

# User Manual

PLOTT 

**PRL900HT-R/G Rotary Laser**

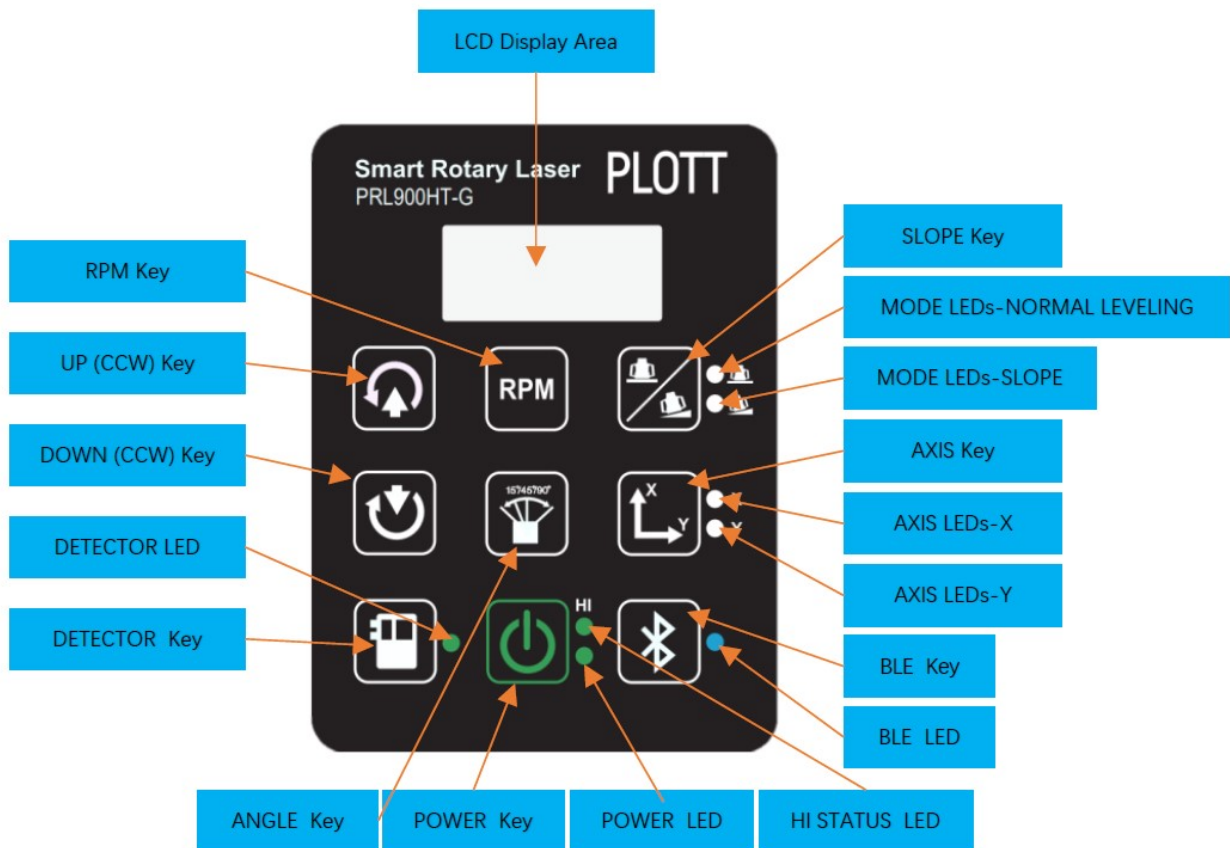


# Product Description

The PRL900 HT is a set of self-leveling tool and cast a horizontal laser plane or a laser beam for the purpose of alignment.

- The laser beam can be detected by a laser detector
- Remote control of product
- Data communication with Bluetooth5.0
- Bluetooth5.0 Long Distance Connection

# Product Function – Control panel



**Power Button**

Short press to power on the unit.  
Press and hold to power off.

**Up/ Increase/ CCW Button**

Short press to rotate/move CCW.  
Press and hold to rotate/move CCW continuously.

