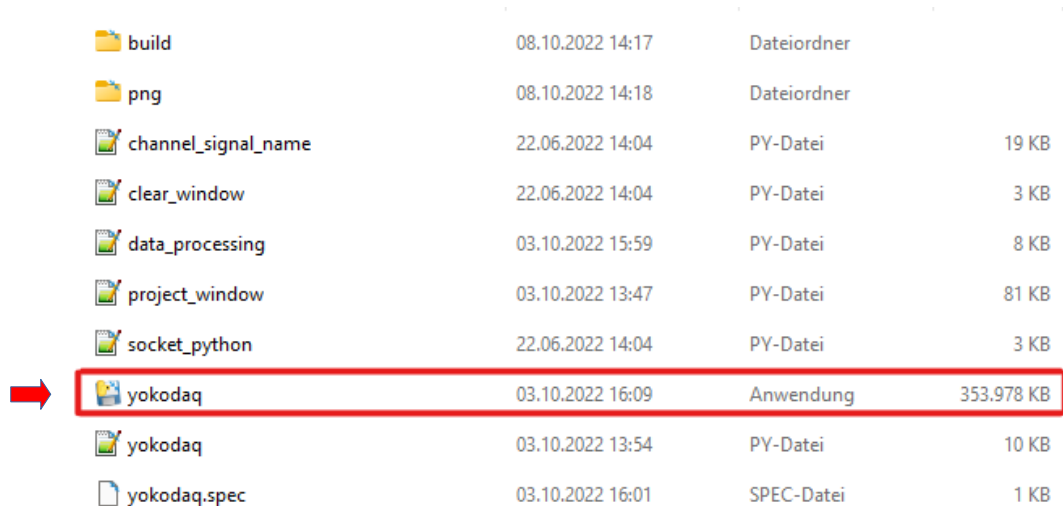


# User's Manual

## YokoDAQ

This is step-by-step guide on how to use the YokoDAQ effectively.

### 1. Start the application by clicking on it



build	08.10.2022 14:17	Dateiordner	
png	08.10.2022 14:18	Dateiordner	
channel_signal_name	22.06.2022 14:04	PY-Datei	19 KB
clear_window	22.06.2022 14:04	PY-Datei	3 KB
data_processing	03.10.2022 15:59	PY-Datei	8 KB
project_window	03.10.2022 13:47	PY-Datei	81 KB
socket_python	22.06.2022 14:04	PY-Datei	3 KB
yokodaq	03.10.2022 16:09	Anwendung	353.978 KB
yokodaq	03.10.2022 13:54	PY-Datei	10 KB
yokodaq.spec	03.10.2022 16:01	SPEC-Datei	1 KB

Fig. 1. Working directory

Alternatively you can also use the command line

```
\project-yokogawa-2>python3 yokodaq.py
```

