

diymore A1_KBAI0058-006_US

Diymore USB C Power Meter Tester User Manual

Model: A1_KBAI0058-006_US

INTRODUCTION

This manual provides detailed instructions for the operation, maintenance, and troubleshooting of the Diymore USB C Power Meter Tester. This device is designed for comprehensive testing of USB-C power delivery, supporting various fast charging protocols and offering real-time measurement of voltage, current, and power.

The Diymore USB C Power Meter Tester is a compact and lightweight tool, ideal for verifying the performance of chargers, cables, and devices. It features a bright LCD screen for clear display of measurements and advanced functionalities like ripple testing and automatic protocol detection.

KEY FEATURES

- **Comprehensive Testing:** Supports PD3.1 protocol testing with voltage range 3-40V and current up to 12A, measuring voltage, current, and power up to 240W.
- **Wide Compatibility:** Supports multiple fast charging protocols including PD3.1, QC2.0/3.0/4.0, MTK, and other common charging agreements.
- **Clear LCD Display:** Features a bright LCD screen showing real-time measurements of voltage, current, power, and charging protocols with easy-to-read colored text.
- **Portable Design:** Compact and lightweight, perfect for testing phones, laptops, chargers, and other USB-C devices on the go.
- **Advanced Features:** Includes ripple testing capability and automatic protocol detection for comprehensive power delivery analysis.
- **Durable Construction:** Unibody aluminum alloy housing for reliability and safety.

WHAT'S IN THE BOX

Upon opening the package, please ensure all items are present and in good condition:

- Diymore USB-C Power Meter Tester
- User Manual (this document)

PRODUCT OVERVIEW

Familiarize yourself with the components and display of your USB C Power Meter Tester.



Figure 1: Front and side view of the Diymore USB C Power Meter Tester, highlighting its compact design and vibrant LCD screen displaying various electrical parameters.

PD3.1 fast charging protocol test

12A high current

4-30V 240W

Ripple Test

Protocol testing



Figure 2: The USB C Power Meter Tester in use, connected between a power adapter and a smartphone, demonstrating its ability to monitor fast charging protocols and display real-time voltage, current, and power.

TYPE-C Tester

ALUMINIUM

METAL

HOUSING

A highly reliable and safe TYPE-C voltage and current detection meter and

12A high current



Figure 3: The tester's display showing results from a PD3.1 fast charging protocol test, indicating support for 12A high current, 4-30V, and 240W power delivery, along with ripple and protocol testing capabilities.

TYPE-C Tester

Unibody aluminium alloy housing
Play with 240W fast-charging mobile phones
A breakthrough is a breakthrough
A New Era of Flash Charging
Explore more imagination with you



Figure 4: Close-up view emphasizing the durable aluminum metal housing of the Type-C tester, designed for reliable and safe voltage and current detection, supporting up to 12A high current.

PDE-Marker Data Cable Inspection

Support detecting data line, voltage, current and other parameters

Newly upgraded 240W fast charging data cable detection.



Figure 5: The tester performing PDE-Marker Data Cable Inspection, demonstrating its ability to detect data line, voltage, current, and other parameters, including newly upgraded 240W fast charging data cable detection.

3 display pages

Enhanced functionality

Click on a button

Change page



Figure 6: Illustration of the three distinct display pages available on the tester, showcasing enhanced functionality and how to navigate between them by clicking a button to change the page.

PD3.1 fast charging protocol test

12A high current

4-30V 240W

Ripple Test

Protocol Testing

Protocol Trigge



Figure 7: The tester displaying options for PD3.1 fast charging protocol tests, including 12A high current, 4-30V 240W, Ripple Test, Protocol Testing, and Protocol Trigger, shown connected to a smartphone.

SETUP

The Diymore USB C Power Meter Tester is designed for plug-and-play operation. No complex setup or software installation is required.

