



DYN 3000 NATIVE / DYN 3000-DT

Midas-Powered High-End Dynamics Channel Plug-In with Optional Hardware Desktop Controller

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EN Important Safety Instructions



Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock.

Use only high-quality professional speaker cables with ¼" TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.



Caution

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



Caution

These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Use only attachments/accessories specified by the manufacturer.



12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid

injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.

16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.



17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product

should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.

18. Do not install in a confined space, such as a book case or similar unit.

19. Do not place naked flame sources, such as lighted candles, on the apparatus.

20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed-of at a battery collection point.

21. This apparatus may be used in tropical and moderate climates up to 45°C.

LEGAL DISCLAIMER

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LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at musictribe.com/warranty.

1. Introduction

Congratulations on the purchase of your TC Electronic DYN 3000.

The DYN 3000 Compressor/Gate plug-in is part of the Icon Series of plug-ins. In combination with an optional dedicated Desktop Controller, it takes mixing audio to a new level.

The DYN 3000 is a truly versatile compressor and gate effect for both channel, bus, and master operation, based on the Midas Heritage consoles. Its class-leading dynamics processing is acclaimed for its rich, warm sonic performance and flexibility.

The compressor features four different content and use dedicated types:

- Adaptive
- Corrective
- Creative
- Vintage

These, in combination with the unique Presence and Parallel compression, and the flexible sidechain filtering, make the DYN 3000 second to none in dynamics processing.

The Gate adds noise suppression, envelope capabilities, and level control, through three available types:

- Normal
- Transient
- Ducker

To assist in the delicate mixing process, the DYN 3000 also features:

- Scrolling History of signal and Gain reduction
- Constant-Q Real-Time Analyzer for sidechannel signal investigation

Midas

The DYN 3000 builds upon the long heritage and experience of Midas live sound mixing consoles. It is designed for the modern-day studio sound engineer without compromise.

For decades, Midas has been a driving force in the world of pro audio. Building on the incredible success of the analog flagship Heritage 3000, the ground-breaking digital XL8 and PRO Series with their exemplary audio performance and proven technology, the Midas PRO Series became the gold standard in concert touring and installed live sound. Offering the same outstanding sample-synchronized and phase-coherent audio performance, interpolated control functions and intuitive navigation, the PRO1, PRO2, PRO3, PRO6, PRO9 and later the PRO-X Live Audio Systems, have become one of the industry's main choices for live sound mixing.

The introduction of the DYN 3000 plug-in is aligned with the introduction of the next generation Midas live mixing console: the HD96-24. For the first time, the Midas sound is available for the modern computer based studios and live sound setups.

The DYN 3000 has impressive 64-bit floating point processing, and up to 192 kHz sampling frequency, providing exemplary quality audio processing. The combination of the True Analog feel of the user controls, the informative Dynamics Views in the Plug-in or on the Desktop Controller, all result in the smooth continuous response and immediacy of working on an analog console.

The DYN 3000 was designed with the main focus on speeding up your work flow and letting you concentrate on the mix. It allows simultaneous display and control of all the critical information required to craft an unprecedented mix experience.

About this manual

Read this manual to learn how to install and use your TC Electronic DYN 3000 Compressor/Gate. This manual is only available in PDF format from the TC Electronic website.

To get the most from this manual, please read it from start to finish, or you may miss important information.

To download the most current version of this manual, visit the web page:

www.tcelectronic.com/Categories/c/Tcelectronic/Downloads

If you still have questions about your TC Electronic product after reading its manual, please get in touch with TC Support:

www.tcelectronic.com/brand/tcelectronic/support

2. Plug-in Installation

The combined DYN 3000 plug-in installer for both the NATIVE and DT Desktop Controller products can be downloaded from the following page:

www.tcelectronic.com/dyn3000-dt/support

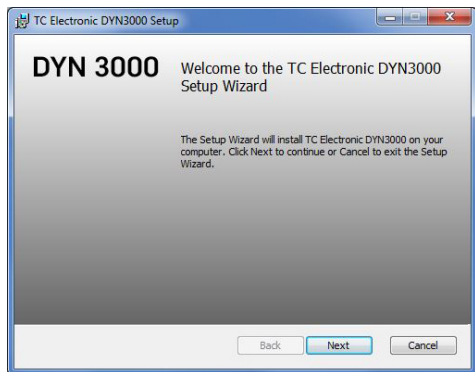
The DYN 3000 plug-in requires an active PACE iLok license to work. See Chapter 3.

