

#### Introduction

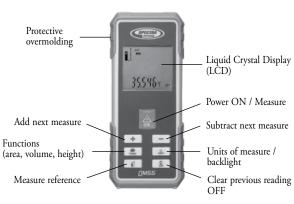
Thank you for choosing the Spectra Precision QM55 from the Trimble family of precision products. This easy-to-use distance measuring tool will allow you to measure distances quickly, accurately and reliably. Before using the Quick Measure, read this operator's manual carefully. Included is information about operation, safety and maintenance. Ensure that the operating instructions are with the laser distance meter

when it is given to other persons. Your comments and suggestions are welcome; please contact us at: Trimble Spectra Precision Division

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  - +1 (937) 203-4419
- +1 (937) 482-0030 Internet: www.trimble.com/spectra

**Features** 



Included with the QM55: Pouch, unit, battery, user guide, battery key/extension



Features - LCD Detail

**General Operation** 

Single distance measurement

**Continuous measurement** 

beeper is turned on.

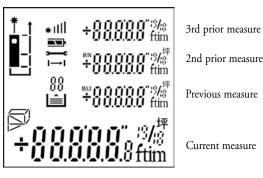
• Maximum distance • Minimum distance • Last distance

1) Switch on the device by pressing the ON button.

2) Press the ON button again to activate the laser.

4) Press and hold the OFF Button to switch off.

wall or longest distance to a corner as shown.



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3) Aim the laser do to the surface to be measured, and press the On

1) With the device on, press and hold the ON Button for 2 seconds

measuring mode. The tool beeps during continuous measure mode if

until the continuous measure icon appears to activate continuous

2) Press the Measure Button again to stop continuous measure.

Continuous measure can be useful to find the shortest distance to a

When continuous measure is stopped, the display will show:

button again. The measurement will be shown in the display

**Batteries - Installation** 

1. Open the battery compartment using the supplied battery key or a coin. 2. Remove the batteries from the packaging and insert them in the tool. NOTE When installing batteries note the positive (+) and negative (-) markings on the housings 3. Close the battery compartment cover.



Battery disposal - Some areas have regulations regarding the disposal of batteries. Be sure to dispose of discharged batteries properly. **CAUTION:** The batteries should be removed when storing the laser more than 30 days.

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## Features - LCD Detail

Icon	Name	Description
*	Laser on	Shows that laser is activated
	Measure reference	Indicates measure reference from front, center, back, and back with extended key
	Functions	Indicates functions: area, volume, indirect measure
I→I	Continuous Measure	Symbol flashes when in continuous measure mode
*111	Signal strength indicator	More bars indicate strong signal, faster and more accurate measure. No bars indicate weak signal - best to adjust conditions
	Battery indicator	More bars indicate more battery power remaining Flashing indicates it is time to change batteries
50 1	Data storage	Indicates historical reading being displayed. 50 is most recent. 1 is the oldest
Ţ	Hardware error	Switch unit on/off several time. If this symbol remains, contact your dealer

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## **Clear button**

Press the C/OFF button to clear the last reading or command. During area and volume measures, the C/OFF button clears the most recent measure, but preserves previous measures.

#### Change reference

Default measure reference is the back of the unit. Press the MEASURE REFERENCE button to change to front, center or extended back with tail as shown on the icon.

### **Display backlight**

Press the UNIT/LIGHT button to turn the back light on or off.

## Setting unit of measure

Press and hold UNIT/LIGHT button until the units of measure changes. Press again to change to next unit of measure. Unit of measure options are: m, ft, in, ft-in.

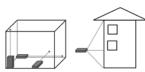
<u>3935</u> m	12.9 10 ft	/54 %	12 10° %

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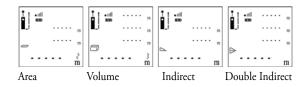
#### **Quick Start Guide**