1. **Connect to Power Source:** Insert the male USB-C connector of the tester into your USB-C power adapter, power bank, or computer's USB-C port.
2. **Connect Device:** Insert the USB-C cable from your device (e.g., smartphone, laptop, tablet) into the female USB-C port on the tester.
3. **Begin Monitoring:** The tester's LCD screen will automatically power on and begin displaying real-time voltage, current, and power measurements.

Ripple Measurement

1. Status indication, real-time measurement or pause measurement (display data at a certain moment, switch status by confirming key)
2. Sampling speed display (switch sampling speed by +/- key)
3. Draw curve area
4. Real-time voltage and current display (support locking current data when paused)
5. Real-time display of average ripple within 100ms, and measurement following real-time changes of VBUS voltage.

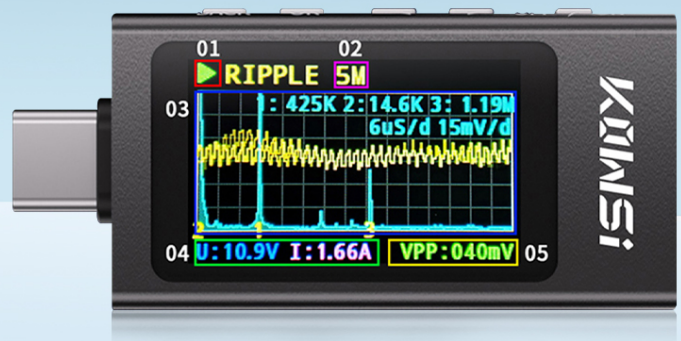


Figure 8: Setup illustration demonstrating how to connect the USB-C Power Meter Tester to measure charging speed and quality of a USB cable, showing connections to a laptop and a power bank with a smartphone.

OPERATING INSTRUCTIONS

Display Navigation

The tester features a single button (often labeled "OK" or "BACK/OK") for navigating through different display screens and confirming selections. Pressing the button briefly will cycle through the main display pages.

- **Voltage & Power Interface:** Displays real-time voltage (V), current (A), and power (W), along with other basic charging parameters.
- **Ripple Measurement:** Shows a graphical representation of voltage ripple, crucial for assessing power supply stability.
- **Curve Measurement:** Provides a real-time curve drawing of voltage, current, and power over time.
- **Protocol Test Interface:** Initiates and displays results of fast charging protocol detection.
- **Settings Interface:** Allows adjustment of language, screen brightness, screen saver time, and gravity rotation.



Figure 9: Overview of the various display interfaces, including the main menu, ripple measurement, protocol testing, settings, and detailed voltage and power readings, illustrating the tester's comprehensive data presentation.

Specific Functions

Protocol Testing (Automatic Test)

This function automatically detects and displays the supported fast charging protocols of the connected power source.

- 1. Navigate to the "Protocol Testing" interface.
- 2. The tester will automatically begin detecting protocols.
- 3. The screen will display supported protocols like PD, QC, and their respective voltage/current ranges.

<ul style="list-style-type: none">● Fully compatible with fast charging protocols: QC3.0/4.0; PD/OC2.0/3.0/4.0, MTK and other protocols● Support fast charging automatic protocol detection: PD2.0, 3.0, PPS, QC2.0, 3.0, FCP, SCP, AFC, PE, DASH VOOC, SuperVooc, etc.			
Absolute withstand voltage:	0~40V	Language switching:	√
Absolute current:	0~16A	Screen brightness adjustment:	√
Absolute power:	0~240W (typical value: 0.0~140.0W)	Offline saving:	√
Measurement voltage:	3.3~40V (typical value: 4~30V)	Emarker simulation:	√
Measurement current:	0~12A	PDO message analysis:	√
Measurement power:	280W	PDO gear deception:	√
Temperature measurement range:	0~99℃	QC gear deception:	√
Sampling frequency:	2~5MHz	Ripple measurement:	√
QC protocol support version:	2.0/3.0/4.0+	Curve drawing:	√
Gravity rotation screen:	180°	Ripple sampling gear switching:	√

Figure 10: Detailed breakdown of the automatic protocol detection screen, explaining each numbered indicator for status, PD status, PDO maximum gear, PPS support, fixed gear support, QC2.0/3.0 status, and PD protocol version.

