TOOLCRAFT 2865714 2-in-1 Laser Measuring Tape Instruction Manual

Contents

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Intended use

This product is a 2-in-1 laser measuring tape equipped with a 40 m (135 ft) digital laser measure and a 5 m (16 ft) tape measure. The digital laser features multiple measurement functions, including distance measurement, real-time measurement, area, volume, as well as 2-point Pythagoras and 3-point Pythagoras for indirect height or width measurements. The product is ideal for measuring distances between two surfaces, estimating carpets, tiles, measuring a wall for painting, or measuring the height of a wall without using a ladder. The product is intended for indoor use only. Do not use it outdoors. Contact with moisture must be avoided under all circumstances. If you use the product for purposes other than those described, the product may be damaged. Improper use can result in short circuits, fires or other hazards. The product complies with the statutory national and European requirements. For safety and approval purposes, you must not rebuild and/or modify the product. Read the operating instructions carefully and store them in a safe place. Make this product available to third parties only together with the operating instructions. All company names and product names are trademarks of their respective owners. All rights reserved. USB4®, USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum.

Delivery content

- Rechargeable 2-in-1 laser and tape measure
- USB-A to USB-C® charging cable (43 cm)
- Operating instructions

Latest product information

Download the latest product information at **www.conrad.com/downloads** or scan the QR code shown. Follow the instructions on the website.

Description of symbols

The following symbols are on the product/appliance or are used in the text:

Read the operating instructions carefully.

The symbol warns of hazards that can lead to personal injury.

The symbol warns of dangerous voltage that can lead to personal injury by electric shock.

The laser radiation symbol indicates hazards associated with making distance measurements with the built-in laser.

Safety instructions

Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling in this manual, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.

General information

WARNING: This product contains no user-serviceable parts. Do not open, modify, or repair the product yourself in any way. Modifying the product can result in hazardous exposure to laser radiation or injury. Do not use the product if it is damaged. All repairs must be performed by a qualified technician or an authorised repair centre. The device is not a toy. Keep it out of the reach of children and pets. Do not leave packaging material lying around carelessly. This may become dangerous playing material for children. If you have questions which remain unanswered by these operating instructions, contact our technical support service or other technical personnel. Maintenance, modifications and repairs must only be completed by a technician or an authorised repair centre.

Handling

Please handle the product carefully. Jolts, impacts or a fall even from a low height can damage the product.

Operation

Do not leave the product unattended when it is turned on. To avoid the risk of injury, always retract the tape measure slowly and carefully. Consult an expert when in doubt about the operation, safety or connection of the appliance. If it is no longer possible to operate the product safely, take it out of operation and protect it from any accidental use. DO NOT attempt to repair the product yourself. Safe operation can no longer be guaranteed if the product:

- is visibly damaged,
- is no longer working properly,
- has been stored for extended periods in poor ambient conditions or
- has been subjected to any serious transport-related stresses.

Laser beam

- When operating the laser equipment, always make sure that the laser beam is directed so that no one is in the projection area and that unintentionally reflected beams (e.g., from reflective objects) cannot be directed into areas where people are present.
- Laser radiation can be dangerous, if the laser beam or its reflection enters unprotected eyes. Therefore, before using the laser equipment, familiarise yourself with the statutory regulations and instructions for operating such a laser device.

- Never look into the laser beam and never point it at people or animals. Laser radiation can seriously damage your eyes.
- If laser radiation enters your eyes, close your eyes immediately and move your head away from the beam. If your eyes have been irritated by laser radiation, do not continue to carry out tasks with safety implications, such as working with machines, working from great heights or close to high voltage. Also, do not operate any vehicles until the irritation has completely subsided.
- Do not point the laser beam at mirrors or other reflective surfaces. The uncontrolled, reflected beam may strike people or animals.
- Never open the device. Setting or maintenance tasks must only be executed by a trained specialist familiar with potential hazards. Improperly executed adjustments might result in dangerous laser radiation.
- The product is equipped with a class 2 laser. Laser signs in different languages are included in the package. If the sign on the laser is not written in the language of your country, please affix the appropriate sign onto the laser.

