Laser Rangefinder for Golf - User Manual

Introduction

Thank you for purchasing the Shot Navi Voice Laser GR Leo, hereinafter referred to as "this product" or "the product". This product is a laser-based distance measuring device designed to improve your score and speed up play. Before using this product for the first time, please read this manual to ensure correct and safe use. After reading, please store it in a place where it can be easily referenced at any time.

If you have any questions, please contact our customer service center, as listed on the warranty card.

Table of Contents

Safety Precautions

To ensure safe use of this product, please follow the safety guidelines outlined below. After reading these instructions, keep them handy for future reference. Unauthorized reproduction of this manual is prohibited.

- **Handle with Care:** Do not drop the product or subject it to strong impacts. Severe impacts may cause significant damage.
- **Operating Temperature:** The operating temperature range of this product is -10° C to 50° C. Avoid using the product in environments with sudden temperature changes, even within this range, as this is a precision instrument.
- **Avoid Prolonged Exposure:** Do not leave the product in direct sunlight or in extremely hot or cold environments for long periods. This may cause malfunction or deterioration of synthetic materials.
- **Electromagnetic Interference:** Avoid placing the product near equipment that generates strong electromagnetic fields or radiation during use or storage.
- **Long-Term Storage:** When not using the product for an extended period, store it in a cool, dry place. For long-term storage, place the product in a dry box to prevent damage.
- **Do not store the product in the following environments:**
    1. In areas with poor ventilation and high humidity.
    2. Inside a vehicle exposed to excessive sunlight or extreme temperatures.
    3. In environments where humidity exceeds 90%.

- **No Disassembly or Modification:** Never disassemble, modify, or attempt to repair the product yourself. Doing so may cause damage to the product and may result in exposure to laser beams, which can cause vision impairment. This also voids the warranty.
- **Avoid Extreme Conditions:** Do not use the product in extremely cold, hot, or humid conditions, as this may cause malfunction.
- **Dusty Environments:** Do not use the product in dusty areas, as this can lead to malfunction.
- **Keep Away from Fire:** Do not place the product near fire, as it may cause deformation or malfunction.
- **Water Resistance:** While this product is designed to be water-resistant (equivalent to IPX4), do not intentionally expose it to water or submerge it. If there is moisture around the buttons, wipe it off before operation.
- **Make sure the charging cover is securely closed before use.**

  Note: Do not leave the lens exposed to direct sunlight. The magnifying effect of the lens may damage the display.

Laser Safety Warnings

Please do not do the following as it may cause visual impairment:

- Do not look into the laser emission window. Exposure to laser light may cause vision impairment.
- Do not aim the laser at another person's eyes.
- Do not operate the measurement button when the product is not in use.
- Never disassemble the product
- Keep the product out of reach of children.
- If the product is dropped or subjected to a strong impact and starts to make unusual noises, stop using it and contact customer service.
- Do not use this product to look directly at the sun or any other bright light sources.

Important Warnings!

Please do not do the following:

- Do not use the product underwater.
- Do not store the product in vehicles exposed to direct sunlight or in areas near heating appliances.
- Do not use or store near heating appliances.

■ Avoid sudden temperature changes, as this may cause condensation on the lens.

Note: The product has a water resistance rating of IPX4, which makes it suitable for light exposure to sweat or short-term rain. However, do not expose it to prolonged rain or immerse it in water. If the product gets wet, wipe off moisture promptly and allow it to dry in the shade.

Note: **Battery Storage Guidelines**

Storing the product with an empty battery may result in the battery becoming unusable. The battery protection circuit is designed to prevent overcharging or 0 voltage, but natural discharge over time may still lead to 0 voltage. To prevent this, store the product with the battery at approximately 50% charge for long-term storage. Avoid storing the product with a full charge as this can also lead to battery failure. Do not leave the product connected to a charger for extended periods, as overcharging may cause chemical changes, leading to swelling, overheating, or fire.

Cleaning and Maintenance

Use a blower or air duster to remove dust from the product or gently wipe it with a soft, clean cloth.