Ripple Measurement

Measure the ripple voltage of the power supply to check its stability.

- 1. Navigate to the "Ripple Measurement" interface.
- 2. The screen will display a real-time curve of the ripple.
- 3. Use the navigation button to pause or resume measurement, or adjust sampling speed.

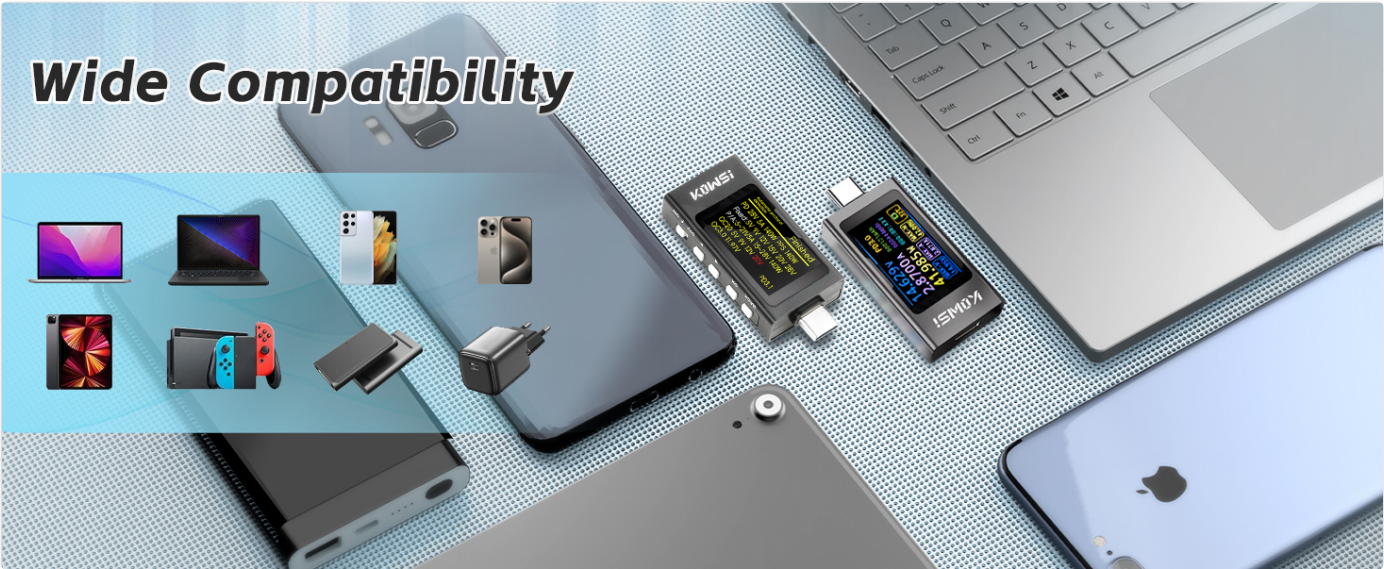


Figure 11: Explanation of the ripple measurement interface, detailing status indication, sampling speed display, curve drawing area, real-time voltage and current display, and average ripple display within 100ms.

Curve Measurement

Monitor voltage, current, and power changes over time graphically.

1. Navigate to the "Curve Measurement" interface.
2. Observe the real-time graphs for voltage, current, and power.
3. The display adapts to total voltage, and sampling time can be adjusted.



Figure 12: Breakdown of the curve measurement interface, illustrating the 4-area curve unit grid voltage display, sampling time display, current direction indication, real-time curve drawing, and real-time voltage, current, and power display.

