

## **INSTRUCTIONS**

LASER DISTANCE MEASURING DEVICE









## **Table of contents**

Information on the use of these instructions	2
Safety	2
Information about the device	4
Transport and storage	7
Operation	7
Maintenance and repair	13
Errors and faults	14
Disposal	14

## Information on the use of these instructions

## **Symbols**



## Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



### Warning of laser radiation

This symbol indicates dangers to the health of persons due to laser radiation.



#### Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



#### **Caution**

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

## Notice

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



#### Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.



#### Follow the manual

Information marked with this symbol indicates that the instructions must be observed.

You can download the current version of the instructions and the EU declaration of conformity via the following link:



BD21



https://hub.trotec.com/?id=31523



BD26

https://hub.trotec.com/?id=31523

## Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



#### Warning

## Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future

**reference.**Do not use the device in potentially explosive rooms or

- areas and do not install it there.
- Do not use the device in an aggressive atmosphere.
- Do not immerse the device in water. Do not allow liquids to penetrate into the device.
- The device may only be used in dry surroundings and must not be used in the rain or at a relative humidity exceeding the operating conditions.
- Protect the device from permanent direct sunlight.
- Do not open the device.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Avoid looking directly into the laser beam.
- Never point the laser beam at people or animals.
- Use batteries of type AAA.
- Do not insert rechargeable batteries into the remote control.
- Never charge batteries that cannot be recharged.



- Different types of batteries and new and used batteries must not be used together.
- Insert the batteries into the battery compartment according to the correct polarity.
- Remove discharged batteries. Batteries contain materials hazardous to the environment. Dispose of the batteries according to the national regulations.
- Remove the batteries from the remote control if you will not be using the device for a longer period of time.
- Remove the batteries from the device if you will not be using the device for a longer period of time.
- Never short-circuit the supply terminal in the battery compartment!
- Do not swallow batteries! If a battery is swallowed, it can cause severe internal burns within 2 hours! These burns can lead to death!
- If you think batteries might have been swallowed or otherwise entered the body, seek medical attention immediately!
- Keep new and used batteries and an open battery compartment away from children.
- If the battery compartment does not close securely, stop using the product via the remote control.
- Only use the device, if sufficient safety precautions were taken at the surveyed location (e.g. when performing measurements along public roads, on building sites etc.).
   Otherwise do not use the device.
- Observe the storage and operating conditions (see Technical data).

#### Intended use

Only use the device for measuring distances, areas and volumes by means of the integrated laser and within the measuring range specified in the technical data. Observe and comply with the technical data.

Any use other than the intended use is regarded as misuse.

## Reasonably foreseeable misuse

The device must not be pointed at people or animals. Do not use the device in potentially explosive areas. Do not use the device underwater.

Any unauthorised changes, modifications or alterations to the device are forbidden.

#### Personnel qualification

People who use this device must:

- be aware of the dangers that occur when working with laser measuring devices.
- have read and understood the instructions, especially the Safety chapter.

## Safety signs and labels on the device

#### **Notice**

Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.

The following safety signs and labels are attached to the device:

Safety symbol	Meaning
2	The warning sign is located on the back of the device and indicates that the device is equipped with a class 2 laser.  Do not look directly into the laser beam or the opening from which the laser beam emerges!
(2) 2 162 (***)	The warning sign is located on the back of the device.  Do not look directly into the laser beam or the opening from which the laser beam emerges!

## **Residual risks**



## Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing!

Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.



#### Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



## Warning of laser radiation

Laser class 2, P max.: < 1 mW,  $\lambda$ : 400-700 nm, EN 60825-1:2014

Do not look directly into the laser beam or the opening from which it emerges.

Never point the laser beam at people, animals or reflective surfaces. Even brief eye contact can lead to eye damage.

Examining the laser output aperture by use of optical instruments (e.g. magnifying glass, magnifiers and the like) entails the risk of eye damage.

When working with a laser of class 2, observe the national regulations on wearing eye protection.



## Warning

Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.



#### Warning

The device is not a toy and does not belong in the hands of children.



## Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



#### Caution

Keep a sufficient distance from heat sources.

#### **Notice**

To prevent damages to the device, do not expose it to extreme temperatures, extreme humidity or moisture.