Max. output: <1.0 mW
Wavelength: 620 - 690 nm
IEC/EN 60825-1: 2014

- **Caution**: if operation settings or procedures other than those described in these instructions are used, it could lead to exposure to dangerous radiation.

Operating environment
WARNING: Avoid using metal measuring tapes near electrical fittings to avoid the dangers of electric shock or electrocution.

- Do not place the product under any mechanical stress.
- Protect the product from extreme temperatures, strong jolts, flammable gases, steam and solvents.
- Protect the product from high humidity and moisture.
- Protect the product from direct sunlight.
- Do not switch the product on after it has been taken from a cold to a warm environment.
- The condensation that forms might destroy the product. Allow the product to reach room temperature before you use it.

Li-ion battery

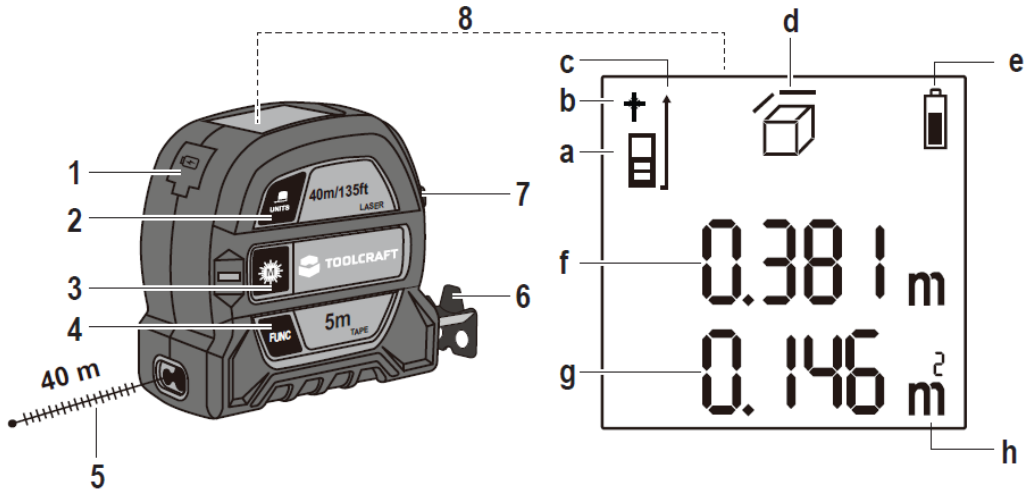
- The rechargeable battery is permanently built into the product and cannot be replaced.
- Never damage the rechargeable battery. Damaging the casing of the rechargeable battery might cause an explosion or a fire!
- Never short-circuit the contacts of the rechargeable battery. Do not throw the battery or the product into fire.

There is a danger of fire and explosion!

- Charge the rechargeable battery regularly, even if you do are not using the product. Due to the rechargeable battery technology being used, you do not need to discharge the rechargeable battery first.
- Never charge the rechargeable battery of the product unattended.
- When charging, place the product on a surface that is not heat-sensitive. It is normal that a certain amount of heat is generated during charging.

Connected devices
Also observe the safety and operating instructions of any other devices which are connected to the product.

