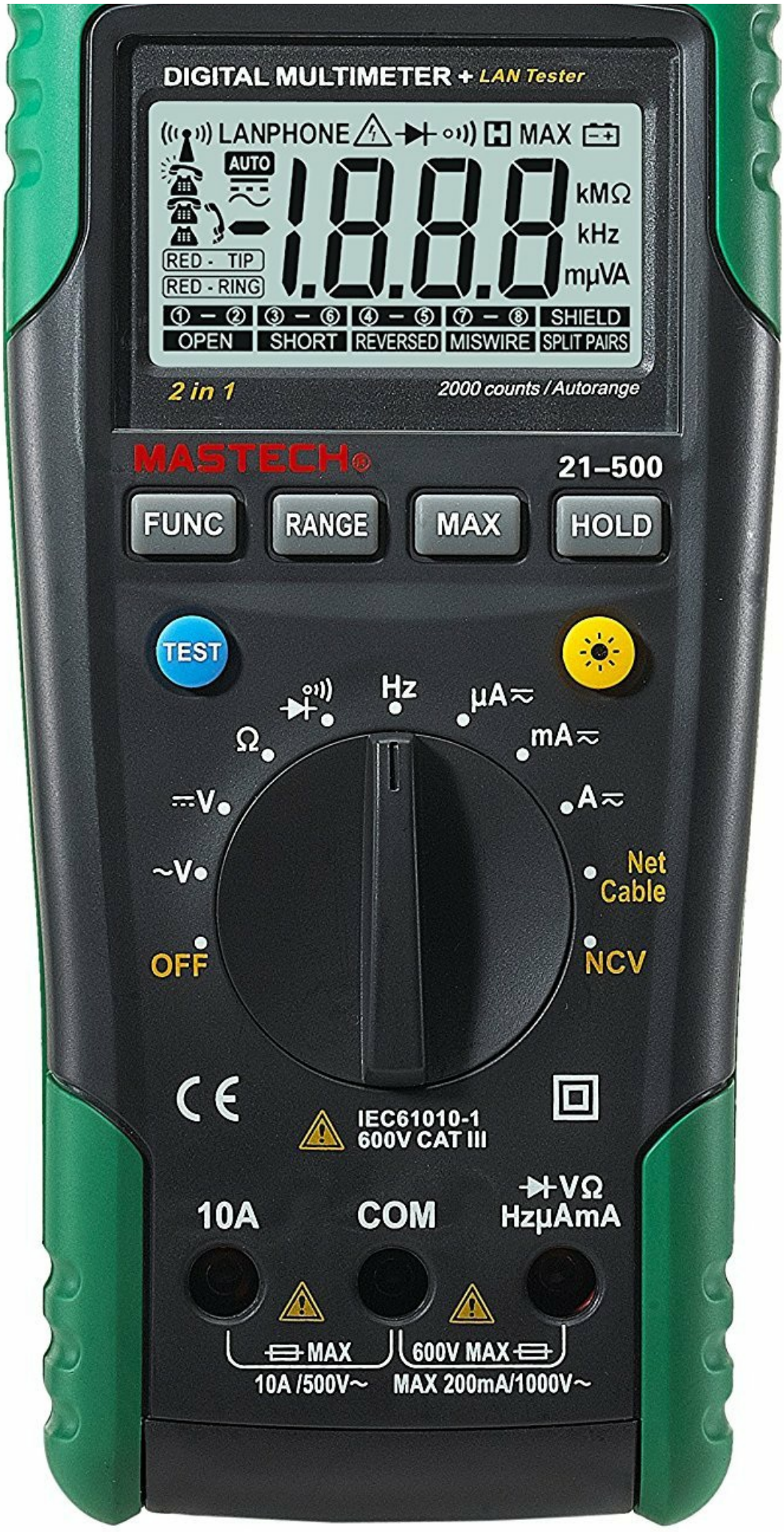
Safety Information

Always adhere to safety precautions when operating the Mastech MS8235. Failure to do so may result in electric shock, injury, or damage to the meter or equipment under test.

- **CAT III 600V Rating:** This meter is designed for measurements in distribution boards, circuit breakers, wiring, including cables, bus-bars, junction boxes, switches, socket outlets in the fixed installation, and industrial use with permanent connection to the fixed installation. Do not exceed the specified voltage and current limits.
- Before each use, inspect the test leads for any damage. Do not use if insulation is cracked or if the leads are exposed.
- Ensure the rotary switch is in the correct position for the desired measurement before connecting the test leads to the circuit.
- Do not attempt to measure voltage or current on circuits exceeding the meter's maximum input ratings.
- Exercise extreme caution when working with live circuits. Always use appropriate personal protective equipment (PPE).
- Never operate the meter with the battery cover removed.
- If the 'Low Battery' indicator appears, replace the batteries immediately to ensure accurate readings.

