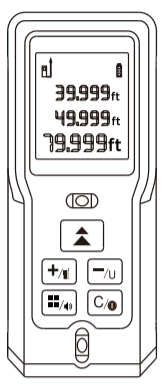**196Ft/60M
Laser Distance Measure
w/ Two Bubble Levels &
20-Set Data Storage
(MH-02-LM-C1-196-1)**

Customer Service
Phone # 1-866-608-5212
E-Mail: support@motorheadtool.com
Register your tool on MOTORHEAD.COM for a Free
Extended Warranty!

1

Introduction

Thank you for choosing the MOTORHEAD 196ft/60M Laser Measure handheld laser distance meter. Please carefully read the safety instructions and the user manual before using this product, incorrect operation may result in hazardous laser radiation and electric shock.

Safety Instructions

1. This product is a class II laser product. Please DO NOT stare into beam at any time when operating this product!
2. Please DO NOT looking directly into the beam with optical aids to avoid causing serious laser radiation!
3. Please DO NOT remove any safety labels on this product!

Caution

1. Please DO NOT use this product in an unstable situation.
2. Please avoid kids to contact and use the meter.
3. Please DO NOT disassemble or restructure the meter. Otherwise, it may lead to laser emission resulting in unnecessary personal injury.
4. Please retain the manual for later reference
5. Automatically memorize unit – automatically memorize last unit for next-time use (m/in/ft)

Contents

Laser distance meter	1pc
AAA battery	2pc
User manual	1pc
Packing box	1pc
Hand strap	1pc

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Basic Function

Single Measurement	√
Continuous Measurement (Max/Min)	√
Area/Volume/Pythagoras	√
Plus and Minus	√
Unit Conversion	√
Measuring Reference	√
Silence Function	√
Historical Data Review	20Groups
Error Code	√
Battery Power Indication	√
Laser Auto Switch of	30s
Instrument Auto Switch off	180s
Measuring Range	0.05m-60m
Measuring Accuracy (Standard Deviation)	±2.0mm
Measuring Unit	m,ft,in
Area Unit	m^2,ft^2
Volume Unit	m^3,ft^3
Recommended Target	White wall or a piece of A4 white paper
Laser Type	620-690nm
Laser Class	class II ,<1mW

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Single Measurement Time	0.25s
Operating Temperature	0~+40℃
Storage Temperature	-20~+65℃
Batteries	AAA(Alkaline), 2x1.5V
Working time(Fully charged)	>5000 times
Weight (Without batteries)	Approximate 82g
Dimension (L*W*H)	117X53X27mm

Notes:

* When measuring distance within 10m, measurement accuracy is ±2mm; more than 10m, measurement accuracy is calculated as follows: ±2mm+[±0.05*(D-10)] (D: Measuring Distance, Unit: m)
* When measuring too poorly reflecting target or very rough surfaces, or the environment temperature is too high or too low, or ambient brightness is too bright, such as under sunlight, the deviation will be inaccurate.

Refrain From:

1. Opening or repairing the device
2. Measuring in direct sunlight.
3. Measuring outside of specified range.
4. Immersing the equipment in water.
5. Cleaning the lens using alcohol or any other organic solvent.
6. Wiping the lens directly with fingers or other rough surfaces.
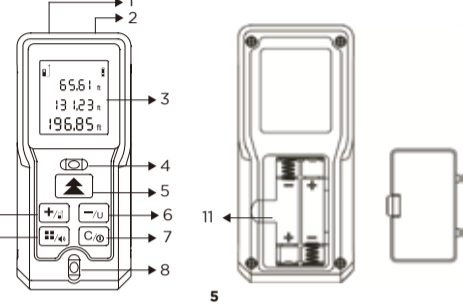7. Powering the equipment beyond the rated DC voltage.

4

Battery Installation:

According to figures, remove battery compartment lid and insert 2*AAA batteries (alkaline).

Structure of Product:
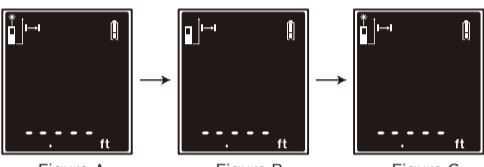

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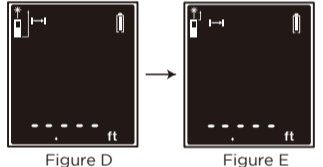|	
1. Laser receiver	7. Clear key/Exit key/OFF key
2. Laser emitter	8. Spirit bubble
3. Display screen	9. Plus key/Reference switch key
4. Spirit bubble	10. Function key/Sound key
5. Power key/Measuring key	11. Battery compartment
6. Minus key/Unit switch key	

Operation:

1. Switch-on

Short-time press [↑] to power on the laser measure, as shown in Figure A. The laser Point will automatically shut down if no any operation is completed after 30 seconds. Or short-time press [C⊕] to close the laser point, indication as shown as Figure B. Short press [↑] again to open laser point,indication as shown as Figure C.

