AUTO TEST
Products Pty Ltd

User Manual
Version 3.6

AutoLight® PLUS

Window Tint Meter

AUSTRALIAN MADE AND OWNED

Licence ID number: 10242

DECLARATION OF CONFORMITY
We, Auto Test Products Pty Ltd. declare under our sole responsibility that the product Auto*Light* Plus is in conformity with the provisions of the following Council Directive: 1999/5/EC.
A copy of the Declaration of Conformity is available from http://www.autotest.net.au

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1. UNPACKING AND FIRST TIME USE

Congratulations on your choice of an Auto*Light* **Plus** Light Transmission Meter. Please take the time to read this User's Guide before using the Auto*Light*™ Meter in the field. Incorrect or inappropriate use of this instrument may void the warranty. Retain the packing materials for future shipping and transport of the unit for periodic calibration.

The packing box should contain:
- *AutoLight* **Plus** Light Transmission Meter
- 1 x Glass check sample
- 2 x Duracell (9V) batteries (MN1604)
- USB stick including Manual and software
- Warranty registration card
- Protective Bag

2. INSTALLATION AND BATTERY CHANGE

Your Auto*Light* **Plus** pack includes two 9-volt Duracell batteries in the battery compartment accessible from the back of the light source tube. The battery must be connected before initial use. The long-life batteries will provide up to 6 hours of continuous use (approx. 500 tests). If standard batteries are used, anticipate a shorter period of continuous use. This meter is fitted with a low voltage cut out to ensure an accurate power supply to the light source. If the unit fails to operate, replace the batteries.

To replace batteries, remove screw from cover located at the bottom of the light source. Carefully replace both batteries. Close cover. NOTE: Batteries must be disconnected and removed for prolonged storage. The warranty does not cover damage from battery leakage.

3. CHECKING READOUT

Using the glass check sample provided, check the light transmission readout by following the three testing steps outlined under '4. OPERATION'. When checking, align the light source and sensor by accurately mounting the sensor tube above the light source with the test glass in between. The light transmission value of the test sample is marked on the sample and should correspond to the reading of Auto*Light* **Plus** within ±3.

4. OPERATION

4.1 Operating Conditions and Set-up
AutoLight Plus has a photocell built into the light sensor tube and a constant light source built into the light source tube. These components are fragile. Care should be taken when handling the unit and should not be dropped or violently shaken. **Avoid taking measurements in strong sunlight** as stray light may affect the reading accuracy. Aim the light source directly at the sensor for an accurate reading. It can be fixed or held onto one of the windows surfaced while readings are being taken off the main unit.

4.2 Instructions for Use
By aligning the light source and sensor on opposing sides of the window to be tested, the percentage of light transmitted through the window is measured.

Follow these four easy steps:

Step 1 - Align: Align Auto*Light* **Plus** to the side window or windscreen so that the light source and sensor are on opposing sides.

Step 2 - Activate: After aligning Auto*Light* **Plus**, press ON button until you see "▪" on the LED window. Then press the ON button once again to take a reading of the light transmitted through the glass window.

Step 3 - Annunciate: After the test is completed, the display shows the percentage of light transmitted through the window. Auto*Light* **Plus** reads light transmission as a percentage. Simply compare the reading with the specific value according to your local regulations. The reading will remain displayed for 3 seconds, before Auto*Light* **Plus** turns off automatically.

Step 4 – View stored readings: To view stored light readings, press the ON button and do a quick test. When the test measurement is finished, wait for about two seconds, and then quickly press the ON button to enter into viewing mode. Once in the viewing mode, subsequent presses of the ON button will increment test number and relevant light reading for each test will be displayed adjacently.

Repeat steps for each window area to be tested.

Step 1 – Align

Step 2 – Activate

Step 3 - Annunciate

5. TROUBLESHOOTING

Problem	**Troubleshooting**
AutoLight Plus will not turn on	Batteries are discharged, replace batteries
Sample glass not reading 41%, 51% or 74% ± 3%	Adjust using test sample
Light globe not working	Return Auto*Light* **Plus** for servicing
AutoLight Plus turns off during use	Batteries have discharged, replace batteries

For other problems, contact AutoTest Products. Repairs should only be carried out by AutoTest Products Pty Ltd or by an Authorised Service Centre in order to ensure the product retains its calibration.

6. CALIBRATION

Auto*Light* **Plus** will require calibration at intervals of one year or as required by your local Authority. Calibration can only be carried out by AutoTest Products Pty Ltd or by an Authorised Service Centre.

