Laserliner 082.091A

Laserliner MultiWet-Finder Plus: Material Moisture Meter and Temperature Measurement User Manual

Model: 082.091A

1. Introduction

The Laserliner MultiWet-Finder Plus is a versatile diagnostic tool designed for non-destructive measurement of material moisture and ambient conditions. It provides quick and reliable readings for various building materials, along with air temperature, relative humidity, and dew point temperature. This manual provides essential information for the safe and efficient operation of your device.

Figure 1: The Laserliner MultiWet-Finder Plus device. This image shows the front view of the device, highlighting its large digital display, control buttons, and the spherical sensor at the top.

2. Safety Instructions

Please read these safety instructions carefully before using the device. Failure to follow these instructions may result in electric shock, fire, or injury.

- Keep the device away from moisture and direct sunlight.
- Do not open the device. Repairs should only be performed by authorized personnel.
- Use only specified batteries. Ensure correct polarity during installation.
- Avoid strong impacts or dropping the device.
- Do not use the device in explosive atmospheres or near flammable materials.
- Dispose of batteries and the device according to local regulations.

3. Product Overview

3.1 Device Components

The MultiWet-Finder Plus features a robust design with intuitive controls and a clear display.

- **Spherical Sensor:** For non-destructive material moisture measurement.
- **LCD Display:** Shows measurement values, modes, and indicators.
- **MODE Button:** To switch between measurement modes (Index, CM%, MASS%).
- **REF Button:** To set a reference value.
- **MAX/SET Button:** To view maximum/minimum values or confirm settings.
- **FIND Button:** To activate the measurement.
- **Temperature/Humidity Sensors:** Located on the side for ambient condition measurements.