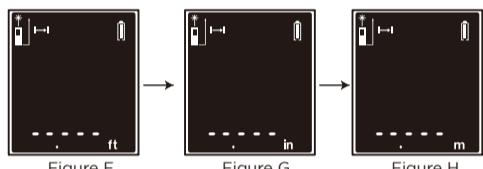Figure A   Figure B   Figure C

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2. Change Measurement Reference

Default measuring reference is the bottom of the meter, indicated as shown in Figure D. Long-time press [+√] to change the measuring reference to the top of the meter, indicated as shown in Figure E.

Figure D   Figure E

3. Unit Conversion

Factory default unit of measurement is Ft, indication as shown in Figure F. Long-time press [−∪] again to switch unit from Ft to In, indicated as shown in Figure G. Long-time press [−∪] again to switch the unit from In to m, indicated as shown in Figure H. (Note: Long pressing [−∪] when a measure value is present will convert the measurement into the various units of measure supported by the laser measure)

When the unit is set to Ft^2, Long pressing [−∪], will switch laser measure from Ft^2 to in^2. When the unit is Ft^3, Long pressing [−∪], will switch the unit of measurement from ft^3 to in^3. Upon powering off the device, the unit will restart in the last unit of measurement set on the device.
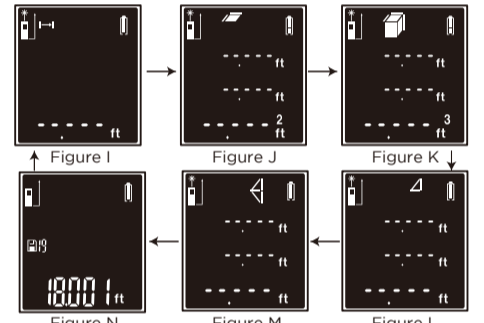
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Figure F   Figure G   Figure H

4. Change Measurement Mode

Default measurement setting is Single Measurement Mode, as shown in Figure I. Short pressing [П+] switches the device into Area Measurement Mode, as shown in Figure J. Short pressing [П+] again switches the device into Volume Measurement Mode, as shown in Figure K. Short pressing [П+] again switches the device into Single Pythagorean Theorem Measurement Mode, as shown in Figure L. Short pressing [П+] again will switch the device into Dual Pythagorean Theorem Measurement Mode, indicated as shown in Figure M. Short pressing [П+] again will switch the device into Historical Data Review Mode, which will show the last measurement data recorded, as shown in Figure N. (Note: When first viewing the Historical Data Review Mode, there will be some measure data from factory quality control testing. It do not means this device has been used)
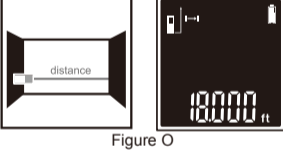
8

Figure I   Figure J   Figure K

Figure N   Figure M   Figure L

5. Switch off

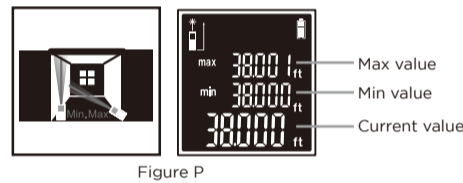The equipment can be switched off at any time by long pressing [C⊕]

Function description:

1. Single measurement

In Single Measurement Mode, aim the laser onto target. Short press [↑]. The measurement result will be displayed immediately as shown in Figure O.
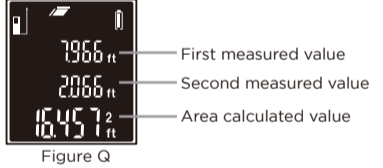

Figure O

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2. Continuous measurement

In Single Measurement Mode only, aim the laser onto the target. Long press [↑] to enter the continuous measurement, as shown in Figure P.

Figure P

- Max value
- Min value
- Current value

3. Area Measurement

In Area Measurement Mode, aim the laser at the target. Short press [↑] to measure the two side lengths of the target respectively, area measurement results will be displayed as shown in Figure Q.
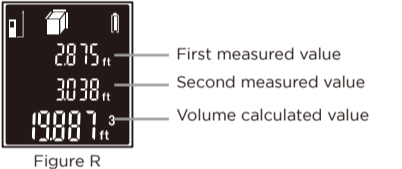

Figure Q

- First measured value
- Second measured value
- Area calculated value

4. Volume Measurement

In Volume Measurement Mode, aim the laser at the target.

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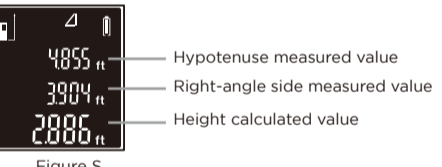
Short press [↑] and measure the three side lengths of the target respectively. The result will be displayed immediately as shown as Figure R. (Note: the length value of third side do not display at screen because the screen can only display three lines.)
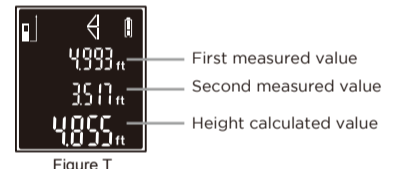

Figure R

- First measured value
- Second measured value
- Volume calculated value

5. Single Pythagorean Theorem Measurement

In Single Pythagorean Theorem Measurement Mode, aim the laser at the target. Short press [↑] to measure the length of the hypotenuse and right-angle side of a right triangle. The height of the right triangle is displayed immediately on the screen as shown in Figure S.

