

# TRIMBLE S5, S7, S9, S9 HP TOTAL STATION

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 Total Station



Trimble S7 Total Station



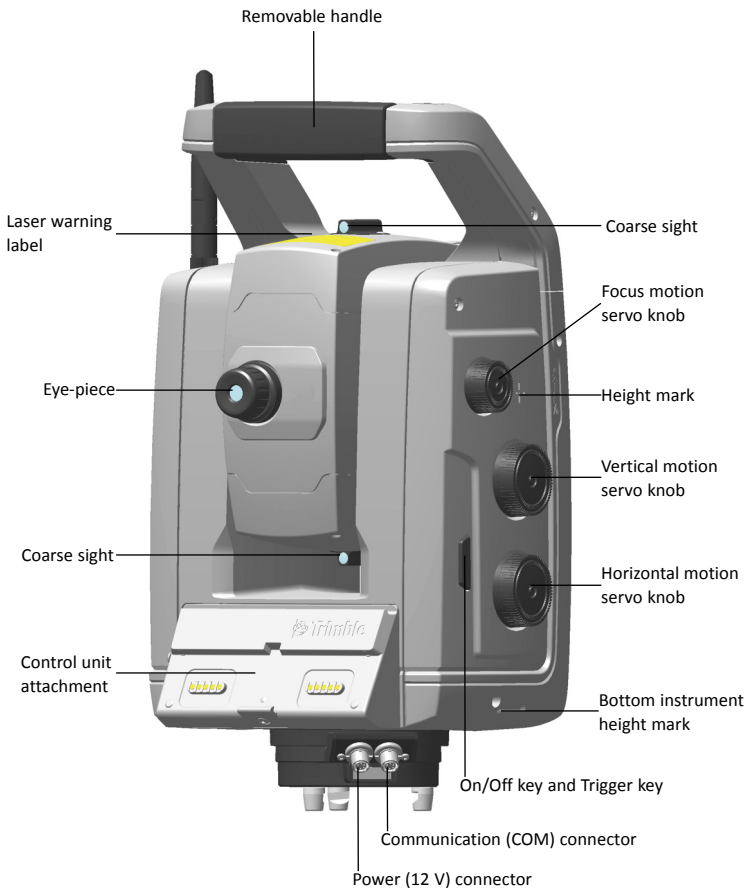
Trimble S9 Total Station  
Trimble S9 HP Total Station

## In the Case

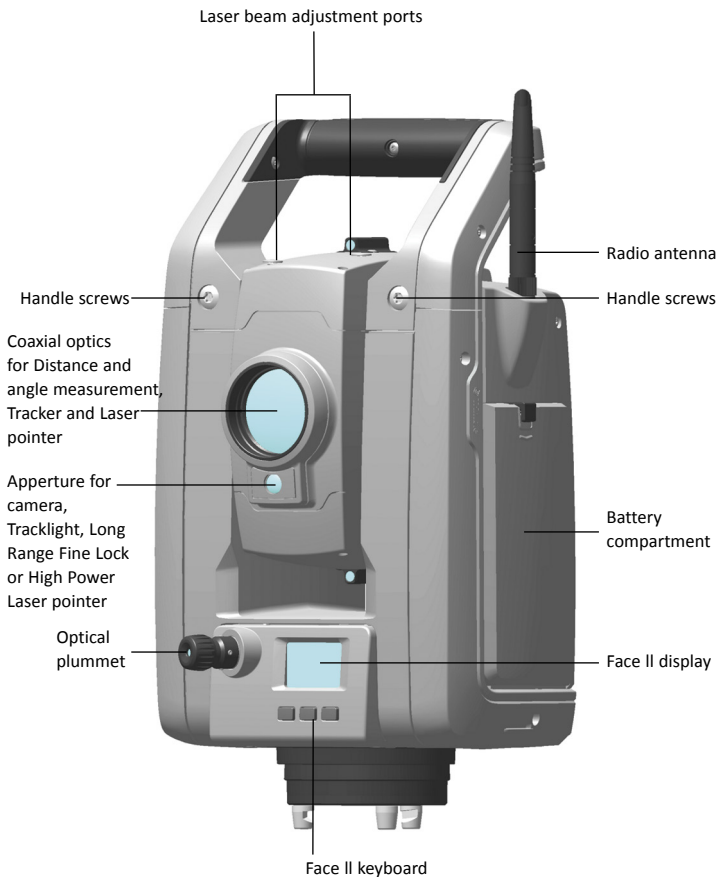


Number	Description	Number	Description
1	Trimble S5, S7, S9 or S9 HP Total Station	7	Instrument case keys
2	Tribrach	8	Quick start guide (this document), Regulatory information, Locate 2 protect activation card, Warranty activation card and Extended warranty card.
3	Instrument case with carrying straps	9	Laser pointer adjustment tool
4	Rain cover	10	Reflective foil target
5	T30 Torx key	11	Laser pointer adjustment target (type of target depends on distance meter type)
6	Accessory tool kit	12	Lens rain cover

