# CIMEL CE318-T
# Quick Setup Guide
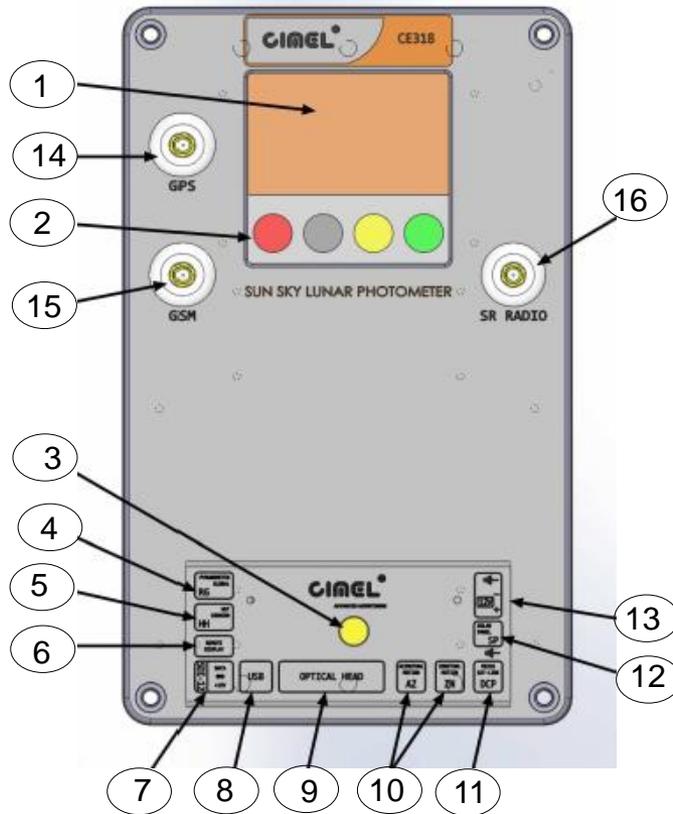
**User interface:**
1. Graphic display
2. Capacitive keys
3. Mechanical push button

**Connector panel:**
4. **NOT USED**
5. Wet sensor
6. **NOT USED**
7. **NOT USED**
8. USB
9. Sensor head
10. Robot azimuth and zenith motion
11. DCP / Serial communication
12. Solar panel
13. External battery

**Other:**

14. GPS antenna
15. GSM antenna
16. **NOT USED**

**1.** Assemble the collimator to the sensor head by tightening the long central threaded rod using pliers (Do Not Overtighten). The notch must face the 4 quadrants lens on the sensor head front plate. Now connect the sensor head cable to the connector panel and route it through the hole in the deployment case and connect it to the sensor head



Notch that enable the 4 quadrant not to be hidden
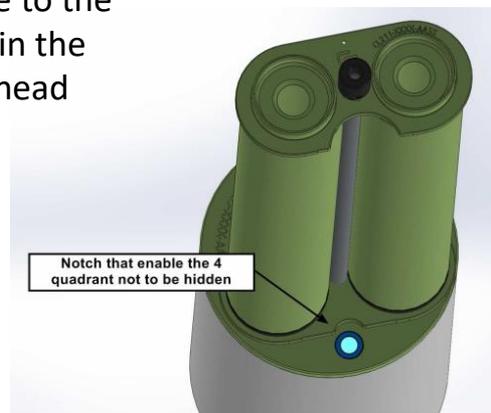
**2.** **BEFORE CONNECTING POWER TO THE CONTROL BOX**, Connect everything else to the connector panel and the GPS antenna to GPS port (number 14) through the hole in the deployment case.

**3.** From the main menu scroll down to "**CIMEL**" and touch "**enter**", then scroll down to "**GPS INFO**" and touch "**enter**" to synchronize the GPS coordinates (*to turn on display, press the yellow (number 3) push button on the connector panel*)



```
16/06/14  13:03
DATE
CIMEL
INFO

return    ↑    ↓    enter
```
● ○ ○ ●

```
16/06/14  13:03
TSV
ROBOT
GPS INFO

return    ↑    ↓    enter
```
● ○ ○ ●

```
state: waiting GPS
Latitude: 48.8562°
Longitude: 2.3922°
Altitude: 100m

return    ↑    ↓    enter
```
● ○ ○ ●
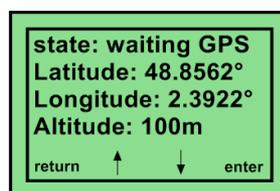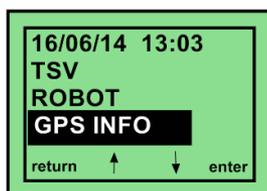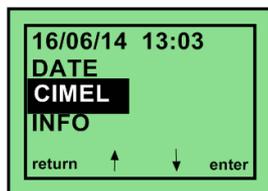
Select CIMEL then GPS INFO and validate with the green button

