



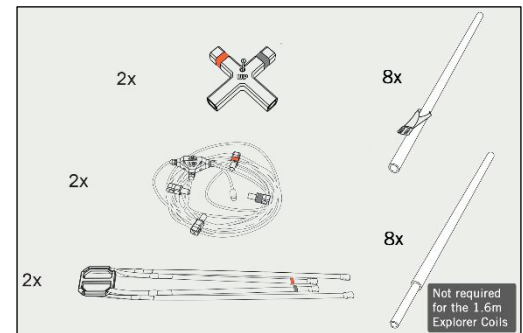
PRE-SURVEY PROCEDURE

A. Check components

- Check all components are present and correct, see right, noting that the eight extension poles (bottom right) are only required for the 3.0m coils.

B. Prepare the batteries

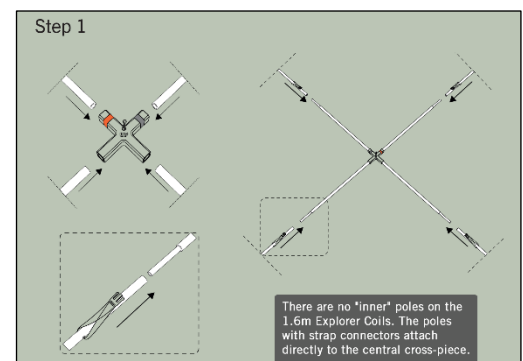
- Charge batteries using the supplied GroundTEM battery charger;
- Guidance notes in the lid provide information on checking battery status.



ASSEMBLY & START-UP PROCEDURE

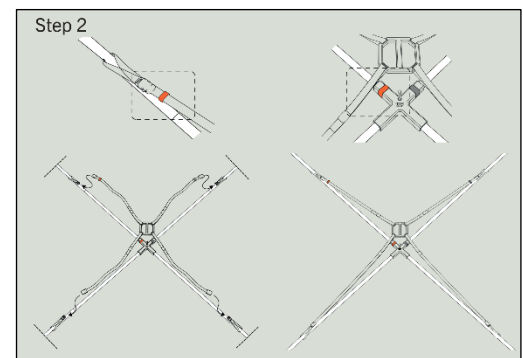
A. Build frames (Step 1)

- Place central cross-pieces down, note the engraved “UP” instructions;
- 1.6m coils:** insert four poles into each central cross-piece, with the strap buckles towards the free end of the poles;
- 3.0m coils:** insert extension poles (*without* strap buckle) into the central cross-pieces, and push outer poles (*with* buckles) onto the extension poles; buckles on the outer poles should be towards the center.



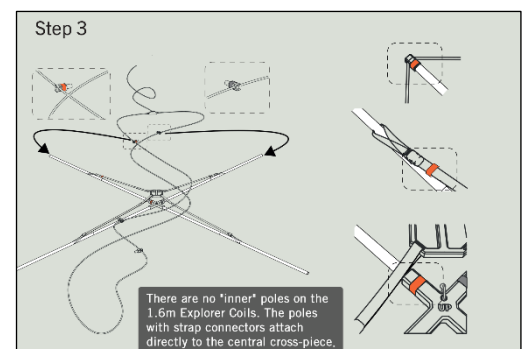
B. Connect carrying straps and handle (Step 2)

- Lay the carrying handles at the center of the frames;
- Pull straps along each pole, ensuring the coloured (grey & orange) clips on the straps match the coloured bands on the central cross-pieces;
- Clip the straps to the poles, and adjust lengths until frame hangs level.



C. Attach Tx and Rx coils (Step 3)

- Lay the coils over the frames, matching the coloured corner pieces with the coloured bands on the straps and central cross-pieces;
- Insert the corner pieces of the coils into the end of the poles;
- The coils will be tight on the frames, so this stage can be difficult, especially in cold conditions; try to “roll” the corner-pieces into the end of the poles.



