



TintMan

Quick Reference Guide



Any material to be tested should be clean and free from grease, finger marks and dust. If necessary the material should be cleaned using a propriety glass cleaner and thoroughly dried using lint free cloth.

Before use always check and adjust the Tintman instrument sensitivity against the sample of *Reference Window* supplied in the instrument kit. The *Reference Window* is marked with the transmission measured by a reference instrument. Please refer to the ***Checking and Adjusting Tintman*** instructions at the end of this guide.

To use the instrument connect the light source and detector to the readout unit with the colour coded connectors. Check the colours match and the connectors are pushed in firmly. The light source has a red connector, the detector black. No damage will be done if the connectors are mistakenly swapped.

Attach the source and detector to either side of the material to be measured, if necessary use the captive suckers to secure to vertical windows. The source and detector should self align magnetically. On raked windscreens attach the detector to the inside of the glass hanging from its sucker. When the source is placed on the outside of the windscreen the magnetic attraction between the two should automatically draw the detector to the windscreen.

Before taking a reading, visually check that the source and detector are concentrically aligned and firmly against the material.

To take a transmission reading press the large button on the readout unit. The display will show the measured transmission in percent. Allow about 10 to 20 seconds with the button depressed for the light source intensity to stabilise. Keep the button pressed throughout this period. It is recommended that three readings are taken at different positions and the average value used.



A low battery warning will appear on the display momentarily when the button is depressed and then disappear. If the low battery warning remains on do not accept the transmission reading and change the instruments batteries (four AA alkaline cells) immediately.

If the transmission test is done in very bright direct sunlight, stray light scatter may increase the apparent transmission by up to 0.5%.

Note that the high power magnets used in Tintman are brittle. Do not drop them or bang them together. They will shatter. Do not force either of the magnets against another magnetic pole of the same polarity - their strength may be weakened!

Checking and Adjusting Tintman

Before each use it is recommended that the sensitivity of the instrument is checked against the *Reference Window* and the *100% Spacer Ring* supplied in the kit. The *Reference Window* is marked with the value of transmission measured by a reference instrument.

The aim of this check and adjustment is to make sure Tintman reads the correct transmission value. If the reading is low increase the sensitivity by turning the recessed control clockwise with the tool provided. To decrease the sensitivity turn anti-clockwise.

Insert the 4 mm thick *100% Spacer Ring* between the source and detector magnets and adjust the sensitivity until the instrument reads 100.0 ± 0.3 .

Make sure the *Reference Window* is clean, attach the source and detector and take a normal reading. This reading should be within ± 1.5 of the value printed on the *Reference Window*. If not repeat the 100% adjustment.

If the readings fluctuate, clean the connector contacts by rotating the red connector plug in its socket.

Do not place the source or detector near computer disks, the fields from their magnets may corrupt the disk.

Please refer to the **TintMan Operating Instructions** for more detailed information about using and configuring this instrument.

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