**4.** Perform a "**PARK**" scenario in the control box menu. The robot will find its home position



```
16/06/14  13:03
SCENARIOS
MEASURES
MEMORY

return    ↑     ↓    enter
```
● ○ ● ●

```
16/06/14  13:03
OFF
PARK
GOSUN

return    ↑     ↓    enter
```
● ○ ● ●
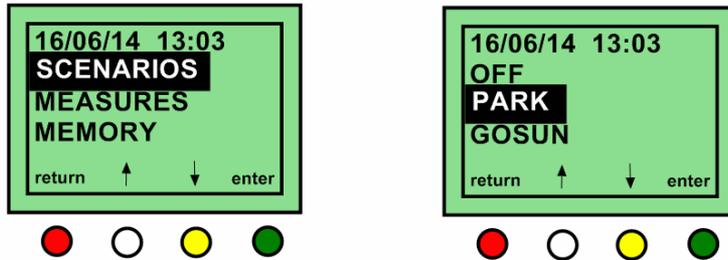
Select SCENARIOS then PARK and validate with the green button

**5.** Strap the sensor head on the V-shaped support of the robot with the collimator pointing down.



The 2 purple faces have to be aligned properly



Notches that have to be placed face to face
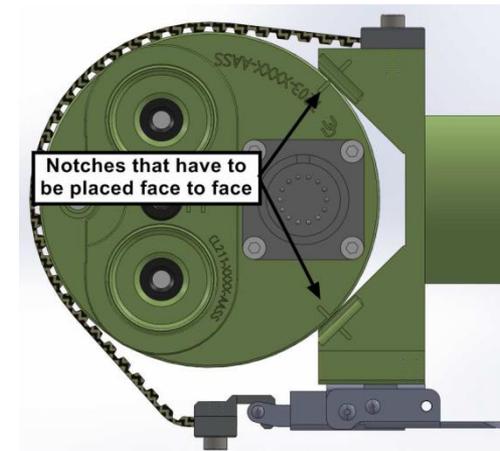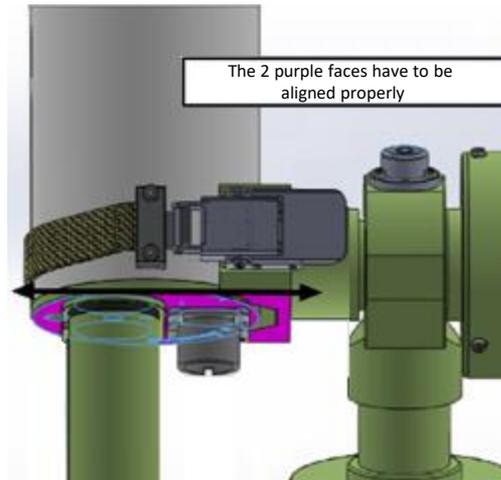
**6.** Perform a "**PARK"** scenario in the control box menu. The robot will find its home position. The collimator should return to pointing down.
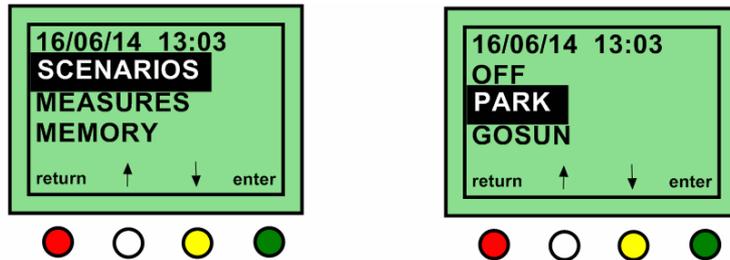