For cleaning the lens, use the same method as above. For smudges such as fingerprints, use a commercially available lens cleaner. Be careful not to wipe the lens while dust or debris is present, as this may scratch the lens.

Before Using

This product calculates distances by emitting a laser beam and measuring the time it takes for the laser to reflect off the target and return. Depending on factors such as the color, shape, material of the target, and weather conditions, the product may not always provide accurate measurements or may fail to measure the distance altogether.

Note: Do not use this product to look directly at the sun or any other bright light sources. In early mornings or late evenings when the sun is low, there is a risk of accidentally looking at the sun, which can cause damage to the device and affect measurement accuracy.

Contents

Main Unit

User Manual / Warranty Card

USB Charging Cable (Type-C)

Carrying Case

Lens Cloth

Charging

To charge the device:

Open the power cover on the device and insert the small end of the USB Type-C cable into the USB port.

Connect the larger USB-A terminal to a computer or AC adapter to begin charging.

During charging, the LED on the side of the device will blink. Once fully charged, the LED will remain lit.

Note: The AC adapter is sold separately. If you need to purchase one, ensure it meets the following specifications: Output: DC 5V, 500~1000mA.

Note: Using an adapter outside of these specifications may result in malfunction or accidents.

Parts Overview

① **6x Telephoto Lens / Laser Receiver**

② **Laser Emission Window:**

Do not look directly into this part as the laser light can cause vision impairment.

③ **LED Display:**

- **No Light:** Indicates height difference (slope) measurement is ON.
- **Green Light (lit):** Indicates slope measurement is OFF / charging is complete.
- **Green Light (blinking):** Indicates the device is charging.

④ **Mode Button:**

- Short press: Toggles 3D measurement mode ON/OFF.
- Long press (about 3 seconds): Toggles slope measurement ON/OFF.
- Long press (about 5 seconds): Bluetooth connection mode ON/OFF.

Note: **Bluetooth mode is OFF by default when shipped.**

⑤ **Power / Measurement Button**

- Short press: Turns the power ON.
- In power ON mode: Enables point measurement.
- Press twice consecutively: Enables scan measurement.
- Long press: Enables Pin Seek Measurement (Pin Search).

⑥ **Focus Adjustment Ring**

⑦ **Viewfinder**

⑧ **Power Cover / USB Port**

Screen Display Explanation

The distance to the measured target.

The reference distance

Height difference

Target Mark:

Center this mark on the target during measurement.

During measurement, place the target you want to measure inside the center circle and start measuring. It will flash during measurement.

Distance Unit:

M: Meter

Y: Yard

Height Difference Mark:

Displays when height difference is ON.

Bluetooth:

Indicates when Bluetooth is connected.

Battery Level:

Displays the current battery level. When low, please recharge the device.

Pin Seek Measurement:

Appears when Pin Seek measurement is active.

It will flash during Pin Seek measurement and after be lit.

Pin Seek measurement completed:

Displays when Pin Seek measurement is completed.

Scan Measurement:

Appears during scan measurement.

It will flash during Scan measurement and after be lit.

Vibration Mark:

Displays when the vibration function is activated to notify of measurement completion.

3D Measurement Mark:

Displays during 3D measurement mode.

Measuring

Power ON/OFF

Look through the viewfinder and press the power/measurement button to turn the device on. The display will appear in the viewfinder. If no operations are performed for about 10 seconds, the power will automatically turn off.

Note: If the display doesn't appear, check the battery level.

Switching Between Meters and Yards

While the device is powered on, press and hold the power and mode buttons simultaneously for about 2 seconds to switch between meters (M) and yards (Y).

Default: The unit is set to yards (Y) at shipment.

Note: If you want to switch back again, press and hold the button in the same way.

Adjusting Brightness

While the device is powered on, press the mode button twice to adjust the brightness in four steps.

Select "BR A" for automatic adjustment mode.

Repeat the adjustment as BR A→1→2→3→4

The brightness increases from BR 1.

Adjusting Focus

If it is difficult to see, adjust it by turning the adjustment ring.

Measurement Modes

① Point Measurement

This mode allows you to measure the distance to a target positioned at the center of the viewfinder.

