

OhmPi installation checklist v1.0.0

Date (YYYY-MM-DD):

Installer:

Location (e.g. Rocherfort (BE), 54.2223, 3.4423):

OhmPi name (register your ohmpi on <https://ohmpi.org>) :

OhmPi config (e.g. mb2024+4*mux2023+dph5005):

Before going in the field:

- o Measurement board
 - o Continuity check (SC checks) (power off)
 - o Voltage check (power on)
 - o Check shunt resistor, board version and values in config.py
 - o Resistance check on reference resistor board with quad [0,0,0,0]
- o Multiplexer board
 - o All role cables (A, B, M, N) wired to right board/connector and MUX boards addresses match those in config.py
 - o Continuity test (OhmPi.test_mux())
 - o Resistance check on reference resistor board with reference_sequence file

In the field:

- o Immediate surrounding free of power sources that could affect the system (e.g. generator, high voltage line)
- o Cables firmly connected to screw terminals (gently pull wires to check connections)
- o Metallic enclosure wired to ground
- o System protected from rainfall/sun and humidity (sun shade, silicagel, water tight spray, etc.)
- o Charged batteries
- o Decoupled solar charging system from battery when measuring

Power system:

- o Software tests (OhmPi.test())
- o Resistance check on reference resistor board with reference_sequence file

Connect your electrodes:

- o Contact resistance check
- o Sequence run
 - o Current does not reach the limit of 4800/50/shunt_value mA (e.g. for a shunt of 2 Ohm, this means a limit of 48 mA)
 - o Full-waveform check for noise or strange decay (OhmPi.plot_last_fw())