Product overview

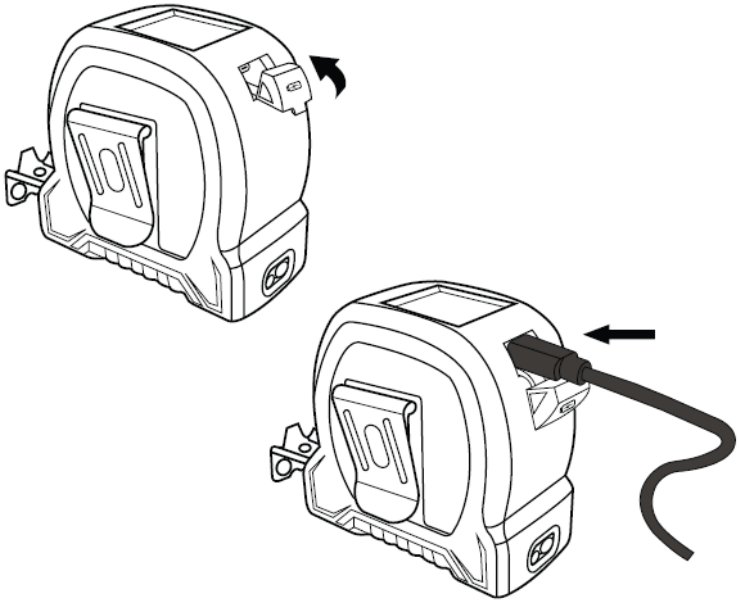


1 Charging input cover
2 UNITS Units / Reference point button
3 On/Off / Measure button
4 FUNC Function button
5 Laser beam output
6 Tape measure
7 Tape measure thumb lock
8 Display
a Distance / Real-time measurement icon
b Active laser indication
c Reference point indication
d Area / Volume / 2-Point Pythagoras / 3-Point Pythagoras icon
e Battery icon
f Secondary line (measurement)
g Main line (measurement / result)
h Unit of measurement

Using the tape measure

1. Press and hold the measure button for 5 seconds until the display and laser turn off.
2. Pull out the tape measure to start measuring.
3. Push the thumb lock down to lock the tape when required.
4. Retract the tape measure slowly and in a controlled manner after use. Use the thumb lock to help control the retraction speed, and guide the tape with the other hand as it retracts into the product. Keep fingers away from the edges of the metal tape to prevent cuts.

Charging the battery
Before first use, or when the display shows an empty battery icon, fully charge the built-in rechargeable battery. The charging time is 2 – 3 hours.



1. Open the charging input cover by gently lifting the tab on the cover, as illustrated. The cover is permanently attached to the product. Do not remove it.
2. Connect the USB charging cable (included) to the USB-C® input on the product.
3. Connect the other end of the charging cable to a USB power adaptor. Do not charge the battery via a USB port on your computer as the power supply will not be sufficient. The display will show the battery charging animation while the battery is charging, and will show a solid full battery icon when charging is complete.
4. Once fully charged, disconnect the charging cable and close the USB-C® charging input cover.

Turning the product on/off

WARNING: Do not look directly into the laser beam or project the laser beam directly into the eyes of others. Serious eye injury can result.

- To turn the product on, press the measure button. The display and laser will turn on.
- To turn the product off, press and hold the measure button for 5 seconds until the display and laser turn off.

Note:

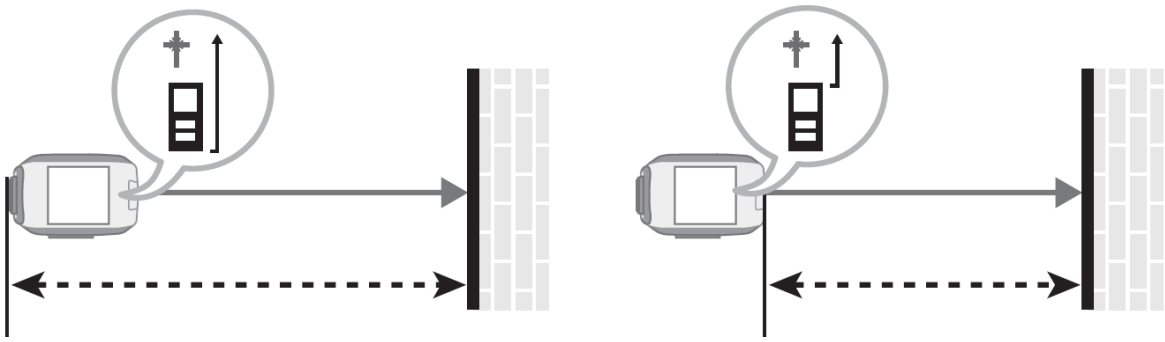
- The laser automatically turns off after 30 seconds of inactivity.
- The product automatically turns off after 2 minutes of inactivity to save battery power.
- If the laser automatically turns off during a short pause, press the measure button to activate the laser, and then press the button again to take the measurement.

