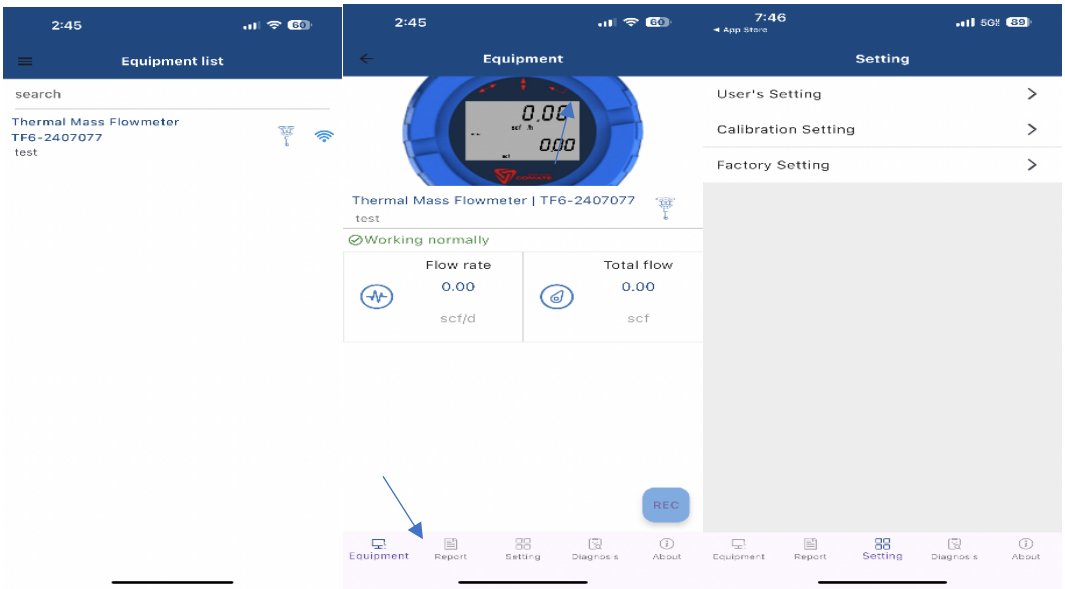
Thermal Mass Meter

Quick setup guide

Note: You will need to follow these instructions exactly to connect to the Meter.

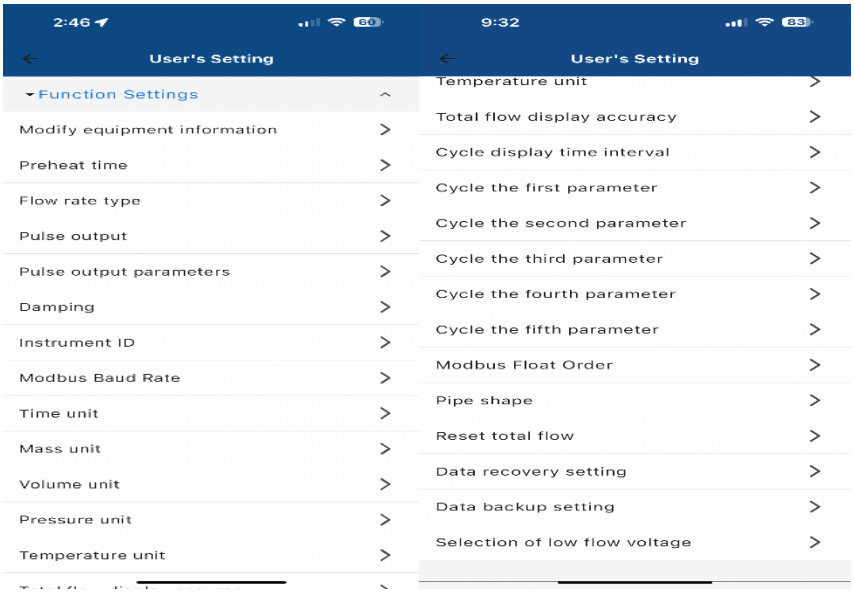
1. **Download the COMATE (Flow Meter) app from the Apple Store or Google Play. For Android users: pgyer.com**
2. **Once you download the app, you will need an access code to access the app. Account: 20000000313**

3. **Once you log in, select the Thermal Mass Meter and it will bring you to the main page. Select Settings on the bottom menu and it will bring you to the settings menu.**

