

# DW0165S User Manual



# www.DEWALT.com



Please read these instructions before operating the product.

















F









# Contents

- User Safety
- Battery Safety
- Loading Batteries
- Using the Tool
- Warranty
- Error Codes
- · Specifications

Retain all sections of this manual for future reference.

# **User Safety**



#### WARNING:

Carefully read the Safety Instructions and Product Manual before using this product. The person responsible for the product must ensure that all users understand and adhere to these instructions.



#### WARNING:

The following label information is placed on your laser tool to inform you of the laser class for your convenience and safety.



The DW0165S tools emit a visible laser beam, as shown in Figure (A) (T). The laser beam emitted is Laser Class 2 per IEC 60825-1 and complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

#### WARNING:

While the laser tool is in operation, be careful not to expose your eyes to the emitting laser beam (red light source). Exposure to a laser beam for an extended time period may be hazardous to your eyes. Do not look into the beam with optical aids.



WARNINGTo reduce the risk of injury, user must read the Product User manual, Laser Safety manual, and Battery Safety information.

# **Battery Safety**



WARNING: Batteries can explode or leak and cause serious injury or fire. To reduce the risk:

ALWAYS follow all instructions and warnings on the battery label and package.

DO NOT short any battery terminals.

DO NOT charge alkaline 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.

DO NOT mix battery chemistries.

DO NOT dispose of batteries in fire.

ALWAYS keep batteries out of reach of children.

ALWAYS remove batteries if the device will not be used for several months

NOTE: Ensure that the recommended batteries are used.

NOTE: Ensure the batteries are inserted in the correct manner, with the correct polarity.

# Loading Batteries

 Pull up the tool stand on the back of the tool (Figure ۵Ó).

2. Pull up the battery compartment latch on the back of the tool (Figure (D) (2) and (D) (3).

Insert three AAA batteries, making sure to position the - and + ends of each battery as noted inside the battery compartment (Figure (D) (4)).

4. Push the battery door down until it snaps in place (Figure (D) (5)).

When the tool is ON, the battery level appears in the display window (Figure (C) (1)).

# Using the Tool

## Measuring Distance to a Wall or Object

1. Point the tool's laser (Figure (A) (1)) toward a wall or object, and not toward anyone's eyes.

2. Click \land (Figure (A) (3)) to turn the tool on.

 By default, distances are measured from the bottom of the tool to a wall or object (Figure (E) (3)).

To measure distances from the top or middle of the tool, or from the tool's endpiece (when it is flipped open to measure from a corner), click II.



4. Point the tool's laser (Figure (A) (1)) toward the wall or object whose distance you need to measure.

5. Click to measure the distance from the tool to the wall or object.

#### 6. At the bottom of the display window, view the current measurement (Figure (C) (6)).

To take a new measurement, click on to move the current measurement up to the previous line on the display window. Then repeat steps 4-6.

## Measuring Distances Continuously

To take a series of measurements as you move around. change to Continuous Measure mode.

- 1. Point the tool's laser (Figure (A) (1)) toward a wall or object, and not toward anyone's eyes.
- 2. Click 🗟 (Figure (A) (3)) to turn the tool on.
- By default, distances are measured from the bottom of the tool to a wall or object (Figure (E) (3)).

To measure distances from the top or middle of the tool, or from the tool's endpiece (when it is flipped open to measure from a corner), click I.

- 4. Press I to turn on the Continuous Measure mode (Figure (C) (5)).
- 5. Point the tool's laser (Figure (A) (1)) toward the wall or object whose distance you need to measure.
- At the bottom of the display window, view the current measurement (Figure (C) (6)), which will keep changing as you move the tool.
- To take the current measurement (from the tool to the wall or object) and exit Continuous Measure mode. click 🚮

To take a new measurement, click 🗟 to move the current measurement up to the previous line on the display window. Then repeat steps 4-7.

#### Measuring Area

You can measure the area of a wall, floor, or object.



