Imaging system manual

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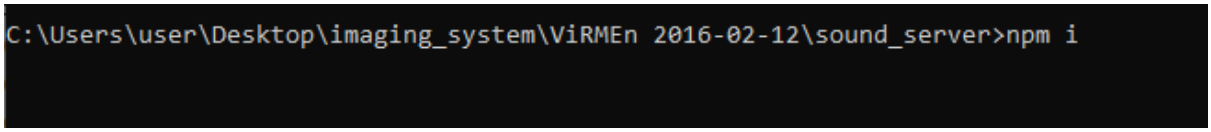
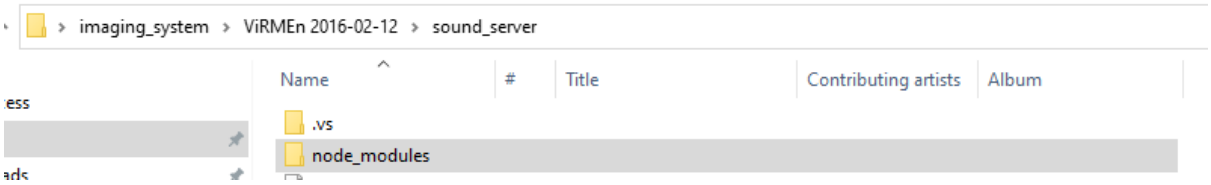
Requirements

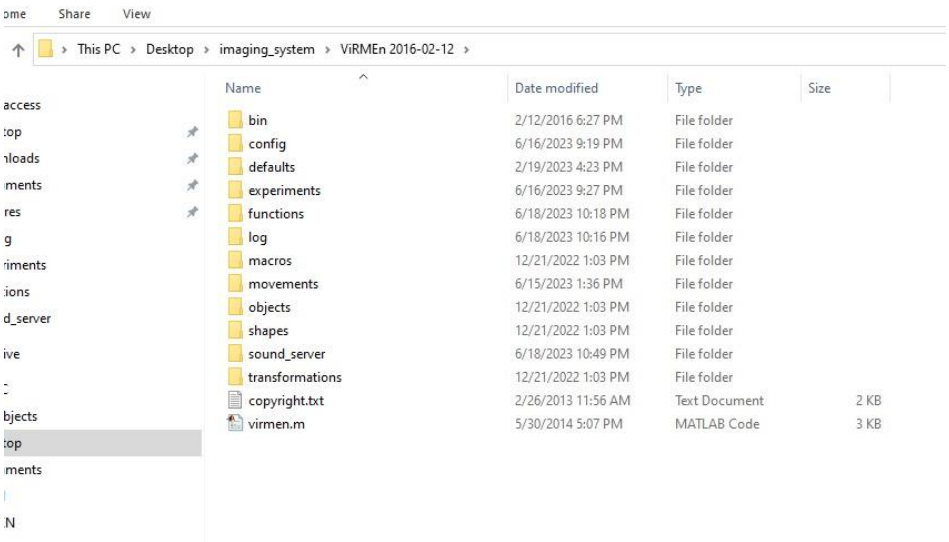
For a new computer – in the sound_server folder, run in the cmd: “npm i” this will download all the necessary libraries for running the program. It will save them in a folder called node_modules





Create a folder called “log” inside the virmen folder.
(C:\Users\user\Desktop\imaging_system\ViRMEn 2016-02-12\log)