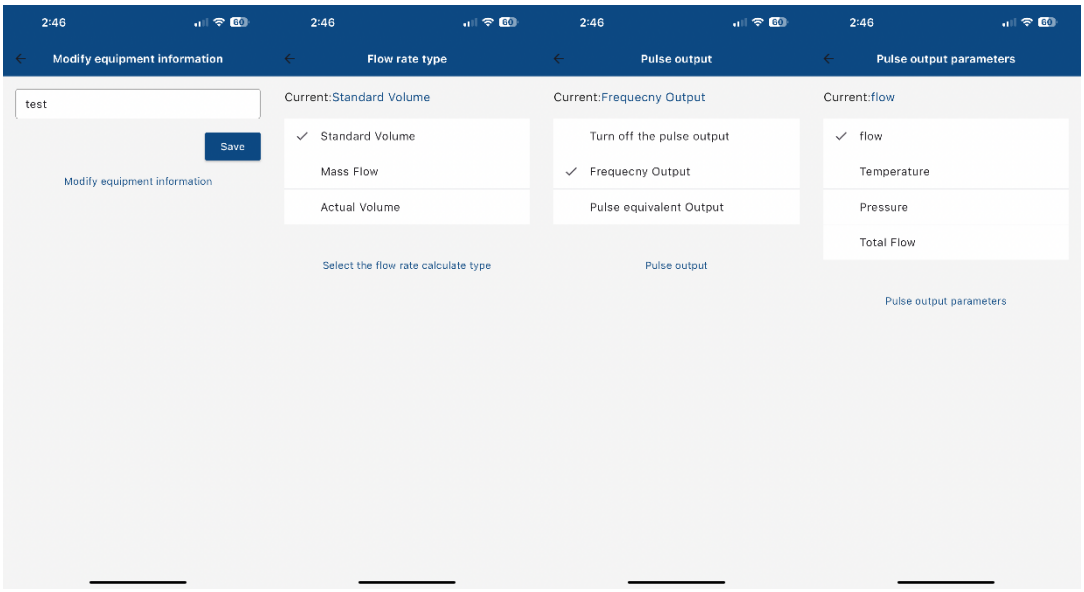


Function Settings

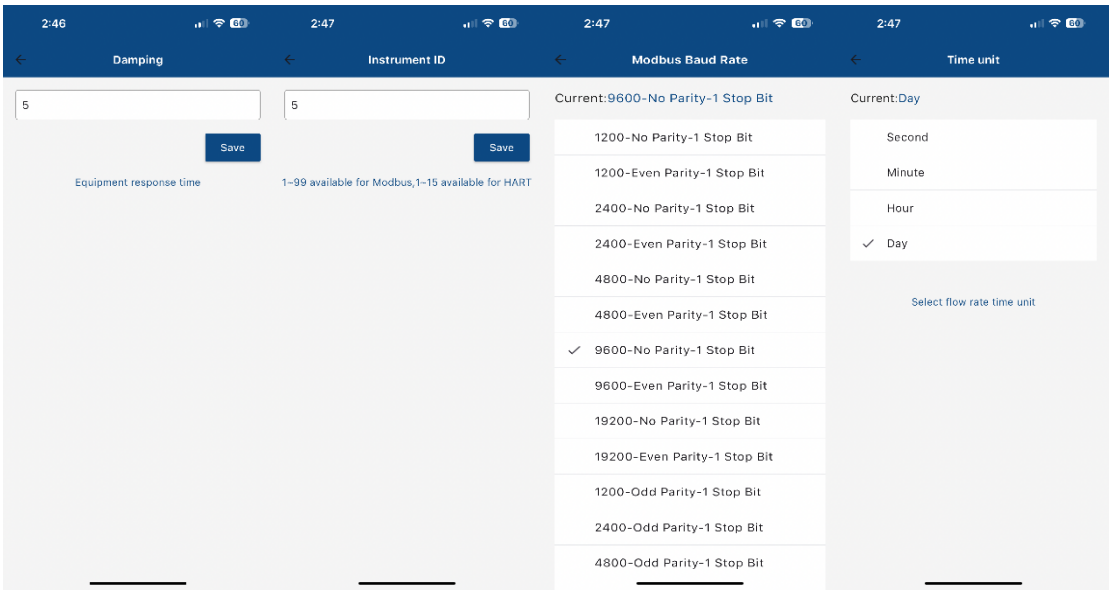
4. Select **User Settings** and now you will be able to set up the meter to your specifications starting with **Function Settings**