To use:

1. Press the power/measurement button to turn on the device.
   Align the target mark with the desired object and press the power/measurement button again to begin the measurement or say "Point Measurement" or "Distance to Point" to initiate the measurement.
2. The measured distance will be displayed.

Note: If the pin flag cannot be accurately measured, please try the "Pin Seek Measurement" described on page 12.

Note: For reference distances that account for slope, refer to page 18.

② Pin Seek Measurement (Pin Search Assistance)

This function assists you in locating the pin flag when it is difficult to aim directly at it. When searching for a target closer than the initial object detected, the device will notify you of measurement completion with a vibration.

To use:

1. Press the power/measurement button to turn on the device.
   Aim at an object beyond the pin flag and press and hold the power/measurement button or say "Measure to Pin" or "Distance to Pin" to begin the measurement.
2. The device will flash while measuring. Once a provisional distance is displayed, slowly move the crosshairs towards the pin flag.
3. When the crosshairs are aligned with the pin flag, the indicator will display, and the device will vibrate to indicate measurement completion. The displayed distance will be the distance to the pin.

Note: If a non-pin target is measured, restart the measurement.

Note: The Pin Seek function may not work properly when the battery is low.

Note: This function works when the front and back targets are more than 5 meters apart.

Note: Accurate Pin Seek measurement may not be possible for distances over 250

yards.

③ Scan Measurement

This function is useful when you want to measure the distance to multiple targets such as bunkers, creeks, or trees simultaneously.

To use:

1. Press the power/measurement button to turn on the device.
   Aim at the desired target and press the power/measurement button twice quickly or say "Start Measurement" or "Start Scan" to begin the scan.
2. The device will continuously measure the distance to the target for about 10 seconds. The indicator will flash while measuring.
3. After 10 seconds or upon pressing the power/measurement button again, the indicator will display, and the device will vibrate to indicate measurement completion.

④ 3D Measurement

With the 3D Measurement function, you can measure the distance from the ball to the pin, even if you are still in the cart. This feature provides great convenience by allowing you to choose the appropriate club for your next shot based on the distance before moving to the ball.

To use:

1. Press the power/measurement button to turn on the device.
   Short press the mode button or say "3D Measurement" or "Start 3D" to switch to 3D mode.
   Once the mode has been switched, the indicator “G” will light up and the icon “B” will flash.

   A: Distance from the ball to the pin (3D measurement distance)
   B: Distance from the current location to the ball
   C: Distance from the current location to the pin
2. While measuring, the indicator “G” will flash.
   First, aim at the ball and either press the power/measurement button (for point measurement) or say "Measure to Ball" to measure the distance to the ball.
   Once the measurement is complete, the distance will be displayed in "B" and the indicator will light up.
3. Next, when the indicator for "C" starts flashing, aim at the pin and press and hold the power/measurement button (for Pin Seek measurement)

or say "Measure to Pin" to measure the distance to the pin.
Once the crosshairs align with the pin, the indicator will light up, and the distance to the pin will be displayed in "C."
Afterward, the 3D measurement distance (distance from the ball to the pin) will be displayed in "A."

Note: If you measure a target other than the pin, please retry the measurement.

Note: The 3D measurement mode cannot be used when slope measurement is turned off.

Note: To exit 3D measurement mode, press shortly the mode button again.

[When measuring the distance to the pin]

Note: If the pin is more than 250 yards away, Pin Seek measurement may not work properly.

Note: If the battery is low, Pin Seek measurement may not work properly.

Note: The function will work when the pin in front and the target in the back are more than 5 meters apart.

Voice-Based Measurement Methods

Press the power/measurement button to turn on the device ensuring the device is powered on by checking the viewfinder and give the voice commands according to the measurement content.

You can use voice commands to initiate measurements, helping to reduce hand movement and ensure smoother measurements.

