

# Neo DynaMaster

Full-Featured, Multi-Purpose Stereo Dual Dynamics

Processor with Modelling Engine



Developed by



## Operational Manual

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## Important! Limitations on Demo Version

1. A 0.5 second audio dropout occurs every 30 seconds
2. The following features are inactive in the Demo; SideChain and Auto Release

## Install Neo DynaMaster **\*\*CK: we could make installers for these\*\***

Neo DynaMaster is provided as a zip package. After downloaded it

1. Unzip it
2. Copy it to your VST folder. Please note, the location of the VST folder is specific to your DAW/Host.
3. The AU version must be copied into the “Library/Audio/Plug-Ins/Components/ “ folder

## Purchasing Neo DynaMaster

There are two ways to purchase Neo DynaMaster

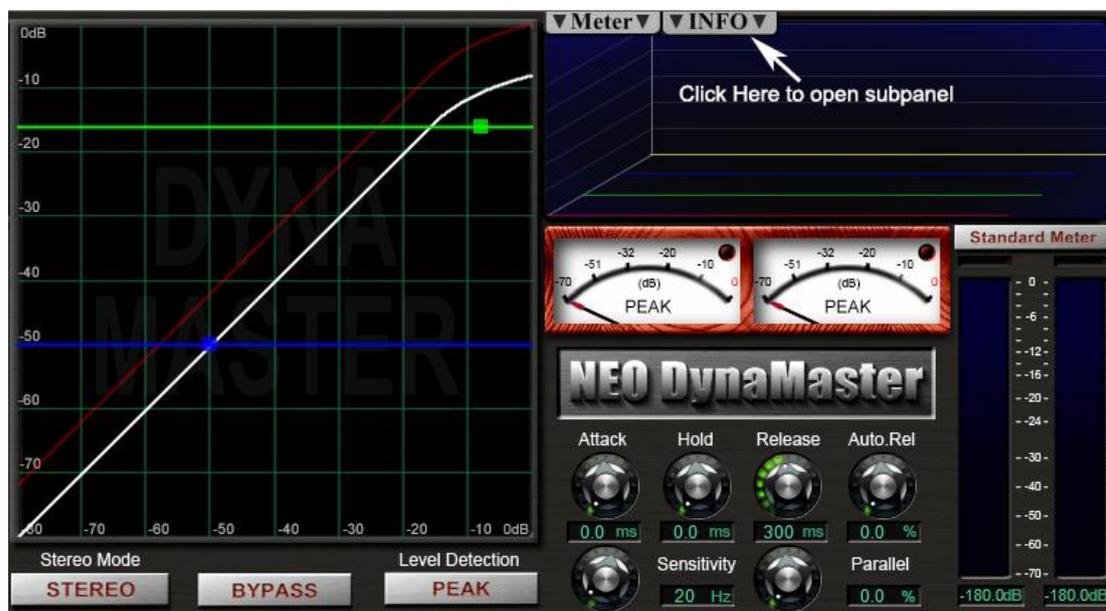
1. In the demo version, when you first load the plugin, the info page will be displayed and there is a ‘Buy Now’ button, you can pay by clicking the button and it will take you to the PayPal page if you are connected to the internet.
2. Go to our website, <http://www.supremepiano.com/product/neodyna.html>  
Click the ‘buy now’ button to go to PayPal page.

## Register Neo DynaMaster

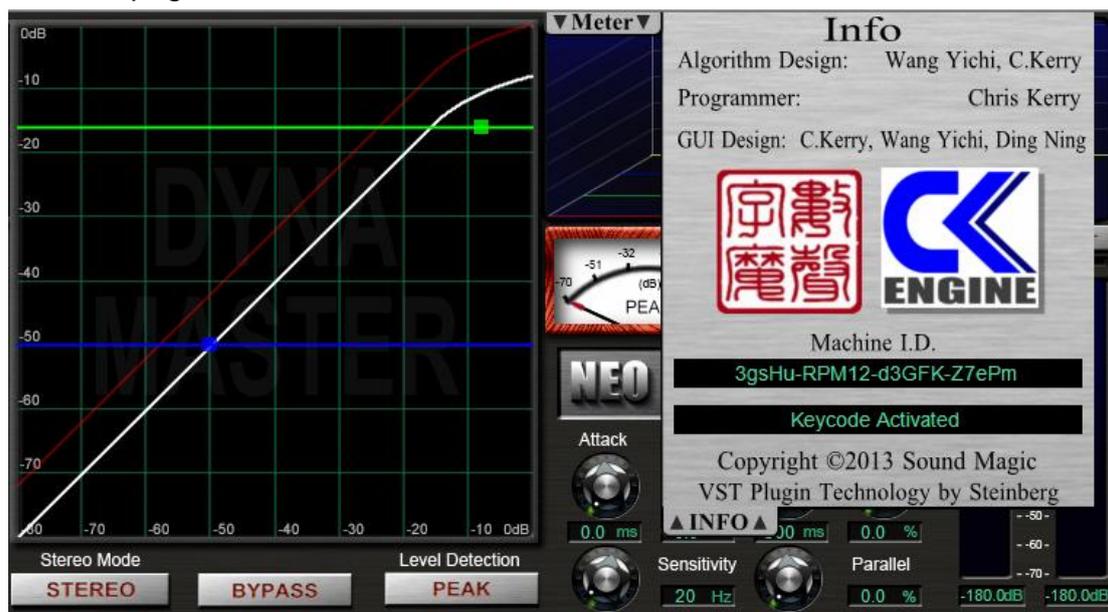
Neo DynaMaster must be registered before it can operate or Neo DynaMaster will be bypassed.