PD Single Item Deception (Trigger)

This advanced feature allows you to trigger specific PD voltage profiles for testing purposes. **Use with caution as incorrect settings can damage devices.**

1. Navigate to the "Protocol Test - PD Single Item Deception" interface.
2. Use the navigation button to select the desired voltage/power profile.
3. Press the confirmation key to activate the deception. The display will update with the triggered values.

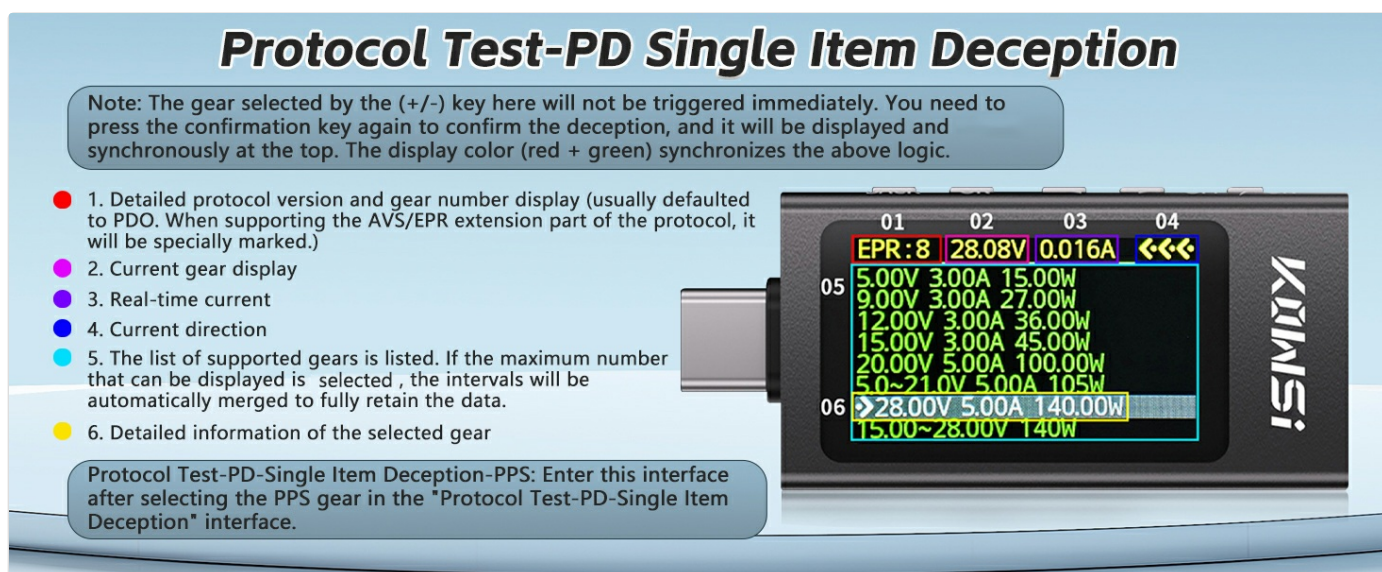


Figure 13: Explanation of the PD Single Item Deception interface, detailing the display of protocol version, current gear, real-time current, current direction, list of supported gears, and detailed information of the selected gear. Note: Confirmation key press is required to trigger deception.

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the device. Do not use abrasive cleaners or solvents.
- **Storage:** Store the tester in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Avoid dropping the device or subjecting it to strong impacts, as this may damage the internal components or the screen.
- **Connectivity:** Ensure USB-C connectors are clean and free of debris before connecting to prevent poor contact or damage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Screen does not turn on.	No power supply; faulty connection.	Ensure the tester is properly connected to a working USB-C power source. Try a different power source or cable.
Incorrect readings.	Loose connection; faulty cable/device; environmental interference.	Check all connections. Try testing with a different USB-C cable or device. Ensure the environment is stable.
Tester freezes or becomes unresponsive.	Temporary software glitch.	Disconnect the tester from all power sources and devices, then reconnect. This will perform a soft reset.
Fast charging protocol not detected.	Source/device does not support protocol; faulty cable.	Verify that both the power source and the device support the desired fast charging protocol. Try a different cable.

