

1) Device turns on and off

- When the device is on, click the Power button
- The screen should turn off (black screen)
- All buttons are disabled, except the power button
- When the device is off, click the Power button
- The screen should turn on (not black screen)
- All buttons are enabled

2) Start a session

- Turn the device on.
- Screen has options for "Start Session".
- All buttons are enabled.
- Start Session by selecting "Start Session", and clicking OK button
- Session screen appears
- Timer shows with default value of 20 minutes
- Frequency and Waveform have default values of 0.5Hz and Alpha respectively.
- Turn on "Contact" to start session
- Timer starts counting down the seconds.
- Frequency and Waveform buttons are disabled.

3) Changing Frequency

- Turn the device on, and start a session
- The default value of frequency should be 0.5Hz
- There should be 3 option for frequency: 0.5Hz, 77Hz and 100Hz.
- Clicking on the "Change Frequency" button, cycles through the Frequency option.
- Currently selected Frequency shows on the top left of screen. For eg, "Freq: 100 Hz"

4) Changing Waveform

- Turn the device on, and start a session
- The default value of Waveform is Alpha
- There should be 3 option for waveform: Alpha, Beta, Gamma
- Clicking on the "Change Waveform" button, cycles through the Waveform options.
- Currently selected Waveform shows on the top right of screen. For eg, "Waveform: Alpha"

5) Increase the session time

- Turn the device on and start a session.
- Default time is 20 minutes.
- Clicking on the Timer button cycles the time between 20 min, 40 min and 60 min.

6) Increase the intensity of the current

- Turn the device on, and start a session.
- Default Intensity is 100 μ A
- Pressing the Up Arrow button increases the intensity by 50 μ A
- Max intensity is 500 μ A.
- Pressing the Up Arrow when the intensity is at 500 μ A doesn't do anything
- Pressing the Down Arrow button decreases the intensity by 100 μ A
- Min intensity is 0 μ A.
- Pressing the Down Arrow when the intensity is at 0 μ A doesn't do anything

7) Removing contact pauses a session

- Turn the device on, and start a session.
- Establish contact by turning on the Contact check box.
- Timer starts counting down
- Change Frequency and Change Waveform buttons are disabled.
- Remove the contact by turning off the Contact check box.
- Timer stops counting down.
- Change Frequency and Change Waveform buttons are enabled.
- If there is no Contact for 5 seconds, the session stops.
- New screen appears with the option to record session
- If user selects "Yes", and clicks OK, the session is stored in History
- User is returned to the "Start a Session" screen.
- If user selects "No", and clicks OK, the session is not stored in History
- User is returned to the "Start a Session" screen.

8) Resume a session

- Turn the device on, and start a session.
- Establish contact by turning on the Contact check box.
- Timer starts counting down
- Change Frequency and Change Waveform buttons are disabled.
- Remove the contact by turning off the Contact check box.
- Timer stops counting down.
- Change Frequency and Change Waveform buttons are enabled.
- Within 5 seconds of removing contact, re-establish contact by clicking on the Contact check box.
- Timer resumes counting down from its paused state.
- Change Frequency and Change Waveform buttons are disabled.

9) Complete and record a session

- Turn the device on, and start a session.
- Establish contact by turning on the Contact check box.
- Timer starts counting down
- Change Frequency and Change Waveform buttons are disabled.
- Wait until timer expires.
- New screen presents option to Record the session with "Yes" and "No".

- If user selects "Yes", and clicks OK, the session is stored in History
- User is returned to the "Start a Session" screen.
- If user selects "No", and clicks OK, the session is not stored in History
- User is returned to the main session screen

10) Finish session

- Turn the device on, and start a session.
- Establish contact by turning on the Contact check box.
- Timer starts counting down
- Change Frequency and Change Waveform buttons are disabled.
- Click on the Finish Session button
- New screen presents option to Record the session with "Yes" and "No".
- If user selects "Yes", and clicks OK, the session is stored in History
- User is returned to the "Start a Session" screen.
- If user selects "No", and clicks OK, the session is not stored in History
- User is returned to the main session screen

11) Device turns off after 30 minutes of inactivity

- Turn the device on.
- If no buttons are pressed for 30 minutes (for the purpose of testing, 30 seconds are used), then the device turns off.
- If there is a session in progress, then the device DOES NOT turn off even after 30 seconds of inactivity.

12) Battery drains

- Turn the device on, and start a session
- Battery indicator on top left of screen shows remaining battery amount
- By default, the battery is at 100%
- Battery starts draining once the device is turned on
- The Battery Indicator value changes to show draining battery.
- When the session is active, the rate of battery degradation is related to the selected Intensity value
- Battery drains faster when the Intensity is at a higher value
- Turning off "Realistic power draw" check box emulates aggressive battery drain
- Clicking Charge re-charges the battery.
- Battery restores to 100%
- Warning issue when battery at 5%
- Device issues a warning at 5% charge
- Device shuts down when battery at 2%

13) Lock Device to disable most buttons

- Turn the device on, and start a session
- Click on the Lock button to disable most buttons

- Except for the Power and Back buttons, clicking on any other button doesn't have any effect.
- Clicking on Contact (when locked) will still start a session.

14) Emulate Power Surge

- Clicking on the Power Surge button simulates a power surge, in excess of 700 μA
- All buttons are disabled.
- Device displays warning about Power Surge. "Power Surge Detected. Contact Support. Device Disabled"
- Restarting the application re-enables the device.

15) View Session History

- Turn the device on, and record a session
- Click on the History button to view previously recorded Sessions.
- Select a session and click OK to see the following details about the session:
- Session number, Waveform, Frequency, Duration, Power Level