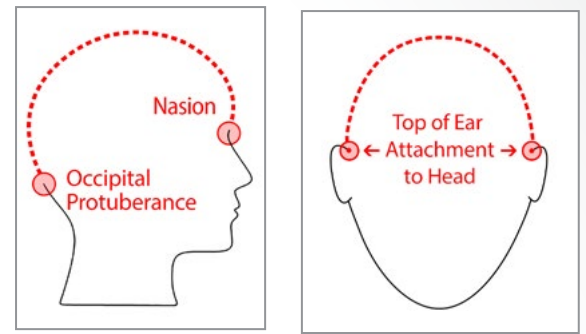


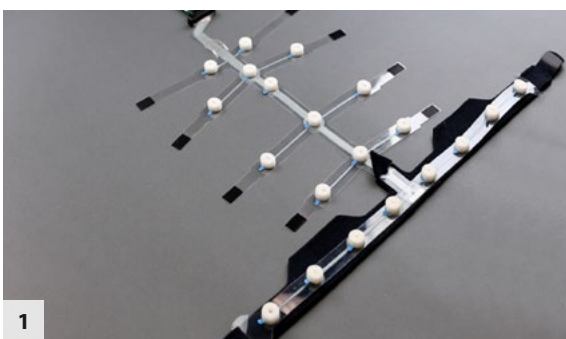
Please view the *Stat X24 Technician Training Video* and keep the *User Manual* available for reference during training.

Strip Sizing Chart		XS				Extra Small Strip				M				Medium Strip							
		S				Small Strip				-				Outside ABM Range							
		Left to Right Top of Ear Attachment to Head																			
		24.5	25	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34
Nasion to Occipital Protuberance	30.5	XS	XS	XS	XS	XS	XS	XS	XS	XS	XS	XS	-	-	-	-	-	-	-	-	-
	31	XS	XS	XS	XS	XS	XS	XS	XS	XS	XS	XS	-	-	-	-	-	-	-	-	-
	31.5	XS	XS	XS	XS	XS	XS	XS	XS	XS	S	S	S	S	S	S	S	S	-	-	-
	32	XS	XS	XS	XS	XS	XS	XS	XS	XS	S	S	S	S	S	S	S	S	-	-	-
	32.5	XS	XS	XS	XS	XS	XS	S	S	S	S	S	S	S	S	S	S	S	M	M	M
	33	XS	XS	XS	XS	XS	S	S	S	S	S	S	S	S	S	M	M	M	M	M	M
	33.5	XS	XS	XS	XS	S	S	S	S	S	S	S	S	S	M	M	M	M	M	M	M
	34	XS	XS	XS	S	S	S	S	S	S	S	S	S	S	M	M	M	M	M	M	M
	34.5	XS	XS	XS	S	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M
	35	XS	XS	XS	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M	M
	35.5	XS	XS	XS	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M	M
	36	XS	XS	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M	M	M
	36.5	-	S	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M	M	M
	37	-	-	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M	M	M
37.5	-	-	S	S	S	S	S	S	S	M	M	M	M	M	M	M	M	M	M	M	

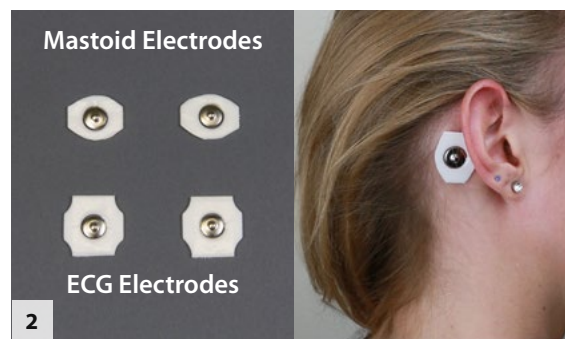
Also measure circumference. Downsize if:
 - circumference measures < 56cm, use Small Strip.
 - circumference measures < 52cm, use XSmall Strip.



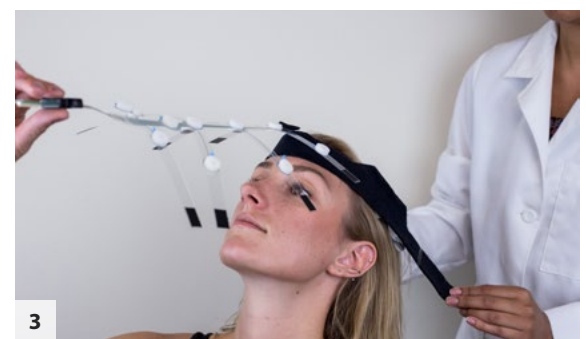
The Nasion is located at the intersection of the bridge of the nose, and just above the eyebrows. The Occipital Protuberance is located below the horizontal midline of the skull at the protruding bump. The Left/ Right Top of Ear Attachment is located where the ear and head intersect.



