

1. Setup in Portal

Enter project on http://portal.ventusar.com – ensure all projects and versions are published and use the Bulk Downloader to transfer all data to the device.

2. Position Tripod

Use a tripod mount to make the setup more stable.

- Avoid sources of magnetic interference (cars, power lines).

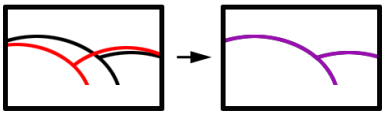
3. Calibrate: Height

Override the viewpoint height if you are not at the default height above the grid. The default value is 1.5m above the height from the grid. Use this if you're not standing at ground level (e.g. on a building or a bridge).

4. Calibrate: Heading

This calibration fits the wireline to the camera feed by moving the wireline from left to right. The heading calibration should be done before the inclination or roll calibration.

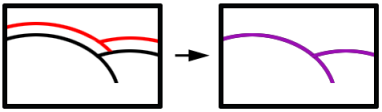
- Tap to add a small offset, hold for a larger offset.
- To override the internal compass, enter a magnetic heading from an external compass.



5. Calibrate: Inclination

This process fits the wireline to camera feed by raising or lowering the wireline. Inclination calibration should be done after the heading calibration as it only applies for the current heading.

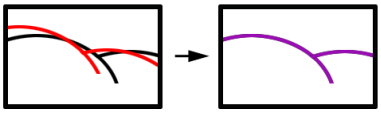
- Tap to add a small offset, hold for a larger offset.



6. Calibrate: Roll

This process fits the wireline to camera feed by rising on the left and lowering on the right. Roll calibration should be done after the heading and inclination calibration as it only applies for the current heading.

- Tap to add a small offset, hold for a larger offset.



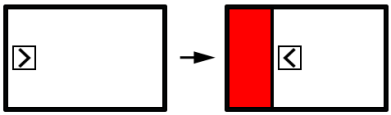
7. Capture

Once wireline and camera feed align correctly, tap the capture button. This is always in the bottom right of the My View Screen. This will store the image from the camera and the metadata of the viewpoint (location, attitude of the device and any calibration). Captures will be stored in the gallery.

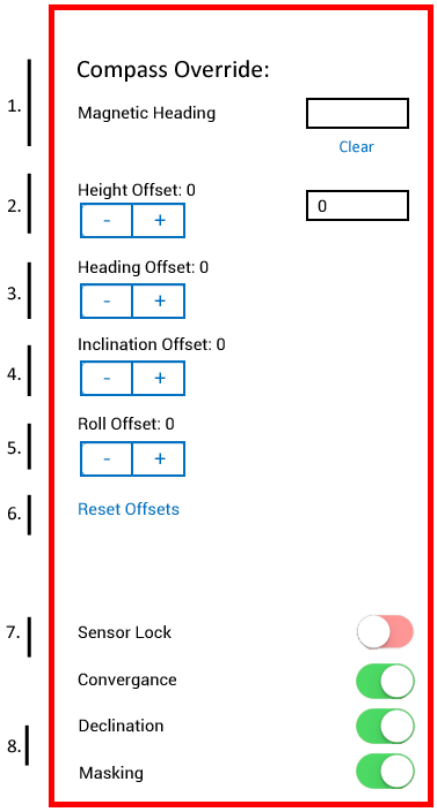


Calibration Controls: iPad

All calibration controls are stored in the left panel. Calibration controls are used to change the way the information is received from the sensors built into the device.



8. Controls



1. **Compass Override** replaces the heading picked up from the internal compass in the device. To use an external compass:
   - Take a bearing to a visible point in the scene (pylon, met mast etc.) using external compass.
   - Align device so red calibration line in middle of camera feed matches visible object.
   - Enter magnetic bearing - the wireline will now be locked to this heading, inclination and roll will still come from the devices sensor.
   - Input should be a magnetic heading; the device will convert this to a grid heading.
2. **Height Offset** allows generation of visualisations as though above ground level (e.g. on a bridge). This offset will be added to the 1.5m tripod height.
3. **Heading Offset** allows correction of noise from the device digital compass.
   - Tap to add a small offset, hold for a larger offset.
4. **Inclination Offset** raises or lowers the wireline so the horizon matches the camera feed.
   - Tap to add a small offset, hold for a larger offset.
5. **Roll Offset** correct when the horizon at the left of the screen is lower than at the right.
   - Tap to add a small offset, hold for a larger offset.
6. **Reset Offset** sets the height, heading, inclination and roll offset back to zero.
7. **Sensor Lock** stops the orientation of the device being used to update the wirelines.
8. **Terrain Masking** – when enabled the terrain will mask objects behind it, when disabled objects behind the terrain will be shown. Use this to find the turbines when they hidden behind a hill.