The application will start and you will see the following window pop up

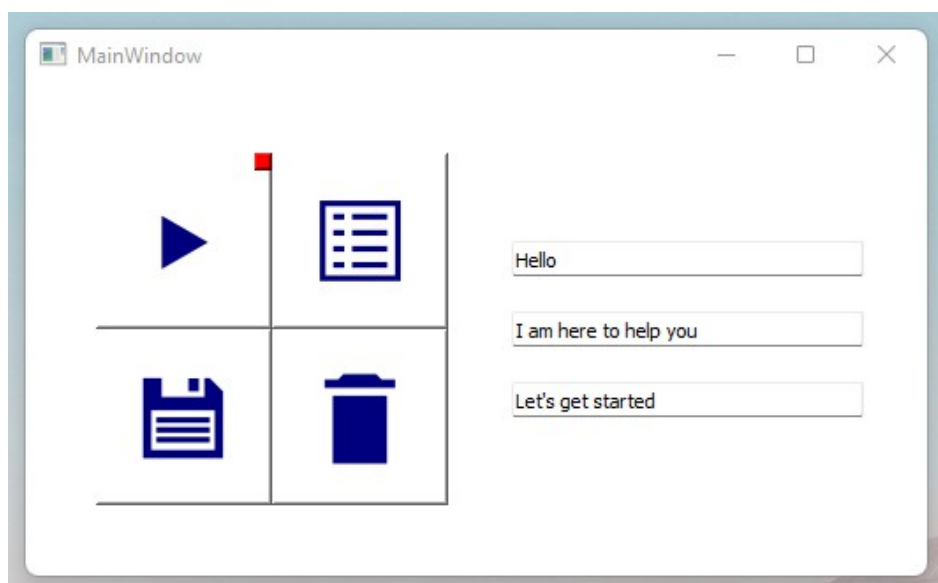


Fig. 2. Main Window

2. The next step is to configure the project. Open the project icon to open the project window.

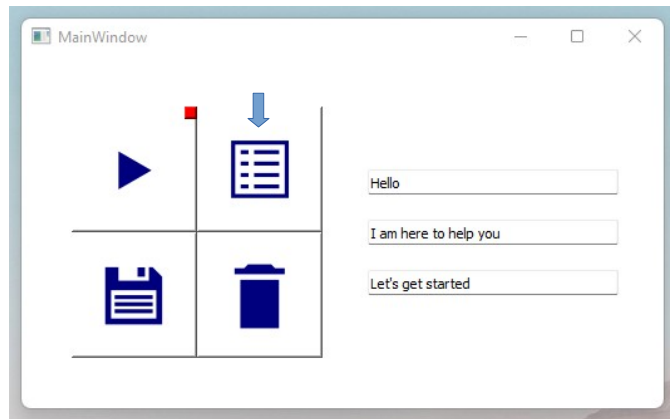


Fig. 3. Main Window, click on 'Project' icon

The following window will pop up.

