

Lay-out of the lab



- Reception space main entrance (<u>B3.01</u>), seats 8
- Reception space back entrance (<u>B3.G3</u>), seats 3 (G=gang, hallway)
- Room <u>B3.03</u>: larger room for polyvalent research
- Room <u>B3.04</u>: larger room for electrophysiological (EEG/neurostimulation) experiments
- Cubicles
 - o Dimmable lighting
 - o Cubicles 1-8 (B3.05-B3.12): set-up for reaction time experiments
 - Cubicles 9, 11 and 12 (B3.15-B3.17): only a table and chair (e.g., for questionnaires)
 - Cubicle B3.13: central server room
 - Cubicle B3.18: monitoring room (for EEG research in B3.04)
 - Cubicle B3.14: sanitary/washing room

Access to the Posner lab

- General access to the lab using a transponder for **B3.01**, and typically also a badge for **B3.18** if you run Eprime experiments
 - Note that the alarm at the entrance needs to be turned off using a secret number which changes periodically (ask the person in charge of the lab / Humanise operational director)
- Access to specifically designated room (B3.03, B3.04, B3.13, B3.18)
 - If you do not have a transponder or badge with permission to access these room, keys are available via locker safes located next to the door of each room
 - The lockers can be opened with a secret code (ask the person in charge of the lab / Humanise operational director).
 - Enter the code, and turn the black lever down for the key (transponder or badge)
 - Put the transponder and badge back in the locker when closing the room (be careful with the badge, make sure that the **upper** part is carefully put inside the locker; gently close)

See important timing information for running E-Prime 3.0 on Windows 11 on last page

Behavioral experiments (cubicles 1-8; B3.05-B3.012)

- Reception space (main entrance, B3.01)
 - should be booked together with the cubicles to receive participants
- Hardware
 - Monitor resolution is 1920 x 1080
 - Absolute dimensions of the working surface is 527mm x 296.5mm
 - Standard keyboard, audio boxes and mouse is available
- Software
 - E-prime:
 - Cubicle 1 has the full E-prime 3 studio software installed, to enable adapting visual properties on the monitors
 - Bring an EPrime USB stick with you to run the full E-prime 3 studio software.
 - Do <u>NOT</u> use an USB stick to put your experiments / collect your data through the USB ports on the PCs. Use the central LAN server (see below).
 - Cubicles 1-8 have E-prime 3 run installed
 - o Internet:
 - There is no internet connection in the cubicles, nor active virus checker to avoid interference with reaction time measurements.
- Access, login and accounts
 - o Accounts
 - Upon startup, choose "Eprime"
 - Within this startup, there are 2 accounts:
 - <u>Testafname</u>: this is what you typically need password is *MichaelPosner1*
 - Admin: you normally don't need this account at all
- Do <u>NOT</u> put your experiments / collect your data through the USB ports of the PCs. Use the central LAN server (which runs antivirus, unlike the cubicle PC's). See next.

Central LAN server (B3.013)

- Data exchange (collecting data and putting experiments on PCs)
 - Start the central server in room <u>B.3.13</u>.
 - Login to the account <u>Testafname</u>, with the same password as in the cubicles (*MichaelPosner1*)
 - Create a subfolder (with your name) in the shared K-drive on the desktop
 - Put your Eprime run-file in your subfolder (you can connect your USB drive here, or download it via the internet connection); it will then be available on all individual cubicle PC's.
 - All data files will be collectable from your subfolder on the central LAN server.

WARNING when using pictures in your experiment:

Using pictures in your experiment may significantly slow down Eprime when using the shared drive from the central server. This is because these pictures need to be transmitted from the shared drive every time they are loaded, which might take some time. To avoid this:

- Copy your experiment on the shared drive of the central server (see above).
- Copy **from the shared drive** the folder with the Eprime run file and, if not in the same folder, the subfolder with the pictures on the Desktop of each local PC. Do **NOT** use USB sticks on the local PCs!!
- Run the Eprime run file from the folder on the Desktop. No slowing down will be observed.
- Do not forget to copy the datafiles to the shared drive after finishing the experiment. Do not copy on USB sticks on the local PCs!!

EEG (or neurostimulation) experiments (B3.04)

- Room <u>B3.04</u> is a more spacious room to enable easier preparation and monitoring of participants for EEG or neurostimulation experiments.
- The lighting is DC, to reduce interference with EEG-recordings.
- The locked cupboard contains the tDCS-equipment for diverse researchers. Please do not use this equipment without prior consultation of the operational director of Humanise lab.
- The **Eprime PC** and a **Humanise-EEG portable** are located in the monitoring room B3.18 to avoid interference with EEG measurements. Once the Eprime / EEG PC is turned on in B3.18, you can take full control of each PC from within room B3.04 (using screen, mouse and keyboard)
- The EPrime PC has the same specifications as the cubicle PCs.
- The **Humanise-EEG laptop** can only be used by VUB users that have their VUB account added to this PC (see below)

Humanise laptops (NOT PCs)

Several Humanise laptops are available:

- Humanise-EEG laptop for EEG recording and analysis, available only in the monitoring room B3.18
- Humanise-Experiment laptop for running all sorts of experiments, including Eprime, to be used in the Humanise Posner lab (available from B3.02).
- Humanise-Analysis laptop for running all sorts of complex analyses, including software for analyzing Eprime (e.g., Eprime analysis), SPSS, Rstudio etc. (available from B3.02). More software will be added depending on the requests of the users.
 Additional RStudio packages can be added by yourself. Software can be installed by yourself on your account and can be made available to other users if you place the software .exe link on the Public Desktop. Can be taken home to facilitate your personal analyses.

How to use?

Log in via "other users" with your VUB account. The first time, you have to send a confirmation and install your PIN (take the typical one you use, to avoid forgetting).

Select the C:\Users\Public\Public Desktop folder (go back to the C: drive, and select these folders sequentially) and you will see

- For **EEG**: links/shortcuts to **ActiView**, **ActiRead** and **ActiTools** programs to use with Biosemi Active 3.
- For Eprime: links/shortcuts to Eprime Run and other EPrime software for analysis
- For other **software**: links/shortcuts to these programs

You can copy and paste these links to your desktop for easier access later. Do NOT move the links!

Sanitary room (B3.14)

• The heater has to be switched on some time before use. Do not forget to switch it off at the end of the testing day (unplug to be sure).

Eprime Alerts (for more info go to https://support.pstnet.com/hc/en-us)

Windows 11 laptops may exhibit timing issues where the OnsetTime is delayed and the OnsetTime value is inaccurately assigned and logged. Typically, this issue only occurs while on battery power. This delay period typically lasts a few milliseconds, but can be greater than a refresh, and does not occur on every trial.

Workaround 1:

Plug the machine into line power and do not run on battery power.

Workaround 2:

Change the computer's Power Mode setting. We observed these issues when using "Balanced" or "Recommended" settings. To check this setting and change if needed, open the System Settings (i.e., press Windows key + I), select Power & battery, and change the setting from "Balanced" or "Recommended" to a "Best Performance" mode (the specific Performance setting name may vary with specific Windows versions).