

Script for Plato Device

1. Let's go through the set-up of our PLATO device

Opening the PLATO box, we have various components to assist us successfully throughout our stimulations.

Firstly we have a sozo headband, the plato headset, a charging wire, a bottle for the saltwater solution and 3 sets of 3 sponges – each set will last you approximately 2–3 months.

2. Silicone attachments are used to keep the headset in place, especially when the headset is placed at central and occipital positions.

If they are uncomfortable for patients, they can be removed like this.

3. Apart from the kit, we need to have the PLATO app to operate the device.

Before we go into setting up our headset, let's set up our PLATO app.

Search and download the PLATO app from your Play Store or App Store.

That's P-L-A-T-O A-P-P — no spaces.

Download the app and create an account by inserting a username and password.

Accept the terms of use.

TIP: If the device is an iPhone, we are ready to use the headset. If, however, the device is Android, we will need to go to the phone's settings, then to the applications section, select the PLATO app, and enable all permissions.

The first thing that shows up on the screen is step-by-step instructions which you can go through as supplementary set-up materials.

4. Once done with the instructions, proceed to choose the stimulation program assigned by the doctor or medical professional.

There are 6 different programs named Learn, Create, Concentrate, Rethink, Clarity, and Calm.

The naming of these programs is purely for marketing purposes, so the program "Learn", for example, doesn't necessarily help you learn new things through neuromodulation.

5. Next to each program, there is a little cartoon brain with a dot and an arrow.

The dot represents the **anode**, and the direction the arrow is pointing represents the **cathode**.

In other words, the anode stimulates the area at the dot and sends the stimulation to the cathode—so, in the direction the arrow is pointing.

Depending on, firstly, how the headset is placed on the head of the patient and, secondly, what stimulation program is chosen, we can stimulate different areas of the brain.

6. Show Positions

Now, let's set up our headset to start our neuromodulation session.

Here we have our tDCS HEADSET — PLATO.

As you can see, there are no buttons to turn the device on or off, so we just unfold or fold the device to turn it on and off accordingly.

7. We turn on the device by opening the headset until the two bands lock in perpendicularly.

8. This blue flickering light appears, showing us that the device is ON and ready to be paired and activated.

9. When we are done with the device, we turn it off by closing the headset, and the light automatically turns off when the device is folded.

10. Once we unfold and open the device, we can adjust the width and size of it by pulling the black plastic side away on both sides.

The Latin numerals on the top grey area here show the size:

3 lines meaning the largest, to 1 meaning the smallest.

You pull in and out to adjust the size accordingly for each patient.

Do not apply pressure on the grey area here, as the electricity passes through during the stimulation. If this area is damaged, then the device **WILL BE DAMAGED**.

11. Moving on, we have these three silicone pockets where the three sponges are placed.

12. But first, let's prepare the solution together.

Grab the small bottle included in the PLATO kit and fill it up with 100 ml of room temperature, drinkable water.

Then, add $\frac{1}{4}$ of a teaspoon of regular kitchen salt.

The salt used needs to be easily dissolvable — so **no rock salt, Himalayan salt, or salt flakes**.

TIP: When travelling with your PLATO kit, keep the bottle empty, as airplane pressure might spill the water onto the device or create humidity that could damage the device.

13. Now let's moisten our sponges in our water solution.

Immerse the sponges until they double in size, and squeeze to remove excess water.

14. We then place the sponges within the silicone borders of the pockets.

Make sure that the silicone borders are keeping your sponges intact.

To do so, just press each silicone border out and upwards to bring it above the sponge in a hugging-like placement.

15. Adjust the headset to the largest size and our device is set up and ready for our neuromodulation session.

TIP: If the patient has any hair products, oil-based products, hair dye, makeup, or face creams, please clean the areas that will be stimulated with some antiseptic gel.

Also, if the patient has thick hair, use bobby pins to separate and clear out the areas of

stimulation from the hair for better contact with the scalp. It's better to do this **before** the headset is placed.

16. Place the headset on the patient and adjust the size to the patient's head.

TIP: It's natural for the water solution to drip down the patient's face or head — this shows an adequate amount of solution was used to moisten the sponges and ensure good conductivity.