#### **Notice**

Do not use abrasive cleaners or solvents to clean the device.

## Information about the device

## **Device description**

The laser distance measuring device BD21 / BD26 is used to determine distances, areas and volumes in interior spaces. Indirect measurements are carried out employing the Pythagoras function.

The device is equipped with operating elements for the different measuring functions. The multi-line and optionally also illuminated display indicates the determined values.

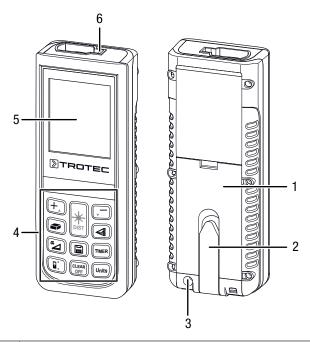
## **Measuring distance**

The range of the device can be gathered from the Technical data chapter. Under certain conditions – e.g. at night, in twilight or when the target is hidden in the shade – greater distances are possible even without target plate. During the day use a target plate to increase the distance for poorly reflecting targets.

## **Target surfaces**

There might be measurement errors when the laser encounters colourless liquids (e.g. water), dust-free glass, styrofoam or other semi-permeable materials. The measurement result may also be falsified if the laser encounters a high-gloss surface and is deflected by it. Non-glossy, non-reflective or dark surfaces can extend the measurement duration.

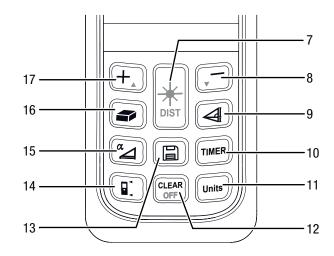
## **Device depiction**



No.	Designation
1	Battery compartment cover
2	Multifunctional end piece
3	Tripod thread
4	Operating elements
5	Display
6	Laser

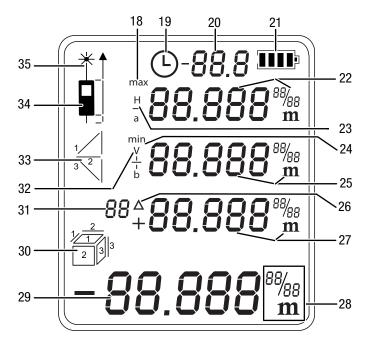


## **Operating elements**



No.	Button	Function
7	Measure	Press briefly: switching the device on/
		measuring
		Press and hold: starting continuous
		distance measurement
8	Minus	Press briefly: subtracting the measured
		value/
		changing to the previous value
		Press and hold: switching the acoustic signal on/off
9	Indirect	Starting indirect measurement
10	Timer	Press briefly: starting the timer
		Press and hold: setting the timer
11	Units	Changing the unit (ft, in, m)
12	CLEAR/OFF	Press briefly: deleting the value
		Press and hold: switching the device off
13	History	Calling up the history
14	Reference point	Changing the reference point
15	Inclination	Press briefly: displaying the inclination
		Press and hold: hiding the inclination
16	Area/space	Press once: starting area measurement
		Press twice: starting volume
		measurement
17	Plus	adding the measured value/
		changing to the next value

## Display



No.	Indication	Function	
18	Max	Maximum measured value is displayed	
19	Timer	Timer active	
20	Angle	Indicates the inclination angle of the device	
21	Battery status	indicates the battery charge level	
22	Detail A	Detailed measured value with unit: maximum measured value/ horizontal measuring distance/ saved measured value/ partial measured values for calculations	
23	Horizontal	Horizontal measuring distance is displayed	
24	Min	Minimum measured value is displayed	
25	Detail B	Detailed measured value with unit: minimum measured value/ vertical measuring distance/ saved measured value/ partial measured values for calculations	
26	Delta	Delta value is displayed delta = maximum minus minimum	
27	Detail C	Detailed measured value with unit: delta measured value/ saved measured value/ partial measured values for calculations	
28	Unit	Indicates the current measuring unit: ft³, ft², in, m, m³, m²	