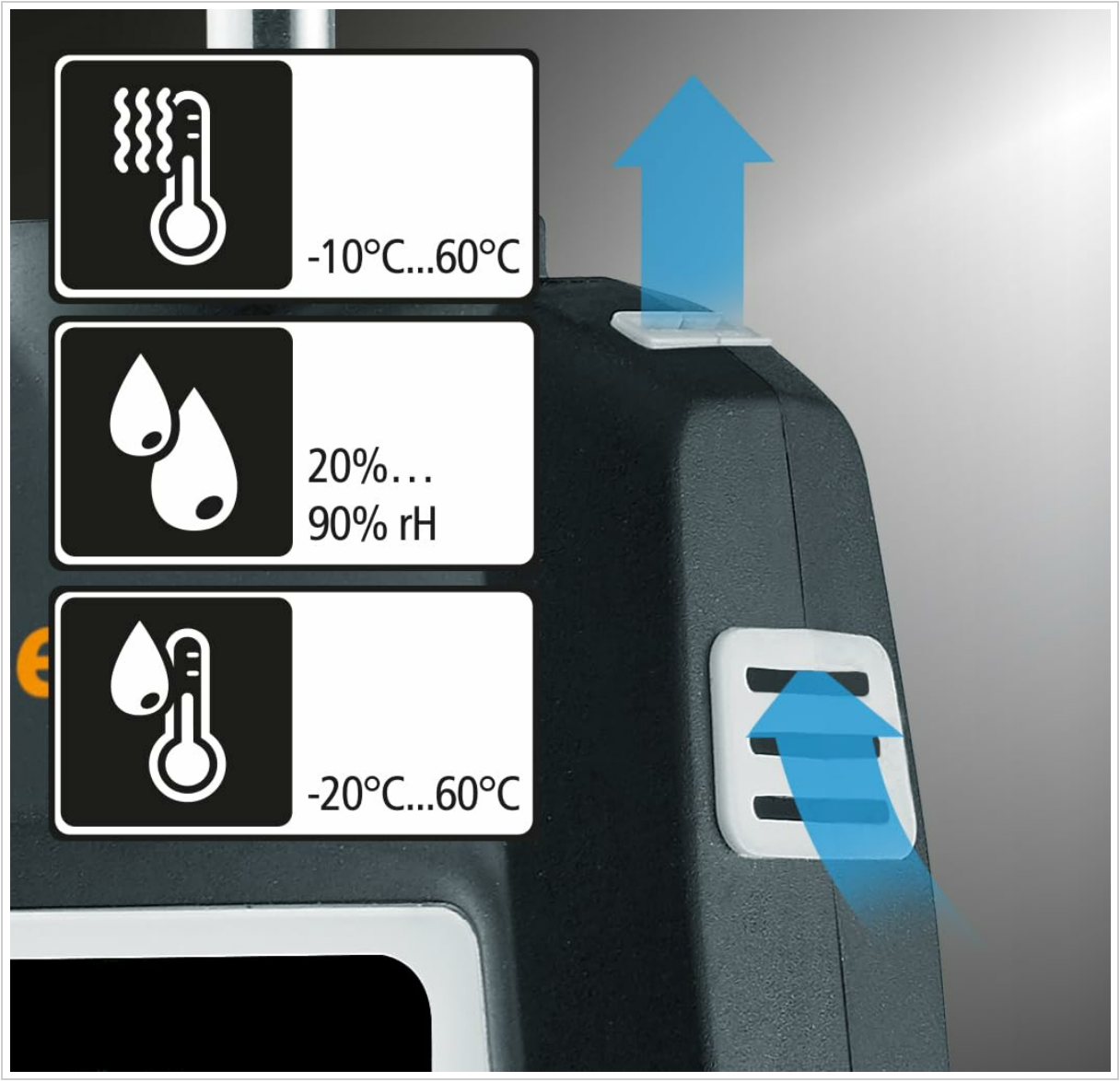

Figure 2: Side view of the device showing the integrated sensors for air temperature and relative humidity. The image also indicates the measurement ranges for these sensors: air temperature from -10°C to 60°C, relative humidity from 20% to 90% RH, and dew point temperature from -20°C to 60°C.

3.2 Display Indicators

The LCD display provides comprehensive information:

- **Temperature (°C):** Ambient air temperature.
- **Relative Humidity (% RH):** Ambient air humidity.
- **Dew Point Temperature (°C):** Calculated dew point.
- **Moisture Index:** A relative value indicating moisture content.
- **CM% / MASS%:** Specific moisture content for selected materials.

- **DRY/WET Bar Graph:** Visual indication of moisture level (green for dry, red for wet).

Figure 3: The device's display showing readings in "INDEX MODE". This view includes air temperature, relative humidity, dew point, and a large numerical index value, along with the DRY/WET bar graph.

