

ITEM #0805836

50 FT LASER MEASURE MODEL #KB50FT

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ATTACH YOUR RECEIPT HERE

Serial Number \_\_\_\_\_Purchase Date \_\_\_\_



# Questions, problems, missing parts?

Before returning to your retailer, call our customer service department 1-888-3KOBALT, 8 a.m. - 8 p.m., EST, Monday - Friday.

# TECHNICAL SPECIFICATIONS

Laser	λ=630-660 nm, Class <b>II</b> laser, maximum laser output<1mW
Measuring range (typically)	2 inch - 50 feet (0.05-15 M)*
Measuring accuracy (typically)	± 1/8 inch (± 3 mm)*
Smallest unit displayed	1/16 inch (1 mm)
Automatic switch off	180 seconds
Estimated battery life	>2,500 single measurements
Optimum operating temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage temperature	-4 °F to 149 °F (-20 °C to 65 °C)
Relative air humidity, max.	90 %
Batteries	2 x 1.5V alkaline AAA

<sup>\*</sup>Important: Under unfavorable conditions, such as in bright sunlight or when measuring poorly reflecting or very rough surfaces, the tool's measuring range and accuracy will be reduced.

### SAFETY INSTRUCTIONS

Working safely with the measuring tool is possible only when the operating and safety information are read completely and instructions contained therein are strictly followed. Never make warning labels on the measuring tool unrecognizable.

### SAVE THESE INSTRUCTIONS

### **A CAUTION**

The use of other operating or adjusting equipment or the application of other processing methods than those mentioned here can lead to dangerous radiation exposure.

# **SAFETY INSTRUCTIONS**

#### **A WARNING**



ASER RADIATION. Do not direct the laser beam at persons or animals and do not stare into laser beam yourself. Class II

laser product. Turn the laser beam on only when using this tool.

- DO NOT remove or deface any product labels.
- Avoid direct eve exposure. The laser beam can cause flash blindness.
- DO NOT operate the tool around children or allow children to operate the tool.
- DO NOT place the tool in a position that may cause anyone to stare at the laser beam, whether intentionally or unintentionally.
- DO NOT use any optical tools such as, but not limited to, telescopes or transits to view the laser beam. Serious eve injury could result.
- DO NOT use on bright, shiny reflective surfaces such as sheet steel or similar reflective surfaces. The shiny surface could reflect the beam back toward the operator.
- Always turn the laser tool off when not in use. Leaving the tool on increases the risk of someone inadvertently staring into the laser beam.
- Always remove the batteries when cleaning the laser light aperture to laser lens
- Take care to recognize the accuracy and range of the device. Measurement may not be accurate if used beyond the rated range of the device.
- Always position the laser tool securely. Damage to the laser tool and/or serious injury to the user could result if the laser tool falls.
- DO NOT attempt to modify the performance of this laser device in any way. This may result in a dangerous exposure to laser radiation.
- DO NOT attempt to repair or disassemble the laser-measuring tool. If unqualified persons attempt to repair this product, serious injury may occur, Any repair required on this laser product should be performed only by qualified service personnel.
- Use of other accessories that have been designed for use with other laser tools could result in serious injury.

# **SAFETY INSTRUCTIONS**

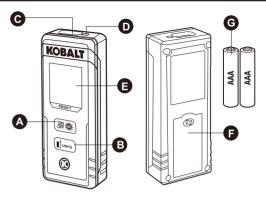
- DO NOT use the laser viewing glasses as safety goggles. The laser viewing glasses are used for improved visualization of the laser beam, but they do not protect against laser radiation.
- DO NOT use the laser view glasses as sun glasses or in traffic. The laser viewing glasses do not afford complete UV protection and reduce color perception.
- DO NOT operate the tool outdoors.
- DO NOT place or store tool under extreme temperature conditions.
- DO NOT operate the tool in explosive environments, such as in the presence of flammable liquids, gases or dusts. Sparks can be created in the tool which may ignite the dust or fumes.
- Keep the tool away from magnetic data medium and magnetically-sensitive equipment. The effect of the magnet can lead to irreversible data loss.

# **Electrical Safety**

Batteries can explode or leak, cause injury or fire. To reduce this risk, always follow all instructions and warnings on the battery label and package.

- Bateries are to be inserted with the correct polarity.
- 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.
- Dispose of or recycle batteries per local code.
- DO NOT dispose of batteries in fire. Batteries may explode or leak.
- Keep batteries out of reach of children.
- Remove batteries if the device will not be used for several months.
- Exhausted batteries are to be removed from the product.

# **PACKAGE CONTENTS**



PARTS	DESCRIPTION
Α	ON/OFF button
В	Measurement reference/Units button
С	Reception lens
D	Laser beam outlet
Е	LCD display
F	Battery lid
G	AAA alkaline batteries (x 2)

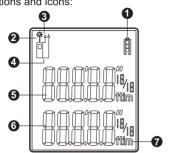
The laser measure's front-panel controls:

- A. ON/OFF button. Press to turn the tool on for measurement. Press and hold to turn the tool off.
- B. Measurement reference/Units button. Press briefly to cycle through two measurement reference options: top or bottom of tool housing. Press and hold to cycle through four measurement unit options: feet/inches, inches, feet or meters.

# **LCD DISPLAY**

The laser measure's display indications and icons:

- 1. Battery indicator
- 2. Laser beam indicator
- Indicates that the measurement is taken from the top of the tool
- 4. Indicates that the measurement is taken from the bottom of the tool
- 5. Previous measuring value
- 6. Current measuring value
- 7. Unit of measure



# **BATTERY INSTALL INSTRUCTIONS**

Carefully lift the laser measure out of the box and place it on a stable, flat surface.

