Manuals+ — User Manuals Simplified.

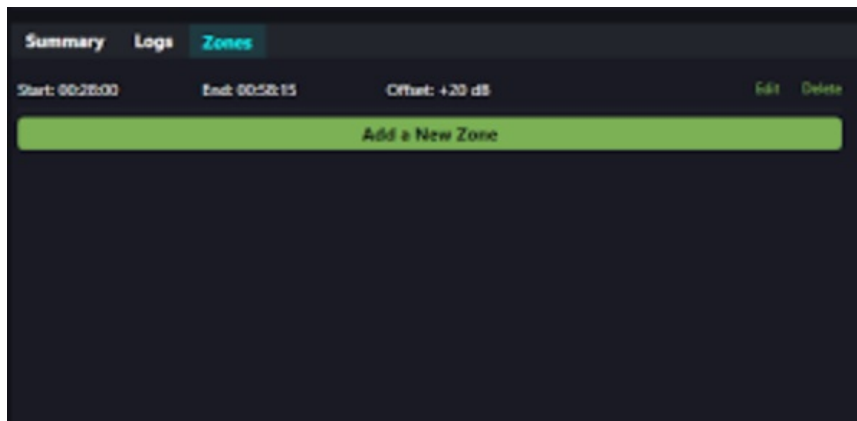# SKC PDP0003 DataTrac dB Software for NoiseCHEK User Manual

Contents

SKC PDP0003 DataTrac dB Software for NoiseCHEK

Specifications

- **Operating System:** Windows
- **Required Software:** DataTrac dB
- **Minimum Display Resolution:** Not specified
- **Available Port:** USB

Product Usage Instructions

Getting Started
Connecting NoiseCHEK to PC and Installing Software

1. Connect charging dock to PC using included USB cable.
2. Download and install DataTrac dB software from the provided link or USB drive.
3. Place noise dosimeter(s) in the charging dock to establish communication.

Updating DataTrac dB Software
DataTrac dB will automatically scan for updates each time it is launched. Follow prompts to install updates when available.

Uninstalling DataTrac dB Software

1. Access Windows Control Panel.
2. Select Programs and Features.
3. Select DataTrac dB and click Uninstall.

Using DataTrac dB Software
Detecting/Selecting Devices
Connect the charging dock to your PC before launching DataTrac dB. The software will scan for connected devices once dosimeters are placed in the dock.

Setting/Changing Device Options
In the selected device tab, use the menu to edit name, clear history, set time and date, and update firmware for the device as needed.

FAQ

- **How do I connect multiple NoiseCHEK dosimeters?**

  You can connect up to five NoiseCHEK dosimeters in the 5-unit charging dock to upload settings simultaneously.

- **What should I do if DataTrac dB does not detect my dosimeter?**

  Ensure that the dosimeter is properly seated in the connected charging dock. You can click the Rescan icon if the dosimeter is not detected automatically.

INTRODUCTION

Checking System Requirements
Ensure your PC meets minimum requirements for DataTrac® dB Software.

Operating System	Microsoft® Windows® 10
Required Software	DataTrac dB Installer (*included with installation*)
Minimum Display Resolution	1024 x 768
Available Port	USB 2.0

Checking Hardware Requirements

- 1-unit Charging Dock Cat. No. 701-002 or 5-unit Charging Dock Cat. No. 701-003
- USB cable
- DataTrac dB Software USB drive
- NoiseCHEK Personal Noise Dosimeter Cat. No. 701-001, 701-001S, 701-001NB, or 701-001NBS

GETTING STARTED

Connecting NoiseCHEK to PC and Installing Software

- Do not apply stickers to the back of the dosimeter because this can cause connectivity issues while the dosimeter is in the charging dock.

The NoiseCHEK noise dosimeter communicates with a PC via USB cable and charging dock (1 or 5-unit) and DataTrac dB software (see Figure 1). Connect up to five NoiseCHEK dosimeters in the 5-unit charging dock to upload settings.

1. Connect charging dock to PC using included USB cable.
2. Download from **https://www.skcinc.com/catalog/datatrac/DataTracdB/setup.exe** or copy from USB drive "setup.exe" and install DataTrac dB as instructed.

   DataTrac dB will launch automatically.

   The DataTrac dB Installer requires administrator privileges to install properly.

Figure 1. Communication Train

3. Place noise dosimeter(s) in the charging dock to complete the communication train shown in Figure 1. Note: DataTrac dB will only detect dosimeters that are properly seated in the connected charging dock.

Updating DataTrac dB Software

DataTrac dB will scan automatically for available online updates each time it is launched. If an update is found, the user will be asked to install now, install later, or ignore.

Uninstalling DataTrac dB Software

1. Access the Windows Control Panel on the PC.
2. Select Programs (Programs and Features).
3. Select DataTrac dB.
4. Click Uninstall.

USING DATATRAC DB SOFTWARE

Detecting/Selecting Devices

Connect the charging dock to your PC before launching DataTrac dB software.

When dosimeters are placed in the charging dock (see Figure 1), DataTrac dB will scan for connected devices. **Note:** DataTrac dB will only detect dosimeters that are properly seated in the connected charging dock. The names of detected devices will appear under the Connected devices bar at the upper left corner of the DataTrac dB screen (Figure 2). If the names of connected devices are not displayed automatically under the bar, click the Rescan icon ↻.
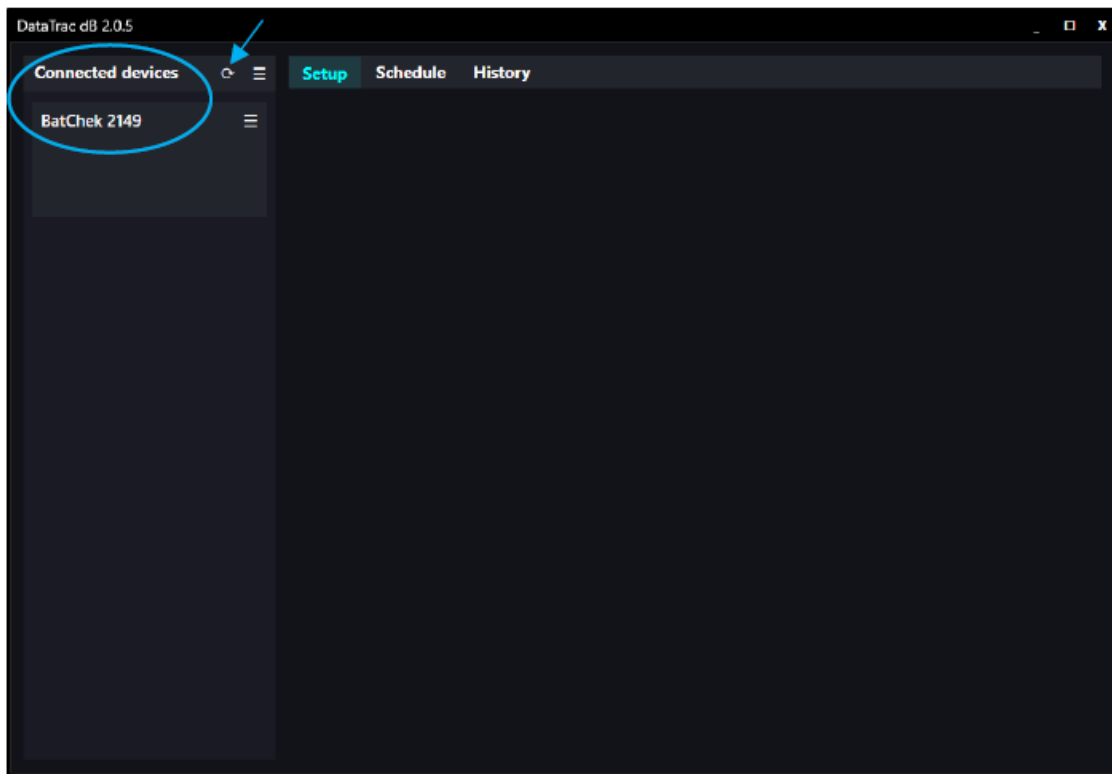
Figure 2. DataTrac dB Screen Showing Detected Device

Select the desired connected device by clicking on its tabs in the bar; the tab will become highlighted and display the appropriate operation button as shown in Figure 3, depending on whether you are in Setup, Schedule, or History. In the selected device tab, use the menu to set or change the options shown for that device. See Setting/Changing Device Options.
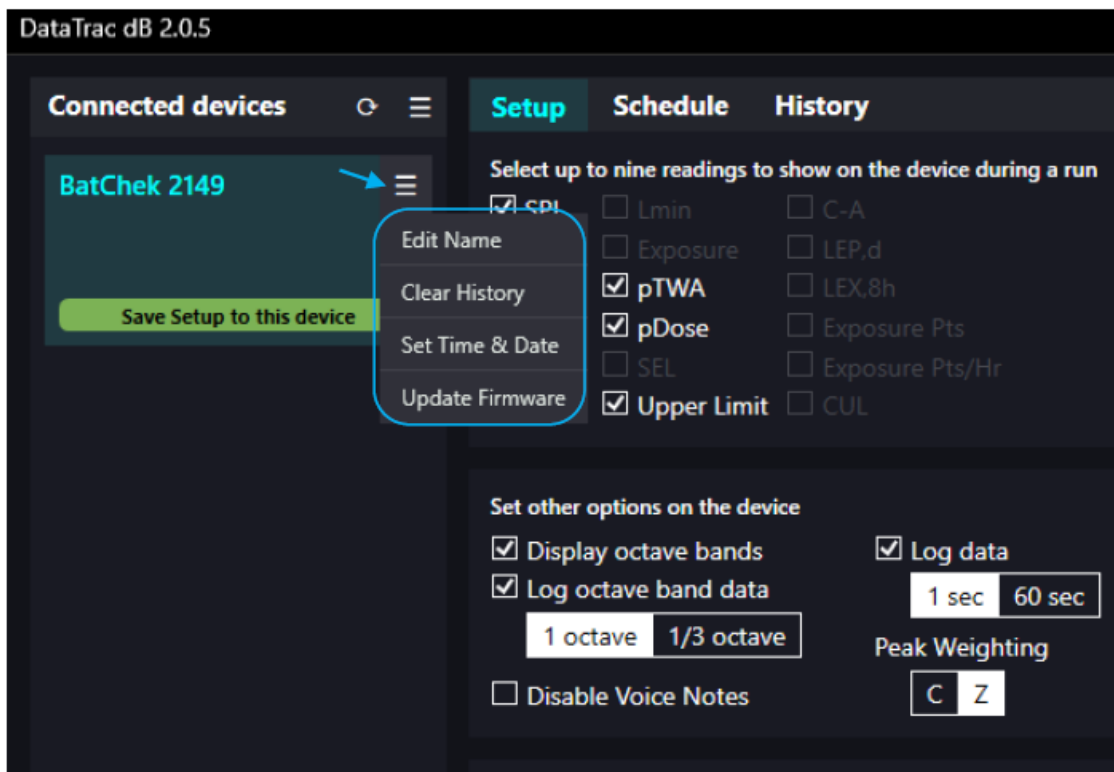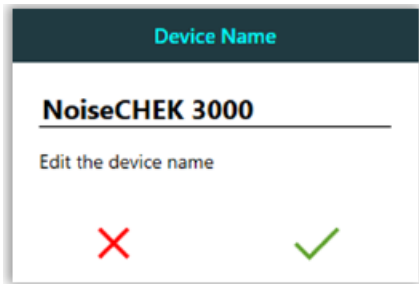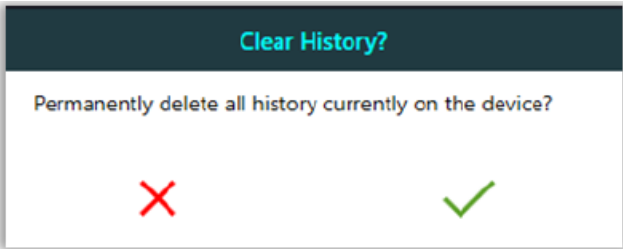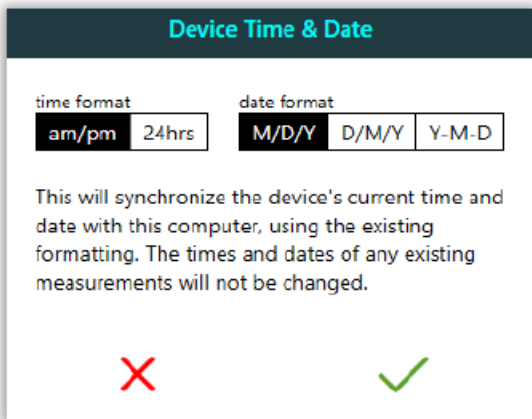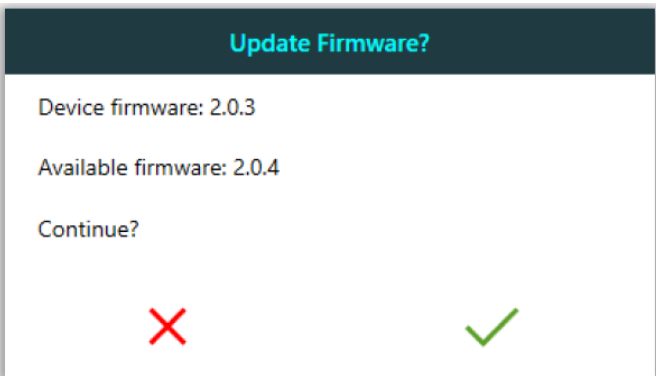