You can complete the registration by the following steps

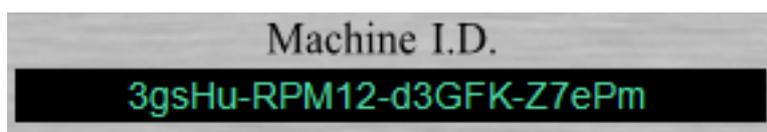
If you are not registered, the info page will show each time you load DynaMaster. If you need to open the info page, simply click the ‘INFO’ tab as shown.



The Info page is shown below

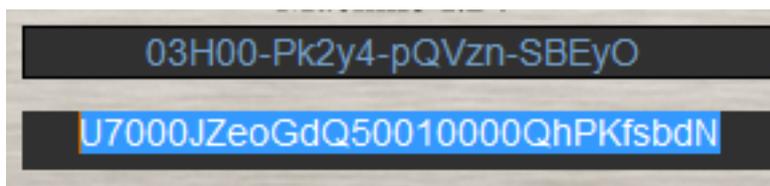


Click the text below Machine I.D. and copy the I.D.

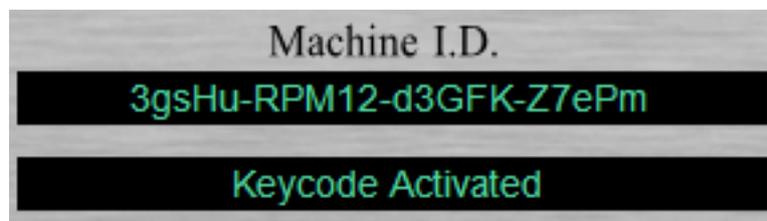


Paste the MachineID code into an email and send it to our customer service: support@soundemon.com

You will be sent a Keycode from our customer service, copy and paste this Keycode where it says “Enter Keycode Here”, as shown below



If the Keycode is valid, it will show “Keycode Activated” as below



If the text still shows “Enter Keycode Here”, that means there was a problem entering the Keycode. Copy the Keycode from the email again and be careful to copy the whole Keycode. If after several attempts it still fails to activate,

contact customer service for a new keycode (include your Machine ID code)

### **Dynamic Controls**

Neo DynaMaster features compression/limiting and expansion in one effect unit and allows you to shape more complex dynamic's curves than common compressors or dynamic processors. You will see two Thresholds, two Ratios and two Knees in the dynamics section.

**Compressor Threshold:** This is the level above which compression applies, ranging from 0dB to -80dB and is referred to as the 'Compressor Section'. The compressor threshold is always at or above the expander threshold. If you try to move the compressor threshold below the expander threshold, they will both move.

**Expander Threshold:** This is the level below which expansion applies, ranging from 0dB to -80dB and is referred to as the 'Expander Section'. The expander threshold is always at or below the compressor threshold. If you try to move expander threshold above the compression threshold, they will both move.

**Gain:** This sets the 'Make Up Gain', ranging from -24dB to +24dB

**Compression Ratio:** Ratio for the Compressor Section, ranging from 0.1 to 20. Values above 1.0 will reduce the dynamics and is commonly known as compression. Values below 1.0 will boost the dynamics and is known as upward expansion or inverse compression. Because we have two dynamics sections we refer to this simply as the Compression Ratio as it affects the Compression Section.

**Expansion Ratio:** Ratio for the Expander Section, ranging from 0.1 to 4. Values above 1.0 will boost the dynamics and is commonly known as expansion. Values below 1.0 will reduce the dynamics and is known as downward expansion or inverse expansion. Because we have two dynamic sections we refer to this simply as the Expansion Ratio as it affects the Expansion Section.