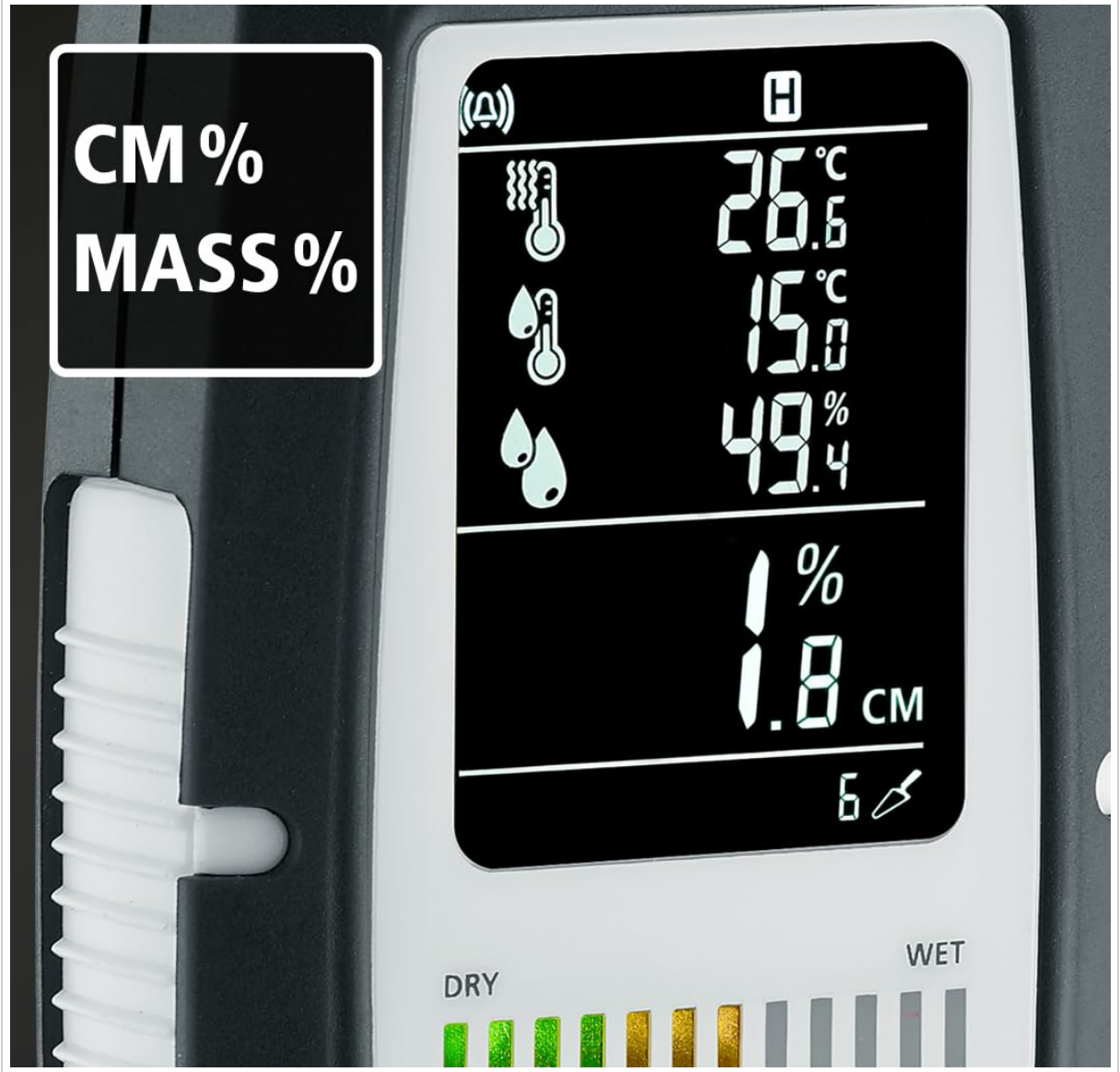

Figure 4: The device's display showing readings in "CM%" or "MASS%" mode. This view provides specific moisture content percentages, alongside the ambient condition readings.

4. Setup

4.1 Battery Installation

The MultiWet-Finder Plus requires standard AAA batteries for operation.

1. Locate the battery compartment cover on the back of the device.
2. Open the cover by sliding or unscrewing it (refer to the diagram if available).
3. Insert the required number of AAA batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

Figure 5: The MultiWet-Finder Plus shown alongside its packaging, which indicates the use of AAA batteries. This image implies the battery type required for the device.

5. Operating Instructions

5.1 Powering On/Off

Press and hold the **MODE** button to power the device on or off.

5.2 Selecting Measurement Mode

Briefly press the **MODE** button to cycle through the available measurement modes:

- **INDEX Mode:** Provides a relative moisture index, useful for quick comparisons and identifying moisture patterns.
- **CM% / MASS% Mode:** Displays specific moisture content as a percentage for selected material types. Refer to the device's internal material tables for accurate readings.

5.3 Taking a Material Moisture Measurement

1. Select the desired measurement mode using the **MODE** button.
2. Place the spherical sensor directly onto the surface of the material to be measured. Ensure full

contact.

3. Press the **FIND** button to initiate the measurement.
4. Read the moisture value on the display. The device measures moisture up to a depth of approximately 40 mm.

