

MPT

MOST PROFESSIONAL TOOLS

MLL1207
LINE LASER LEVEL

12 LINES



The operation manual appears in the meaning of "▲ warning" and "▲ attention"

"▲ Warning": When the operation is wrong, it is likely to cause serious consequences such as death or serious injury to the user.

"▲ Caution": When the operation is wrong, it is likely to cause the user to be injured or bring material losses.

Even if listed in the "▲ attention" situation, under certain conditions, may have serious consequences.

"▲ Warning" and "▲ attention" are important matters related to security and must be strictly observed.

Safety Regulations

▲ The laser of our laser levels was grade 2 laser and fit for IEC-60825-1 standard, the laser will influence people's sight ability.

▲ In order to keep yourself safety, do not look straight at laser.

▲ Do not allow child use laser levels unless there is some adults keep the child.

▲ Do not use laser levels under explosive surrounding (Flammable liquid, gas and powder)

▲ Use goggles can help you distinguish laser, but can not protect you from the laser.

▲ Goggles are not the same as sun glasses, so, it hasn't function of anti ultraviolet rays.

Also, do not wear the goggles when you walk outside, cuz it will affect your ability of distinguishing color.

7. The machine must be far away from the place with magnetic field or disturbed by magnetic field, otherwise it will cause the difference of accuracy or disorder of function of the laser level.

▲ The laser level can only be repaired by professionals, and only the original parts can be used to ensure the safety of the machine.

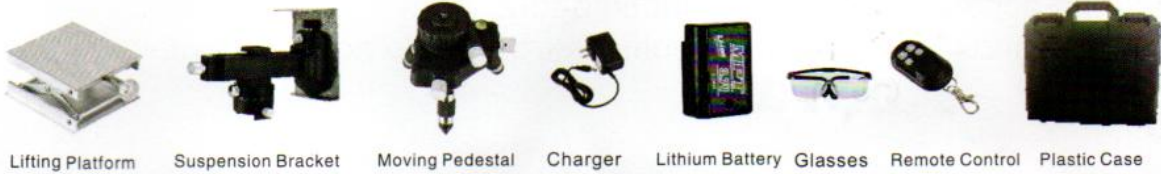
▲ Be sure to read all instructions in the operating manual in detail so that you can operate the laser level safely.

▲ Please keep the manual carefully.

◆ Technical Parameters

Measuring range	45m	Laser grade	2
Automatic leveling accuracy	10m/±3mm	Laser type	505-520nm
Automatic leveling range	±3°	Port of tripod	1/4"
Automatic leveling time	<6s	Built-in battery	3.7V
Working Temperature	-20°C...+50°C	Working Time	360Mins
Storage temperature	-40°C...+80°C	Weight	3.0kg
Max relative air humidity	90%	Dimensions	10.5*8*11cm(L*W*H)

◆ Supplementary parts



Lifting Platform

Suspension Bracket

Moving Pedestal

Charger

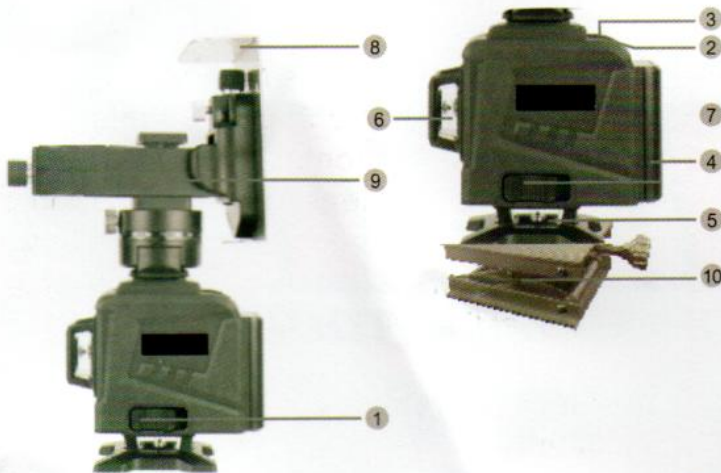
Lithium Battery

Glasses

Remote Control

Plastic Case

Name of each part



- ❶ Power switch
- ❷ Vertical line switch
- ❸ Horizontal line switch
- ❹ Battery
- ❺ Window of horizontal line
- ❻ Window of vertical line(1)
- ❼ Window of vertical line(2)
- ❽ Iron plate which stick on wall
- ❾ Multiple function suspension bracket
- ❿ Lifting platform