Select SCENARIOS then PARK and validate with the green button
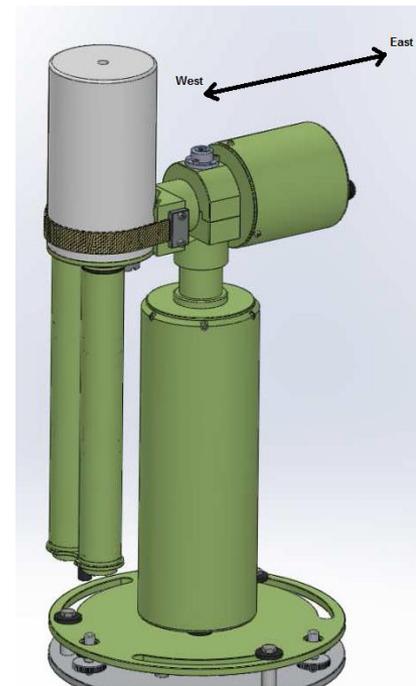
**7.** Perform a **"GOSUN"** scenario in the control box menu. The sensor head will point towards the sun.
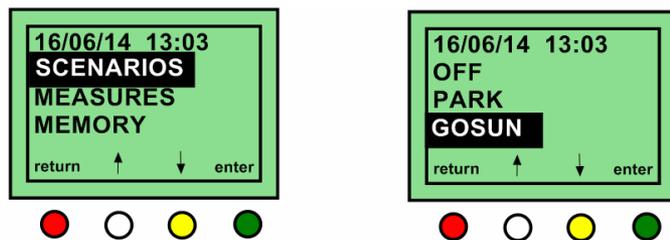


Select SCENARIOS then GOSUN and validate with the green button
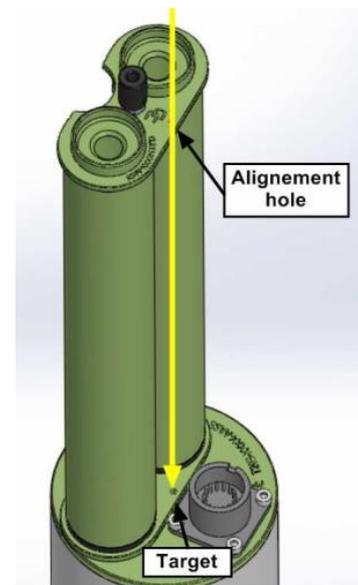
**8.** After a **"GOSUN"** scenario rotate the base of the robot until the sun spot lines up to the target.

*Note:* The sun spot <u>may</u> <u>not</u> be centered on the target.
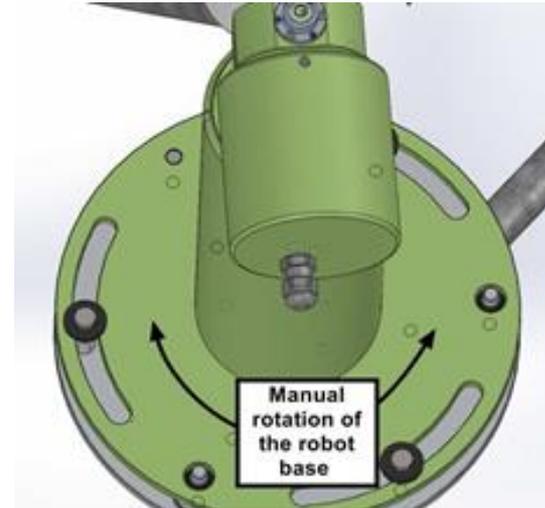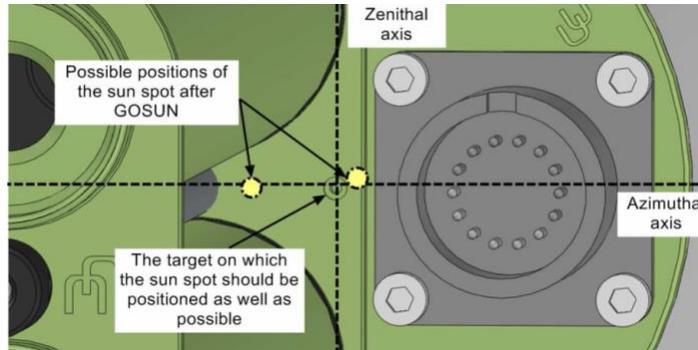


