You can think now. Let's get started!



www.unicorn-bi.com

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Hello

UNICORN NAKED BCI **Quick Start Guide**

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Download the Unicorn Suite by clicking the download link in the Order Confirmation E-mail that was sent to vou.

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Install and start the Unicorn Suite. Switch to "Licenses" to enter the license key(s) that you received in the Order Completion E-mail after your purchase.

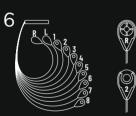


Insert the Unicorn Bluetooth Donale into a USB socket. Wait for the driver installation to complete

Fully charge the device using the supplied charging cable on the device's Micro USB port on the back. The status LED on the front will be green while charging, and will go out when the battery is fully charged.



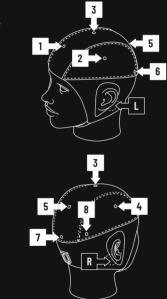
If you have a Unicorn EEG Cap: Place the 8 Unicorn Hybrid Electrodes into the prepunched holes of the EEG cap by putting the fabric over the second notch of each electrode.



The bottom of each clip connector has a number or letter with the correct position. Carefully attach the clip connectors numbered 1-8 by sliding them onto the first notch of the corresponding mounted electrodes on the cap.



The following pictures show the correct positions of the electrode clips on the cap.



The positions marked as L (for left) and R(for right) are for the sticky reference electrodes and will be described in step 9.

Put the Unicorn Cap with the attached Unicorn Brain Interface on your head and secure it with the chin strap.



Finally, put a Unicorn Sticky Electrode on each of the mastoid bones behind your ears (L and R positions, as seen in the figure on the left). Click the L- and R-clips onto the corresponding sticky electrodes.

Ω The Unicorn Sticky

signal quality.

Electrodes do not require

Unicorn Gel for dry recordings.

However, a small amount of

Gel underneath the electrode

can sometimes provide better



10

With wet recording, add some Unicorn Gel using the syringe to moisten the electrode tips' contact points with the scalp through the holes in the electrode clips.



For the best signal quality, make sure the cap sits tight on your head and you can feel all electrodes on your head. Twist each electrode back and forth a bit to get through hair and make direct contact with the scalp.

12 Turn on the Unicorn Naked BCI by pressing the power button for 2 seconds. (Do the same to turn it off.)

13



Open the Unicorn Suite on your computer. Switch to the My Unicorn tab and follow the instructions to pair your Unicorn Brain Interface with your computer.

Slow blinking icons show that Unicorn Suite has successfully opened the Bluetooth link (not an indication for the pairing state). As soon as the data acquisition is started via the Unicorn Recorder, the status LED will remain illuminated until the data acquisition stops. A color change from cyan to vellow indicates a low battery.



After preparing all electrodes, it might take 2-3 minutes until all electrodes display stable signals. If some electrodes provide noisy data or the signal floats, you may need to repeat the twisting, make sure the electrodes are tight on the scalp, or apply more gel. To obtain clear EEG signals, we recommend a bandpass filter (0.5-30 Hz or 2-30 Hz) and a 50 or 60 Hz notch filter.

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Once your EEG signals are clear, you can start recording brain activity!

**Noise Reduction:** EEG recordings are quite sensitive to noise, which can result from nearby electromagnetic and electrostatic fields or moving the subject, cables or electrodes. These noise sources are especially challenging with dry recording. If you need to record EEG activity with a lot of movement or electrical noise, we recommend wet recording using Unicorn Gel.

**O** Antistatic Environment: Avoid electrostatic charges by choosing an antistatic environment/lab for high quality recordings. Use a room with antistatic carpet or floor covering or wooden/stone floor instead of normal carpets or artificial parquet floors. Furniture made of wood, metal and leather is preferable to plastic materials and synthetic textiles. Cotton clothing is preferred to wool and synthetics. Avoid shoes with synthetic soles.

**O** Groundina: We recommend grounding any additional equipment (using a potential equalization conductor) and metal-made furniture to a central earth/ground contact (lab ground). The subject as well as the operator(s) may be grounded to avoid electrostatic charges (e.g. using an antistatic wrist band connected to the lab ground).

**A** Disassembling: When disassembling the Unicorn Naked BCI from the EEG cap or removing clips from electrodes, be careful not to pull on the cables.

A Cleaning: Whenever the device gets in contact with gel or other substances, it should be cleaned immediately. Use a damp cloth to clean the device. Do not submerge the device in water and avoid contact with liquids. Do not use warm air (such as a blowdryer) to dry the device.

**Further Reading:** Find more technical and practical information in the Unicorn User Manual, online at www.unicorn-bi.com or directly via the ? question mark button in the Unicorn Suite.

