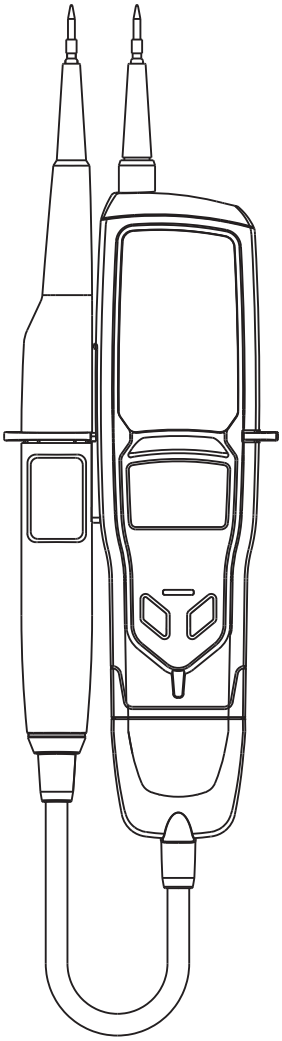
VOLTAGE TESTER



- Voltage test up to 1000V AC/DC
- Single-pole phase test
- Continuity test
- Rotary field indication
- Polarity indication
- Hold function
- CAT III 1000V
- CAT IV 600V
- LCD backlight
- Clear audible tone
- Built in torch
- Probe tip protection cap

OPERATOR'S MANUAL
ORDER CODE: OXD-516-8260F

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

OXFORD PRECISION

SYMBOLS USED

 Warning of a potential danger, comply with Operator's manual.

 Caution! Dangerous voltage. Danger of electric shock.

 Double insulation.

 Suitable for live working.

CE Conforms to European Union Directives.

CAT III Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's low- voltage MAINS installation.

CAT IV Measurement Category IV is applicable to test and measuring circuits connected at the source of the building's low-voltage MAINS installation.

SAFETY INFORMATION

- Reference. Please use utmost attention.
- Do not exceed the maximum allowable input range of any function
- Insulated personnel body protective equipment up to 1000V.
- Unauthorised persons are not to be allowed to disassemble the Voltage Tester.

 In order to avoid electrical shock, the valid safety and VDE regulations regarding excessive contact voltages must receive utmost attention, when working with voltages exceeding 120V (60V) DC or 50V (25V) rms AC. The values in brackets are valid for limited ranges (as for example medicine and agriculture).

 Prior to measurement ensure that the test leads and the Voltage Tester are in perfect condition.

 When using this instrument keep fingers behind the finger guards on the probes and do not touch the probe tips.

 This instrument may only be used within the ranges specified and within low voltage systems up to 1000V.

 Prior to usage, ensure that the Voltage Tester is fully working (e.g. on known voltage source).

 The Voltage Tester is not to be used, if the battery compartment is open.

 The Voltage Tester must be kept dry and clean.

 The Voltage Tester may no longer be used if one or several functions fail or if no functionality is indicated.

 Do not use in damp conditions.

 A Perfect display is only guaranteed within a temperature range of -10°C up to +55°C, at relative humidity of <85%.

 If the operator's safety cannot be guaranteed, the instrument must be removed from service and protected against use.

Safety can no longer be insured if the Voltage Tester:

- Shows obvious damage
- Does not carry out the desired measurements
- Has been stored for too long under unfavourable conditions
- Has been subjected to mechanical stress during transport.
  All relevant statutory regulations must be adhered to when using this instrument

Safety Advice

- Depending on the internal impedance of the Voltage Tester there will be a different capability of indicating the presence or absence of operating voltage in case of the presence of interference voltage.
- A Voltage Tester of relatively low internal impedance, compared to the reference value of 100kΩ, will not indicate all interference voltages having an original voltage value above the ELV (Extra Low Voltage) level. When in contact with the parts to be tested, the Voltage Tester may discharge temporarily the interference voltage to a level below the ELV, but it will be back to the original value when the Voltage Tester is removed.
- When the indication “voltage present” does not appear, it is highly recommended installing earthing equipment before work.
- A Voltage Tester of relatively high internal impedance, compared to the reference value of 100kΩ, may not permit to clearly indicate the absence of operating voltage in case of presence of interference voltage.
- When the indication “voltage present” appears on a part that is expected to be disconnected of the installation, it is highly recommended confirming by another means (e.g. use of an adequate voltage detector, visual check of the disconnecting point of the electric circuit, etc.) that there is no operating voltage on the part to be tested and to conclude that the voltage indicated by the Voltage Tester is an interference voltage.
- A Voltage Tester declaring two values of internal impedance has passed a performance test of managing interference voltages and is (within technical limits) able to distinguish operating voltage from interference voltage and has a means to directly or indirectly indicate which type of voltage is present.

