

# GAUGEMASTER®

## MODEL LT LOCOMOTIVE TESTER/CONTROLLER

**WARNING: - THIS APPLIANCE MUST BE EARTHED. FOR INDOOR USE ONLY.**

The controller/tester should be regularly examined for potential hazards such as damage to the casing, cable or plug. In the event of any damage, the unit should not be used until the damage has been repaired and the unit should not be opened, as it has no consumer repairable components. A repair service is available at GAUGEMASTER CONTROLS.

### **MAINS CABLE:**

This unit is presently fitted with a 3 amp fused plug. If this plug is not suitable for your supply, another plug must be fitted in the following manner: -

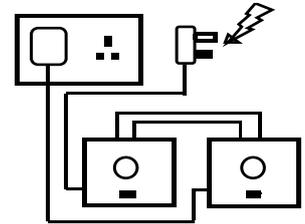
**BLUE:** To the small pin marked 'N' or coloured **Black**.

**BROWN:** To the small pin marked 'L' or coloured **Red**.

**GREEN/YELLOW:** To the large pin marked 'E' or by the symbol  $\perp$  or coloured **Green** or **Green/Yellow**.

If any other type of plug is used, a 3 Amp fuse must be used in the mains circuit. If in doubt consult an electrician.

**CAUTION: It is very important that the outputs of two or more control units are not connected together in parallel. i.e. outputs connected. If this is done, there is a risk of electric shock from a plug not inserted into a socket.**



### **CONNECTIONS TO TRACK:**

Connect the terminals marked "Track " to the section or track you wish to operate. Reverse wires if the locomotive travels in the wrong direction. Suitable for Cab Control and Common Return wiring. Please ensure tracks/sections are correctly isolated from each other. The outputs of two or more control circuits must not be connected in such a way that both positive and negative wires may accidentally be connected together, i.e. through switches or points, etc.

The terminals marked "Accessories 16v AC" are for use with point motors and other electrical accessories, but are not suitable for Common Return wiring with the DC outputs. When used for point motors it is advisable to use a Capacitor Discharge Unit (CDU) to ensure successful operation. All outputs are protected by automatic resetting PTC (positive temperature coefficient) circuit breakers rated at 1 Amp. Should a track/tester overload occur the red LED will extinguish and the ammeter reading will fall to zero. Switch off and establish the reason for the overload. Allow the PTC to cool for approx. 2 mins. before turning the unit on again. The 16V ac supply is independent and as such has it's own PTC and no indication exists for auxiliary supply overload. Should problems persist contact the manufacturer. This unit is suitable for use with all types of motors, including Portescap, and High Frequency Track Maintainers.

**Outputs:** 0-12Vv dc at 1 Amp. & 16V ac at 1 Amp

### **LOCOMOTIVE TESTER ROLLER ASSEMBLIES:**

Your GAUGEMASTER MODEL LT is supplied with 8 roller assemblies, before installing these onto the unit place each one on a flat surface to check alignment. If a roller assembly has distorted in transit a light pressure on the top of the opposing plates whilst it is on a flat surface should re-align it.

Before placing the roller assemblies on to the unit select 'TEST' on the front panel mounted selector switch and turn on the power supply. Should the ammeter go immediately full scale and the unit trip out then a fault exists within the unit and it should be returned to Gaugemaster Controls for repair. Place each roller assembly in turn between the rails on top of the unit. If at any time during this procedure the ammeter goes full scale and the unit trips then that roller assembly unit is shorting the rails and it should not be used.

The axles of each roller assembly unit should be periodically oiled with light machine oil. Wheels may need cleaning from time to time. The central insulating bush of the roller assemblies are Nylon and care should be taken when using solvent based cleaners.

Locomotives such as steam outline that have large driven wheels may in some cases override the roller assemblies and derail. For this purpose your GAUGEMASTER MODEL LT is provided with two foam buffers. By placing these over the rail sections so that the slots locate over the rails and at both ends of your loco these will act to keep your locomotive in place. It is recommended that the roller assemblies be aligned to the locomotive axles first, before attempting to position the foam buffers.

Spare roller assemblies in both 'N' and 'OO' gauges can be purchased from Gaugemaster Controls and other good retailers.

**OPERATION:**

**LOCOMOTIVE TESTER:** Plug into an appropriate supply and switch the unit to test mode. Position the direction selector switch to its central OFF position and turn the output control knob to zero. Place a loco onto the roller assemblies, positioning the roller assemblies to suit the position of the loco wheels. When satisfied the loco is correctly positioned switch the direction selector to the appropriate position and increase the controlled output to the required level. The ammeter is scaled 0 –1 Amp and will register the current required to drive your locomotive.

**LOCOMOTIVE CONTROLLER:** Connect to your layout as instructed. Plug into an appropriate supply and switch the unit to track mode. Position the direction selector switch to its central off position and turn the output control knob to zero. Place a loco onto the track and switch the direction selector to the appropriate position and increase the controlled output to the required level. The ammeter will register the current required to drive your locomotive.

**AUXILIARY SUPPLY:** The 16V ac supply is an independent supply rated at 1Amp(16VA) max. This supply has no influence upon the registered output of the ammeter.

**GUARANTEE:**

We undertake to replace, free of charge, any controller parts found defective within the lifetime of the unit, providing the item has not been tampered with and parts are still available for such a repair. Roller assemblies are mechanical and subject to wear and tear and require maintenance over which we have no control. The guarantee on the roller assemblies is limited to replacement of units found to be defective by manufacture. This guarantee covers only the supply of replacement parts, labour cost for fitting of same and the cost of returning the unit to the customer or retailer. This Guarantee does not affect your Statutory Rights. We reserve the right to vary design or specification without notice.

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CONSTRUCTED TO EN60 742

A CATALOGUE ON THE FULL RANGE OF GAUGEMASTER PRODUCTS IS AVAILABLE

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