

Mobile Mapping Installation Checklist

• Name: _____

• Date: _____

1. Hardware and components

Do you have...

- | | | |
|--|---|--|
| <input type="checkbox"/> GNSS/INS | <input type="checkbox"/> External data logger | <input type="checkbox"/> Vibration dampening |
| <input type="checkbox"/> LiDAR (or other sensor) | <input type="checkbox"/> Mounting system | <input type="checkbox"/> Power source |
| <input type="checkbox"/> GNSS antenna(s) | <input type="checkbox"/> Correct cables | <input type="checkbox"/> Tape measure |

2. Platform readiness

- Does your platform have stable, rigid mounting points for your sensors?
- Can your platform power all required sensors, or do you need an external source?
- Do you need converters or backup batteries?

4. Mounting and connecting

- Mount your GNSS/INS
- Mount your LiDAR or other sensor
- Mount your GNSS antenna(s)
- Connect your sensors to each other
- Connect your sensors to a data logger (if you're using one)
- Label connections for ease of reference later

3. Hardware configuration

- Install NAVconfig on your computer
- Connect your GNSS/INS and follow the step-by-step guide to configure your unit
- Input lever arm measurements:
 - GNSS antenna to IMU
- Configure your LiDAR/other sensors according to the manufacturer's handbook

***Ensure hardware configuration is accurate. Failure to do so, could cause issues at a later stage.**

5. Data and computing system

- Verify you have enough onboard storage capacity for your survey
- Verify data write speeds to make sure they match up with the data output rate (typically 100hz but can be up to 250hz)
- Verify firmware versions across devices and update if necessary
- If using correction services, confirm subscriptions and base station access
- Install and test NAVdisplay for real time data visualisation, and any other software your project requires
- Set file naming conventions, logging intervals, LiDAR scan rate and similar parameters

6. Operational and safety checks

- Confirm all equipment and data gathering is compliant with local regulations
- Define a test run route that confirms all equipment is operating to the required level
- Perform a boresight calibration to calibrate LiDAR and INS coordinate frames
 - If required, use dedicated boresight calibration targets (see OXTS support guide for more details)