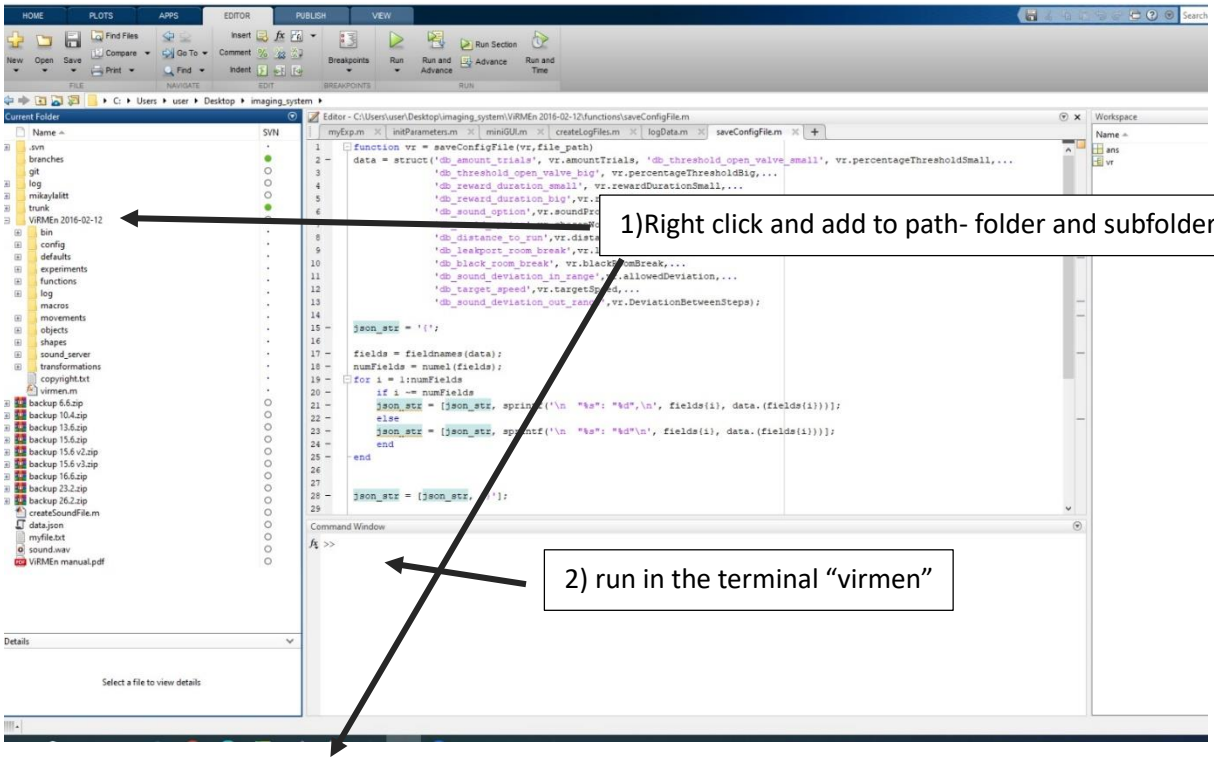
Create a folder called “config” inside the virmen folder.
(C:\Users\user\Desktop\imaging_system\ViRMEn 2016-02-12\config)

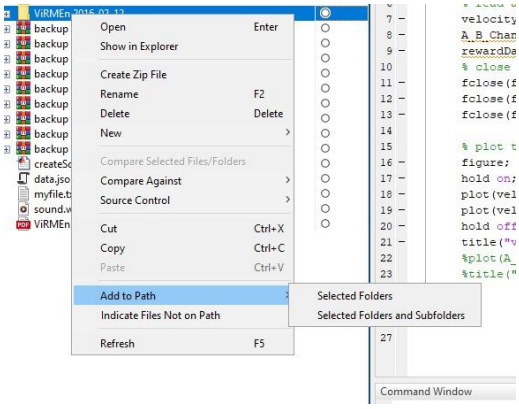


For running the program:

