

# Condmaster® Ruby 2014 Upgrade Benefits

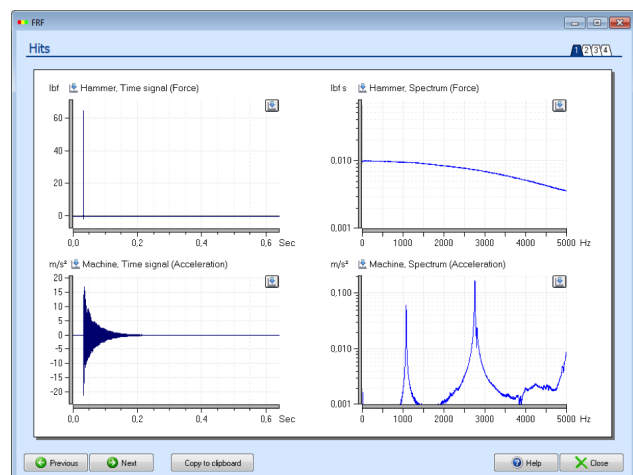
The Condmaster Ruby 2014 Edition of the comprehensive condition monitoring and predictive maintenance program provides support for the new functions in the powerful vibration analysis package of the Leonova instruments and installs in 32 and 64-bit versions by default. Below is an outline of the most notable news in Condmaster Ruby 2014 Edition.

## Support for Leonova Diamond and Leonova Emerald

Condmaster Ruby 2014 Edition comes with added functionality to support new functions in the portable instruments Leonova Diamond and Leonova Emerald and their new IS (Intrinsically Safe) versions.

- The Leonova instruments now have the capacity to **execute multiple measuring assignments in parallel**, thus enabling users of Condmaster Ruby 2014 to create measuring rounds with greater efficiency and maintained measurement accuracy.

- **Frequency Response Function (FRF)** is a function available with the portable instrument Leonova Diamond and used to measure the vibration response (natural frequencies) of a machine structure, similar to the 'Bump test'. FRF however is more sophisticated, measuring the response resulting from a known applied input by using an impact hammer and a vibration transducer. The FRF measuring assignment is set up in Leonova Diamond and after the measuring round is uploaded, the settings and measuring results can be viewed in Condmaster. The spectrums can also be exported as .txt or .uff files and analyzed in other software.



- **Cepstrum analysis** is especially useful for detection and analysis of bearing vibrations and gear faults in gearboxes. Its strength is finding periodic components and repeated patterns in a time signal, which can be difficult to find in other types of spectra. Cepstrum is the forward Fourier transform of a logarithmic spectrum ('a spectrum of a spectrum'). Thus, while a frequency spectrum or FFT reveals the periodicity of a signal in the time domain, the cepstrum reveals the periodicity of a spectrum. In the cepstrum, overlapping sets of sidebands or harmonics will be separated, much like the spectrum separates repetitive time patterns in the waveform.

- **Shaft Centerline Plot** is a function available with the portable instrument Leonova Diamond. The plot, which can be viewed and exported from Condmaster Ruby 2014, displays changes in radial rotor position over a range of speed and is especially useful for assessment of lubrication during start-up of a machine with journal bearings.

## 64-bit version

As of Condmaster Ruby 2014 Edition, users have the freedom to choose between running a 32-bit or 64-bit version of the software; both are included in the license and installed by default, providing maximum flexibility for all users. The 64-bit version is designed to make optimal use of the computer's internal memory, which in turn typically increases overall program performance. This is noticeable when working with Condmaster graphics functions such as the Coloured Spectrum Overview, which can now manage an increased number of measuring results.

## Coloured Spectrum Overview enhancement

For both the 32-bit and 64-bit Condmaster Ruby 2014 versions, optimized data retrieval processes further enhance performance and display of graphic data in the Coloured Spectrum Overview.

## Universal File Format export feature

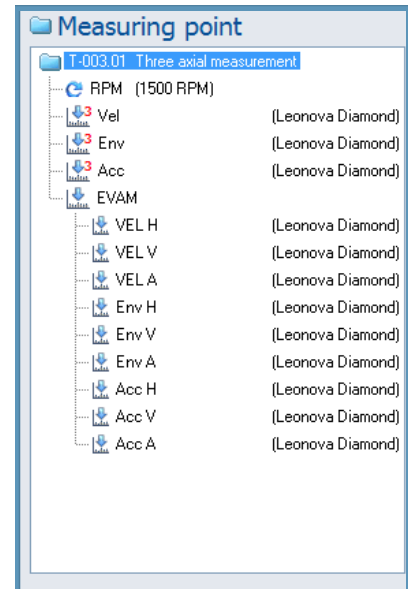
Spectrums and time signals can now be exported also as .uff (Universal File Format) files for further analysis in for instance ME'scope, MatLab or LabVIEW.

## Multiple two and three-channel measurements per measuring point

Condmaster Ruby 2014 Edition offers the possibility to set up several two or three-channel vibration measuring assignments per measuring point, providing the possibility to use more measuring techniques, in two or three directions or positions. Leonova Diamond has two and three-channel capabilities, while the Intellinova Standard online system handles two-channel vibration measuring assignments.

## Server and view-only licenses

Through the introduction of a new license registration procedure for the software, it is now possible to register and use view-only, free-of-charge licenses of Condmaster Ruby 2014 Edition. The view-only license(s) are included in a full-use license and enable users to access contents in Condmaster for viewing only, to enter comments in comment fields, and to download/upload measuring rounds. To enable remote access to Condmaster Ruby 2014 Edition (such as for support purposes), a server license running under the Windows Server operating system is also included.



## Features for the Intellinova online system

Condmaster Ruby 2014 Edition supports the installation of multiple LinX instances on a single computer for the Intellinova online system. It also offers the possibility to set up email alerts to be sent to selected recipient(s) when Condmaster Ruby has not received new measuring results from Intellinova in a given period of time.

## Upgrading

The upgrade process is straightforward. Condmaster Ruby 2014 Edition is backwards compatible and users of Condmaster Ruby 2012 or earlier versions install a single user or network version of Condmaster Ruby 2014 Edition, then transfer the contents of the old Condmaster database using a safety copy of that database. Complete instructions can be found in the Condmaster Ruby installation manual (72008).

## System requirements

- Windows 8, 7, XP or Vista
- 1 GHz 32-bit (x86) or 64 bit (x64) processor
- 1 GB of RAM memory
- 40 GB hard disk with at least 15 GB available space
- 128 MB of graphics memory
- Microsoft SQL Server 7.0 or later

For more information, please visit [spminstrument.com/products/condmaster/](http://spminstrument.com/products/condmaster/).