Figure 3. Selected Device Tab and Menu Options

Setting/Changing Device Options

Click on the menu ☰ in the selected device tab (see Figure 3) to enter or edit the name, clear the history, set

time and date, and update firmware for the device (see Table 1).
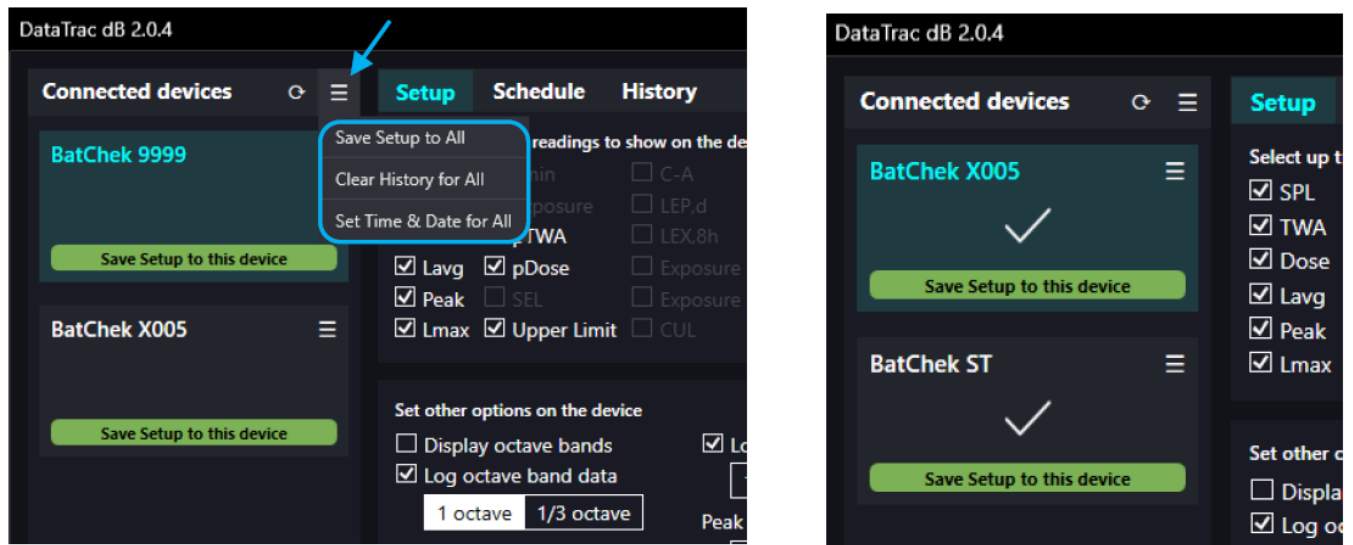
Table 1. Selected Device Menu Options

Edit Name: Enter/edit name for device and click on check mark.	**Device Name** **NoiseCHEK 3000** Edit the device name ✗　　✓
Clear History: Click on check mark to permanently clear history from selected device.	**Clear History?** Permanently delete all history currently on the device? ✗　　✓
Set Time & Date: Select time and date format and click on check mark to save settings.	**Device Time & Date** time format　　　date format am/pm　24hrs　　M/D/Y　D/M/Y　Y-M-D This will synchronize the device's current time and date with this computer, using the existing formatting. The times and dates of any existing measurements will not be changed. ✗　　✓
Update Firmware: Click on check mark to update firmware to latest version.	**Update Firmware?** Device firmware: 2.0.3 Available firmware: 2.0.4 Continue? ✗　　✓

Applying Actions to All Connected Devices

When multiple devices are connected in the 5-unit charging dock, use the Connected devices menu ▤ to apply the following actions under any operation (Setup, Schedule, or History) to all connected devices at one time (see Figure 4):

- Save Setup to All (Setup tab only), Save Schedule to All (Schedule tab only), and Download History from All (History tab only)
- Clear History for All
- Set Time & Date for All

1. Select the desired operation tab (Setup, Schedule, or History).
2. Click on the Connected devices menu icon and select the desired option (Figure 4 shows the menu options for Setup). A check mark will appear briefly under each device name to indicate that the selected option has been applied to it.

Figure 4. Connected devices Menu Options and Application (Example from Setup)

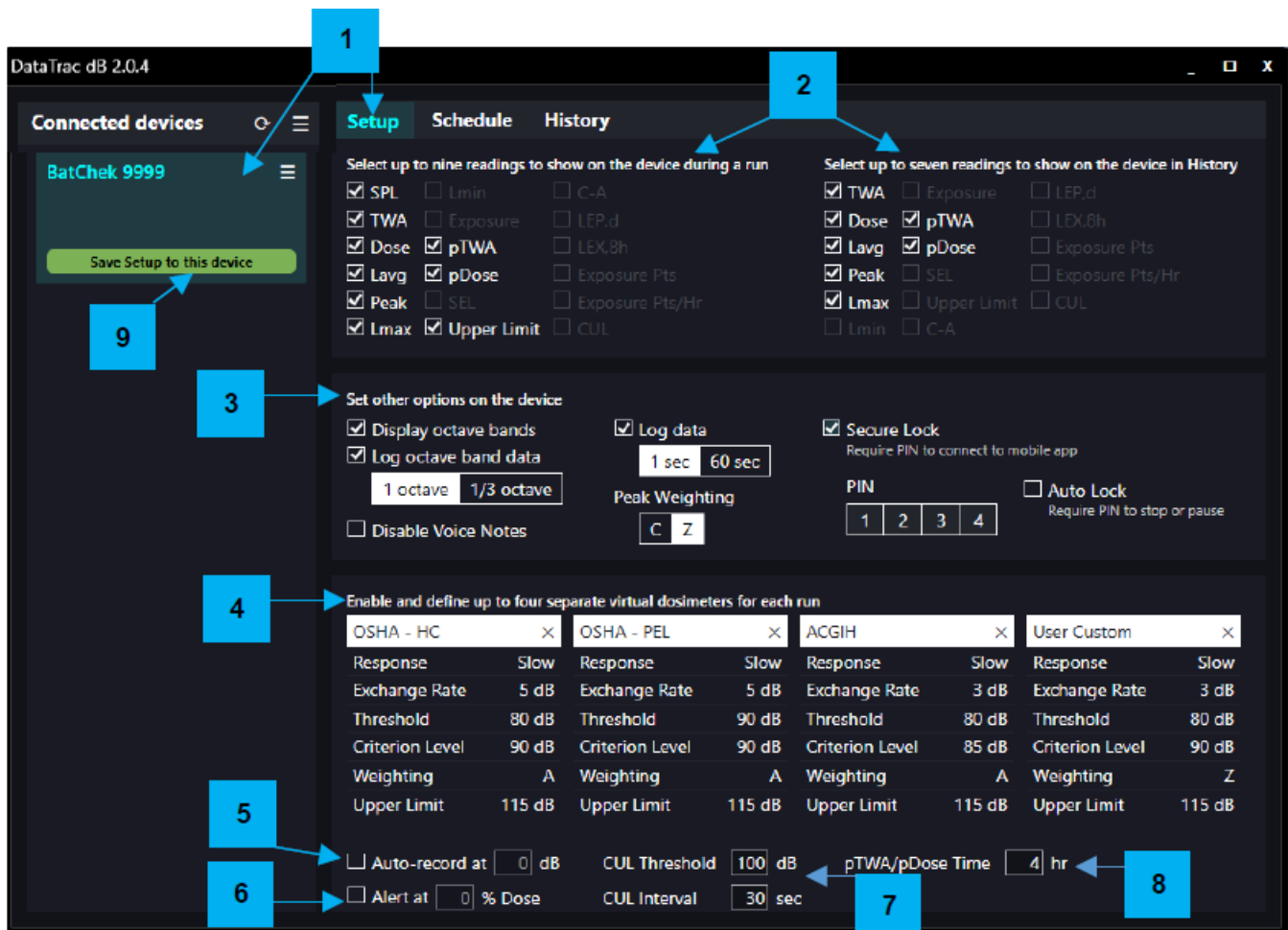**Setup — Programming and Uploading Presets (Figure 5)**

Figure 5. Setup

1. With a device selected, select Setup tab.
2. Select measurement readings to be displayed on the device during a run (up to nine) and in History (up to seven); the following readings are available:

Note: If the maximum number (nine or seven) is selected, the unselected readings will be grayed out as shown in Figure 5.

3. Select other options on device (see left to right in Setup screen) as desired:

✋ When all four virtual dosimeters and octave band data logging are enabled and log data is set to 1 second, it will take approximately 3 hours (1/3 octave) or 1 hour

(1 octave) to download data accumulated during an 8-hour run. Select log octave band data and 1 second log interval only if you need and intend to use this kind of data.

Octave bands — Activate octave band view and/or octave band datalogging to display octave bands on virtual dosimeters and/or log octave band data.

Log Data — Set desired data logging rate.

Secure Lock — Activate/deactivate as desired. Secure Lock enables Auto Lock.

- Secure Lock requires a PIN (four-digit using 1234) to connect to SKC SmartWave dB mobile app. NoiseCHEK ships with Secure Lock activated and PIN set to 1234.
- Auto Lock requires a PIN to pause or stop sampling using the dosimeter buttons. All other commands are available on the device including start sampling.

  Disable Voice Notes — Select or deselect Disable Voice Notes as desired.

  Peak Weighting — Select C or Z peak weighting. Note: 'A' peak weighting is an option in User Custom virtual dosimeter. See Defining User Custom Virtual Dosimeter.

