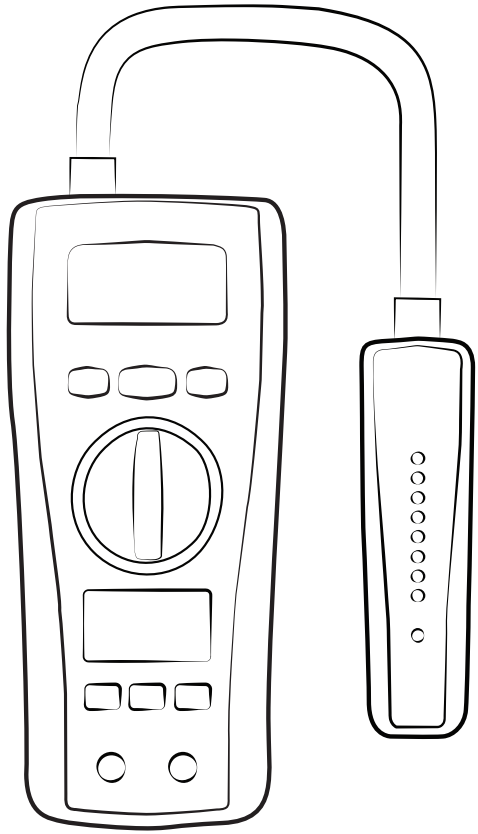
2 IN 1 LAN TESTER & MULTIMETER



- Auto ranging
- AC/DC voltage
- Resistance
- Continuity
- Diode forward voltage
- Current
- CAT II 1000V
- CAT III 600V
- LAN cable tester
- Tilt stand
- Test leads
- Connection cables
- Carrying case

OPERATOR'S MANUAL
ORDER CODES: OXD-516-0225E

CZ HU PL SK TH **cromwell.co.uk**

OXFORD PRECISION

INTRODUCTION

2 in 1 LAN Tester & Multimeter is a innovative tester that allows the user easy to measure DC/AC Voltage/Current, Resistance, Continuity, diode and verify the cable continuity, open short, cross-connect. The included remote terminator allows the user to test installed cable either at a wall jack or a patch panel adding up to value and convenience. Proper use and care of this meter will provide years of reliable service.

FEATURES

- 2 in 1- LAN Tester & Multimeter
- Measures DC/AC Voltage, DC/AC Current, Resistance, Continuity, diode and LAN tester
- 3-1/2 digit (2000 count) LCD display for multimeter functions
- LED Displays the actual pin configuration of 10BASE-T AND 10BASE-2 Thin Ethernet, FJ45/RJ11 modular, 258A, TIA-568A/568B and Token Ring cables
- Double Molded housing
- CAT III 600V; CAT II 1000V
- Provides easy to read continuity and fault status display
- Checks for continuity, open wire, ground wire, shorted pair and crossed pair faults
- Allows for remote testing of installed cables from a wall jack or patch panel
- Auto or manual scanning for LAN tester
- Auto ranging with auto power off for Multimeter functions

Symbols used


This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.


This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present.


Double insulation

Safety information

1. Improper use of this Multimeter can cause damage, shock, injury or death. Read and understand this operator's manual before operating the Multimeter.
2. Make sure any covers are properly closed and secured.
3. Always disconnect the test leads from any voltage source before replacing the batteries or fuses.
4. Do not exceed the maximum rated input limits.

Input Limits	
Function	Maximum Input
V DC or V AC	600V DC/AC
µA AC/DC	200mA/250V fast acting Fuse
Resistance,Diode & Continuity Test	600V DC/AC

5. Use great care when making measurements if the voltages are greater than 25VAC rms or 35VDC. These voltages are considered a shock hazard.
6. Always discharge capacitors and remove power from the device under test before performing Diode, Resistance or Continuity tests.
7. Remove the batteries if the Multimeter is to be stored for long periods.

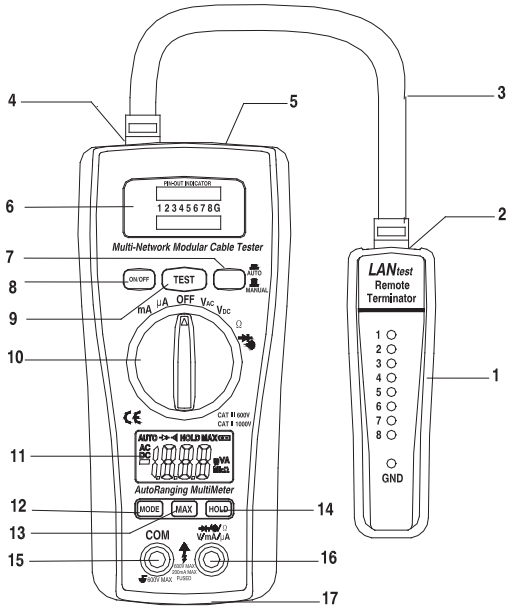
PRODUCT FEATURES

LAN tester part Description (1~9) :

