

Nebula Explained Professional



Nebula is famous for its amazing emulations of classic studio gear, but up until now it has been very hard work for the average user to get the most out of it.

Nebula uses unique and complex technology that has previously been understood by only a small number of dedicated computer audio geeks. Now at last this information is available for everyone in plain English!

Professional is the full version of the course and contains all the detailed information about using Nebula that the professional user demands. It contains all the lectures included in Starter and builds on this to provide all the specialist knowledge to transform your way of working with Nebula and the results you can achieve

The course is comprised of 22 lectures and will take approximately 2.5 hours to finish, and by the time you have completed it you will learn:

In the **Welcome To the World of Nebula** Section:

- How Nebula's brute force emulation works and what it can and can't achieve
- The different ways that Nebula can sample hardware and why we would use each of them
- An overview of sampling using Nebula's NAT sampling software
- How convolution impulse responses are used in reverb emulation
- How sampling with Nebula differs from standard convolution
- What the 'dynamic dimension' is and how Nebula can sample it
- The limitations of Nebula's technology

In the **Installation & Setup** Section:

- The difference between the 'Nebula' and 'Nebula Reverb' versions of the plug-in and which version you should be using
- How to install and delete Nebula libraries easily
- How Nebula's latency settings affect its sound and performance
- How to Locate and edit the plug-ins XML files to customize your install
- How to create multiple versions of the plug-in with different latencies
- How to create alternative directories to store your Nebula libraries
- How to add meaningful names to the default 3 character categories
- How to add the ability to use TIMED kernels
- How to adjust compressor look ahead time with AHEADLENGTH

In the **Graphic User Interface** Section:

- How to easily change GUI parameters using buttons, sliders, keyboard input and the modifier keys

- How to save a Program with a new name and change its category
- All about RTE, The Flashing 'T', KERNELS:, MONO-L / STEREO and SPLITH / CLASSIC mode
- About what the exact difference is between the FREQD and TIMED modes
- About the kernel control grid and how SPLITH Works
- About using an analyser and turning distortion kernels on and off
- About what EVERY parameters on the global MAST page does in detail

In the **Mixing With Nebula** Section:

- The basics of gain staging and understand how important it is in relation to Nebula
- What good gain staging looks like
- What exactly dBFS, RMS and dBu are
- Why use -18dBFS instead of -20dBFS or another similar value
- About using the 'magic' formula and measuring -18dBFS accurately using a free insert channel plug-in
- About the accuracy and usability of Nebula's emulations
- About how the core technology is used in preamps/consolos, EQ, reverb and compressors
- About each category of program including examples of hardware types sampled, the general uses of each category and a review of their accuracy and usability

Every lecture starts by telling you exactly what you will learn in the lecture and ends with a detailed summary. These summaries are available as PDF files for you to download and print out. At the end of each section there are multiple choice questions to help consolidate your learning.

As an extra special bonus there is a full audio interview with Giancarlo Del Sordo (the creator of Nebula) included.

Enrol now and take your Nebula knowledge to the next level!

Syllabus

Section 1: Welcome To The World Of Nebula

Lecture 1: What Is Nebula and How is it Different From Other Plug-ins?

- What type of plug-in Nebula is and what it can do
- What types of hardware Nebula can and can't emulate
- How Nebula can manipulate samples to make brand new effects
- How 'simplified computer model' based emulation has evolved over the last 12 years
- The difference between 'brute force' emulation and 'simplified computer models'

Lecture 2: How Does Sampling And Playback In Nebula Actually Work?

- The different ways that Nebula can sample hardware and why we would use each of them
- An overview of sampling using Nebula's NAT sampling software

Lecture 3: How Does Nebula's Volterra Kernel Sampling Compare To Impulse Response Sampling?

- How convolution impulse responses are used in reverb emulation
- How sampling with Nebula differs from standard convolution
- What the 'dynamic dimension' is and how Nebula can sample it
- How the 'dynamic dimension' exists in hardware other than reverbs
- In introduction to Nebula's distortion capabilities

Lecture 4: Conclusion: Can Nebula Make A Perfect Emulation?