Voice Commands for Measurements:

IThe voice instructions for measurement are as follows:

Measurement Type	Voice Command
Point Measurement (P11)	"Point Measurement" or "Distance to Point"
Pin Seek Measurement (P12)	"Measure to Pin" or "Distance to Pin"
Scan Measurement (P13)	"Start Measurement" or "Start Scan"
3D Measurement Mode (P14)	"3D Measurement" or "Start 3D"
Ball Measurement (P14)	"Ball Measurement" or "Distance to Ball"
Pin Measurement (P14)	"Measure to Pin" or "Distance to Pin"

Note: After ensuring the device is powered on (by checking the viewfinder), take a moment and clearly speak the voice command for a

smooth measurement.

Turning Height Difference Measurement ON/OFF

Height Difference Measurement OFF

When participating in competitions or events where slope measurement is not allowed, you can turn this feature off. To do so, while the device is powered on, press and hold the mode button for approximately 3 seconds. The slope and reference distance display will be hidden.

Note: The LED indicator will turn on when slope measurement is OFF, signaling that slope is not being measured.

Height Difference Measurement ON

To turn slope measurement back on, press and hold the mode button for about 3 seconds while the device is powered on. The slope and reference distance markers will be displayed again.

Note: The device is set to have slope measurement ON by default when shipped. When slope measurement is ON, the LED indicator will be off.

Reference Distances

When hitting uphill or downhill shots, the distance you need to hit will differ from the straight-line distance to the pin due to elevation changes. This product automatically calculates and displays both the straight-line distance (AC) and the reference distance to shot (AB) based on the slope.

Uphill Example:

If you hit based on the straight-line distance (AC = 148 yards), your ball won't reach the pin because of the uphill slope. To reach the pin, you'll need to hit based on the horizontal distance (AB = 159 yards). The product will automatically display both AC (straight-line distance) and AB (reference distance to hit).

Downhill Example:

If you hit based on the straight-line distance (AC = 148 yards), your ball will overshoot the pin due to the downhill slope. To reach the pin,

you'll need to hit based on the horizontal distance (AB = 141 yards). The product will automatically display both AC (straight-line distance) and AB (reference distance to hit).

Note: When slope measurement is OFF, reference distance and slope markers will not be displayed.

Bluetooth Function

For instructions on using the Bluetooth function, please refer to the product page: https://shotnavi.jp/snp/voicelaser/grleo/bluetooth.php

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Product Specifications

Dimensions: 98.4 x 57.7 x 34 mm

Weight: 138g

Battery: Lithium polymer battery (USB Type-C charging)

Charging Time: Approximately 2 hours

- *Note:* Full charge lasts for approximately 16,000 point measurements.

Measurement Range: 5 to 1000 yards (5 to 914 meters)

Measurement Accuracy: ±1 meter

Magnification: 6x

Laser Classification: IEC 60825-1 Class 1M Laser Product

Lens Diameter: 20 mm

Operating Temperature: -10° C to 50° C

Storage Temperature: -20° C to 60° C

Water Resistance: Equivalent to IPX4 (suitable for everyday water resistance)

Note: The number of uses may vary depending on factors such as usage frequency, age, and specific measurement methods (e.g., voice measurement, scan, Pin Seek, or 3D measurement).

FAQ (Frequently Asked Questions)

Q. The device won't turn on:

A.

- Ensure the battery is sufficiently charged.
- Confirm you are pressing the power/measurement button correctly.

Q. The distance measurement seems incorrect:

A.

- Check whether the lens is clean.

- Ensure the target object is properly aligned with the crosshairs.
- Try measuring a different target to verify results.

Note: Laser distance measurements are calculated based on the time it takes for the laser to reflect off a target. The following conditions may affect accuracy:

- Rain or fog
- Difficulty aiming the laser at the target (small or narrow objects)
- Poor reflection from the target (dark-colored, complex shapes, curved surfaces, water, glass, or reflective surfaces)
- Bright sunlight entering the lens directly during early morning or late evening

  Note: Avoid looking directly at the sun or its surroundings for eye protection.

After-Sales Service

If the product malfunctions under normal use as described in this manual, it will be repaired or replaced free of charge within one year of purchase. If repair or replacement is necessary, please take the product along with the warranty card to the place of purchase. We offer after-sales service in accordance with the following conditions. By requesting after-sales service, you agree to these terms.