7. PC SOFTWARE GUIDE

Software Setup

System Requirements:

- Windows 10 or later

Install AutoLight Plus Download Software

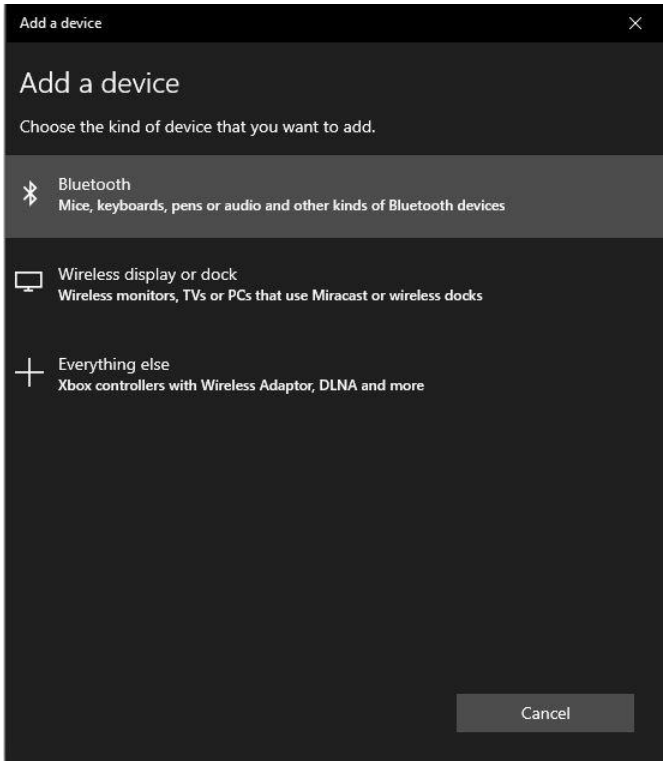
Insert the Auto*Light* **Plus** Download software from enclosed USB stick and run “Setup.exe”. Follow on screen instructions.

You are now ready to download readings from your Auto*Light* **Plus** light meter.

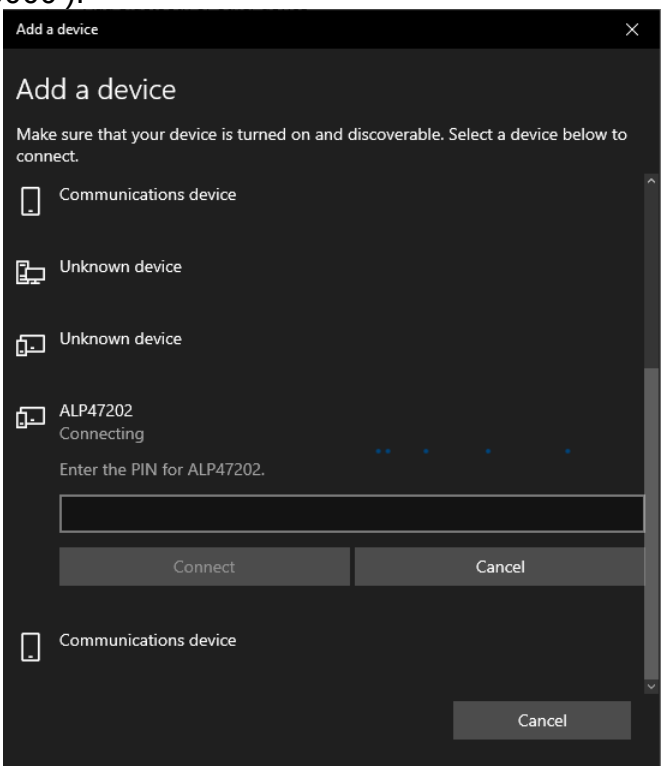
Pairing Device

(1) Switch ON your Auto*Light* **Plus** device. When the light meter displays “▪” on its LED screen, it indicates that the device is ready and can be discovered using a Bluetooth discovery tool.

(2) Use your Bluetooth Manager to establish pairing with your Auto*Light* **Plus** device. The light meter should be listed in the Bluetooth devices list as ALP12345, where 12345 is the serial number of the meter.