Operational instructions

Operational instructions

▲ Our products were LD green line laser level, please use 5v or original power adapter to charging or working;

▲ When machine is charging, the red LED lamp will light up; when it full charged, the green LED lamp will light up. So, when full charged, you can stop the charging, and one full charged can let machine working more than 6 hours (With two 18650 Lithium batteries), charging time need be limited within 4 hours, and it need to be charged when someone is watching;

▲ The machine will warning and releasing noisy if the battery lack of power, if this situation happened, please use new battery or charging the machine immediately.

▲ Do not let steam or wet air inside the machine, do not put machine under strong sunlight. Do not put the machine under any extreme weather, also, do not put the machine under surroundings which has a huge difference in temperature. Machine can not leave in car for long time. If you have put machine under a huge difference in temperature

surroundings, please use the machine after machine come back to normal temperature. If put machine under extreme weather or surrounds, the measuring accuracy will be influenced badly.

▲ It should avoid to hitting the machine strongly, do not let the machine fall down to the floor. If the machine has been hit strongly, please test the measuring accuracy before using (Follow the automatic leveling accuracy).

▲ The machine should be turned off before carrying. Cuz the inside swing parts will be locked when the machine has turned off, otherwise, the swing parts will be damaged because of strong shock.

TURN ON/OFF

▲ Put two 18650 Lithium batteries into battery box before using the machine, adjust the bracket (Follow Name of each part No.9) until bubble between two parties. Turn on No. 1 switch to make horizontal laser line light up. If you need turn on or turn off horizontal laser line, please push the button of NO.2 switch; if you need turn on or turn off vertical laser line, please push button of NO.3 switch. When you push NO.3 switch button, first push, one vertical line window light working, second push, two vertical line windows working, and on third push, all vertical line windows will light up.

▲ Push NO.3 button with 5 seconds, the machine without warning function and start another function---able to using oblique line. If you need cancel oblique line function, please push NO.3 button with 5 seconds again or push NO.1 turn on/off button.

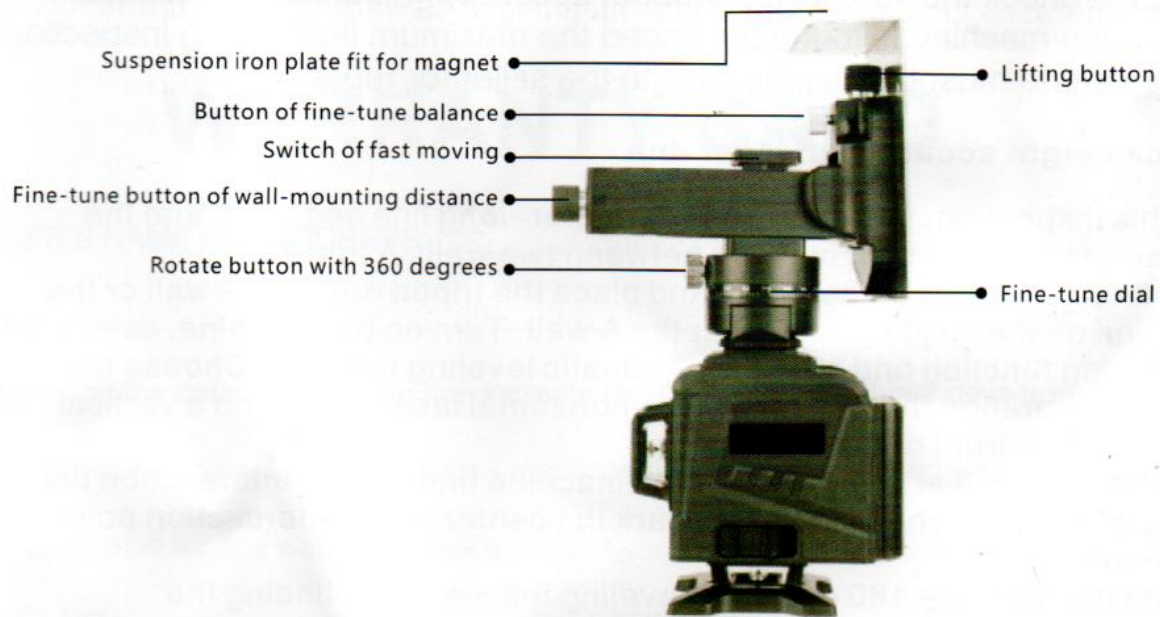
▲ Push NO.2 button with 5 seconds, the brightness of laser line will be weaker, and the machine was under a situation that work with a receiver, if you want to cancel this model, please push NO.2 button with 5 seconds again or push NO.1 turn on/off button.