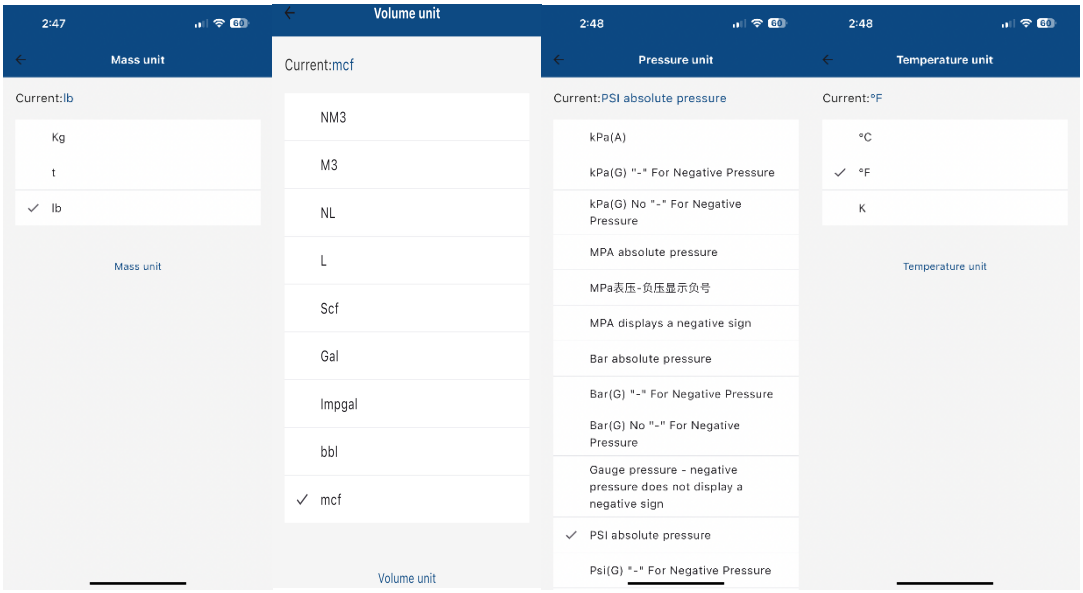
5. Under **Modify Equipment information**, this is where you can tag the meter to the name of choice. **Flow rate type** will allow to to choose your preferred flowrate: standard volume, mass flow, or actual volume. The next 2 settings is where you would change your **Pulse Output** and **Pulse Output Parameters**.



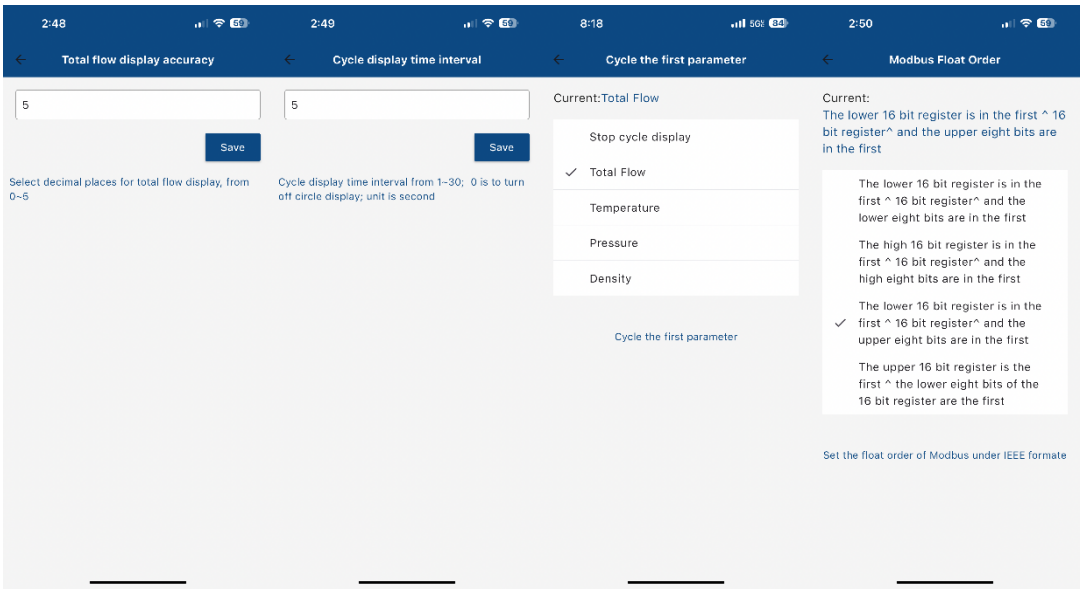
6. The next settings will allow you to adjust your **Damping** (1-99), **Instrument ID** (slave address), **Modbus Settings (Baud Rate,Parity, Stop bits)**, and **Time Unit** (seconds, minute, hour, or day)