No.	Indication	Function	
29	Measurement value display	Last measured value/ result of a calculation	
30	Space	☐ Area measurement ☐ Volume measurement	
31	Counter	Current timer/ number of the saved measured value displayed in <i>Detail C</i> (27)	
32	Vertical	Vertical measuring distance is displayed	
33	Indirect measurement	Indirect measurement (two auxiliary measurements)	
		Indirect measurement (three auxiliary measurements)	
34	Reference point	Front reference point	
		Rear reference point	
		Reference point at the end of the end piece	
35	Laser	Laser active	

## **Technical data**

Parameter	Value	
Model:	BD21 / BD26	
Weight:	150 g	
Dimensions (H x W x D):	118 x 49 x 27 mm	
Measuring range:	BD21: 0.05 to 70 m BD26: 0.05 to 120 m	
Accuracy:	±2 mm*	
Measuring range resolution:	1 mm	
Horizontal measuring range:	±90°	
Horizontal measuring range accuracy:	±0.3°	
Number of recordings logged in the history:	10	
Type of protection:	IP41	
Operating temperature:	0 °C to 40 °C	
Storage temperature:	-20 °C to 70 °C	
Laser output:	< 1 mW (620–690 nm)	
Laser class:	II	
Laser point Ø	10 m distance: 6 mm 50 m distance: 30 mm 100 m distance: 60 mm	
Power supply:	2 x Alkaline LR03 AAA batteries	
Automatic switch-off of the device:	After approx. 3 minutes of non-use	
Automatic switch-off of the laser:	After approx. 30 seconds of non-use	
*under favourable conditions (good target surface, room temperature) up to 10 m		

## Scope of delivery

- 1 x Laser distance measuring device (without batteries)
- 1 x Device bag
- 1 x Wrist strap
- 1 x Quick guide



## **Transport and storage**

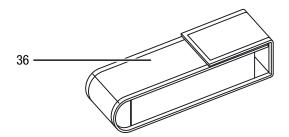
#### **Notice**

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

## **Transport**

Use the supplied device bag (36) to transport the device.



## **Storage**

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- protected from dust and direct sunlight
- at the temperature specified in the technical data
- · Batteries are removed from the device
- Secured in the supplied device bag

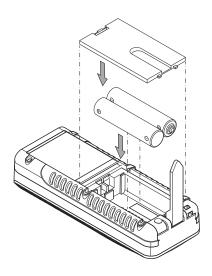
## **Operation**

## **Inserting the batteries**

#### **Notice**

Make sure that the surface of the device is dry and the device is switched off.

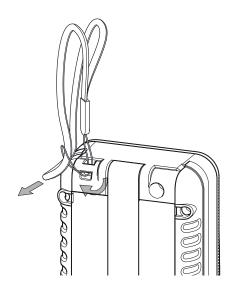
- 1. Open the cover of the battery compartment (1).
- 2. Insert two batteries of type AAA (1.5 V, not included in the scope of delivery) into the battery compartment with correct polarity (+/-).



3. Refit the battery compartment cover onto the device.

## Attaching the wrist strap

 Attach the wrist strap to the designated recess at the rear of the device.



## Switch-on

- 1. Briefly press the *Measure* button (7).
  - ⇒ The display will be switched on and the device ready for operation.



## **Basic settings**

## Switching the acoustic signal on/off

- 1. Press and hold the *Minus* button (8) to switch the acoustic signal on or off.
  - ⇒ The switch-on/off process is confirmed by a brief acoustic signal.

## Adjusting the reference point

The device always measures the total distance starting at the reference point. This means that if the rear end of the device is set as reference point, the length of the device will be part of the measurement. By default the reference point is set to the rear of the device. You can, however, also relocate the reference point to the front part of the device. Please proceed as follows:

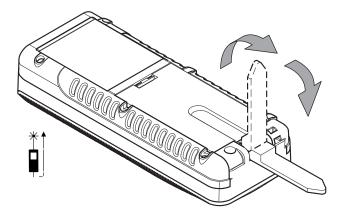
- 1. Press the *Reference point* button (14) to relocate the reference point to the front end of the device.
  - ⇒ An acoustic signal is emitted when the reference point is relocated.
  - ⇒ The *Reference point* display (34) indicates the selected reference point.