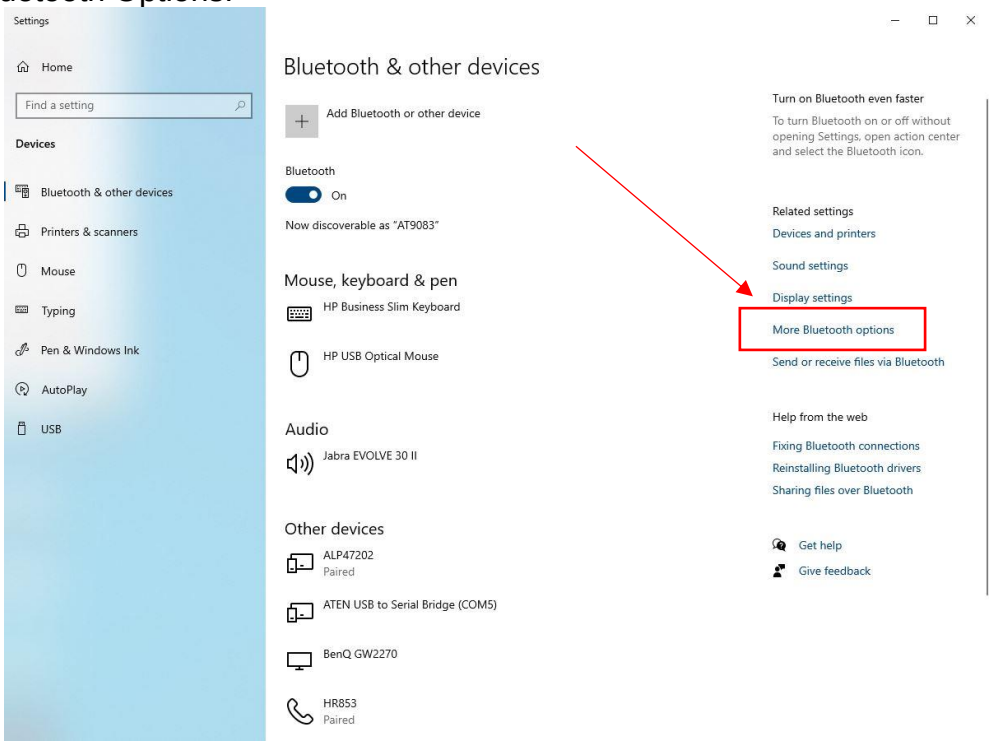


(3) Once the Auto*Light* **Plus** device is found by your Bluetooth Manager, establish pairing using PIN ‘1234’ (or ‘0000’).

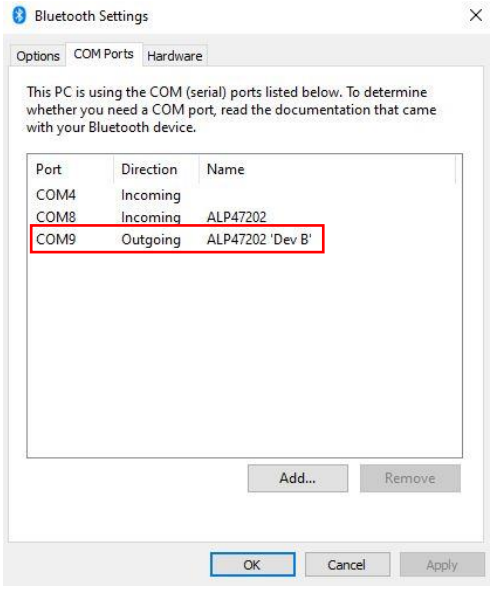


Finding the correct COM Port

(1) To find the Com Port in use by the Auto*Light* **Plus**, open Bluetooth Settings and click on More Bluetooth Options.

