

UIC558 MULTITESTER

TPV18-1K

MultiTester **TPV18-1K** is a modern service device designed for inspection and testing of 18-wire¹⁾ continuous UIC cable, as well as for complex diagnostics of systems connected to this line according to UIC 558 recommendation.

Device description

The device is installed in a robust, but lightweight plastic suitcase (water, impact and dust-proof). It consists of several functionally separate parts:

- **Test of functionality and integrity of UIC line, control of door and lighting.**
- **Test of the electro-pneumatic brake system (EPB) and emergency brake override (EBO).**
- **Test of Public Address System (PAS),** whereby installed diagnostic facility simulates staff gateway, coach gateway or locomotive gateway (PAS Units). Through the audio input, it is possible to send any audio source (sin. signal, noise, ...) into the program channel.

It is also possible, through the wireless **Bluetooth®** connection, to send a generated noise, sinusoidal signal or any record (music) to the train set by means of a mobile application.

On the front panel, the 18-pole socket is installed. Through this socket, the tester connects to the UIC line of the car. During testing of the line for interruption and for correct connection, the measuring head (part of the accessories) is gradually connected to all UIC connectors of the coach, train respectively. The tester enables several hours long operation by using supply from its own installed battery, or by using an adapter from 230V network. On the control panel of the tester, the controllers are divided into the functional groups for a simple orientation of a user during diagnostics.

By using of the **TPV18-1K** tester, it is possible to diagnose the UIC line of the **whole train** and systems connected to it **with one device**, and all these tests can be performed by one person.

Using the TPV18-1K tester will bring a significant reduction of time necessary for testing of all functions of the coach, locomotive or the whole train set, related to the UIC 558 recommendation.

¹⁾ Optionally, it is possible to test also 13-wire UIC cable (less used today) – see optional equipment



TPV18-1K tester enables:

- **Galvanic testing of the 18-wire continuous information UIC line**
 - for short-circuit (between wires, or against the frame),
 - for interruptions
 - for correct connection,
 - for insulation resistance between pairs and pairs against the frame.
- **Testing of functions and devices of vehicle or train set controlled by the continuous cable:**
 - Door control (central closing, selective door unlocking)
 - Turning lights on and off
 - Test of the electro-pneumatic brake system - EPB - and emergency brake override - EBO (DB, ÖBB)
 - Sound distribution in the coach by a built in "gong" signal, by connecting of the signal source to a 3.5 mm connector (jack) or wireless via **Bluetooth®**
 - PAS gateway (tester works as a source and receiver of signals imitating other coaches and a locomotive) according to **UIC 558, 568.**

Technical parameters

- Supply from installed battery DC 14.8V
- Charging adapter AC 230V/50Hz
- Incoming power max. 25 VA
- Suitcase dimensions 470 x 330 x 175 mm

Accessories:

- 18-wire testing cable
- Grounding cable
- AC/DC Power supply / charging adapter
- Testing adapter with 18 pole connector HTV118
- Testing adapter with 18 pole socket HTZ118
- 18 pole adapter reduction: socket-socket
- Operation manual
- Backpack for easy carrying of the accessories (cables, adapters, etc.)

Optional accessories:

- Cable for power supply and charging from the car power system
- 13-wire testing cable
- Modified adapter with 13 pole connector HTV113