When switching the device off and then on again, the reference value will automatically be relocated to the rear end of the device.

## Using the multifunctional end piece

The device is equipped with a multifunctional end piece (2), which you can use e.g. for measurements at corners. It serves for device stabilization. Please proceed as follows to use the end piece:

- 1. Fold out the end piece (2).
- 2. **BD21**: If necessary, press the *Reference point button* (14) several times until the symbol appears in the *Reference point* display (34).
  - ⇒ The reference point is set to the end piece and the length of the end piece is taken into account during the measurement.
- 3. **BD26**: The position of the end piece and the associated reference point are automatically recognized by the device.
  - ⇒ The symbol automatically appears in the *Reference* point display (34).



## Changing the units



#### Info

If no measurement has been performed yet and if you want to switch to another unit, there will be no unit indication at first if you select **ft in**. Only if a measurement is performed or if measured values are already available will the measured values be displayed in the xx'yy'' format.

- 1. Briefly press the *Units* button (11) several times to switch between the units for the measured values. The unit is displayed in the *Unit* display (28) behind the measurement value display (29) as well as behind the three additional measurement value displays (22, 25, 27). You can set the following units one after the other:
  - ⇒ m
  - ⇒ ft in
  - $\Rightarrow$  in
  - ⇒ ft

## Displaying the inclination angle

- 1. Briefly press the *Inclination* button (15).
  - ⇒ The inclination angle of the device is displayed in the *Angle* indication (20).

## Calling up a measured value in the device history

The device automatically saves the last 10 measured values. The saved measured values can be called up as follows:

- 1. Press the *History* button (13) to call up the history.
  - ⇒ The indications *Detail A* (22), *Detail B* (25) and *Detail C* (27) show the three most recently saved measured values.
- Briefly press the *Minus* button (8) or the *Plus* button (17) to navigate through the history and call up the saved measured values.
- 3. Briefly press the *CLEAR/OFF* button (12) or the *Measure* button (7) to return to the basic measuring mode.

## Setting the timer

The device is provided with an internal timer, which can be used to set a delay after which the measurement begins. The timer can be used for all measuring operations.

- 1. Briefly press the *Timer* button (10) to activate a delay of 5 seconds.
  - ⇒ The countdown for the selected time appears in the *Counter* indication (31).
- 2. Press and hold the *Timer* button until the desired time is displayed (30 seconds max.).
- 3. Let go of the *Timer* button to start the timer.
  - ⇒ The countdown in the *Counter* indication (31) starts.
  - ⇒ The last 5 seconds are each accompanied by an acoustic signal.
  - ⇒ After the expiration of this time the measurement is performed.



## **Carrying out measurements**



#### Warning of laser radiation

# Laser class 2, P max.: < 1 mW, $\lambda$ : 400-700 nm, EN 60825-1:2014

Do not look directly into the laser beam or the opening from which it emerges.

Never point the laser beam at people, animals or reflective surfaces. Even brief eye contact can lead to eye damage.

Examining the laser output aperture by use of optical instruments (e.g. magnifying glass, magnifiers and the like) entails the risk of eye damage.

When working with a laser of class 2, observe the national regulations on wearing eye protection.



#### Info

Before carrying out measurements, make sure that the correct reference point is selected. By default, the rear reference point is selected. The reference point should not be changed in the course of a measurement!

#### **Notice**

You can cancel an ongoing measurement at any time by pressing the *CLEAR/OFF* button (12).

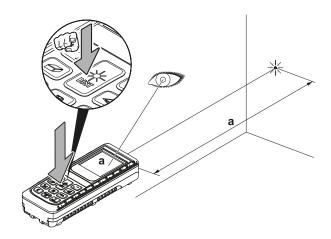
#### **Notice**

For measurements with several measured values, you can delete the measured values step by step by pressing the *CLEAR/OFF* button (12).

