

DW088LR, DW088LG LaserChalkLine™ Laser Line Generator Generador de línea láser DW088LR, DW088LG LaserChalkLine™ Générateurs de faisceaux laser LaserChalkLineMC DW088LR et DW088LG Gerador de linha laser DW088LR, DW088LG LaserChalkLine™



# www.DEWALT.com

Please read these instructions before operating the product Lea estas instrucciones antes de utilizar el producto Bien lire ces instructions avant d'utiliser le produit Leia estas instruções antes de operar o produto



EN ESP FR PT



Quick Start Guide / Guía de inicio rápido / Guide de démarrage rapide / Guia de Início Rápido







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# **User Safety**

# WARNING:

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

# WARNING:

Laser Radiation Exposure. Do not disassemble or modify the laser level. There are no user serviceable parts inside. Serious eve iniury could result.

# WARNING

Hazardous Radiation. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

## CAUTION: LASER RADIATION - DO NOT STARE INTO THE LASER BEAM. Class 2 Laser Product.

The label on your tool may include the following symbols.

- V volts
- mW milliwatts
- Ampere Hours Ah
- A laser warning symbol nm wavelength in nanometers
- Class 2 Laser
- 2 (S)

## Do not stare into the laser beam

#### Warning Labels

DEWALT DWO

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SER wender All Ser Consider with 21 CPU 104; 11 and 104; 11 and 104; 12 and 10

For your convenience and safety, the following labels are on vour laser.

WARNING: To reduce the risk of injury, user must read instruction manual

WARNING: LASER RADIATION. DO NOT STARE INTO REAM Class 2 Laser Product



- · Do not operate the laser in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- . Use the laser only with the specifically designated batteries. Use of any other batteries may create a risk of fire.
- persons. Lasers are dangerous in the hands of untrained users.

manufacturer for your model. Accessories that may be suitable for one laser, may create a risk of injury when used on another laser

- personnel. Service or maintenance performed by unqualified personnel may result in iniury. To locate your nearest DeWALT service center call 1-800-4-DEWALT (1-800-433-9258) or go to http://www.dewalt.com.on.the.Internet.
- Do not use optical tools such as a telescope or transit to view the laser beam. Serious eve injury could result.
- Do not place the laser in a position which may cause . anyone to intentionally or unintentionally stare into the laser beam. Serious eve injury could result.
- Turn the laser off when it is not in use. Leaving the laser on increases the risk of staring into the laser beam.
- Do not disassemble the laser tool. There are no user serviceable parts inside.
- Do not modify the laser in any way. Modifying the tool may result in Hazardous Laser Radiation Exposure.
- Do not operate the laser around children or allow children to operate the laser. Serious eve iniury may result.
- Do not remove or deface warning labels. Removing labels increases the risk of exposure to radiation.
- Position the laser securely on a level surface. Damage to the laser or serious injury could result if the laser falls

### Laser Information

- The DW088LB and DW088LG Laser Levels are Class 2 laser products and comply with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50, dated June 24, 2007.
- The DW088LR and DW088LG lasers are self-leveling laser tools that can be used inside and outside for horizontal (level), vertical and plumb alignment projects.

Conforms to UL STDS 61010-1 & 2595 Certified to CSA STD C22.2 No. 61010-1



WARNING: Read and understand all instructions. Failure to follow all

instructions listed below may result in electric shock, fire and/ or serious personal injury.

#### Work Area

- Keen your work area clean and well lit. Cluttered benches and dark areas invite accidents
- Do not operate laser tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- · Keep bystanders, children, and visitors away while operating a laser tool. Distractions can cause you to lose control.

#### Electrical Safety

 Use battery operated tool only with the specifically designed batteries. Use of any other batteries may create a risk of fire.

# **Product Overview**



Never modify the tool or any part of it. Damage to the laser or personal injury could result.

Figure 3 - Battery Interface

Figure 2 - Pendulum Lock (B)

Figure 2 - Keypad ©

- Figure 5B ON/OFF button; horizontal laser line @
- Figure 5B ON/OFF button: vertical laser line (2)

Figure 5B - Battery Meter

## Figure 3 - Magnetic pivot bracket @

Figure 3 - Keyhole slot (H)

Figure 5A - Tripod thread fitting (1/4 - 20 & 5/8-11)

Figure 5A - Ceiling Mount

Figure 5A - Clamp ®

Figure 5A - Screw Hole @

# **Batteries and Power**

 This tool is powered by the following DeWALT 12V Battery packs. DCB120, DCB127 or may also be powered using the DEWALT AA Starter pack which can carry 4 x AA batteries. Note: The AA starter pack is recommended only for use with the red laser

## **Battery Installation / Removal** (See figure (3))

# Using the AA Starter Pack:



The AA starter pack is designed specifically for use only with the DeWALT 12V compatible laser products and cannot be used with any other tools Do not attempt to modify the product.

