

## Storage Conditions

The TEK402/TEK404 should be kept in warm dry conditions away from direct sources of heat or sunlight, with the battery removed and in such a manner as to preserve the working life of the TEK402/TEK404. It is strongly advised that the unit is not kept in a tool box where other tools may damage it.

## Warranty

Faults in manufacture and materials are fully guaranteed for 24 months from date of invoice and will be rectified by us free of charge, provided the unit has not been tampered with, and is returned to us unopened. Damage due to dropping, abuse or misuse is not covered by the guarantee. Nothing in these instructions reduces your statutory rights.

LIT400 Rev 4.

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# INSTRUCTIONS



## TEK 402/404 CONTINUITY TESTER

**MARTINDALE**  
● ● ● ELECTRIC

Trusted by professionals

**SAFETY INFORMATION:** Always read before proceeding.

### Warning

**These instructions contain both information and warnings that are necessary for the safe operation and maintenance of the TEK402/TEK404. It is recommended that you read the instructions carefully and ensure that the contents are fully understood. Failure to understand the instructions and to comply with the warnings and instructions contained herein can result in serious injury, damage or even death.**

**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, 42 V AC peak or 60 V DC.**

**The TEK402/TEK404 must only be used under the conditions and for the purposes for which it has been constructed. Particular attention should be paid to the safety instructions, the technical specifications and the use of the TEK402/TEK404 in dry surroundings.**

**Always check the TEK402/TEK404 is in good working order before use and that there are no signs of damage to the unit. Do not use if damaged.**

### SYMBOLS:



AC (Alternating Current)



Equipment complies with relevant  
EU Directives

## MAINTENANCE

### Battery Replacement

Disconnect the TEK404 from any external circuit or components. Remove the battery cover of the TEK402/TEK404 by unscrewing the battery cover retaining screw. The cover will now lift off. Fit a new 9V, MN1604/PP3 alkaline battery, observing correct polarity. Replace the battery cover and secure with the battery cover retaining screw. Check the function of the unit by shorting the leads together.

### Fuse Replacement (TEK404 only)

Disconnect the TEK404 from any external circuits or components. Unscrew the 4 nylon screws from the rear casing and remove the rear casing. Remove the fuse from its holder and replace it with a 50mA, 250V, Fast, 20mm fuse, 35A Breaking Capacity. Replace the rear cover and the 4 nylon screws. Ensure that internal wiring is not pinched as screws are tightened. Do not overtighten screws. Check the function of the unit by shorting the leads together.

### Cleaning

The TEK402/TEK404 may be cleaned using a soft damp cloth. Do not use abrasive cleaners or solvents. Allow to dry completely before using.

### Repair & Service

There are no user serviceable parts in this unit other than the fuse (TEK404 only). Return to Martindale Electric Company Ltd if faulty. Our service department will quote to repair any faults that occur outside the warranty period.

## Using the TEK402/TEK404

Connect the leads supplied to the 4mm sockets of the TEK402/TEK404.

Verify the TEK402/TEK404 is functioning correctly by shorting together the leads. An audible tone will be emitted and the red LED on the TEK404 will illuminate.

After making any possible checks to verify the circuit/component you are going to check for continuity is not live, connect the TEK402/TEK404 leads to it.

If there is continuity of less than 10 K $\Omega$  an audible tone will be emitted. The red LED on the TEK404 will illuminate if the continuity is less than 20 K $\Omega$ .

Note: - The sound level emitted and the LED brightness will depend upon the continuity of the circuit/component being tested.

### Over-Voltage Protection (TEK404 only)

If the TEK404 has been placed across a live circuit the internal circuitry will intentionally draw current to blow the internal fuse and protect other components of the TEK404. To replace the fuse, refer to section on maintenance (Fuse Replacement).

## CONTENTS

<b>Introduction</b>	<b>4</b>
Description	4
Unpacking And Inspection	4
Battery Installation	4
<b>Technical Specification</b>	<b>5</b>
<b>Operation</b>	<b>5</b>
Precautions	5
Using the TEK402/TEK404	6
Over-Voltage Protection (TEK404 only)	6
<b>Maintenance</b>	<b>7</b>
Battery Replacement	7
Fuse Replacement (TEK404 only)	7
Cleaning	7
Repair & Service	7
Storage Conditions	8
Warranty	8

## INTRODUCTION

### **Description**

The TEK402 and TEK404 are battery powered continuity testers that give an audible indication of the continuity of the circuit/component under test.

The TEK404 also gives visual indication of continuity and has over-voltage protection for instances where the TEK404 may accidentally be connected to a live circuit.

### **Unpacking and Inspection**

Before unpacking the TEK402/TEK404, examine the shipping carton for any sign of damage. Unpack and inspect the TEK402/TEK404 and leads for any damage. If there is any damage then consult your distributor immediately.

### **Battery Installation**

Refer to section on maintenance (Battery Replacement).

## TECHNICAL SPECIFICATION

### **TEK402 & TEK404**

Probe voltage:	9 V.
Test current:	5 mA.
Continuity range (audible):	Up to approx 10 K $\Omega$ .
Audible output level:	85dB minimum at 30 cm with zero continuity resistance.
Audible output frequency:	2.8 KHz.
Power supply:	9V, MN1604/PP3 alkaline battery.
Dimensions:	150 x 64 x 30mm.
Weight:	Approx 185g (including leads, without battery).

### **TEK404 only**

Continuity range (visual):	Up to approx 20 K $\Omega$ .
Fuse rating:	50mA, 250V, Fast Glass Fuse, 20x5mm.
Over-voltage protection:	Up to 250 V AC/DC.

## OPERATION

### **Precautions**

**Warning** Before use check the TEK402/TEK404 for cracks or any other damage, and make sure the units are free from dust, grease and moisture.

**Warning** Do not connect to a live circuit.

**Warning** Do not use if the battery cover is not fitted.

**Caution** Avoid severe mechanical shock or vibration and extreme temperature.

**Caution** Remove the batteries when not in use for an extended period to avoid corrosion from leaking batteries.