**9. ROBOT LEVELING:**

Without disturbing the sensor head, place the level on the AZ housing. using both the adjusters on the robot base (Fig. 1) adjust the level in the direction that is perpendicular with the adjustable feet *(Fig.2),* and then adjust the level in the direction that is parallel with the adjustable feet *(Fig.3).* This will ensure that robot is level in all directions.
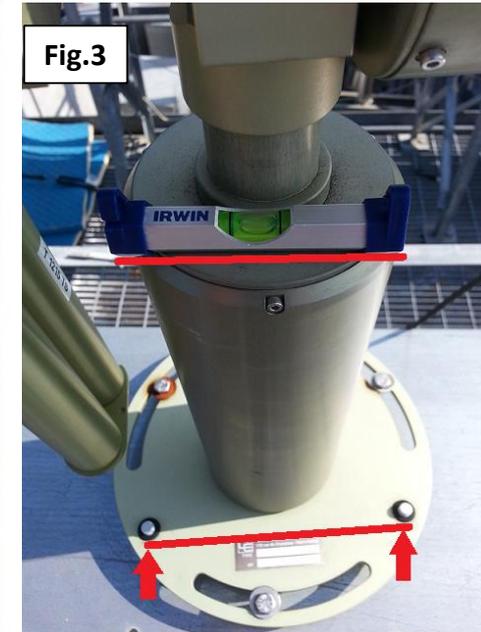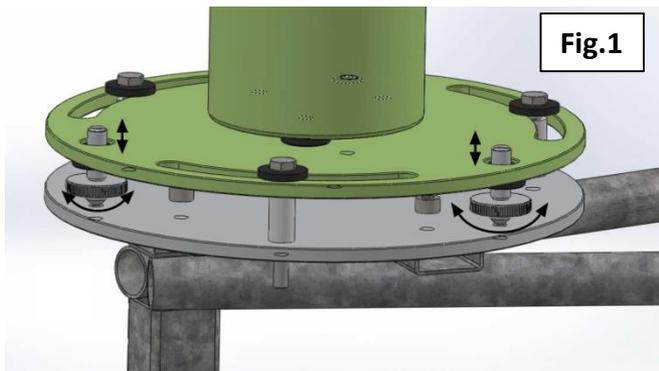


Fig.1

Fig.2

Fig.3

**10.** Perform a "**PARK**" scenario in the control box menu again. The robot will find its home position.



```
16/06/14  13:03
SCENARIOS
MEASURES
MEMORY

return    ↑      ↓    enter
  ●    ○    ●    ●
```

```
16/06/14  13:03
OFF
PARK
GOSUN

return    ↑      ↓    enter
  ●    ○    ●    ●
```
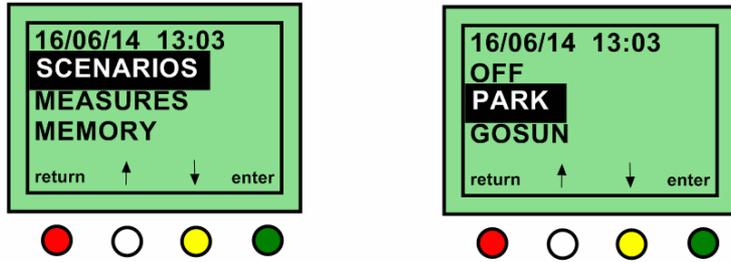
**Select SCENARIOS then PARK and validate with the green button**

**11.** Perform a **"GOSUN"** scenario in the control box menu. The sensor head will point to the sun.

```
16/06/14  13:03
SCENARIOS
MEASURES
MEMORY

return    ↑      ↓    enter
  ●    ○    ●    ●
```

```
16/06/14  13:03
OFF
PARK
GOSUN

return    ↑      ↓    enter
  ●    ○    ●    ●
```

**Select SCENARIOS then GOSUN and validate with the green button**



Alignement hole
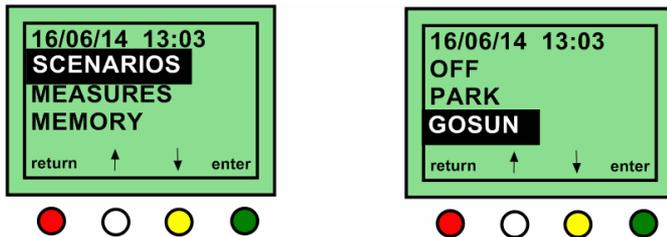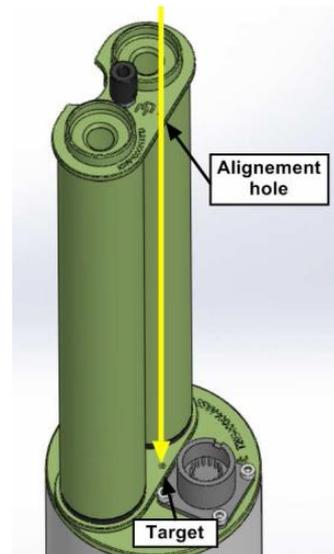
Target