Unit OFF	Press	Press Time	Press 2	Press Time	Press 3	Press Time	Comment
Power ON	A ON	Long					
Unit ON							
Single measure	- ADN	Short		Short			1 turn on laser 2 measure
Continuous measure		Long		Short to stop		Last screen shows	Maximum distance Minimum distance Last distance
Change measure reference	Ĩ	Short	Measure from back with extension	t ↑ Measure from front	Measure from center	Measure from back	Measure from back is the default setting when turned on.
Turn on/off backlight	UNIT	Short					
Area	FUNC	Short	Cycle functio	n to:	<b>N</b>	Measure as shown	Result shows 2 measures and area
Volume	FUNC	Short	Cycle functio	n to:	- AN	Measure as shown	Result shows 3 measures and volume
Indirect single height	FUNC	Short	Cycle functio	n to:		Measure as shown	Result shows 2 measures and distance
Indirect double height	FUNC	Short	Cycle function	n to:		Measure as shown	Result shows 3 measures and distance
Stake Out	FUNC	Short	Cycle functio	n to:		Use + to select digit. Use - to change digits	Continuous measure; Beeps faster when near set value.
Addition	+	Short					Adds next measure
Subtraction	-	Short					Subtracts next measure
Units of measure change	UNIT	Long	UNIT	m, ft, in, ft-in			Cycle through units with long presses
Memory	C	Short	+	50 ))	First clear sci	reen measures	Press + or- to cycle through measures.
Clear previous action	C	Short					Erase previous action
Power off	C	Long					

### **FUNCTIONS - Area, Volume, Indirect Measure** (Pvthagorean Theorem)



1) Press the FUNC button and cycle through the symbols until you arrive at the desired function as shown in this figure.



2) Press the ON button to activate the laser and take first measure 3) Press the ON button to activate the laser and take second measure 4) Press the ON button to activate the laser and take third measure (if required)

The display will indicate which measure is being taken as per the following chart.

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## General Care, Safety And Storage

#### General safety rules

a) Check the condition of the tool before use.

b) The user must check the accuracy of the tool after it has been dropped or subjected to other mechanical stresses.

c) Although the tool is designed for the tough conditions of jobsite use, as with other measuring instruments it should be treated with care.

## Do not use prisms or mirrored surfaces

Distances can be measured from all stationary targets without a highly reflective surface, i.e. concrete, stone, wood, plastic, paper, etc. The use of prisms or other highly reflective targets is not permissible and, if attempted, may falsify the results.

#### **Calibration Check**

It is recommended to occasionally check the calibration of the tool. 1) Select a known measure distance about 1 to 5 meters (3 to 15 ft) that does not change over time.

2.) Measure the distance 10 times. Calculate the mean deviation from the actual distance. The measured mean deviation should be less than the typical accuracy tolerance of  $\pm 1.5$  mm ( $\pm 1/16$  in)

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#### Laser Safety

Use of this product by people other than those trained on this product may result in exposure to hazardous laser light.

• Do not remove warning labels from the unit.

• Never look into the laser beam or direct it to the eyes of other people. • Always operate the unit in a way that prevents the beam from getting



• The QM55 is a Class 2M (635 nm) laser product .

into people's eyes.



### FUNCTIONS - Area, Volume, Indirect Measure

Measurement Function	Icons	Measurement Sequence
Single Measurement	*	
Area Measurement	Ì	
Volume Measurement	Ĩ	
Height (Pythagorean Theorem) Measurement 1	7	
Height (Pythagorean Theorem) Measurement 2	$\overline{\mathbb{V}}$	$\leq$

The result will be displayed along with the individual measures. NOTE: The indirect and indirect double measurements are based upon the Pythagorean principle which requires a right angle (90<sup>0</sup>) for accuracy. The indirect measure estimate is less accurate if the measurements do not form a right angle.

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# **Cleaning and drying**

1. Blow dust off the lens. 2. Do not touch the lens with the fingers.

3. Use only a clean, soft cloth for cleaning. If necessary, moisten the

cloth slightly with pure alcohol or a little water. NOTE Do not use any other liquids as these may damage the plastic

components. Storage

The temperature limits for storage of your equipment must be observed, especially in winter / summer.

Remove the tool from its pouch if it has become wet. The tool, its carrying case and accessories should be cleaned and dried (at maximum 40°C). Repack the equipment only once it is completely dry. Check the accuracy of the equipment before it is used after a long period of storage or transportation.

## Transport

Use the original packaging or packaging of equivalent quality for transporting or shipping your equipment. CAUTION

Always remove the batteries before shipping the tool.

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#### Warranty

Trimble warrants the Quick Measure QM55 to be free of defects in material and workmanship for a period of 3 years. For the first 2 years, Trimble or its authorized Dealer or Service Center will repair or replace, at its option, any defective part, or the entire product, for which notice has been given during the warranty period. For the 3rd year, an exchange fee may apply. This warranty period is in effect from the date the system is delivered by Trimble or its authorized Dealer to the purchaser, or is put into service by a Dealer as a demonstrator or rental component.

Any evidence of negligent or abnormal use, or any attempt to repair equipment by other than factory-authorized personnel or Trimble certified or recommended parts, automatically voids the warranty. The foregoing states the entire liability of Trimble regarding the purchase and use of its equipment. Trimble will not be held responsible

for any consequential loss or damage of any kind. This warranty is in lieu of all other warranties, except as set forth above,

including an implied warranty. Merchantability of fitness for a particular purpose is hereby disclaimed.

