

ID	Requirement	Related Use Case	Fulfilled by	Test	Description
1	The device turns on when the power button is pressed.	Base Use Case (UC01)	MainWindow	Run the simulator in Qt and press the power button	When the power button is pressed the simulated device will turn on, allowing control of the rest of the device through <i>MainWindow</i> .
2	The device turns off when the power button is pressed.	Power Off Use Case (UC05)	MainWindow	Press the power button while the simulated device is running.	When the power button is pressed while the device is running, the buttons will become inactive and side panel will gray out until power button is pressed again
3	The session ends when the power button is pressed.	Power Off Use Case (UC05)	MainWindow, Session	Press the power button while a session is running.	When the power button is pressed while a session is running, the device will indicate that the session is ending with soft off.
5	Warnings are given when the device is at low battery.	N/A	MainWindow	Reduce the battery by running sessions or manual input and observe behavior	When the battery reaches 20 percent, the system will display a warning. When the battery reaches 10 percent, the system will prompt the user to replace the battery.
6	The battery level is dependent on the length, intensity and connection	N/A	MainWindow, Session	Run sessions of different length and type and observe battery level	When a session is completed the battery level will decrease corresponding to the length of the session.
7	The device supports 3 choices for session groups.	Select a Session Use Case (UC02)	MainWindow, Session	Cycle through session groups by pressing the "switch group button"	The <i>MainWindow</i> displays 3 options for session groups, when the "switch group" button is pressed the highlighted group will cycle between the options.
8	The device supports 4 choices for session types.	Select a Session Use Case (UC02)	MainWindow, Session	Cycle through session types by pressing "switch type" button	The <i>MainWindow</i> displays 4 options for session types, when the "switch type" button is pressed the highlighted type will

					cycle between the options.
9	Before each session the device tests for connection.	Connection Test Use Case (UC06)	Session	Run a session using different combinations of ear clip setups and connection levels.	When a session is started the MainWindow will call a connection test which checks if the ear clips are connected and that the connection in the admin panel is good.
10	Intensity is increased and decreased when up and down buttons are pressed.	Adjust Intensity Use Case (UC03)	MainWindow, Session	Press up and down buttons while a session is running and observe the behavior of the graph.	When a session is running, the up and down buttons can be pressed. Pressing the up button will increase the intensity by one, shown on the graph. Pressing the down button will decrease the intensity by one, shown on the graph.
11	User Designed sessions can be added to session groups.	User Designed Use Case (UC07)	MainWindow, Session	Simulate DAVID Session Editor with the admin panel, add session to custom session group	The custom session design is simulated by the admin panel, where the user can enter a desired length and save it to the third session group.
12	Recorded sessions are added to session history	Record Session Use Case (UC08)	MainWindow, Session, Record	Run a session with selected group and type, adjust intensity during the session, press the record button.	When the record button is pressed during a session the type, group and current intensity will be written to a text file and saved to the disk. The history can then be viewed on the side panel by retrieving the information from the text file.
13	Session will pause if connection changes during the session.	Select a Session Use Case (UC02) Connection Test Use Case (UC06)	MainWindow, Session	While a session is running, change the connection by removing an ear clip and observe behavior.	Removing an ear clip during a session, simulated by the buttons on the side panel, will pause and end the session with soft off.