F

1. Point the tool's laser (Figure (A) (1)) toward a wall or object, and not toward anyone's eves.



2. Click DIST (Figure (A) (3)) to turn the tool on.

By default, distances are measured from the bottom of the tool to a wall or object (Figure (E) (3)).

To measure distances from the top or middle of the tool, or from the tool's endpiece (when it is flipped open to measure from a corner), click I.

- 4. Click H
- 5. Click J
- 6. Click ☐ to determine the area of one wall, floor, or object, or click DID to add or subtract the areas of two walls, floors, or objects,

#### 7. Measure the width.

- · Point the top of the tool at one side of the target (wall, floor, or object).
- · Position the tool at one end of the target and point the laser dot across the width. (Figure (F) n shows where to position the tool if you are measuring from the bottom of the tool.)
- Click DIST to display the width measurement at the top of the display window.

#### Measure the length.

- · Position the tool at one end of the target and point the laser dot across the length. (Figure (F) (2) shows where to position the tool if you are measuring from the bottom of the tool.)
- Click DIST to display the length measurement on the second line of the display window.
- View the Area measurement at the bottom of the display window (Figure (C) (6)).

#### Measuring Volume

You can measure the volume of a room or object.



Click DIST (Figure (A) (3)) to turn the tool on.

 By default, distances are measured from the bottom of the tool to a wall or object (Figure (E) (3)).

To measure distances from the top or middle of the tool, or from the tool's endpiece (when it is flipped open to measure from a corner), click II.

#### 4. Click

#### 5. Click Jr

Click III to determine the volume of one room or object, or click @ @ to add or subtract the volumes. of two rooms or objects.

7. Measure the width.

- · Point the top of the tool at one side of the target (room or object).
- · Position the tool at one end of the target and point the laser dot across the width. (Figure G (1) shows where to position the tool if you are measuring from the bottom of the tool.)
- Click DIST to display the width measurement at the top of the display window.
- 8. Measure the length.
  - · Position the tool at one end of the target and point the laser dot across the length. (Figure G) (2) shows where to position the tool if you are measuring from the bottom of the tool.)
  - Click DIST to display the length measurement on the second line of the display window.
- 9 Measure the height.
  - · Positon the tool at one end of the target and point the laser dot across the height. (Figure G) (3) shows where to position the tool if you are measuring from the bottom of the tool).
  - · Click DIST to display the height measurement on the third line of the display window.

10. View the Volume measurement at the bottom of the display window (Figure C) (6).

### Measuring the Height of a Tall Object

If you need to measure the height of a tall object (e.g., a tall building), you can calculate the height based on the distances from the same point to 2 or 3 points on the object. The tool will use the Pythagorean Theorem (C<sup>2</sup>=A<sup>2</sup>+B<sup>2</sup>) to calculate the height.

- If the tool can be positioned opposite the bottom of the tall object (to create an angle ≤ 45°), use the distances to 2 points to calculate the height (Figure ③).
- If the tool must be pointed downward to aim at the bottom of the tall object (to create an angle > 45°), use the distances to 3 points to calculate the height (Figure (H)).