# **INSERTING/REPLACING THE BATTERIES**

2 AAA alkaline batteries are recommended for the measuring tool. To open battery lid, use a Phillips screwdriver (not included) to loosen the screw located on back of measuring tool and remove battery lid (F). Insert both batteries (G). Pay careful attention to the correct polarity indicated inside battery compartment.

It is recommended to replace batteries at the same time. Only use

batteries from same brand and with identical capacity.

**NOTE:** Remove the batteries from the measuring tool when not using it for extended periods. When storing for extended periods, the batteries can corrode and discharge themselves.



# **OPERATING INSTRUCTIONS**

#### **A WARNING**

- Protect the tool against moisture and direct sun light. Do not subject the tool to extreme temperatures or variations in temperature, or the accuracy of the tool can be impaired.
- Avoid heavy impact or dropping the tool on hard surfaces, or accuracy could be impaired.

### **WORKING ADVICE**

- 1. The reception lens (C) and the laser beam outlet (D) must not be covered when taking a measurement.
- 2. Measurement takes place at the center of the laser beam, even when target surfaces are at a slope.
- 3. The measuring range depends on the light conditions and the reflection properties of the target surface.
- 4. It is important to note that faulty measurements can occur due to physical effects from certain surfaces:
  - Transparent surfaces (e.g., glass, water)
  - Reflecting surfaces (e.g., polished metal, glass)
  - Porous surfaces (e.g., insulation materials)
  - Structured surfaces (e.g., roughcast, natural stone)
- Air layers with varying temperatures or indirectly received reflections can affect the measured value.

#### TO TURN THE LASER MEASURE ON AND OFF

- Press the ON/OFF button (A) to turn the tool on.
- Press and hold ON/OFF button (A) to turn off.

**NOTE:** When the measuring tool has been inactive for 3 minutes, it will automatically turn off to save battery power.

# CHOOSING A MEASUREMENT REFERENCE

- Power the tool on.
- Press the ON/OFF button (A) briefly again to keep HOLD data status.

# **OPERATING INSTRUCTIONS**

- Press the Measurement reference/Units button (B) briefly to cycle two measurement reference options: top or bottom. Continue pressing until the desired reference is displayed on the screen. The tool defaults to the last status measured.
- Press the ON/OFF button (A) briefly to go on measuring.

#### CHANGING THE UNIT OF MEASURE

- Power the tool on.
- Press the ON/OFF button (A) briefly again to keep HOLD data status
- Press the Measurement reference/Units button (B) to cycle four measurement unit options: feet/inches, inches, feet or meters. Continue pressing until the desired unit of measurements is displayed on the screen. The tool defaults to the last unit measured.
- Press the ON/OFF button (A) briefly to go on measuring.

#### CONTINUOUS MEASUREMENT

The continuous measurement function can be used for transferring measurements, e.g., from construction plans. In the continuous measurement mode, the laser measure can be moved relative to the target. As an example, the user can move from a wall to a predetermined distance, during which time the actual, changing measurement is displayed continuously.

- Press ON/OFF button (A) to move the cursor to the continuous measurement indicator.
- Aim the laser at the target to which you want to measure.

**NOTE:** All dashes will display when the beam is moved too fast or if the object is out of range in continuous mode.

- The continuous measurement will continue to measure for about 3 minutes, and the measurement will automatically stop after 3 minutes.
- Press the ON/OFF button (A) briefly again to make a new measurement,

# **OPERATING INSTRUCTIONS**

#### **ERROR SIGNALS**

The following error signals may appear on the LCD display:

ERROR#	EXPLANATIONS	ACTION
	Beam is moved too fast	Move slowly
	The object is out of range	Change target
	Received signal too weak / Measurement time too long	Change target surface (e.g. white paper)
	Received signal too strong (target too reflective)	Change target surface (e.g. white paper)
	Ambient light is too strong	Shadow target area
301	The temperature is too high or too low	Let the tool to restore to operating temperature range
401	Hardware malfunction	Contact customer service

# CARE AND MAINTENANCE

This laser measure has been designed to be a low-maintenance tool. However, in order to maintain performance, always follow these directions:

- Avoid exposing the tool to shock, continuous vibration or extreme hot or cold temperatures.
- Always store the tool indoors.
- Always keep the tool free of dust and liquids. Use only a clean, soft cloth for cleaning. If necessary, slightly moisten the cloth with a little water.
- Do not disassemble the laser measure. This will expose the user to hazardous radiation exposure.
- Do not attempt to change any part of the laser lens.

### **TROUBLESHOOTING**

PROBLEM	CAUSE	SOLUTION
	The battery is too low	Replace the batteries
Tool cannot be switched on	The power button did not contact well	Try to press the power button more firmly or call customer service
Error code shows on display	Please refer to "Error signals" above	Please refer to "Error signals" above

# TWO-YEAR LIMITED WARRANTY

The manufacturer warrants this laser measure against defects in materials and workmanship for two (2) years from the date of purchase. If within this period the product is found to be defective in material or workmanship, the manufacturer will, at its option, repair, replace or refund the original purchase price to the customer. Please keep the original sales receipt as proof of purchase and call 1-888-3KOBALT, 8 a.m. - 8 p.m., EST, Monday - Friday, for warranty service.

This warranty does not cover defects due to misuse or accidental damage and specifically excludes liability for direct, incidental or consequential damages, and/or any parts have been altered or modified by anyone other than authorized service.

As some states do not allow exclusions or limitations on an implied warranty, the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.