



Trimble S Series

TOTAL STATION

The Trimble® S Series total station instruments are designed to be used for surveying. This Quick Start Guide applies to the Trimble S5, S7, S9 and S9 HP total stations. Instrument features and options will vary between the different models.



Trimble S5



Trimble S7



Trimble S9/Trimble S9 HP

IN THE CASE



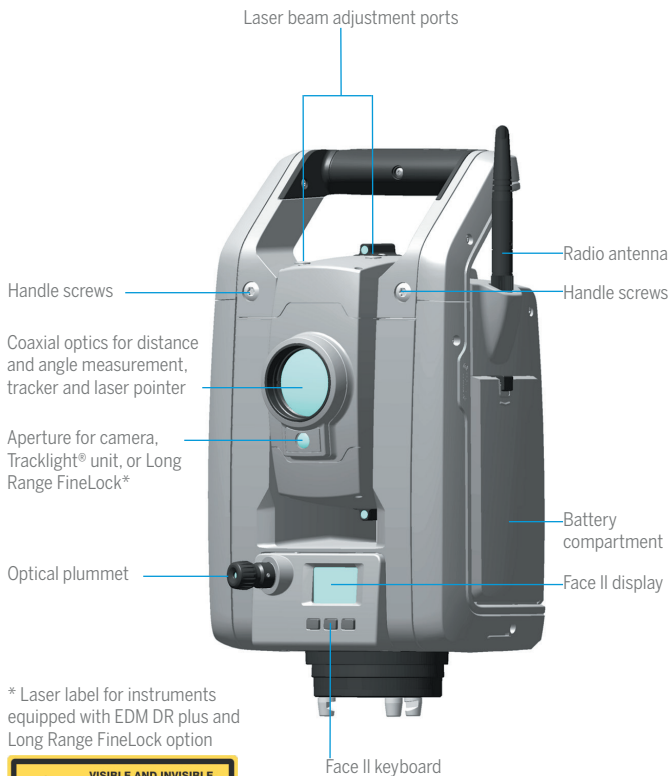
Item	Description	Item	Description
1	Trimble S total station	10	Certificate, China RoHS table and Declaration of conformity
2	Tribrach	11	Warranty activation card
3	Panel attachment cover	12	Extended warranty card
4	Rain cover	13	Laser adjustment tool
5	Tool for handle	14	Laser adjustment plate
6	Tool kit	15	Reflective foil targets
7	Instrument case keys	16	Rain lens cover
8	Regulatory information document	17	Instrument case
9	Quick start guide		

TRIMBLE S SERIES FEATURES

Laser warning label



TRIMBLE S SERIES FEATURES



SPECIFICATION

Power rating

Power input	12V DC, 20W
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Environmental specification

IP Classification / dust and water proofing	IP 65
Operating temperature range	-20°C to +50°C (-4°F to +122°F)
Humidity	100%, condensing

For further technical specifications please refer to the Trimble S Series total station data sheet available from www.trimble.com.

POWER SUPPLY

CAUTION – The optional power supply for the S Series total stations is intended for indoor use only and shall not be exposed to moisture or liquids.

BATTERY

WARNING – Before charging or using the Trimble S Series total station battery it is important that you read and understand the battery safety and environmental information. The battery safety and environmental information is available in the *Trimble S Series Total Station Regulatory Information document*.

The Trimble S Series total station battery (not included) come with battery charge status indicator LEDs. Press the button on the battery to check the battery charge status.

Charge battery

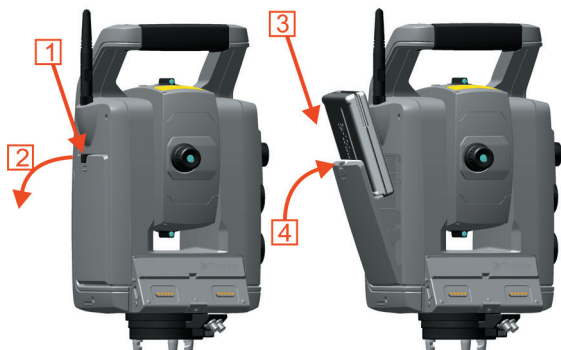
The rechargeable lithium-ion battery is supplied partially charged. Before using the battery for the first time, charge it completely using a Trimble battery charger (not included).



Connect internal battery

The Trimble S Series total station battery is placed in the battery compartment on the side of the instrument.

1. Press the battery compartment lock downwards to unlock.
2. Open the battery compartment.
3. Slide the battery into the battery compartment.
4. Close the battery compartment.



Power On/Off instrument

To power on the instrument press the On/Off key. To power off the instrument, press and hold the On/Off key for 2seconds.

On/Off key LED

Mode	Indicator LED	Description
Off	Off	
On	Solid	Connected to controller
Suspend	Flashing	Waiting for connection

Set up

A stable setup is critical for high precision measurements. Set the tripod legs wide apart as shown in figure.

Take into account that the instrument requires sufficient time to adjust to the ambient temperature. The rule-of-thumb for a high precision measurement is:

- Celsius: Temperature difference in degrees Celsius ($^{\circ}\text{C}$) $\times 2$ = duration in minutes required for the instrument to adjust to the new ambient temperature.
- Fahrenheit: Temperature difference in degrees Fahrenheit ($^{\circ}\text{F}$) = duration in minutes required for the instrument to adjust to the new ambient temperature.



Operation

The instrument is operated from a controller using field software. Connect the controller using a cable or wirelessly.

Care and maintenance

Like all precision instruments, the Trimble S Series total station requires care and maintenance. To get the best results from the instrument:

- Do not subject the equipment to rough jolts or careless treatment.
- Keep the lenses and reflectors clean. Be very careful when cleaning the instrument, especially when removing sand or dust from lenses and reflectors. Never use coarse or dirty cloth or hard paper. Trimble recommends that you use anti-static lens paper, a cotton wad, or a lens brush.

⚠ CAUTION – Never use strong detergents such as benzine or thinners on the instrument or the instrument case.

- Keep the instrument protected and in an upright position, preferably in the instrument case.
- Do not carry the instrument while the instrument is mounted on a tripod. Doing so can damage the tribrach screws.
- Carry the instrument by the handle.

- When you need extremely precise measurements, make sure that the instrument has adapted to the surrounding temperature. Significant variations in instrument temperature can affect precision.
- If the instrument has been used in damp weather, take the instrument indoors and remove the instrument from the instrument case. Leave the instrument to dry naturally. If condensation forms on the lenses, allow the moisture to evaporate naturally. Leave the carrying case open until all moisture has evaporated.
- Always transport the instrument in a locked instrument case. For longer trips, transport the instrument in the instrument case and inside the original shipping container.
- Trimble recommends calibrating your instrument once every two weeks to ensure you are attaining the high accuracy results the instrument is capable of. If the instrument is transported over rough terrain in a site vehicle it is recommended to perform a calibration. If the instrument is transported via air travel, it is recommended the instrument is calibrated before use.

Additional information

The original document is written in English. All documents in other languages are translations from the original English document. For more information and information in other languages, go to www.trimble.com.

⚠ CAUTION – For laser safety and regulatory information, refer to the Regulatory Information document delivered with the product.

For Trimble support, go to www.trimble.com/support.

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