#### Using the Distances to 2 Points

	<b>,</b>	of the tool to a wall or object (Figure (E) (3)).		
1. 2.	Click $[1]$ (Figure (A) (3)) to turn on the tool.	To measure distances from the <b>top</b> or <b>middle</b> of the tool, or from the tool's <b>endpiece</b> (when it is flipped open to measure from a corner), click <b>u</b> ].		
	Click 📾 3 times to show ⊿ on the display window (Figure ⓒ #4).			
3.	Aim the laser at the top of the tool (Figure () #1) at the highest point of the building or object whose height you need to measure (Figure () #1).	<ol> <li>Point the laser at the top of the tool (Figure (A) (1)) toward the wall or object whose distance you need to measure.</li> </ol>		
4.	Click <b>DET</b> to measure the distance to the top of the tall object.	<ol> <li>Click DIST to measure the distance from the tool to the wall or object.</li> </ol>		
5.	From the same point, aim the laser at the lowest point of the building or object (Figure (G) #2).	<ol> <li>Indicate that you want to add this measurement to the next measurement.</li> </ol>		
6.	Click DIST to measure the distance.	• Click •/- (Figure (A) (3)		
7.	On the bottom line of the display window, view the height of the building or object.	Click		
		<ol> <li>Point the laser at the top of the tool toward the next wall or object.</li> </ol>		
Using the Distances to 3 Points		7. Click DIST to measure the distance and add it to the		
1.	Click DIST (Figure (A) (3)) to turn on the tool.	previous measurement.		
2.	Click @ 4 times to show  don the display window (Figure © #4).	<ol> <li>View the total of the two measurements at the bottom of the display window (Figure C) (6).</li> </ol>		
3.	Point the laser (Figure (A) #1) at the highest point of the building or object whose height you need to measure (Figure (A) #1).	Subtracting Measurements		
		You can subtract one measurement from another.		
4.	Click DIST to measure the distance to the top of	1. Click IIST (Figure (A) (3)) to turn on the tool.		
	the tall object.	2. By default, distances are measured from the bottom		
5.	From the same point, aim the laser on a horizontal line straight ahead toward the building or object (Figure $(\mathbf{H})$ #2).	of the tool to a wall or object (Figure (E) (3)).		
		To measure distances from the <b>top</b> or <b>middle</b> of the		
6.	Click DIST to measure the distance.	open to measure from a corner), click I.		
7.	From the same point, aim the laser at the lowest point of the building or object (Figure $\bigoplus #3$ ).	<ol> <li>Point the laser at the top of the tool (Figure (A) (1)) toward the wall or object whose distance you need to</li> </ol>		
8.	Click DIST to measure the distance	measure.		

 Click DIST to measure the distance from the tool to the wall or object.

9. On the bottom line of the display window, view the

height of the building or object.

You can add two measurements to get a total

1. Click IIST (Figure (A) (3)) to turn on the tool.

2. By default, distances are measured from the bottom

Adding Measurements

measurement of the two distances.

F

 Indicate that you want to subtract the next measurement from this measurement.

- Click +/- twice.-----
- Click twice.----

6. Point the laser at the top of the tool toward the next wall or object.



 View the difference between the two measurements at the bottom of the display window (Figure C 6).

## Changing the Unit of Measure

Once the current measurement is taken (the device is not in Continuous Measure mode), you can set the unit of measure to fractional ft (602°9/16), inches (74 9/16 in), decimal ft (6.21 ft), decimal inches (3.21 in), or meters (1.894 m).



2. Click ft/m.

3. Click the desired unit of measure.

- 0'00" 0/00
- 0" 0/00
- 0'00" ft
- 0.00 in
- 0.000 m

Click (Q) to return to the previous screen.

## Using Your DW0165S With



If you have a DW0165S, you can use its Bluetooth<sup>®</sup> capability to pair it with the DeWALT<sup>®</sup> Tool Connect application on your cell phone or tablet, and then record accurate measurements in your floor plans.

- From either Concerner application to your cell phone or tablet.
- Using the DEWALT<sup>®</sup> Tool Connect application, capture the room or space for which you want to record the measurements, and build your floor plan.

- On the DW0165S keypad, click DIST to turn on the tool.
- If the Bluetooth<sup>®</sup> icon does not appear on the display window (Figure C 2), turn on Bluetooth<sup>®</sup>.
  - Click +/- get to Bluetooth option.
  - Click +/- select Bluetooth option.
- Use the DEWALT<sup>®</sup> Tool Connect application to pair your cell phone or tablet to the DW0165S.
- 6 Use the DW0165S to measure each wall in the room or space captured in the floor plan, and sync the measurements to the floor plan.
- Using the DEWALT<sup>®</sup> Tool Connect application, save the floor plan.