SPECIFICATIONS

Parameter	Value
Model Number	A1_KBAI0058-006_US
Absolute Withstand Voltage	0-40V
Absolute Current	0-16A
Absolute Power	0-240W (typical value: 0.0-140.0W)
Measurement Voltage	3.3-40V (typical value: 4-30V)
Measurement Current	0-12A
Measurement Power	280W
Temperature Measurement Range	0-99°C
Sampling Frequency	2-5MHz
QC Protocol Support Version	2.0/3.0/4.0+
Gravity Rotation Screen	180°

Parameter	Value
Product Dimensions	4 x 3.5 x 1.2 inches; 0.53 ounces
Color	Black And Gray
Power Source	USB-C
Style	Digital LCD Display

Supported Features

- Language switching
- Screen brightness adjustment
- Offline saving
- Emarker simulation
- PDO message analysis
- PDO gear deception
- QC gear deception
- Ripple measurement
- Curve drawing
- Ripple sampling gear switching

WARRANTY AND SUPPORT

Diymore products are designed for reliability and performance. For warranty information and technical support, please refer to the official Diymore website or contact their customer service directly.

Manufacturer: diymore


First Available Date: June 26, 2025






Return Policy: 30 days (refund/replacement)

For further assistance, you may visit the official Diymore store on Amazon:[Diymore Store](#)

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Related Documents - A1_KBAI0058-006_US