**Compression Knee:** This sets the response of the compressor above the threshold. This is a multi-function knob which combines Hard knee, Soft knee and Optical compression together. A value of 0.0 will be a linear response known as 'Hard Knee'. Values up to 50 provide a 'Soft Knee' response where 50 is the maximum 'Soft Knee'. Values above 50 provide an 'Optical Knee' response. You can dial in the ideal response to suit your requirements which will be shown on the display.

**Expansion Knee:** This sets the response of the expander below the threshold. This is a multi-function knob which combines Hard knee, Soft knee and Optical

compression together. A value of 0.0 will be a linear response known as 'Hard Knee'. Values up to 50 provide a 'Soft Knee' response where 50 is the maximum 'Soft Knee'. Values above 50 provide an 'Optical Knee' response. You can dial in the ideal response to suit your requirements which will be shown on the display.

**LookAhead:** LookAhead adds latency(delay) to the output signal. This is used for the Auto Release dynamic processing function to “predict” the correct release time.

LookAhead is also very useful for controlling transient signals when using Attack time. The Attack time sets the time taken for the compressor/expander to reach the appropriate Ratio. Attack settings above 0.0(ms) will allow transient signals to pass, adjusting the LookAhead time can control these transients. Setting the LookAhead time to the same time as the Attack time will prevent transients from exceeding the Ratio response curve and prevent clipping.

**Comp/Exp Window:** This window allows you to see and edit the compressor/expander response curves. This is essential if you want to really take full control of your dynamic range. The white line shows the response curve as it acts on the Input and the red line shows the Output response adjusted by the make-up gain. In this window, you can edit the Thresholds (click and drag the lines), Ratios (click in the response area and move up/down) and Knee (drag the Box left/right). All changes will also update the controls where you can also see the values.

**Attack:** Attack Time (ms), ranging from 0ms to 500ms.

**Hold:** Hold Time (ms), ranging from 0ms to 500ms.

**Release:** Release Time (ms), ranging from 0ms to 2000ms.

**Auto.Rel:** Auto Release Scale (0 to 100%). This sets the amount of Auto Release adjustment. The system, in conjunction with LookAhead, monitors the signal and modifies the Release time accordingly.

**Parallel:** Sets the amount of Parallel Compression or New York Compression. A value of 0% outputs only the processed sound. A value of 100% outputs only the Dry sound. A value of 50% outputs an equal mix of Processed and Dry sound.

**Sensitivity:** In [PEAK] mode this new custom designed innovative feature allows you to set the compressor metering sensitivity response while still retaining sample accurate transient detection, providing a more stable

compressor metering signal than other systems and eliminates audible level modulation artefacts.

Frequencies above this setting are virtually unaffected by modulation distortion (THD: -122dB).

Frequencies below this setting are liable to (waveform) distortion; this can be useful for adding distortion effects to Bass and Kick Drum sounds etc.

In [RMS] mode this sets the RMS sensitivity (time). RMS removes transients from the Compressor metering signal to allow transients to pass while controlling average Programme Level.

[RMS] mode is normally used with a low/slow sensitivity setting to smooth out transient signals from the metered output.

Sensitivity sets the response time of [RMS] to changes in the Programme level. High/fast sensitivity settings in [RMS] mode will cause level modulation and is provided for compression waveform distortion FX.

### **Metering System**

Neo DynaMaster features a multi-purpose metering system which provides detailed information in real time. By using this metering system, users can have very detailed information about the dynamic and can quickly find their preference setting. By utilizing K-System, users also can find the right loudness for their usage.

**Meter System:** You can select different metering scales for the Bar Meters here. You can select from “Standard”, “K12”, “K14” and K20; each meter type suits a particular field, e.g. K12 is used in broadcasting studios.

**Volt Meters/Needle Meters:** You can see the wooden volt meters. Blue is the Input and Red is the output. Also Overload Led will light if either of them clip.

**Meter Panel:** Click the ‘Meter’ tab to open the meter settings panel. The following options are available on the Meter panel.

**Bar Meter Input:** Selects the input for Bar meters; you can select Input or Output.

**Scope 1:** Selects the input for scope 1, you can choose from; Input L, Input R, Output L, Output R, SideChain L, SideChain R.

**Scope 2:** Selects the input for scope 2.

**Scope 3:** Selects the input for scope 3.

**Scope 4:** Selects the input for scope 4.

**INFO Panel:** Click the 'Info' tab to open the Info panel. From this panel you can enter your Activation Keycode, locate your Machine ID, and visit the Sound Magic website by clicking on the red Chinese logo. This panel will appear automatically until you enter a valid Activation Keycode.

