

# NoiseTools V1.6 Release Notes



Cirrus Research plc  
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## 1 New & updated features in NoiseTools v1.6

This update to the NoiseTools program adds a number of new features and enhancements.

The key points are covered in the following sections.

### 1.1 General enhancements

- The welcome screen has been updated and will be displayed when the software is first run. This shows the default location of the database and audio storage folders
- Additional data types added to the reporting engine
- Password protection for the Configuration screen  
The configuration screen for connected instruments can be password protected to prevent users from changing the setup.
- Microsoft App-V Support  
NoiseTools has been tested under Microsoft App-V thin client systems. Other thin client systems have also been tested
- The display of time and date formats has been updated to be consistent across the NoiseTools program.
- Additional support for NoiseTools modules

### 1.2 Instrument Management

- Calibration Reminder  
This function displays a reminder in the Common Tasks window when a connected instrument is within 30 days of its last factory calibration date. This reminder can be disabled.

### 1.3 Data Management

- Additional data import options
  - doseBadge Database - Import data from doseBadge Database (dbd files)
  - Deaf Defier - Import data from DeafDefier
  - MTP Files - Add duplicate detection on import

### 1.4 Viewing & Analysing Measurements

- Audio playback has been improved
  - Audio playback controls have been integrated into the main display.
  - Audio playback will continue when NoiseTools is not the front or focused application
  - The position of the audio playback can be controlled using the mouse
- Display of time stamps has been improved
  - Export of time history data now includes complete time and date information
  - Time and date stamps are displayed on tool tips

- Summary screen options
  - The user can create their own summary screen views using either an existing summary view as a template or by creating a new summary view
  - Available for single and group measurement views
  - Custom summary displays are installed automatically and can be disabled
- Total and remainder values added to the marker table view
- Combined marker table added
- Markers in Groups
  - Display markers on Group Time History graph
  - List markers & allow for combination of similar markers as per single measurements
  - Shows warning messages if large areas or markers are overlapping
  - Read only – There's no option to create markers from group. Markers must be added into individual measurements
- Time history annotations
  - Annotations can be added to time history views
  - Annotations can be colour coded and set at specific levels
  - User selectable level, colour and label.
  - Annotations are included in image exports
  - A measurement name can be added to the Time History Image Export
- Taktmax values displayed on time history views  
The overall LAFT3 & LAFT5 overall values can be displayed on the time history graph (German Version only)
- Octave graph axis scaling  
The Y axis scaling of the 1:1 and 1:3 time history graphs can be set to automatic or manual
- Calculation of Ln values within marked sections
  - NoiseTools will recalculate the values in the overall view for markers in the time history view
  - For example, if the user selects to display the overall L10 and L90, when a section is marked, NoiseTools will calculate these values for that chosen section.
  - This additional information will appear in the tooltip when the mouse is placed over the marked section.
  - The additional parameters will also appear in the markers list section so they can be exported or copied
- Time History Graph Legends
  - When the time history graph contains too many data samples to display within the available pixels, NoiseTools will recalculate the values.
  - An asterix will next to the graph legend to show that the values displayed are recalculated ie LAeq\*
  - A tooltip that appears over the legend with information about the recalculation

## 1.5 Reporting & Exporting Measurement Data

- Measurement Reports
  - Custom measurement reports can be distributed and installed into NoiseTools using the Report Import option.
  - The distributable packages for new reports include:
    - Includes report file itself
    - Descriptions and other metadata
    - Thumbnail and preview images
- Combined measurement reports & report cover page
  - A combined measurement report can be assembled from individual measurement reports and a cover page.
- Audio Export
  - Multiple audio recordings can be exported at the same time from the markers view
- Time History Export
  - The new export manager allows for any number of channels to be selected along with frequency weightings
  - The selection in the export manager are stored for the next time the export manager is used
  - Time history export is now available from the group time history window
- Tonal Noise Report
  - New tonal noise report – This report is available for the CR:172C & CR:171C instruments
  - Includes 1:3 graph, detected tones and relevant settings.
- Trojan Noise Nuisance Report
  - A new report to show a list of the audio recordings along with the LAeq, Lmax, LAE within each measurement period.
- Time History report
  - Additional marker details added to the time history report

## 2 Updating an existing NoiseTools installation

Please read the following information carefully before installing v1.6 of NoiseTools.

[Technical Note 59 – Advanced Installation of Noise Tools](#) provides detailed information regarding the installation of NoiseTools and covers the use of networked systems and the storage of databases on remote systems.

Please refer to Technical Noise 59 for more information. This document can be downloaded from the Cirrus Research website at [www.cirrusresearch.co.uk/library/](http://www.cirrusresearch.co.uk/library/)

### 2.1 Database upgrade from version 1.4 or earlier

NoiseTools uses a database to store the measurement information from the instruments along with notes, comments and any other settings associated with your measurements.

To support the new information that can be stored by NoiseTools, the structure of the database has changed from that used in the previous versions of NoiseTools.

During the installation process, any existing databases will be converted to the new format so that they can be used in NoiseTools v1.5. These new database files are not compatible with the previous versions of the NoiseTools program and cannot be opened in any previous versions (v1.4 or earlier).