- The difference between the real world and digital technology
- The demands placed on hardware to make more realistic emulations
- The limitations of Nebula's technology

Section 2: Installation & Set-up

Lecture 5: Installing Nebula

- The difference between 32 bit and 64 bit Nebula
- Looking at what files to download on the Acustica website and general advice on installation
- The difference between Nebula 3 and Nebula 3 Reverb?

Lecture 6: Installing & Deleting Nebula Libraries

- What exactly a Nebula library is
- What a Program and Vector is
- Installing a Nebula library using LibraryInstaller.exe and by hand
- Deleting a Nebula library or Program by hand

Lecture 7: Testing Nebula's RAM Use

- The difference between 32 and 64 bit versions of Nebula
- Measuring RAM use inside a project to estimate our RAM needs

Lecture 8: Basic Set-up

- Making some basic and important changes to Nebula's default set-up
- Switching to GURU mode to enable us to make those changes
- Understanding how Nebula's latency settings effects sound and performance
- Changing Nebula's latency from within the GUI

Lecture 9: Advanced Set-up

- Locating and editing the plug-ins XML files to enable making the changes suggested in this lecture
- Creating multiple versions of the plug-in with different latencies
- Adding alternative directories to store your nebula libraries
- Adding meaningful names to the default 3 character categories
- Adding the ability to use TIMED kernels
- Adjust compressor look ahead time with AHEADLENGTH
- Silence Nebula's output at a chosen level

Section 3: The Graphic User Interface

Lecture 10: Changing Parameters & The Basic GUI Layout

- Changing parameters using buttons, sliders and keyboard input
- Using modifier keys
- A basic overview of the GUI

Lecture 11: The PROG Page & Program Browser

- Using the program browser
- Going into detail on every parameter on the PROG page

Lecture 12: Saving a Program and Changing its Category

- Saving a Program with a new name

- Changing its Category

Lecture 13: The KERN Page

- RTE
- The Flashing 'T'
- KERNELS:
- MONO-L / STEREO

Lecture 14: FREQD, TIMED Modes and the Kernel Control Grid

- SPLITH / CLASSIC mode
- What are the FREQD and TIMED Modes?
- The kernel control grid and how SPLITH Works
- Using an analyser and turning distortion kernels on and off

Lecture 15: The MAST Page

- Details about what each of the parameters on the global MAST page does

Lecture 16: The MIDI & DISK Page

- How to set-up Nebula's MIDI learn so you can control it with any MIDI controller
- Every parameter on the DISK page

Section 4: Mixing With Nebula

Lecture 17: Gain Staging Basics

- The basic concepts of gain staging
- What signal to noise ratio and headroom are
- What happens if we record audio too low or too high

Lecture 18: Gain Staging Nebula - Dynamic Layers & Distortion

- Why is gain staging so important for Nebula?
- Nebula's dynamic layers

- The optimum input volume to Nebula and controlling the level of distortion

Lecture 19: Understanding The -18dBFS Rule

- What good gain staging looks like
- What is dBFS?
- What is RMS?
- What is dBu?
- Why -18dBFS instead of -20dBFS or another similar value?

Lecture 20: Using The -18dBFS Rule

- Using the 'magic' formula
- How to measure -18dBFS accurately using a free insert channel plug-in
- Looking at an example of using a soft synth with -18dBFS gain staging

Lecture 21: Understanding and Using Nebula's Libraries

- The accuracy and usability of Nebula's emulations
- How the core Nebula technologies are used in different categories of program
- An example of dynamic layers and distortion in a Nebula spring reverb emulation

Lecture 22: The Different Categories of Nebula's Libraries

- Preamps/consolos, EQ, reverb and compressors
- The core technology used in sampling each category
- An overview of each category
- Examples of hardware types sampled
- General uses of each category
- Accuracy and usability of each category