

Receiver Self-Test



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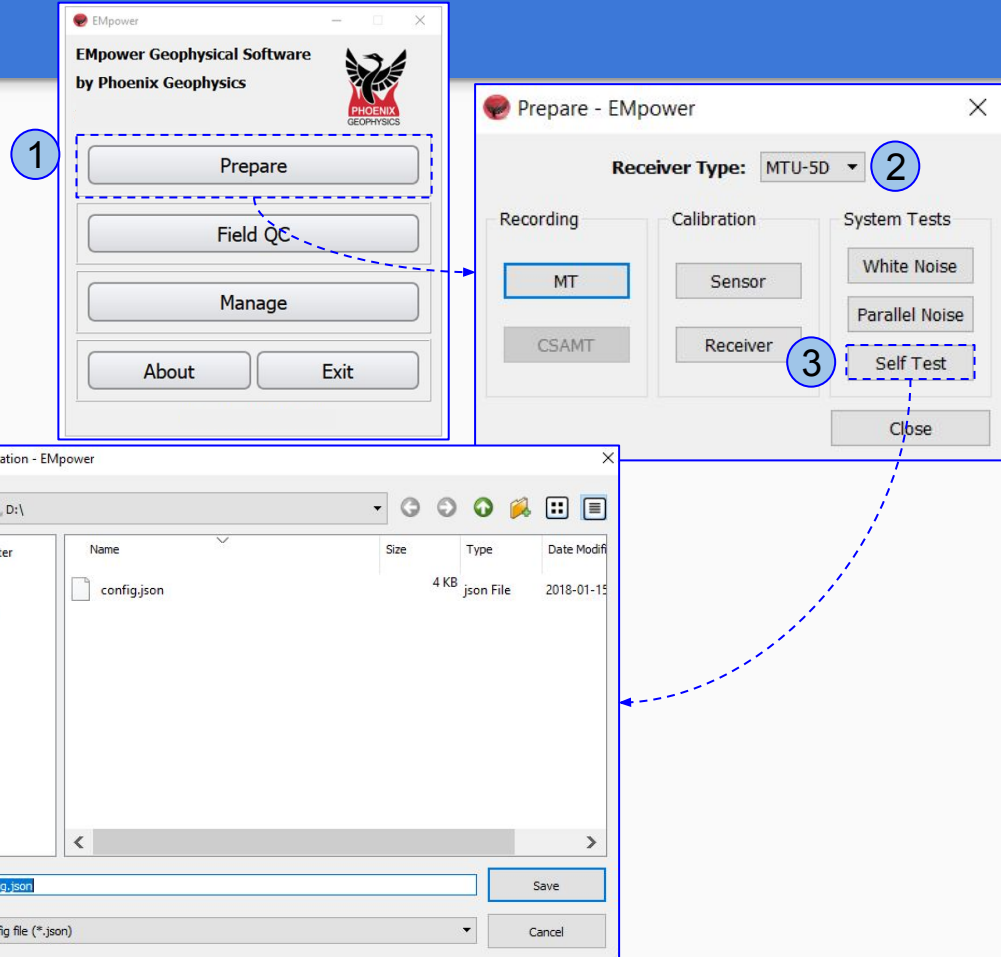
Materials



Qty	Description
1	Computer with an EMapower license and SD card reader
1	SD card
1	Receiver under test
3	Magnetic channels test jig
1	GPS antenna and tripod assembly
1	GPS signal cable, GPS antenna to receiver
1	Self Test Jig
5	Test lead Banana to Banana 2 Black, 2 Red, and 1 Yellow
1	12V cable, Battery to Receiver
1	12V Battery

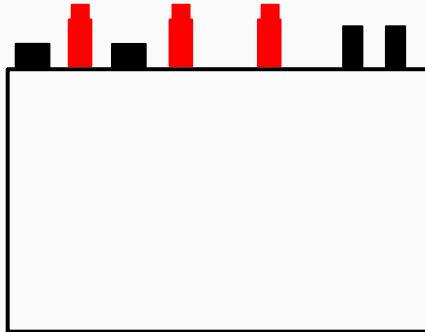
Configuration file (Self-Test)

1. Open EMpower and click the **Prepare** button
2. Select the **Receiver Type**
3. Click the **Self-Test** button
4. Insert the **SD card** in the computer's SD card slot or use a USB memory card reader.
 - o Click **File** menu / **Save** or **Ctrl+S**
([see the user manual](#))