	<p>Diymore 0.28-inch Dual Display DC Voltmeter Ammeter 100V 10A - User Guide</p> <p>Concise guide to wiring and using the Diymore 0.28-inch dual display DC voltmeter and ammeter, capable of measuring up to 100V and 10A. Includes wiring diagrams for different power supply configurations. Supports DC 4-30V power input and DC 0-100V measurement range.</p>
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 <p>5918 Voltage meter instruction manual</p> <p>Please read the instructions carefully before use.</p> <p>The table is not set, the power and percentage will not change.</p> <p>Product Parameters</p> <ol style="list-style-type: none"> 1. Voltage measurement range: 0.1V to 1000V 2. Voltage accuracy: 100mV to 1000V 3. Resolution: 0.1mV to 1000V 4. Measurement range: 0.1V to 1000V 5. Measurement range: 0.1V to 1000V 6. Measurement range: 0.1V to 1000V 7. Measurement range: 0.1V to 1000V 8. Measurement range: 0.1V to 1000V 9. Measurement range: 0.1V to 1000V 10. Measurement range: 0.1V to 1000V 11. Measurement range: 0.1V to 1000V 12. Measurement range: 0.1V to 1000V 13. Measurement range: 0.1V to 1000V 14. Measurement range: 0.1V to 1000V 15. Measurement range: 0.1V to 1000V 16. Measurement range: 0.1V to 1000V 17. Measurement range: 0.1V to 1000V 18. Measurement range: 0.1V to 1000V 19. Measurement range: 0.1V to 1000V 20. Measurement range: 0.1V to 1000V 21. Measurement range: 0.1V to 1000V 22. Measurement range: 0.1V to 1000V 23. Measurement range: 0.1V to 1000V 24. Measurement range: 0.1V to 1000V 25. Measurement range: 0.1V to 1000V 26. Measurement range: 0.1V to 1000V 27. Measurement range: 0.1V to 1000V 28. Measurement range: 0.1V to 1000V 29. Measurement range: 0.1V to 1000V 30. Measurement range: 0.1V to 1000V 31. Measurement range: 0.1V to 1000V 32. Measurement range: 0.1V to 1000V 33. Measurement range: 0.1V to 1000V 34. Measurement range: 0.1V to 1000V 35. Measurement range: 0.1V to 1000V 36. Measurement range: 0.1V to 1000V 37. Measurement range: 0.1V to 1000V 38. Measurement range: 0.1V to 1000V 39. Measurement range: 0.1V to 1000V 40. Measurement range: 0.1V to 1000V 41. Measurement range: 0.1V to 1000V 42. Measurement range: 0.1V to 1000V 43. Measurement range: 0.1V to 1000V 44. Measurement range: 0.1V to 1000V 45. Measurement range: 0.1V to 1000V 46. Measurement range: 0.1V to 1000V 47. Measurement range: 0.1V to 1000V 48. Measurement range: 0.1V to 1000V 49. Measurement range: 0.1V to 1000V 50. Measurement range: 0.1V to 1000V 51. Measurement range: 0.1V to 1000V 52. Measurement range: 0.1V to 1000V 53. Measurement range: 0.1V to 1000V 54. Measurement range: 0.1V to 1000V 55. Measurement range: 0.1V to 1000V 56. Measurement range: 0.1V to 1000V 57. Measurement range: 0.1V to 1000V 58. Measurement range: 0.1V to 1000V 59. Measurement range: 0.1V to 1000V 60. Measurement range: 0.1V to 1000V 61. Measurement range: 0.1V to 1000V 62. Measurement range: 0.1V to 1000V 63. Measurement range: 0.1V to 1000V 64. Measurement range: 0.1V to 1000V 65. Measurement range: 0.1V to 1000V 66. Measurement range: 0.1V to 1000V 67. Measurement range: 0.1V to 1000V 68. Measurement range: 0.1V to 1000V 69. Measurement range: 0.1V to 1000V 70. Measurement range: 0.1V to 1000V 71. Measurement range: 0.1V to 1000V 72. Measurement range: 0.1V to 1000V 73. Measurement range: 0.1V to 1000V 74. Measurement range: 0.1V to 1000V 75. Measurement range: 0.1V to 1000V 76. Measurement range: 0.1V to 1000V 77. Measurement range: 0.1V to 1000V 78. Measurement range: 0.1V to 1000V 79. Measurement range: 0.1V to 1000V 80. Measurement range: 0.1V to 1000V 81. Measurement range: 0.1V to 1000V 82. Measurement range: 0.1V to 1000V 83. Measurement range: 0.1V to 1000V 84. Measurement range: 0.1V to 1000V 85. Measurement range: 0.1V to 1000V 86. Measurement range: 0.1V to 1000V 87. Measurement range: 0.1V to 1000V 88. Measurement range: 0.1V to 1000V 89. Measurement range: 0.1V to 1000V 90. Measurement range: 0.1V to 1000V 91. Measurement range: 0.1V to 1000V 92. Measurement range: 0.1V to 1000V 93. Measurement range: 0.1V to 1000V 94. Measurement range: 0.1V to 1000V 95. Measurement range: 0.1V to 1000V 96. Measurement range: 0.1V to 1000V 97. Measurement range: 0.1V to 1000V 98. Measurement range: 0.1V to 1000V 99. Measurement range: 0.1V to 1000V 100. Measurement range: 0.1V to 1000V 	<p>5918 Digital Voltage Meter User Manual</p> <p>User manual for the 5918 Digital Voltage Meter by diymore. Covers product parameters, description, key functions, and detailed setup instructions for various battery types (ternary lithium, iron-lithium, lead-acid) and custom voltage/backlight settings.</p>