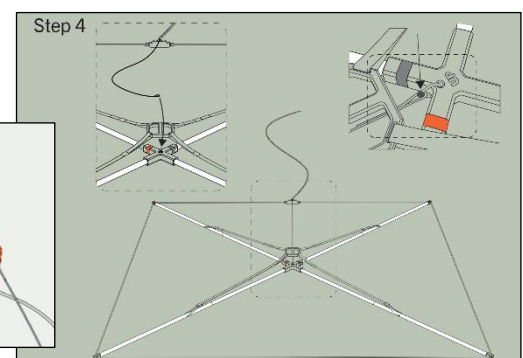
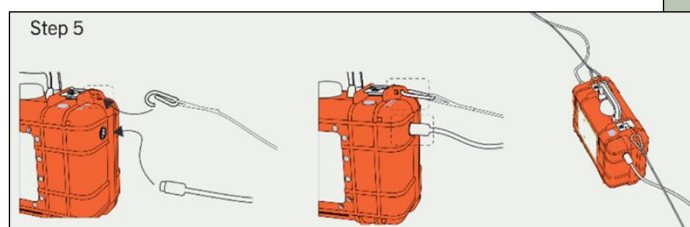
D. Connect strain-relief cords (Step 4 & 5)

- Hook strain relief loops into the fastening on the central cross-pieces;
- Clip the sprung-loaded clips through the holes on the top corners of the instrument case when connecting the Tx and Rx lead-in cables.