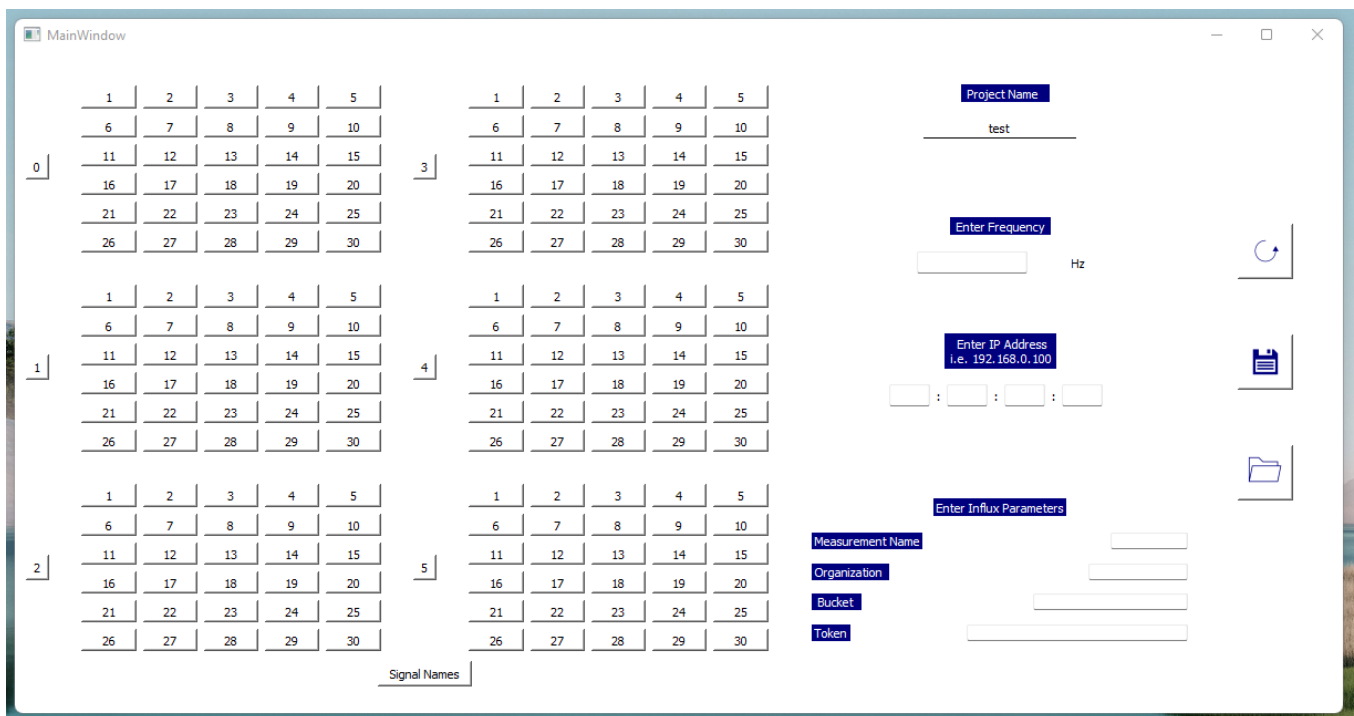


Fig. 4. Project window

1. Start by entering the ip-address of the Main Unit DA100
2. Choose a project name and a frequency.
3. Choose your Influx Parameters

To see what channels are available, click on the 'Initialize' icon in the right panel

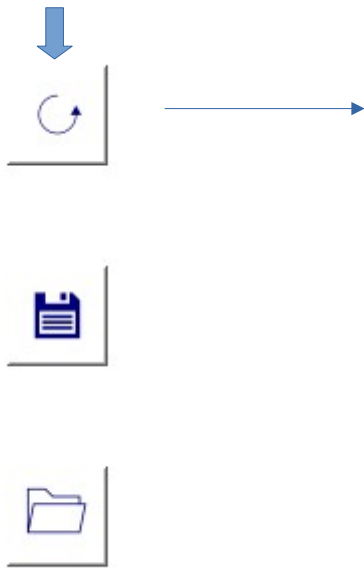


Fig. 5. Project window, right panel

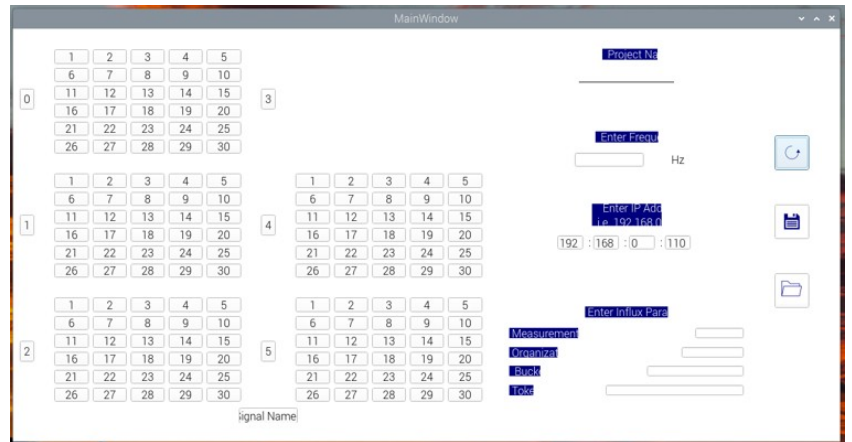


Fig. 6. Project window, after clicking on 'Initialize' icon

Here in this example all the channels except the ones from subunit 3 are available.

Next you can choose which channel from which subunit you want to acquire the data from by simply clicking on it.

Example with subunit 0:

By clicking on '1','18','24','0'