1. Remote terminator with LED display for receiving end
2. Jack RJ45
3. LAN-connector
4. Jack RJ45
5. Jack RJ45
6. Led display for sourcing end (Jack 1) & Led display for receiving end (Jack 2)
7. Test switch for auto scan
8. LAN tester Power switch
9. Test switch for manual scan

Digital Multimeter part Description (10~17) :

10. Function switch
11. 3 1/2 Digit (2000 count) LCD display for DMM functions
12. MODE button
13. MAX Hold button
14. Data Hold button
15. COM input jack
16. V, Ω, µA, mA input jack
17. Battery Cover



SPECIFICATIONS

Electrical Specifications

Function	Range	Accuracy
DC Voltage	200mV,	±(0.5% rdg + 3d)
	2.000V, 20.00V,	±(1.0% rdg + 3d)
	200.0V, 600V	±(1.0% rdg + 3d)
AC Voltage 50-60Hz	2.000V, 20.00V	±(1.0% rdg + 5d)
	200.0V, 600V	±(1.5% rdg + 10d)
DC Current	200.0µA, 2000µA	±(1.5% rdg + 3d)
	20.00mA, 200.0mA	±(2.0% rdg + 3d)

Function	Range	Accuracy
AC Current	200.0µA, 2000µA	±(1.8% rdg + 8d)
	20.00mA, 200.0mA	±(2.5% rdg + 8d)
Resistance	200.0Ω	±(0.8% rdg + 5d)
	2.000kΩ, 20.00kΩ, 200.0kΩ	±(1.2% rdg + 3d)
	2.000MΩ	±(2.0% rdg + 5d)
	20.00MΩ	±(5.0% rdg + 8d)

Max input voltage	600V AC/DC
Diode Test	Test current 1mA max., open circuit voltage of 1.5V typical
Continuity Check	Audible signal if the resistance is <150Ω
Display	2000 count 3 -1/2 digit LCD
Over range indication	LCD displays "OL"
Polarity	Minus (-) sign for negative polarity.
Low Battery Indication	"▬" symbol indicates low battery condition.
Input Impedance	>7.5MΩ (VDC & VAC)
AC Response	Average responding
ACV Bandwidth	50Hz to60Hz
Auto Power Off	15 minutes (approximately)
Fuse	mA, µA ranges; 0.2A/250V fast acting fuse
Batteries	9V battery and two "AAA" batteries
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	14°F to 122°F (-10°C to 50°C)
Weight	308g
Size	162 x 74.5 x 44.0mm
Standard	CAT III 600V

OPERATION

AC/DC Voltage Measurements

CAUTION: Do not measure AC/ DC voltages if a motor on the circuit is being switched ON or OFF. Large voltage surges may occur that can damage the Multimeter.

1. Insert the black test lead into the negative COM terminal and the red test lead into the positive V terminal.
2. Set the function switch to VAC or VDC position.
3. Connect the test leads in parallel to the circuit under test.
4. Read the voltage measurement on the LCD display.

AC/DC Current Measurements

1. Set the function switch to the µA/mA position.
2. Insert the black test lead into the negative COM terminal and the red test lead into the positive µA/mA terminal.
3. For current measurements up to 2000µA DC/AC, set the function switch to the mA position
4. Press the MODE button to indicate “DC” / “AC” on the display.
5. Remove power from the circuit under test, then open up the circuit at the point where you wish to measure current.
6. Touch the black test probe tip to the negative side of the circuit.
   Touch the red test probe tip to the positive side of the circuit.
7. Apply power to the circuit.
8. Read the current in the display

Resistance Measurement

WARNING: To avoid electric shock, disconnect power to the unit under test and discharge all capacitors before taking any resistance measurements. Remove the batteries and unplug the power leads.

1. Set the function switch to the Ω position.
2. Insert the black test lead into the negative COM terminal and the red test lead into the positive Ω terminal.
3. Touch the test probe tips across the circuit or part under test. It is best 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.

Continuity Check

WARNING: To avoid electric shock, never measure continuity on circuits or wires that have voltage on them.

1. Set the function switch to the position.
2. Insert the black test lead into the negative COM terminal and the red test lead into the positive Ω terminal.
3. Press the MODE button to indicate on the display
4. Touch the test probe tips to the circuit or wire you wish to check.
5. If the resistance is less than approximately 150Ω, the audible signal will sound. If the circuit is open, the display will indicate “OL”.

Diode Test

1. Set the function switch to the position.
2. Press the MODE button to indicate on the display. Touch the test probes to the diode under test.

MAX button

To hold the highest reading on the LCD:

1. Press the MAX button. The meter reading will not change as readings change.
2. Press the MAX button again to return to normal operation.

Hold Button

The Hold function allows the Multimeter to “freeze” a measurement for later reference

1. Press the “HOLD” button to “freeze” the display, the “HOLD” indicator will appear.
2. Press the “HOLD” button to return to normal operation.

AUTO POWER OFF

The auto off feature will turn the multimeter off after 15 minutes.

