



WELLCOME SANGER INSTITUTE

STANDARD OPERATING PROCEDURE PACKET

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SANGER INSTITUTE STANDARD OPERATING PROCEDURE

SUBJECT: Calibration for PPI – V1

| | | |
|----------------------------|------------------------|-------|
| SOP Number: SOP0049 | To be reviewed: | |
| Author(s): | Signed: | Date: |
| Editor: | Signed: | Date: |
| Date Modified: | | |

INTRODUCTION

The purpose of this procedure is to calibrate the Prepulse Inhibition (PPI) machine for use.

ABBREVIATIONS

- **ARA** = Advanced Research Assistant
- **PPI** = Prepulse Inhibition
- **PPL** = Procedure Project License
- **SOP** = Standard Operating Procedure
- **STL** = Scientific Team Leader

HEALTH & SAFETY

- **RA004** – Physical Hazards; *Sections RA004.2 & RA004.8*

RESPONSIBILITIES

All staff performing this procedure are responsible for ensuring that this Standard Operating Procedure (SOP) has been read, understood and where applicable is followed in accordance with the relevant Project License (PPL). All staff should be trained and competent to perform the procedure, where applicable they should also be licensed to perform the procedure.

RESOURCES

Equipment:

1. PPI
2. ANL929A-PC microphone connected to PPI
3. ANL929A-PC microphone end slot
4. ENV-263A mouse holder with end slots
5. Two 20g weights
6. Small, single blade, screw driver

Associated SOPs:

- **SOP0048** – Prepulse Inhibition (PPI)
- **SOP0101** - Taking and returning cages for procedure
- **SOP0103** - Setting Up a PPI Configuration

Staff Required: The calibration can be completed with 1 phenotypers.

PROCEDURE

1. Log onto the computer connected to the PPI.
2. Once logged in, turn on the PPI by pressing the green power switch located on the front of the device.
3. Double click on the desktop icon *ANL929A-PC*.
4. Double click on the desktop icon *Startle Reflex*. If an error message occurs that says the startle card cannot be found, wait a minute and try again. Should this still not work, turn off the PPI and log off the computer. Try steps 1-4 again. If it still doesn't work, restart the computer and try again.
5. Go to *File*, then *Load Config*. To get to the correct folder click on *My Computer*, then *Local Disk (C:)*, then *Program Files*, then *MED Associates*, then *Startle Reflex* and select the configuration to be used . If you need to create a new configuration, refer to SOP0103 - Setting Up a PPI Configuration.
6. Minimise the *Startle Reflex* screen so that you can view both it and the *ANL929A-PC Sound Level Meter* window at the same time.
7. In the *Startle Reflex* window, go to the *Hardware* menu and select *Stimulus Test*.
8. In the new window, select *White Noise* from the *Stimulus Type* dropdown menu. Enter the following settings (see image 1 in the Appendix):
 - *Rise/Fall Time (ms)*: 0
 - *Duration (ms)*: 40
 - *Stimulus Level (dB)*: 110
 - *Background Level (dB)*: 60
9. Take the microphone out of the large rat holder and place it in one of the smaller mouse holders so it is loaded from the left and is facing the holes in the holder. Remember to place the end slots into the holder (using the one stored with the microphone at the end where the microphone cable comes out) as you would if there were a live mouse in it.
10. Put the holder on the platform, making sure the holes face the speaker, in Chamber 1 and tighten the screws.
11. Close the doors to all the chambers.
12. Ensure that the room is as quiet as it will be during the test.
13. Click the *On* button for *Background Noise Lock* and see whether the microphone is actually reading 60 dB +/- 2 dB. If it is, click the *Off* button and move on to the next step. If it isn't, open the chamber and check to see that the end slots are in place. If they are, use the *Background White Noise*

Adjustment Knob on the PHM-255A (see image 2 in the Appendix) to adjust the dB level. This allows for an adjustment of about +/- 2 dB. If this doesn't solve the problem, inform the relevant Advanced Research Assistant (ARA) or Scientific Team Leader (STL).

