

STANLEY[®]

IntelliLaser™ Pro

**Stud Finder and Laser Line Level with
Continuous AC Warning**



**INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
BRUGERVEJLEDNING
KÄYTTÖOHJE
INSTRUKTIONSHANDBOK
INSTRUKSJONSBOK
РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ**



1-77-500

SAFETY INSTRUCTIONS

Failure to follow warnings may result in bodily injury.

The following warnings must be followed to avoid injury:

- Keep out of reach of children.
- Tool not suitable for use by children under 16 years of age.
- DO NOT remove warning labels
- DO NOT use optical tools such as a transit to view laser beam. Serious eye injury could result
- DO NOT project the laser beam directly into the eyes of others.
- DO NOT stare directly at the laser beam.
- DO NOT project laser beam onto a reflective surface.
- DO NOT operate around children, or allow children to operate.
- DO NOT disassemble the laser.
- Always turn off laser when the tool is not in use.
- DO NOT over reach so as to cause loss of balance or loss of secure footing.

WARNINGS:

IMPORTANT: Read all instructions prior to operating the IntelliLaser™ Pro and DO NOT remove any labels from the tool.

<p>DANGER Class 2 Laser Product Laser radiation emitted from tool Max. Power Output < 0.16mW Wavelength: 630-670 nm Do not stare into the beam AVOID DIRECT EYE EXPOSURE THIS TOOL EMITS A LASER RADIATION</p>	<p>This caution notice is reminded with a sticker located on the front of each unit.</p>
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The 77-500 produces a straight line on the same surface on which the tool is placed. Any reflection of the line on another surface should be considered reference.



MAIN STUD SENSING/LASER UNIT



The Stanley® IntelliLaser™ Pro uses electronic signals to locate the position of studs, joists or live AC wires through drywall and other common wall materials. Once the edge of the stud has been detected, the IntelliLaser™ Pro LCD display gives visual and audio indications that allow you to easily pinpoint the stud's edge position. A pencil line allows you to quickly note the location of the stud edges.

The Stanley® IntelliLaser™ Pro stud sensor generates a vertical laser plane. The unit can also be tilted to produce a laser plane at any angle.

The IntelliLaser™ Pro allows the user to locate wood and metal studs through common wall materials up to 38mm (1½") thick.

The IntelliLaser™ Pro provides automatic calibration, a backlit LCD screen, auto shut off and heavy duty ABS construction.

Depth detection selected by side button for 12mm (½"), 25mm (1") and 38mm (1½").

LASER POD

The addition of the laser pod opens up the functionality of the stud finder. The unit is mountable using adhesive pads (included). Retractable feet keep the adhesive away from the surface during placement. The laser pod can be tilted $\pm 10^\circ$ once it is attached to the surface without removing the adhesive. This allows for easy repositioning of the laser plane. The laser pod can be set to level, plumb or any other angle required. With the laser pod mounted to the wall horizontally, you are free to use the main stud sensor laser pod and mark both the height and stud locations at the same time.

The IntelliLaser™ Pro laser pod generates a horizontal or vertical laser plane. It can also be mounted to the wall to reproduce any angle required.

The IntelliLaser™ Pro laser pod provides heavy duty ABS construction with large rubber pads to provide a firm grip and superior impact resistance.

LASER CLASSIFICATION

This product produces a visible laser beam. It is a Class 2 laser product in accordance with EN60825-1/A1:2002.

This product complies with all applicable portions of title 21 of the USA Code of Federal Regulations set by the Dept of Health, Education and Welfare, the Food & Drug Administration, the Center for Devices & the Bureau of Radiological Health.

DECLARATION OF CONFORMITY

The Stanley Works declares that these products conform to:
EN60825-1, 89/336/EEC; EN61010, 2001/95/EC, 2002/96/EC,
EN61000-6(EN50082-1), EN61000-6-3(EN50081-1)

Signed by



Alisdair Cumming
Director of Engineering & Technology
Hellaby Industrial Estate
Rotherham
02/06

ILLUSTRATION 1 ILLUSTRATION 3



ILLUSTRATION 2

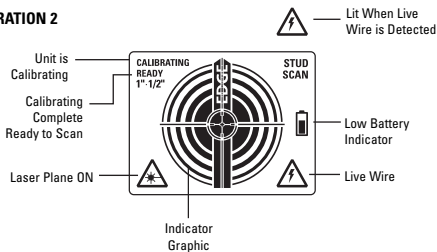
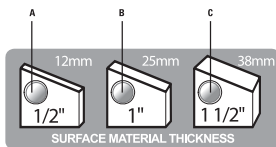