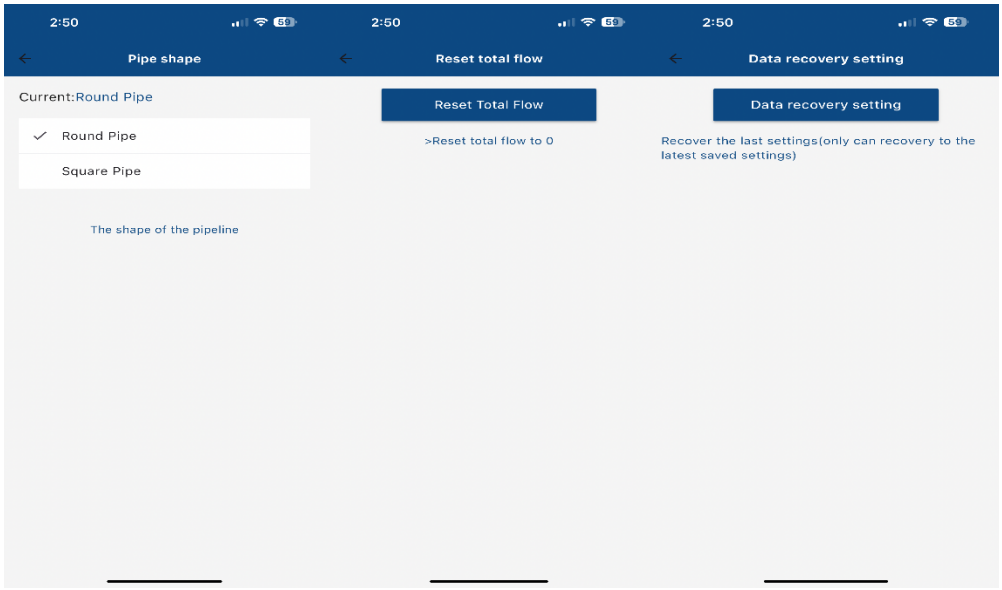
7. Under the next settings you will be able to change your **Mass Unit** (lb), **Volume Unit** (mcf), **Pressure Unit** (PSI (G)) , and **Temperature Unit** (F)



8. **Total Flow Display Accuracy** will allow to choose how many digits that you want to display. **Cycle Display Time Interval** is how soon the parameters will change on the display in seconds. Under **Cycle the parameter**, you will have 5 parameters to choose from and set. Next you will have your **Modbus Float Order**.

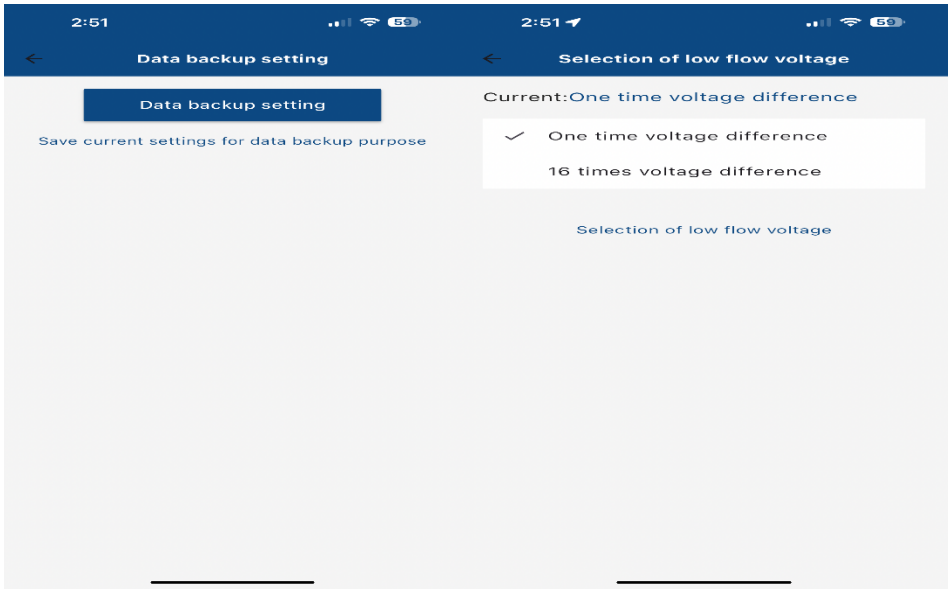


9. **Pipe shape** can be changed to round or square under **Pipe Shape. Reset Total Flow** will allow you to reset the totaliser. If you need to recover the last setting made, you can make that change under **Data Recovery Setting**