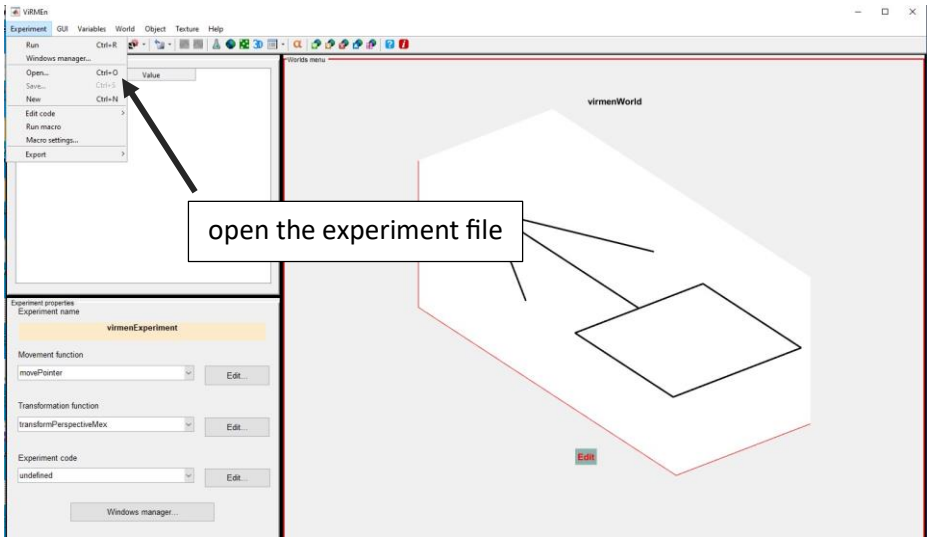
Open Matlab 2018b

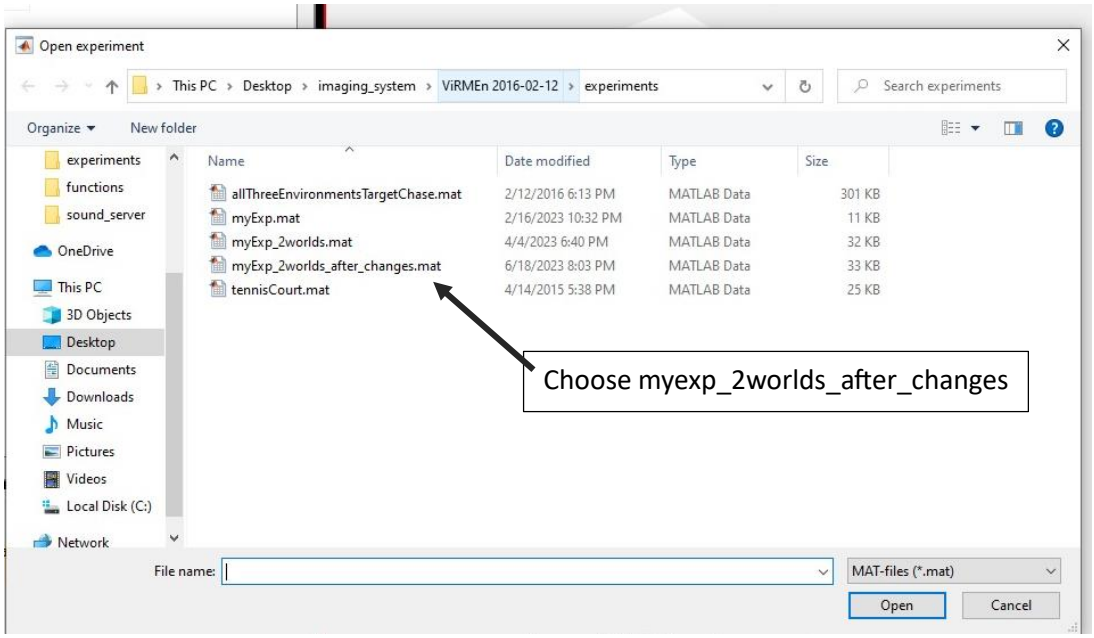
Go to the “C:\Users\user\Desktop\imaging_system\ViRMEn 2016-02-12” folder in the matlab file explorer.