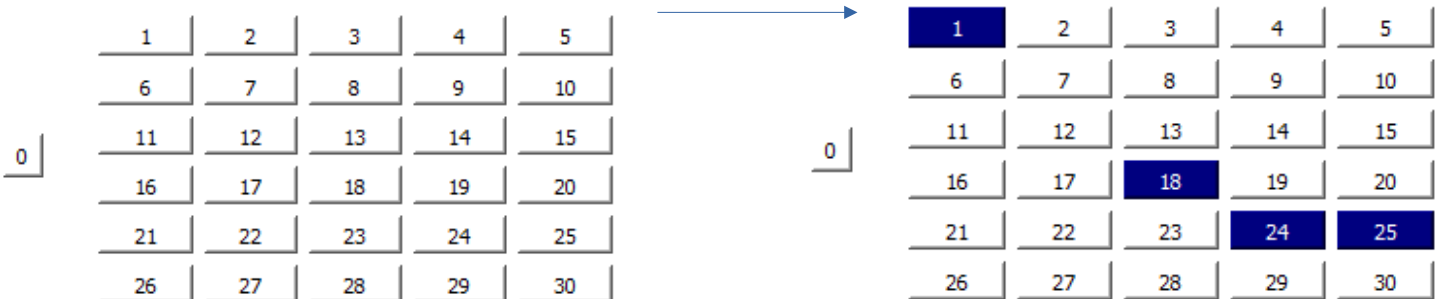
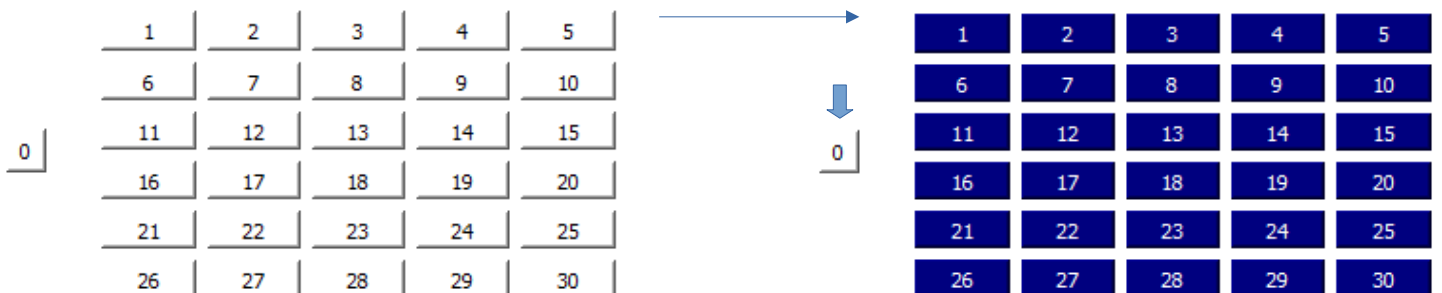


Fig. 7. Project window, subunit '0'

Fig. 8. Project window, after clicking on channels

By clicking on subunit '0'



From this point on it should be self explanatory how to select channel. If you want to unselect a channel just simply click on it again and the box will turn white.

An example of how everything can look like is the following:

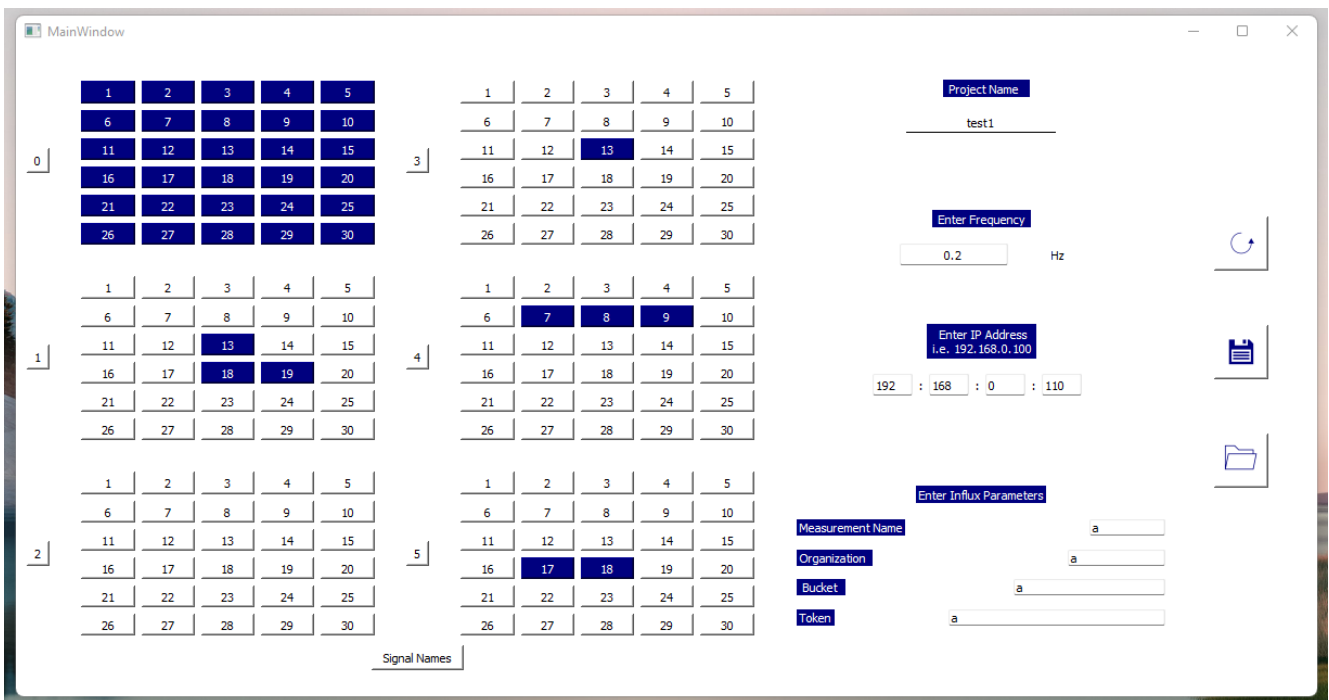


Fig. 9. Project window, complete setting

Often times when dealing with a lot of sensors it is easy to lose sight which sensor belongs to which subunit and number. You can avoid this confusion by giving each sensor a 'signal name'. For that, simply click on the 'Signal Names' button. You will see the following window pop up for all selected channels:

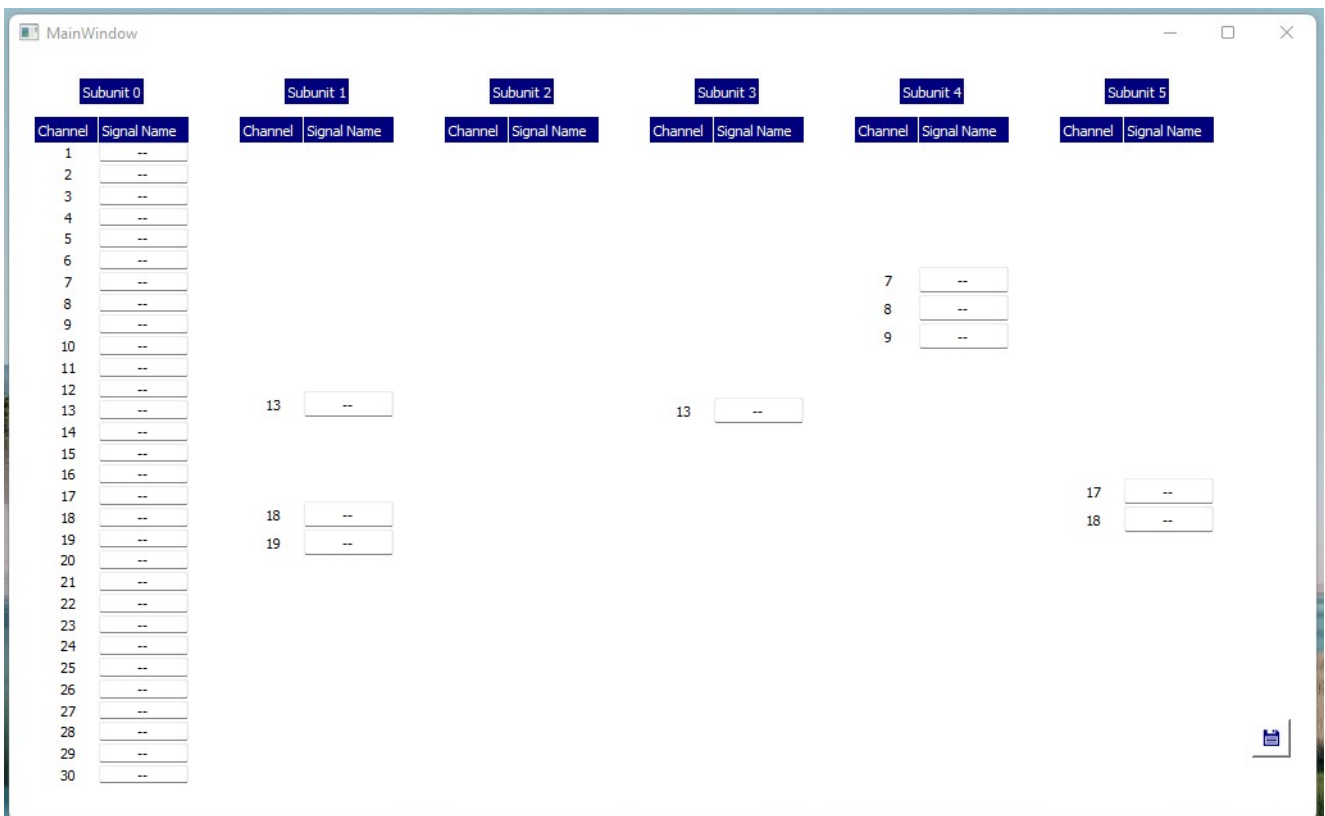


Fig. 10. Signal names window

Enter the signal names in the slots, save with the 'save' icon and close the window. Back in your 'projects window' you can now save the project by clicking on the button with the save icon. Now you can close the window. You should now be able to find a new folder named 'Projects' in your working directory.












	build	08.10.2022 14:17	Dateiordner	
	png	08.10.2022 14:18	Dateiordner	
	Projects	08.10.2022 16:53	Dateiordner	
	channel_signal_name	22.06.2022 14:04	PY-Datei	19 KB
	clear_window	22.06.2022 14:04	PY-Datei	3 KB
	data_processing	03.10.2022 15:59	PY-Datei	8 KB
	project_window	03.10.2022 13:47	PY-Datei	81 KB
	socket_python	22.06.2022 14:04	PY-Datei	3 KB
	yokodaq	03.10.2022 16:09	Anwendung	353.978 KB
	yokodaq	03.10.2022 13:54	PY-Datei	10 KB
	yokodaq.spec	03.10.2022 16:01	SPEC-Datei	1 KB

Fig. 11. working directory

From now on this 'Projects' folder will hold all the projects you will ever create. If you open this folder, you will see the following

	test1	08.10.2022 16:53	Dateiordner	
---	-------	------------------	-------------	--

A folder was created with the project name you previously entered, for this case it would be 'test1'. If you open the folder you will find the following file.

	project_settings	08.10.2022 16:53	PROJ-Datei	1 KB
---	------------------	------------------	------------	------

This file saved all your previously entered configuration and is used to identify the project for future purposes, i.e. conducting the same experiment again. For this, click on the 'Open File' icon in the right panel of the project window.