Adjusting the settings

Setting the unit of measurement

Press and hold the UNITS units button for 3 seconds to select the preferred unit of measurement (m / ′ ″ / in / ft). The unit of measurement can also be switched after taking measurements.

Setting the laser reference point
The reference point of the laser is set to measure from the back of the product by default.



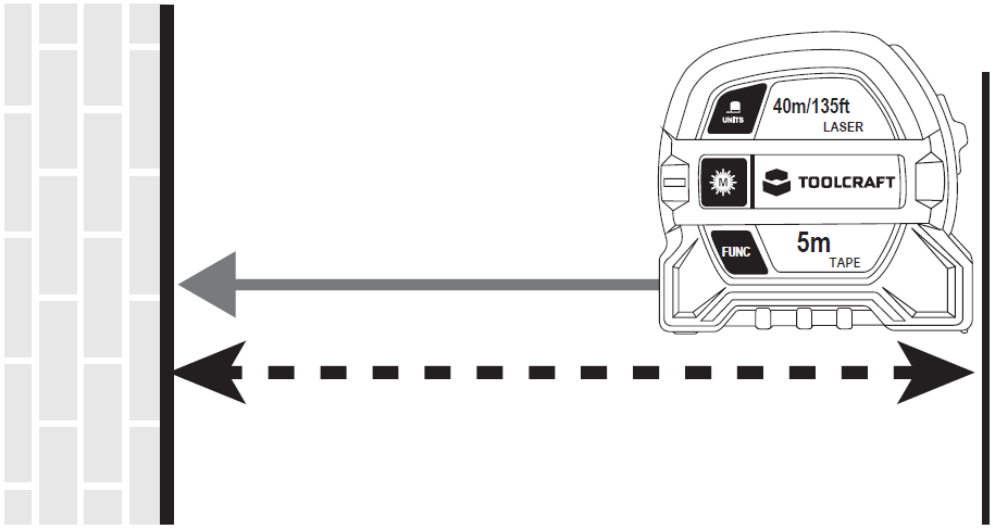
- When using the back reference point, place the back of the product against the starting point of measure (e.g. a wall).
- Use the UNITS button to switch the reference point of the laser to measure from the front or back of the product.

Using the laser measure

PRECONDITIONS:

- The product has sufficient battery.
- The reference point and the unit of measurement have been set.

Distance measurement mode
Use this mode to measure single distances.



1. Press the measure button to turn the product on.
2. Point the laser at the target surface and press the measure button to measure the distance. The measured distance shows on the display.
3. To measure another distance, press the measure button to activate the laser, and press the button again to take the measurement.

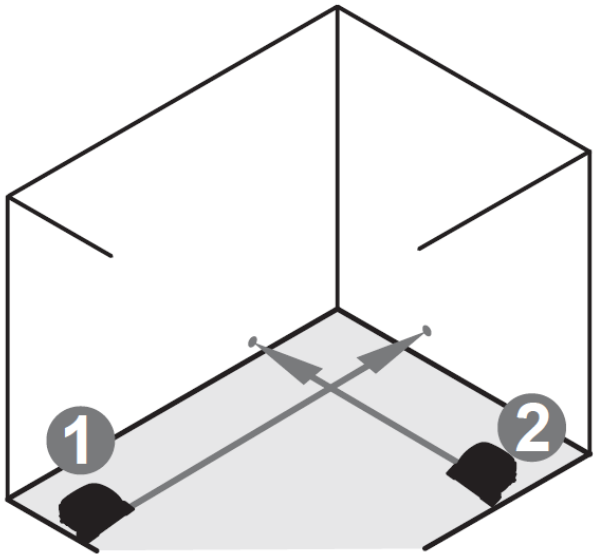
Real-time measurement mode

The real-time measurement mode instantly displays the distance as you aim the laser at different points on the target surface, or move the laser closer to or further from the target surface.