4. Select/enable virtual dosimeters. Click on drop-down menu and select from OSHA HC, OSHA PEL, MSHA HC, MSHA PEL, ACGIH, and User Custom (see Defining a User Custom Virtual Dosimeter). Note: To disable a programmed virtual dosimeter, click on the X next to the dosimeter name.

5. Activate Auto-record feature to enable audio recording of an event exceeding the set dB level. 0 dB level deactivates audio recording. The length of a single stored audio event is 10 seconds. The noise dosimeter can store up to 24 such events, after which new recordings will overwrite the oldest ones. The event log will still note recordings that are overwritten. Auto-threshold audio recordings (audio captures) and other events are indicated in the History summary. See Summary – Viewing, Editing, and Reporting Data.

6. Activate Alert feature at set % Dose. If the set level is exceeded, the amber LEDs will flash in an alternating pattern with green LEDs, approximately every 2 seconds.

7. If applicable, set CUL Threshold and CUL Interval values. CUL (Continuous Upper Limit) equals the number of times the set threshold was exceeded continuously for the set interval. Any continuous event lasting for the set interval counts as one, so using the values set in Figure 4 (117 dB and 30 sec) as an example, CUL = 1 for an event continuously lasting for more than 30 seconds but less than 59 seconds, 2 for an event lasting for 60 to 89 seconds, and so on. Each subsequent continuous event lasting for the set interval is added to the overall count.

8. In pTWA/pDose Time enter desired number of hours of work shift duration, which will be used to calculate projected values. Dosimeters are shipped with preset time of 8 hr.

9. Click on Save Setup to this device in selected device tab to upload setup to selected dosimeter. A check mark appears briefly under the device name to indicate that presets have been saved. Note: To upload the setup to all connected devices, click on the Connected devices menu and select option Save Setup to All. See Applying Actions to All Connected Devices.

Defining a User Custom Virtual Dosimeter (Figure 6)
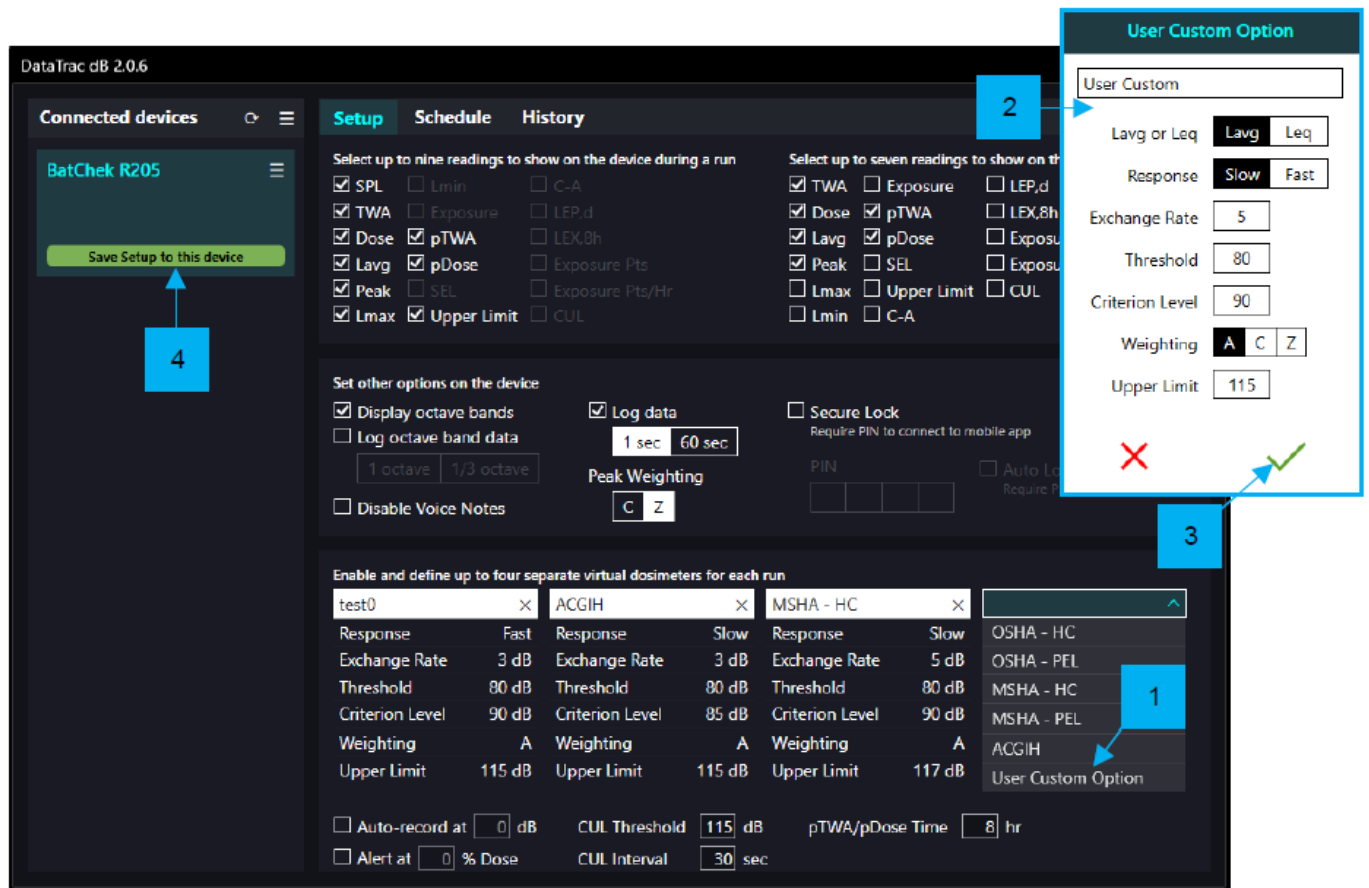
Figure 6. User Custom Option

1. Select User Custom from virtual dosimeter dropdown.
2. Select and enter desired custom virtual dosimeter name and measurements in the pop-up User Custom Option window.
3. Click on the check mark to save settings.
4. Click Save Setup to this device in selected device tab to upload settings. Note: To upload the setup to all connected devices, click on the Connected devices menu and select option Save Setup to All. See Applying Actions to All Connected Devices.

Schedule – Scheduling Sample Runs (Figure 7)

Figure 7. Schedule Sample Run

1. Select Schedule tab.
2. Select manual or scheduled start/stop for measurement. Manual start and stop are selected above; for scheduled start/stop, select "Start/Stop at a specific date and time…" and enter desired dates and times.
3. In the selected device tab, click Save Schedule to this device to upload schedule. Note: To upload the schedule to all connected devices, click on the Connected devices menu and select option Save Schedule to All. See Applying Actions to All Connected Devices.
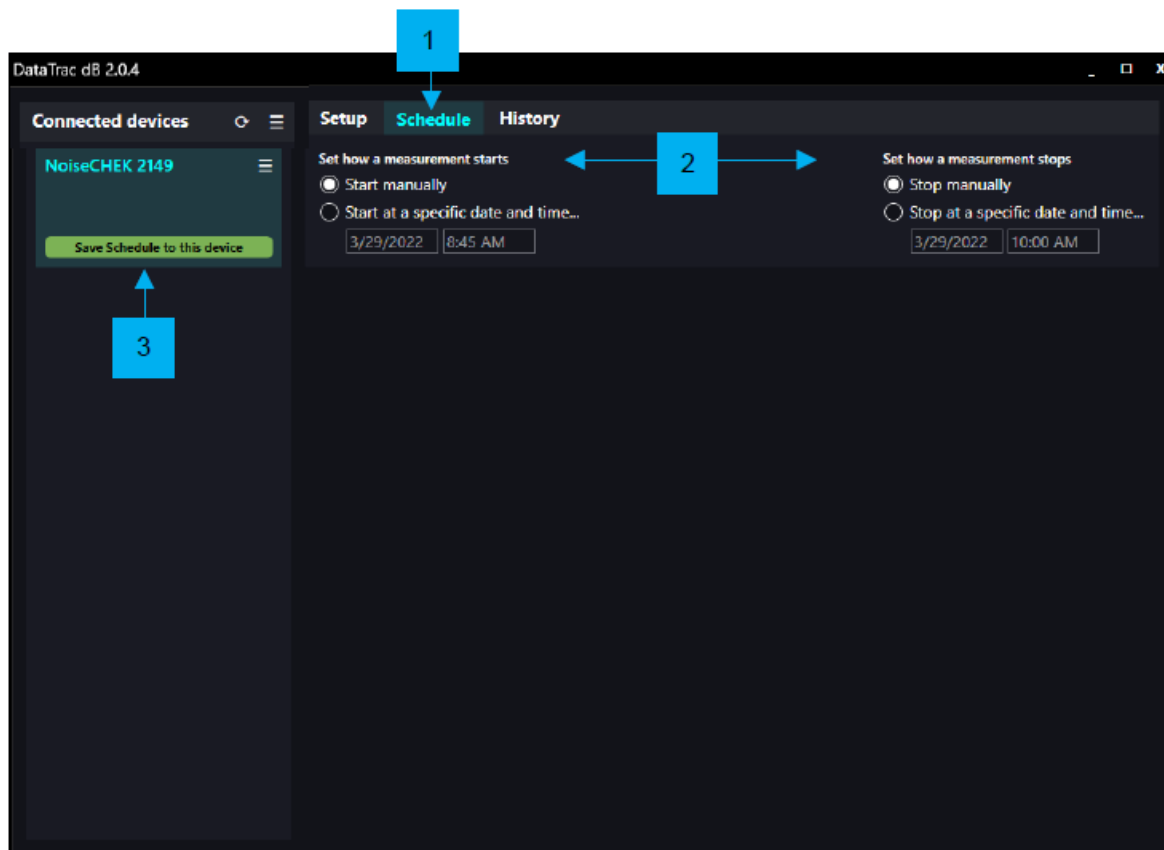
History – Downloading, Managing, Reporting, and Sharing Data
Download history as often as possible to keep all history records. When a device memory is full, it will automatically record over the oldest records.

- Download history as often as possible as it may take up to 30 minutes to download a full memory.
- The sampling time stored in History ranges from 40 hours to hundreds of days depending on sampling rate, number of virtual dosimeters enabled, and whether octave bands are activated. With sampling rate set at 60 sec and fewer virtual dosimeters enabled and octave bands not enabled, a device can store more hours.
- The noise dosimeter can store up to 24 audio recordings and 30 voice notes. When those numbers are exceeded, the oldest recordings will be overwritten.
- DataTrac dB will not download data to a PC if the same data is already there.
- Although History (includes data, audio recordings and voice notes) can be deleted using DataTrac dB software (see Clear History in Table 1 or Clear History for All in Applying Actions to All Connected Devices), there is no need to do so as the noise dosimeter will automatically record over the oldest records when its memory is full.