**Down/ Decrease/ CW Button**

Short press to rotate/move CW.  
Press and hold to rotate/move CW continuously.

**Rotate Speed Switching Button**

Short press to switching Rotate speed  
Cycle:600rpm, 1200rpm, and 300rpm

**Slope Button**

Short press to Slope on.  
Short press to Slope off.

**Scan Angle Switching Button**

Short press to scanning angles.  
Cycle: 0°, 15°, 45° and 90°

**Slope Axis Switching Button**

Short press switching axis to slope.  
Switch axis: X/Y (Slope on).

**Bluetooth Link Switching Button**



Short press to on  
Short press to off

**Detector Link Switching Button**

Short press to on  
Short press to off

# Rotate Speed Switching

## Operation & Product Setup



- Turn on the units by short pressing the Power button .
- After turning ON the device, the rotate speed is 600 RPM.
- Short pressing the  to change the speed.

## Speed Switching

- If the laser is scanning for a circle(no matter in slope mode or automatically leveling mode), the unit can change the scanning speed in different speed grades. The grades and the switching sequence will be, 600rpm, 1200rpm and 300rpm, then loop to 600rpm.
- The scanning speed can be switch through the SPEED key on rotary laser panel, remote panel and the App.
- Lower rpm, Visible light father
- Higher rpm, Visible light more continuous

# Scan Angle Switching

## Operation & Product Setup







- Turn on the units by short pressing the Power button .
- After turning ON the device, the angle switching is off.
- Short pressing the  to into the angle switching.

## Scan Angle Switching

- The unit can change the scanning angles in different grades to generate a line. The scanning angles and the switching sequence will be 360degree, 0degree/dot, 15degree, 45degree and 90degree, then loop to 360degree.
- The scanning angle can be switch through the ANGLE key on rotary laser panel, remote panel and the App.
- 0 degree is a dot model, provide point to operation.
- Angle 15,45,90 degree provide fixed area operation.(Avoid interfering with other work areas)

# Slope model

## Operation & Product Setup




- Turn on the units by short pressing the Power button .
- After turning ON the device, the Slope mode is off.
- Short pressing the  to into the Slope mode and slope axis X direction.
- Press the  Up/ Increase/ CCW Button to increase the slope and the  Down/ Decrease/ CW Button to decrease.
- Short press the  Slope Axis Switching Button to switch the slope axis to Y.
- Short press the  Working Mode Switching Button to out off Slope mode.

## Slope model

- The MODE LEDs – SLOPE LED indicator will light up.
- One of the AXIS LEDs will light up to indicate current activated slope axis.
- By short pressing the UP(CCW) Key can increase the slope value by one step(0.017%).
- By pressing and holding the UP(CCW) Key can increase the slope value continuously.
- By short pressing the DOWN(CW) Key can decrease the slope value by one step(0.017%).
- By pressing and holding the DOWN(CW) Key can decrease the slope value continuously.
- The slope is also controllable from the remote and the App.
- Slope model can prove a slope plate with tilt  $\pm 10\%$ .

# Rotating Direction Switching

## Operation & Product Setup





- Turn on the units by short pressing the Power button .
- After turning ON the device, the unit run with CW.
- Press the  Up/ Increase/ CCW Button to run CCW.
- Press the  Down/ Decrease/ CW Button to run CW.

## Rotating Direction Switching

- This function is only valid in normal leveling mode with scanning a circle.
- The unit can change the rotating direction between CCW and CW.
- The rotating direction can be switch through the UP(CCW) Key and DOWN(CW) Key on rotary laser panel, remote panel and the App.
- Short pressing UP(CCW) Key will control the rotary laser to rotate in CCW.
- Short pressing DOWN(CW) Key will control the rotary laser to rotate in CW.

## Dot and Line Moving

### Operation & Product Setup



- Turn on the units by short pressing the Power button  .
- After turning ON the device, the dot or line move is off.
- Press the  into dot mode.
- Press the  Up/ Increase/ CCW Button to move dot/line CCW.
- Press the  Down/ Decrease/ CW Button to move dot/line CW.