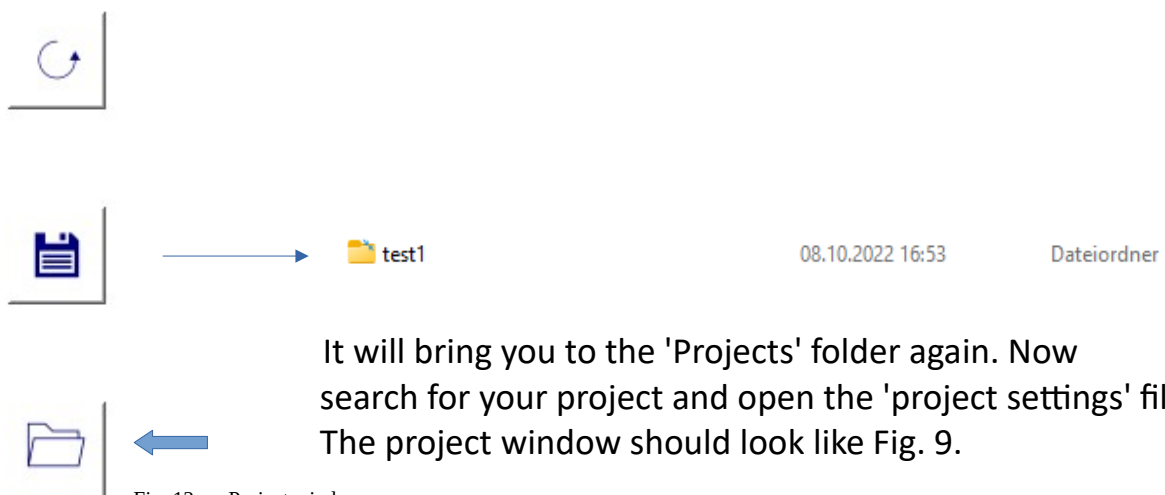


Fig. 12. Project window, right panel

**3.** The next step is to start the data acquisition. After you have closed the project window you will only see the main window where you started which is:



Fig. 13. Main Window, not sending to Influx

By clicking on the red button

This enables the realtime data transfer to the Influx Database specified by the Influx paramters. If you want to turn it off, simply click on the now green button.

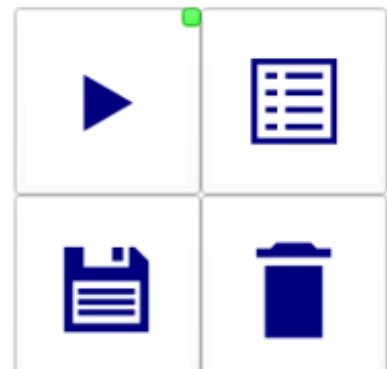


Fig. 14. Main Window, sending to Influx

To start the Data acquisition simply click on the Play Button



Fig. 15. Main Window, not acquiring data

By clicking on the play button

You are now starting the data acquisition. If you want to stop it because i.e. you are done with your measurement, simply click on the now stop button.



Fig. 16. Main Window, acquiring data

#### 4. Delete or save the measurement:

Now that you are done with your measurment, you can either save the data or delete it. If you have enabled the Influx button earlier your data should be stored in the Influx database. However if you want to be safe, you can also save your data by clicking on the 'save' icon:





Fig. 17. Main Window, not saved data

If you return to your 'Projects' folder

 test1	08.10.2022 16:53	Dateiordner
---	------------------	-------------

and click on that folder again you will see the following

 project_settings	21.10.2022 16:09	PROJ-Datei	1 KB
 test1	03.10.2022 15:18	CSV-Datei	1 KB

A new file named 'test1' was added and this a csv-file containing all your experiment data.

Instead, if you want to delete the measurement, simply click on the 'delete button':

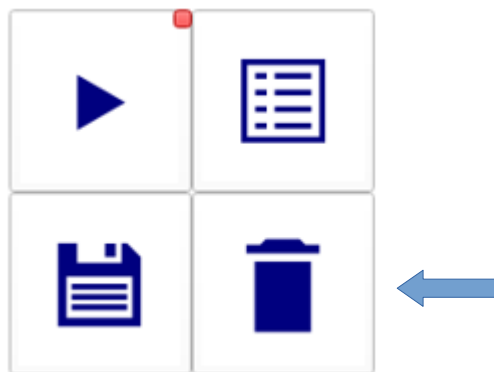


Fig. 18. Main Window, not deleted data

The following window will pop up:

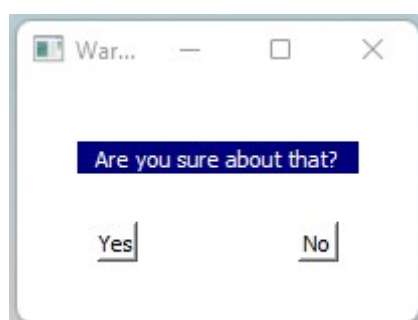


Fig. 19. Delete window, Warning

If you are sure to delete the file then click 'yes' otherwise 'no'.