Product Overview




DIGITAL MULTIMETER + LAN Tester
LANPHONE
MAX
AUTO
1.8.8.8
kMΩ
kHz
mμVA
RED - TIP
RED - RING
① – ②
③ – ⑥
④ – ⑤
⑦ – ⑧
SHIELD
OPEN
SHORT
REVERSED
MISWIRE
SPLIT PAIRS
2 in 1
2000 counts / Autorange
MASTECH®
21–500
FUNC
RANGE
MAX
HOLD
TEST
Hz
μA≂
mA≂
A≂
Ω
⎓V
~V
OFF
Net Cable
NCV
IEC61010-1
600V CAT III
10A
COM
VΩ HzμAmA
MAX
10A /500V~
600V MAX
MAX 200mA/1000V~

Front view of the Mastech MS8235 Digital Multimeter with LAN Tester, showing the LCD display, function buttons, rotary switch, and input jacks.

Components and Controls:

- **LCD Display:** Large digital display (2000 counts) showing measurement values, units (kΩ, kHz, mμVA), function indicators (LANPHONE, AUTO, MAX, battery), and LAN test results (OPEN, SHORT, REVERSED, MISWIRE, SPLIT PAIRS, SHIELD).
- **FUNC Button:** Selects different functions within a single rotary switch position (e.g., AC/DC, Diode/Continuity).
- **RANGE Button:** Toggles between auto-ranging and manual ranging modes.
- **MAX Button:** Displays the maximum measured value.
- **HOLD Button:** Freezes the current display reading.
- **TEST Button (Blue):** Initiates the LAN cable test.
- **Backlight Button (Yellow):** Activates or deactivates the display backlight.
- **Rotary Switch:** Used to select the desired measurement function (OFF, ~V, =V, Ω, Diode/Continuity, Hz, μA~, mA~, A~, Net Cable, NCV).
- **Input Jacks:**
  - **10A Jack:** For current measurements up to 10A.
  - **COM Jack:** Common (negative) input for all measurements.
  - **VΩHzμAmA Jack:** Positive input for voltage, resistance, frequency, diode, continuity, and current measurements up to 200mA.

Setup

Battery Installation:

1. Ensure the meter is turned OFF.
2. Locate the battery compartment on the rear of the meter.
3. Unscrew the retaining screw(s) and remove the battery cover.
4. Insert two (2) AA batteries, observing the correct polarity (+/-) as indicated inside the compartment.
5. Replace the battery cover and secure it with the screw(s).

Connecting Test Leads:

- For most measurements (voltage, resistance, frequency, diode, continuity, and current up to 200mA), insert the black test lead into the **COM** jack and the red test lead into the**VΩHzμAmA** jack.
- For high current measurements (up to 10A), insert the black test lead into the**COM** jack and the red test lead into the **10A** jack.

Operating Instructions

General Operation:

- **Auto-Ranging:** The meter automatically selects the appropriate measurement range. Press the**RANGE**

button to switch to manual ranging if desired.

- **Data Hold:** Press the **HOLD** button to freeze the current reading on the display. Press again to release.
- **Backlight:** Press the yellow backlight button to illuminate the display for better visibility in low-light conditions. Press again to turn off.
- **Auto Power Off:** The meter will automatically power off after a period of inactivity to conserve battery life.

Multimeter Functions:

1. **DC Voltage Measurement (=V):**
   - Set the rotary switch to the **=V** position.
   - Connect the red test lead to the positive side of the circuit and the black test lead to the negative side.
   - Read the DC voltage value on the display.
2. **AC Voltage Measurement (~V):**
   - Set the rotary switch to the **~V** position.
   - Connect the test leads across the AC voltage source.
   - Read the AC voltage value on the display.
3. **DC/AC Current Measurement (µA=~, mA=~, A=~):**
   - Set the rotary switch to the appropriate current range (µA, mA, or A).
   - Press the **FUNC** button to select DC or AC current.
   - Connect the meter in series with the circuit. Ensure correct jack usage (VΩHzµAmA for µA/mA, 10A for A).
   - Read the current value on the display.
4. **Resistance Measurement (Ω):**
   - Set the rotary switch to the **Ω** position.
   - Ensure the circuit is de-energized before measuring resistance.
   - Connect the test leads across the component to be measured.
   - Read the resistance value on the display.
5. **Frequency Measurement (Hz):**
   - Set the rotary switch to the **Hz** position.
   - Connect the test leads across the signal source.
   - Read the frequency value on the display.
6. **Diode Test and Audible Continuity:**
   - Set the rotary switch to the Diode/Continuity position.
   - Press the **FUNC** button to toggle between Diode Test and Continuity Test.
   - For Diode Test: Connect the red lead to the anode and black lead to the cathode. Read the forward voltage drop. Reverse leads for reverse bias.
   - For Continuity Test: Connect leads across the circuit. An audible beep indicates continuity (low resistance).
7. **Non-Contact Voltage (NCV) Detection:**

- Set the rotary switch to the **NCV** position.
- Move the top part of the meter near a live AC voltage source.
- The meter will beep and the NCV indicator will light up when AC voltage is detected.

