

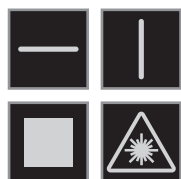
ENGLISH

93PLL

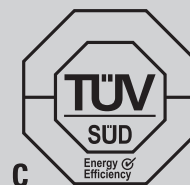
INSTRUCTION MANUAL

Rechargeable Self-Leveling Green Planar Laser Level

- **THREE ORTHOGONAL
360° PLANAR LINES**



IP54



C

CE

**UK
CA**



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GENERAL SPECIFICATIONS

Klein Tools 93PLL is a self-leveling laser alignment instrument that can be used to deliver three orthogonal 360° planar lines in the X, Y, and Z planes.

- **Operating Altitude:** 6562 ft. (2000 m)
- **Relative Humidity:** <80% non-condensing
- **Operating Temp:** 20°F to 120°F (-10°C to 50°C)
- **Storage Temp:** -5°F to 140°F (-20°C to 60°C)
- **Lasers:**
 - 510-530 nm
 - ≤1mW each beam, Class 2 Laser Product
- **Accuracy:** +/- 4.5 mm per 15 m
- **Battery Type:** Removable Li-Ion, 3.7V 10400 mAH
- **Battery Life:** 9+ Hours (with all three lasers active)
- **Dimensions:** 5.5" x 4.75" x 3.5" (140 x 120 x 88 mm)
- **Weight:** 22.6 oz. (640 g) without battery
- **Calibration:** Accurate for one year
- **Standards:** Conforms to: EN61326-1:2013, EN60825-1:2014.
Conforms to NOM-001-SCFI-2018 Electronic Devices: Safety Requirements and Test Methods, based on NMX-I-60950-1-NYCE-2015 Information Technology Equipment - General Requirements.
Complies with: 21 CFR 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50, dated June 24, 2007.
- **Ingress Protection:** IP54 Dust & Water Resistant
- **Electromagnetic Environment:** IEC EN61326-1:2013. This equipment meets requirements for use in basic and controlled electromagnetic environments like residential properties, business premises, and light-industrial locations.

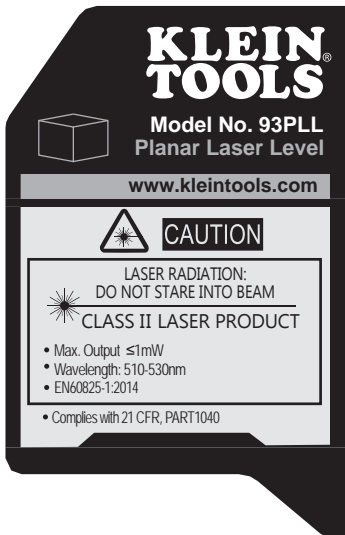
Specifications subject to change.

⚠ WARNINGS

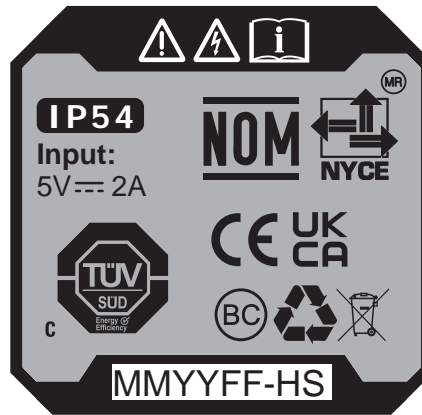
To ensure safe operation and service of the instrument, follow these instructions. Failure to observe these warnings can result in serious personal injury, fire, or electrical shock. Retain these instructions for future reference.

⚠ WARNING: LASER RADIATION. DO NOT STARE INTO BEAM. Class 2 Laser.

