

# TFM Input Tester

## Type: ST20I



## Overview

Investigation and reviews have shown that a key cause of TFM failures can be the gradual degradation of transzorbs, used in the input circuits of Alstom Mk3/Mk4 and Westinghouse MkIIIa TFMs. The problem is common to Signal and Points Modules manufactured by both Alstom and Westinghouse. Until recently it had not been possible to identify or predict the input failures associated with a particular TFM before they occurred, as no current test methods are capable of detecting these latent defects.

Investigative work revealed a test method that is objective and capable of detecting the defects before they cause a problem in service; Park Signalling's TFM Input Tester (ST 201) uses this methodology. Technical analysis has shown that by pre-empting the actual failure of TFMs, significant reduction in train delays can be achieved.

The ST 201 is a portable, stand-alone item of test equipment, which only requires a 110V supply. The test is carried out on a stand-alone TFM (i.e. not in service), and takes no longer than one minute. Thus, screening of TFMs can be carried out at the depot or on site during quiet periods, with minimal disruption.



## Environment

Suitable for use in sheltered trackside locations.

## Electrical connections

The TFMIT connects to the module under test via a flying lead terminated with an ITT Trident series 75-way socket.

The TFMIT sources its power from a flying lead terminated with an ITT Trident series 75-way plug, which can be connected to the location case's TFM connector (thus placing the TFMIT in series with the location case

and TFM). For workshop use, an optional TFMIT Power Adaptor (ST 202) can be added, which brings out the 110V a.c. power connections to unterminated flying leads.

The incoming supply passes through an isolating transformer within the TFMIT.

## Outlines

The TFMIT is of robust construction, having dimensions 220mm × 120mm × 90mm, and weighing 3kg.

A hook is provided for hanging the TFMIT from a TFM handle while testing at trackside locations.

## Park Signalling

3rd Floor, Houldsworth Mill, Houldsworth Street,  
Reddish, Stockport, SK5 6DA

Tel: +44 (0) 161 219 0161

email: sales@park-signalling.co.uk

[www.park-signalling.co.uk](http://www.park-signalling.co.uk)