### **Buttons**

**Bypass:** You can use this bypass button to perform A/B sound comparisons. When this button is on, it will flash to indicate the sound is Bypassed.

**Stereo Mode:** Selects different processing modes:

**Stereo:** Processes the input signal. This is the standard mode.

**M/S Middle:** Only processes the Middle part of the M/S(Mono/Side) signal. This processing method is often useful in mastering.

**Sidechain:** In this mode, Dynamics processing will be based on the level of the sidechain signal.

Different hosts handle sidechain signals differently, please read the reference on page for more information.

**Level Detection:** Selects Peak or RMS compressor metering.

### **EQ Window**

Neo DynaMaster provides a very flexible 3 band parametric EQ to shape the compressor metering signal to allow you to adapt the compressor frequency response.

Boosting increases the compressor response for those frequencies.

Cutting decreases the compressor response for those frequencies.

**EQ ON/OFF:** Click the button on the right of the EQ window to turn the EQ On or OFF.

### **Setting the EQ curve:**

Simply Left click and drag the boxes to alter the Frequency (left/right) and Gain (up,down), or Right click and drag to alter Width (left/right) and Gain (up,down). Frequency, Gain and Width values are displayed in the window during editing.

### **Presets:**

Neo DynaMaster provides presets to help you get started.

A brief description follows:

**Default Start:** This preset provides a good starting point as it is set as a standard compressor.

**Vocal:** These presets are designed to process Vocal tracks.

**Drums:** These presets are designed for Drums, Drum Kits and Percussion.

**Guitars:** These presets are designed specifically for Guitars.

**Expansion:** Examples for using the Expander section capabilities.

**Compressor:** Examples for using the Compressor section capabilities.

**Limiter:** These presets show how to set the compressor for Limiting.

**Maximiser:** Examples to show how to set up a Maximiser.

A maximiser increases sound density, energy and loudness while also preventing clipping and reducing the noise floor. Maximisers are commonly used for Dance music.

**Modelling Presets:** These presets provide close emulations of SSL4000, API2500, EMI TG124, EMI RS124, Tube-Tech CL-1B units.

Use these presets as your starting point to use emulated settings for your chosen unit.

## **How to use Neo DynaMaster to achieve better sound**

### **1. SideChain**

SideChain is a special feature that allows a different signal to affect the compression of the main sound.

Different Hosts have different methods of setting sidechain signals.

Neo DynaMaster has 2 stereo inputs. The first stereo input is the main audio signal. The second stereo input is the sidechain signal.

Depending on your Host you may see 2 stereo inputs or 4 mono inputs.

Setting SideChain signals in Cubase

Insert a group track set to Quad, not stereo. Then insert Neo DynaMaster as an insert effect for the group track.

### **2. Optical Compression**

Optical Compression is considered as a natural sounding compressor response for the vocals in most cases. Neo DynaMaster not only features optical compression curves, but also has optical expansion curves. If you want to use optical response curves, simply adjust the knee value over 50.

Neo DynaMaster is the first dynamics processor to feature optical expansion curves. It enables you to naturally boost soft musical passages while also reducing the noise floor. This is a really powerful feature that once you try it, you will wonder how you every lived without it!

### 3. Limiting

Limiting prevents signals exceeding a certain level, allowing you to minimise headroom and increase volume/loudness.

Neo DynaMaster can be set to Limiting by using the Maximum Compression Ratio and setting the Knee to 50. See the example presets provided.

### 4. Parallel Compression

Parallel compression, also known as New York compression, is a dynamic range compression technique used in sound recording and mixing. Parallel compression, a form of upward compression, is achieved by mixing the unprocessed 'dry' signal with a heavily compressed version of the same signal. Rather than bringing down the highest peaks for the purpose of dynamic range reduction, it reduces the dynamic range by bringing up the softest sounds, adding audible detail. It is most often used on stereo percussion buses in recording and mixdown, on electric bass, and on vocals in recording mixes and live concert mixes.

To apply Parallel Compression, simply adjust the Parallel control. The Default setting is 0 which is no parallel compression.

### 5. Modelling Engine

Neo DynaMaster features modelling to enable it to simulate other vintage compressors. This engine consists of internal complex math parameters which are not available from the GUI, however, for advanced users they are available through the Automation window.

To use the modelling features you should use the specific presets SSL4000, API2500, EMI TG124, EMI RS124, Tube-Tech CL-1B as your starting point. More vintage modelled presets will be available in the near future.