ILLUSTRATION 3



A = Wood or metal stud detection up to 12mm (1/2")

B = Wood or metal stud detection up to 25mm (1")

C = Wood or metal stud detection up to 38mm (1-1/2")

ILLUSTRATION 4

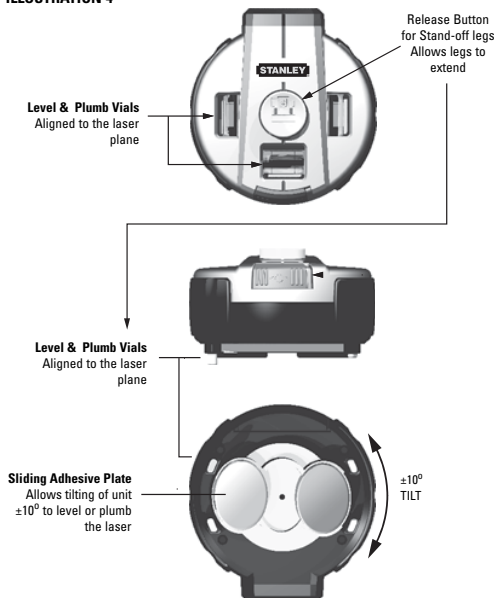


ILLUSTRATION 5

Adhesive Pad w/ Pull Tab
For proper application of this unit see illustration 8



OPERATING INSTRUCTIONS

ILLUSTRATION 6

Battery Replacement

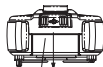
Stud Finder Unit

Open the battery door on back of unit and connect a 9-volt battery (not included) to clip. Place battery back into case and snap battery door on. It is recommended to replace with a new 9 volt battery when low battery indicator is on.



Battery door
(1) 9V Alkaline
battery type
6LR61

ILLUSTRATION 7



Battery door
(2) AAA Alkaline
batteries type LR03

Laser Unit

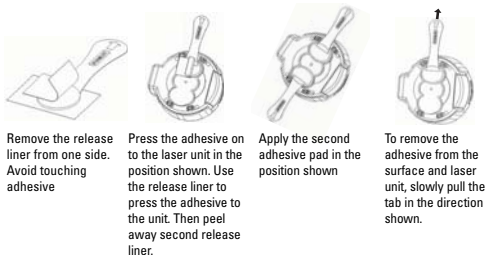
Open the battery door on back of unit by sliding the door down. Slide in (2)

Application and Removal of Adhesive on Laser Pod

1. To apply the adhesive to the unit, follow the steps outlined in illustration 8.
2. Lower the standoff legs by pressing the release button (see illustration 4).
3. Make sure that the adhesive plate is centred so you have clearance to tilt the unit to either side (see illustration 4).
4. Place the unit on the surface and position it where required. Press the unit toward the wall so the adhesive is applied and the legs lock in the retracted position.
5. To remove the adhesive from the surface and the laser unit, **SLOWLY** pull on the adhesive tab in the direction shown.

Note: To assure a continued good bond of the adhesive to the product, periodically wipe the sliding adhesive plate (see illustration 4) with a swab dipped in isopropyl or rubbing alcohol to keep the surface clean.

WARNING: Do not pull the adhesive and/or laser pod away from the surface. Damage to the surface may result. If the tab separates from the adhesive, very slowly pull the unit away from the surface to allow time for the adhesive to gently separate from the surface/unit.

ILLUSTRATION 8**Calibration**

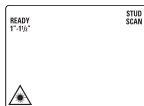
Calibrate the unit on wall before scanning for wood or metal stud.

Note: While calibrating, the IntelliLaser™ Pro must not be placed directly over a stud, dense material such as metal, wet or newly painted areas as this will prevent the unit from calibrating properly. If this is done over a wood or metal stud the unit will give no indication when moved away from the area. Move to a different location and try again.

Calibrating

Hold the IntelliLaser™ Pro flat against the surface, making firm contact. Press and hold the "ON" button. All indicators on the LCD are displayed while the unit goes through its 1 to 3 second calibration cycle. The word "CALIBRATING" will appear on the LCD (illustration 2) while the unit is calibrating to surface. Following the completion of calibration the unit will beep, and the word "READY" will be shown on the LCD (illustration 9). The LED light will then illuminate the keypad depth mode (12mm / 1/2" depth default).