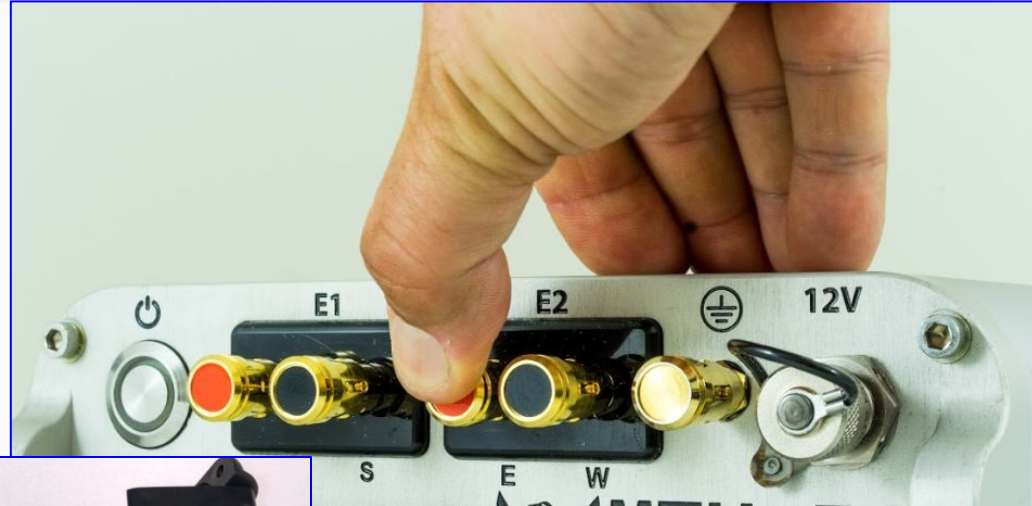
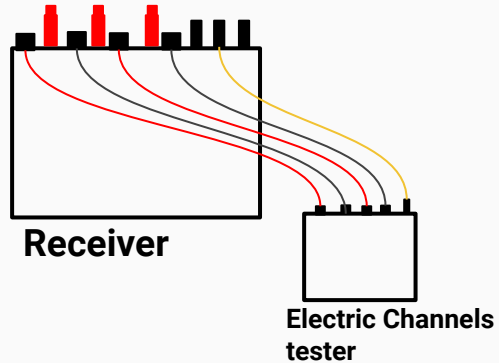
Magnetic Channels testers

Connect the magnetic channels testers to each magnetic channel of the receiver (*H1, H2, H3*)



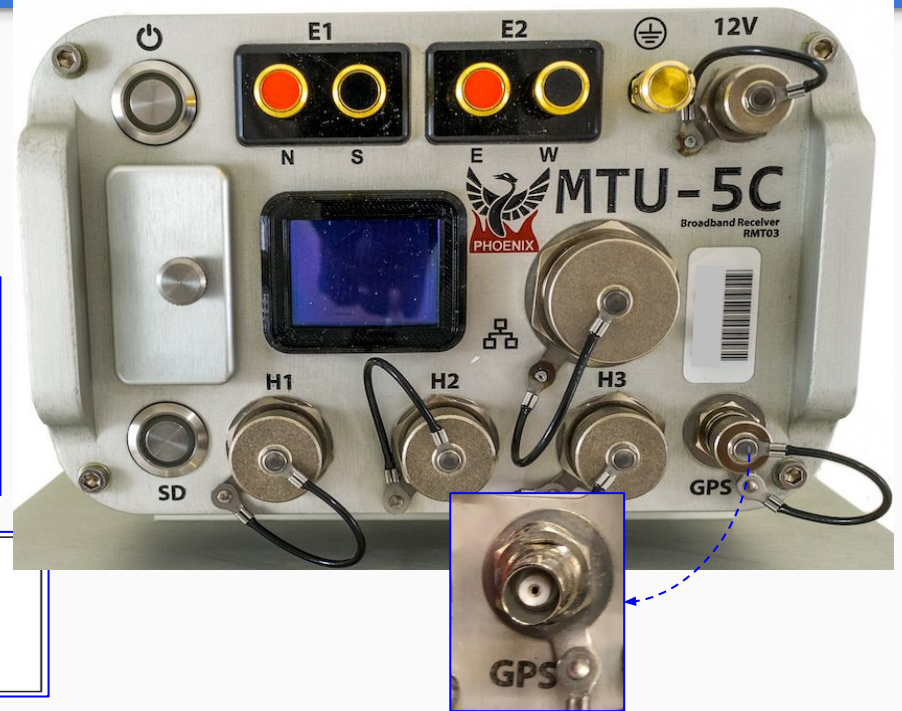
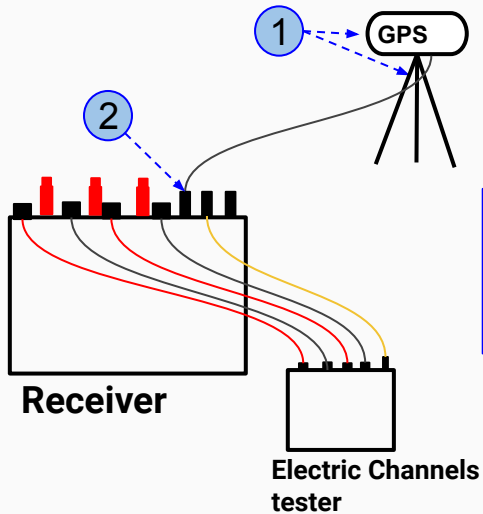
Electric Channels tester