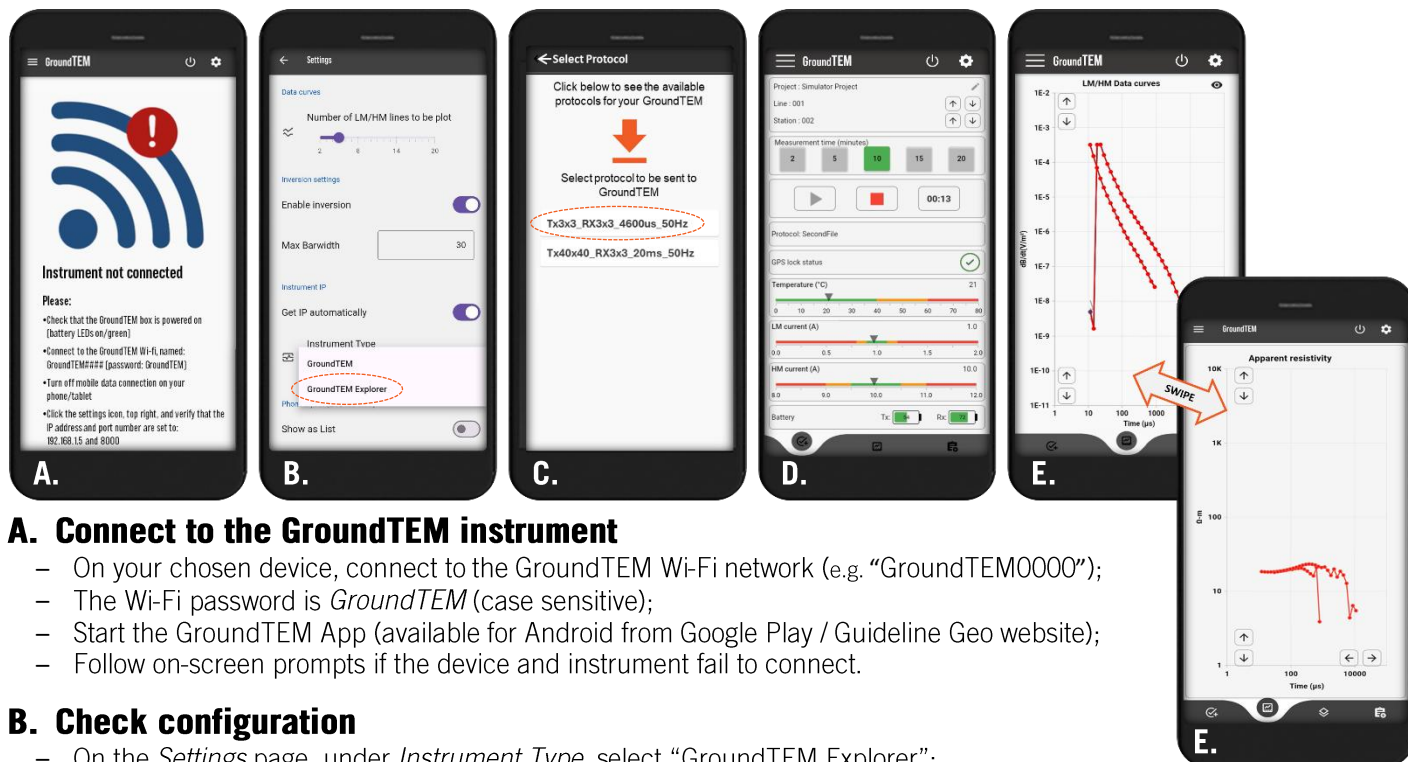
E. Power-on the instrument

- Press the silver power button on the instrument;
- Three green lights indicate that power is on the transmitter (Tx), power is on the receiver (Rx), and GPS signal is received (flashing light).

To see these assembly instructions in more detail, scan the QR code below



MAKING A MEASUREMENT



A. Connect to the GroundTEM instrument

- On your chosen device, connect to the GroundTEM Wi-Fi network (e.g. “GroundTEM0000”);
- The Wi-Fi password is *GroundTEM* (case sensitive);
- Start the GroundTEM App (available for Android from Google Play / Guideline Geo website);
- Follow on-screen prompts if the device and instrument fail to connect.

B. Check configuration

- On the *Settings* page, under *Instrument Type*, select “GroundTEM Explorer”;
- This example is from an instrument with an active *Real-time Inversion* subscription.

C. Choose an Explorer Coil measurement script

- Scripts are named according to transmitter / receiver loop size – select the correct one for the current configuration.

D. Enter a project name, line / station numbers, and measurement duration

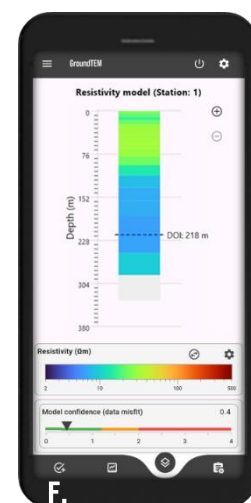
- The top box is for file management: it is possible to survey individual stations, along survey lines, within projects (note that separate projects must be used for different configurations / scripts);
- Select measurement duration then press *Play* button: 1 to 5 minutes are normally sufficient for Explorer surveys but, if data are coming in cleanly / consistently, it is possible to stop longer measurements early, without losing data.

E. Monitor the live results

- Decay / apparent resistivity curves can be inspected (swipe left/right to switch between the two displays), to ensure that they are smooth and stable between repetitions;
- Instrument temperature and output current can be checked using the monitoring bars.

F. Review real-time inversion results

- An inversion, showing an auto-processed resistivity model can be seen during measurement*;
- If multiple stations have been collected in a line, swipe sideways to view a 2D profile of results.



FILE MANAGEMENT

A. Install ABEM GroundTEM Connect

- Download the GroundTEM Connect software from the Guideline Geo webpages (use QR code on first page);
- After installing, right click on the GroundTEM Connect icon and tick “Run as Administrator”.

B. Downloading data

- Connect the PC to the GroundTEM Wi-Fi network (ID: GroundTEM#### Password: GroundTEM);
- Click on “Connect to Instrument” (if it fails, firstly check the Wi-Fi connection, then make sure that the GroundTEM Connect settings are correct (⚙️), try the “Default settings” button, if necessary);
- The left panel shows projects on the instrument, whilst the right panel shows the default download location;
- If the right panel is blank, refresh the view (🔄);
- Select the required projects in the left window and click on the “Copy” button, between the two windows;
- To change the download location, either add a new directory (📁+) or work up through existing directories (⬅️back);
- If the USF file (an industry standard format, compatible with all 1D inversion software) is corrupt or missing, use the “STB -> USF” button to generate a new one from the selected project folder.