- 1. You can carry out measurements in the following measuring modes:
  - ⇒ Single distance measurement:
    - you can add or subtract measured values
    - you can perform a non-stop measurement with MAX/MIN/current value
  - ⇒ Area measurement
  - ⇒ Volume measurement
  - ⇒ Indirect height measurement
  - ⇒ Twofold indirect height measurement

## Performing a single distance measurement

- 1. Briefly press the *Measure* button (7) to activate the laser.
  - ⇒ The *Laser* indication (35) appears.
- 2. Point the laser at the target area.
- 3. Briefly press the *Measure* button again to perform a distance measurement.
  - ⇒ The measured value is displayed in the measurement value display (29).



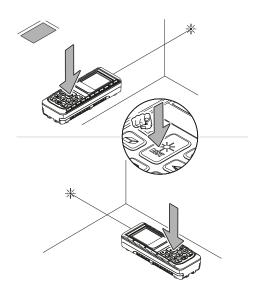
## Adding / subtracting measured values

- 1. Carry out a single distance measurement.
- 2. Press the *Plus* button (17) to add the next measured value to the previous one.
  - Press the *Minus* button (8) to subtract the next measured value from the previous one.
- 3. Press the *Measure* button (7) to determine the next measured value.
  - ⇒ The individual measured values will be indicated in the upper detailed displays.
  - ⇒ The overall result will be indicated in the measurement value display (29).



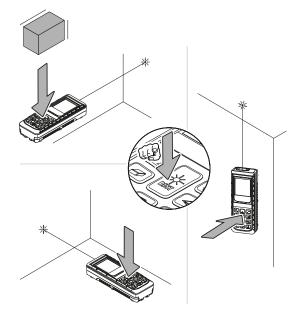
## Performing an area measurement

- 1. Briefly press the *Area/space* button (16) once.
  - ⇒ The symbol for area measurement is displayed in the *Space* indication (30).
- 2. Briefly press the *Measure* button (7) to carry out the first measurement (e.g. length).
- 3. Briefly press the *Measure* button again to carry out the second measurement (e.g. width).
  - ⇒ Upon pressing the *Measure* button for the second time, the device independently calculates the area and displays this value in the measurement value display (29). The most recently measured value will be indicated in one of the upper detailed displays.



## Performing a volume measurement

- 1. Briefly press the *Area/space* button (16) twice.
  - ⇒ The ☐ symbol for volume measurement is displayed in the *Space* indication (30).
  - ⇒ The side to be measured is displayed flashing in the *Space* indication.
- 2. Briefly press the *Measure* button (7) to carry out the first measurement (e.g. length).
- 3. Briefly press the *Measure* button again to carry out the second measurement (e.g. width).
- 4. Briefly press the *Measure* button again to carry out the third measurement (e.g., height).
  - ⇒ Upon pressing the *Measure* button for the third time, the device independently calculates the volume and displays this value in the measurement value display (29). The most recently measured values will be indicated in one of the detailed displays.





## Performing a continuous, MIN or MAX measurement

Use the non-stop measuring function to correlate measurements e.g. with construction drawings. With this measurement method the device can be moved closer toward the target with the measured value being recalculated roughly every 0.5 seconds. You can use the function for performing the following measurements, for example:

- measuring a diagonal (MAX value)
- determining the perpendicular length to a wall/floor area (MIN value)
- marking a defined value for a distance (e.g. a measurement from a ground plan)

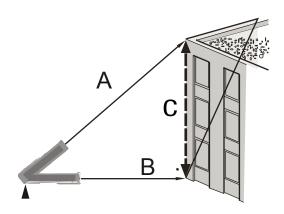


- 1. Press and hold the *Measure* button (7) until an acoustic signal can be heard.
  - ⇒ The *Laser* indication (35) appears.
  - ⇒ The *Max* (18), *Min* (24) and *Delta* (26) indications appear next to the corresponding detailed displays.
  - ⇒ The maximum value is shown in the Detail A indication (22), the current minimum value in the Detail B indication (25) and the current delta value in the Detail C indication (27).
- 2. With reference to the target point, move the device slowly back and forth or up and down (e.g. in a corner of a room).
- 3. Briefly press the *Measure* button to terminate the continuous measurement.
  - ⇒ The final maximum value, minimum value and delta value are shown in the respective detailed displays.