1. Use the Black wires to connect **South-South** and **West-West**
2. Use the Red wires to connect **North-North** and **East-East**
3. Use the Yellow wire to connect the Ground connectors



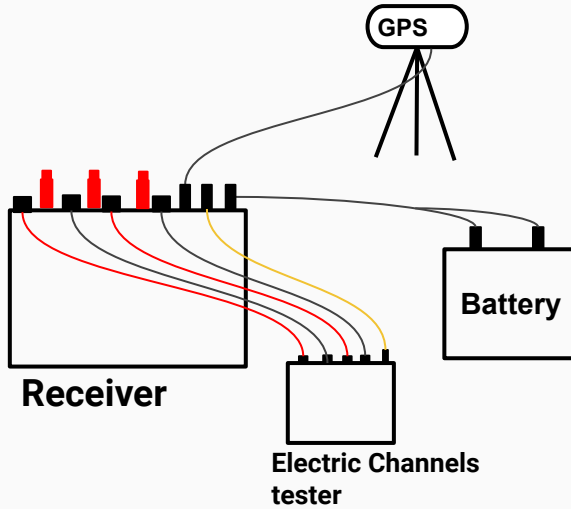
GPS connection

1. Assemble the **GPS** antenna with the **tripod**
2. Connect the GPS cable from the GPS antenna to the **Receiver**



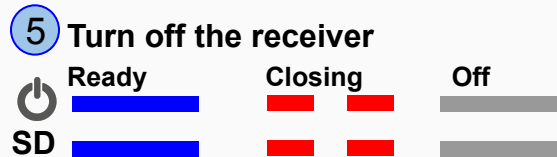
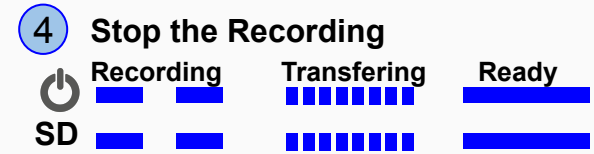
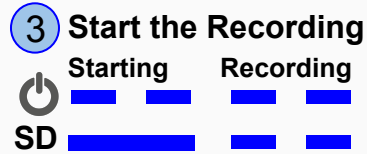
Battery connection