#### To install batteries:

- · Lift up the battery compartment cover as shown in Figure 4.
- Insert four fresh AA batteries in the compartment, placing the batteries according to (+) and (-) on the inside of the compartment
- Install the AA starter Battery pack as shown in Figure 3.

# Using the 12V DEWALT Rechargeable Pack:

 Install the 12V Battery pack as shown in Figure 3.



Batteries can explode, or leak, and can cause iniurv or fire. To reduce this risk





# Tool service must be performed only by qualified repair



- Carefully follow all instructions and warnings on the battery label and package and accompanying Battery Safety Leaflet.
- Always insert batteries correctly with regard to polarity (+ and -), marked on the battery and the equipment.
- Do not short battery terminals.
- Do not charge disposable batteries.
- Do not mix old and new batteries. Replace all of them at the same time with new batteries of the same brand and type.
- Remove dead batteries immediately and dispose of per local codes.
- Do not dispose of batteries in fire.
- Keep batteries out of reach of children.
- Remove batteries when the device is not in use
- Use only the charger specified for your rechargeable battery pack.

# Personal Safety

- Stay alert, watch what you are doing and use common sense when operating a laser tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection may be required for appropriate conditions.

## **Tool Use and Care**

- Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

## Service

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

To locate your nearest DeWALT service center call 1-800-4-DeWALT (1-800-433-9258) or go to http://www.dewalt.com on the Internet.

# **Operating Tips**

- Use only new, high-quality, name brand AA batteries or specified rechargeable DEWALT 12V Li-lon pack for best results.
- Ensure batteries are in good working condition. If the low battery red indicator light is flashing, the batteries need replacement.
- To extend battery life, turn laser off when not working with the beam.
- To ensure the accuracy of your work, check to make sure your laser is calibrated often. See Field Calibration Check.
- Before attempting to use the laser, make sure it is positioned securely, on a smooth, flat surface.
- Always mark the center of the beam created by the laser.
- Extreme temperature changes may cause movement of internal parts that can affect accuracy. Check your accuracy often while working. See Field Calibration Check.
- If the laser has been dropped, check to make sure your laser is still calibrated. See Field Calibration Check.

## Low Battery Indication

The DW088LR and DW088LG lasers are equipped with a battery gauge as shown in O. The battery gauge indicates remaining power with each LED representing 25%. The bottom LED will illuminate and blink indicating that the level is low (below 12.5%) and the batteries need to be replaced. The laser may continue to operate for a short time while the batteries continue to drain, but the beam(s) will quickly dim. After fresh batteries are installed and the laser is turned on again, the laser beam(s) will return to full brightness and the battery indicator level will indicate full capacity. (A flashing laser beam is not caused by low batteries; see **Out of Tik Range Indicator**.)

If all 4 LED's on the battery meter LED's continuously flash this does not indicate a low battery; see "The Battery Meter LED's Flash" under **Troubleshooting**.

# **Operation**

# To Turn the Lasers On and Off (See Figure (2, 5))

With the laser off, place it on a flat surface. This model has a pendulum locking switch (1) and a keypad (2) to activate the laser beams with two ON/OFF buttons; one for a horizontal laser line (2) and one for a vertical laser line (2) and one for a vertical laser line (2) and one for a vertical laser line (2) button on the keypad. The laser lines can be powered one at a time or at the same time. Pressing the ON/OFF buttons again turns the laser line soft. The pendulum locking switch disables the lasers as well as locking the pendulum locking switch disables the laser as well as locking the pendulum, and should always be placed in the LOCKED/OF position when the laser is not in use.

If the pendulum lock switch is not placed in the lock position all 4 LED's will continuously flash on the Battery Meter.

#### Using the Lasers Out of LEVEL Range Indicator

The lasers are designed to self-level. If the laser has been tilted so much that it cannot self-level (> 4°), the laser beam will flash. There are two flashing sequences associated with the out of level condition: (i) between 4° and 10° the beams flash with a constant blink cycle; (ii) at angles greater than 10° the beams flash with a three blink cycle. When the beams flash **it a laser is not level (or plumb) and should not be used for determining or marking level or plumb.** Try repositioning the laser on a more level surface.

#### Using the Pivot Bracket (See figure ③)

The lasers have a magnetic pivot bracket <sup>(1)</sup> permanently attached to the units. This bracket allows the unit to be mounted to any upright surface made of steel or iron. Common examples of suitable surfaces include steel framing studs, steel door frames and structural steel beams. The bracket also has a keyhole slot <sup>(1)</sup> allowing the unit to be hung from a nail or screw on any kind of surface. Position the laser and/or wall mount on a stable surface. Serious personal injury or damage to the laser may result if the laser falls.