Appropriate Usage

The instrument may only be used under those conditions and for those purposes for which it was conceived. For this reason, in particular the safety references, the technical data including environmental conditions and the usage in dry environments must be followed. When modifying or changing the Voltage Tester, the operational safety is no longer ensured. The Voltage Tester may only be opened by an authorised service technician, e.g. for fuse replacement. The Voltage Tester is designed to be used by skilled persons and in accordance with safe methods of work.

SPECIFICATIONS:

LEDS

LED voltage range	12V to 1000V AC/DC
LED resolution	±12,24,50,120,230, 400, 690,1000V AC/DC
Tolerances	-30% to 0% of reading
Frequency range	40HZ to 400HZ
Response time	≤1 second
Auto power on	Auto power on ≥12V AC/DC

LCD

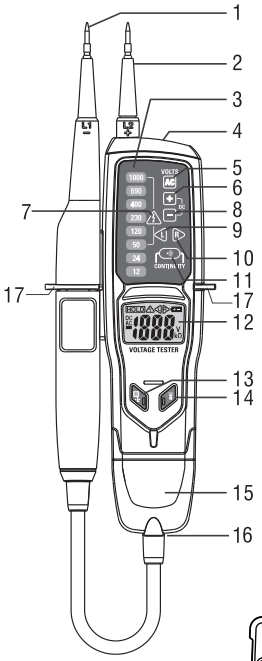
LCD display	1999 counts (3 1/2 digit) LCD display with bar graph & backlight
Voltage range	6V to 690V AC/DC
Resolution	1V AC/DC
Tolerances	DCV: ±1.0% of reading ±3 digit ACV: ±1.5% of reading ±5 digit
Frequency range	40HZ to 400HZ
Response time	≤1 second
Auto power on	Auto power on ≥6V AC/DC
Range detection	Automatic
Polarity detection	Full range
Internal basic load impedance peak current	Maximum 3.5mA at 690V 200kΩ / Is <3.5 mA (no RCD tripping)
Operation time	Duration Time = 30 seconds
Recovery time	Recovery Time = 240 seconds
Continuity Test	0 to 400kΩ
Accuracy	nominal resistance +50%
Test current	≤5 μA
Single-pole Phase Test	100V to 1000V AC
Frequency range	50Hz to 60Hz

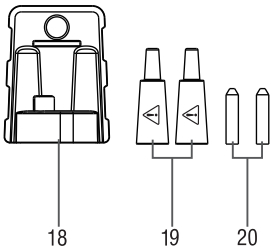
ROTARY FIELD INDICATION

Voltage range (LEDs)	100…1000V
Frequency range	50/60Hz
Measurement principle	Double-pole and contact electrode
Power supply	2 x 1.5V “AAA” batteries
Power consumption	Max. 30mA / approx. 250mW
Temperature range	-10°C up to +55°C
Humidity	Max. 85% relative humidity
Over voltage protection	1000V AC/DC
Measurement category	CAT lll 1000V/CAT IV 600V
Protection degree	IP64

PRODUCT FEATURES

1. Handle test probe - (L 1)
2. Instrument test probe + (L2)
3. LEDs for voltage display
4. Torch
5. LED for AC voltage
6. LED for positive voltage
7. LED for "⚠" warning voltage mode display
8. LED for negative voltage
9. LED for left rotary field
10. LED for right rotary field
11. LED for continuity
12. 1999 Counts LCD display
13. HOLD Button
14. Torch on/off button
15. Battery cover
16. Battery cover release screw
17. Finger guards
18. Probe tip Protective cap(with storage compartments for probe lip cover and probe tip extension)
19. Probe tip cover
20. Probe tip extension (diameter4 mm, screw-on)





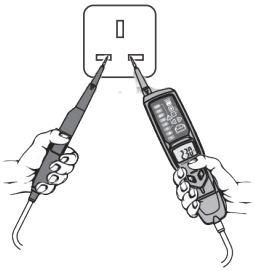
BEFORE USING THE VOLTAGE TESTER

- Ensure that the Voltage Tester is in perfect condition. For example, keep an eye out for a broken housing or leaking batteries.
- Before using at locations with a high background noise level, it has to be determined whether the audible signal is clear.
- Always carry out a function test before using the Voltage Tester, see below.
- Check that the Voltage Tester is functioning properly (for example at a known voltage source) before and after every test.
- If the safety of the user cannot be guaranteed, switch off the Voltage Tester and secure it to prevent unintentional usage.

Function test

- Connect the voltage tester probe tips for 4 to10 seconds and then disconnect. All LEDs should light up. All segments are illuminated on the LCD display.