Once you have saved the floor plan, you can export it to one of several different file formats, including PDF, DXF, or JPG, and print it or email it to other people (your realtor, home center, etc.).

#### 8 Bluetooth

"THE BLUETOOTH<sup>®</sup> WORD MARK AND LOGOS ARE REGIS-TERED TRADEMARKS OWNED BY BLUETOOTH SIG, INC. AND ANY USE OF SUCH MARKS BY DEWALT INDUSTRIAL TOOL CO. IS UNDER LICENSE. OTHER TRADEMARKS AND TRADE NAMES ARE THOSE OF THEIR RESPECTIVE OWNERS."

### Turning Off the Sound

Each time you take a measurement, the tool will beep. You can turn off the beeps.

- 1. Click 🔅 .
- Click 
   I to display I to display
- Click Q to return to the previous screen.

## Turning Off the Tool

The tool can be turned off in either of these ways:

- If you do not use the tool for 90 seconds, it will automatically turn off.

## **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, for free, 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 Power Tool, Laser, or Nailer 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.

## **Error Codes**

Code	Description	Corrective Action
101	Received Signal Too Weak, Measuring Time Too Long	Use the target plate or change the target surface.
102	Received Signal Too High	Target is too reflective. Use the target plate or change the target surface.
201	Too Much Background Light	Reduce the background light on the target area.
202	Laser Beam Interrupted	Remove the obstacle and repeat the measurement.
203	Insufficient Power	Replace the batteries.
301	Temperature Too High	Allow the device to cool down to a temperature within the specified <b>Operating Temperature Range</b> .
302	Temperature Too Low	Allow the device to warm up to a temperature within the specified <b>Operating Temperature Range</b> .
401	Hardware Error	Switch the device on/off several times. If the error still occurs, return the defective device to the Service Center or distributor. Refer to the <b>Warranty</b> .
402	Unknown Error	Contact the Service Center or distributor. Refer to the Warranty.

If INFO appears on the display window with a Code number, perform the corresponding Corrective Action.

## E Specifications

Range	6in to 165ft (.15m to 50m)
Measuring Accuracy*	± 1/16in (± 1.5mm)*
Resolution**	1/16in (1mm)**
Laser Class	Class 2 (IEC/EN60825-1: 2007/2014)
Laser Type	≤ 1.0mW @ 620-690nm
Laser/Backlight Automatic Switch-off	After 30s
Unit Automatic Switch-off	After 90s
Continuous Measuring	Yes
Area	Yes
Volume	Yes
Pythagoras 2-Point	Yes
Pythagoras 3-Point	Yes
Endpiece to measure from corners or grooves	Yes. Flip open the endpiece at the bottom of the tool when you need to fit the tool into corners or grooves that are not at 180° angles. If a corner is at 90°, the endpiece can be used to hold the tool up against something.
Battery Life (3 x AAA)	Up to 3000 Measurements (2500 with § Bluetooth)
Dimension (H x D x W)	4.72 x 1.91 x 1.02in (120 x 48.5 x 26mm)
Weight (with Batteries)	9.88oz (280g)
Storage Temperature Range	13° F ~ 158° F (-25° C ~ +70 C)
Operating Temperature Range	32° F ~ 104° F (0° C ~ +40° C)

\*Measuring Accuracy depends on the current conditions:

· Under favorable conditions (good target surface and room temperature), up to 33ft (10m).

Under unfavorable conditions (bright sunlight, a very weak reflecting target surface, or large temperature fluctuations), the
error can increase by to ± 0.003 in/ft (± 0.25mm/m) for distances over 33ft (10m).

\*\*Resolution is the finest measurement you can see. In inches, that is 1/16". In mm, that is 1mm.

Caution—use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

#### Caution:

This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) fappareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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 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.



© 2017 DEWALT Industrial Tool Co., 701 East Joppa Road, Towson, MD 21286

Made in China

021474 December 2017