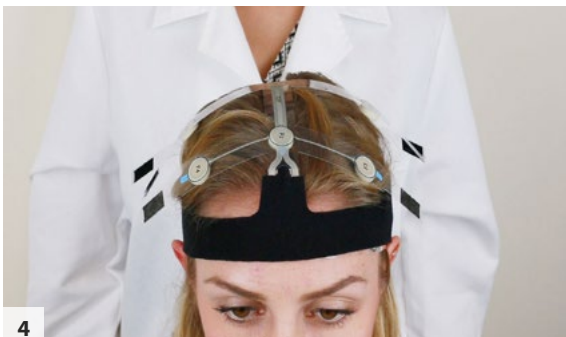
1 Attach the sensor strip to the neoprene strap with the Velcro tabs facing up and the loop side facing down. Affix the foam sensors and fill the centers with synapse cream.



2 Cut electrodes to fit the mastoid site, add a small amount of synapse cream to the center, and adhere to the patient's mastoid area.



3 Ask the patient to tilt head backwards, then center strip to the nasion. Connect the neoprene head strap to the participant's head for a snug fit.



4 Ensure sensor strip placement is centered, then attach the strip's back tabs to the neoprene head strap.



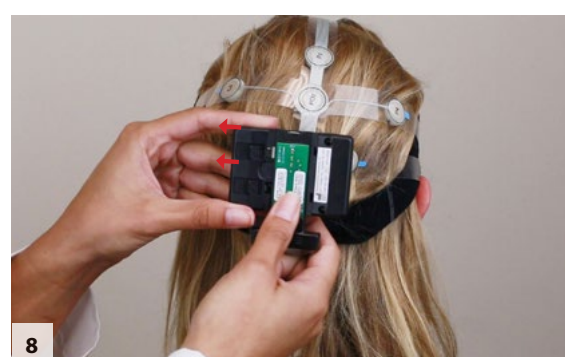
5 Using the syringe, part the hair at the temporal foam sites and add synapse cream to the foam sensors. Once all temporal sites have been filled, attach the remaining strip tabs to the neoprene head strap.



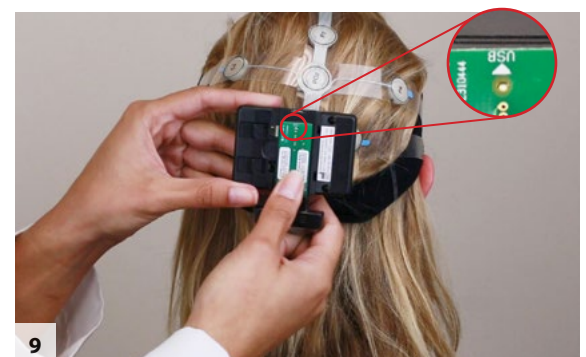
6 One at a time, detach each strip tab, part the hair and fill foam sensors at the parietal, frontal, and occipital sensor sites.



7 Proper head strip and strap placement is crucial in order to acquire high quality data.



8 With the device upside down (USB port facing up), unlock and remove the door by sliding the tabs away from the center.



9 Flip the connector up (arrow pointing up) and gently fasten it to the device.



10 Reattach the device door and lock it in place by sliding the tabs toward the center of the device. Connect the 3-pin linked mastoid cable, and optional 2-pin leads, to the device.



11 With the hook side of the Velcro tabs facing away from the patient's head, slide the small neoprene strap through the plastic loop, and flip the device right-side-up. Attach the Velcro tabs to the neoprene head strap and adjust the device slightly to the right side of the patients head.



12 Attach the 3-pin linked mastoid cable to the mastoid electrodes.



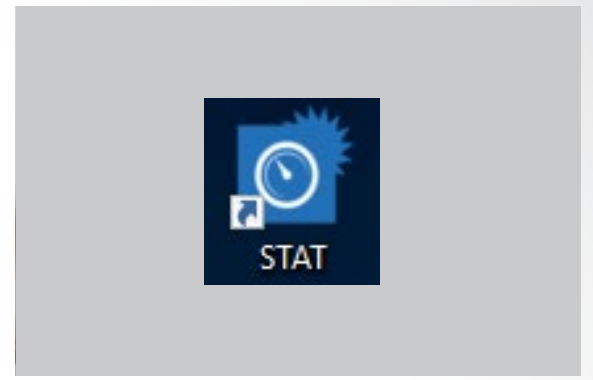
13

Attach the ESU or Bluetooth dongle to the USB port on the computer. Allow device and ESU to sync before as indicated by a solid light on both devices.



14

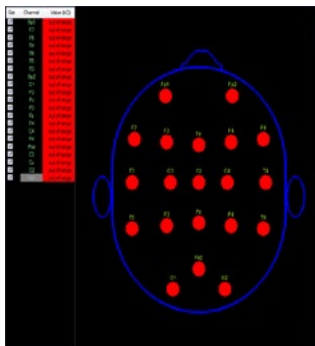
Turn on the device.



Double-click the STAT icon to open software. Enter your Username, Password, and TechID. Click Login button to proceed.