Use the battery cable to connect the MTU-5C receiver to the battery




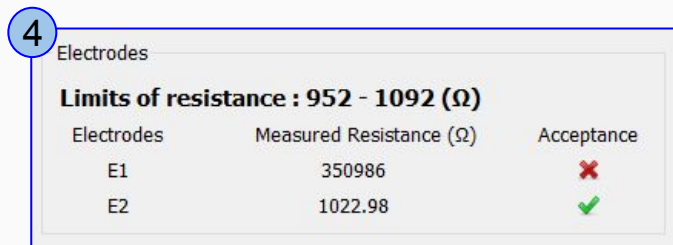
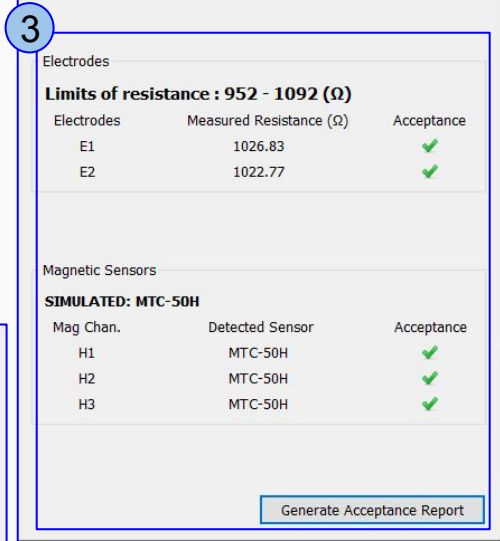
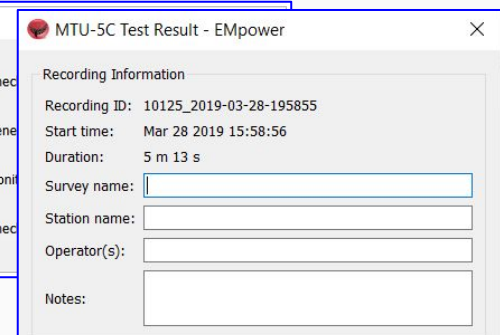
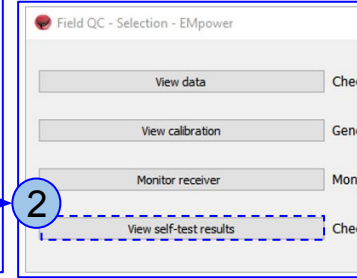
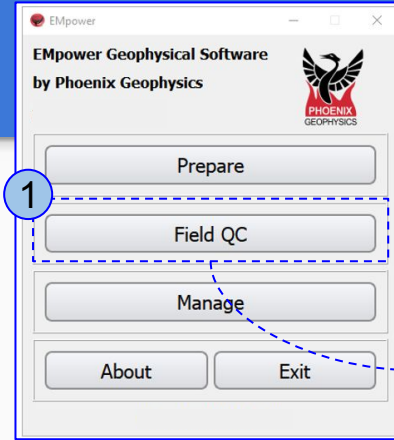
Start Test

1. Insert the **SD Card** into the receiver
2. Press the Power button briefly
 - Wait until the receiver is ready to record
3. To start the recording press the Power button briefly
4. After 5 minutes, stop the recording by pressing the **Power** button briefly and releasing it
5. To turn off the receiver press the Power button for 3sec and release it



Field QC in EMpower

1. Open the **Field QC** module in EMpower
2. Select **View self-test results**
3. Review the results, there should be green check marks for every channel
4. If the **Acceptance** result shows a red cross 
 - Check the connections and repeat the test
 - If the receiver repeats the same result, contact Phoenix Geophysics for support (*see the last page*)



Acceptance Report

To export the report:

1. Click the **Generate Acceptance Report** button
2. Type the file name (*PDF file*) and **Save**
3. Review the **Acceptance Report**

Magnetic Sensors

SIMULATED: MTC-50H

Mag Chan.	Detected Sensor	Acceptance
H1	MTC-50H	✓
H2	MTC-50H	✓
H3	MTC-50H	✓

1

Generate Acceptance Report

Select target PDF - EMpower

Look in: D:\MTU-5C Self Test Kit

Name	Size	Type	Date Modified
10125_2019-03-28-195855		File Folder	28/03/2019 7:59
10125_2019-03-28-200559		File Folder	28/03/2019 8:06

File name: Report

Files of type: PDF Files (*.pdf)

2

Save

Cancel

```
PHOENIX GEOPHYSICS

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These are the results from Self Instrument Check
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Recording Information :
-----
Instrument Serial: 10125 (MTU-5C)
Recording ID: 10125_2019-03-28-195855
Local Start time: Mar 28 2019 15:58:56
Duration: 5 m 13 s
Survey Name:
Station Name:
Operator(s):
Notes:

-----
Electric Channels :
-----
Chan Resistance (ohms) Status
-----
E1 1026.83 Passed
E2 1022.77 Passed

-----
Magnetic Channels :
-----
Chan Sensor type Status
-----
H1 MTC-50H Passed
H2 MTC-50H Passed
H3 MTC-50H Passed
```

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Please check out the [FAQs](#)

<https://phoenixgeophysics.freshdesk.com/>

Or email us at: support@phoenix-geophysics.com