

## WARRANTY

The manufacturer warrants all models of the TC1800 to be free from defects in material and workmanship under normal use and service as specified within the operator's manual. The manufacturer shall repair or replace the unit within twelve (12) months from the original date of shipment after the unit is returned to the manufacturer's factory, prepaid by the user, and the unit is disclosed to the manufacturer's satisfaction, to be thus defective. This warranty shall not apply to any unit that has been repaired or altered other than by the manufacturer. The aforementioned provisions do not extend the original warranty period of the unit which has been repaired or replaced by the manufacturer. Batteries are not covered by warranty.

The manufacturer assumes no liability for the consequential damages of any kind through the use or misuse of the TC1800 product by the purchaser or others. No other obligations or liabilities are expressed or implied. All damage or liability claims will be limited to an amount equal to the sale price of the TC1800, as established by the manufacturer.

## Other Products From EDTM



Solar Spectrum Transmission Meter  
Full spectrum measurements  
Values calculated to 3 standards  
Tuv, Tvis, Tsolar, Tir & Tdw

(Model# SS2450)



TINT-CHEK PRO  
2-Piece Light Transmission Meter  
For Rear & Side Windows (+ Windshield)  
(Model# TC3800)



TINT-CHEK+  
Light Transmission Meter  
Back-lit display & 0.1% Resolution  
(Model# TC2800)

## TINT-CHEK Window Tint Meter

MODEL# TC1800



### FEATURES:

- Quick Light Transmission Measurements
- All Digital with micro-processor control
- No mechanical lever switch to scratch glass
- Insert the glass in any direction
- 35% larger display than competing models
- Slimmer pocket-friendly design: 5.2" x 2.5" x 1"
- Reliable instrument with no moving parts
- Automatic power-off feature for extended battery life
- Auto-calibration at start-up
- LED light source for longevity
- Low battery warning
- Convenient push-on/push-off membrane power switch
- Light weight
- Patent-Pending technology to remove ambient light and increase accuracy

## QUICK-START DIRECTIONS

### STEP 1

ROLL DOWN THE WINDOW AT LEAST 3 INCHES.

### STEP 2

CLEAN THE GLASS.

### STEP 3

TURN THE METER ON. THE DISPLAY WILL READ 100% WHEN THE METER IS READY TO BEGIN TESTING.

### STEP 4

SLIDE THE METER OVER THE EDGE OF THE GLASS (AS SHOWN) AND READ THE MEASUREMENT RESULTS ON THE DISPLAY.

### STEP 5

RE-TEST THE WINDOW TO CONFIRM THE ACCURACY OF YOUR FIRST TEST.



## **BASIC OPERATION**

Turn the meter on and wait for the system to self-calibrate. After the display shows 100%, you can slide the unit over the sample to measure the light transmission characteristics. Here are a few helpful reminders for conducting transmission measurements. For the most accurate transmission measurements, the glass should be held perpendicular to the sensor. Do not tilt the meter/glass at angles. Be aware that fingerprints, dirt, and defects on the glass can affect the transmission values.

When you place the meter on the glass, slide the instrument completely on to the glass so it is pressing against the stop location. This will guarantee that the edge of the glass is not blocking the sensor during tests. Pay attention to the proximity of window film near the edges of the glass that might not cover the entire window. Testing the glass on the extreme edge of the window might negatively impact the accuracy of your measurement, due to the edges of window film. If you slide the instrument fully onto the glass until it clamps in the meter opening, this will avoid any problems.

The instrument will continually monitor its calibration during measurements. If the instrument detects any problems with the calibration, it will reset itself in between measurements. If you mistakenly turn the instrument on with a piece of glass already in position, the display will calibrate to read 100% with the glass in place. Simply remove meter from the glass sample. Once removed, the instrument will display “-E” and power off. Turn the meter back on with no glass in the opening and the display will then show “100%”.

If the display ever reads “-E”, please verify there is nothing between the LED light source and the sensor. If there is, remove it from blocking the sensor and LED source.

## **CALIBRATION STANDARDS**

Two light transmission test standards accompany each meter. The standards have VLT values of approximately 27% and 59%. The actual calibrated values of each standard are indicated on the printed label applied to each standard. These standards were created using a NIST traceable source.

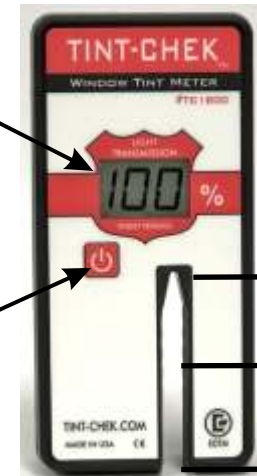
Use the standards to verify that your meter measures the VLT values within +/- 2% of their indicated values. On a regular basis you should verify that your meter is operating within specifications. Before measuring the standards, ensure they are clean and not scratched. Blow off any dust that may appear on the surface, and remove any finger prints with a lint-free cloth. If the meter measures outside of the +/-2% range, please inspect the quality of your calibration standards. If the standards are in great condition, then discontinue use of the meter until the calibration can be verified or corrected.

If you need to order replacement calibration standards, please reference Part# TC1810 when placing your order.



VISIBLE LIGHT  
TRANSMISSION  
DISPLAY

POWER  
BUTTON



1.0" Sensor to top

1.3" Sensor to edge

## **BATTERY REPLACEMENT**

The TC1800 is powered by a 9 volt battery (included). When the battery voltage is getting low, “-battery-” will scroll across the screen. The instrument can still be used at this point, however it is recommended that the battery be replaced soon. When the battery voltage gets too low to operate, the meter will power off automatically.

## **AUTO-POWER-OFF**

The TC1800 instrument is equipped with an automatic power-off feature to extend the life of your battery. The instrument will automatically shut off after approximately 2 minutes if not used. You can also use the power switch to turn the meter off immediately after each use.

## **SPECIFICATIONS**

Wavelength.....	550 Nanometers
Resolution.....	1%
Accuracy.....	+/- 2 Percentage Points
Repeatability .....	1 Percentage Point
Measurement Range.....	0 to 100% Light Transmission
Operating Temperature.....	0 F to 122 F (-17 C to +50 C)
Storage Temperature.....	-4 F to 158 F (-20 C to +70 C)
Testing Time .....	2 seconds
Light source.....	LED
Powered by .....	9V Battery (Supplied)
Sample Thickness.....	0 to 0.25 inches (0 to 6.5 mm)
Minimum Sample Size.....	1 inch x 1/2 inch (25 x 13mm)
Instrument Dimensions.....	5.2 x 2.5 x 1 inches(127 x 63.5 x 25.4mm)
Instrument Weight.....	0.34 pound (0.15kg)

