

N4Ldlog

User Guide

There are 3 types of N4L file created when saving Data and Settings to Internal flash memory on the instrument or to a USB memory device (recommended 2GB maximum storage capacity).

The three types of N4L file are:

- **Program Files (PPA_C***.N4L):** File contains configuration information (1024 bytes) and is used to save configuration settings so that they can be re-entered into the instrument or another instrument. These files should not be modified or exported to .txt format. N4ldlog software will not work with these types of file.
- **Result Files (PPA_R***.N4L):** File contains configuration information (1024 bytes) along with stored results. They are normally accompanied by a corresponding “.txt” file that contains the results in ASCII format. The contents of the “.txt” file are in a viewable format so the use of N4ldlog software is not necessary for result files.
- **Datalog Files (PPA_D***.N4L):** File contains configuration information (1024 bytes) along with stored datalog results. Datalog files are normally accompanied by a “.txt” file. The exception to this is when a datalog is stored directly to a USB memory stick; this method does not create the “.txt” file. Instead, the text file can be created by recalling the datalog into the instrument and saving it again to the USB memory stick or by using the N4ldlog software with the originally created N4L file.

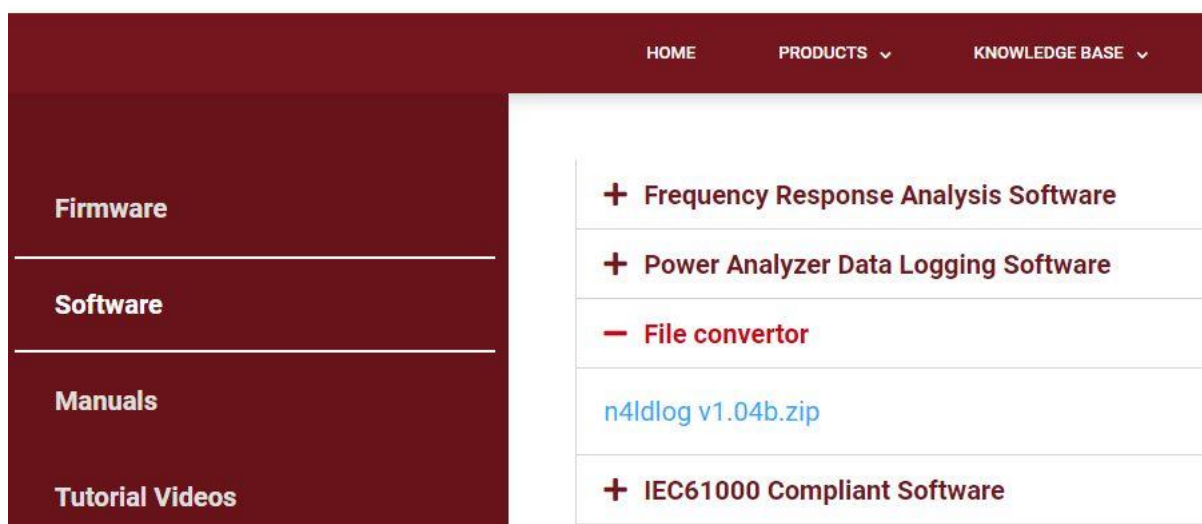
Using N4ldlog Software to convert N4L Datalog Files.

When a Datalog is performed on a PPA with the results saved directly to a memory stick the following type of file is created:

PPA_D008.N4L

This file can be used to load the Datalog details back into a PPA but the code in the file needs to be converted to a text file before the Datalog results can be viewed other than on a PPA. N4ldlog software should be used to convert the N4L file to a viewable text file.

The software is free of charge and can be downloaded from the Support Section of the N4L website. You will need to register on the website if you have not done so already. Click on Support to display the N4L Resources page. See screenshot below:



Click on “Software” and then “File Converter”. Click on the **N4ldlog.zip** file to download the software.

Once downloaded the zip file should be unzipped. It is best to save it to the desktop to make access easier.

Note: The N4L file can be saved where the user prefers but it is important to know that the text file that is created will be saved to the same location / folder on the PC or attached memory device. In this example the N4ldlog software and the **PPA_D008.N4L** file were saved on the desktop:

N4Ldlog - User Guide	Sep 2024	Doc ref: D000723_1
Newtons4th Ltd 1 Bede Island Road Leicester LE2 7EA UK		Tel: +44 (0)116 2301066



Click on the N4L file and drag it over the icon for the N4ldlog software.



Release the key when the “Open with n4ldlog.exe” message appears.

The N4ldlog software window will open and start updating:

```

C:\Users\Kenneth\Desktop\n4ldlog.exe

Newtons4th Ltd datalog file conversion program v1.04b

Processing file:      C:\Users\Kenneth\Desktop\PPA_D008.N4L
into output file:    C:\Users\Kenneth\Desktop\PPA_D008.txt

Instrument Type:  PPA55
Autodetect number of records
5 values per record
5240600 values per phase
5240608 phases per record

Analysing datalog file
  Unpacking record 1 from .N4L file
  Unpacking record 2 from .N4L file
  Unpacking record 3 from .N4L file
  Unpacking record 4 from .N4L file
  Unpacking record 5 from .N4L file
  Unpacking record 6 from .N4L file
  Unpacking record 7 from .N4L file
  Unpacking record 8 from .N4L file
  Unpacking record 9 from .N4L file
  Unpacking record 10 from .N4L file
10 records processed

Operation complete

```

This example was a very short Datalog so that all of the contents of the software window can be seen. You can see that this example only contained 10 records.

If the operation was completed successfully an “Operation Complete” message is seen in the software window.

This will create a Datalog text file of the same name in the location where the N4L file is saved.

This is a screenshot of the contents of the text file created by the above conversion operation:

PPA_D008.TXT - Notepad

	TIME (S)	val 1 Ph 1	val 2 Ph 1	val 3 Ph 1	val 4 Ph 1
1,	+0.0000E+000,	+9.4644E+000,	+2.3269E+002,	+3.8510E-001,	+5.0000E+001
2,	+1.1180E+000,	+9.6139E+000,	+2.3345E+002,	+3.8505E-001,	+5.0000E+001
3,	+3.0130E+000,	+5.1082E+000,	+2.5222E+002,	+3.7168E-001,	+5.0000E+001
4,	+4.1330E+000,	+4.9112E+000,	+2.5215E+002,	+3.7181E-001,	+5.0000E+001
5,	+5.2530E+000,	+4.4505E+000,	+2.5255E+002,	+3.7035E-001,	+5.0000E+001
6,	+6.3730E+000,	+4.0025E+000,	+2.5256E+002,	+3.7088E-001,	+5.0000E+001
7,	+7.4930E+000,	+4.1973E+000,	+2.5271E+002,	+3.7026E-001,	+5.0000E+001
8,	+8.6130E+000,	+2.6328E+000,	+2.5439E+002,	+3.7311E-001,	+5.0000E+001
9,	+9.7330E+000,	+2.3872E+000,	+2.5473E+002,	+3.7227E-001,	+5.0000E+001
10,	+1.0853E+001,	+2.4475E+000,	+2.5535E+002,	+3.7160E-001,	+5.0000E+001

The contents can then be imported into Excel etc. for further processing or included in a report etc.