

Correct Pole and Prism Setup for **Robotic** TS Applications



ATP1 360° Prism

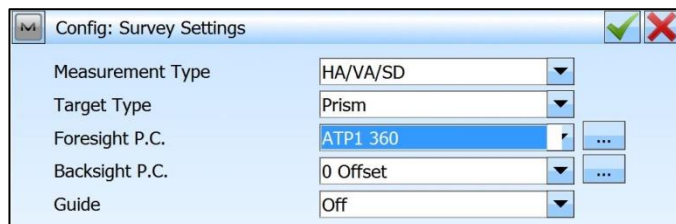
Confirm **ATP1 360° Prism** is being used.

Ensure small black **26 mm** spacer **is** attached.

Ensure specific **Robotic Pole** is used (top height marking will read **1.42 m**).

Make sure to select **ATP1 360** Prism under:

Configuration – Survey Settings – Foresight P.C.
in MAGNET Field.



Ensure the correct **Prism Constant/Offset** values are set by pressing
and confirming the following values are displayed:



| | |
|---|----------|
| Prism Info | |
| Name | ATP1 360 |
| Constant | -7.0 mm |
| <input checked="" type="checkbox"/> Hybrid positioning antenna offset | 0.055 m |

Press the Green Tick until
returned to the home screen.



NOTE: *Prism Constant/Offset* refers to a value that compensates for the extra distance the laser beam travels through the prism in order to reach the plumb line and return towards the EDM once it initially hits the glass. It changes with differing construction and therefore changes with each prism type. Using the wrong Prism Constant will lead to **Systematic Errors** in a survey.

NOTE: *Vertical Height* is always measured from the base of the pole to the centre line of the prism. If unsure of the value, always take a manual measurement using a hand tape.

Correct Pole and Prism Setup for **Robotic** TS Applications



A7 360° Prism

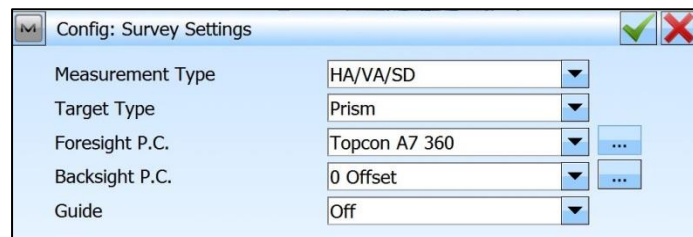
Confirm **A7 360° Prism** is being used.

NO spacer is required.

Ensure specific **Robotic Pole** is used (top height marking will read **1.42 m**).

Make sure to select **A7** Prism under:

Configuration – Survey Settings – Foresight P.C.
in MAGNET Field.



Ensure the correct **Prism Constant/Offset** values are set by pressing and confirming the following values are displayed:



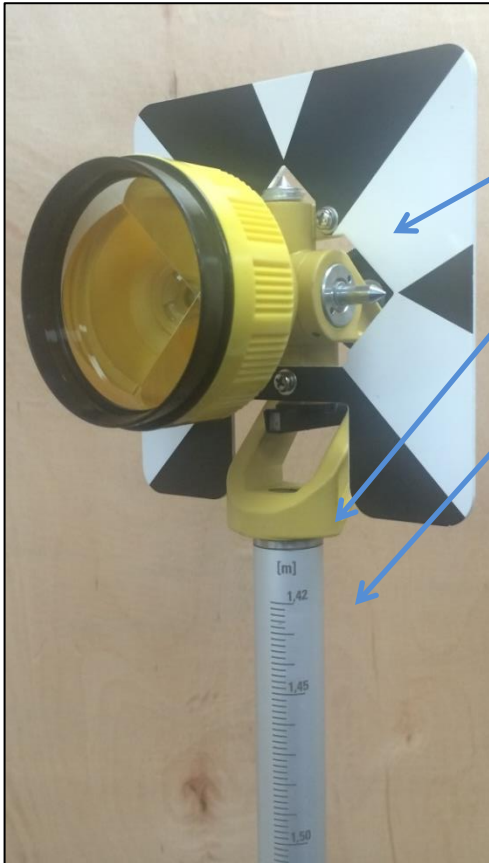

Press the Green Tick until
returned to the home screen.



NOTE: *Prism Constant/Offset* refers to a value that compensates for the extra distance the laser beam travels through the interior of the prism in order to reach the plumb line and return towards the EDM once it initially hits the glass. It changes with differing construction and therefore changes with each prism type. Using the wrong Prism Constant will lead to **Systematic Errors** in a survey.

NOTE: *Vertical Height* is always measured from the base of the pole to the centre line of the prism. If unsure of the value, always take a manual measurement using a hand tape.