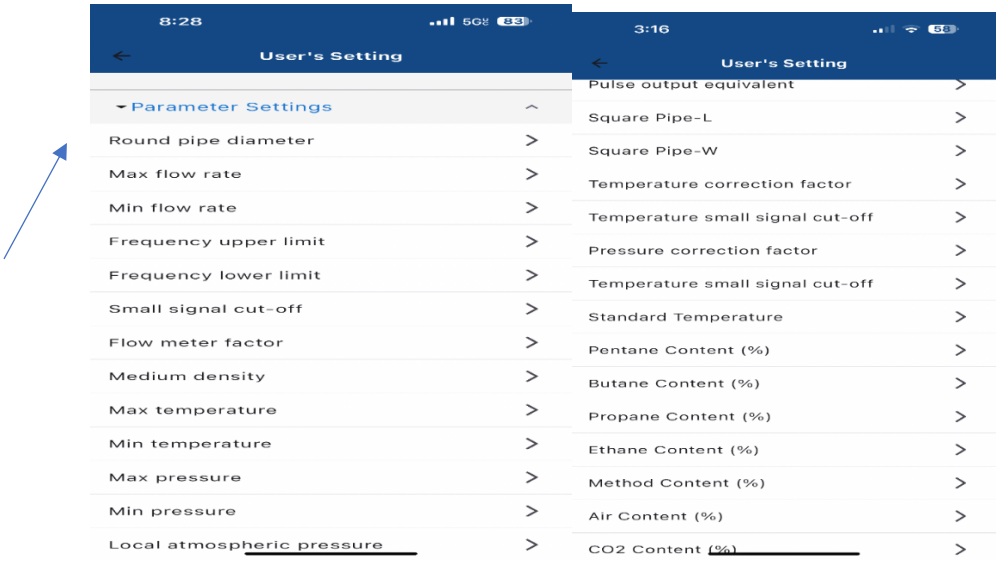
10. If you need to backup your data, you will do this in **Data Backup Setting**.

11. The last setting under Function Setting is **Selection of low flow voltage** (default is one time voltage difference)