▲ Warning again: The laser line will do harm to your eyesight, so, do not look straight at laser level when it working.

▲ Push NO.1 "turn on/off" button to make the machine stop working.

▲ In order to avoid battery leaking and damage the battery box, please take out of battery from box if you don't use the machine for long time.

Introduction of multiple function bracket



Automatic leveling Function

Use automatic leveling to measuring

- ▲ Put the machine on flat and strong ground, or fix the machine on tripod;
- ▲ Please turn on mechanical switch at first and turn on horizontal & vertical button when you need use automatic leveling function to measuring;
- ▲ Automatic leveling range is ± 3 degrees, when the laser line doesn't move anymore, that means the automatic leveling was successful.
- ▲ If the machine out of automatic Leveling range, the laser line will flicker, then, you need put the machine on flat ground again and let it automatic leveling again until the laser line stop flicker and keep light up situation.

Factors that influence measuring accuracy

- ▲ Temperature in the operating environment is the most important factor, especially when the temperature changes gradually from ground to ceiling, it may change the direction of laser beam projection.
- ▲ Because the temperature layer near the ground is the largest, it is better to install the machine on a tripod when the measuring distance exceeds 20 meters. In addition, put the machine in the center of the measuring place as far as possible.
- ▲ In addition to external factors, the condition of the machine itself (such as falling down or being severely impacted) can also affect the accuracy. Therefore, before operating the machine we must check the accuracy of the machine first.

▲First check the horizontal laser beam height accuracy and leveling accuracy, and then check the vertical laser beam accuracy. If the deviation of the measuring machine is found to exceed the maximum limit during inspection. The machine must be handed over to the seller for repair.

Check height accuracy of laser line

For this inspection, you must find a 5-meter-long line segment, and the measuring line segment must be between two walls A and B.

Install the machine on the tripod and place the tripod near the A wall or the machine on the solid surface near the A wall. Turn on the machine, select the measuring function and start the automatic leveling function. Choose the mode of operation that will produce a horizontal laser plane and a vertical laser plane in front of the machine.

Aim the laser line at the wall A, let the machine find out the intersection point of the laser line at the wall A, and mark the center of the intersection point as first mark.

Rotate the machine 180 degrees, leveling the machine, finding the intersection of the laser line at wall B, and marking the center of the intersection as second mark.

Move the machine close to the wall B (no rotating machine), turn on the machine and leveling automatically. Adjust the height of the machine (with the help of tripod, pads can be used if necessary) so that the intersection of laser lines can be accurately projected on the second mark of wall B.

Rotate the machine 180 degrees, but can't change the height of the machine, adjust the machine, let the laser line in the vertical direction pass through the first mark of Wall A, let the machine leveling automatically, and make the third mark at the intersection of the laser line of Wall A. The distance between the second mark and the third mark of Wall A is the actual height deviation of the machine.

You can use the following formula to calculate the maximum permission deviation: d_{max}

$D_{max} = (\text{double distance between two walls}) \times (0.2\text{mm/M})$. For example: if the distance between two walls is 5 meters, so, the d_{max} is: $d_{max} = (2 \times 5 \text{ meters}) \times 0.2\text{mm/M} = 2\text{mm}$. So, that means, the distance between marks should not exceed 2mm.



Return receipt

WARRANTY CARD

DEALER'S NAME AND ADDRESS: _____

Please fill all the details and return the warranty registration card within 7 days from the date of purchase to the Dealer's address mentioned above. Unregistered warranty card is not applicable for any warranty service.