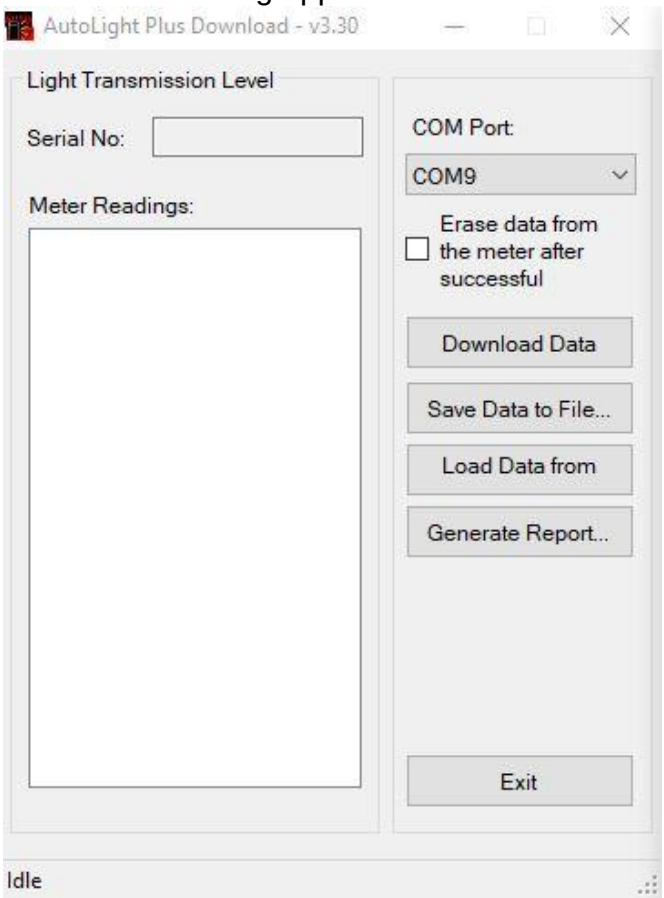


(2) Once in More Bluetooth Settings, the Com Ports in use by your Bluetooth Connections are shown. To connect to your device the Com Port required is in the **Outgoing** direction and will have your Bluetooth Device Name ALP12345 where 12345 is the serial number of the meter.
In the example below the correct Com Port is COM9.



Downloading from the Auto*Light* Plus PC Software

(1) Run the Auto*Light* **Plus** downloading application.



(2) Select the COM port to match the port at which your Bluetooth Manager is connected to the light meter. Once the COM port is selected, press “Download Data” to begin downloading.

(3) Once the data from the light meter is downloaded, you can press ‘Save Data to File..’ to store data on the PC. A previously saved light meter data file can be opened by pressing the ‘Load Data from File...’ button.

(4) To generate a test report, press ‘Generate Report’. Users can customize the report format by altering the “ReportForm.dot” template file located in the same directory where Auto*Light* **Plus** software is installed.

Please note that Auto*Light* **Plus** automatically switches off after 60 seconds of inactivity and you will need to switch it back on if this occurs. Also note that steps 1 to 5 are only required to be followed for the first time. Once the COM port is obtained by your Bluetooth Manager, you can use that same COM port and start from the Downloading from the Auto*Light* Plus Section for future use.

8. WORKSHOP PRO ANDROID APP GUIDE

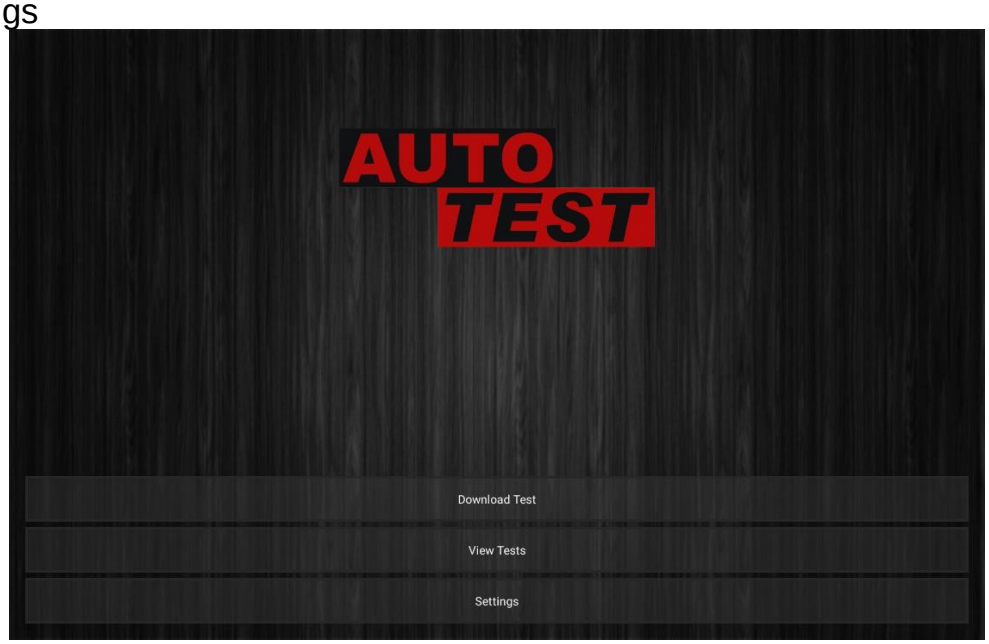
Pairing Bluetooth

Instructions on how to pair your Auto*Light* **Plus** can be found in the Workshop Pro manual on the AutoTest Website.