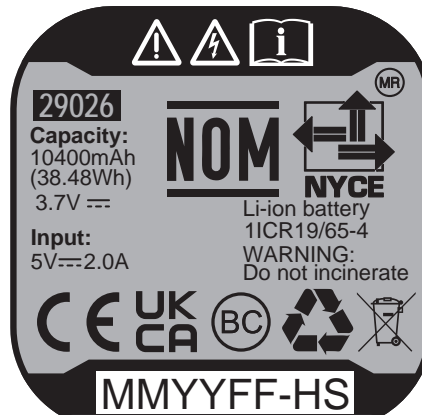
Warning label on side



Warning label on bottom



Battery specifications label



⚠ WARNINGS

- Exposing eyes to laser radiation can result in severe and permanent eye injuries. **NEVER** look directly into the laser beam emitted by this instrument.
- Do not use the instrument if it appears to be damaged.
- Do not modify the instrument in any way, as to do so could result in emission of hazardous laser radiation than could result in severe eye injuries.
- Do not use optical equipment such as lenses, prisms, optical scopes, etc. to transmit, retransmit, or view the laser beam as this could result in severe eye injuries.
- This product should not be used by untrained operators or operators who have not read and fully understood the instructions.
- This product should not be used in any location that could result in somebody looking at or having their eyes inadvertently irradiated by the laser beam as this could result in severe eye injuries.
- The instrument should be powered off following use to minimize the risks of inadvertently exposure to hazardous laser radiation that could result in severe eye injuries.
- Do not remove warning labels from this instrument as this could result in serious personal injury and increases the risk of exposure to hazardous laser irradiation.
- The instrument should be securely located in a tidy work environment prior to operation as unexpected drops or movement of the instrument may result in damage to the instrument and increases the risk of inadvertent exposure to laser radiation that could result in severe eye injuries.
- This instrument is IP54 dust & water resistant. Following any contact with water, thoroughly dry the instrument with a dry, lint-free cloth.
- There are no user serviceable parts in this instrument.

SYMBOLS ON INSTRUMENT

	X-Plane Laser		Ingress Protection IP54 Rating - Dust & Water Resistant
	Y-Plane Laser		Hazardous laser radiation, DO NOT stare into beam or view directly with optical instruments
	Z-Plane Laser		Warning or Caution
	Out-Of-Level Indicator		Warning – Risk of electric shock
	Conformity		Conformité Européenne: Conforms with European Economic Area directives
	Conforms with BCS regulations of California Energy Commission		UKCA - United Kingdom Conformity Assessment

FEATURE DETAILS



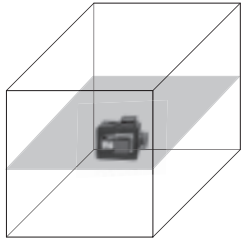
NOTE: No user-serviceable parts inside.

- | | |
|-------------------------------|---|
| 1. X-Plane Line On/Off Button | 10. Power/Pendulum Lock/Unlock Switch |
| 2. Y-Plane Line On/Off Button | 11. Bracket 1/4-20 Tripod Mount |
| 3. Z-Plane Line On/Off Button | 12. Battery Door |
| 4. Excessive Tilt Indicator | 13. USB-C Charging Cable |
| 5. Battery Level Indicator | 14. Magnets |
| 6. USB-C Charge-In Port | 15. 1/4-20 Mounting Screw |
| 7. X-Plane Aperture | 16. Li-Ion Battery Charge-In Port |
| 8. Y-Plane Aperture | 17. Li-Ion Battery Charge Indicator LED |
| 9. Z-Plane Aperture | |

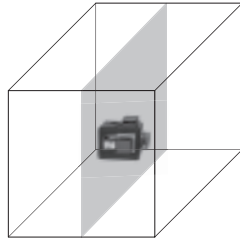
OPERATING INSTRUCTIONS

TURNING LASER BEAMS ON/OFF

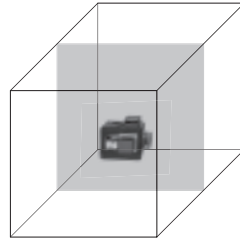
Push the ON/OFF buttons for the X-Plane ①, Y-Plane ②, and Z-Plane ③ lines to turn ON and OFF their respective laser lines. These buttons are only active once the Pendulum Lock/Unlock Slider Switch ⑩ has been set to the Unlocked position. If the Pendulum Slider Switch is moved from the Unlocked to the Locked position while the laser beams are active, they will be turned OFF. The different laser lines can be operated independently or simultaneously.



X-Plane Laser Line



Y-Plane Laser Line



Z-Plane Laser Line

NOTE: The plumb spot can be found by locating the top and bottom laser line intersections while projecting both Y-Plane and Z-Plane Laser lines simultaneously. The bottom laser line intersection can be used to locate a specific point on a floor layout while the top laser line intersection projects that same point to a ceiling.

