## **Use Case Model**

**14** Use cases, alongside a use case diagram at the end of the document.

Use Case 1 - Power (ReplaceableBattery)

Primary Actor - Oasis Pro UI

Level - Subfunction

Precondition - 9 volt battery required

Success Guarantee - Oasis Pro powered successfully.

Main Success Scenario:

- 1. User slides the cover off of the back of the unit's battery compartment.
- 2.User inserts the 9-volt battery as indicated on the diagram
- 3. User slides the cover back into place.

Postcondition - Doing this grants 25-30 hours of operation. Repeat use case after battery life drained.

Extensions:

2a. Diagram not there/ Damaged.

2a1. User can view diagram online or on the original box with purchase(?)

Use Case 2 - Power (Re<u>charg</u>eableBattery)

Primary Actor - Oasis Pro UI

Level - Subfunction

Precondition - wires to charge the device

Success Guarantee - Oasis Pro powered successfully.

Main Success Scenario:

- 1.User inserts power charging cable into outlet
- 2. User inserts power charging cable into Oasis Pro.
- 3. User slides the cover back into place.

Postcondition - remove cable when battery fully charged

Extensions:

Use Case 3 - Power On

Primary Actor - Oasis Pro UI

Level - User Goal

Precondition - Device is charged enough or powered with a battery.

Success Guarantee - Oasis Pro Powers on and the graph displays the battery level.

Main Success Scenario:

1. User presses and holds the power button until the power LED turns on.

Postcondition - If no session is selected within 2 minutes, the Oasis Pro will turn off.

Extensions:

1a.Button is stuck or doesn't function properly.

1ab. View "Warranty & Care" Section in the Oasis Pro Manual

Use Case 4 - Power Off

Primary Actor - Oasis Pro UI

Level - User Goal

Precondition - Device is on.

Success Guarantee - Oasis Pro shuts off safely.

Main Success Scenario:

1. User presses and holds the power button at any time to turn off the Oasis Pro.

This may take up to 1 second if a session is running.

Extensions:

Use Case 5 - Battery Level Display

Primary Actor - Oasis Pro UI

Level - Subfunction

Precondition - Device is powered

Success Guarantee - Battery level visible to user initially and periodically afterwards.

Main Success Scenario:

- 1.User *Powers on*(UC3) the Oasis Pro.
- 2.Battery level is displayed on the graph for a couple seconds initially.
- 3.Battery Level continuously monitored and periodically displayed while session running.

Postcondition: -

Extensions: -

Use Case 6 - Battery Level Low

Primary Actor - Oasis Pro UI

Level - Subfunction

Precondition - Device is powered on and battery getting low

Success Guarantee- Battery level continuously monitored for when to be low

Main Success Scenario:

1. The graph will display two bars and blink.

Postcondition:

Extensions:

Use Case 7 - Battery Level Critical

Primary Actor - Oasis Pro UI

Level - Subfunction

Precondition - Device is powered on and battery critically low

Success Guarantee- Battery level continuously monitored for when its critically low Main Success Scenario:

- 1. The graph will display a single bar.
- 2. If this warning occurs during a session, the session will end early and the battery indicator will continue to blink for a short period of time. The battery must now be *Powered* by Use Case 1 or 2, respectably.

Postcondition:

Extensions:

Use Case 8 - Starting a Session

Primary Actor: Oasis Pro UI

Level: User Goal

Precondition: Device is powered on and the user would like to start a session

Success Guarantee: The user can start a specific session, see it through to completion,

or end it early.

Main Success Scenario:

- 1. User presses and releases the power button to switch between groups, and they can see which one is being selected as the lit group icon will change.
- 2. User presses the INT Up or Down arrows to highlight a session number.

- 3. The frequency and mode icons associated with the session light up to indicate what frequency range and CES pulse type will be used.
- 4.User presses the Select button to start the highlighted session. The session number will flash and the session will begin after a five second delay.

Use Case 9 - Connection Test
Primary Actor - Oasis Pro
Level - User Goal
Precondition - Currently in session start

Trigger - Oasis Pro checks for an electrical connection by entering a test mode Success Guarantee - After connection test mode is done, you can adjust the intensity. Main Success Scenario:

- 1. Oasis Pro enters test mode. CES Mode light blinks ( or and the graph shows the status of the connection as shown in p6 of the manual.
- 2. User can either resume a saved preference or start a new one, for the latter, the display goes blank. For the former, it displays a Soft On animation.
- 3. The Oasis Pro will run with either an Excellent or Okay connection.
- 4. If the ear clips are disconnected, the Oasis Pro will pause the session and wait for the ear clips to be reconnected by *Placing Electrodes*. The No Connection signal will blink for a couple of seconds, then the graph scrolls up and down indicating the unit is returning the voltage to a safe testing level; this may take up to 20 seconds. (the ⇒L€ and ⇒R€ lights may turn on as well).

Extensions:

Use Case 10 - Placing Electrodes

Primary Actor : User Level : User Goal

Precondition: No object interfering with ear clips Trigger: User desires to place electrodes on earlobes

Success Guarantee:
Main Success Scenario:

- 1. Plug in the stimulus cable into the CES output jack( 1.).
- 2. User attaches black clip to the left ear, and the red clip to the right ear.

Extensions:

2a.Connection still weak

2a1.Wet the earlobes using tap water, conductive gel, or saliva, before attaching the ear clips.

Use Case 11 - Ending A Session(Soft Off)

Primary Actor - Oasis Pro UI

Level - User Goal

Precondition - Oasis Pro currently in a valid session, and the user wishes to end it early. Success Guarantee - Soft Off takes place and the graph scrolls from 8 to 1.

Main Success Scenario:

- 1. User presses and releases the power button.
- 2. Soft Off begins and the Oasis Pro gradually reduces the CES stimulus.
- 3. The graph will scroll from 8 to 1 to confirm that Soft Off is in progress.

Postcondition: -

Extensions: -

Use Case 12 - Adjusting Intensity

Primary Actor - Oasis Pro UI

Level - User Goal

Precondition - Oasis Pro currently in a valid session, and the user wishes to adjust intensity.

Success Guarantee - When the user adjusts INT on the Oasis Pro UI, the topmost lit number will blink.

Main Success Scenario:

- 1. User presses the UP or DOWN INT arrow to increase or decrease intensity, respectably.
- 2. The graph lights 1 to 8 only show an approximate intensity level, but when the intensity is adjusted, the topmost lit number will blink

Postcondition: - Intensity of Oasis Pro CES is adjusted as requested.

Extensions: -

Use Case 13 - Recording Therapy Session

Primary Actor - Oasis Pro UI

Level - User Goal

Precondition - Oasis Pro currently in a valid session, and the user wishes to record the therapy and history of treatment.

Success Guarantee - User will see details of recorded session in the list view of history. Main Success Scenario:

1. User presses the save session button during therapy.

2. The session alongside its corresponding type, duration, and last used intensity gets saved into the database.

Postcondition: - The session is now visible in the list view for history of recorded sessions.

Use Case 14 - Saving Preferences

Primary Actor - Oasis Pro UI

Level - User Goal

Precondition - Oasis Pro currently in a valid session, and the user wishes to save preferred intensity setting for the session.

Success Guarantee - Oasis Pro saves your preferred intensity and uses it the next time you run that session.

Main Success Scenario:

- 1.User adjusts to his preferred intensity, then presses and holds the Select button for 1 second.
- 2. The graph displays a short animation and the Oasis Pro saves the user's preferred intensity in the database for preferences.

Postcondition: after every save, and on each startup, the Oasis Pro remembers saved preferences from the database connected.

## **Oasis Pro**