IMPORTANT: The unit cannot be moved before calibration is complete and "READY" appears on the LCD and LED illuminates.

**ILLUSTRATION 9**

Notes:

1. Laser line is always on when holding the "ON" button.
2. Continue to hold the "ON" button during stud detection.

USAGE

Selecting Depth Detection

1. Depress and hold "ON" button once (1x) to select 12mm ($1/2$ ") read depth detection. The 12mm ($1/2$ ") mode LED will illuminate (illustration 3). The unit will then calibrate, followed by a beep and a "READY" displayed on the LCD.
2. "Double-click" / Depress and hold ON button twice (2x) to select 25mm (1") read depth detection. The 25mm (1") mode LED will illuminate (illustration 3). The unit will then calibrate, followed by a beep and a "READY" displayed on the LCD.
3. "Triple-click" / Depress "ON" button three times (3x) to select 38mm ($1-1/2$ ") read depth detection. The 38mm ($1-1/2$ ") mode LED will illuminate (illustration 3). The unit will then calibrate, followed by a beep and a "READY" displayed on the LCD.

IMPORTANT: The unit cannot be moved before calibration is complete and "READY"

Detecting Wood or Metal Studs

1. Once the unit is calibrated, slide the unit across the surface in a straight line horizontally. As the unit gets closer to the stud, the cross will appear and the indicator rings will illuminate in succession from the largest to the smallest as shown in illustration 10. When the stud edge is detected, the "stud" indicator and vertical "EDGE" symbol will appear as shown in illustration 11. The unit will also sound a constant tone.
2. Use the indicator line to mark the stud edge.

3. Continue sliding past the stud until the indicator turns off and the unit stops beeping.
4. Repeat steps 1 and 2 in the other direction.
5. The midpoint between the two marks is the stud centre.

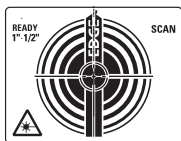


ILLUSTRATION 10

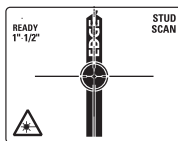


ILLUSTRATION 11

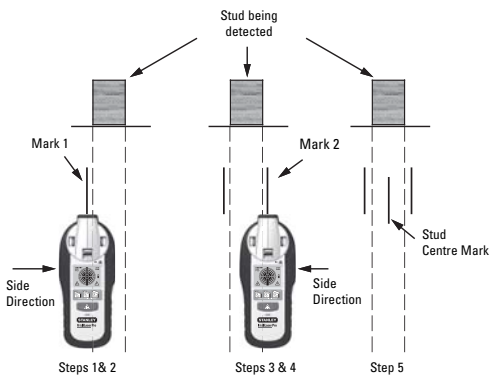


ILLUSTRATION 12

Detecting Live Wires

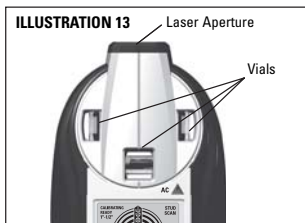
The Live Wire Detection feature is always on and the "Live Wire" icon will be displayed on the LCD. When a Live Wire is detected, the red live wire LED indicator will be on. (see illustration 1 & 2).

Static electricity charges that can develop on drywall and other surfaces will spread the voltage detection area many inches to each side of the actual electrical wire. To aid in locating the wire position, scan holding the unit 1/2 inch away from the wall surface or place other hand on surface approximately 12 inches from sensor.

Warning: shielded wires or live wires in metal conduits, casings, metalized walls or thick, dense walls, will not be detected. Always turn AC power off when working near wiring.

The IntelliLaser™ Pro is designed to detect 230 volts AC in live electrical wires. It will also detect the presence of live wires having greater than 230 volts.

Laser Plane



1. Laser plane in the stud detection mode is always on, a laser plane icon is also shown on the LCD. It can be turned off by pressing "▲" button once.
2. Laser plane can also be turned on individually by pressing "▲" button once or pressing again to turn it off.

3. The Laser plane will be auto - off after 1 hour.
4. The projected laser plane will coincide with stud edge indicator.
5. The level vials are aligned to the laser plane. When the bubble is centred, the laser plane will be vertical/horizontal (depending on vial used).

CAUTIONS ON OPERATING

You should always use caution when nailing, cutting or drilling in walls, ceilings and floors that may contain wiring or pipes near to the surface.