1. Press the measure button to turn the product on.
2. Press and hold the measure button for 3 seconds to activate the real-time measurement mode.
3. Point the real-time laser at the first target and press the measure button to record the distance. The measured distance shows on the display.
4. To measure another distance, press and hold the measure button for 3 seconds to activate the real-time laser. Press the button again to record the distance.
5. To exit real-time measurement mode, press the measure button.

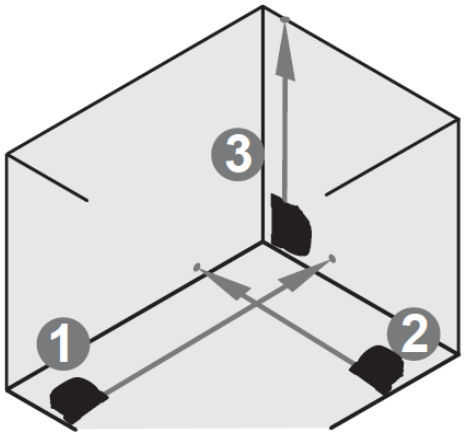
Area function
Calculate areas based on 2 measurements.

1. Press the FUNC function button to select Area.
2. Point the laser at the first target and press the measure button to record the distance.
3. Point the laser at the second target and press the measure button to record the distance. The display will show the result on the main line and the last measurement on the secondary line.



Volume function
Calculate volumes based on 3 measurements.

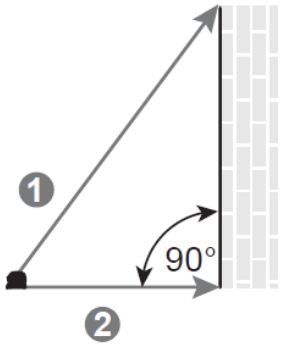
1. Press the FUNC function button to select Volume.
2. Point the laser at the first target and press the measure button to record the distance.
3. Point the laser at the second target and press the measure button to record the distance.
4. Point the laser at the third target and press the measure button to record the distance. The display will show the result on the main line and the last measurement on the secondary line.



2-Point Pythagoras function
Calculate the height or width based on 2 indirect measurements. For example, you can estimate the height of a wall without using a ladder.

1. Press the FUNC function button to select Pythagoras 2-point ( ).
2. Point the laser at the first target and press the M measure button to record the distance.
3. Point the laser at a 90° angle to the second target, and press the M measure button to record the distance.

→ The display will show the result on the main line and the last measurement on the secondary line.

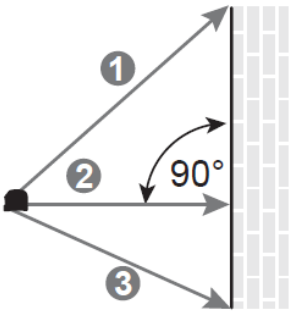


11.6 3-Point Pythagoras function

Calculate the height or width based on 3 indirect measurements.

1. Press the FUNC function button to select Pythagoras 3-point ( ).
2. Point the laser at the first target and press the M measure button to record the distance.
3. Point the laser at a 90° angle to the second target, and press the M measure button to record the distance.
4. Point the laser at the third target and press the M measure button to record the distance.

→ The display will show the result on the main line and the last measurement on the secondary line.



