# Script for TPS Device

1. Turn on the NEUROLITH® system by pressing the power button.

2. Once the device turns on, allow the device to automatically set up for up to 5 minutes

3. Place the silicone patch in the cap of the handpiece.

4. Apply a few drops of oil to the top of the handpiece. Once the oil covers the whole surface area, place the silicone patch on top and secure the cap by rotating it clockwise until firmly closed.

5. Next, seat the patient facing the 3D camera. Adjust the position and rotation of the 3D camera to face the patient's head.

6. Find the appropriate size of the detection-lens glasses provided with the system and fit them on the patient.

**TIP:** Three sizes are available, select the appropriate size based on the patient's facial structure and attach the detection lenses.

Note: The shorter base of the detection lenses should be down and the longer base should be up

7. For improved stability, secure the glasses with tape.

8. If available, load the patient's MRI scan in the device (TIP: You need to connect an CD reader). If not, load the demo MRI provided by the system for reference ( TIP: connect a USB with the DEMO MRI) .

9. Select the DCM section on the top left corner of the screen. Please note that the first option is the MRI you will use for your patient.

10. Perform a full mapping of the patient's scalp using the calibration pin in all directions as shown on the display's instructions. (TIP: the pin must always have contact with the scalp to get accurate mapping). Proceed by slowly and steadily tracing the scalp as directed on the screen, ensuring the dots are densely placed to achieve accurate mapping. Then, confirm calibration and confirm that you placed oil drops as shown in the first steps by selecting this icon on the screen.

11. Once the MRI appears on-screen, ensure that the lenses of both the handpiece and the glasses are correctly aligned and detected by the 3D camera. The three icons—camera, lenses, and handpiece—must always remain green. A red icon indicates poor connectivity with the 3D camera. Adjust the camera and pillar as needed to restore full connectivity.

12. Place the stimulation cap securely on the patient's head. Moisten the cap and the hair by spraying water to ensure proper conductivity.

**TIP:** Make sure the scalp is properly moistened with sufficient water.

13. Apply ultrasound gel generously to the tip of the handpiece to ensure optimal energy transmission.

14. Adjust the pulse frequency and energy level according to the doctor's instructions. The energy level controls how strong each pulse is, the frequency how fast the pulses are delivered, the pulses indicate the total number of pulses for each TPS session.

15. Position the handpiece at 90 degrees to the patient's scalp. Apply moderate pressure to the scalp and press the trigger button to begin the treatment session. Hold the patient's head for better stability. Steadily glide the handpiece across the target areas on the scalp.

16. Each session consists of 6,000 pulses. At approximately 4,000 pulses, ensure that the handpiece is accurately targeting the patient's identified dysfunctional brain regions. Targeting enables deeper penetration to the area. A darker colour indicates deeper penetration.

**TIP:** Example: In patients with certain conditions, the fronto-temporal region should be targeted.

17. Frequently reapply ultrasound gel to maintain proper coupling. Always pause the treatment by pressing the trigger button before reapplying gel.

18. The session will automatically stop once 6,000 pulses have been reached.

19. You can see what areas have been targeted by going through the MRI slices on the screen.

20. At the end of the session, clean and return the handpiece to its designated place. Clean any remaining gel from the patient's scalp, remove the stimulation cap and the detection lens glasses.

21. Finally, return to the home-screen and switch off the device by pressing the power button.

**TIP:** Patients stimulation programs are saved on the device for future reference.