Using the Laser with the CEILING Mount (See Figure (5))

The laser ceiling mount O (if included) offers more mounting options for the laser. The ceiling mount has a clamp at one end O which can be fixed to a wall angle for acoustic ceiling installation. At each end of the ceiling mount is a screw hole O, allowing the ceiling mount to be attached to any surface with a nail or screw.

Once the ceiling mount is secured, its steel plate provides a surface to which the magnetic pivot bracket O can be attached. The position of the laser can then be fine-tuned by sliding the magnetic pivot bracket up or down on the wall mount.

#### Using the Lasers with Accessories

The lasers are equipped with 1/4 - 20 and 5/8 -11 female threads on the bottom of the unit. This thread is to accommodate current or future DeWALT accessories. Only use DeWALT accessories specified for use with this product. Follow the directions included with the accessory.

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The use of any other accessory not recommended for use with this tool could be hazardous. If you need any assistance in locating any accessory, please

contact DeWALT Industrial Tool Co., 701 East Joppa Road, Towson, MD 21286 or call 1-800-4-DeWALT (1-800-433-9258)

#### Leveling the Lasers

As long as the lasers are properly calibrated, the lasers are self-leveling. Each laser is calibrated at the factory to find level as long as it is positioned on a flat surface within  $\pm$  4° of level. No manual adjustments must be made.

## Maintenance

- To maintain the accuracy of your work, check the laser often to make sure it is properly calibrated. See Field Calibration Check.
- Calibration checks and other maintenance repairs may be performed by DeWALT service centers.
- When not in use, store the laser in the kit box provided. Do not store your laser at temperatures below -5°F (-20°C) or above 140°F (60°C).
- Do not store your laser in the kit box if the laser is wet. The laser should be dried first with a soft dry cloth prior to storage.

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## Cleaning

Exterior plastic parts may be cleaned with a damp cloth. Although these parts are solvent resistant, NEVER use solvents. Use a soft, dry cloth to remove moisture from the tool before storage.

# **Accuracy Check and Calibration**

#### **Checking Accuracy –** Horizontal Beam, Scan Direction (See figure <sup>(6)</sup>)

Checking the horizontal scan calibration of the laser requires two walls 30' (9m) apart. It is important to conduct a calibration check using a distance no shorter than the distance of the applications for which the tool will be used.

- 1. Attach the laser to a wall using its pivot bracket. Make sure the laser is facing straight ahead.
- Turn on the laser's horizontal beam and pivot the laser approximately 45' so that the right-most end of the laser line is striking the opposing wall at a distance of at least 30' (9m). Mark the center of the beam •.
- Pivot the laser approximately 90° to bring the left-most end of the laser line around to the mark made in Step 2. Mark the center of the beam <sup>(1)</sup>/<sub>2</sub>.
- 4. Measure the vertical distance between the marks.
- 5. If the measurement is greater than the values shown below, the laser must be serviced at an authorized service center.

Distance Between Walls	Allowable Distance Between Marks
30' (9m)	1/8" (3.0mm)
40' (12m)	5/32" (4.0mm)
50' (15m)	7/32" (5.0mm)

## **Checking Accuracy –** Horizontal Beam, Pitch Direction (See figure ⑦)

Checking the horizontal pitch calibration of the laser requires a single wall at least 30' (9m) long. It is important to conduct a calibration check using a distance no shorter than the distance of the applications for which the tool will be used.

- 1. Attach the laser to one end of a wall using its pivot bracket.
- Turn on the laser's horizontal beam and pivot the laser toward the opposite end of the wall and approximately parallel to the adjacent wall.
- 3. Mark the center of the beam at two locations (c), (d) at least 30' (9m) apart.
- 4. Reposition the laser to the opposite end of the wall.
- Turn on the laser's horizontal beam and pivot the laser back toward the first end of the wall and approximately parallel to the adjacent wall.
- Adjust the height of the laser so that the center of the beam is aligned with the nearest mark .
- Mark the center of the beam O directly above or below the farthest mark O.
- 8. Measure the distance between these two marks ©, @
- If the measurement is greater than the values shown below, the laser must be serviced at an authorized service center.

## Checking Accuracy -

Vertical Beam (See Figure (8))

Checking the vertical (plumb) calibration of the laser can be most accurately done when there is a substantial amount of vertical height available, ideally 30' (9m), with one person on the floor positioning the laser and another person near a ceiling to mark the position of the beam. It is important to conduct a calibration check using a distance no shorter than the distance of the applications for which the tool will be used.