Downloading History to PC (Figure 8)
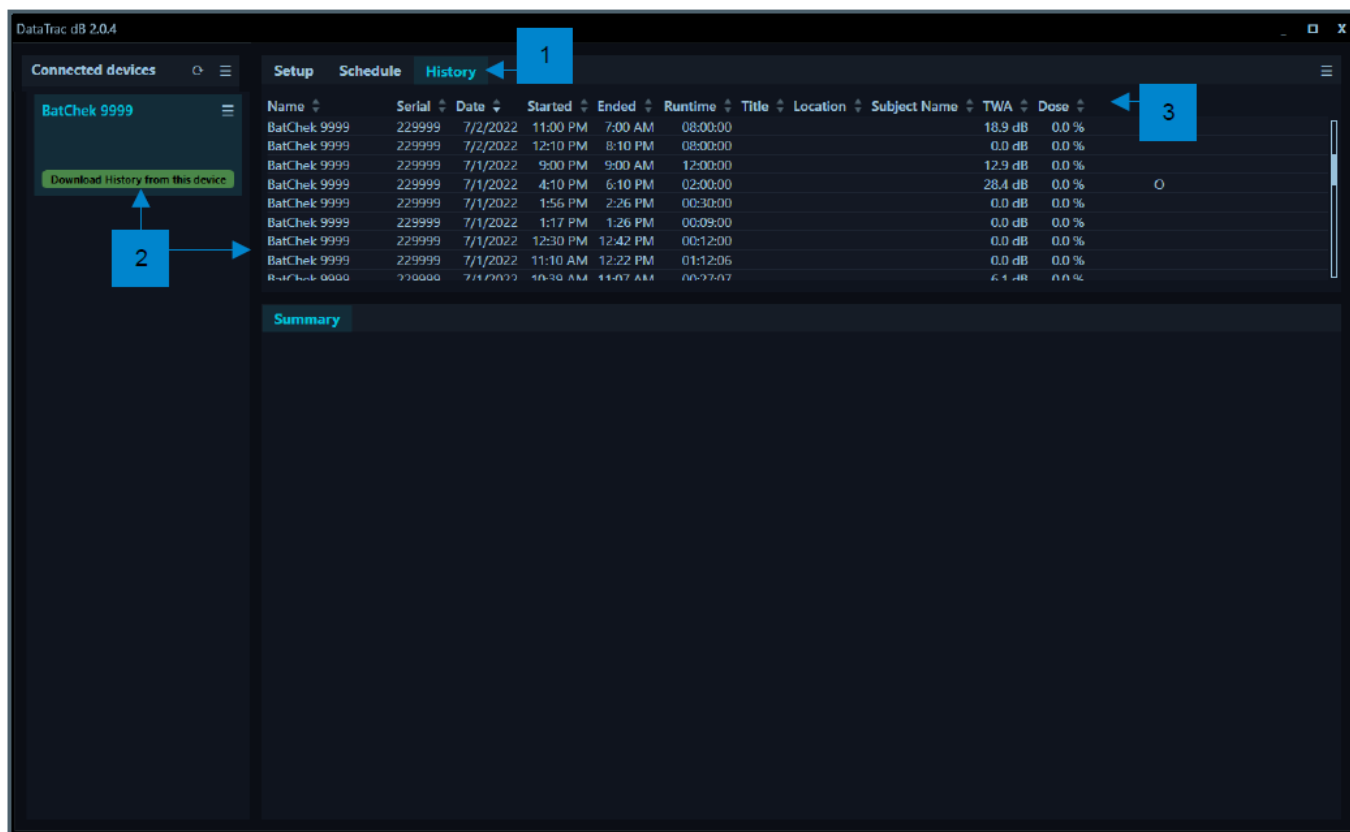
Figure 8. Download History from Device

1. Select History tab.
2. In the selected device tab, click Download History from this device for sample run history. The downloaded history will be displayed.

   Note: To download history from all connected devices, click on the Connected devices menu and select option Download History from All. See Applying Actions to All Connected Devices.
3. Sort records by serial number, date, start/end times, run time, title, location, subject name, TWA, or dose by clicking on the up/down arrows next to the desired parameter.

Notations N, A, V, and O indicate the following:
N Text note added from mobile app before connecting device(s) to PC or added in DataTrac dB after connecting device(s) to PC. See Add/Edit Note.
A Audio recording above set threshold. Click Listen in Summary or audio capture in graph to play back the recording.
V Voice note present. Click Listen in summary to hear the recorded note.
O Overload – During the sample run, sound pressure level exceeded 140 dB for > 4 milliseconds
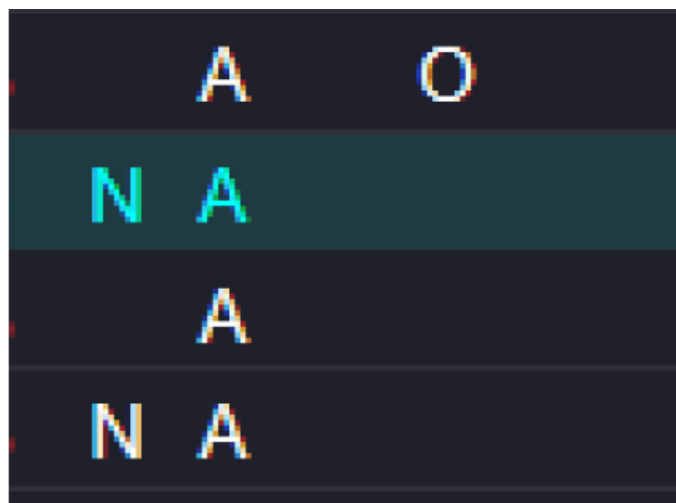
Sharing, Deleting, or Combining Sample Run Data (Figure 9)
The options to share, delete, or combine data are available in the menu at the top right of the History screen, allowing you to:

- Share downloaded sample run data on with DataTrac dB software on different PCs by importing or exporting run files
- Delete data from history
- Combine data from the same actual or virtual dosimeter

Figure 9. Import, Export, Delete, or Combine Sample Run Data

Note: Export Raw Data and Delete are not enabled options unless a run is selected. Combine is available only when two or more compatible runs (i.e., from the same dosimeter) are selected.
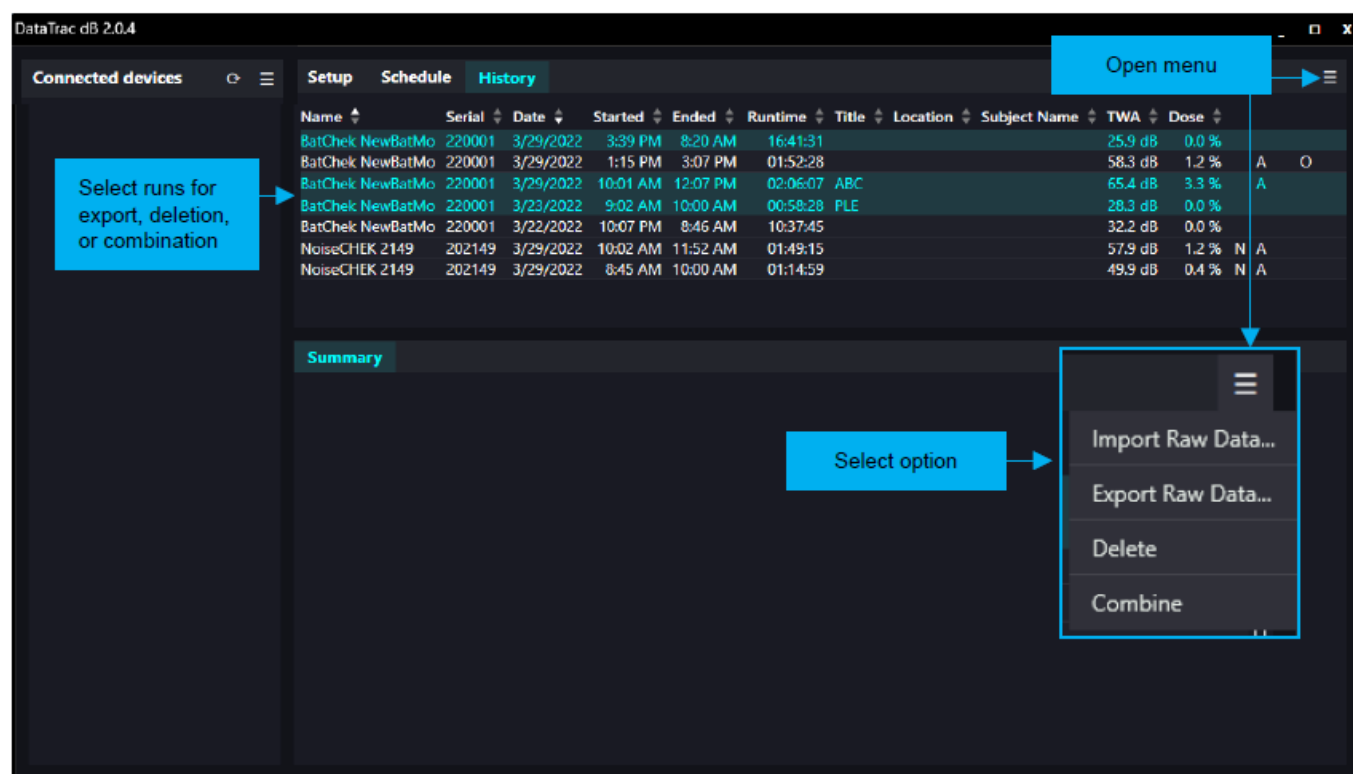
Import Raw Data

1. Click on menu icon to open. Select Import Raw Data.

2. Select and save appropriate Exported Runs file [.skca file(s)] to DataTrac dB on your PC.

3. The imported runs will appear in the History in your DataTrac dB.

Export Raw Data, Delete, or Combine

1. Select runs for export to DataTrac dB on another PC, deletion from downloaded history, or combination of data into one report.
   - To select all or consecutive runs, select the first one and hold the Shift key when selecting the last one.
   - To select multiple individual runs that are not consecutive, select the first one and hold the Ctrl key while selecting the other desired runs.

2. Click on menu icon to open. Select Export Raw Data, Delete, or Combine:

   Export Raw Data saves selected sample runs to a .skca file for import to DataTrac dB on another PC.

   Delete removes selected sample runs from the downloaded history.

   Combine creates a combined report for two or more compatible runs (however, graphs are not combined). The Create Report window will display "Combined log" and applicable options on the left side. Make the desired selections and entries and click on the check mark to create the report and save it to your PC.