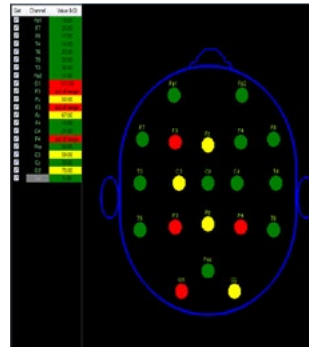
Impedance Check

- Open the software and click the "Test Impedance" button. Enter in the subject number, group number, session iteration, task type, and task iteration specified for impedance testing. Click the "Continue" button.
- A window will appear with a surface map and channel list. Ask the subject to remain still; press the play button to measure impedance values.
- A display of the impedance values will appear and indicate which sensor sites you will need to adjust to decrease impedance values.
- **Reference impedances** will be measured at the **mastoid sites**.



High reference values will be shown as "OUT OF RANGE". If reference values are high, all other values will be inaccurate. To troubleshoot:

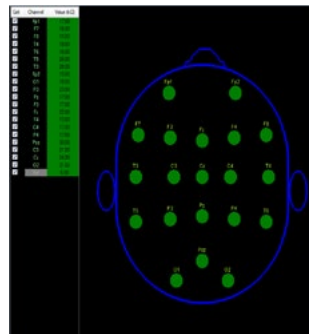
- Firmly press down on the mastoid electrodes; you may even adjust the mastoid lead cable position.
- If values are still high after re-testing, remove the mastoid electrodes, wipe behind the ears with an alcohol swab, and re-apply (you may need to cut new mastoid electrodes if the adhesive has worn).



If any site is presenting high (red or yellow) impedances:

- Un-Velcro the corresponding strip arm. Part the patient's hair at the sensor site and add more cream to the scalp and sensor.
- You may have to re-wipe the site area on the scalp with an alcohol swab and re-apply more cream depending on the circumstance.

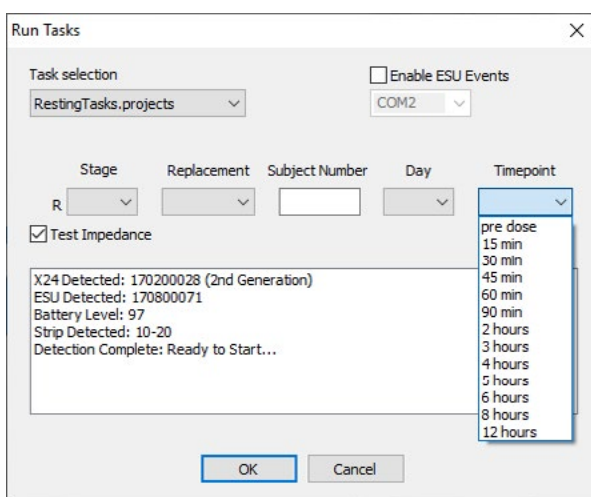
Impedance Value	Comments
< 40 kΩ	Good
40 kΩ - 80 kΩ	Moderate
> 80 kΩ	Bad
> 250 kΩ	OUT OF RANGE



- Troubleshoot each channel marked yellow or red: Re-run the impedance test to view the new values. Repeat these directions as necessary (when all impedances fall within the green values, including the reference, you may continue with other tasks).

Initiation of Acquisition

- Inform the participant that they will be performing several tasks including resting state acquisition with eyes open and closed and two tasks designed to evaluate memory and learning.
- Instruct the participant to relax, blink normally, avoid excessive blinking, remain silent and avoid jaw clenching.

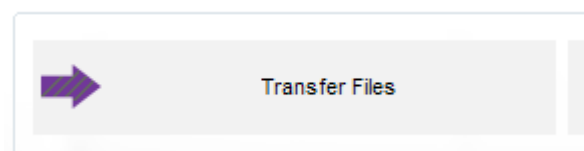


Acquisition

- The tasks will begin automatically with display of instructions for each task.
- All active tasks will consist of a practice session followed by the task. During practice an error window will appear if the participant fails to respond or responds incorrectly. During the testing session, the session will fail if participant fails to respond 6 consecutive times or 25% overall.
- If the session fails, "CTRL + ALT + R" can be used to restart the session.
- At the conclusion of the test bed, the software will close and a completed task window will appear. Once acquisition is complete, upload pending files in Gateway by clicking the "Transfer Files" button.

NOTE:

- Un-check "Enable ESU Events" before acquisition
- Replacement: select 0 for **NO** replacement, or 1 for replacement



Caring for equipment:

- **Clean strips immediately after use:** First, remove foam sensors, then wipe with an alcohol swab. Be gentle when cleaning strips, as excessive scrubbing will dramatically reduce the useful life of the strip. Hand wash the neoprene strap with soap and wipe with an alcohol swab after it has air dried.
- Always store strips in a flat position and handle with care to prevent creasing and/or folding.
- **Charging:** To charge your headset, plug the provided micro USB cable into the bottom of the headset. The device will tell you it is charging and the green LED indicates charging status as follows: the light blinks double while charging and single when the headset is fully charged. The device will tell you when charging is complete.