MODEL NO.: _____ SERIAL NO.: _____

NAME: _____ DATE OF PURCHASE: _____

ADDRESS: _____



For customer keep

WARRANTY CARD

MODEL NO.: _____ SERIAL NO.: _____

NAME: _____

ADDRESS: _____

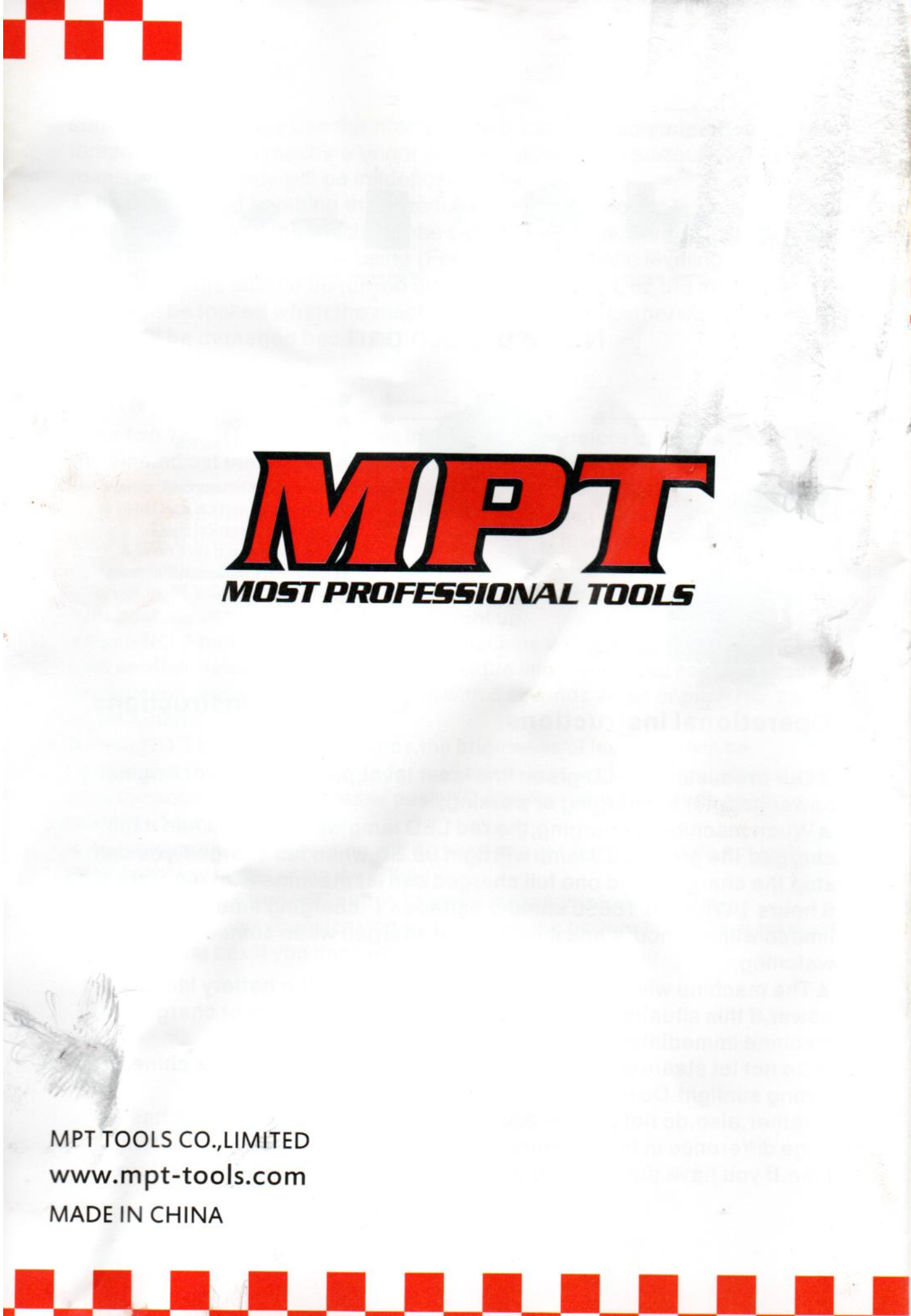
DATE OF PURCHASE: _____

DEALER'S STAMP & SIGNATURE: _____



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MADE IN CHINA

