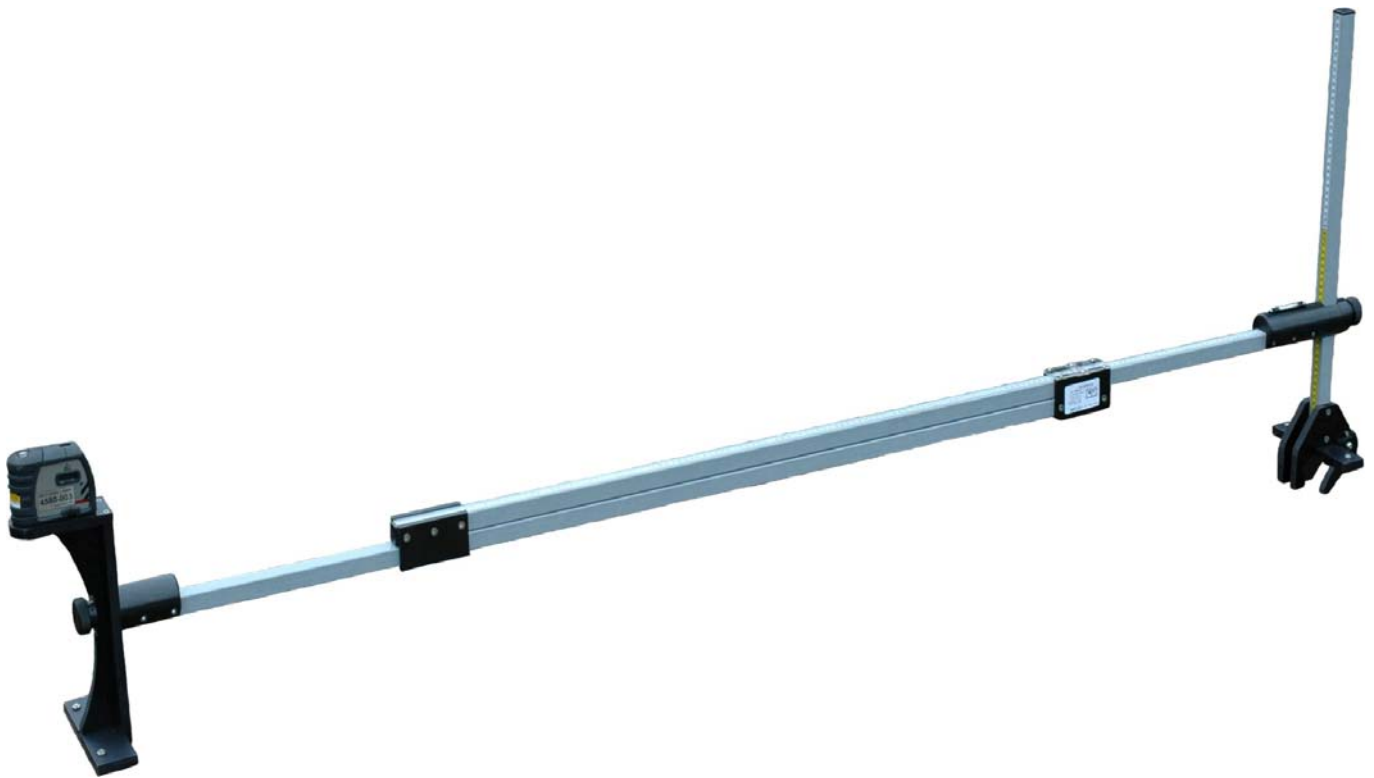




ABT4580 6' Relative Level Gauge



Instruction Manual

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2.0 Item List

1. 6' Relative Level Gauge
2. 1000mm Digging Pole
3. Fisco Multi-point Laser EL-SO-MP (where requested)
4. Instruction Manual
5. Fisco and case Documentation (supplied with Fisco Laser where requested).

3.0 Specification

Weight	-	5.0kg
Dimensions	-	Length: 1450mm Height: 1495mm Width: 450mm
Measures Outside edge to outside edge (Relative Transfer)	-	Range: 1700mm > 2800mm Accuracy: ± 1 mm Resolution: 1mm
Measures Relative Level	-	Range: -300mm > +175m Accuracy: ± 1.0 mm Resolution: 1mm

Features

1. 6ft/10ft Measurements.
2. Fully insulated – allowing work over 3rd/4th Conductor rails.
3. Long Battery Life.
4. Single person operation.
5. Can be used in areas of high ballast and obstructions higher than rail level.

4.0 Getting Started

4.1 Overview

The ABT 4580 is a light-weight gauge that allows the user to safely take relative 6' transfer measurements. A self leveling laser is used to allow accurate and quick measurement of relative heights without the need to make minute adjustments for each measurement.

4.2 Assembly

The gauge is made up of 5 main parts, these are:

- Fixed end (with laser platform)
- Central sliding section
- Adjustable end.
- Self-levelling Fisco Laser
- Digging Pole

The fixed end is attached to the central sliding section by using the two locating pins and tightening the knurled knob. The adjustable end passes through the opposite end of the central sliding section and is tightened/released with a knurled knob.

Where applicable the multi-point laser is fixed to the laser platform on the fixed end of the gauge. The Digging pole can be used separately or as part of then gauge; where it replaces the adjustable end.