Using the Desktop Controller is optional, and all parameters are available in the plug-in.

Save the installer file (.pkg or .msi file) in a convenient location on your hard drive.

2.1 Installation on a PC

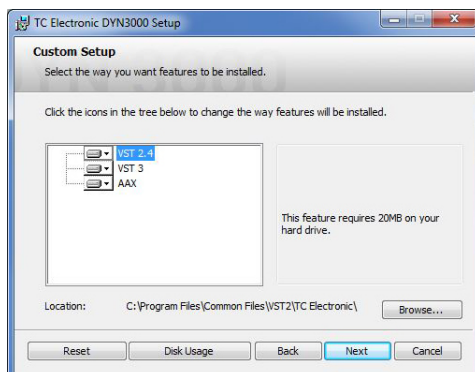
Double click the installer (.msi file). If you get a security warning, click 'Run'.



Accept the license agreement and click 'Next'.



Select which VST and/or AAX components you want to install. Pro Tools uses AAX and most other DAW programs use VST. The installer will offer a default location to save the file, but you can choose another location by clicking the 'Browse' button.



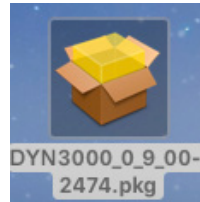
Click 'Next' to begin the installation. When installation is complete, click 'Finish'.

Note: If your DAW fails to detect the newly-installed plugin, this can often be fixed by adding the following paths to the Plug-in Manager (or similar) of the DAW. The default paths on a PC are "C:\Program Files\Common Files\VST2" and "C:\Program Files\Common Files\VST3" for VST2 and VST3, respectively.

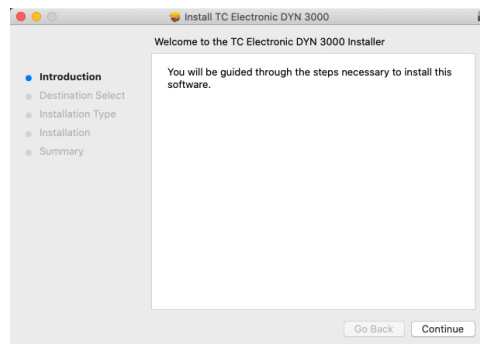
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2.2 Installation on a Mac

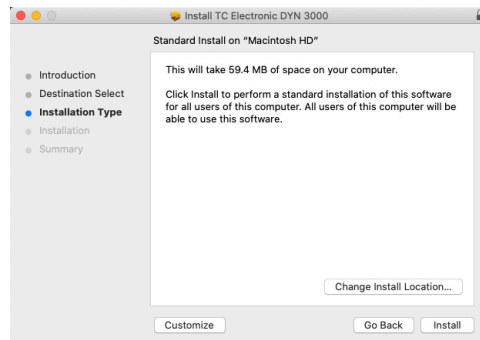
Double click the installer (.pkg) file.



Proceed through the prompts to begin installation.

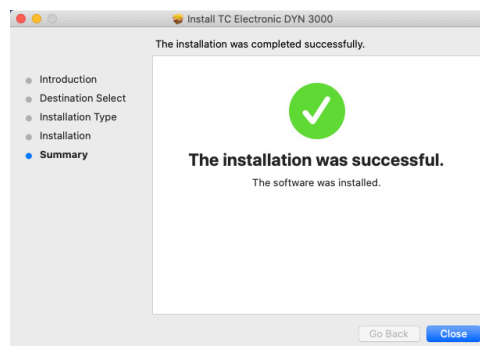


Click 'Continue.'