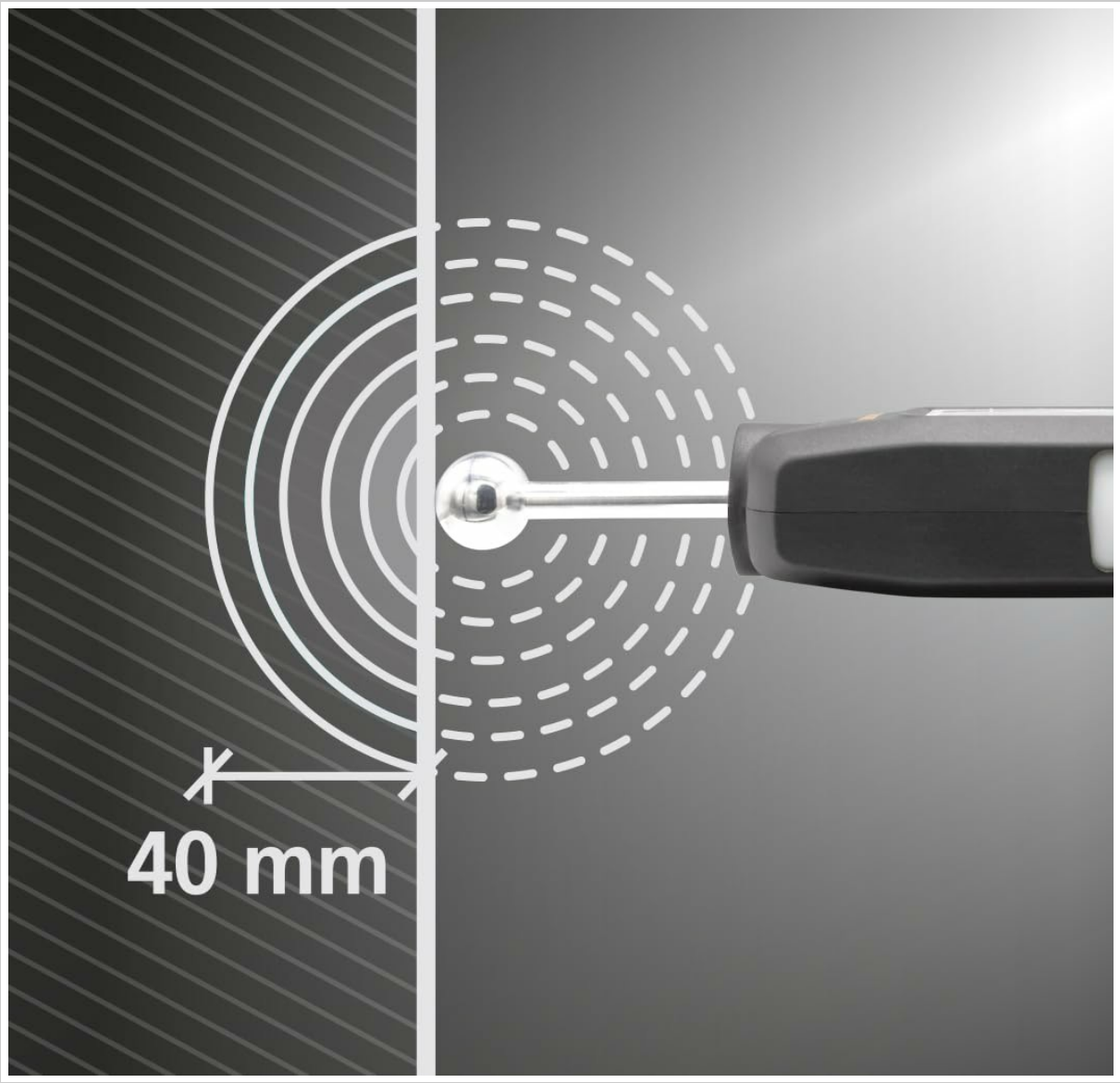

Figure 6: Illustration demonstrating the non-destructive measurement capability of the MultiWet-Finder Plus. The image shows the spherical sensor penetrating a material surface, indicating a measurement depth of up to 40 mm.