**12.** After a **"GOSUN"** scenario rotate the base of the robot until the sun spot lines up to the target. The sun spot may not be centered on the target but should be closer than 4mm. If the sun spot is further, go back to step 6.
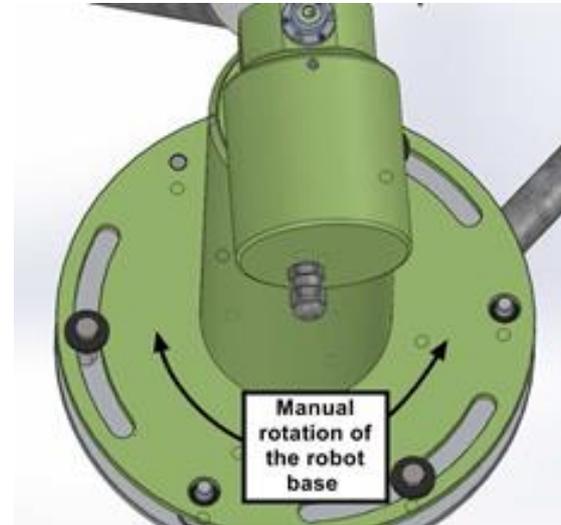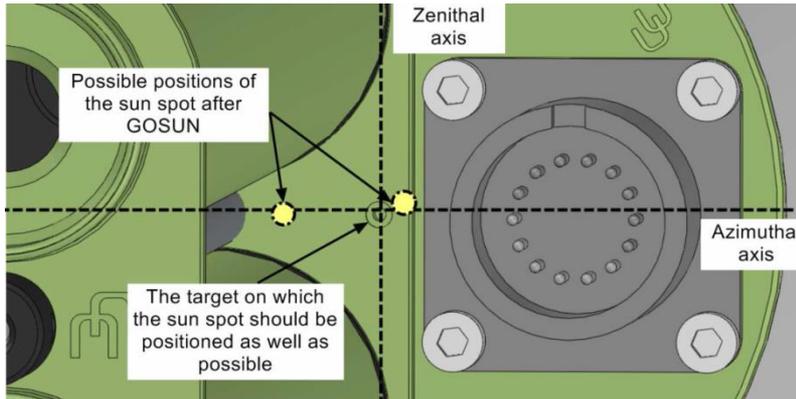




**13.** Tighten the bolts on the robot base to secure the robot without changing its position.
Important note: watch out that the level didn't move. If the level moved, go back to step 6 and repeat procedure.
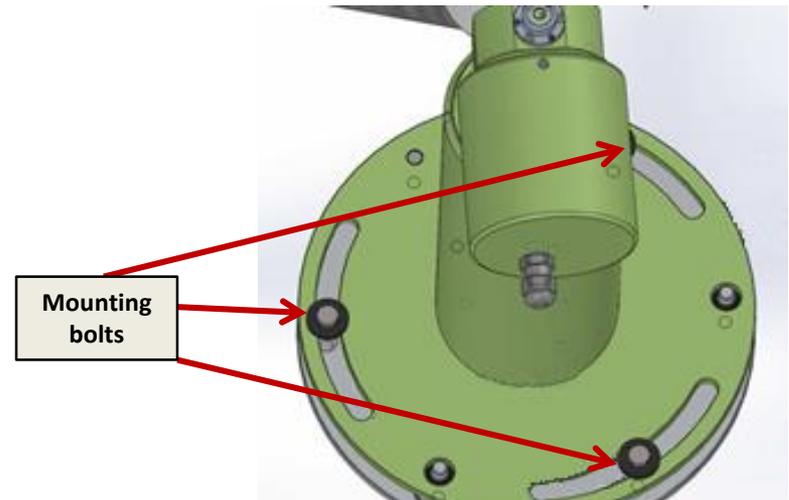
**14.** Secure the sensor head cable to the ZN motor (fig. 1 – 3)