14. Alter the *Background Level (dB)* to 70 dB and repeat step 13.
15. Alter the *Background Level (dB)* to 80 dB and repeat step 13.
16. Alter the *Background Level (dB)* to 90 dB and repeat step 13.
17. Click the *On* button for *Stimulus Lock* and see whether the microphone is actually reading 110 dB +/- 2 dB. If it is, click the *Off* button and move on to the next step. If it isn't, open the chamber and check to see that the end slots are in place. If they are, use the *Acoustic Startle Adjustment Knob* on the PHM-255A (see image 2 in the Appendix) to adjust the dB level. This allows an adjustment of about +/- 2 dB. If this doesn't solve the problem, inform the relevant ARA or STL.
18. Repeat steps 10-17 for Chambers 2 & 3, only leave the number next to *Chamber* in the *Stimulus Test* window as 1.
19. Click *Exit* on the *Stimulus Test* window and *Menu* followed by *Quit* on the *ANL929A-PC Sound Level Meter* window.
20. Maximise the *Startle Reflex* window once more.
21. Under the *Hardware* menu, select *Calibrate Input*.
22. Put 1 next to *Chamber* and make sure *Weight* is chosen from the *Calibrator Type* dropdown menu.
23. Make sure that there is nothing on the platforms.
24. In Chamber 1, the PHM-250B amplifier is marked with a label with *Unit #1* written on it. It has a *Cal/Run* switch on the front, set it to *Cal*.
25. Unlock the *Gain* knob by pushing the black protrusion on the knob to the left. Turn the knob until it reads 1.0.
26. Double check that the *Rat/Mouse* switch is set to *Mouse*.
27. Click *Begin* in the *Calibrate Input* window. A new trace display will appear with a red line (see image 3 in the Appendix).
28. If the red line is on the axis, go to the next step. If not, use the screwdriver to adjust the *Tare* potentiometer on the amplifier. Turning left makes the trace go down while turning right makes the trace go up.
Note: a small adjustment can cause a big change!
29. Place the two 20 gram weights on the centre of the platform.
30. If the red line is not on 125, turn the *Gain* knob until it is at 125.
31. Lock the *Gain* knob by pushing the black protrusion on the knob to the right.

32. Set the *Cal/Run* switch to *Run*.
33. Remove the weights.
34. Click *Done* in the *Calibrate Input* window.
35. Repeat steps 21-34 for Chambers 2 & 3.
36. The *Gain* knob settings between chambers 2 & 3 should not differ by more than 10-15%. If they do, inform the relevant ARA or STL.
37. If the experiment is to start right away, refer to SOP0048 – Prepulse Inhibition (PPI). If not, lock the computer until the start of the experiment.

APPENDIX

Image 1:

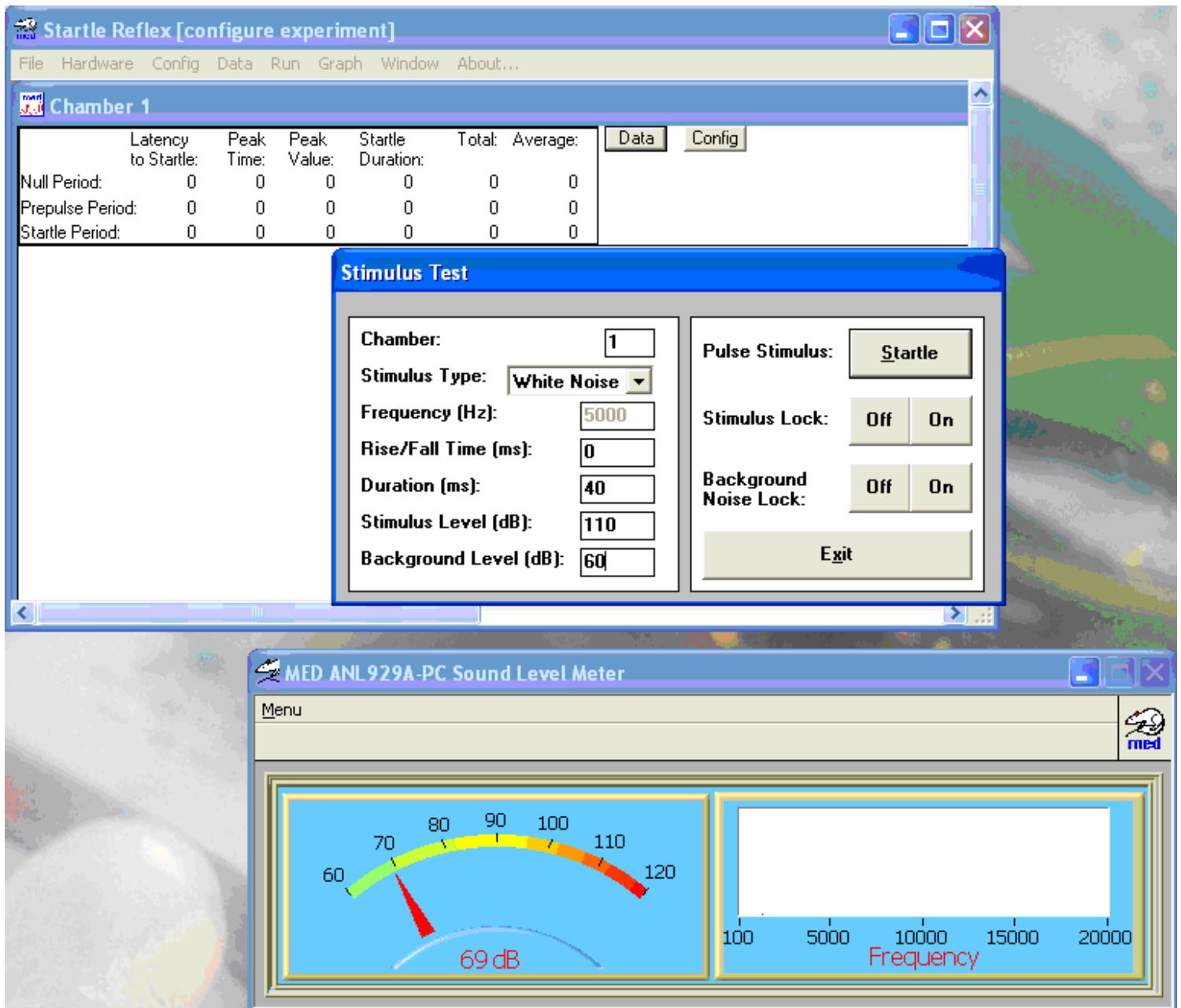


Image 2:

Figure 3.7 – PHM-255A Acoustic Startle Adjustment Knob

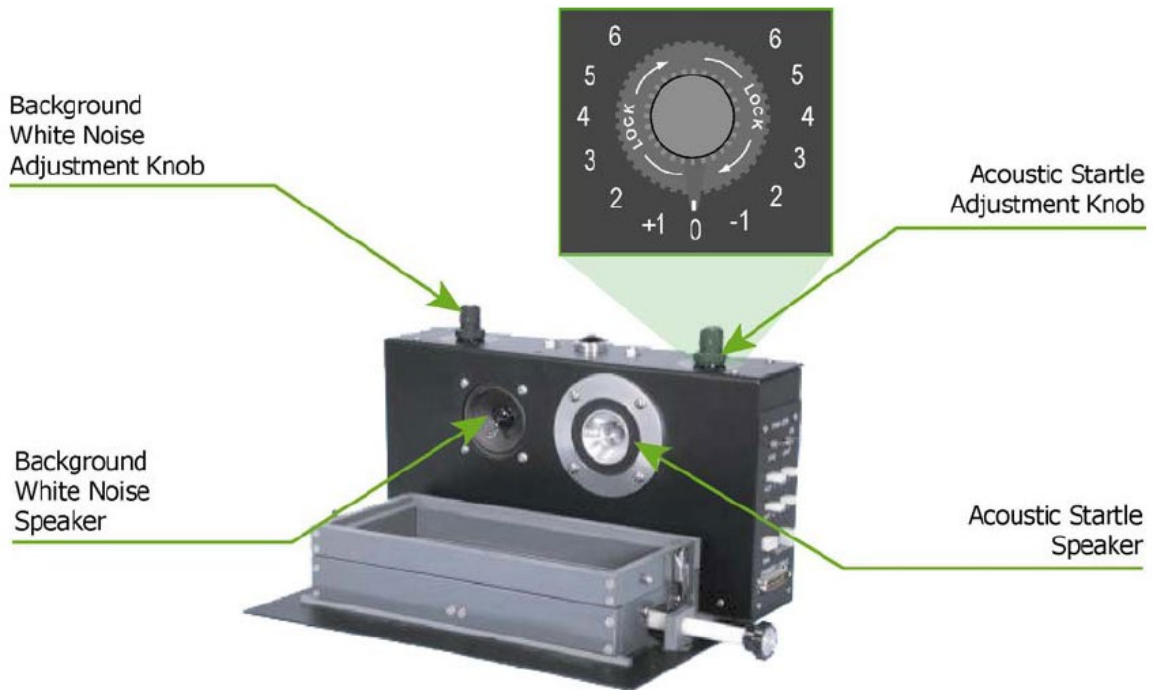


Image 3:



SANGER INSTITUTE STANDARD OPERATING PROCEDURE

SUBJECT: Prepulse Inhibition (PPI) – V1

| | | |
|----------------------------|------------------------|-------|
| SOP Number: SOP0048 | To be reviewed: | |
| Author(s): | Signed: | Date: |
| Editor: | Signed: | Date: |
| Date Modified: | | |

INTRODUCTION

The purpose of this procedure is to measure the strength (if present) of the PPI response of mice.

ABBREVIATIONS

- **IVC** = Individually Ventilated Cage
- **PPI** = Prepulse Inhibition
- **PPL** = Procedure Project License
- **SOP** = Standard Operating Procedure

HEALTH & SAFETY

- **RA001** - Laboratory Animal Allergens; *Section RA001.3*
- **RA003** – Hazardous Substances; *Section RA003.2*
- **RA004** – Physical Hazards; *Sections RA004.6 & RA004.8*

RESPONSIBILITIES

All staff performing this procedure are responsible for ensuring that this Standard Operating Procedure (SOP) has been read, understood and where applicable is followed in accordance with the relevant Project License (PPL). All staff should be trained and competent to perform the procedure, where applicable they should also be licensed to perform the procedure.

RESOURCES

Equipment:

1. Mobile Individually Ventilated Cage (IVC) rack
2. PPI
3. Six ENV-263A mouse holders with end slots
4. *PPI testing in progress...* sign
5. Balance
6. Cello tape
7. Disinfectants & cleaning agents: 70% ethanol, water & alcohol wipes
8. Paper towels
9. Diet as defined by pipeline
10. Nestlets
11. A new cage for every cage tested
12. PPI lab book

Associated SOPs:

- **SOP0045** – Weigh Mice
- **SOP0049** – Calibration for PPI
- **SOP0101** – Taking and returning cages for procedure

Staff Required: The procedure can be carried out by 1 phenotyper.