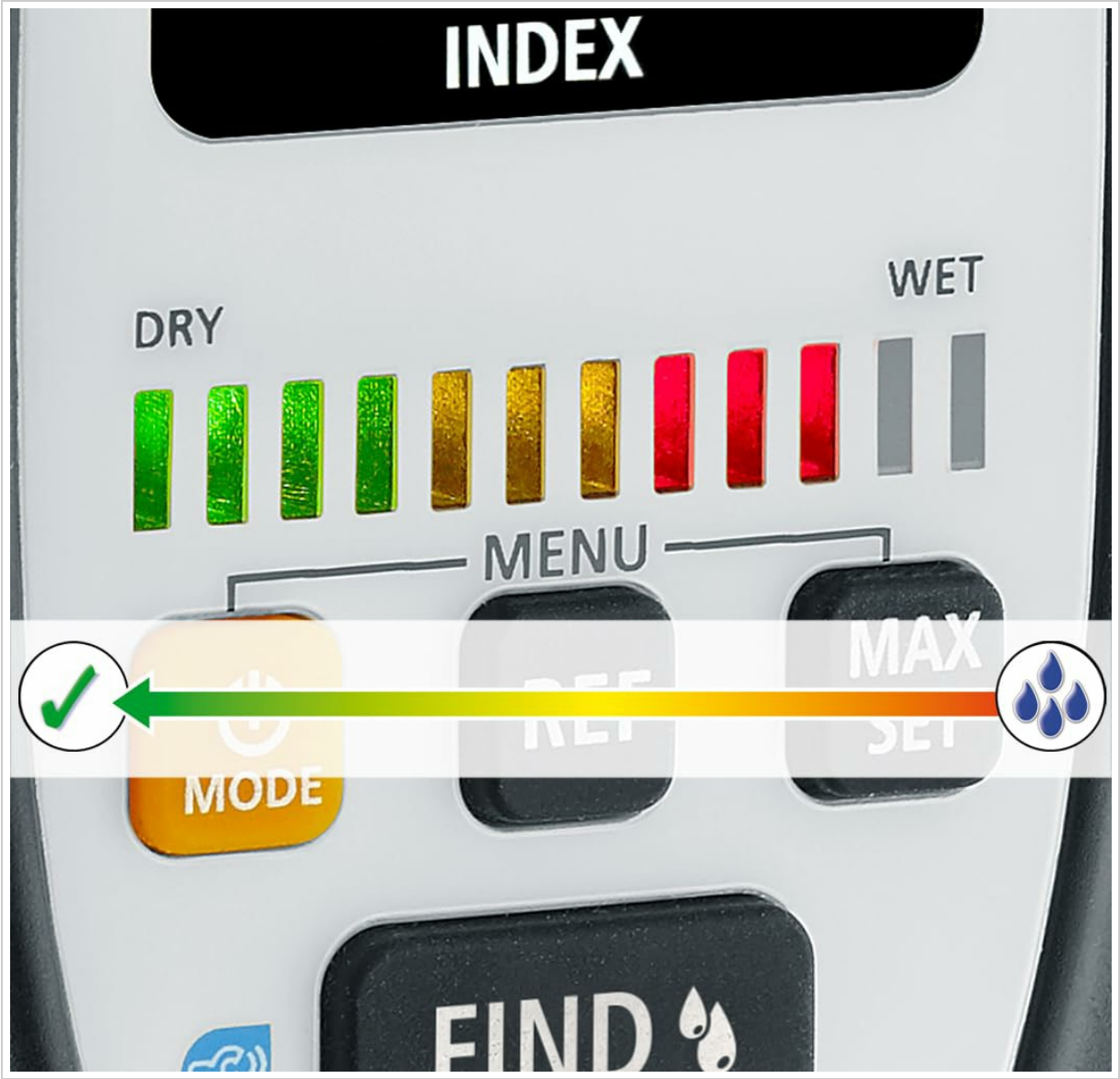

Figure 7: Close-up of the device's display, highlighting the DRY/WET bar graph and the control buttons. The bar graph visually represents the moisture level, transitioning from green (dry) to red (wet).

5.4 Ambient Condition Measurement

The device continuously measures air temperature, relative humidity, and calculates the dew point temperature. These values are displayed on the upper part of the LCD screen.

5.5 Reference Function (REF)

The **REF** button allows you to set a reference value. This is useful for comparing current measurements against a known dry or acceptable moisture level in a specific material.

1. Take a measurement on a known dry area of the material.
2. Press and hold the **REF** button to set this value as the reference.
3. Subsequent measurements will show the deviation from this reference.

5.6 Max/Min Function (MAX SET)

Press the **MAX/SET** button to view the maximum or minimum measured values during a session. This helps in identifying the highest or lowest moisture points.

5.7 Digital Connection (App)

The MultiWet-Finder Plus supports digital connection to a smartphone application for data logging and

analysis. Refer to the app's instructions for pairing and usage.

Figure 8: The MultiWet-Finder Plus wirelessly connected to a smartphone displaying the "DIGITAL CONNECTION" feature. This image illustrates the device's capability to transmit data to a mobile application for further analysis and recording.

Figure 9: The MultiWet-Finder Plus being used in a bathroom setting, indicating its application in detecting moisture in damp environments. The image shows the device pointed towards a wall, with a water droplet icon suggesting moisture detection.

6. Maintenance

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a dry, cool place, away from direct sunlight. Remove batteries if storing for extended periods to prevent leakage.
- **Calibration:** The device is factory calibrated. If you suspect inaccuracies, contact Laserliner support for recalibration services.

7. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly inserted batteries.	Replace batteries with new ones, ensuring correct polarity.

Problem	Possible Cause	Solution
Inaccurate moisture readings.	Poor contact with material, incorrect mode selected, or material outside measurement range.	Ensure full contact with the spherical sensor. Select the appropriate material mode. Consult specifications for measurement range.
Display is blank or flickering.	Low battery power or internal error.	Replace batteries. If the problem persists, contact customer support.

8. Specifications

Feature	Detail
Model Number	082.091A
Product Dimensions	5.51 x 5.51 x 8.66 inches
Weight	1.32 Pounds
Manufacturer	Laserliner
Material	Stainless Steel (sensor ball, device body is likely plastic)
Measurement Depth	Approx. 40 mm (non-destructive)
Air Temperature Range	-10°C to 60°C
Relative Humidity Range	20% to 90% RH
Dew Point Temperature Range	-20°C to 60°C

9. Warranty and Support

For warranty information, technical support, or service inquiries, please contact Laserliner customer service or visit their official website. Keep your purchase receipt as proof of purchase.
Manufacturer: Laserliner
Website: www.laserliner.com (Example link, actual link may vary)