



Phoenix AL-100 Airloop Calibration

To calibrate an AL-100 Airloop sensor for MT surveys:

Physical layout

1. Set up the Loop and MTU-5 box as shown in Figure 1.

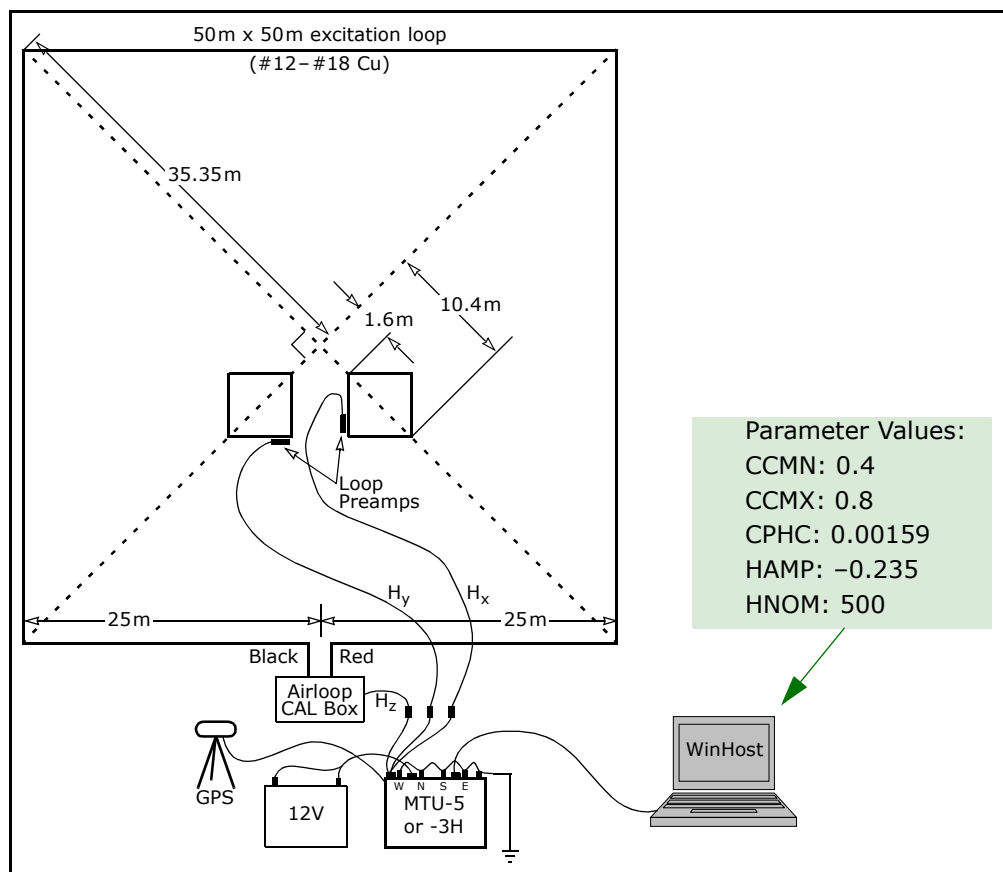


Figure 1: Physical Layout

2. Ensure that the WNSE telluric inputs and the GND connector are all connected to the GND electrode.
3. Ensure that the Airloop preamps are oriented as shown above, that is, *the cable to the MTU exits the preamp toward the right when viewed from within the Airloop.*
4. Connect the Airloops to be calibrated to the Hx and Hy cables, and connect the Airloop Calibration box to the Hz cable.
5. Connect the GPS antenna, battery, and laptop computer to the MTU-5 or -3H.



Setting parameters

To set the parameters using Winhost:

1. Power up the MTU, and start WinHost on the laptop.
2. Click **Setup**.
3. Enter the Hx and Hy Loop serial numbers; leave Hz blank.

Hx Coil Serial #	LOOP1234
Hy Coil Serial #	LOOP5678
Hz Coil Serial #	
Coil Cal Multiplier	2

4. Set the **Coil Cal Multiplier** to at least 2 to ensure quality calibration data. Each increment of the Multiplier adds 30min to the duration of calibration data acquisition.
5. Click **More...**

The **Additional Parameters** dialog box appears, with parameter **CCMN** selected.

Select a parameter from the drop down list. To change the value, edit the "Value" field, then press the "Change" button.

Parameter: CCMN

Value: 0.4

Coil cal minimum acceptable corner frequency.
Set to 0.2 for MTC-50 coil.
Set to 0.4 for air loop calibration.

6. From the Parameter drop-down list, choose each parameter in turn, change its **Value**: according to the following table, and click **Change**.

Parameter	Value for Airloop Calibration
CCMN	0.4
CCMX	0.8
CPHC	0.00159
HAMP	-0.235
HNOM	500

7. Click **Done** to return to the main window.

Monitoring calibration progress

To monitor the calibration:

1. Click **MTU Status**, and view the progress of the calibration in the lower right pane.
When calibration is complete, the **Calibration Status** pane will contain the message, "Coil calibration files on disk."
2. Close the **Information Parameters** window.

Saving the files

The finished calibration files should be saved in the MTU-CAL folder on the laptop hard disk. To save the files:

1. Click **Setup**.
2. Click **MTU Files**.
3. Choose the CAL directory, and transfer the Airloop calibration files to the laptop.
Calibration of the Airloop(s) is now complete.