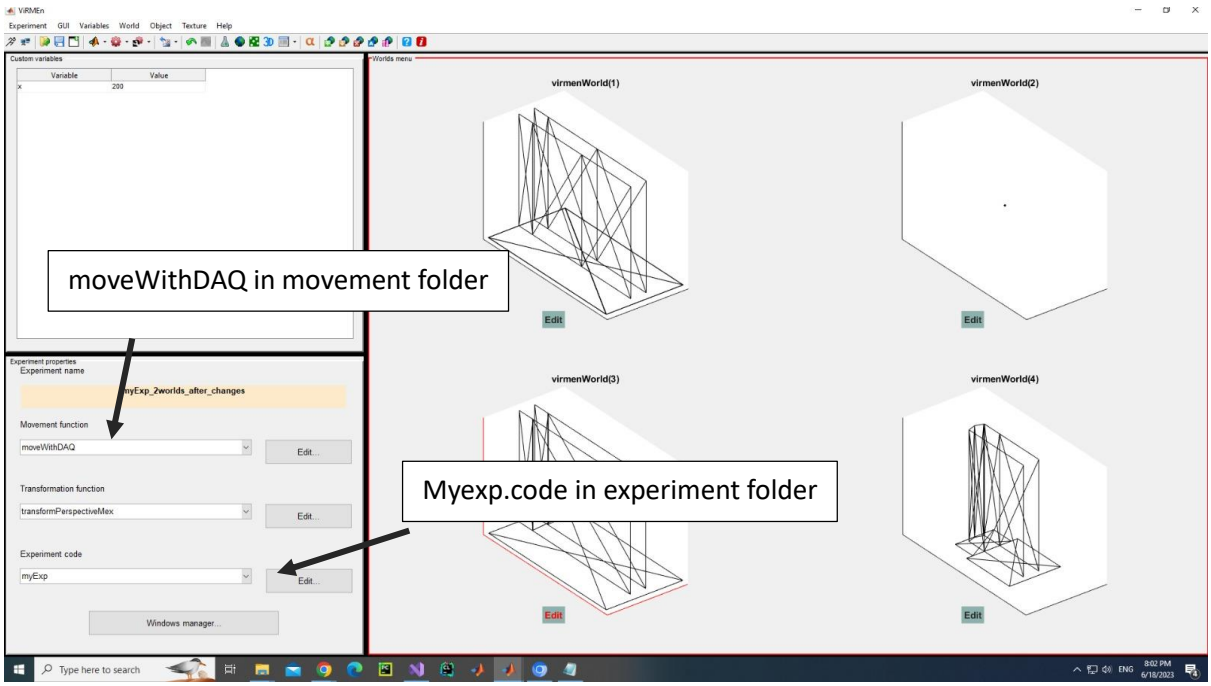




You will get this window



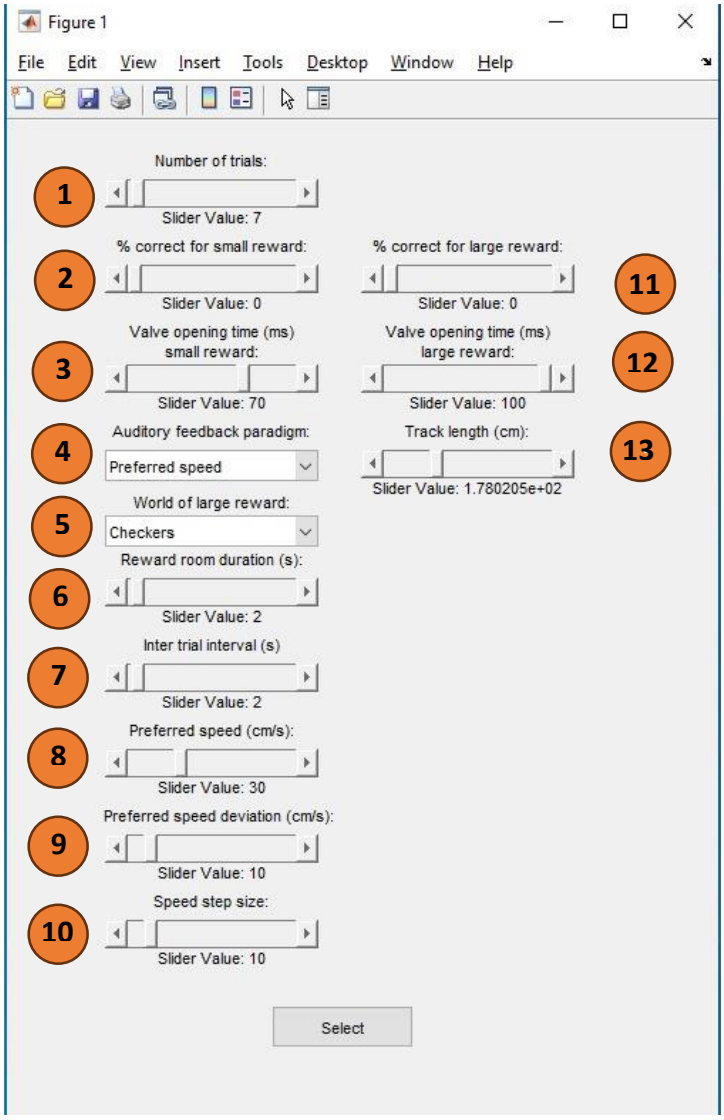




after setting everything, run the session

you will enter the configuration of the session.

After pressing “select” It will be saved in the log folder, in a file called “config.json” The default configuration file when getting to this screen is the last configuration used.



1) Number of trials for the session
2) Percentage of time running in the goal range in small reward world in order to open the valve
3) Reward size- how much time to open the valve for the small reward.
4) Which type of sound policy to activate.
5) Choose the hallway that will represent the large reward hallway.
6) How much time (in sec) to be in the reward room.
7) How much time (in sec) to be in the black room.
8) Target speed (cm/s)
9) How much deviation from the target speed we allowed to each side(cm/s). (i.e it sets to 20-40 in this configuration)