## Features



## Features



## Battery

**WARNING:** Before charging or using the Trimble S5, S7, S9 and S9 HP 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 S5, S7, S9 or S9 HP Total Station User Guide and Trimble S5, S7, S9, S9 HP Total Station Regulatory Information Document.

The Trimble S5, S7, S9 and S9 HP Total Station batteries come with charge battery indicator LEDs. Push the button on the battery to check the battery charge status.



### Charging the 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 specified for the purpose.

Refer to the Trimble S5, S7, S9 or S9 HP Total Station user guide and the Battery charger user guide for more information.

## Connecting the Internal Battery

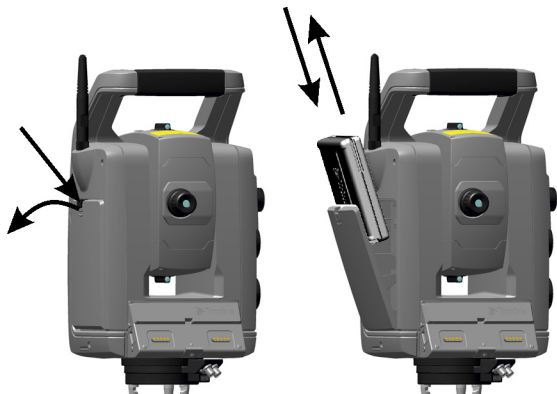
The Trimble S5, S7, S9 and S9 HP internal battery is placed in the battery compartment on the side of the instrument.

Step 1: Press the battery compartment lock downwards to unlock.

Step 2: Open the battery compartment

Step 3: Slide the battery into the battery compartment

Step 4: Close the battery compartment



## Starting the Instrument

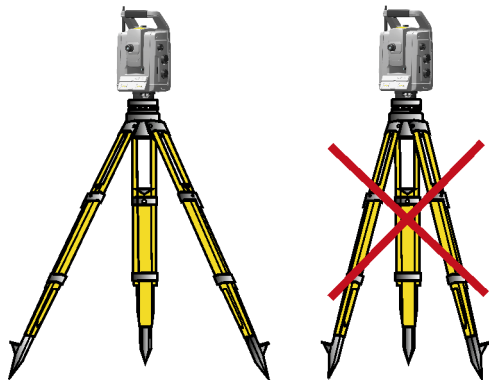
To start the instrument press the On/Off key. To turn the instrument off press and hold the On/Off key for 2 seconds.

On/Off key LED

Instrument mode	Power LED	Description
Off	Off	
On	On	Connected to controller
Suspend	Flashing	Waiting for connection

## Set up

An instrument set up with good stability will increase the precision in the measurement result and allow you to fully utilize the measurement precision of the Trimble S5, S7, S9 and S9 HP Total Station. Set the tripod legs wide apart as shown in figure below.



Take into account that instruments require sufficient time to adjust to the ambient temperature. The following rule-of-thumb applies for a precision instrument: Temperature difference in degrees Celsius ( $^{\circ}\text{C}$ )  $\times$  2 = duration in minutes required for the instrument to adjust to the new ambient temperature.


## Care and Maintenance

The Trimble S5, S7, S9 and S9 HP Total Stations are designed and tested to withstand field conditions, but like all precision instruments, it requires care and maintenance. Take the following steps 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. Use only lens paper or other material that is designed for cleaning optical equipment.
- 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.
- Do not carry the instrument by the telescope barrel. Use 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.

## Cleaning

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.

## Getting Rid of Moisture

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.

## Transporting the Instrument


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.


## Additional information

For further details regarding the features and operation of the instrument, and to access the latest information, including the Trimble S5, S7, S9 and/or S9 HP Total Station User Guide and release notes, go to [www.trimble.com](http://www.trimble.com).

## Trimble support

For Trimble support, go to [www.trimble.com/support](http://www.trimble.com/support).

 **WARNING:** For safety information, refer to the Safety Information section of the Trimble® S5, S7, S9 and/or S9 HP Total Station User Guide.

 **CAUTION:** For laser and regulatory information, refer to the Regulatory Information document delivered with the product.

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