NOTE

This is a sound sensitive test. *All* noise **must** be minimised during the runs. This means that the opening and closing of cages *must* be done carefully so as to reduce the sound as much as possible. Also be careful when taking cages off or returning them to the mobile IVC rack.

The bench the chambers are on should not be jarred or receive any sudden movements.

PROCEDURE

Before performing the procedure, verify that this is the correct procedure at this point in the pipeline by consulting the cage card(s) and confirming that the procedure has not already been performed on the mouse.

1. Collect scheduled mice from the animal room and transport to the holding equipment in the test area (refer to SOP0101 – Taking and returning cages for procedure).
2. Calibrate the PPI machine (refer to SOP0049 - Calibration for PPI).
3. Clean all the holders and end slots with 70% ethanol.
4. Prepare the scale.
5. Weigh the mice (refer to SOP0045 - Weigh Mice), writing the weights in the lab book.
6. Place the *PPI testing in process...* sign on the door.
7. On the PPI computer, go to *Config* and select *Chamber Data* or, alternatively, click on the *Data* button in the *Chamber 1* portion of the window. This opens up a new window. Fill in the information as follows:
 - *Study Number*: cohort name
 - *Animal Number*: mouse barcode
 - *Technician*: your initials
 - *Comment*: mouse ID and ear mark
8. Click *Next Chamber* at the lower right corner of the window and repeat step 7 for Chambers 2 & 3.
9. Click *OK*.

10. Load the mice into the holders. Do not give them more room than is necessary for them to sit comfortably so as to prevent them from moving around. Secure the end slots of the holder in place with cello tape.
11. Place the holders on the platforms, making sure the side with the holes is facing the speakers, and tighten the screws.
12. Close the chamber doors.
13. On the computer select the *Run* menu and then *Begin Experiment*. Ensure that the room is as quiet as possible. *DO NOT* touch the chambers or jostle the bench they are on until the end of the experiment.
14. Begin the procedure for these mice on the database, entering as much information as is possible. Some information can't be filled in until after the data has been analysed.
15. Place the home cage(s) of the mice in the machine back onto the rack.
16. As the test reaches the end of block 2, retrieve the necessary cage(s) and get the next 3 mice out and into the other 3 holders, taping down the end slots.
17. When the test ends, place the second set of mice on top of the chamber they will be run in.
18. Go to *File* and *Save Data*.
19. Then go to *File* and *Save Data As*. Ensure *Computed Values* and *Database File* are selected before clicking *Save As*. *NOTE*: If only one or two chambers were used, make sure to select only those chambers or an error message may be generated when attempting to save the data.
20. Open the chamber doors and loosen the screws securing the holders in place. Remove all the mice from the first run and place them on the bench before moving on to step 21.
21. Repeat steps 11 & 12, making sure to place the correct mouse in the right chamber.
22. Go to *File* and select *Load Config*.
23. Repeat steps 7-9.
24. Repeat step 13-15.
25. Return the first set of mice to their home cage(s).
26. Wait until the first trial of block 1 has started and check that everything appears normal before moving on to step 27.
27. Take the first set of holders and end slots and quietly leave the room.
28. Rinse everything with water and ensure all the faeces and urine are removed before drying the holders and end slots.

29. Quietly return to the PPI room and clean the holders and end slots with 70% ethanol before drying them.
30. Repeat until all mice have been tested. If a run is performed where there is a chamber that does not house a mouse, make sure to only select the chambers for which you wish to save data in step 19 or an error can occur.
31. When finished for the day, clean all the holders.
32. Turn off the PPI machine. DO NOT turn it off when there are still mice in the chamber as it emits a loud burst of noise.
33. Shut down the *Startle Reflex* software.
34. Log off of the computer.
35. Clean equipment and surfaces. Transfer all waste to a yellow offensive waste bag or clearly labelled waste container.
36. Perform a partial or full cage clean as necessary for all cages from which all the mice have been tested (if some mice are to be tested the following day, DO NOT give that cage a clean!).
37. Ensure all cages display updated cage cards and return mice to animal room (refer to SOP0101 – Taking and returning cages for procedure).

SANGER INSTITUTE STANDARD OPERATING PROCEDURE

SUBJECT: Setting Up a PPI Configuration – V1

| | | |
|----------------------------|------------------------|-------|
| SOP Number: SOP0103 | To be reviewed: | |
| Author(s): | Signed: | Date: |
| Editor: | Signed: | Date: |
| Date Implemented: | | |

INTRODUCTION

The purpose of this procedure is to setup a Prepulse Inhibition (PPI) configuration.

ABBREVIATIONS

- **PPI** = Prepulse Inhibition
- **PPL** = Project License
- **SOP** = Standard Operating Procedure

HEALTH & SAFETY

- **RA004** – Physical Hazards; *Section RA004.4.2*
- **RA007** – Musculoskeletal; *Section RA007.11*

RESPONSIBILITIES

All staff performing this procedure are responsible for ensuring that this Standard Operating Procedure (SOP) has been read, understood and where applicable is followed in accordance with the relevant Project License (PPL). All staff should be trained and competent to perform the procedure, where applicable they should also be licensed to perform the procedure.