Summary – Viewing, Editing, and Reporting Data (Figure 10)
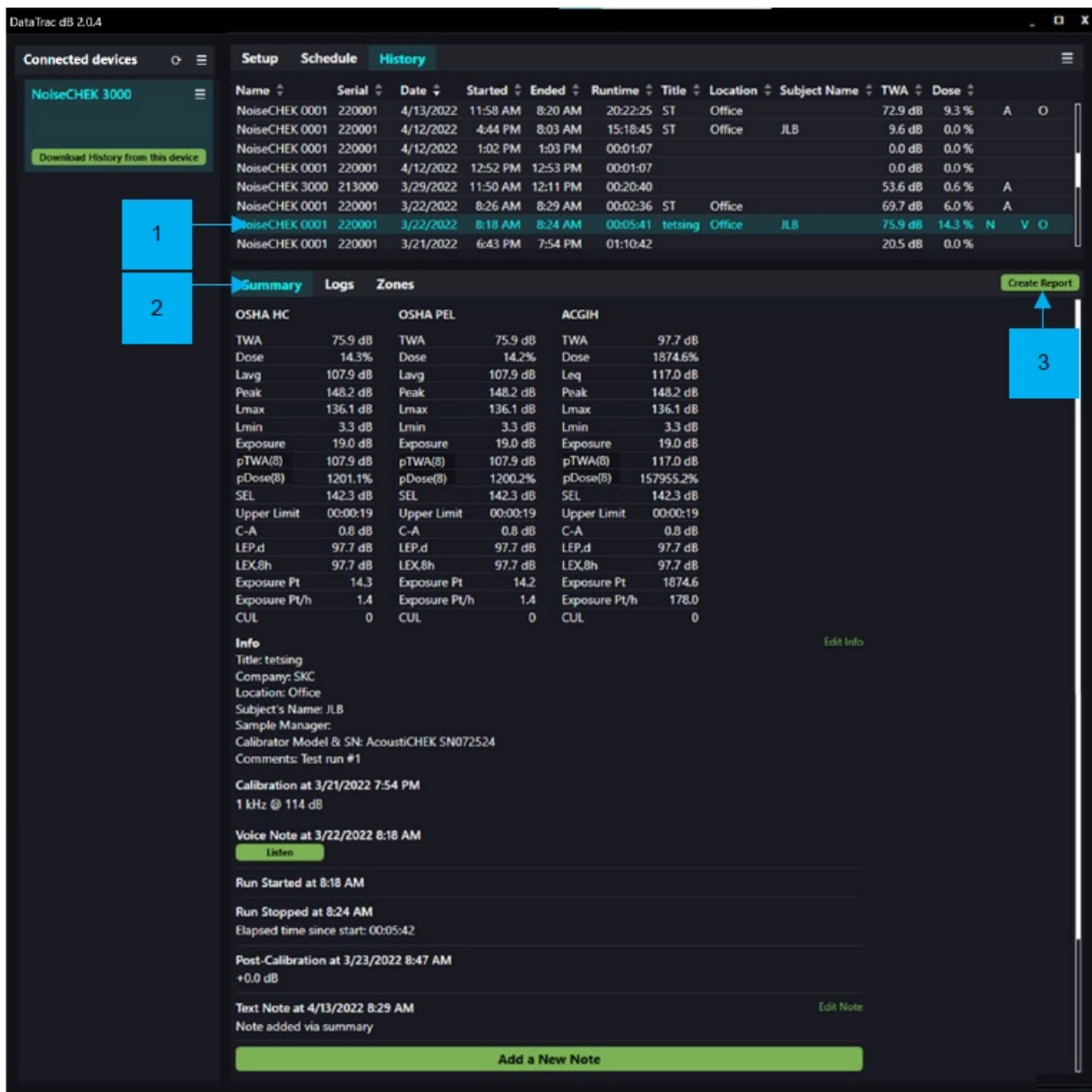
Figure 10. Summary

1. Click on the desired run to select it.

2. View the run data. Edit Info, listen to voice notes, and edit or add text notes as desired. See Edit/Add Note.

   Note: When you add zones in the Logs graph (see Logs or Zones), both the original and modified summaries will be displayed as well as a warning that data has been modified.

3. Click Create Report to create a summary report in PDF or Word (DOCX) format. In the Create Report window (Figure 11), make the desired selections and entries.

Note: Select Readings allows selection of readings to be shown (Figure 11a) in the report. Selection buttons to export original summary, modified summary, or both summaries and the warning "Modified summary" appear only if you modified data in the selected run history by adding exclusion zones (see Logs or Zones). Click on the check mark to create and save the report to your PC or on X to close the window without creating the report. See the sample report in Appendix B.

Figure 11. Create Report
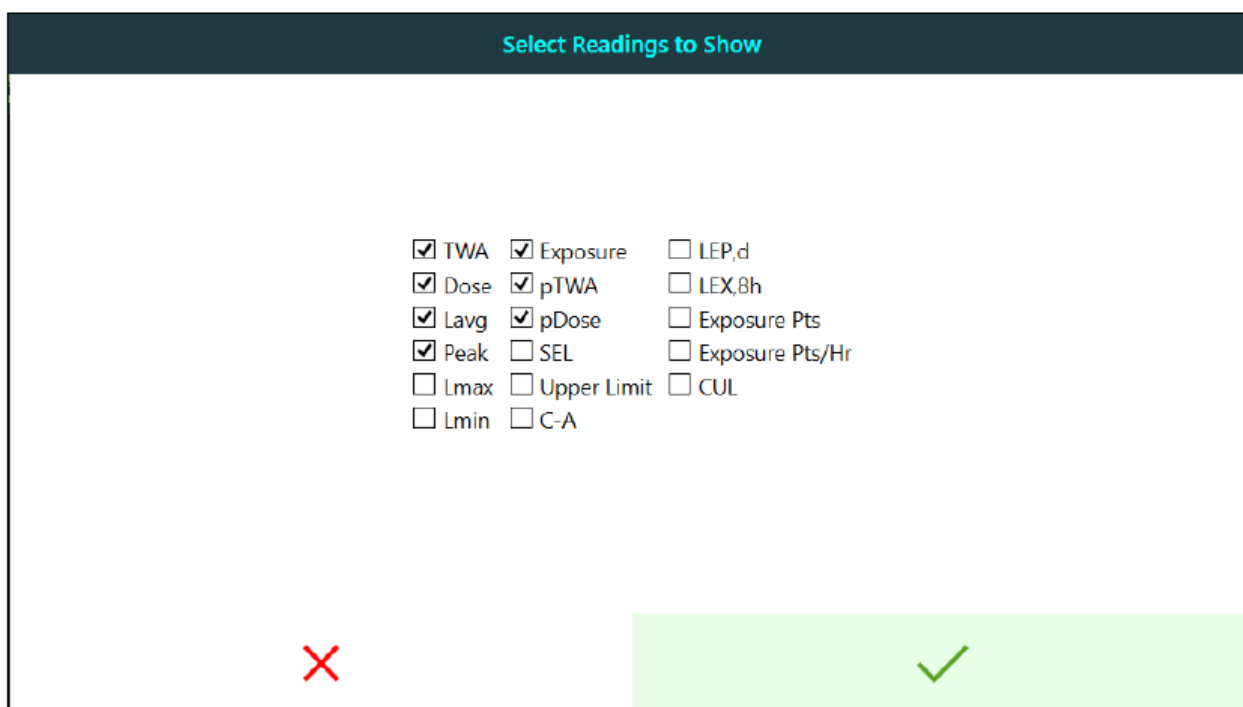
Figure 11a. Select Readings to Show

Add/Edit Note

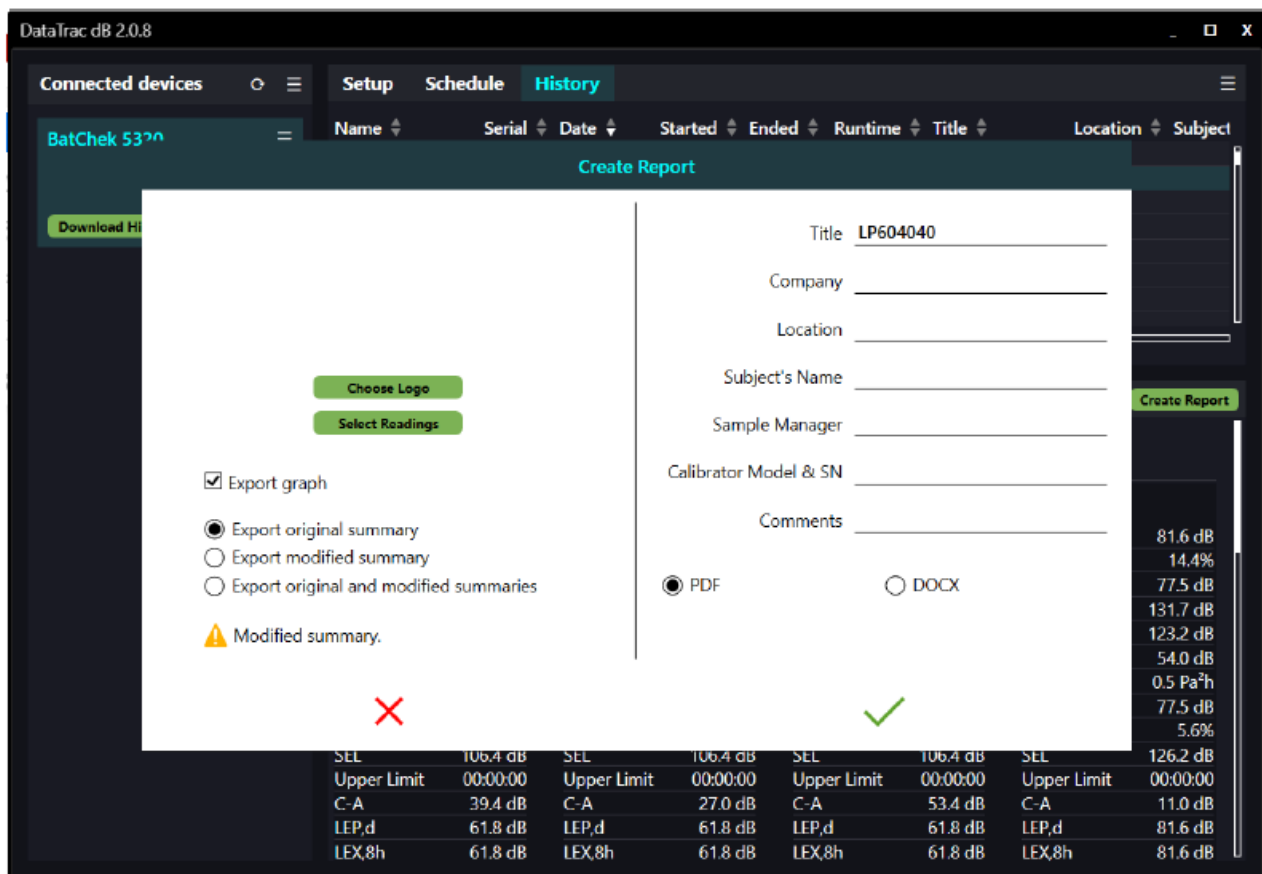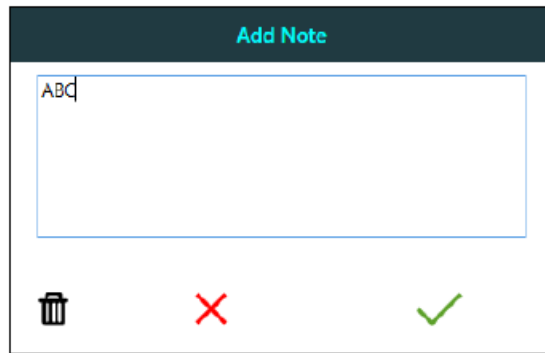Text notes can be added and edited in Summary and Logs.

1. In Summary: Click Add a New Note (see Figure 10).

2. In Logs: Click add note icon (see Logs) and place the cursor where desired in the graph. Enter text in the Add
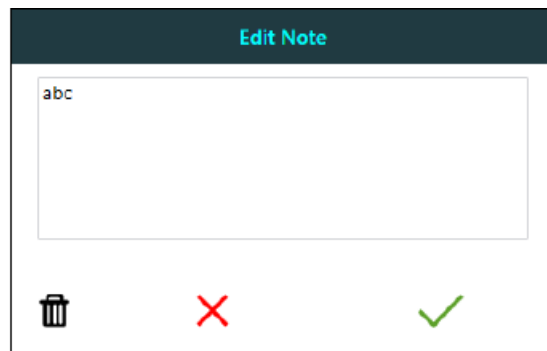
Note window (see below) and click the check mark to save or X to close without saving.

3.

The saved note will appear in the Summary, Log graph, and created summary report.