PENDULUM SLIDER SWITCH & SELF-LEVELING

The laser assemblies are mounted on a pendulum so that the instrument can self-level. The Pendulum Slider Switch ⑩ must be in the unlocked position for the instrument to self-level. If the instrument is tilted by $>4^\circ$ from the horizontal plane, the pendulum will not be capable of self-leveling; the active laser beams will flash and the Excessive Tilt Indicator ④ will blink to indicate that the instrument is not level and cannot self-level. The instrument must be repositioned on a more level geometry for the self-leveling pendulum to function appropriately.



Instrument Tilted Excessively

NOTE: If the instrument indicates that it is not level (via flashing beams and/or a blinking Excessive Tilt indicator ④), then it should not be used for laying out level or plumb lines.

NOTE: Following use, the active laser beams must be turned OFF and the Pendulum Slider Switch must be placed in the Locked position prior to storage.

OPERATING INSTRUCTIONS

MAGNETIC MOUNTING BRACKET 14

A magnetic mounting bracket is included with the product. The instrument can be mounted on the bracket via its 1/4" threaded screw 15. The bracket may be magnetically attached to any ferrous structure such as steel studs, ducts, structural beams, and steel doors. The bracket also features a keyhole for mounting the instrument using a screw or nail to non-ferrous structures. Once mounted to a structure via the mounting bracket, the instrument can be rotated on the bracket through 360° to direct the laser beams.

RECHARGING BATTERY

When the Red LED on the Battery Level Indicator blinks, the battery needs to be recharged:

Charging Battery via 93PLL USB-C Port:

1. Connect supplied charging cable's 13 USB-C connection to the USB-C port 6 of the 93PLL.
2. Connect the charging cable's USB-A port to a charging source (5V DC, Min 2.0A, not included).
3. The Battery Level Indicator 5 will illuminate to indicate charging status (TABLE 1).
4. A full charge can take up to 8.5 hours, depending on the charger's output. Charge completely before using.

Charging Battery via Battery Pack USB-C Port:

1. Ensure 93PLL is turned off by locking the Power/Pendulum Switch 10.
2. Loosen screw from the Battery Door 12 and remove battery.
3. Connect the supplied charging cable's 13 USB-C connection to battery's Charge-In Port 16.
4. Connect the charging cable's USB-A port to a charging source (5.0V, min. 2.0A, not included).
5. Battery Charge Indicator LED 17 will blink red while charging, and turn solid green when fully charged. When fully charged, disconnect cable from battery and reinstall battery in 93PLL.

TABLE 1				
○ Not Illuminated	○ Green	● Yellow	● Red	≥ ≤ Blinking
LED	Status	% Charged		
○ ○ ● ●	Solid green Solid green Solid yellow Solid red	100% charged		
≥○ ○ ● ●	Blinking green Solid green Solid yellow Solid red	75% to 99% charged		
≥○ ≥○ ● ●	Blinking green Blinking green Solid yellow Solid red	50% to 74% charged		
≥○ ≥○ ≥○ ●	Blinking green Blinking green Blinking yellow Solid red	25% to 49% charged		
≥○ ≥○ ≥○ ●	Blinking green Blinking green Blinking yellow Blinking red	0% to 24% charged		

6. Close the battery door and secure with screw. Do not over-tighten.

MAINTENANCE

- Regularly inspect ports and charging cable for and debris, dirt, damage, and corrosion.
- DO NOT attempt to repair device or cable; replace as needed.

CLEANING

Be sure instrument is turned off and disconnected from all power sources. Wipe with a clean, dry lint-free cloth. ***Do not use abrasive cleaners or solvents.***

RECHARGING

Recharge as needed. There are no pre-designated intervals at which to recharge as long as you are using the unit regularly. Avoid discharging completely on a regular basis, as this can impact overall life.

STORAGE

If storing for more than one month, charge completely before storage, and recharge approximately every three months to avoid full discharge. Store in cool temperatures, mild humidity, and away from direct sunlight (See GENERAL SPECIFICATIONS section).

Leaving in a vehicle or other confined spaces in extreme hot temperatures can lead to decrease in service life, overheating, or fire. Extreme cold temperatures below the specified storage range can also harm performance and service life. Keep away from corrosive chemicals and gases.

After taking out of storage, inspect visually to make sure device and all accessories look satisfactory. Allow unit to return to ambient conditions before recharging.

WARRANTY

www.kleintools.com/warranty

DISPOSAL / RECYCLE



Do not place equipment and its accessories in the trash. Items must be properly disposed of in accordance with local regulations. Please see www.epa.gov or www.erecycle.org for additional information.