Figure S

- Hypotenuse measured value
- Right-angle side measured value
- Height calculated value

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6. Dual Pythagorean Theorem Measurement

In Dual Pythagorean Theorem Measurement Mode, aim the laser onto target. Short press [↑] to measure the length of the hypotenuse right-angle side and other hypotenuse of a triangle. The height is displayed immediately on the screen as shown in Figure T. (Note: the length value of other hypotenuse do not display in the screen because the screen can only display three lines.)
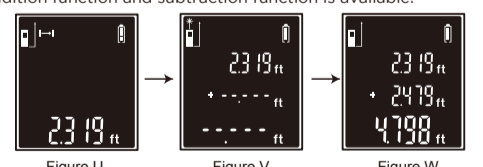

Figure T

- First measured value
- Second measured value
- Height calculated value

7. Historical Data Review and Delete

In Historical Data Review Mode, up-date data is last measurement, Short-time press [+√] to view the measurement forward, Short-time press [−∪] to view the measurement backward, Short-time press [C⊕] to delete the measurement one by one. Historical Data range: 0-19.
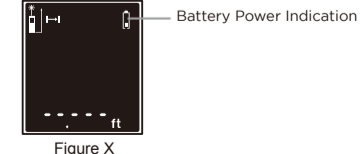
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8. Addition and Subtraction Functions

At the Single Measurement Mode, aim the laser onto target. Short-time press [↑] to get a measurement, indication as shown as Figure U, Then Short-time press [+√] , indication as shown as Figure V, Then short-time press [↑] to get another measure-ment, The summation will be displayed immediately, indication as shown as Figure W. It is plus function, minus function is same as plus function.

In Area Measurement Mode and Volume Measurement Mode, addition function and subtraction function is available.

Figure U   Figure V   Figure W

9. Battery Power Indication

When the battery power indicator appears as shown in Figure X, the battery should be changed.

- Battery Power Indication

Figure X

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10. Silence Function

At any state, long-time press [П+] to switch on or switch off the Buzzer.

11. Error Code

Code	Possible cause	Remedy
Err 10	Battery too low	Change batteries
Err 15	Out of measuring range	Measure target within the range
Err 16	Received signal too weak	Measuring high reflectance target or use high reflectance reflector
Err 18	Received signal too strong	Measuring low reflectance target or use low reflectance reflector
Err 26	Value is too big to display at screen	Reduce measuring range

FCC SAFETY

This device complies with part 15 of the FCC Rules. 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.
NOTE: 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 communica-tions. 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:

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—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.

Two-Year Limited Warranty

MOTORHEAD warrants its electronic measuring tools against deficiencies in materials and /or workmanship for two years from date of purchase WITH PROOF of SALE.

This Warranty does not cover deficiencies caused by accidental damage, wear and tear, use other than in accordance with the manufacturer's instructions or repair or alteration of this product not authorized by MOTORHEAD.

Repair or replacement under this Warranty does not affect the expiry date of the Warranty. To the extent permitted by law, MOTORHEAD shall not be liable under this Warranty for indirect or consequential loss resulting from deficiencies in this product. This Warranty may not be varied without the authorization of MOTORHEAD.

This Warranty does not affect the statutory rights of consumer purchasers of this product. This Warranty shall be governed by and construed in accordance with the laws of the country sold where in and MOTORHEAD and the purchaser each irrevocably agrees to submit to the exclusive jurisdiction of the courts of that country over any claim or matter arising under or in connection with this Warranty.

For warranty service please call MOTORHEAD Customer Service at **1-866-608-5212** or e-mail **support@motorheadtool.com**.

Register your product at **MOTORHEADTOOL.COM** for a **free extended warranty** and additional offers!

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WARNING: For adult use only.This product is not a toy.Keep out of reach of children.
WARNING: For adult use only.Not for children 17 years of age or younger
WARNING: Wear safety goggles-user and bystander
CAUTION
LASER RADIATION,DO NOT STARE INTO BEAM.
WARNING: LASER LIGHT.LASER RADATION.Avoid direct eye exposure.
Do not srare into beam. Only turn laser beam on when needed.Class 2 Laser Product.
CAUTION:
Do not mix old and new batteries.
Do not mix alkaline,standard (carbon-zinc),or rechargeable (nickel-cadminum) batteries.
Caution – use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

⚠**WARNING:** This product can expose you to chemicals including lead and lead compounds, Di(2-ethylhexyl)phthalate (DEHP), which are known to the State of California to cause cancer, and chemicals including Di-n-butyl Phthalate (DBP), which are known to the State of California to cause birth defects or other reproductive harm.
For more information go to www.P65Warnings.ca.gov.

Customer Service: 1-866-608-5212
Monday – Friday
8:00 AM – 8:00 PM EST
support@motorheadtool.com

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