Customers should send products to the nearest authorized Factory, Dealer or Service Center for warranty repairs, freight prepaid. In countries with Trimble Service Subsidiary Centers, the repaired products will be returned to the customer, freight prepaid.

#### Addition and Subtraction

+ The next measure is added to the previous one

- The next measure is subtracted from the previous one See figure

₩ ¥250	ин
+ ¥532	- 2204 г.
+ 8,782 m	8.440 m

## Storage and Recall of Measurements

The QM55 will automatically store the previous 50 measurements results.

1) To retrieve these measures: press the clear button (C/OFF)until there are no measures shown on the screen 2) Press the + button. The Display will appear like the figure. 3) The higher number (up to 50) indicates the most recent measurement taken.

4) Use the + or – buttons to scroll through the measurements.



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Measuring Range 0.5 m to 50 m (1.6 to 165 ft) Accuracy ± 1.5 mm typical (± 1/16 in) Measure, Continuous measure, Area, Volume, Pythagorean, Add/Subtract, Stake out, memory 50 measures Functions Measure reference Front, Center, Rear, Rear with Extension Automatic shut off Laser - 0.5 minutes Product - 3 minutes Battery life (alkaline) 5000+ measures -10°C to +50°C (14°F to 122°F) Operating temperature -20°C to +65°C (-4°F to 149°F) Storage temperature Power supply 2 x AAA x 1.5V LCD 3 segments - 100%, 50%, 0% Power indication Class II as per EN 60825-1:2007; IEC 60825-1:2007 CFR 21 § 1040 (FDA) Laser Safety 635 nm visible red / 0.95 mW max Laser Type / Power Dimensions 52 x 28 x 125 mm (2.0 x 1.1 x 4.9 in) Weight 180 g (6.35 oz) without batteries Dust & Water resistance IP54 Drop Performance 1.5 m (5 ft)

Specifications

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# **Trouble Shooting**

Message Code	Possible cause	Remedy
101	Battery too low	Change batteries
104	Calculation error	Repeat procedure
152	Temperature too high	Allow the unit to cool down
153	Temperature too low	Allow the unit to warm up
154	Out of range	Measure target within distance of 0.5 and 50 m (1 to 165 ft)
155	Received signal too weak	Use light color target; Hold Quick Measure more steady
156	Received signal too strong	Use dark colored target
157	Background brightness too high	Use dark-colored target
*1	Weak signal	Adjust measurement conditions until signal strength is stronger
<del>بر</del>	Hardware error	Switch unit on/off several time. If this symbol remains, contact your dealer

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#### Service Request

To locate your local dealer or authorized Trimble Service Center outside the U.S.A. for service, accessories, or spare parts, contact one of our offices listed below.

North-Latin America Trimble / Spectra Precision Division 8261 State Route 235 Dayton, Ohio 45424-6383 U.S.A. (888) 527-3771 (Toll Free in U.S.A.) +1-937-203-4419 Phone +1-937-482-0030 Fax www.trimble.com/spectra Europe Trimble Kaiserslautern GmbH Am Sportplatz 5 67661 Kaiserslautern GERMANY Tel +49-(0)6301-71 14 14 Fax +49-06301-32213 Africa & Middle East Trimble Export Middle-East P.O. Box 17760 JAFZ View, Dubai UAE +971-4-881-3005 Phone

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Trimble Navigation Singapore PTE Ltd. 80 Marine Parade Road, #22-06 Parkway Parade Singapore, 449269 +65 6348 2212 Phone +65 6348 2232 Fax China Trimble Beijing Room 2805-07, Tengda Plaza, No. 168 Xiwai Street Haidian District Beijing, China 100044 +86 10 8857 7575 Phone +86 10 8857 7161 Fax www.trimble.com.cn

Asia-Pacific

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### Declarations

We declare, on our sole responsibility, that this product complies with the following directives and standards: EN 50081-1, EN 61000-6-2, 2004/108/EC. Designation: Laser range meter Type: QM55

Notice to Our European Union Customer	s
For product recycling instructions and more information, please go to: <u>www.trimble.com/environment/summary.html</u>	
Recycling in Europe	
To recycle Trimble WEEE, call: +31 497 53 2430, and ask for the associate," or mail a request for recycling instructions to: Trimble Europe BV c/o Menlo Worldwide Logistics Meerheide 45 5521 DZ Eersel, NL	WEEE



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