4. To edit or delete a note, click Edit Note on that line in the summary or click on the note in the graph. In the Edit Note window (see below), edit text and save or click on the wastebasket icon to delete; if deleting, a Delete note? window will be displayed for your confirmation of the deletion.
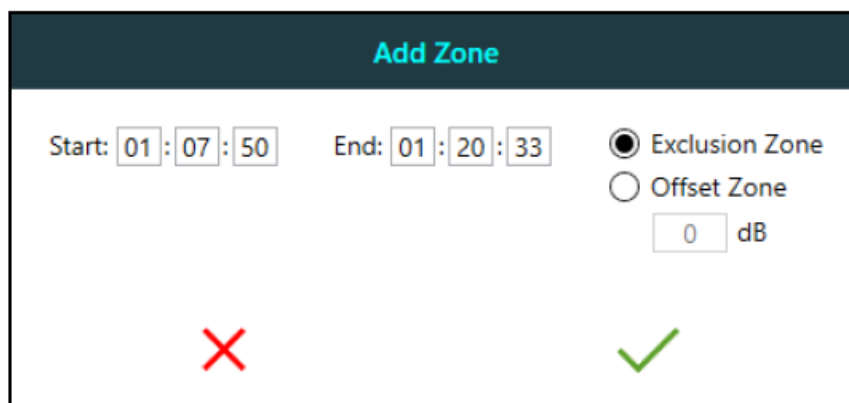
Logs – Viewing and Exporting Data Log

Select Logs (Figure 12) to display the graph for the selected measurement run. Measurements for all the programmed virtual dosimeters are contained in one graph. View and export the data using the features and functions described below.

Figure 12. Data Log for Selected Run History

1. Add zone. Click icon and use cursor to drag and select desired zone. In Add Zone window (see below), select exclusion or offset, start/end times, and +/- dB value as applicable. Also see Zones – Exclusion and Offset. A warning message that data has been modified will appear in the Summary and, if the modified summary is exported when creating a report (see Figure 11), in the summary report. See the example in Appendix B.
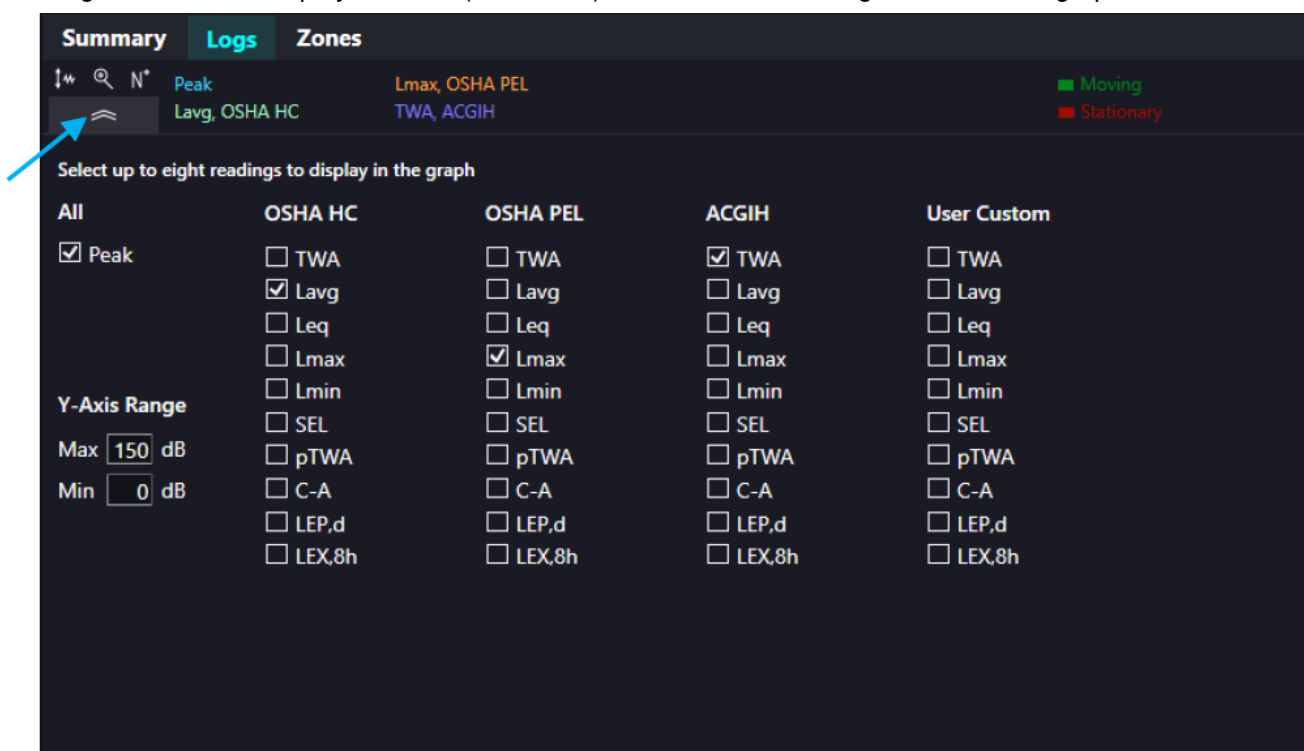
2. Add note. Click icon and then click in desired location in graph to open Add Note window (see Add/Edit Note). Enter text and select check mark to save. An "N" will be displayed at the top of the graph. To view and/or edit note, see Step 6 below.

3. Zoom. Click icon and then click in graph and drag cursor over desired area. A navigation bar will appear at the bottom of the zoom area (see below).
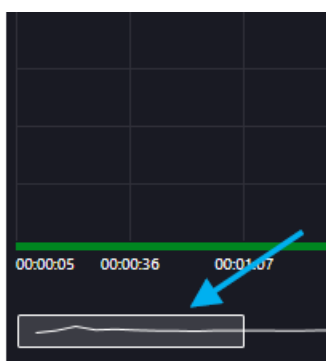
4. Select readings and Y-axis range. Click double-arrow and select up to eight readings to display in graph and Y-axis range values from displayed menu (see below); click double-arrow again to return to graph.

5. Audio capture. Click to listen.

6. Note. Click to view/edit/delete. See Add/Edit Note.

7. Undo zoom. Click to undo zoom.

8. Overall run (Leq of first dosimeter)

9. Motion indicator indicates if dosimeter was moving or stationary at a given point.

10. Copy graph to clipboard. Click to copy graph and then paste it in any document or email.

11. Save Octave Band CSV and Save Log CSV. Click to export desired data into .csv files and save to a PC. See sample in Appendix C.

View Readings at Selected Point in Run

With no icon selected, click on desired point in the graph to see reading values on top of the graph (Figure 13). The vertical line indicates the time of displayed readings. Click on the line and move it to see how readings change over time.

Figure 13. View Readings at Selected Point in Graph

Zones – Exclusion and Offset

Use the Zones tab to add or edit exclusion and offset zones (Figure 14) in the data log. Note: You can also add zones via the Logs tab by clicking on the add zone icon (see Figure 12). Click in the graph and use the cursor to add the zone where desired; click on the check mark to save.

An exclusion zone removes a span of run time from the data, allowing for a "what if" view or analysis.

An offset zone allows you to see what the exposure would be if the noise level during the selected time span were higher or lower than the selected dB value.

When exclusion or offset zones are added, a warning message that data has been modified will appear in the Summary and, if the modified summary is exported when creating a report (see Figure 11), in the summary report.
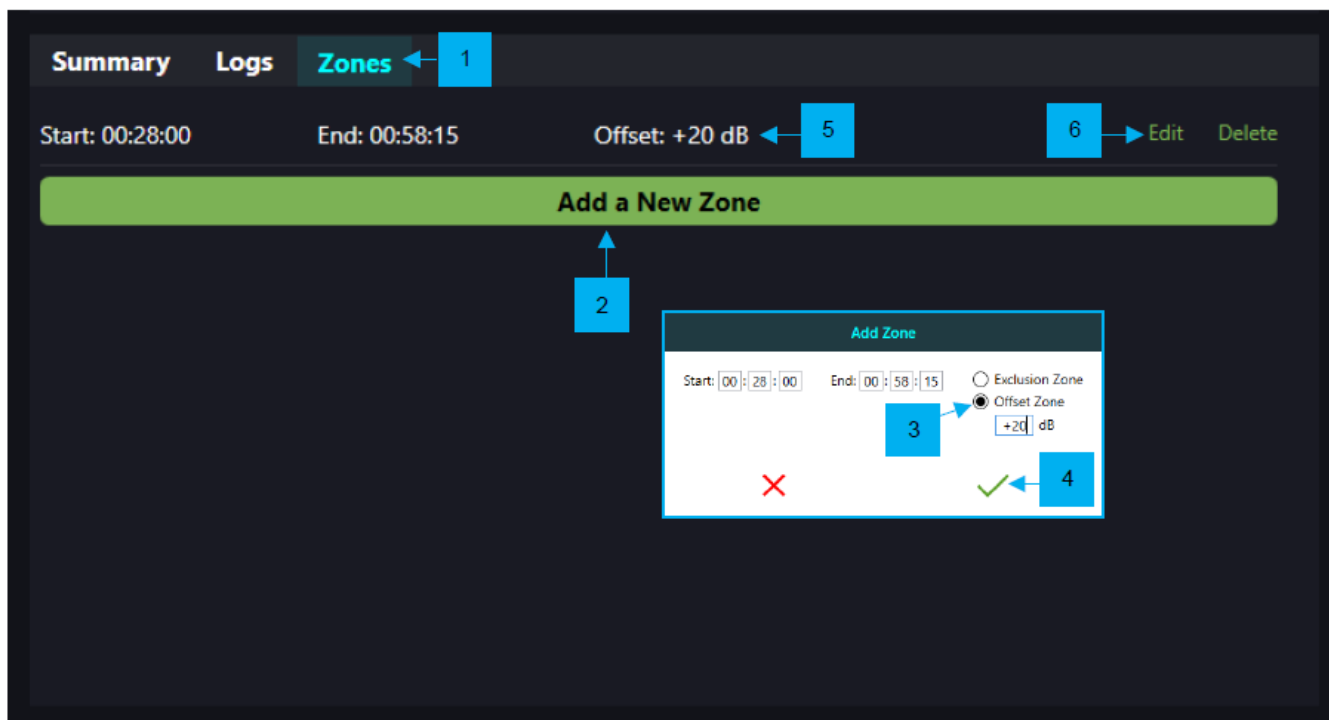
Figure 14. Add a New Zone

1. Click on Zones.

2. Click on Add a New Zone.

3. In the Add Zone window, select Exclusion Zone or Offset Zone and enter desired Start and End times (and +/- dB value if adding Offset Zone).