A backup of any existing databases will be made *before* they are converted to allow data to be recovered in the event of any problems.

These backups will be in the same folder as previously along with the new versions.

The progress of the database backup and conversion will be shown on the screen.

#### 2.1.1 Single user installations

For single user installations (where a single installation of NoiseTools is used to access a database or databases), the program can be updated using either the DVD, downloaded from the Cirrus website ([www.cirrusresearch.co.uk/library/software](http://www.cirrusresearch.co.uk/library/software)) or by using the program update feature within NoiseTools itself.

The installer will run and will update any existing databases.

When the installation is complete, run the NoiseTools program.

#### 2.1.2 Multi-user installations

For installation where more than one instance of NoiseTools is used to access a database or where a database is shared across a network for example, all installations of the NoiseTools program must be updated at the same time.

When the first installation of NoiseTools is updated, all of the current databases will be converted to the new format.

The new database files are not compatible with the previous versions of NoiseTools. Ensure that all installations of NoiseTools are upgraded at the same time.

### **3 NoiseTools System Requirements**

Please note that NoiseTools is not compatible with the Apple Mac Operating system.

#### **3.1 Operating System**

From version 1.5, NoiseTools is compatible with Windows 10.

Please note that NoiseTools is not compatible with the Apple Mac Operating system.

Please note that as of April 8th 2014, Windows XP is no longer supported by Microsoft. Refer to the minimum system requirements below.

#### **3.2 Minimum System Requirements**

- Windows 7 SP1 \*
- CPU: 2GHz Dual Core
- Memory: 2GB
- Storage: 10GB free space
- Display: 1280×800

#### **3.3 Recommended System Specification**

- Windows 7 SP1 Professional/Enterprise (x64)
- CPU: 3GHz Dual Core
- Memory: 4GB
- Storage: 50GB free space
- Display: 1280×1024

#### **3.4 Ideal System Specification**

- Windows 8.1 Pro/Enterprise (x64) or Windows 10 (x64)
- CPU: 3GHz Quad Core
- Memory: 8GB
- Storage: 100GB free space
- Display: 2x 1920×1080
- Dedicated NVIDIA graphics card with CUDA support
- Dedicated sound card and external speakers

#### **3.5 Storage Requirements for NoiseTools Installation & Measurement Data**

- Approximately 1GB for installing NoiseTools and dependencies
- Up to 512MB for temporary files during measurement download
- 1GB per instrument per year for measurements and time history data, assuming typical usage

Where an instrument is storing and downloading audio recordings, additional storage space will be required. The amount of storage will depend upon the length of recordings and the audio quality chosen. Audio recordings require the following amounts of space:

Standard Quality 120MB/hr

Studio Quality 1.4GB/hr

#### **3.6 Sound Card for Audio Playback**



NoiseTools can work with on-board sound cards and even internal laptop speakers. However for best results a dedicated card and external speakers are required.

Some on-board sound cards will not be capable of playing the studio quality 96kHz audio. In these cases an external sound card will be required.

In some cases internal speakers are sufficient, however to playback at realistic levels, such as when using the speaker calibration feature, good quality external speakers are required.

### **3.7 Graphics Card**

NoiseTools uses the latest technologies to draw the user interface directly using the graphics card. This gives a much better looking more responsive experience and allows us to easily provide certain advanced features, such as the 3D frequency analysis view.

Most on-board graphics chips can provide more than enough power to display the basic user interface but the more advanced screens will be noticeably smoother on more powerful hardware.

NoiseTools is also able to use the latest CUDA graphics cards, from NVIDIA, to do FFT and other complex calculations. This can be many times faster than running these calculations on the main processor. This feature requires a CUDA capable card and 64bit version of Windows.

### **3.8 .NET Framework 4.0**

All versions of the NoiseTools software use the Microsoft .NET Framework and this is installed as part of the Windows operating system. The version of the .NET Framework installed by depend upon the version of the Windows operating system that is installed.

When NoiseTools was updated from v1.4.6 to v1.5, the .NET Framework used was changed from 3.5 to 4.0 to allow for new functions and features to be added.

By default, .NET 4.0 is not included with Windows XP (as this was released before .NET 4.0 was available) and so to run NoiseTools v1.5 or later on Windows XP, the .NET Framework 4.0 must be installed manually.

Please note that Cirrus Research plc is not responsible for the loss of any data or any issues caused by the installation of the .NET 4.0 Framework.

Users must ensure that their systems meet the minimum requirements before installation and all data should be backed up before installing this update. The requirements are given on the Microsoft website on the download page for .NET 4.0

Note that certain versions of Windows 7 may also not include the .NET 4.0 Framework and must be updated before they can run NoiseTools v1.5 or later.

#### **4 Cirrus Research Offices**

The addresses given below are the Cirrus Research plc offices. Cirrus Research plc also have approved distributors and agents in many countries worldwide. For details of your local representative, please contact Cirrus Research plc at the address below. Contact details for Cirrus Research authorised distributors and agents are also available from the Internet Web site at the address shown below.

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