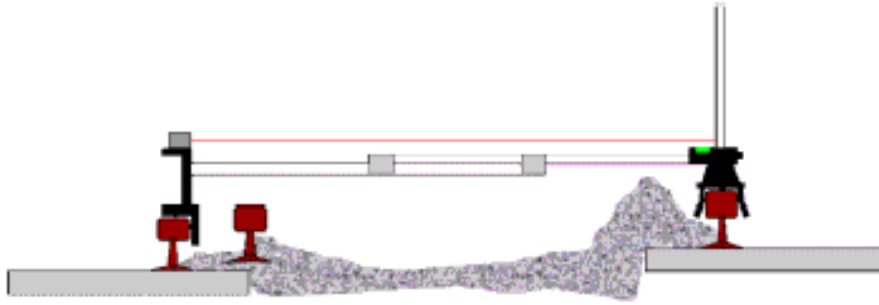
Note: The magnetic base of the Laser must be removed before the Laser is fitted to the gauge.

4.3 Operating the Gauge

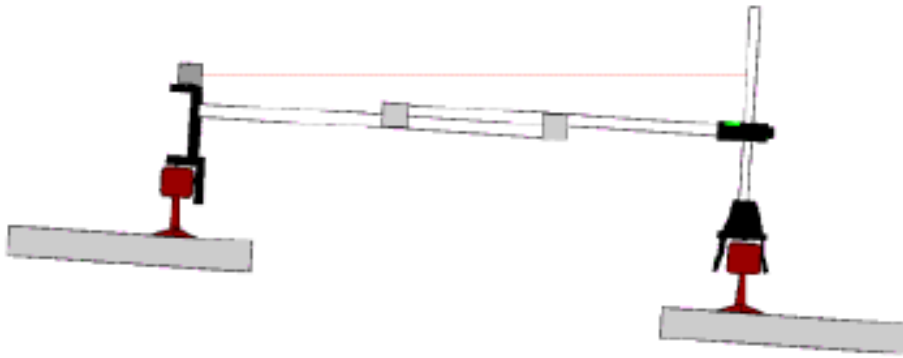
The **ABT 4580** can be used to read a maximum negative relative (transfer) level of -300mm. It can be used to obtain true horizontal out-side edge to out-side measurement of 1700mm to 2800mm with no loss of accuracy to the relative measurement. The spirit level bubble (built in) is used purely to obtain a true horizontal measurement.



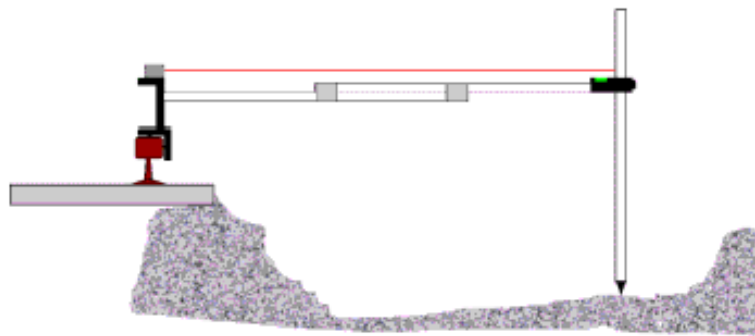
With the capability to read $-300\text{mm} > +175\text{mm}$ the user is able to take measurements from a position of safety if the adjacent line is open to traffic, or allows readings to be taken from under a stationary engineering train during Renewal work.



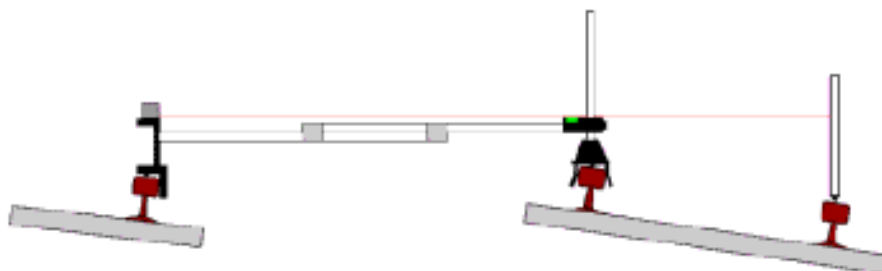
When used with the multi-point laser the gauge will give a true level. The close proximity of a Tamper or high winds will not affect the reading as the Laser is fitted with a damper that reduces the impact of vibration.



An additional Digging Pole can be used with the **ABT 4580**. In this instance a 1000mm pole is being used to check both formation or bottom stone depths during renewal operations.



On canted track, the Engineer may require to take a relative reading over the high rail. This can easily be done using the 1000mm digging pole. The laser can easily be turned so as to miss the vertical pole on the ABT 4580, thus allowing a reading to be taken on any rail or object.



5 Maintenance

5.1 Before Each Use

1. Check that all parts contacting the rail are clean and clear of dirt, grease etc...
2. Ensure that all sections of the gauge connect together properly.
3. Ensure that laser is functioning. (where applicable)

5.2 Every 3 Months

1. Visually check for damage

5.3 Annual

To ensure that the accuracy of your ABT4580 remains within specified limits, it should be returned to your local distributor for annual re-calibration.