4. Click on the check mark to save the zone.

5. The zone is listed under the Zones tab and displayed in the Logs graph (see Figure 15). Modified run time is shown. Both the original and modified data summaries will be displayed in the Summary tab and one or both can be exported to the summary report. See Figure 11 and Appendix B.
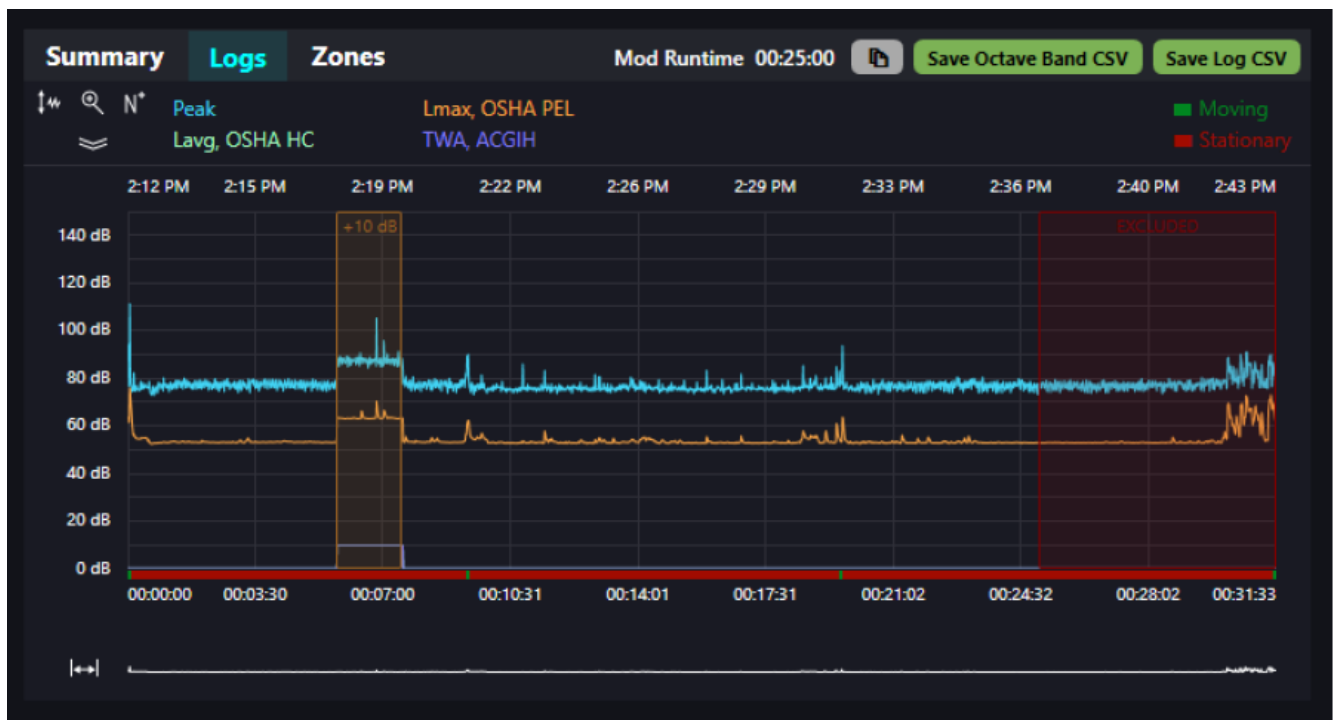
Figure 15. Zone Displayed in Logs Graph

6. Select Edit or Delete as needed and edit details or delete zone and click on check mark to save as shown below.

SOFTWARE NOTES

Version	What's New
V.1.0.15 or earlier	- No ability to add zones
V.2.0.0	- Added zones, enhanced graphing and report features (zones can be added only if data is collected using NoiseCHEK running firmware V.2.0.0 or later version). DataTrac dB V.1.0.15 or earlier will not be able to download data from dosimeter with V.2.0.0 or later firmware. Includes firmware V.2.0.0.
V.2.0.1	- Fixed timeout issues when downloading data from dosimeter with completely filled memory. Displays version number in title bar. Includes firmware V2.0.1, which adds the ability to indicate last factory calibration date (LFC) on the Info screen.
V.2.0.2	- Added ability to set time for pTWA and pDose (requires firmware V.2.0.2) and to share data with DataTrac dB on different PCs. Includes firmware V.2.0.2.
V.2.0.3	- Fixes order of dosimeters on dock and issues with report title. Includes firmware V.2.0.3.
V.2.0.4	- Added Connected devices menu with options to upload settings/schedule to and download history from all connected devices. Improves connectivity to PC. Includes firmware V.2.0.4.
V.2.0.5	- Added ability to export summary report in Word format (.docx).
V.2.0.6	- Added ability to combine two or more runs in exported report; in modified log graphs, displays modified run time.
V.2.0.7	- Fixed minor bugs.
V.2.0.8	- Added lifetime run time (LRT) on Info screen and ability in Create Report to select readings shown in summary report.

APPENDICES

Appendix A
SKC End-user License Agreement
NOTICE TO USER: This is a contract. By installing this software, you accept all the terms and conditions of this End-user License Agreement (EULA). If you do not agree with the terms and conditions shown below, do not install the software.
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The USER may:

- Use the SOFTWARE on more than one computer.

The USER may not:

- Use the SOFTWARE with improperly licensed SOFTWARE. The SOFTWARE must be supported by properly

licensed SOFTWARE.

- Reverse engineer, decompile, disassemble, modify, translate, make any attempt to discover the source code, or otherwise plagiarize the SOFTWARE.

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THE WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
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Appendix B: Sample Summary Report

NoiseCHEK Noise Dosimeter
NoiseCHEK 2149 SN: 202149
Sample date: 3/29/2022 10:02:56 AM
Company: SKC
Sample Manager: PLE
Calibrator Model & SN: 703-002 SN XXXX

Device Setup

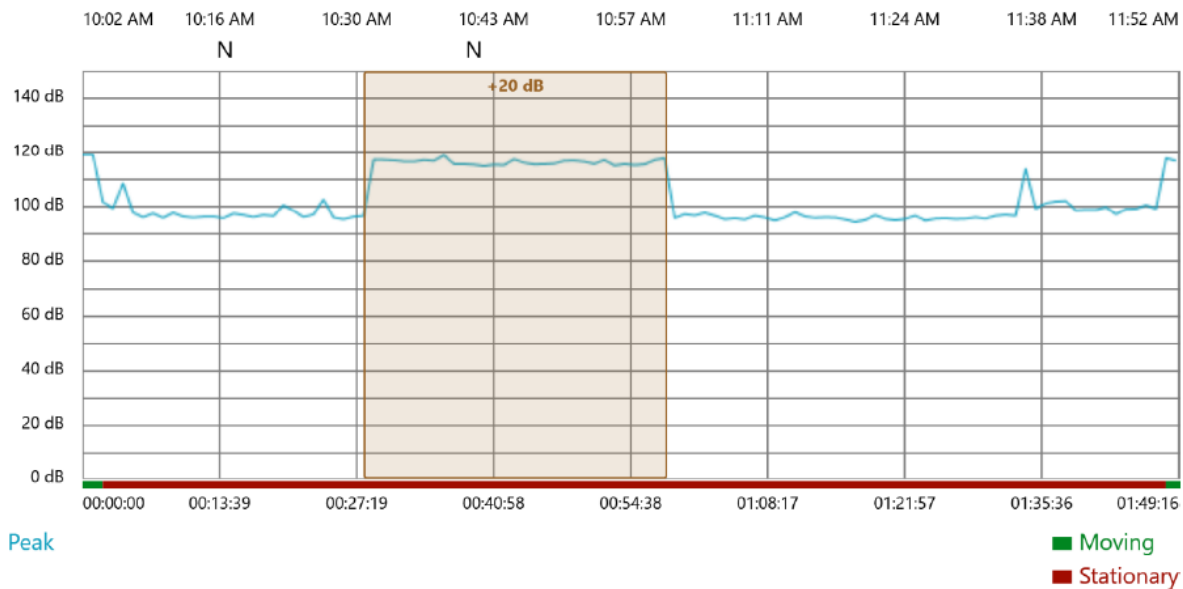| OSHA - HC		OSHA - PEL		MSHA - HC	
Response	Slow	Response	Slow	Response	Slow
Threshold	80	Threshold	90	Threshold	80
Upper Limit	115	Upper Limit	115	Upper Limit	117
Exchange Rate	5	Exchange Rate	5	Exchange Rate	5
Criterion Level	90	Criterion Level	90	Criterion Level	90
RMS Weighting	A	RMS Weighting	A	RMS Weighting	A

Measurement Summary Information
Pre Calibration: 1 kHz @ 114 dB, 3/29/2022 10:02:22 AM
Run Started: 3/29/2022 10:02:56 AM
Run Ended: 3/29/2022 11:52:12 AM
Total Runtime: 01:49:15
Post Calibration: +0.3 dB, 3/29/2022 11:52:28 AM

Modified Summary

⚠️ **Data has been modified**
Total Runtime: 01:49:00

OSHA - HC		OSHA - PEL		MSHA - HC	
TWA	60.5 dBA	TWA	51.8 dBA	TWA	60.5 dBA
Dose	1.7%	Dose	0.5%	Dose	1.7%
Lavg	71.2 dBA	Lavg	62.5 dBA	Lavg	71.2 dBA
Lmax	106.8 dBA	Lmax	106.8 dBA	Lmax	106.8 dBA
Lmin	25.4 dBA	Lmin	25.4 dBA	Lmin	25.4 dBA
Peak	119.1 dB	Peak	119.1 dB	Peak	119.1 dB
Exposure	0.8 Pa²-h	Exposure	0.8 Pa²-h	Exposure	0.8 Pa²-h
ULT	00:00:00	ULT	00:00:00	ULT	00:00:00
SEL	128.6 dBA	SEL	128.6 dBA	SEL	128.6 dBA
pTWA	71.2 dBA	pTWA	62.5 dBA	pTWA	71.2 dBA
pDose	7.4%	pDose	2.2%	pDose	7.4%
C-A	6.7 dB	C-A	1.5 dB	C-A	6.7 dB
LEP,d	84.0 dBA	LEP,d	84.0 dBA	LEP,d	84.0 dBA
LEX,8h	84.0 dBA	LEX,8h	84.0 dBA	LEX,8h	84.0 dBA
Exp. Pts.	1.7	Exp. Pts.	0.5	Exp. Pts.	1.7
Exp. Pts/h	3.1	Exp. Pts/h	0.9	Exp. Pts/h	3.1
CUL	0	CUL	0	CUL	0

Original Summary

OSHA - HC		OSHA - PEL		MSHA - HC	
TWA	57.9 dBA	TWA	51.8 dBA	TWA	57.9 dBA
Dose	1.2%	Dose	0.5%	Dose	1.2%
Lavg	68.6 dBA	Lavg	62.5 dBA	Lavg	68.6 dBA
Lmax	106.8 dBA	Lmax	106.8 dBA	Lmax	106.8 dBA
Lmin	25.4 dBA	Lmin	25.4 dBA	Lmin	25.4 dBA
Peak	119.1 dB	Peak	119.1 dB	Peak	119.1 dB
Exposure	0.1 Pa²-h	Exposure	0.1 Pa²-h	Exposure	0.1 Pa²-h
ULT	00:00:00	ULT	00:00:00	ULT	00:00:00
SEL	118.3 dBA	SEL	118.3 dBA	SEL	118.3 dBA
pTWA	68.6 dBA	pTWA	62.5 dBA	pTWA	68.6 dBA
pDose	5.2%	pDose	2.2%	pDose	5.2%
C-A	4.5 dB	C-A	1.5 dB	C-A	4.5 dB
LEP,d	73.7 dBA	LEP,d	73.7 dBA	LEP,d	73.7 dBA
LEX,8h	73.7 dBA	LEX,8h	73.7 dBA	LEX,8h	73.7 dBA
Exp. Pts.	1.2	Exp. Pts.	0.5	Exp. Pts.	1.2
Exp. Pts/h	2.1	Exp. Pts/h	0.9	Exp. Pts/h	2.1
CUL	0	CUL	0	CUL	0

Measurement Event Details

Auto-threshold Audio Capture at 3/29/2022 10:03:38 AM
Text note added at 3/29/2022 10:17:57 AM
aBC
Text note added at 3/29/2022 10:42:46 AM
abc
Auto-threshold Audio Capture at 3/29/2022 11:36:38 AM
Auto-threshold Audio Capture at 3/29/2022 11:50:39 AM
Text note added at 4/13/2022 11:02:05 AM fjalksdjfalksdjflkads