RESOURCES

Equipment:

1. PPI
2. PPI computer
3. Pen
4. Paper
5. Scissors
6. Container

Associated SOPs:

- **SOP0048** – Prepulse Inhibition (PPI)
- **SOP0049** – Calibration for PPI

Staff Required: The setup can be completed with 1 phenotypers.

This SOP was written to create a configuration in line with EUMODIC requirements. Any underlined numbers or options can be altered if the configuration does not need to meet EUMODIC requirements.

Background noise and prepulse levels have been determined through in-house testing of the equipment. Moving the equipment to another location may necessitate the alteration of these numbers.

This set up is designed for 3 prepulse levels (63, 66 & 69dB) as we did towards the end of testing. Additional prepulse levels are possible and were run (72dB) on the pipeline previously.

PROCEDURE

1. Log onto the computer connected to the PPI.
2. Once logged in, turn on the PPI by pressing the green power switch located on the front of the device.
3. Double click on the desktop icon *Startle Reflex*. If an error message occurs that says the startle card cannot be found, wait a minute and try again. Should this still not work, turn off the PPI and log off the computer. Try steps 1-3 again. If it still doesn't work, restart the computer and try again.
4. Go to *File*, then select *New*. This will open a blank experiment configuration window (similar to image 1 in the Appendix).
5. Enter a name for the configuration in the *Experiment Title* field.
6. Select chambers 1, 2 and 3 in the *Chambers* box.
7. Ensure that the *Background Noise Lockon* check box is ticked. If not, click on it.
8. Alter the *Background Noise Level (dB)* to 60.
9. Set the *Acclimation Duration (min.)* to 5.
10. Change the *Stimulus Sample Duration (ms)* to 500.
11. Ensure that the *ANL-925D Amplifiers Used* check box is ticked. If not, click on it.
12. In the *Configuration – Block 1* section, enter the number of trials for the first block in the *Trials* box, remembering to add 5 trials as the first 5 are not analysed.
13. In the *Inter-Trial Interval Type* dropdown menu, select Variable.
14. Set the *Inter-Trial Interval (sec.)* to 20 to 30.
15. Press the 2 button in the *Configuration* section.

16. Enter the number of Block 2 trials into the *Trials* box. At present there are 16 trials per prepulse level test, 8 prepulse only trials and 8 prepulse and startle trials. At 3 prepulse levels (63, 66 & 69dB) that makes for 48 trials. More prepulse levels are possible, simply adjust the trial numbers accordingly.
17. Repeat steps 13 & 14.
18. Press the 3 button in the *Configuration* section.
19. Enter 1 into the *Trials* box.
20. Repeated steps 13 & 14.
21. Enter any necessary information about this configuration and how it differs from previous ones in the *Comments* box.
22. Press *OK*.
23. The 3 chamber windows will open along with a *Save As* box asking for you to name the configuration and for a location to save it. To get to the correct folder click on *My Computer*, then *Local Disk (C:)*, then *Program Files*, then *MED Associates*, then *Startle Reflex*.
24. Go to *Config* and select *Chamber Config*. This will open a window asking for you to select a chamber. Choose *Chamber 1* and click *OK*, opening a blank chamber configuration (similar to image 2 in the Appendix).
25. Make sure *Prepulse Startle* is selected in the *Experiment Type* dropdown box.
26. In the *Startle Stimulus* box ensure that Blocks 1 & 2 are ticked but that Block 3 isn't.
27. Change the rest of the Block 1 & 2 settings to:
 - *Stimulus Type*: White Noise
 - *Duration (ms)*: 40
 - *Level (dB)*: 110
 - *Rise/Fall Time (ms)*: 0
28. In the *Prepulse Stimulus* box tick Block 2 to enable it, leaving Blocks 1 & 3 unticked.
29. Change the Block 2 settings to:
 - *Stimulus Type*: White Noise
 - *Duration (ms)*: 10
 - *Level (dB)*: 63*
 - *Rise/Fall Time (ms)*: 0

* this simply needs to be *one* of the levels, the other levels will be entered into the necessary trials in the experiment table in step 41.
30. In the *General* box, set the *Null Period (ms)* setting for all blocks to 135 and the *Prepulse Startle Delay (ms)* to 0 for Blocks 1 & 3 and 60 for Block 2.