Shielded, dead or non-powered wiring will not be detected as live wires.

Always remember that studs or joists are normally spaced 41cm (16") or 61cm (24") apart and are 38mm (1 1/2") in width. To avoid surprises, be aware that anything closer together or of a different width may be an additional stud, or joist fire break.

When working near AC electrical wires, always turn off the power.

OPERATING TIPS

IMPORTANT SAFETY NOTICE

To ensure proper detection of live wires, ALWAYS hold the IntelliLaser™ Pro in the handle area only. Grasp between fingers and thumb while maintaining contact with your palm.

Conventional Construction

Doors and windows are commonly constructed with additional studs and headers for added stability. The IntelliLaser™ Pro detects the edge of these double studs and solid headers and emits and holds an audio signal as it crosses over them.

Surface Differences

Wallpaper — There will be no difference in the function of the stud sensor on surfaces covered with wallpaper or fabric unless the coverings contain metallic foil or fibres.

Plaster and Lath — Unless the plaster and lath is exceptionally thick or has metal mesh in it there will be no problem with the unit functioning properly.

Ceiling or Textured Surfaces — When dealing with a rough surface such as a sprayed ceiling, use a piece of cardboard when scanning the surface. Run through the calibration technique described earlier WITH the piece of cardboard between the stud sensor and the surface. Also, it is particularly important in this application to remember to keep your free hand away from the unit.

SPECIFICATIONS

Utilising the procedure of scanning and marking from two sides, IntelliLaser™ Pro will find the stud center with 1/8" accuracy for wood and 1/4" accuracy for metal. When measuring a wood or metal stud, it is recommended the IntelliSensor™ to be used at 20-35% relative humidity.

Battery : Main unit:	1 x 9V Alkaline type 6LR61
Laser pod:	2 x AAA Alkaline type LR03
Shock Resistance:	up to 91cm (3')
Operating Temperature:	-7°C to +49°C (+20°F to +120°F)
Storage Temperature:	-29°C to +66°C (-20°F to +150°F)
Laser Class:	2 < 0.16 mW power output
Laser diode:	635nm Class 2
Laser accuracy:	12mm (1/2") at 6m (20')
Length of projected Laser Line:	up to 6m (20')

This is a Class 2 laser tool and is manufactured to comply with international safety rule IEC EN60825-1.

MAINTENANCE & CARE

The IntelliLaser™ Pro is not waterproof. Do not allow the unit to get wet. Damage to internal circuits will result.

Do not leave the IntelliLaser™ Pro out in direct sunlight or expose it to high temperatures. The housing and some internal parts are made of plastic and may become deformed at high temperatures.

Do not store the IntelliLaser™ Pro in a cold environment. Moisture will form on interior parts when warming up. The moisture could fog up laser windows and cause corrosion of internal circuit boards.

When working in dusty locations, some dirt will collect on the laser window. Remove any moisture or dirt with a soft, dry cloth. Do not use aggressive cleaning agents or solvents.

Remove batteries before storage of the instrument.

ENVIRONMENTAL PROTECTION

Sort the product, packaging and accessories for environmentally friendly recycling when disposing of them.

Dispose of used batteries in an environmentally friendly way in accordance with local regulations. Do not throw batteries in the fire or in the household waste



WARRANTY

One Year Warranty

Stanley Tools warrants its electronic measuring tools against deficiencies in materials or workmanship for one year from date of purchase.

Deficient products will be repaired or replaced, at Stanley Tools' option, if sent together with proof of purchase to:-

Stanley UK Sales Limited,
Gowerton Road,
Brackmills,
Northampton
NN4 7BW

This Warranty does not cover deficiencies caused by accidental damage, wear and tear, use other than in accordance with the manufacturer's instructions or repair or alteration of this product not authorised by Stanley Tools. Repair or replacement under this Warranty does not affect the expiry date of the Warranty. To the extent permitted by law, Stanley Tools shall not be liable under this Warranty for indirect or consequential loss resulting from deficiencies in this product.

This Warranty may not be varied without the authorisation of Stanley Tools.

This Warranty does not affect the statutory rights of consumer purchasers of this product.

This Warranty shall be governed by and construed in accordance with the laws of England and Stanley Tools and the purchaser each irrevocably agrees to submit to the exclusive jurisdiction of the courts of England over any claim or matter arising under or in connection with this Warranty.



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BUK-1-77-500 (01/07) Issue 1