10) in out of range scenario, how much deviation between each step
11) As of 2 – but here it is for large reward room.
12) As of 3 – but here it is for large reard room
13) The length of the trace (in cm, not precise)

Using a previously used configuration setting

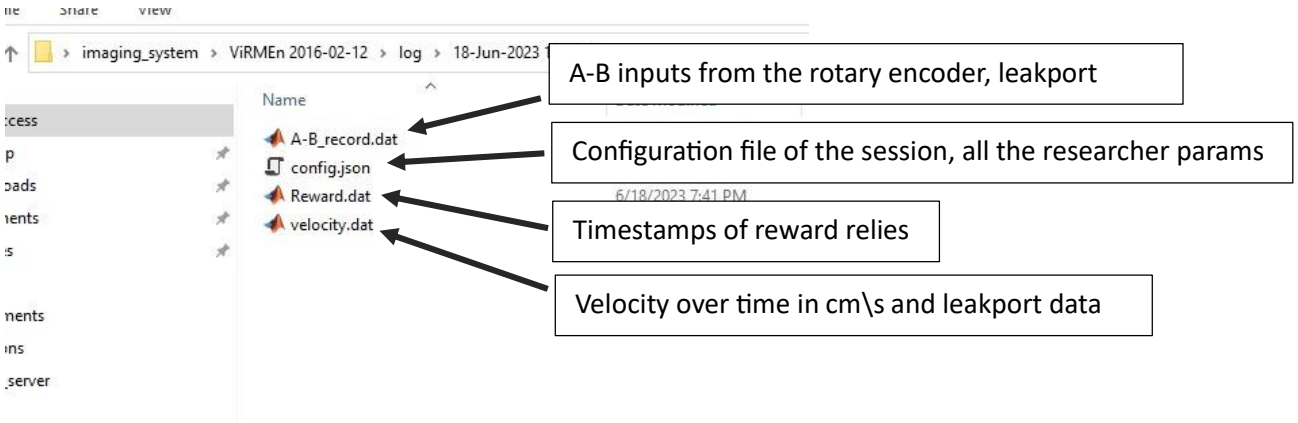
For using a config.json file from other session, copy its content and paste it in the default config file in config\config.json (you can use CTRL+C CTRL+V).

- If by any reason there is no config.json in config folder. It will create a default file when starting a session.

results

after running the session, all the data will be saved in the log folder, under the session's date and time

There are 4 files in the folder:



How the data is structured

A-B_Leakport_record (4Xn)

timestamp	…
A state(0-4 Volt)	…
B state(0-4 Volt)	…
Lickport state	…

Reward(2Xn)

Timestamps	…
Reward gaved	…

Velocity (3Xn)

timestamp	…
Velocity (cm\s)	…
Current leakport status	…