

⚠ ALWAYS READ THESE INSTRUCTIONS BEFORE PROCEEDING

Thank you for buying one of our products. For safety and a full understanding of its benefits please read this manual before use. Technical support is available from 01923 441717 and support@martindale-electric.co.uk.

1. SAFETY INFORMATION

⚠ REMEMBER: SAFETY IS NO ACCIDENT

These instructions contain both information and cautions that are necessary for the correct operation and maintenance of this product. It is recommended that you read the instructions carefully and ensure that the contents are fully understood. Failure to understand and to comply with the warnings and instructions can result in serious injury, damage or even death.

In accordance with safe electrical practice, please switch off the socket before plugging in and removal.

Particular attention should be paid to the Precautions and Technical Specification.

Please keep these instructions for future reference. Updated instructions and product information are available at: www.martindale-electric.co.uk

1.1 Meaning of Symbols and Markings

⚠ Caution - risk of danger and refer to instructions

⚡ Caution - risk of electric shock

☐ Equipment protected by double or reinforced insulation (Class II)

CAT II (Measurement Category II) is applicable to test and measuring equipment connected directly to utilization points (socket outlets and similar points) of the low-voltage MAINS installation. For further information on measurement categories visit: www.martindale-electric.co.uk

CE Equipment complies with relevant EU Directives

UK CA Equipment complies with relevant UK Directives

♻ End of life disposal of this equipment should be in accordance with relevant EU Directives.

~ Alternating Current (ac)

1.2 Precautions

This product has been designed with your safety in mind, but please pay attention to the following warnings and cautions before use.

⚠ Warnings

In order to avoid the danger of electrical shock, it is important that proper safety measures are taken when working with voltages exceeding 30 V AC rms, 42V AC peak or 60V DC.

Where applicable other safety measures such as use of protective gloves, goggles etc. should be employed.

This socket tester must only be used by a skilled and competent person who is familiar with the relevant regulations, the safety risks involved and the consequent normal safe working practices, and under the conditions and for the purposes for which it has been constructed and specified.

Before each use the socket tester should be examined for damage, cracks, cuts or scratches. **Do not use** if damaged in any way. Make sure the socket tester is dry, clean and free from dust, grease and moisture while in use to avoid the danger from electric shock due to surface leakage.

The socket tester must only be used on CAT II installations up to 300V to earth.

Always verify the unit is functioning correctly on a known correctly-wired live socket before and after use.

If none of the indicators illuminate, this does not necessarily mean the circuit under test is dead. For example the earth and neutral lines could both be open circuit, or the supply voltage may be <200V.

If the equipment is used in a manner not specified by Martindale Electric, the protection provided by the equipment may be impaired.

⚠ Cautions

Avoid severe mechanical shock or vibration and extreme temperature.

2. INTRODUCTION

2.1 Inspection

Examine the shipping carton for any sign of damage. Inspect the unit and any accessories for damage. If there is any damage, consult your distributor immediately.

2.2 Description

BZ101 Classic Buzzit Socket Tester with Buzzer
CP501 Classic Checkplug Socket Tester
CP520 Classic Checkplug Socket Tester with Earth Socket

3. OPERATION

3.1. Description of Indicators

The socket tester uses a row of LED's to indicate wiring condition and mains voltage level.

Verify the socket tester in a known correctly wired live socket before and after use. If any indicators do not illuminate and buzzer does not emit a continuous tone (BZ101), then do not use the socket tester and return it for repair.

CP520

The CP520 is provided with a front panel socket that is connected directly to the earth pin of the CP520. The socket may not be at 'earth' if a fault is indicated. Observe standard safety precautions when making connections.

3.2 Using the socket tester

Plug the socket tester into the socket to be tested.

Compare the status of the indicators with the front decal or with figure 1, in section 3.3.1.

If the socket tester does not power up and none of the LED's illuminate this could mean that the wiring is incorrect, or the mains voltage is less than 200V and investigation of the wiring is required. In such circumstances verify the socket tester in a known correctly wired socket to confirm the need for investigation.

The socket tester is designed to be plugged into a socket and removed after the test has been performed.

3.2.1 Wiring Check

The polarity of the wiring at the socket under test will be indicated by the LED sequences of figure 1 on the row of LED's. In the event of a fault being indicated, investigation should only be carried out by a suitably qualified electrician.

With reference to table:

Note 1
EN reversal not detectable.

Note 2
Investigation required by qualified electrician.

Note 3 Caution!
Investigate with care. Socket wire(s) may be live, but LED's will not light.
Investigation required by qualified electrician.

NOTE: This unit, in common with other simple socket testers, cannot detect Earth/Neutral reversal.


Figure 1. Wiring Test Indicators

N	E	L
Socket Wires		
N	E	L
N	N	L
E	E	L
E	N	L
L	E	N
L	E	E
L	N	E
L	N	N
E	L	L
N	L	L
N	OPEN	L
E	OPEN	L
L	OPEN	E
L	OPEN	N
OPEN	E	L
OPEN	N	L
OPEN	L	E
OPEN	L	N
N	L	E
E	L	E
E	L	N
N	L	N
L	E	L
L	N	L
OPEN	OPEN	L
OPEN	L	OPEN
L	OPEN	OPEN
OPEN	L	L
L	OPEN	L
L	L	OPEN
OPEN	OPEN	OPEN
L	L	L