Fig.1

Sensor head cable should hang down to the end of collimator



Fig.2



Fig.3

**15.** Perform a "**PARK**" scenario in the control box menu again. The robot will find its home position.

| 16/06/14  13:03 |
|---|
| **SCENARIOS** |
| MEASURES |
| MEMORY |
| return ↑ ↓ enter |

| 16/06/14  13:03 |
|---|
| OFF |
| **PARK** |
| GOSUN |
| return ↑ ↓ enter |
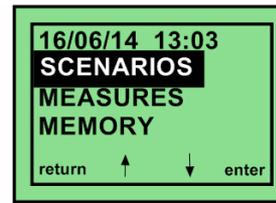
Select SCENARIOS then PARK and validate with the green button

**16.** Perform a **"GOSUN"** scenario in the control box menu. The sensor head will point to the sun.

| 16/06/14  13:03 |
|---|
| **SCENARIOS** |
| MEASURES |
| MEMORY |
| return ↑ ↓ enter |

| 16/06/14  13:03 |
|---|
| OFF |
| PARK |
| **GOSUN** |
| return ↑ ↓ enter |
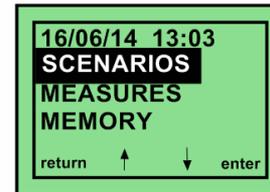
Select SCENARIOS then GOSUN and validate with the green button

**17.** Perform a **"TRACK SUN"** scenario in the Control box menu, The robot will follow the sun. Check that the sun spot is centered on the collimator target at the end of the scenario.
*Note:* If it doesn't track correctly, check and reseat connections

| 16/06/14  13:03 |
|---|
| **SCENARIOS** |
| MEASURES |
| MEMORY |
| return ↑ ↓ enter |

| 16/06/14  13:03 |
|---|
| PARK |
| GOSUN |
| **TRACK SUN** |
| return ↑ ↓ enter |
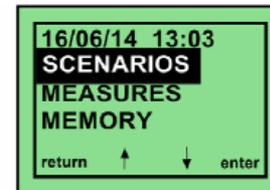
Select SCENARIOS thenTRACK SUN and validate with the green button

**18.** When the track is done correctly, repeat step 15, 16 and 17 once or twice to validate the photometer behavior.

**19.** Set the photometer in automatic mode.



Select SETTINGS then Auto and switch it to ON
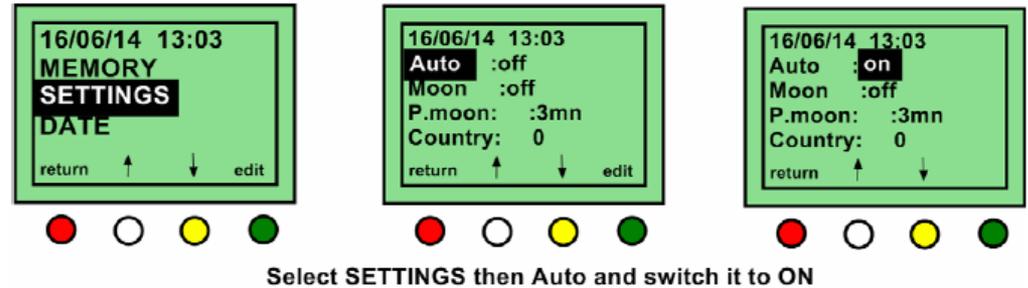
**20.** Plug the USB adapter into the PC.
Connect the PC cable to the DCP connector
On the connector panel. Then connect the PC
Cable to the USB adapter.
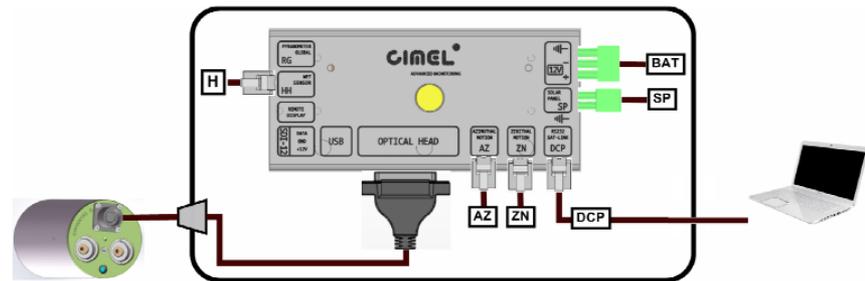


**21.** Run the "cimelTS_https_connect.exe*" program*