

LASER SENSOR LS-B100

Thank you for purchasing the TOPCON LS-B100.
For the best performance of the instruments, please read these instructions carefully and keep them in a convenient location for future reference.

GENERAL HANDLING PRECAUTIONS

Before starting work or operation, be sure to check that the system is functioning properly. Remove the batteries from the instrument when you will not be using it for long period. When washing the instrument, avoid spraying it with a high pressure stream of water from a water hose. The inside of the instrument will be damaged by the water. This instrument is designed based on the International Standard IPX 6, but it is not protected from a high pressure water stream or submergence.

Affection of the radio waves

When using the instrument in the following place, the strong radio wave may cause faulty operation.



- Near the instrument occurring strong radio waves. (e.g. Transceiver)
- Near the radio wave towers such as television or radio.

Battery replacement

- Replace all 4 batteries with new ones at the same time. Do not mix used and new batteries, and do not mix different types of batteries together.
- Use alkaline dry cells. (4 Dry cells for initial operation check are composed in a standard package.)
Nickel hydrogen dry cells and nickel cadmium dry cells can be used too, but the operating time is different from the time of alkaline dry cells.

DISPLAY FOR SAFE USE

In order to encourage the safe use of products and prevent any danger to the operator and others or damage to properties, important warnings are put on the products and inserted in the instruction manuals. We suggest that everyone understand the meaning of the following displays and icons before reading the "Safety Cautions" and text.

Display	Meaning
 WARNING	Ignoring or disregard of this display may lead to death or serious injury.
 CAUTION	Ignoring or disregard of this display may lead to personal injury or physical damage to the instrument.


- Injury refers to hurt, burn, electric shock, etc.
- Physical damage refers to extensive damage to buildings or equipment and furniture.


HANDLING PRECAUTIONS

Guarding the instrument against shock

When transporting the instrument, provide some protection to minimize risk of shock. Heavy shock may affect beam accuracy.

SAFETY CAUTIONS

 WARNING
<ul style="list-style-type: none"> • There is a risk of fire, electric shock or physical harm if you attempt to disassemble or repair the instrument yourself. This is only to be carried out by TOPCON or an authorized dealer, only! • Risk of fire or electric shock. Do not use damaged power cable, plug and socket. • Risk of fire or electric shock. Do not use a wet battery. • May ignite explosively. Never use an instrument near flammable gas, liquid matter, and do not use in a coal mine. • Battery can cause explosion or injury. Do not dispose in fire or heat. • The short circuit of a battery can cause a fire. Do not short circuit battery when storing it. • Battery can cause explosion or injury. Remove battery when using the connector for external power supply.

 CAUTION
Do not allow skin or clothing to come into contact with acid from the batteries, if this does occur then wash off with copious amounts of water and seek medical advice.

EXCEPTIONS FROM RESPONSIBILITY

- The user of this product is expected to follow all operating instructions and make periodic checks of the product's performance.
- The manufacturer, or its representatives, assumes no responsibility for results of a faulty or intentional usage or misuse including any direct, indirect, consequential damage, and loss of profits.
- The manufacturer, or its representatives, assumes no responsibility for consequential damage, and loss of profits by any disaster, (an earthquake, storms, floods etc.).
A fire, accident, or an act of a third party and/or a usage any other usual conditions.
- The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits due to a change of data, loss of data, an interruption of business etc., caused by using the product or an unusable product.
- The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits caused by usage except for explained in the user manual.
- The manufacturer, or its representatives, assumes no responsibility for damage caused by wrong movement, or action due to connecting with other products.

Standard Set Composition

- LS-B100 Instrument 1pc.
- Carrying case 1pc.
- Instruction manual 1pc.

Dry battery type*

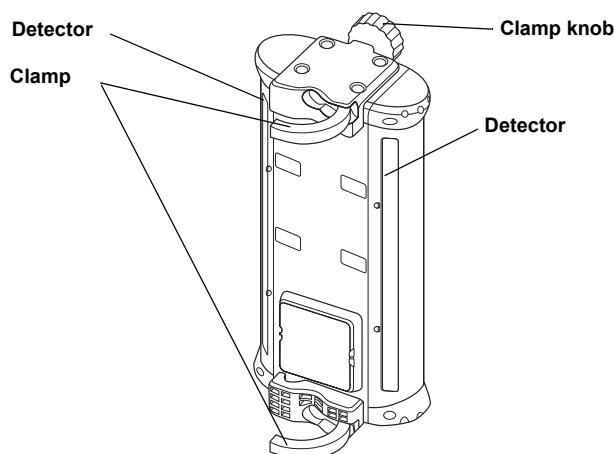
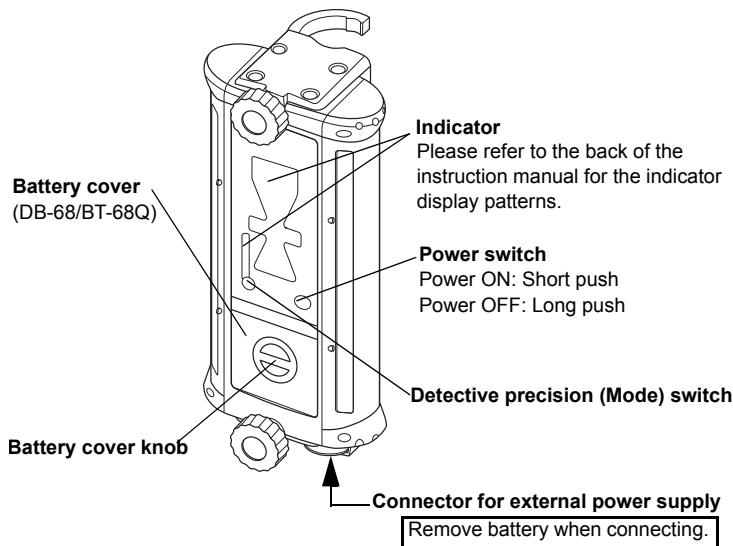
- Battery holder DB-68 1pc.
- C-size dry cells 4pcs.

*In some destinations, a rechargeable battery is already set in the main unit.

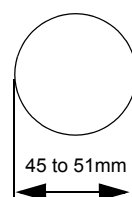
Rechargeable battery type (Optional accessories)

- Ni-MH battery pack BT-68Q 1pc.
- AC/DC converter AD-11 1pc.

Nomenclature and Functions



Pipes that can be installed onto the LS-B100 are as described below.



Shape: Cylindrical
Dimension: 45 to 51mm in diameter

Please refer to the instruction manual for the machine or contact the machine manufacturer for instructions on installing the mast onto the machine (by welding, etc.).

Operation

- Position a rotating laser and turn on the laser.
- Raise or lower the machine blade or arm to position the cutting edge or bucket at the desired grade elevation.
- Mount the LS-B100 onto the mast near the path of the laser beam and turn on the LS-B100.
- Keep the machine blade or arm motionless and raise or lower the LS-B100 and adjust until ON-GRADE position are flashing. This is the ON GRADE position.
- Securely clamp the LS-B100 in place. The reference position has been set.
- While operating, use the LED display to continually check grade, moving the blade or cutting / filling according to the direction of the LS-B100 display.