		LED's		
OK	● ● ●			
Note 1	● ● ●			
Note 1	● ● ●			
Note 1	● ● ●			
LN Reverse	●		Note 2	
LN Reverse	●		Note 2	
LN Reverse	●		Note 2	
LN Reverse	●		Note 2	
LN Reverse	●		Note 2	
LN Reverse	●		Note 2	
No Earth	● ●		Note 2	
No Earth	● ●		Note 2	
No Earth	● ●		Note 2	
No Earth	● ●		Note 2	
N Fault	● ●		Note 2	
N Fault	● ●		Note 2	
N Fault	● ●		Note 2	
N Fault	● ●		Note 2	
LE Reverse	●		Note 2	
LE Reverse	●		Note 2	
LE Reverse	●		Note 2	
LE Reverse	●		Note 2	
LE Reverse	●		Note 2	
EN Fault			Note 3	
LEN Fault			Note 3	
LEN Fault			Note 3	
LEN Fault			Note 3	
LEN Fault			Note 3	
LEN Fault			Note 3	
L Fault			Note 3	

4. MAINTENANCE

4.1 Cleaning

 Prior to cleaning, ensure the socket tester is disconnected from any live circuits.

If contamination is found, clean with a damp soft cloth and if necessary a mild detergent or alcohol. Do not use abrasives, abrasive solvents, or detergents which can cause damage to the unit. If a mild detergent is used, the unit should subsequently be thoroughly cleaned with a water dampened soft cloth. After cleaning, dry and allow to remain in a dry environment for 2 hours before use.

4.2 Repair & Service

There are no user serviceable parts. Return to Martindale Electric if faulty. Our service department will quote promptly to repair any fault that occurs outside the guarantee period.

4.3 Storage Conditions

The socket tester should be kept in warm dry conditions away from direct sources of heat or sunlight, and in such a manner as to preserve their working life. It is strongly advised that they are not kept in a tool box where other tools may damage them.

5. WARRANTY & LIMITATION OF LIABILITY

This Martindale product is warranted to be free from defects in material and workmanship under normal use and service. The warranty period is 2 years and begins on the date of receipt by the end user. This warranty extends only to the original buyer or end-user customer, and does not apply to any product which, in Martindale's opinion, has been misused, altered,

neglected, contaminated, or damaged by accident or abnormal conditions of operation, handling or storage.

Martindale authorised resellers shall extend this warranty on new and unused products to end-user customers only but have no authority to extend a greater or different warranty on behalf of Martindale.

Martindale's warranty obligation is limited, at Martindale's option, to refund of the purchase price, free of charge repair, or replacement of a defective product which is returned to Martindale within the warranty period.

This warranty is the buyer's sole and exclusive remedy and is in lieu of all other warranties, expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. Martindale shall not be liable for any special, indirect, incidental or consequential damages or losses, including loss of data, arising from any cause or theory.

Since some jurisdictions do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any part of any provision of this warranty is held invalid or unenforceable by a court or other decision-maker of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision or other part of that provision.

Nothing in this statement reduces your statutory rights.

Specification
BZ101



Electrical

Nominal operating voltage: 230V~ ±10%
Operating frequency: 30-70Hz
Power consumption: <3W
Power: from mains socket under test
Open earth/neutral indication: >50kΩ at 230VAC nominal

General

Dimensions: 65 x 65 x 47mm

Environmental

For indoor use only
Temperature (Operating & Storage): -10°C to 40°C, at max. 60% RH
Pollution degree: 2
Altitude: <2000m

Safety

Conforms to BS EN 61010-1, CAT II 300V

Specification
CP501



Electrical

Nominal operating voltage: 230V~ ±10%
Operating frequency: 30-70Hz
Power consumption: <2W
Power: from mains socket under test
Open earth/neutral indication: >50kΩ at 230VAC nominal

General

Dimensions: 65 x 65 x 47mm

Environmental

For indoor use only
Temperature (Operating & Storage): -10°C to 40°C, at max. 60% RH
Pollution degree: 2
Altitude: <2000m

Safety

Conforms to BS EN 61010-1, CAT II 300V

Specification
CP520



Electrical

Nominal operating voltage: 230V~ ±10%
Operating frequency: 30-70Hz
Power consumption: <2W
Power: from mains socket under test
Open earth/neutral indication: >20kΩ at 230VAC nominal

General

Dimensions: 65 x 65 x 47mm

Environmental

For indoor use only
Temperature (Operating & Storage): -10°C to 40°C, at max. 60% RH
Pollution degree: 2
Altitude: <2000m

Safety

Conforms to BS EN 61010-1, CAT II 300V

Check out what else you can get from Martindale:

- 18th Edition Testers
- Accessories
- Calibration Equipment
- Calibration & Repair Service
- Continuity Testers
- Electricians' Kits
- Environmental Products
- Fuse Finders
- Digital Clamp Meters
- Digital Multimeters
- Labels
- Microwave Leakage Detectors
- Safe Isolation Kits
- Multifunction Testers
- Non-trip Loop Testers
- Pat Testers & Accessories
- Phase Rotation Testers
- Proving Units
- Socket Testers
- Thermometers & Probes
- Test Leads
- Voltage Indicators
- Specialist Metrohm Testers
- Specialist Drummond Testers

Martindale Electric Co. Ltd. Metrohm House,
12 Imperial Park, Imperial Way,
Watford WD24 4PP, UK.
T: 01923 441717 F: 01923 446900
www.martindale-electric.co.uk
sales@martindale-electric.co.uk

Ver. C1.2

© Martindale Electric Company Ltd. 2022
Registered in England No. 3387451.
LITBZ101CP501CP520

BZ101 / CP501 / CP520
SOCKET TESTER

Instruction
Manual



BZ101 Classic Buzzit
Socket Tester with Buzzer



CP501 Classic Checkplug
Socket Tester

CP520 Classic Checkplug
Socket Tester with Earth
Socket



MARTINDALE
ELECTRIC
Keeping You Safe