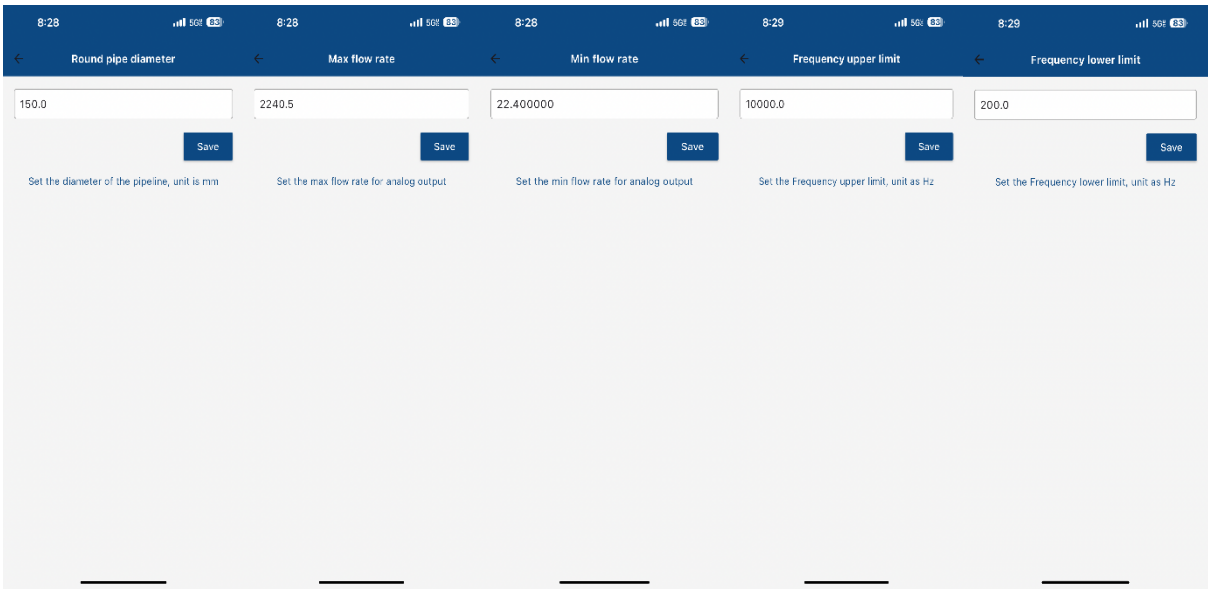


Parameter Settings

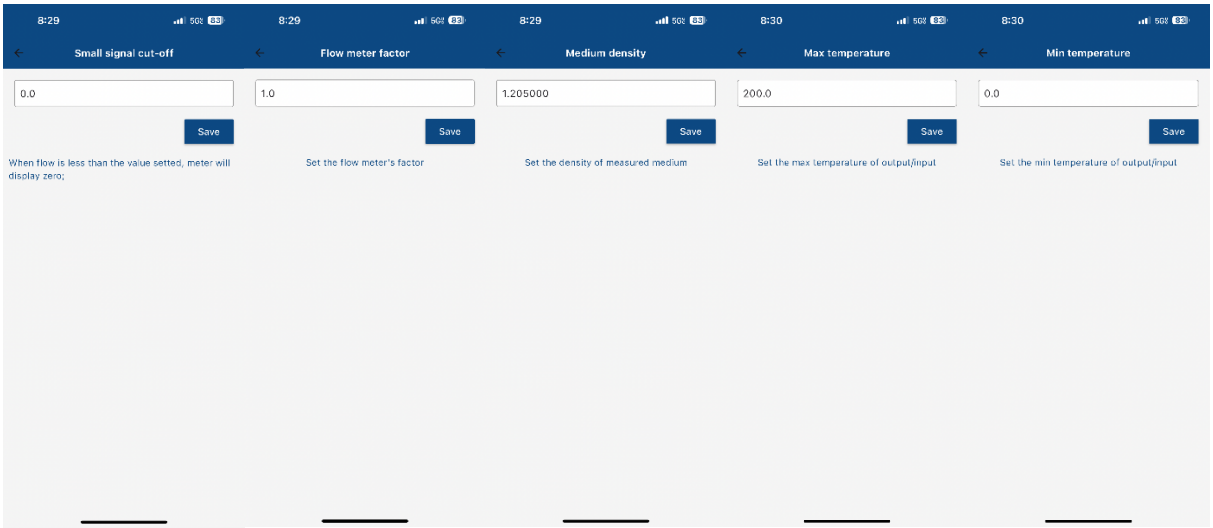
1. Select Settings on the bottom menu and it will bring you to the settings menu. Select **User Settings** and now you will be able to set up the meter to your specifications starting with **Parameter Settings**



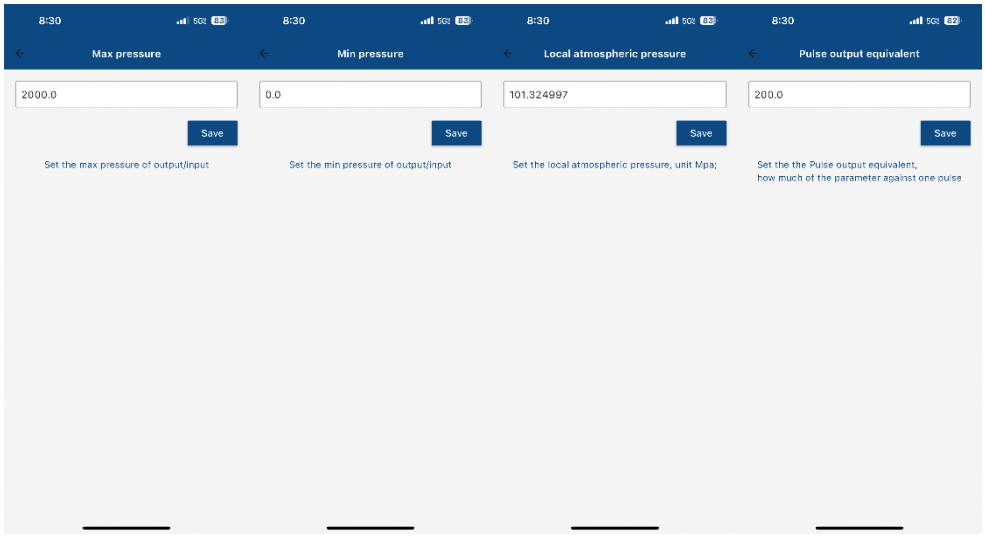
2. If you changed the pipe shape to round, you can change the diamter under **Round Pipe Diamater**.
3. Next you can change the **Maximum Flow Rate** and **Minimum Flow Rate**.
4. To change the frequency limits, do so under **Frequency Upper Limit** and **Frequency Lower Limit**