Main Menu

The main menu screen is shown below and allows you to choose from 3 options.

- Download Test
- View Tests
- Settings

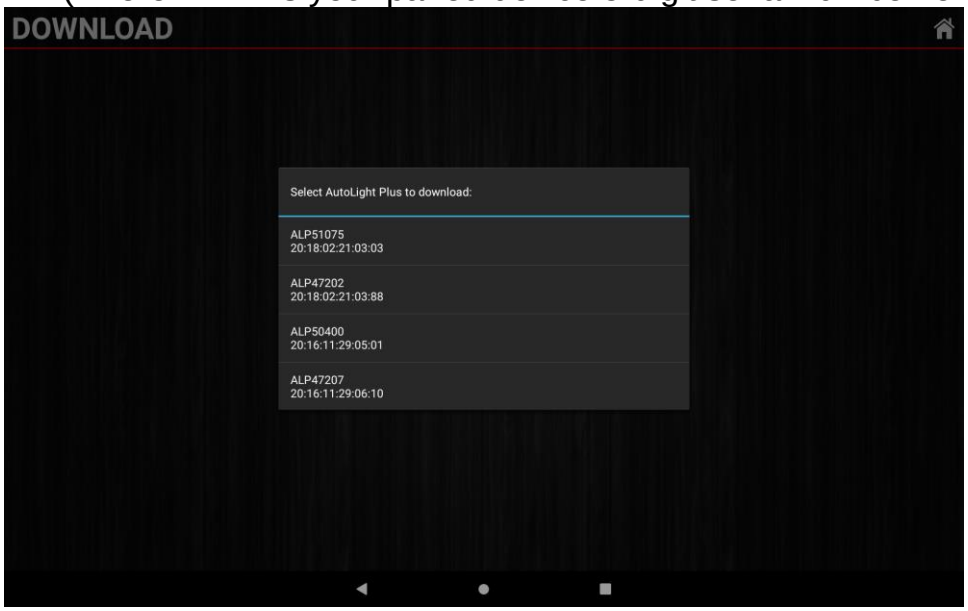


Download Test

After clicking ‘Download Test’ follow the instructions below to download tests from your Auto*Light* **Plus** on to your Workshop Pro.

*You **must have paired** your AutoLight **Plus** device with your tablet before you can download any tests.*

1. Select your AutoLight Plus to download from. The paired devices will be labelled ALPxxxxx (where xxxxx is your paired device 5-digit serial number ie ALP47202).



2.
3.

9. SPECIFICATIONS AND SPARE PARTS

Standards:	Conforms with ISO 3538
Battery	2 x MN1604 batteries (9 Volt) - Duracell type only
Light Source	Output 2856ºK + 50ºK, conforming to C.I.E. standard illuminant A
Lamp Voltage	Stabilised within + 0.1%
Sensor	Spectral sensitivity conforming to photopic curve V(λ) of relative illuminous efficiency of the C.I.E. 1931 standard observer for photopic vision
Display	LED readout 0 - 100%, linear from 20 - 100%, ± 3%

The following spare parts can be obtained from AutoTest Products:
- Calibrated glass samples
- PDF Manual
- Batteries (2 x 9v)
- Protective Bag

The replacement of any other components must be carried out by Auto*Test* Products or an Authorised Auto*Test* Products Service Centre.

10. WARRANTY

To ensure prompt warranty service should it be required, please complete warranty registration form, and return to Auto*Test* Products Pty Ltd within 10 days of purchase of the product. Auto*Test* Products or an Authorised Service Centre warrants this product against defects in material and workmanship for a period of 12 months from the original date of purchase. This warranty applies only to products and components supplied by Auto*Test* Products which can be identified by the trade name or logo affixed to them or by other documents. Auto*Test* Products does not warrant any products not supplied by Auto*Test* Products. During the warranty period, Auto*Test* Products or an Authorised Service Centre will repair (or at its option replace), any defective component(s) without charge for labour, provided the product is returned in its original or suitable equivalent container, freight prepaid, to an authorised Auto*Test* Service Centre. Transit insurance and return freight will be at the owner's expense.
In order to obtain calibration, warranty or non-warranty service, ship the product, freight and insurance prepaid to your nearest AutoTest Service Centre. Attach to the product your name, address, contact numbers, description of the problem and if a warranty claim, proof of purchase (dated sales receipt or invoice).
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