 <p>Instruction</p> <ol style="list-style-type: none"> 1. Safety precautions 2. Product parameters 3. Product description 4. Product features 5. Product applications 6. Product specifications 7. Product testing 8. Product maintenance 9. Product troubleshooting 10. Product warranty 11. Product contact information 12. Product disclaimer 13. Product copyright 14. Product trademark 15. Product patent 16. Product confidentiality 17. Product security 18. Product privacy 19. Product compliance 20. Product sustainability 21. Product social responsibility 22. Product ethics 23. Product governance 24. Product risk management 25. Product crisis management 26. Product reputation management 27. Product brand management 28. Product marketing management 29. Product sales management 30. Product distribution management 31. Product customer service management 32. Product after-sales service management 33. Product quality management 34. Product safety management 35. Product environmental management 36. Product health and safety management 37. Product food and drug management 38. Product medical device management 39. Product pharmaceutical management 40. Product biotechnology management 41. Product chemical management 42. Product material management 43. Product manufacturing management 44. Product supply chain management 45. Product logistics management 46. Product transportation management 47. Product warehousing management 48. Product inventory management 49. Product procurement management 50. Product financial management 51. Product human resources management 52. Product information management 53. Product technology management 54. Product research and development management 55. Product innovation management 56. Product intellectual property management 57. Product legal management 58. Product public relations management 59. Product media management 60. Product advertising management 61. Product promotion management 62. Product event management 63. Product exhibition management 64. Product trade show management 65. Product conference management 66. Product seminar management 67. Product workshop management 68. Product training management 69. Product certification management 70. Product accreditation management 71. Product registration management 72. Product licensing management 73. Product franchising management 74. Product joint venture management 75. Product partnership management 76. Product collaboration management 77. Product alliance management 78. Product consortium management 79. Product network management 80. Product ecosystem management 81. Product platform management 82. Product interface management 83. Product API management 84. Product data management 85. Product analytics management 86. Product reporting management 87. Product dashboard management 88. Product visualization management 89. Product interaction management 90. Product engagement management 91. Product loyalty management 92. Product rewards management 93. Product incentives management 94. Product discounts management 95. Product coupons management 96. Product vouchers management 97. Product gift cards management 98. Product cashback management 99. Product referral management 100. Product affiliate management 	<p>Operating Instructions for Diymore Adjustable Voltage Regulator</p> <p>Detailed operating instructions and parameter settings for the Diymore Adjustable Voltage Regulator DC Buck Boost Converter, covering voltage and current adjustment, protection settings, and calibration.</p>
 <p>diymore DC 5V/12V 4 Channel Bluetooth Relay Module - Smart Home Control</p> <p>Detailed overview of the diymore DC 5V/12V 4-channel Bluetooth relay module for smart home automation. Features remote control via mobile APP, JDY-31 Bluetooth module, and 10A relays.</p>	<p>diymore DC 5V/12V 4 Channel Bluetooth Relay Module - Smart Home Control</p> <p>Detailed overview of the diymore DC 5V/12V 4-channel Bluetooth relay module for smart home automation. Features remote control via mobile APP, JDY-31 Bluetooth module, and 10A relays.</p>
 <p>Précautions d'utilisation du testeur de transistors</p> <p>Informations essentielles sur les précautions d'utilisation, les limitations et les caractéristiques du testeur de transistors diymore LCR-TC1 et LCR-T7 pour une utilisation sûre et efficace.</p>	<p>Précautions d'utilisation et guide du testeur de transistors diymore LCR-TC1/LCR-T7</p> <p>Informations essentielles sur les précautions d'utilisation, les limitations et les caractéristiques du testeur de transistors diymore LCR-TC1 et LCR-T7 pour une utilisation sûre et efficace.</p>
 <p>DIYMORE DSO 138 Oscilloscope Case DIY Kit Installation Guide</p> <p>Step-by-step installation guide for the DIYMORE DSO 138 Oscilloscope Case DIY Kit. Learn how to assemble the acrylic case for your DSO 138 oscilloscope.</p>	<p>DIYMORE DSO 138 Oscilloscope Case DIY Kit Installation Guide</p> <p>Step-by-step installation guide for the DIYMORE DSO 138 Oscilloscope Case DIY Kit. Learn how to assemble the acrylic case for your DSO 138 oscilloscope.</p>