31. Click *Configure All Chambers with this Config* and then *OK* on the window that pops up.
32. Click *OK* to leave the *Chamber Config* window.
33. Go to *Config* and select *Experiment Table*. This will open an already partially filled out configuration table (similar to image 3 in the Appendix).
34. Check that 135 is filled into the *Null Period (ms)* field. If not do so and then in the *Set All* box, select both *Blocks* and *Trials* and click *Modify*. This will apply the null period setting to all blocks and trails for that chamber.
35. For Block 1, Trial 1, check that the *Startle Enabled* option is ticked and that the following settings are entered:
 - *Stimulus Type*: White Noise
 - *Duration (ms)*: 40
 - *Level (dB)*: 110
 - *Rise/Fall Time (ms)*: 0If not, do so and in the *Set All* box, select *Trials* and click *Modify*. This will apply these settings to all of the Block 1 trials.
36. For Block 2, Trial 1, check that the *Prepulse Enabled* option is ticked and that the following settings are entered:
 - *Stimulus Type*: White Noise
 - *Duration (ms)*: 10
 - *Rise/Fall Time (ms)*: 0
37. Check that 60 is entered into the *Prepulse/Startle Delay (ms)* field.
38. If either step 36 or 37 wasn't already implemented then in the *Set All* box, select *Trials* and click *Modify*. This will apply these settings to all of the Block 2 trials. The rest of the settings must be entered manually, trial by trial.
39. Cut some paper into 48 equal pieces. On each piece write one of the combinations so that you end up with:
 - 8 pieces that read *prepulse level 1 without startle*
 - 8 pieces with *prepulse level 1 with startle*
 - 8 pieces with *prepulse level 2 without startle*
 - 8 pieces with *prepulse level 2 with startle*
 - 8 pieces with *prepulse level 3 without startle*
 - 8 pieces with *prepulse level 3 with startle*
 - If additional prepulse levels are to be used, add on additional pieces of paper as required.
40. Mix all of the pieces of paper in the container and blindly pull them out one at a time. This will give you a random order to enter into the experiment table.
41. For Block 2, Trial 1, enter the sound level of the selected prepulse into the *Level (dB)* field under *Prepulse Enabled* overwriting the entered 63dB if necessary.
42. If Block 2, Trial 1 is a trial without a startle following the prepulse, untick the *Startle Enabled* box to deactivate those settings. If it is a trial with a startle,

check that the *Startle Enabled* option is ticked and that the following settings are entered:

- *Stimulus Type*: White Noise
- *Duration (ms)*: 40
- *Level (dB)*: 110
- *Rise/Fall Time (ms)*: 0

43. Repeat steps 41 & 42 for all trials of Block 2, filling in the necessary information.
44. For Block 3, Trial 1 nothing needs to be done as the previous steps will already have populated all of the necessary fields.
45. In the *Set All* box, select *Chambers* and click *Modify*. This will set these settings for all 3 chambers.
46. Select *Save Table* giving it a name to match your configuration and ensuring that it is saved in the correct folder. To get to there click on *My Computer*, then *Local Disk (C:)*, then *Program Files*, then *MED Associates*, then *Startle Reflex*.
47. Click *Exit*.
48. Go back to *Experiment Configuration* and hit the *Select Table* button.
49. Select the name of the table you just created and then click *OK*.
50. Go to *File* and press *Save Config*.
51. Press *Yes* when asked if you want to overwrite the existing configuration.
52. Go to *Data* and select *Options*.
53. Set *Minimum Peak Value* to 1 and *Minimum Peak Time (ms)* to 10ms.
54. Click *OK*.
55. Go back to *Data* and select *Save Data Options* giving it a name to match your configuration and ensuring that it is saved in the correct folder. To get to there click on *My Computer*, then *Local Disk (C:)*, then *Program Files*, then *MED Associates*, then *Startle Reflex*.
56. Go to *File* and select *Save Config*.
57. Press *Yes* when asked if you want to overwrite the existing configuration.
58. The configuration is now ready for use in either SOP0049 – Calibration for PPI or SOP0048 – Prepulse Inhibition (PPI).

APPENDIX

Image 1:

Experiment Configuration

Experiment Title:

| | | | | | | | |
|--|---|----------|--|----------|---|----------|--|
| <p>Chambers:</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input checked="" type="checkbox"/> 1</div> <div style="width: 50%;"><input checked="" type="checkbox"/> 2</div> <div style="width: 50%;"><input type="checkbox"/> 3</div> <div style="width: 50%;"><input type="checkbox"/> 4</div> <div style="width: 50%;"><input type="checkbox"/> 5</div> <div style="width: 50%;"><input type="checkbox"/> 6</div> <div style="width: 50%;"><input type="checkbox"/> 7</div> <div style="width: 50%;"><input type="checkbox"/> 8</div> </div> <p style="text-align: center;"><input type="button" value="Select All"/></p> <p>Background Noise Lockon: <input checked="" type="checkbox"/></p> <p>Background Noise Level (dB): <input style="width: 50px;" type="text" value="60"/></p> | <p>General Configuration:</p> <p>Acclimation Duration (min.): <input style="width: 50px;" type="text" value="5"/></p> <p>Stimulus Sample Duration (ms): <input style="width: 50px;" type="text" value="500"/></p> <p>ANL-925C Amplifiers Used: <input type="checkbox"/></p> <p>ANL-925D Amplifiers Used: <input checked="" type="checkbox"/></p> <p>Configuration - Block 1:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30px; text-align: center;">1</td> <td style="width: 60%;">Trials: <input style="width: 50px;" type="text" value="15"/></td> </tr> <tr> <td style="text-align: center;">2</td> <td>Inter-Trial Interval Type: <input style="width: 80px;" type="text" value="Variable"/></td> </tr> <tr> <td style="text-align: center;">3</td> <td>Inter-Trial Interval (sec): <input style="width: 30px;" type="text" value="20"/> to <input style="width: 30px;" type="text" value="30"/></td> </tr> </table> | 1 | Trials: <input style="width: 50px;" type="text" value="15"/> | 2 | Inter-Trial Interval Type: <input style="width: 80px;" type="text" value="Variable"/> | 3 | Inter-Trial Interval (sec): <input style="width: 30px;" type="text" value="20"/> to <input style="width: 30px;" type="text" value="30"/> |
| 1 | Trials: <input style="width: 50px;" type="text" value="15"/> | | | | | | |
| 2 | Inter-Trial Interval Type: <input style="width: 80px;" type="text" value="Variable"/> | | | | | | |
| 3 | Inter-Trial Interval (sec): <input style="width: 30px;" type="text" value="20"/> to <input style="width: 30px;" type="text" value="30"/> | | | | | | |

