Turn ON Coil System:

1. Turn on the **COMPUTER** power strip
2. Turn on **AMPLIFIER** power strip
3. Turn on **FIELDS** power strip
    a. Press the LEFT button on the fields board to power on the field***
    b. The fields are on when the two LED lights are on solid green
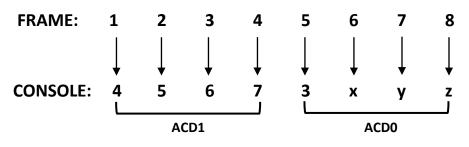   c. The field readings should be between 7-8

Turn OFF Coil System:

1. Press the RIGHT button on the fields board to turn off the fields
2. Turn off the **FIELDS** power strip
3. Turn off the **AMPLIFIER** power strip
4. Turn off the **COMPUTER** power strip

*** Make sure **FIELDS** are OFF before moving coil frame

SOFTWARE:

Account: Search Coil   **Password**: Tesla2016

1. Open the BOSS-gui folder on the desktop and open the BOSS-gui shortcut
    a. It should read "Find BOSS. Ready to read.

2. Select the channels you want to record from
    a. If using TERMINAL: Convert channel by using conversion table
    b. If using GUI: Select the channel based on the frame labeling

FRAME:	1	2	3	4	5	6	7	8
CONSOLE:	4	5	6	7	3	x	y	z
	ACD1				ACD0			

** In MATLAB: Convert channel based on conversion chart regardless of how data is recorded

Calibration (GUI):

1. Activate DEBUG mode if you want to save the raw hex data
   a. In calibration mode, this will automatically save the values into a log file
2. To start recording, click READ and then RECORD
   a. Do NOT press the green button for calibration, this may give the orientation instead of raw data
   b. Continue turning the test coil until all bars are green
3. To stop recording, click RECORD and then READ
   a. This will print out the number of bad files
4. To save file, click save and then put it in the appropriate folder

Experiment/Testing (GUI):

1. Activate DEBUG mode if you want to save the raw hex data
   a. This is not necessary for data collection
2. To start recording, click READ, press the green button, and then click RECORD
3. To stop recording, click RECORD, then the green button, and then click READ
   a. This will print out the number of bad files
4. To save file, click save and then put it in the appropriate folder

Calibration (Console):

1. Open HyperTerminal. Do NOT connect to the modem (just skip/cancel everything)
2. Open BOSS_Terminal_COM4.ht and press ENTER
3. To start calibration, type l-#, with the # indicating the channel using the frame to channel conversion chart
4. Make sure coil calibrator is ready before pressing "y"
5. Rotate coil until all 0s become 1s
6. Repeat for multiple channels