Appendix C: Sample Log Data Imported into Microsoft Excel

Timestamp	Run Time	Overload	Motion	Peak	TWA 1	Dose 1	Lavg 1	Leq 1	Exposure	Lmax 1	Lmin 1	SEL 1	pTWA 1	pDose 1	C-A 1	Lepd 1	Lex 1	Exposure	Exposure	TWA 2	Dose 2	Lavg 2
3/29/2022 10:03	0:01:00	0	1	119.1	46.9	0.255419	91.5	95.4	0.022863	106.8	25.4	113.1	91.5	122.6	1.8	68.5	68.5	0.3	0	45.6	0.211945	9(
3/29/2022 10:04	0:02:00	0	0	101.7	33.4	0.039119	77.9	81.1	0.000855	88.3	66.7	98.9	77.9	18.8	2.2	54.3	54.3	0	0	0	0	
3/29/2022 10:05	0:03:00	0	0	99.4	30.4	0.02592	75	79.8	0.000635	83.4	73.5	97.6	75	12.4	4.9	53	53	0	0	0	0	
3/29/2022 10:06	0:04:00	0	0	108.6	32.4	0.03402	76.9	82.2	0.001116	94.7	67.6	100	76.9	16.3	1.9	55.4	55.4	0	0	25.4	0.0129	6(
3/29/2022 10:07	0:05:00	0	0	97.9	0	0	0	75.9	0.000261	79.9	72.3	93.7	0	0	56.7	49.1	49.1	0	0	0	0	
3/29/2022 10:08	0:06:00	0	0	96.1	0	0	0	75.8	0.000254	80	71.3	93.6	0	0	61.3	49	49	0	0	0	0	
3/29/2022 10:09	0:07:00	0	0	97.6	12.8	0.002262	57.4	74.2	0.000177	82.8	66.6	92	57.4	1.1	8.7	47.4	47.4	0	0	0	0	
3/29/2022 10:10	0:08:00	0	0	95.9	8.1	0.001176	52.7	76	0.000264	80.7	69	93.8	52.7	0.6	15.3	49.2	49.2	0	0	0	0	
3/29/2022 10:11	0:09:00	0	0	97.8	19.4	0.005612	63.9	77.2	0.000349	82	69.9	95	63.9	2.7	10.2	50.4	50.4	0	0	0	0	
3/29/2022 10:12	0:10:00	0	0	96.4	14.5	0.002835	59	77.1	0.000341	80.9	67	94.9	59	1.4	12.3	50.3	50.3	0	0	0	0	
3/29/2022 10:13	0:11:00	0	0	96	0	0	0	75.1	0.000213	79.7	69.4	92.8	0	0	61	48.2	48.2	0	0	0	0	
3/29/2022 10:14	0:12:00	0	0	96.3	6.5	0.000944	51.1	76.6	0.000306	80.4	68.1	94.4	51.1	0.5	15.9	49.8	49.8	0	0	0	0	
3/29/2022 10:15	0:13:00	0	0	96.4	0	0	0	75.6	0.00024	79.1	67.9	93.4	0	0	66.7	48.8	48.8	0	0	0	0	
3/29/2022 10:16	0:14:00	0	0	95.8	16.9	0.003984	61.5	77.5	0.000373	80.6	71.9	95.3	61.5	1.9	12.6	50.7	50.7	0	0	0	0	
3/29/2022 10:17	0:15:00	0	0	97.5	15.8	0.003387	60.3	77.5	0.000378	80.8	71.4	95.3	60.3	1.6	15.3	50.7	50.7	0	0	0	0	
3/29/2022 10:18	0:16:00	0	0	97	8.8	0.001291	53.3	74.5	0.00019	80.8	67.1	92.3	53.3	0.6	14.8	47.7	47.7	0	0	0	0	
3/29/2022 10:19	0:17:00	0	0	96.2	14.2	0.002729	58.7	76.1	0.000274	82	70	93.9	58.7	1.3	8.4	49.3	49.3	0	0	0	0	
3/29/2022 10:20	0:18:00	0	0	97	15.6	0.003306	60.1	76.3	0.000285	82	69.3	94.1	60.1	1.6	8.5	49.5	49.5	0	0	0	0	
3/29/2022 10:21	0:19:00	0	0	96.6	15.4	0.003211	59.9	76.4	0.000292	82.2	67	94.2	59.9	1.5	6.9	49.6	49.6	0	0	0	0	
3/29/2022 10:22	0:20:00	0	0	100.5	0	0	0	75.6	0.000241	79.1	72.3	93.4	0	0	61.5	48.8	48.8	0	0	0	0	
3/29/2022 10:23	0:21:00	0	0	98.6	0	0	0	75.5	0.000236	79.1	67.9	93.3	0	0	58.4	48.7	48.7	0	0	0	0	
3/29/2022 10:24	0:22:00	0	0	96.2	5.5	0.000817	50	76.6	0.000303	80.6	70.2	94.4	50	0.4	20.9	49.8	49.8	0	0	0	0	
3/29/2022 10:25	0:23:00	0	0	97.2	0	0	0	76.9	0.000327	80	70.5	94.7	0	0	71.7	50.1	50.1	0	0	0	0	
3/29/2022 10:26	0:24:00	0	0	102.7	0	0	0	74.6	0.000192	79.6	68.4	92.4	0	0	62	47.8	47.8	0	0	0	0	
3/29/2022 10:27	0:25:00	0	0	96	0	0	0	75	0.000211	79.4	71.6	92.8	0	0	61.6	48.2	48.2	0	0	0	0	
3/29/2022 10:28	0:26:00	0	0	95.4	0	0	0	74.9	0.000207	79.7	66.8	92.7	0	0	63.5	48.1	48.1	0	0	0	0	
3/29/2022 10:29	0:27:00	0	0	96.3	0	0	0	75.4	0.000233	78.8	70.7	93.2	0	0	61.9	48.6	48.6	0	0	0	0	
3/29/2022 10:30	0:28:00	0	0	96.7	3.5	0.000622	48.1	77.5	0.000377	80.4	72.7	95.3	48.1	0.3	25.7	50.7	50.7	0	0	0	0	
3/29/2022 10:31	0:29:00	0	0	97.3	18.5	0.004986	63.1	76.3	0.000286	82	68	94.1	63.1	2.4	7.9	49.5	49.5	0	0	0	0	
3/29/2022 10:32	0:30:00	0	0	97.3	12.6	0.002185	57.1	76.4	0.00029	80.8	67.2	94.2	57.1	1	16	49.6	49.6	0	0	0	0	
3/29/2022 10:33	0:31:00	0	0	97.1	18.1	0.004721	62.7	76.8	0.000319	82.1	71	94.6	62.7	2.3	7.9	50	50	0	0	0	0	
3/29/2022 10:34	0:32:00	0	0	96.7	0	0	0	75.1	0.000213	79.2	67.8	92.8	0	0	64.8	48.2	48.2	0	0	0	0	
3/29/2022 10:35	0:33:00	0	0	96.6	0	0	0	75.9	0.00026	78.6	68.5	93.7	0	0	48	49.1	49.1	0	0	0	0	
3/29/2022 10:36	0:34:00	0	0	97.2	0	0	0	73.2	0.000141	79.7	66.8	91	0	0	63.9	46.4	46.4	0	0	0	0	

GLOSSARY OF NOISE TERMS

Average Sound Level (Lavg) – The average sound level measured over the specific time period using the chosen exchange rate. Only sound level above the threshold is included.
Lavg = Leq (equivalent continuous level) when the exchange rate is 3 dB
Lavg = LOSHA when the exchange rate is 5 dB
C-A – The A-weighted average sound level subtracted from the C-weighted average sound level (LCavg -LAavg).
Continuous Upper Limit (CUL) – The number of times the set upper limit was exceeded continuously for the set time interval. Any continuous event lasting for the set interval counts as one.
Criterion Level – Sound level required to produce 100% dose if continually applied for the criterion time (usually 8 hours). The current OSHA and MSHA criterion level is 90 dB; the ACGIH criterion level is 85 dB.
Daily Noise Exposure (LEX,8h) – The same as LEP,d (see below), used to access a worker's noise exposure during an 8-hour workday.
Daily Personal Noise Exposure (LEP,d) – A-weighted noise level during a nominal 8-hour workday. Used to access a worker's noise exposure during an 8-hour workday.
Dose (D) – The exposure to occupational noise expressed as a percentage of the allowable daily noise exposure. Exposure above 100% represents exposures that are hazardous.
Equivalent Continuous Level (Leq) – The sound level having the same overall energy as the fluctuating sound level over a given period of time.
Exchange Rate – An increment of decibels (dB) that requires the halving of exposure time. For example, a 5-dB exchange rate requires that exposure time be halved for each 5-dB increase.

Frequency Weighting –
A-weighting corresponds to the human ear response
C-weighting correlates with the human response to high noise levels
Z-weighting is unweighted "zero" frequency weighting
Maximum Sound Level (Lmax) – The highest value of the frequency and time-weighted sound levels measured over the specific time period.
Minimum Sound Level (Lmin) – The lowest value of the frequency and time-weighted sound levels measured over the specific time period.
Noise Dose (D) – See Dose.
Noise Exposure Points (Exposure Pt) – Point system based on Health and Safety Executive guidance and used mainly in the UK to access daily personal noise exposure.
Noise Exposure Points per Hour (Exposure Pt/Hr) – Exposure points per hour.
Peak – The highest instantaneous sound pressure level of a selected frequency-weighted sound pressure level during the stated time interval.
Projected Dose (pDose) – The projected exposure to occupational noise assuming that the current exposure continues for the remaining duration of the work shift.
Projected Time Weighted Average (pTWA) – The projected exposure to occupational noise assuming the

current noise exposure continues for the remaining duration of the work shift.

Response (Time Weighting) – Sound pressure level (SPL) averaging time interval, 125 milliseconds for FAST response, 1 second for SLOW response.

Sound Exposure (E) – The sound pressure measured during a stated time interval.

Sound Exposure Level (SEL) – The sound level having the same overall energy as the fluctuating sound level during a 1-second time interval.

Sound Pressure (SP) – A pressure caused by a sound wave passing through the air or other gaseous or liquid medium. The sensation of hearing is the result of fluctuation in atmospheric pressure initiated by a passing sound wave. Sound pressure is measured in Pa or N/m2.

Sound Pressure Level (SPL) – The ratio of actual sound pressure (P) to the reference sound pressure (P0). SPL uses logarithmic scale to represent a wide range of human hearing and is measured in decibels (dB), SPL = 20log(P/P0) dB. The reference sound level is the typical threshold of human hearing, P0 = 20 mPa (2X10-5 Pa).
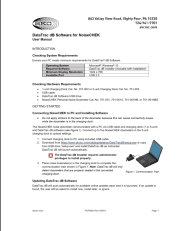
Threshold Level – The A-weighted sound level. Only values above this level are included in noise dose accumulation.

Time-weighted Average (TWA) – Daily exposure to occupational noise normalized to an 8-hour workday. TWA takes into account the average levels of noise and the time spent in each exposure area. Different agencies use different exchange rates and threshold levels to calculate TWA.

Upper Limit (UL) – The cumulative time that the noise level exceeded the set level.

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Documents / Resources

	SKC PDP0003 DataTrac dB Software for NoiseCHEK [pdf] User Manual PDP0003, PDP0003 DataTrac dB Software for NoiseCHEK, DataTrac dB Software for NoiseCHEK, dB Software for NoiseCHEK, Software for NoiseCHEK, NoiseCHEK

References

- **User Manual**