Measuring accuracy
Observe the following (favourable) conditions to improve accuracy:

Favourable conditions	Unfavourable conditions
Low ambient light	Strong sunlight
White, diffusive, reflective targets	Poorly reflective targets
Temperature within: 0 to +40 °C	Temperature outside: 0 to +40 °C

Troubleshooting

ISSUE	CAUSE	ACTION
Failure to switch on	Shock protection switched product off.	Restart the product.
	Low battery.	Recharge the product.
	Software crashed.	Recharge the product to restart.
All dashes shows o n display	The laser beam is moving too fast.	Hold the product steady, and move the laser slowly. Place the product on a firm surface.
	The object is out of rated range.	Measure within rated range.
	Received signal too weak/ Measuring time too long.	Select another target surface.
	Received signal too strong (target is too reflective).	Place a white sheet of paper on the target s urface.
	Ambient light is too strong.	Shadow target area.
Code 204 warning	Trigonometric function function calculation error.	Measure correctly.

Cleaning and care

Important:

- Do not use harsh cleaning agents, rubbing alcohol or other chemical solutions. They damage the housing and can cause the product to malfunction.
- Do not immerse the product in water.

1. Disconnect the product from the power supply.
2. Clean the product with a lint-free, lightly moistened cloth. Dry completely before storing.

Disposal
This symbol must appear on any electrical and electronic equipment placed on the EU market. This symbol indicates that this device should not be disposed of as unsorted municipal waste at the end of its service life. Owners of WEEE (Waste from Electrical and Electronic Equipment) shall dispose of it separately from unsorted municipal waste. Spent batteries and accumulators, which are not enclosed by the WEEE, as well as lamps that can be removed from the WEEE in a non-destructive manner, must be removed by end users from the WEEE in a non-destructive manner before it is handed over to a collection point. Distributors of electrical and electronic equipment are legally obliged to provide free take-back of waste. Conrad provides the following return options free of charge (more details on our website):

- in our Conrad offices
- at the Conrad collection points
- at the collection points of public waste management authorities or the collection points set up by manufacturers or distributors within the meaning of the ElektroG

- End users are responsible for deleting personal data from the WEEE to be disposed of.
- It should be noted that different obligations about the return or recycling of WEEE may apply in countries outside of Germany.

Technical data

Power supply

- Input voltage/current…….5 V/DC, 2 A (max. 10 W)
- Rechargeable battery……..Li-ion 3.7 V 300 mAh
- Battery lifecycle……..<5000 measurements

Laser Measure

- Measuring range ……0.35 – 40 m (1.15 – 135 ft)
- Measuring accuracy…….±3 mm (±1/8 in)
- Smallest unit displayed ……..1 mm (1/16 in)
- Units of measurement ……. Metric: 0.000 m
- Imperial: 0.00 ft, 0 1/16 in, 0′ 00″ 1/16
- Laser diode……620 – 690 nm
- Max. output……<1 mW
- Laser class……Class 2

Tape measure

- Measuring range……..0 – 5 m (0 – 16 ft)
- Accuracy class…….Class II
- Units of measurement…….Metric, Imperial
- Tape blade……. 25 mm extra wide blade, 2.5 m standout, nylon coated, printed on both sides

Environment

- Operating conditions…….0 to +40 °C, 10 – 90 % RH (non-condensing)
- Storage conditions…….-10 to +60 °C, 10 – 90 % RH (non-condensing)

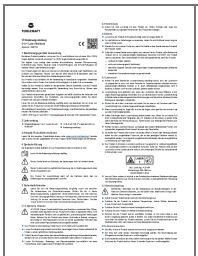
Other

- Display (W x H)……25 x 25 mm
- Dimensions (L x W x H)……..89 x 85 x 50 mm with clip
- Weight……..377 g

Measuring range and accuracy:

- Valid for measurements in favourable conditions ≤10 m.
- For distances >10 m, measurement accuracy ±4 mm/m.
- For further details see section: “12 Measuring accuracy”.

Documents / Resources

	TOOLCRAFT 2865714 2-in-1 Laser Measuring Tape [pdf] Instruction Manual 2865714 2-in-1 Laser Measuring Tape, 2865714, 2-in-1 Laser Measuring Tape, Laser Measuring Tape, Measuring Tape

References

- Conrad Electronic » All parts of success
- Download center
- User Manual