LAN Tester Function:

The MS8235 can test RJ45 (Ethernet) and RJ11/RJ12 (Phone) cables for common wiring faults.

1. Set the rotary switch to the **Net Cable** position.
2. Connect one end of the network cable to the RJ45 port on the top of the meter.
3. Connect the other end of the network cable to the remote unit (if applicable, not explicitly mentioned but implied for full testing).
4. Press the blue **TEST** button to initiate the cable test.
5. The display will show the status of each wire pair (1-8 and Shield) indicating: **OPEN** (broken wire), **SHORT** (short circuit), **REVERSED** (reversed pair), **MISWIRE** (incorrect wiring), or **SPLIT PAIRS** (pairs split between different connectors).
6. For phone cables, the display will indicate **RED-TIP** and **RED-RING** status.

Maintenance

Battery Replacement:

When the 'Low Battery' indicator appears on the display, replace the batteries as described in the 'Setup' section to ensure accurate measurements and proper operation.

Cleaning:

Wipe the meter's casing with a damp cloth and mild detergent. Do not use abrasives or solvents. Ensure the meter is completely dry before use.

Troubleshooting

- **No Display/Meter Not Turning On:** Check battery installation and ensure batteries are fresh.
- **Inaccurate Readings:** Ensure the correct function is selected on the rotary switch. Check test lead connections. Replace batteries if the 'Low Battery' indicator is on.
- **LAN Test Errors:** Ensure both ends of the cable are properly connected. Verify the cable type (RJ45/RJ11) matches the test.
- **No NCV Detection:** Ensure the rotary switch is set to NCV. The NCV function detects AC voltage; it will not respond to DC voltage.

Specifications

Specification	Value
DC Voltage	600V
AC Voltage	600V

Specification	Value
DC Current	10A
AC Current	10A
Resistance	20MΩ
Frequency	20kHz
LCD Display Count	2000
Safety Rating	CAT. III 600V (IEC61010-1)
Power Source	2 AA batteries (included)
Dimensions	9.37 x 5.04 x 2.36 inches
Weight	1.35 Pounds
Item Model Number	MS8235
UPC	815108010734

Warranty and Support

Mastech products are manufactured to high quality standards. For warranty information, technical support, or service inquiries, please refer to the contact information provided with your purchase or visit the official Mastech website. Keep your purchase receipt as proof of purchase for warranty claims.

[pdf] User Manual Catalog

OEM catalogue MGL Mastech LR 2021 02 18 — under our own brands KPS Power Probe and APPA to the complete packaging manuals customization Battery User s Manual mgl euman Euman |||

GENERAL INDEX 04 08 32 37 W ho is MGL P RODUCT OVERVIEW TABLES 44 87 112 116 121 126 130 134 138 148 150 152 153 155 161 2 GENERAL INDEX COMMERCIAL TERMS BUILD TO PRECISION ProdMMuSSc6655t 11l34nfo 145 **MS8235** 145 MS8236 MS6518 138 MS8238 MeasMurSem65e2nt2sA, weight...

lang:en score:23 filesize: 33.32 M page_count: 166 document date: 2021-03-09

[pdf] User Manual Dimension Guide

Fluke 115 Multimeter Manual Pdf 114 117 Electronic Test Equipment Digital Multimeters atel pl katalogi |||

Digital Multimeters Digital luxometers #04013 Net Price: 20,80 EUR Unit: pcs #04054 Net Price: 34 ... es Battery indicator:yes Protection:yes Impedance:10 M Power:9V 6F22 battery Manufacturer: Mastech **MS8235** - Digital multimeter with lan tester Max. LCD display: 1999 Range selection: auto DC voltage:...

lang:it score:22 filesize: 1.52 M page_count: 0 document date: 0000-00-00

[pdf] Catalog

PRODUCTS CATALOG 52c482531c137f4d5fc9ba18918c1982 solislux eu site files |||

BUILD TO PRECISION PRODUCTS CATALOG BUILD TO PRECISION Director s Message Mr Kai-Yin Ip, founder ... 77 MS8229 CE/ETL CAT III 600V 4000 1000V 750V 10A 10A 40M 100F 200kHz -20-1000 -4-1832 71 **MS8235** CE/ETL CAT III 600V 2000 600V 600V 10A 10A 20M 20kHz 71 MS8236 CE/ETL CAT III 600V 2000...

lang:en score:12 filesize: 9.33 M page_count: 86 document date: 2018-10-08