### Dot and Line Moving

- This function is only valid in normal leveling mode with the unit is generating a dot or scanning an angle(line).
- The unit can move the dot or line in the direction CCW or CW.
- Dot and Line Moving can be controlled through the UP(CCW) Key and DOWN(CW) Key on rotary laser panel, remote panel and the UX of the App.
- Short pressing UP(CCW) Key will control the rotary laser to move the dot or line in CCW for one step.
- Pressing and holding the UP(CCW) Key will control the rotary laser to move the dot or line in CCW continuously.
- Pressing and holding the DOWN(CW) Key will control the rotary laser to move the dot or line in CW continuously.

## HI Mode and HI Alert

### Operation & Product Setup

- Turn on the units by short pressing the Power button  .
- After turning ON the device, the HI mode is off.
- Wait for 30 seconds the unit will enter HI mode.
- Under HI mode, if unit no longer level by external influence will enter HI Alert.
- To clear the HI Alert, pressing and hold the Power button  to turn off the unit.

### HI Mode and HI Alert

- The unit will enter HI mode 30s after complete leveling, the HI LED indicator will light up, the MODE LEDs - NORMAL LEVELING LED indicator will turn off.
- In HI mode status, the unit will generate disturbance alarm once it's off the leveling status.
- The disturbance alarm can't be cleared except re-power the unit on.
- As the disturbance alarm is generated,
  1. The laser will blink.
  2. The HI LED will blink.
  3. The buzzer will start to prompt.
- The HI Mode can be disabled before it's alarmed by pressing and holding the Slope key. Once disabled,
  1. The buzzer will prompt to indicate the operation is applied.
  2. The HI LED will turn off.
  3. The MODE LEDs - NORMAL LEVELING LED will turn back on.
- The HI Mode can be re-enabled by pressing and holding the Slope key again.

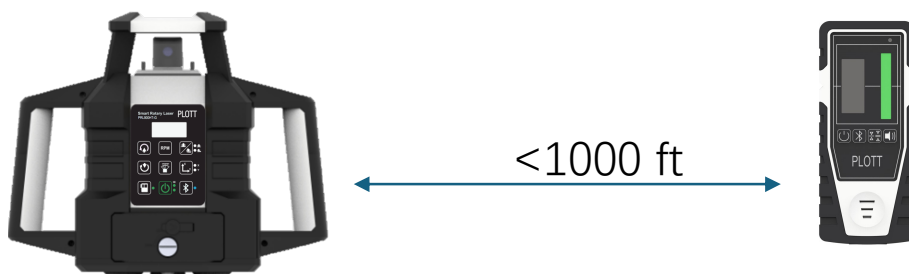
## Detector (Fine the laser line)

### Operation & Product Setup

- Turn on the device by short pressing the Power button
- After turning ON the device, the LCD will turn on and the unit will be ready with BLE off, high sensitivity and high volume, and wait for detecting the laser signal.
- Press and hold the Power button will shut down the unit.

### Laser Detecting

- Laser Detecting is a basic function of the detector unit.
- The detector supports high sensitivity and low sensitivity for different scenarios.
- The high sensitivity is the power on default mode and it can be switch between the 2modes by short pressing Sensitivity Selecting key on detector panel.



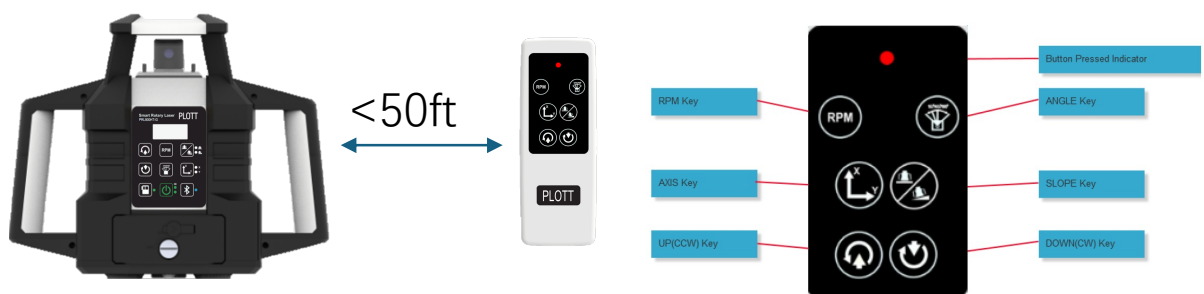
## Remote control

### Operation & Product Setup

- Follow the polarity label and install 2 X AAA batteries to the unit.
- Turn on the Rotary Laser
- Aim the remote to the rotary laser and press the corresponding key to do the remote control.