- 1. Start by marking a 5' (1.5m) line on the floor.
- Turn on the laser's vertical beam and position the unit at one end of the line, facing the line.
- Adjust the unit so its beam is aligned and centered on the line on the floor.
- Mark the position of the laser beam on the ceiling ①. Mark the center of the laser beam directly over the midpoint of the line on the floor.
- Reposition the laser at the other end of the line on the floor. Adjust the unit once again so its beam is aligned and centered on the line on the floor.
- Mark the position of the laser beam on the ceiling (1), directly beside the first mark (1).

7. Measure the distance between these two marks.

 If the measurement is greater than the values shown below, the laser must be serviced at an authorized service center.

Distance Between Walls	Allowable Distance Between Marks
30' (9m)	1/4" (6.0mm)
40' (12m)	5/16" (8.0mm)
50' (15m)	13/32" (10.0mm)

# Troubleshooting The Laser Does Not Turn On

- Make sure AA batteries (when used) are installed correctly according to (+) and (-) on the inside of the battery door.
- Make sure the batteries or rechargeable pack are in proper working condition. If in doubt, try installing new batteries.
- Make sure that the battery contacts are clean and free of rust or corosion. Be sure to keep the laser level dry and use only new, high-quality, name brand batteries to reduce the chance of battery leakage.
- If the laser unit is heated above 120°F (50°C), the unit will not turn on. If the laser has been stored in extremely hot temperatures, allow it to cool. The laser level will not be damaged by pressing the on/off button before cooling to its proper operating temperature.

# The Laser Beams Flash

The DW088LR and DW088LG have been designed to self-level up to an average of 4° in all directions when positioned as shown in ③. If the laser is tilted so much that internal mechanism cannot level itself, the laser beam will flash indicating that the tilt range has been exceeded. The flashing beams created by the laser are not level or plumb and should not be used for determining or marking level or plumb. Try repositioning the laser on a more level surface.

# The Laser Beams Will Not Stop Moving

The DW088LR and DW088LG are precision instruments. Therefore, if the laser is not positioned on a stable (and motionless) surface, the laser will continue to try to find level. If the beam will not stop moving, try placing the laser on a more stable surface. Also, try to make sure that the surface is relatively flat, so that the laser is stable.

# The Battery Meter LED's Flash

When all 4 LED's continuously flash on the Battery Meter this indicates that the unit has not been fully powered off using the Pendulum Lock switch (2). The Pendulum Lock switch should always be placed in the LOCKED/OFF position when the laser is not in use.

# **Service and Repairs**

 Note: Disassembling the laser level(s) will void all warranties on the product.

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by authorized service centers. Service or maintenance performed by unqualified personnel may result in a risk of injury. To locate your nearest DeWALT service center call 1-800-4-DeWALT (1800-433-9258) or go to http://www.dewalt.com on the Internet.



# **Specifications**

# Laser Tool

Light Source	Laser diodes		
Laser Wavelength	630 - 680nm (RED)	515-535nm (GREEN)	
Laser Power	≤1.5mw (each beam) CLASS 2 LASER PRODUCT		
Working Range			
	±65' (20m) (RED)	±115' (35m) GREEN	
	50m with detector	60m with detector	
Accuracy (Level):	± 1/8" per 30' (±3mm per 9m)		
Indicators			
Battery Low	1 x LED Flashing on Battery meter		
Unit Not Powered Off With Pendulum Lock Switch	4 x LED Flashing on Battery meter		
Flashing Laser Beams	Tilt range exceeded/unit is not level		
Power Source	4 AA (1.5V) size batteries (6.0V DC) or 12 Li Ion DEWALT Rechargeable Battery Pack.		
Operating Temperature	20°F to 115°F (-10°C to 45°C)		
Storage Temperature	-5°F to 140°F (-20°C to 60°C)		
Humidity	Maximum relative humidity 80% for temperatures up to 88°F (31°C) decreasing linearly to 50% relative humidity at 104°F (40°C)		
Environmental	Water & Dust Resistant to IP65		

# **Three Year Limited Warranty**

DeWalt will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DeWALT (1-800-433-9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

In addition to the warranty, DeWALT tools are covered by our:

## **1 Year Free Service**

DeWalt will maintain the tool and replace worn parts caused by normal use, at no cost, any time during the first year after purchase.

## 90 DAY money back GUARANTEE

If you are not completely satisfied with the performance of your DeWalt Laser for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

## **Reconditioned Product:**

Reconditioned product is covered under the 1 Year Free Service Warranty. The 90 Day Money Back Guarantee and the Three Year Limited Warranty do not apply to reconditioned product.

#### Free Warning Label Replacement:

If your warning labels become illegible or are missing, call 1-800-4-DeWALT or visit your local service center for a free replacement.

# <u>Notes</u>