BATTERY REPLACEMENT

The instrument is powered by a 9-volt alkaline battery (supplied). The instrument will notify you when the battery is starting to get low. The meter will continue to operate, as this is just a warning that you will need to replace the battery in the near future. Once the battery has reached a level that is too low, the instrument will lock up the display with a "REPLACE BATTERY" message. To access the battery, remove the battery cover and replace with a new 9-volt alkaline battery. If the unit is going to be stored for more than a month without use, we recommend removing the battery during storage.

USE / MIS-USE

WARNING: The instrument includes a UV(A) LED in the design. Do not look directly at the aperture on the back of the instrument while the instrument is testing.

Do not tamper with the enclosure of the instrument. Opening the enclosure WILL affect the calibration of the instrument AND will void the warranty.

Do not apply excessive force to the switch. Doing so could affect the performance of the instrument, especially if excessive force is applied during testing.

The instrument has been calibrated for testing Solarphire AR glass. Testing of materials other than Solarphire AR glass is not warranted to produce the correct test results. If you have a custom application, consult the factory to find out if the product is applicable.

WARRANTY

The manufacturer warrants the electronics included in all models of the AR1750 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 manufacturers factory, prepaid by the user, and the unit is disclosed to the manufacturers 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, enclosures, lenses and front panel interface components are not covered by warranty.

EDTM, Inc. assumes no liability for the consequential damages of any kind through the use or misuse of the AR1750 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 AR1750, as established by EDTM, Inc.

OTHER PRODUCTS FROM EDTM, INC.

Low E Coating Detectors (Model# AE1601)

DIGITAL! Glass & Air Space Laser Meters with Low E Type Detection (Model# GC3000)

Solarphire AR Detector

Model# AR1750

OPERATOR'S MANUAL

The Solarphire AR Detector allows the user to easily identify the coated side of the glass. Simply place the meter against the glass surface and push the button. The results will instantly be displayed on the LCD screen. The instrument includes a MENU button that allows the user to operate the meter in SINGLE TEST MODE or FREE RUNNING MODE. Repeatedly pushing the MENU button will scroll through all of the available options of the meter. When you find the mode you would like to choose, simply push the POWER/SELECT button and it will make your selection for you.

FEATURES

- SINGLE TEST mode or FREE RUN continual measurement operating mode
- Able to recalibrate instrument in the field
- Backlit LCD display for testing in any light condition
- User-friendly LCD display operation with step-by-step directions on how to use
- OPTO-CLEAN™ Error protection against dirty glass and dirty lens on the meter
- Powered by standard 9-volt alkaline battery (included)
- Automatic power-down feature to extend battery life
- Rugged and compact instrument
- Tactile membrane switches on the front panel

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OPERATION

To begin, make sure the glass you are testing is clean. Dirty glass or dust and dirt on the surface of the glass can affect the results of your test. Also make sure the lens on the back side of the meter is clean. To turn the instrument on, hit the momentary power switch on the front of the meter. The display will direct you to place the meter on the glass you want to test. Place the meter FLAT against the glass. Here are the various operating modes and features you can select with the MENU button:

"SINGLE TEST" MODE

Each push of the button will result in one test being done on the surface of glass you are touching. The meter will not test the opposite side of the glass, rather only the side you are in contact with. The display will register a measurement of "SURFACE IS COATED" or "SURFACE IS UNCOATED". Hold the instrument stationary while conducting the measurement.

"FREE RUN" MODE

In this mode, the meter will continually take measurements. There is no need to continually push the power button when you want to take a measurement, as the meter will continually be doing so. Measurements will be updated nearly every second. It should be noted that this operating mode will tend to shorten the life of the battery, as the electronics are powered for a much longer period of time, as opposed to the Single Test mode.

CALIBRATE

If the coating you are testing has changed in chemistry, or if the warning message on the display has encouraged you to recalibrate, select this option. Before beginning, be sure to clean the back lens of the meter, and find a clean sample of the Solarphire AR coating. Use the menu button to select "calibrate" mode. Follow the instructions on the display to take a measurement on both sides of the Solarphire AR sample. It does not matter which side of the glass you choose for Side 1 during the calibration process. The meter will indicate if the calibration was successful or not. If not, try the calibration process again. If it still fails, check to see that the meter lens is clean, and that your Solarphire AR sample is valid.

USE PREV. CAL

If you do not like the new calibration that you performed, you can restore the previous calibration that was stored in the instrument.

USE FACTORY

If you want to return the meter to the calibration that was originally shipped in the meter as new from the factory, make this selection.

TEST RESULTS

"SURFACE IS COATED" or "SURFACE IS UNCOATED"

One of these two screens will appear after a successful test, indicating if the glass surface contains the Solarphire AR coating, or if it is clear glass.

"CLEAN GLASS & TEST AGAIN"

This result screen will show up if the measurement was not in the range anticipated by the meter. This typically happens when the glass is dirty. Clean the glass and test again. If this does not correct the problem, you may want to use compressed air to blow off the lens area on the back side of the instrument.

"SURFACE IS INVALID"

This result screen occurs when the measurements are not inside the anticipated range of measurements for Solarphire AR. This can occur when you place the meter on glass that is coated with other types of coatings that do not have the same characteristics as Solarphire AR. This can also happen if the glass or lens of the meter are extremely dirty. Confirm the type of glass you are testing or clean the meter and/or glass and re-test.

"CLEAN THE BACK LENS"

This message will appear if the meter has determined that its back lens may be dirty. Simply use compressed air to blow off any dirt or dust from the back lens of the meter.

"CLEAN AND RECALIBRATE"

If the meter determines that the back lens has continually been degrading in cleanliness, this message will appear. Before any re-calibration is performed, it is pertinent that the back lens of the meter is cleaned first. Also before re-calibrating, make sure the glass sample of Solarphire AR is a valid sample and that it is clean.

"KEEP METER FLAT ON GLASS DURING TEST"

If you pick up the meter or the instrument is not setting flat against the glass during the test, this error message will occur. The instrument is monitoring the measurement and if it determines that the meter has been pulled away from the surface of glass, it will display this message and ask you to start a new test.

MISCELLANEOUS

POWER

If the user wants to turn the power off manually, you need to press AND HOLD the power button for 2 seconds. After 2 seconds the powering-down screen will appear, and the meter will begin its countdown to shutting off. You must continue to hold the button down during the countdown to complete the powering off sequence. If you let up on the button too early, the instrument will resume operation.

The instrument also has a built-in timer that will automatically power down the product if no button presses occur for approximately 2 minutes. This energy conservation design helps to extend the life of the battery in the instrument in case the user forgets to turn it off. To turn the meter back on, simply push the button.

MAINTENANCE

You will want to occasionally inspect the cleanliness of the viewing window on the back side of the meter. If you see dust or dirt in the window, please use compressed air to blow it off. If you begin getting a large number of error messages during your testing, telling you to "CLEAN GLASS & TEST AGAIN", this may be a sign that the back window needs cleaned. If there are smudges on the window that do not clean off with compressed air, use a soft lint-free cloth to wipe the lens. Always use compressed air first to remove any particles that may scratch the surface of the lens.