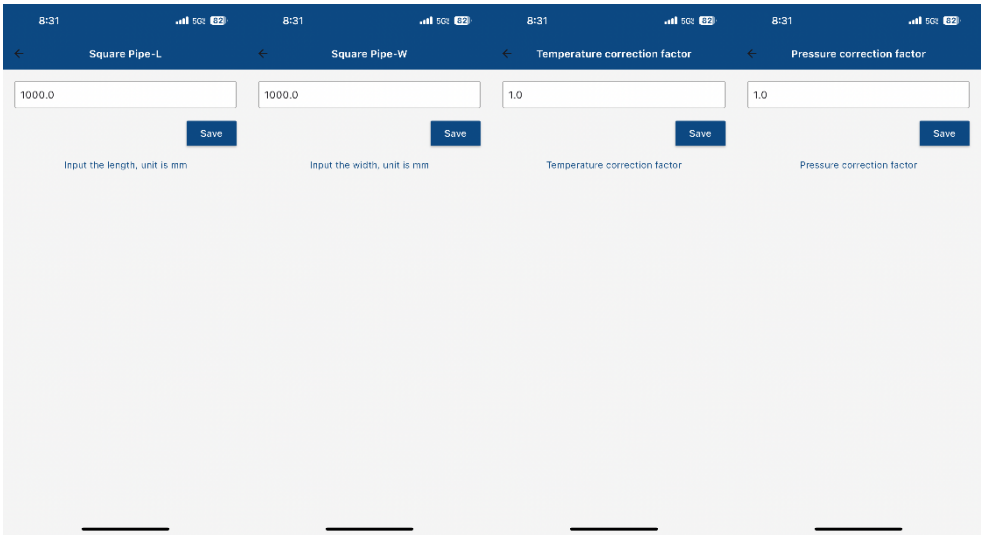
5. If you need to change the **Low Flow Cutoff**, you will do so under Small Signal cut-off. Meter factor can be changed under **Flow Meter Factor**. Also, if you need to change the current density, select **Medium Density** and enter the value.
6. The Output and Input temperature can be changed under **Maximum Temperature** and **Minimum Temperature** settings.



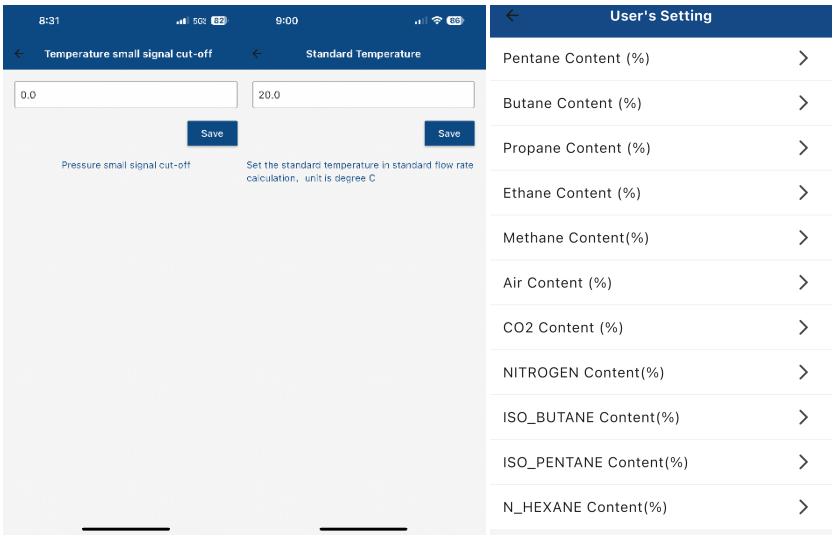
7. Output and Input Pressure can be changed under **Maximum Pressure** and **Minimum Pressure.**
8. Local Atmospheric Pressure can be changed. (Note: you can google the atmospheric pressure at your location for accurate input)
9. **Pulse Output Equivalent** (value per pulse) can be changed under the next setting.



10. **Square Pipe-L** and **Square Pipe-W**
11. **Temperature Correction Factor**
12. **Pressure Correction Factor**



13. **Temperature Small Signal cut-off** (low flow cut off) and **Standard Temperature**
14. **Specific Gas**. Here you be able to adjust the specific gases based on the customer Gas GC analysis. **Pentane, Butane, Propane, Ethane, Methane, Air Content, and CO2**.