## **Indirect height measurement (Pythagoras)**

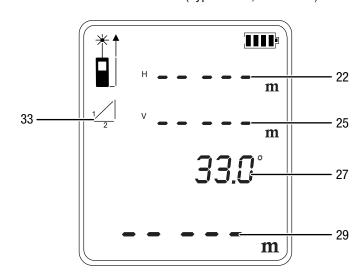
Using this method the length of an unknown straight-line segment can be determined via the Pythagorean Theorem. This method is suitable for e.g. height measurements.

The measurement result is calculated by determining the distance A and the inclination angle (standard setting) or by determining the distances A and B.



Measurement with distance A and inclination angle:

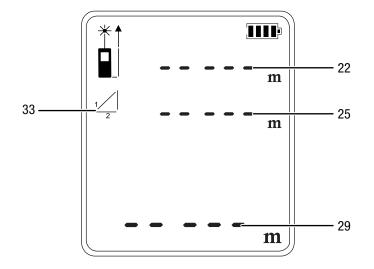
- ✓ The lines B and C meet at right angles.
- 1. Briefly press the *Indirect* button (9) once.
  - ⇒ The 🖄 symbol is displayed in the *Indirect measurement* indication (33).
  - ⇒ The inclination angle is shown in the *Detail C* indication (27).
  - ⇒ The bar with number 1 (hypotenuse, distance A) flashes.



- 2. Aim the device at the highest point and briefly press the Measure button (7) once to perform a measurement. Make sure to hold the device as steady as possible and place it level on the ground with the two rear edges. The position at the two rear edges must not be changed during the measurements!
  - ⇒ Both measurement and calculation of distance C are effected.
  - ⇒ The *Horizontal* indication (23) appears and the horizontal distance (B) is shown in the *Detail A* indication (22).
  - ⇒ The *Vertical* indication (32) appears and the vertical distance (A) is shown in the *Detail B* indication (25).
  - ⇒ The distance C to be determined is displayed as result in the measurement value display (29).

## Measurement with distances A and B:

- ✓ The lines B and C meet at right angles.
- 1. Briefly press the *Indirect* button (9) once.
  - ⇒ The 🗐 symbol is displayed in the *Indirect measurement* indication (33).
  - ⇒ The inclination angle is shown in the *Detail C* indication (27).
  - ⇒ The bar with number 1 (hypotenuse, distance A) flashes.
- 2. Press and hold the *Inclination* button (15).
  - $\Rightarrow$  No angle is shown in the *Detail C* indication.

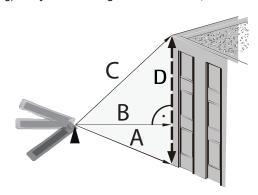


- 3. First, aim the device at the highest point and briefly press the *Measure* button (7) once to perform a measurement. Make sure to hold the device as steady as possible and place it level on the ground with the two rear edges. The position at the two rear edges must not be changed during the measurements!
  - ⇒ The length of distance A is displayed in the *Detail A* indication (22).
- 4. Align the device horizontally (distance B) and briefly press the *Measure* button once to measure the horizontal distance.
  - ⇒ The length of distance B is displayed in the *Detail B* indication (25).
  - ⇒ The distance C to be determined is displayed as result in the measurement value display (29).

## Twofold indirect height measurement

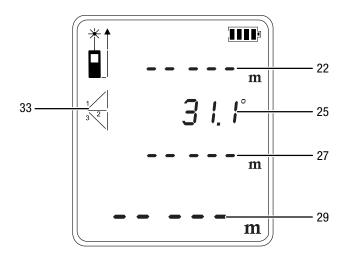
This method is suitable for e.g. height measurements.

The measurement result is calculated by determining the distances A and C as well as the inclination angle (standard setting) or by determining the distances A, B and C.



Measurement with distances A, C and inclination angle:

- ✓ The lines B and D meet at right angles.
- 1. Briefly press the *Indirect* button (9) twice.
  - ⇒ The symbol is displayed in the *Indirect measurement* indication (33).
  - ⇒ The inclination angle is shown in the *Detail B* indication (25).
  - ⇒ The bar with number 1 (hypotenuse, distance C) flashes.