### Remote control of product

- The remote can control the rotary laser to process the same operation to the rotary laser panel, except powering on, BLE standard distance on/ off and BLE long distance on/ off.
- It support short pressing of the keys as well as pressing and holding if there' definition of the behavior on rotary laser panel.



## Bluetooth Standard Distance Control

### Operation & Product Setup

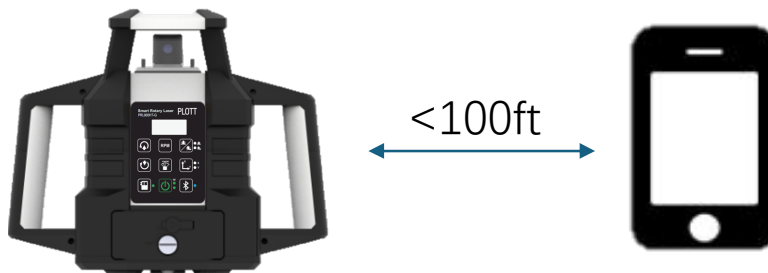
- Turn on the Rotary Laser.
- Short press the BLE key on the rotary laser to enable the BLE standard distance notification
- Search and connect the rotary laser through Smart Laser App.

### Data communication with Bluetooth5.0

The Rotary Laser has integrated Bluetooth5.0 Low Energy(BLE) module inside and the BLE is off as powering on default. It can be turned on by short pressing the BLE key on the rotary laser panel.

To test the connection function, either of below 2 methods are available

- The Rotary Laser can connect to the Smart Laser App on both Android and iOS through BLE.
- The Rotary Laser can also connect to the Production Verification App on Android.



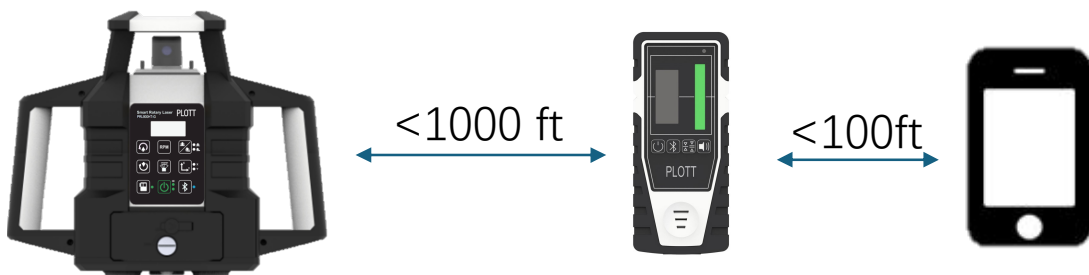
## Bluetooth Long Distance Control

### Operation & Product Setup

- Turn on the Rotary Laser
- Short press the DETECTOR key on the rotary laser to enable the BLE long distance notification
- Turn on the Detector.
- Short press the BLE key on the detector to enable the detector BLE notification
- Search and connect the detector through Smart Laser App.
- Connect the rotary laser listed under the detector in Smart Laser App.

## Bluetooth5.0 Long Distance Connection

- The Rotary Laser and the Detector has integrated Bluetooth5.0 Low Energy(BLE) module inside and the BLE is off as powering on default. The long-distance feature can be turned on by short pressing the DETECTOR key on the rotary laser panel.
- The function need to work with the Detector with its BLE enabled by short pressing the BLE key on the detector panel. By connecting to the detector and repeating through the detector, the rotary laser control distance can be expanded to 1000ft.





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