VOLTAGE TEST



- Connect both test probes with power source.
- The Voltage Tester switches on automatically when used on voltages higher than 6V.
- The voltage is displayed via LEDs. The different indicating signals of the Voltage Tester (including the ELV limit indication) are not to be used for measuring purposes.
- The voltage is also shown on the LCD display.
- For AC voltage, the “AC” is illuminated.
  For positive voltage, the “+” is illuminated.
  For negative voltage, the “-” is illuminated.
- In the case of DC voltage, the polarity of the indicated voltage relates to the Voltage Tester probe tip.
- Once the safety extra-low voltage (50V AC /120V DC) is reached or exceeded, an acoustic signal is emitted, and the ⚠ is illuminated.
- Once voltage is applied to the Voltage Tester, press the HOLD button, the LCD and LEDs display shows the recorded reading. To delete the recorded value, press the HOLD button once again. The LCD and LEDs display once again indicates the voltage currently being applied to the probe tips.

SINGLE-POLE PHASE TEST

- The single-pole phase test is only possible when batteries are installed and in good condition.
- The single-pole phase test starts at an AC voltage of approx. 1OOV (pole> 1OOV AC).
- When using single-pole phase tests to determine external conductors the display function may be impaired under certain conditions (e.g. for insulating body protective equipment on insulation locations).
- The single-pole phase testing is not appropriate to determine whether a line is live or not. For this purpose, the double-pole voltage test is always required.
- Connect both test probes with the power source.
- A signal sound indicates the phase.
- The “⚠”LED is illuminated in the display.

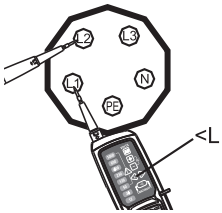
CONTINUITY TEST

The continuity test is only possible when batteries are installed and in good condition.
A signal sound is audible for continuity and the LED for continuity •ıl) (11) is illuminated.

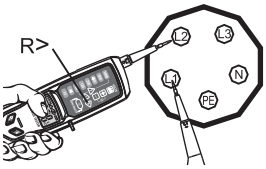
ROTARY FIELD INDICATION

The Voltage Tester is equipped with a double-pole rotary field indicator. The rotary phase indication is always active. The symbols “R”or “L’.’ are always displayed. However, the rotary direction can only be determined within a three-phase system. Here, the instrument indicates the voltage between two external conductors.

- Connect the instrument test probe with the supposed phase L2 and the handle test probe with the supposed phase L 1. The voltage and the rotary field direction are displayed. “R” signifies that the supposed phase L 1 is the actual phase L 1 and the supposed phase L2 is the actual phase L2.



- “L” signifies that the supposed phase L 1 is the actual phase L2 and the supposed phase L2 is the actual phase L 1.
- When re-testing with exchanged test probes the opposite symbol has to be illuminated.



HOLD FUNCTION

Press the “H” button to hold the value that shows in the LCD. Push again to turn hold off.
To save battery power the Voltage Tester will automatically turn off after 4 minutes.

MEASUREMENT POINT ILLUMINATION

The Voltage Tester is equipped with a measurement point illumination feature.
Press the button for measurement point illumination.

MAINTENANCE

Cleaning

Prior to cleaning, remove the Voltage Tester from all measurement circuits. If the instrument is dirty after daily usage, it is advisable to clean it by using a damp cloth and a mild household detergent. Never use acid detergents or dis solvents for cleaning.

After cleaning, do not use the Voltage Tester for a period of approx. 5 hours.

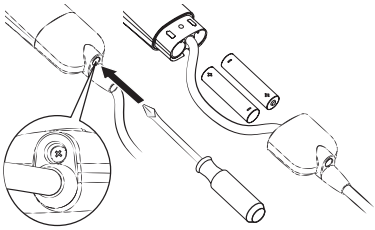
Calibration Interval

The Voltage Tester must be calibrated periodically and checked at regular intervals to ensure the specified accuracy of measurement results. We recommend a calibration interval of one year.

Battery Replacement

If no signal sound is audible when short-circuiting the test probes, proceed with the battery replacement.

- Completely disconnect the Voltage Tester from the measurement circuit.
- Open the battery cover.
- Replace batteries with two new 1.5V AAA batteries.
- Close and attach the battery cover.
- Complete a function test.



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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 VOLTAGE TESTER (ORDER CODE: OXD-516-8260F)

Complies with all the relevant provisions of the

EMC Electromagnetic Compatibility Directive 2014/30/EU

Standards Applied:

EN61326-1:2013, EN61326-2-2:2013

LVD Low Voltage Directive 2014/35/EU

Standards Applied: EN61010-1:2010, EN61010-2-033:2016, EN61010-031:2015, EN61010-2-033:2012

RoHS2 Restriction of Hazardous Substances Directive 2011/65/EU

Signed:

Date: September 2019

Name: Toni Johnson

Position: Compliance Director.

CE

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