

OASIS-PRO TEAM 23 USE CASE

Use case 1

How to power the device/insert and buy the correct battery

Primary actor: battery/device

Scope: operating level/device usage

Level: user goal

User: the user of the oasis pro system can show the device works

Pre-condition: there is the correct battery in hand

Main success scenario:

- The user buys a 9-volt alkaline battery for the oasis pro system
- The user can insert the battery into the battery component of the device
- The user can close the battery compartment fully without the back being loose
- The user can use the device for 25 to 30 hours

Post-condition: the battery is inserted, and device can now work

Extensions:

- 1b. The battery is the wrong type and size and the back component does not close
- 1c. The battery is the wrong type and size, and the device does not work
- 1d. The device is not able to operate for 25 to 30 hours due to the battery fault

Use Case 2

Turn on the device

Primary actor: user(patient)/battery

Scope: operating level/device usage

Level: user goal

User: the user(patient) should be able to turn on the oasis pro system device with no malfunction and errors

Pre-condition: the user(patient) has the device with him/her so he/she can test if it comes on or not

Main success scenario:

- The user(patient) presses and holds the power button till the power light shows
- The user(patient) can see how much battery level there is for the device
- The device turns off automatically when no session is selected within two minutes

Post-condition: the device comes on and the user can see the battery level and select a session

Extensions:

2a. the device does not come on: the user(patient) should check the battery type first like in use case 1 and if/when the battery is not the problem, the user should try charging it up first and if it does not come on then the user(patient) should contact the customer service

Use case 3

Turn off the device

Primary actor: user(patient)/battery

Scope: operating level/device usage

Level: user goal

User: the user (Patient) the user(patient) should be able to turn off the oasis pro system device with no malfunction and errors

Pre-condition: the user(patient) has the device with him/her so he/she can test if it comes on or not

Main success scenario:

- The user(patient) presses and holds the power button when the device is switched on (because if the device is not done while switched on then it means you are turning on the device and not switching it off)
- The user(patient) presses and holds the power button till the device is shut off, if a session is still running for the user(patient), the device will shut off in one second

Post-condition: the device is turned off and there is no session running and battery is not wasted

Extensions:

3b. the device for the user(patient) does not switch off: the user(patient) should contact the customer service for help as the device may be faulty

Use case 4

Selecting a session

Primary actor: user(patient)

Scope: operating level/device usage

Level: user goal

User: the user (Patient) the user(patient) should be able to select a session on the oasis pro system device with no errors

Pre-condition: the user(patient) has the device with him/her to test if he/she can select a session or not

Main success scenario:

- The user(patient) presses and hold the power button until the power light shows
- The user(patient) can see all the sessions available to pick from
- The user(patient) can pick any session they want, and the session number should be lit up as to indicate what was picked
- The user(patient) can switch to another session by pressing and releasing the power button until they reach the session group they want
- The user(patient) can use the up or down button to highlight a session number
- The user(patient) can press the select button and whichever session number was highlighted, the user(patient) should be put in that session with a 5 second delay

Post-condition: the user(patient) can select any session, switch between session group, and select the final session he/she wants

Extensions:

- The user(patient) cannot select any session: the user(patient) should try restarting the device, if that does not work then customer service should be contacted immediately
- The user(patient) can not switch between session groups: the user(patient) should not be holding the power button for too long, should just be a quick press and release, If the problem persists, customer service should be contacted
- The user(patient) cannot see any lit up when a session is selected: the user(patient) should try reselecting other sessions and see if they light up when selected, if the problem only occurs for one session, device is faulty and customer service should be contacted

Use case 5

Ending a session

Primary actor: user(patient)

Scope: operating level/device usage

Level: user goal

User: the user (Patient)) should be able to end a session without any lit-up lights

Pre-condition: the user(patient) has the device with him/her to test if they can end a session that they began

Main success scenario:

- The user(patient) presses and releases the power button while a session is still on
- The user(patient) waits for the soft off mode to finish counting down
- The device shows a graph that counts down to notify when soft mode is done
- The session is powered off so there is no lit up light

Post-condition: there is no session be done and no light lit up as to ensure the session is done

Use case 6

How to place the electrodes

Primary actor: device electrode/user(patient)

Scope: operating level/device usage

Level: device goal

User: the device electrode is attached and connected to the correct components and there are no interferences with the electrode

User (Patient): the electrode is attached and connected to the required place for the skin

Pre-condition: the user(patient) has the device with him/her to attach the ear clips to their ears and selected a session and for the user(device), a session must be selected first

Main success scenario:

- All objects and accessories close to the ear have been removed to avoid interference
- User(patient) can plug the stimulus cable into the CES output jack
- User(patient) should and can water the ear lobe for better connection
- User(patient) can attach the black clip to the left ear and red clip to the right ear
- User(patient) can turn on the oasis pro system device
- User(patient) can select a session
- User(patient) can end a session
- the device should automatically turn when session is done

post-condition: the electrode no sends electrical connection as the session has ended

Extensions:

6d. the electrode did not activate/produce electrical current:

- the user(patient) should check if all accessories and interference have been removed from ear
- the user(patient) should check if the stimulus cable is attached to the CES output jack
- the user(patient) should check if the clips were attached to the correct parts of the ear mentioned in the manual

use case 7

connection test

Primary actor: user(patient)/device

Scope: operating level/device usage

Level: user goal

User: the user (Patient) can connect the electrodes to the oasis pro to check if it works

Pre-condition: the user(patient) has the device with him/her to test the connections

Main success scenario:

- the user(patient) turns on the device
- the user(patient) attaches the ear clips
- the electrode and oasis pro enter test mode
- the CES mode light blinks
- the graph shows the connection status to confirm if there is a connection it can be okay or excellent
- the device goes blank when there is a connection confirmed

post-condition: the user(patient) can successfully use the device with no errors or malfunctions

Extensions:

There is no electrical connection:

7a. the user(patient) should reattach the ear clips

7b. the user(patient) should restart the device

Use case 8

Adjusting intensity

Primary actor: user(patient)/device

Scope: operating level/device usage

Level: user goal

User: the user (Patient) should be able to adjust the intensity of the device depending on the connection

Pre-condition: the user(patient) has the device with him/her to be able to adjust the intensity

Main success scenario:

- the user(patient) turns on the device
- the user(patient) attaches the ear clips
- the user(patient) selects a session
- the user(patient) selects a session length
- the connection of the device displays ok or excellent
- the user(patient) presses the up to increase the intensity or the down button to decrease the intensity
- the device displays lights up the intensity level the user(patient) chooses (from 1 to 8)

post-condition: the user(patient) can adjust the intensity level and the device works properly

Extensions:

 If the intensity is too high:

 The user(patient) should reduce the intensity level as to protect their health

Use case 9

Saving preferences

Primary actor: user(patient)/device

Scope: operating level/device usage

Level: user goal

User: the user (Patient) should be able to pick the saved preferences when the device is turned on and loaded

Pre-condition: the user(patient) has the device with him/her to select and save the preferences

Main success scenario:

- the user(patient) turns on the device
- the user(patient) attaches the ear clips
- the user(patient) selects a session
- the user(patient) selects a session length
- the user(patient) selects the preferred intensity level
- the user(patient) presses and holds the select button for one second
- the user(patient) can continue the session
- the user(patient) preferred settings are saved

post-condition: the user(patient) has selected all the sessions and modifications he/she wants for next time; the device is powered on and there is a section that allows user(patient) to select the saved settings

Extensions:

The user(patient) ends a session immediately: the device should still save the preferred settings

The user(patient) continues a session immediately: the device should still save the preferred settings

Other information on saved preferences:

if only you and someone else uses the device, always check the saved preferences to see which one is yours as it may be dangerous to use the same session and intensity level cause people have different skins.