17. Once the headset is placed and adjusted to the head, open the app, select the desired stimulation program, and wait for the device to connect to the application.

TIP: BEFORE STARTING, always make sure **Bluetooth and location services** on your phone are active while using the headset.

18. Once it connects, the blue flickering light will become stable and blue, which means you can proceed with the neuromodulation session.

19. Press Start.

20. At the bottom part of the screen, a tab will appear that shows the conductivity and assesses the contact between the electrodes and the scalp.

Once it reaches 100% and the light at the side of the headset turns green, this shows that your neuromodulation session has started.

21. Now, on the app, we can see that our neuromodulation session has started, as there is a timer counting down from the 30-minute session.

22. In the middle of the screen, we have 3 different signs:

- The battery icon showing the battery level
- The Bluetooth icon showing that the connection is active
- And the Greek Omega sign (Ω)

This is the most important icon during the session.

A full blue **Omega sign** indicates **perfect contact** with the scalp.

An empty or grey Omega means **no contact**.

The fuller the Omega, the better the contact.

Our aim is to reach **at least a half-full blue Omega**, indicating sufficient conductivity.

TIP: If the patient is having trouble with contact, either:

- The sponges aren't moist enough
- The patient has products on their skin or hair
- Or thick hair is blocking the contact area

Clean the stimulation area with some antiseptic gel and use bobby pins to expose the scalp

23. Once you've tried these solutions, your stimulation time will pause. Select "Try Again".

Press the headset **downwards** toward the scalp by placing your hands on the **black areas** on both sides.

Keep pressing until the bar reaches 100% and the Omega sign is at least half-filled.

TIP: You can also add our SOZO headband to help the headset stay in place and improve contact.

24. Now, once we have established good contact, let's take a look at the bar at the bottom of the screen.

This bar shows the **intensity** in milliamps (mA).

25. The maximum intensity is 1.6 mA, and the minimum is 1.0 mA.

26. The device allows you to lower the intensity below 1.0 mA, but anything below this will not benefit the patient or the brain areas being targeted.

It's as if you're not stimulating at all.

Patients can continue daily activities during stimulation, but must avoid:

- Sleeping
- Intense movement
- Damaging the grey areas of the headset

They may use their phone, **as long as the app remains running in the background.**

27. It's important to keep the phone within 4 meters of the headset.

To ensure the session is still active, check the light in a mirror — **green = good, blue = disrupted.**

TIP: If contact is disrupted repeatedly, the app will send a notification to end the session.

When restarting, subtract the time that had already passed from the total session time to avoid overstimulation.

Example: If a 20-minute session was interrupted at minute 10, the patient should only do **10 more minutes** when restarting.

28. If the patient's protocol involves 2 sessions per day, space them 4–6 hours apart.

Do not do them back-to-back.

29. If the protocol includes two 15-minute programs, they may be done in the same sitting.

For example:

- End the first session at 15 minutes
- Start the second program immediately

If the headset stays in the **same position**, it doesn't need to be removed.

30. However, if the second program requires a different headset position:

- End the session
- Wait 10 seconds
- Remove the headset and sponges

- Re-moisten the sponges and prepare the new stimulation area
- Repeat the setup and select the new program

Patients are encouraged to pick a **consistent time of day** that suits them.
The clinician does **not** need to assign a specific time.

31. Once the session ends, press the Exit button at the top left of the screen.

Wait 10 seconds before safely removing the headset.
Fold the headset to switch it off and remove the sponges.

32. After every session, clean the sponges with liquid soap and water. Let them dry fully.

Wipe any moisture from the silicone pockets using a dry tissue.
If needed, use a wet wipe to clean the **black areas** of the headset — **avoid the grey middle area.**

Side effects:

- Some patients may experience redness or itchiness in the stimulation areas.
- Wipe with water or apply anti-redness cream.
- If it persists, switch from salt water to **saline solution.**

33. Charging the device

How do you know your device needs charging?

When you open the app, the **battery icon** will be red if charging is needed.

This is the charger, and the input port is located here (folds device).

To charge:

- Fold the headset
- Plug in the cable
- Connect to a power outlet

Charge **twice a week for 2 hours.**

There is **no indicator** that shows when charging is complete, so use a timer and unplug after 2 hours.