Repair and Replacement Policy

1. Items sent with the defective product may not be returned. Please remove any accessories attached to the product before sending it for repair.
2. The decision to repair or replace the product will be made by our service team. For environmental reasons, we may use refurbished parts for repairs or replacements.
3. Product settings and specifications may be updated during the repair process.
4. Our repair services are only available in Japan.

Cases Where Repair May Be Refused

1. If unauthorized repairs, disassembly, or modifications have been made to the product.
2. If the product is damaged due to insufficient packaging during transport.
3. If the product is severely damaged, making it impossible to maintain its functionality after repairs.

4. If there is evidence of water damage or submersion.

Repair Costs

Repairs outside the warranty period will incur a service charge. For detailed information about the costs, please contact our customer service center.

Warranty

1. If the product malfunctions under normal use within the warranty period, we will repair it free of charge.
   A. Please present the product and this warranty card at the store where you purchased the product. Shipping costs for sending the product directly to our service center will be borne by the customer.
   B. If the store is not available, please contact our customer service center.

2. Even within the warranty period, the following cases will result in paid repairs:
   A. Malfunctions or damage caused by misuse, unauthorized repairs, or modifications.
   B. Malfunctions or damage caused by transport, drops, or impacts after purchase.
   C. Malfunctions or damage caused by fire, earthquakes, water damage, lightning, or other natural disasters, abnormal voltage, or the use of an inappropriate power source.
   D. Malfunctions caused by extreme impacts (e.g., drops, twisting, crushing).
   E. Replacement of consumable parts and accessories.
   F. Malfunctions caused by leaving the product in extreme heat (e.g., car dashboards, trunks, or direct sunlight) or extreme cold.
   G. Malfunctions caused by water exposure during use in rainy conditions.
   H. Changes in the product's appearance (e.g., scratches) due to normal use.
   I. Lack of a warranty card or missing/altered information (purchase date, customer name, store name).
   J. Products purchased through auctions or personal transactions are not covered by the warranty.

3. The warranty is only valid within Japan, and the warranty card will not be reissued, so please store it safely.

Note: If the product is damaged due to being dropped, dropped and run over by a cart, hit against something while in your pocket, or is damaged due to the force of sitting

on it, repairs will be charged.

Note: Please note that the personal information you provide (warranty copy) may be used for free repairs during the warranty period and for subsequent safety inspection activities.

Note: This warranty does not limit your statutory rights.

Note: This warranty shall be valid only within Japan. For sale and use in Japan only. Commercial use and rental prohibited.

Note: We do not ship repaired items outside of Japan.

Contact Information

For inquiries about handling methods, repair requests, and other after-sales service inquiries, please contact the Customer Service Center listed below. When making an inquiry, please also provide the serial number and usage status.

Customer Service Center

Homepage: Please refer to the "Frequently Asked Questions" section.
https://shotnavi.jp/snp/voicelaser/grleo/faq.php
You can also use a chatbot to automatically answer your inquiries.
https://shotnavi.jp/info_support.php
Email support hours: Monday to Friday 10:00 AM to 5:00 PM
(Excluding weekends, holidays, New Year's holidays, and other periods designated by our company)
e-mail: snp-info@shotnavi.jp

Application for inspection and repair

Please send an email to snp-info@shotnavi.jp with your name, product name, purchase date, and the malfunction in as much detail as possible. After receiving your application, we will contact you with the "reception number."
Note: Please be sure to receive your application in advance before sending the product to the address below.
Note: **We do not accept repairs at our office.**

Postal Code: 369-0221
1130 Hanzawa-Shinden, Fukaya, Saitama
Techtuit Co., Ltd. "Shot Navi Repair Center"
Note: Please write the "Reception Number" in the "Item Name" column on the shipping slip.
Note: Please pay the shipping fee.

Shot Navi Official Website
URL: https://shotnavi.jp/
You can check the latest information on Shot Navi

FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- - Reorient or relocate the receiving antenna.

- - Increase the separation between the equipment and receiver.

- - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- - Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1)This device may not cause harmful interference.

(2)This device must accept any interference received, including interference that may cause undesired operation.