Table Name:

Comments:

Image 2:

Chamber 1

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|---|---|----------------------------------|---------------|--|--|--|----------------|--|---|--|-------------|--|--|---|----------------------|--|--|---|-----------------|---|--|---|-----------------|--|--|--|
| Experiment Type: Prepulse Startle | Startle Stimulus: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID/Comment: Chamber ID: <input style="width: 100%;" type="text"/> Chamber Comment: <input style="width: 100%; height: 40px;" type="text"/> | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Enabled:</td> <td style="width: 33%;">Block 1 <input checked="" type="checkbox"/></td> <td style="width: 33%;">Block 2 <input checked="" type="checkbox"/></td> <td style="width: 33%;">Block 3 <input type="checkbox"/></td> </tr> <tr> <td>StimulusType:</td> <td>White Noise</td> <td>White Noise</td> <td>Pure Tone</td> </tr> <tr> <td>Duration (ms):</td> <td><input style="width: 50%;" type="text" value="40"/></td> <td><input style="width: 50%;" type="text" value="40"/></td> <td><input style="width: 50%;" type="text" value="100"/></td> </tr> <tr> <td>Level (dB):</td> <td><input style="width: 50%;" type="text" value="110"/></td> <td><input style="width: 50%;" type="text" value="110"/></td> <td><input style="width: 50%;" type="text" value="90"/></td> </tr> <tr> <td>Rise/Fall Time (ms):</td> <td><input style="width: 50%;" type="text" value="0"/></td> <td><input style="width: 50%;" type="text" value="0"/></td> <td><input style="width: 50%;" type="text" value="10"/></td> </tr> <tr> <td>Frequency (Hz):</td> <td></td> <td></td> <td><input style="width: 50%;" type="text" value="5000"/></td> </tr> <tr> <td>Auxiliary Port:</td> <td colspan="3"></td> </tr> </table> | | | Enabled: | Block 1 <input checked="" type="checkbox"/> | Block 2 <input checked="" type="checkbox"/> | Block 3 <input type="checkbox"/> | StimulusType: | White Noise | White Noise | Pure Tone | Duration (ms): | <input style="width: 50%;" type="text" value="40"/> | <input style="width: 50%;" type="text" value="40"/> | <input style="width: 50%;" type="text" value="100"/> | Level (dB): | <input style="width: 50%;" type="text" value="110"/> | <input style="width: 50%;" type="text" value="110"/> | <input style="width: 50%;" type="text" value="90"/> | Rise/Fall Time (ms): | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="10"/> | Frequency (Hz): | | | <input style="width: 50%;" type="text" value="5000"/> | Auxiliary Port: | | | |
| Enabled: | Block 1 <input checked="" type="checkbox"/> | Block 2 <input checked="" type="checkbox"/> | Block 3 <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| StimulusType: | White Noise | White Noise | Pure Tone | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duration (ms): | <input style="width: 50%;" type="text" value="40"/> | <input style="width: 50%;" type="text" value="40"/> | <input style="width: 50%;" type="text" value="100"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level (dB): | <input style="width: 50%;" type="text" value="110"/> | <input style="width: 50%;" type="text" value="110"/> | <input style="width: 50%;" type="text" value="90"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rise/Fall Time (ms): | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="10"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency (Hz): | | | <input style="width: 50%;" type="text" value="5000"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auxiliary Port: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acclimation: Enable Acclimation Auxiliary: <input type="checkbox"/> Acclimation Auxiliary Port: <input style="width: 50%;" type="text" value="1"/> Enable Acclimation Background Noise: <input checked="" type="checkbox"/> Background Noise Level (dB): <input style="width: 50%;" type="text" value="60"/> | Prepulse Stimulus: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid gray; padding: 2px; margin-bottom: 2px;">Copy Values to this Chamber from...</div> <div style="border: 1px solid gray; padding: 2px; margin-bottom: 2px;">Configure All Chambers with this Config</div> <div style="border: 1px solid gray; padding: 2px; margin-bottom: 2px;">Restore Defaults</div> <div style="border: 1px solid gray; padding: 2px; margin-bottom: 2px;">Special Options...</div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> OK Cancel </div> | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Enabled:</td> <td style="width: 33%;">Block 1 <input type="checkbox"/></td> <td style="width: 33%;">Block 2 <input checked="" type="checkbox"/></td> <td style="width: 33%;">Block 3 <input type="checkbox"/></td> </tr> <tr> <td>StimulusType:</td> <td>Pure Tone</td> <td>White Noise</td> <td>Pure Tone</td> </tr> <tr> <td>Duration (ms):</td> <td><input style="width: 50%;" type="text" value="120"/></td> <td><input style="width: 50%;" type="text" value="10"/></td> <td><input style="width: 50%;" type="text" value="120"/></td> </tr> <tr> <td>Level (dB):</td> <td><input style="width: 50%;" type="text" value="85"/></td> <td><input style="width: 50%;" type="text" value="63"/></td> <td><input style="width: 50%;" type="text" value="85"/></td> </tr> <tr> <td>Rise/Fall Time (ms):</td> <td><input style="width: 50%;" type="text" value="0"/></td> <td><input style="width: 50%;" type="text" value="0"/></td> <td><input style="width: 50%;" type="text" value="0"/></td> </tr> <tr> <td>Frequency (Hz):</td> <td><input style="width: 50%;" type="text" value="4000"/></td> <td></td> <td><input style="width: 50%;" type="text" value="4000"/></td> </tr> <tr> <td>Auxiliary Port:</td> <td colspan="3"></td> </tr> </table> | | | Enabled: | Block 1 <input type="checkbox"/> | Block 2 <input checked="" type="checkbox"/> | Block 3 <input type="checkbox"/> | StimulusType: | Pure Tone | White Noise | Pure Tone | Duration (ms): | <input style="width: 50%;" type="text" value="120"/> | <input style="width: 50%;" type="text" value="10"/> | <input style="width: 50%;" type="text" value="120"/> | Level (dB): | <input style="width: 50%;" type="text" value="85"/> | <input style="width: 50%;" type="text" value="63"/> | <input style="width: 50%;" type="text" value="85"/> | Rise/Fall Time (ms): | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="0"/> | Frequency (Hz): | <input style="width: 50%;" type="text" value="4000"/> | | <input style="width: 50%;" type="text" value="4000"/> | Auxiliary Port: | | | |
| Enabled: | Block 1 <input type="checkbox"/> | Block 2 <input checked="" type="checkbox"/> | Block 3 <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| StimulusType: | Pure Tone | White Noise | Pure Tone | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duration (ms): | <input style="width: 50%;" type="text" value="120"/> | <input style="width: 50%;" type="text" value="10"/> | <input style="width: 50%;" type="text" value="120"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level (dB): | <input style="width: 50%;" type="text" value="85"/> | <input style="width: 50%;" type="text" value="63"/> | <input style="width: 50%;" type="text" value="85"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rise/Fall Time (ms): | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="0"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency (Hz): | <input style="width: 50%;" type="text" value="4000"/> | | <input style="width: 50%;" type="text" value="4000"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auxiliary Port: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | General: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Background Noise (dB): | <input style="width: 50%;" type="text" value="60"/> | <input style="width: 50%;" type="text" value="60"/> | <input style="width: 50%;" type="text" value="60"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Null Period (ms): | <input style="width: 50%;" type="text" value="135"/> | <input style="width: 50%;" type="text" value="135"/> | <input style="width: 50%;" type="text" value="135"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Prepulse/Startle Delay (ms): | <input style="width: 50%;" type="text" value="0"/> | <input style="width: 50%;" type="text" value="60"/> | <input style="width: 50%;" type="text" value="0"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Image 3:

Stimulus Control Table - C:\Program Files\Startle Reflex\EUMOD PPI v3.TAS

| | | |
|---|--|---|
| Chamber 1 ◀ ▶ | Null Period (ms): <input type="text" value="135"/> | Prepulse/Startle Delay (ms): <input type="text" value="0"/> |
| Block 1 ◀ ▶ | Prepulse Enabled: <input type="checkbox"/> | Startle Enabled: <input checked="" type="checkbox"/> |
| Trial 1 ◀ ▶ | StimulusType: <input type="text" value="Pure Tone"/> | StimulusType: <input type="text" value="White Noise"/> |
| Set All ... | Duration (ms): <input type="text" value="120"/> | Duration (ms): <input type="text" value="40"/> |
| <input type="checkbox"/> Chambers | Level (dB): <input type="text" value="85"/> | Level (dB): <input type="text" value="110"/> |
| <input type="checkbox"/> Blocks | Rise/Fall Time (ms): <input type="text" value="0"/> | Rise/Fall Time (ms): <input type="text" value="0"/> |
| <input type="checkbox"/> Trials | Frequency (Hz): <input type="text" value="4000"/> | Frequency (Hz): <input type="text" value=""/> |
| <input type="button" value="Modify"/> | Auxiliary Port: <input type="text" value=""/> | Auxiliary Port: <input type="text" value=""/> |
| <input type="button" value="Set Defaults"/> | | <input type="button" value="Randomize Defaults"/> |
| <input type="button" value="Load Table"/> | | <input type="button" value="Save Table"/> |
| | | <input type="button" value="Exit"/> |