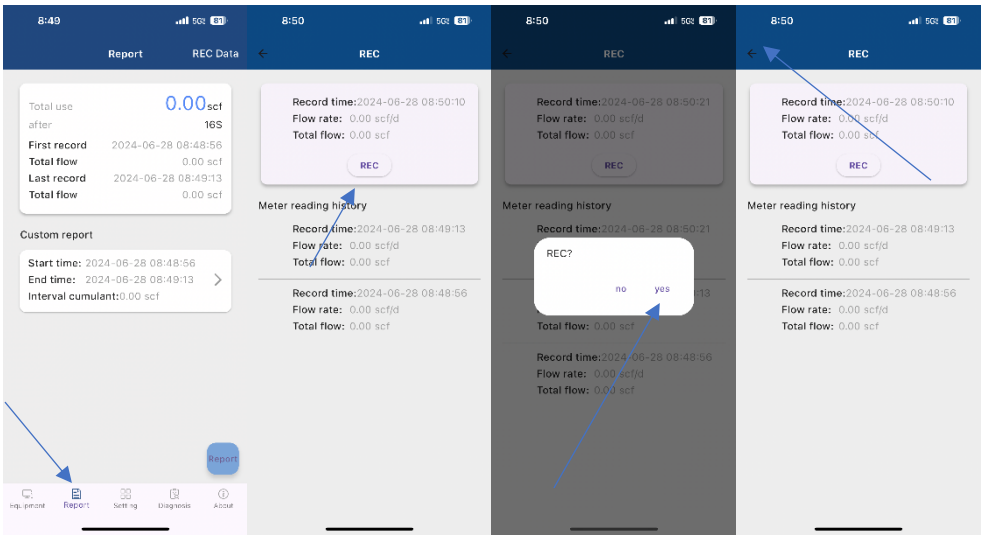
Report

1. To run a report, select **Report** on the bottom menu and then select the blue Report button.

2. Next it will bring you to the **RECORD** menu where you will select the **REC** button.

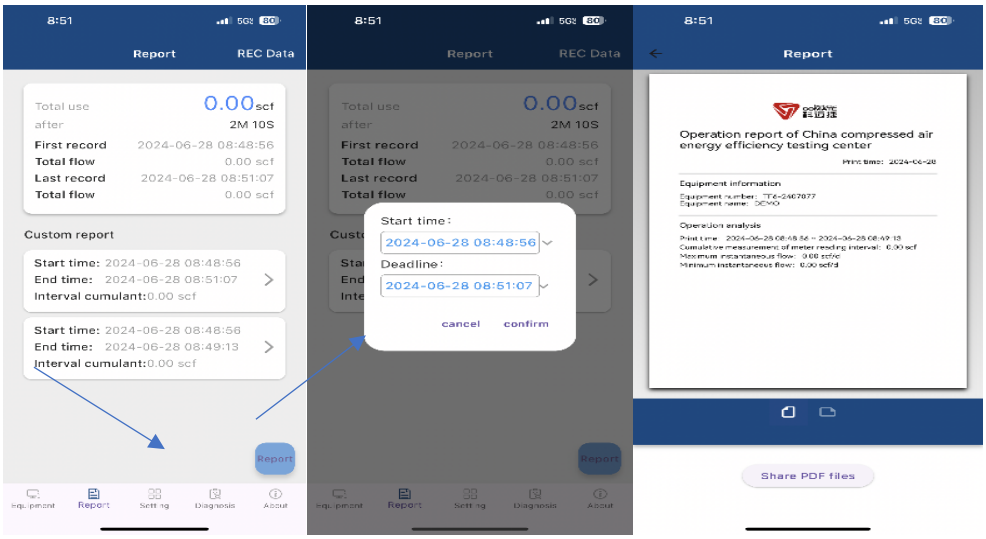
3. When prompted, select **YES**.

4. Once you select yes, hit the back button at the top left of the screen.



5. After you hit the back button it will bring you back the **REPORT** menu. Select the blue report once again.

6. Next you will be prompted to confirm the start and end time of the report. Once you confirm the time, a PDF Report will be generated.


8:51
Report
REC Data
Total use
0.00scf
after
2M 10S
First record
2024-06-28 08:48:56
Total flow
0.00 scf
Last record
2024-06-28 08:51:07
Total flow
0.00 scf
Custom report
Start time: 2024-06-28 08:48:56
End time: 2024-06-28 08:51:07
Interval cumulant:0.00 scf
Start time: 2024-06-28 08:48:56
End time: 2024-06-28 08:49:13
Interval cumulant:0.00 scf
Report
Start time:
2024-06-28 08:48:56
Deadline:
2024-06-28 08:51:07
cancel
confirm
Operation report of China compressed air energy efficiency testing center
Equipment information
Operation analysis
Share PDF files