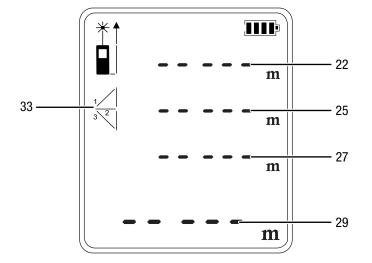




- 2. First, aim the device at the highest point and briefly press the *Measure* button (7) once to perform a measurement. In doing so, hold the device as steady as possible. The alignment of the device in relation to the reference point must not be changed during the measurements!
  - ⇒ The length of distance C is displayed in the *Detail A* indication (22).
- 3. Aim the device at the lowest point and briefly press the *Measure* button once to perform a measurement.
  - ⇒ The length of distance A is displayed in the *Detail C* indication (27).
  - ⇒ The inclination angle is shown in the *Detail B* indication (25).
  - ⇒ The distance D to be determined is displayed as result in the measurement value display (29).

Measurement with distances A, B and C:

- ✓ The lines B and D meet at right angles.
- 1. Briefly press the *Indirect* button (9) twice.
  - ⇒ The symbol is displayed in the *Indirect measurement* indication (33).
  - ⇒ The inclination angle is shown in the *Detail B* indication (25).
  - ⇒ The bar with number 1 (hypotenuse, distance C) flashes.
- 2. Press and hold the Inclination button (15).
  - $\Rightarrow$  No angle is shown in the *Detail B* indication.



- 3. First, aim the device at the highest point and briefly press the *Measure* button (7) once to perform a measurement. In doing so, hold the device as steady as possible. The alignment of the device in relation to the reference point must not be changed during the measurements!
  - ⇒ The length of distance C is displayed in the *Detail A* indication (22).
- 4. Align the device horizontally and briefly press the *Measure* button (7) once to measure the horizontal distance.
  - ⇒ The length of distance B is displayed in the *Detail B* indication (25).
- 5. Aim the device at the lowest point and briefly press the *Measure* button once to perform a measurement.
  - ⇒ The length of distance A is displayed in the *Detail C* indication (27).
  - ⇒ The distance D to be determined is displayed as result in the measurement value display (29).

#### Switch-off

- 1. Press and hold the CLEAR/OFF button (12).
  - ⇒ The device will be switched off.

The device automatically switches off after approx. 3 minutes of non-use.

## **Maintenance and repair**

#### **Battery change**

A battery change is required when the error message *INFO 203* appears on the display, when the device can no longer be switched on or when the *Battery status* indication (21) flashes (see chapter Inserting the batteries).

#### Cleaning

Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners, but only clean water to moisten the cloth.

#### Repair

Do not modify the device or install any spare parts. For repairs or device testing, contact the manufacturer.



## **Errors and faults**

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

The following fault indications can appear in the measurement value display (29) together with the word *INFO*:

Display	Cause	Remedy
101	The reception of the reflected signal is too weak.	Repeat measurement on another surface with better reflective properties or use a
102	The reception of the reflected signal is too strong.	target plate.
201	The ambient light is too intense.	Change the ambient light conditions for the measurement.
203	The batteries are almost empty.	Change the batteries, see chapter Battery change.
301	The temperature is too high.	Allow the device to cool down. Observe the permissible operating temperature according to the Technical data chapter.
302	The temperature is too low.	Allow the device to warm up. Observe the permissible operating temperature according to the Technical data chapter.
401	Hardware fault	Repeatedly switch the device on and off. If the symbol does not disappear, please contact your retailer.
402	Calculation error	Repeat the measurement. Pay attention to the measurement sequence and position of the device.

## **Disposal**

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.

The icon with the crossed-out waste bin on waste electrical or electronic equipment is taken from Directive 2012/19/EU. It states that this device must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website https://hub.trotec.com/?id=45090. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

In the European Union, batteries and accumulators must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.

## **Only for United Kingdom**

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) and the Waste Batteries and Accumulators Regulations 2009 (SI 2009/890) (as amended), devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

#### Trotec GmbH

Grebbener Str. 7
D-52525 Heinsberg
1+49 2452 962-400
4+49 2452 962-200

info@trotec.com www.trotec.com