REPLACING THE BATTERIES

1. Remove the protective rubber holster
2. Under the screws and remove the back cover.
3. Replace old batteries with 2x 1.5V AAA & 9V type batteries.
4. Replace the back cover, secure the screws and replace the rubber holster.

REPLACING THE FUSE

WARNING: To avoid electric shock, disconnect the test leads from any source of voltage before removing the fuse cover.

1. Disconnect the test leads from the meter.
2. Remove the protective rubber holster.
3. Remove the battery cover (two screws) and the battery.
4. Remove the four screws securing the rear cover.
5. Lift the centre circuit board straight up from the connectors to gain access to the fuse holders.
6. Gently remove the old fuse and install the new fuse into the holder.
7. Always use a fuse of the proper size and value (0.2A/250V fast blow for the 200mA range).
8. Align the centre board with the connectors and gently press into place.
9. Replace and secure the rear cover, battery cover and rubber holster.

MULTI-NETWORK MODULAR CABLE TESTER OPERATION

Note: Make sure the battery power is sufficient. Insufficient battery power will lead to dimmed LEDs and incorrect results.

10 Base-T Test

1. Plug one end of the tested cable into the transmitting RJ45 jack on the master unit marked with a '⌂' and the other end of the cable into the remaining receiving RJ45 jack.
2. Press the power switch. The upper row of LEDs will start to scan in sequence if the Auto/Manual button is set on "Auto" mode. The LED for pin 1 will light up if the button is in "Manual" mode.
3. Switch back and forth from Auto or Manual scanning mode by pressing the Auto/Manual button on the side of the master-testing unit.
4. Once both ends of the cable are plugged in properly, the second row of LEDs will illuminate according to the corresponding LEDs in the top row.
5. Read the results of the LED display for the pin configuration status of the tested cable. If you fail to read the results the first time in Auto mode, you may wait for the second LED scan, or simply switch to Manual mode for pin by pin testing. In Manual mode, pressing the "Test" button will advance testing to the next pin.

RJ11 Modular Cable Test

Please follow directions for the UTP/STP Cable Test and use the operations manual for the correct LED pin out display.

Coaxial Cable Test

1. Plug the two attached BNC adapter cables on both RJ45 jacks. Then connect the tested cable to each end of the BNC adapter cables.
2. For the remaining testing procedures, please refer to 10Base-T Test steps 2 to 5.

Note:

1. The centre pin of BNC should be read on LED 2.
2. As Coaxial cable has only two wires, we suggest you read the result of the LED scan using Manual mode.

Remote Test

1. Plug one end of the tested cable to the transmitting RJ45 jack on the master unit marked with a '⌂' and plug the other end into the remote terminator. If the tested cable is installed in a patch panel or wall plate, you may use the included patch cable to solve the connector gender problem.
2. Now set the Auto/Manual switch to Auto mode for one-person testing.
3. Read the test results from the LED display on remote terminator.

Note: The LED display on the remote unit will scan in sequence corresponding to the transmitting end of the master unit.

SAMPLE TEST RESULTS

1. Continuity		Pin 2 has continuity
2. Open		Pin 2 is opened
3. Short		Pin 2 and Pin 3 are shorted
4. Miswire		Pin 3 and Pin 6 are miswired

Caution:

1. Operating the tester in live circuits may damage the tester.

2. Leaving the battery in the tester for long periods of time without use could drain power from the battery.

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THE ENVIRONMENT



Always dispose of unwanted tools, accessories and packaging materials in an environmentally friendly manner.

In observance of European Directive on Waste Electrical and Electronic Equipment (WEEE) and its implementation in accordance with national law, electrical goods that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Do not dispose of electrical goods with domestic waste materials as inappropriate disposal may cause potential hazards to the environment and human health.

For further information, please contact your local authority or the retailer from whom you purchased the product.

QUALITY GUARANTEE & WARRANTY

OXFORD PRECISION products carry a one year manufacturer's warranty.

OXFORD PRECISION products are designed & manufactured to the highest standards & specifications.

Assuring the quality and performance required by all sectors of industry.

OXFORD PRECISION products are fully guaranteed against faulty materials & workmanship.

Should they be found to be defective, they will either be repaired or replaced free of charge (fair wear and tear and/or misuse excepted).

Please retain supplier invoice as proof of purchase.

DECLARATION OF CONFORMITY

We hereby certify that the OXFORD 2 in 1 LAN TESTER & MULTIMETER (ORDER CODE: OXD-516-0225E)

Complies with all the relevant provisions of the

EMC Electromagnetic Compatibility Directive 2014/30/EU

Standards Applied:

EN61326-1:2013, EN61326-2-1:2013, IE61326-1:2012, IE61326-2-1:2012,

RoHS2 Restriction of Hazardous Substances Directive 2011/65/EU

EN61010-1:2010, EN61010-2-033:2012, EN61010-031:2015

Signed:

Date: September 2019

Name: Toni Johnson

Position: Compliance Director.

CE

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