Device Use Cases

UC01 - Base Use Case	
Description	The base use case for turning on and using the device.
Primary Actors	User
Pre-condition	The device is equipped with a charged 9V battery; the user has the black ear clip on their left earlobe, and the red earclip on the right earlobe; the ear clip cable is connected to the device; the device is powered off
Post-condition	The device power LED turns on, the device is waiting for user to make a selection
Main Sequence	1. The user presses the power button until the yellow power LED lights up 2. The device will display the battery level for a few seconds 3. The device waits for user to make a selection 4. User starts to use the device
Extension	1a. If the power LED doesn't turn on, replace the battery. 1a.1. If the power LED still doesn't turn on, replace the device. 2a. If the graph displays a single bar when turning on, replace the battery immediately. 3a. If the user doesn't make any selection for 2 minutes, the Oasis Pro will turn off. 4a. If the user makes a session selection, go to UC02 4b. If the user selects to record a treatment, go to UC08 4c. If the user powers off the device go to UC05

UC02 - Select a session use case	
Description	The use case for user to select a treatment session
Primary Actors	User
Pre-condition	The device is powered on;
Post-condition	The selected session number will flash and the session will begin in 5 seconds.
Main Sequence	1. By default, no session group and type is chosen and no session LED is on; 2. The user presses and releases the "switch group" button to switch between groups, the selected session group LED will be on;

	3. If a session group is selected, the session numbers inside the session group will be lit.
	4. The user presses the "switch type" button to highlight a session type number.
	5. The user presses select √ to start the highlighted session.
	6. The highlighted session number will lit and the session will start in five (5) seconds.
	7. The Oasis Pro checks the connection. See UC06
	8. Session start for the chosen period
	9. Session ends with Soft Off
Variation	6. If the user presses the "record session" button, the session will be recorded. See UC08.
Extension	1a. If the user doesn't make any selection for 2 minutes, the Oasis Pro will turn off.
	3a. If no session number is lit, this means no session is programmed into this group.
	3b. To program session into selected session group, see UC07
	7a. If user want to change intensity, go to UC03
	8a. If the user wants to end the session early, press and release the power button.

UC03 - Adjust intensity use case	
Description	The use case for user to change intensity for a session
Primary Actors	User
Pre-condition	A session is selected; a connection test is successful; the connection quality is shown as LED lights.
Post-condition	The intensity of the session is successfully adjusted.
Main Sequence	1. User press INT Δ ▽ button to increase or decrease the intensity.
	2. The topmost number will be lit to show an approximate of current intensity level.
	3. The intensity level is set successfully

UC04 - Saving preference use case	
Description	The use case for user to save the setting for a treatment

Primary Actors	User
Pre-condition	A session is selected; an intensity level is selected;
Post-condition	The current setting is saved as the default intensity setting when open this session next time.
Main Sequence	1. The current intensity level number lit. 2. User presses and releases the "Record" button. 3. The current intensity level is set as the preferred intensity level for this session
Extension	1a. To adjust intensity see UC03 3a. After the preferred intensity is set, the user can wait for the session to end, or end the session manually by pressing and releasing the power button.

UC05 - Power off user case	
Description	The use case for user to power off the device
Primary Actors	User
Pre-condition	The device is powered on;
Post-condition	The device is powered off successfully.
Main Sequence	1. The user presses the power button. 2. The device shuts down.
Extension	2a. When a session is in progress, the device needs a Soft-Off then power off.

UC06 - Connection Test Use Case	
Description	The use case for the device to conduct a electrical connection test
Primary Actors	Device
Pre-condition	The device is powered on; User has selected a session; Device is in test mode

Post-condition	At least an okay connection is established; The intensity may be adjusted by the user; The selected session will begin
Main Sequence	1. As the test mode begins, the sensor for CES channels will detect the earclips, and corresponding CES Mode light (⎍ or ⎍) will blink 2. The number graph displays status of connection 3. The connection is successfully built

Extension	2a. If 8 and 7 light indicators are lit, device will not run the selected session and wait for at least an okay connection
	  2a. 1. If no connection is built within 8 seconds, the device will turn off.
	  2a. 2. If these indicators start blinking during a session, the session will pause and wait for ear clips to be reconnected before resuming the current session
	2b. If 6,5 and 4 light indicators are solid, User may increase intensity to better feel effects
	2c. If 3,2 and 1 light indicators are solid, session selected by User can run
	3a. If resuming or restoring a saved preference, the display will show a Soft On animation

UC07 - User Design Use Case	
Description	The use case for installing user designed sessions
Primary Actors	User; DAVID Session Editor
Pre-condition	DAVID session editor is installed on separate device;
Post-condition	User designed session is successfully installed on OASIS Pro;
Main Sequence	1. The user has created a session file using DAVID session editor 2. OASIS Pro is connected to DAVID session editor via stereo audio cable 3. The user clicks "Save Session" 4. OASIS Pro downloads the session file and saves it to custom session group
Extension	1a. To create a session refer to instructions in DAVID session editor tutorial 4a. Sessions may be overwritten by saving a new session to a previously used session number

UC08 - Record Session Use Case	
Description	The use case for recording sessions
Primary Actors	User
Pre-condition	"Record Session" button is pressed after a session is selected
Post-condition	Recorded session is successfully added to history
Main Sequence	1. The user click the "Record" button 2. The session type, session group and intensity are recorded to a local text file. 3. The session is added to history
Extension	2a. If the intensity is changed during the session, the last selected intensity will be recorded