Correct Pole and Prism Setup for **Two-Man** TS Applications



'Old Style' 0-Offset Prism- Pole Mount

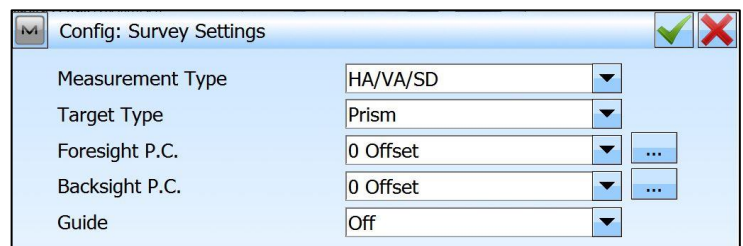
Confirm **0-Offset Prism** is being used.


Remove prism from Adaptor and Chrome Spacer from base of prism mount- **NO** spacer is required.

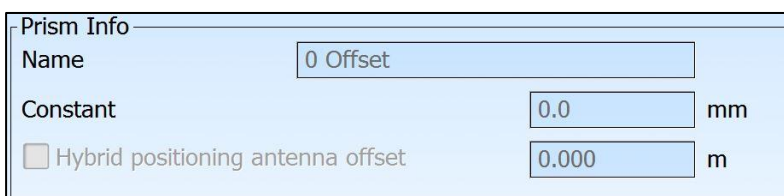
Ensure specific **Robotic Pole** is used (top height marking will read **1.42 m**).

Make sure to select **0-Offset** Prism under:

Configuration – Survey Settings – Foresight P.C.
in MAGNET Field.



Ensure the correct **Prism Constant/Offset** values are set by pressing  and confirming the following values are displayed:



Press the Green Tick until returned to the home screen.

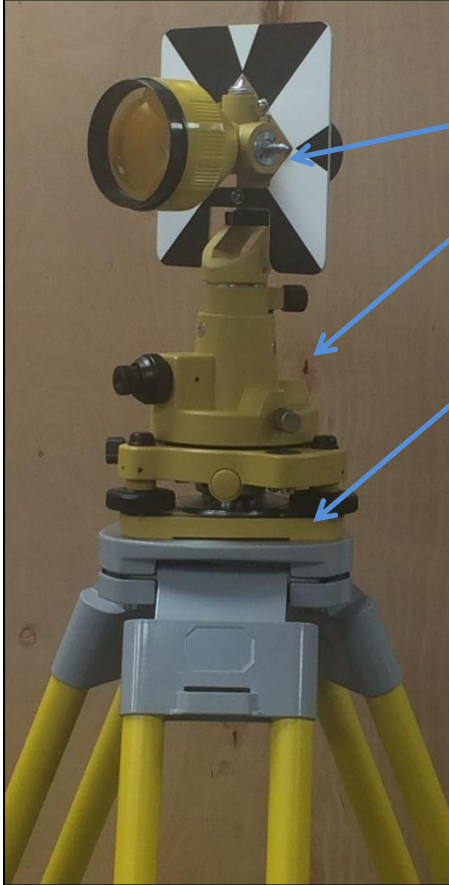


NOTE: *Prism Constant/Offset* refers to a value that compensates for the extra distance the laser beam travels through the interior of the prism in order to reach the plumb line and return towards the EDM once it initially hits the glass. It changes with differing construction and therefore changes with each prism type. Using the wrong Prism Constant will lead to **Systematic Errors** in a survey.

NOTE: *Vertical Height* is always measured from the base of the pole to the centre line of the prism. If unsure of the value, always take a manual measurement using a hand tape.

Correct Pole and Prism Setup for **Two-Man** TS Applications

'Old Style' 0-Offset Prism- Tripod Mount



Confirm **0-Offset Prism** is being used.

Ensure **Tribrach Adaptor with Optical Plummet** is attached to both prism and tribrach.

Make sure tribrach is secured centrally on tripod.

Make certain to select **0-Offset** Prism under:

Configuration – Survey Settings – Foresight P.C. in MAGNET Field (if using a prism as a backsight, also ensure to select the correct model under **Backsight P.C.**).

| Config: Survey Settings | | ✓ | ✗ |
|-------------------------|----------|-----|---|
| Measurement Type | HA/VA/SD | | |
| Target Type | Prism | | |
| Foresight P.C. | 0 Offset | ... | |
| Backsight P.C. | 0 Offset | ... | |
| Guide | Off | | |

Ensure the correct **Prism Constant/Offset** values are set by pressing and confirming the following values are displayed:



| Prism Info | |
|--|----------|
| Name | 0 Offset |
| Constant | 0.0 mm |
| <input type="checkbox"/> Hybrid positioning antenna offset | 0.000 m |

Press the Green Tick until returned to the home screen.



NOTE: *Prism Constant/Offset* refers to a value that compensates for the extra distance the laser beam travels through the interior of the prism in order to reach the plumb line and return towards the EDM once it initially hits the glass. It changes with differing construction and therefore changes with each prism type. Using the wrong Prism Constant will lead to **Systematic Errors** in a survey.

NOTE: *Prism Height* is always measured vertically from the ground to the horizontal centre line of the prism, indicated by the black triangles on the target plate. Always take a manual measurement using a hand tape.