A default location will be selected for installation, or you can select another folder manually. If you have administrator authorization in place, you will need to enter your password before beginning installation.

Click 'Close' when done.



3. Activate your DYN 3000 iLok license

3.1 Activation when you have purchased the NATIVE version

Step 1: Install iLok

The first step is to create an iLok user account at www.iLok.com and install the PACE iLok License Manager on your computer if it's your first time using iLok.

Step 2: Activation

In the received mail (when buying the NATIVE version) or on the rear cover of the printed quick start guide (when you have bought the DT Desktop Controller version) you will find your personal Activation Code. To activate your software, please use the "Redeem an Activation Code" feature in the PACE iLok License Manager.



3.2 Get a Free Demo License

Make use of this hassle-free offer to try out our plug-ins before you buy.

- 14-Day Trial Period
- Fully Functional
- No Feature Limitations
- No Physical iLok Key Needed

Step 1: Install iLok

The first step is to create a free iLok user account at www.iLok.com and install the PACE iLok License Manager on your computer if it is your first time using iLok.

Step 2: Get your free license

Go to:

www.tcelectronic.com/brand/tcelectronic/free-trial-dyn3000-native

and enter your iLok User ID.

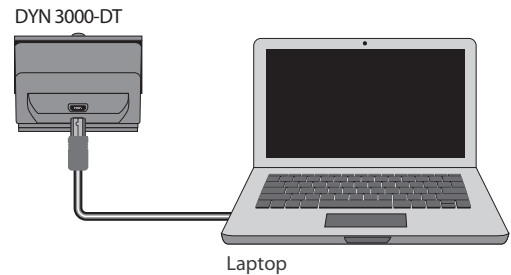
Step 3: Activation

Activate your software in the PACE iLok License Manager.

4. Connection and Setup

4.1 Connecting the DYN 3000-DT Desktop Controller (optional)

Getting the Desktop Controller up and running couldn't get any easier. Plug the included USB cable into the unit's rear micro-USB port, and connect the other end to a free USB port on your computer. The Desktop Controller is bus powered, so no other power cables are necessary, and no additional drivers need to be manually installed.



The Desktop Controller will light up upon successful connection. You can now apply the plug-in to a channel in your DAW to begin using the effect. This process may vary slightly depending on your software, but generally should require these steps:

- Select a channel or bus in your DAW to which you would like to add the effect. Access the mixer page where you should see a section dedicated to effect slots
- Open the menu where you can select from a list of effect types, which probably includes many stock plugins that are included with the DAW. There should be submenu to view general VST/AU/AAX options.
- The plug-in will likely be found in a dedicated TC Electronic folder. Select the DYN 3000 and it will now be added to the signal chain.

Double-click on the effect slot that contains the DYN 3000 to view the plug-in UI. There should be a green link icon at the bottom, and text that indicates successful connection between the plug-in and the Desktop Controller.

4.2 Operating the DYN 3000

After you have installed the plug-in, activated the iLok license, and optionally connected the DYN 3000-DT Desktop Controller via USB, you can begin inserting the plug-in to your tracks.

Adjustments to the effect are done in two ways. Either by using the plug-in user interface or by using the physical Desktop Controller.



4.3 Insert vs Aux Effect

The DYN 3000 is intended for insertion directly into an effect slot on a single channel, sub mix bus or master bus, which passes the entire signal through the effect.

Be careful if using DYN 3000 on an auxiliary bus, as mixing the output of DYN 3000 with the original track sound will potentially create a phasing issue depending on your DAW's ability to correctly compensate for latency in plug-ins.

4.4 Mono/Stereo Operation

The DYN 3000 is intended for Mono and Stereo use for both channel, submix bus and master bus operation.

For a Mono channel, the output signal is made by outputting the left plug-in channel only.

The DYN 3000 has separate sidechains for the compressor and the gate. Both can either be fed internally, or from the external input set up in the DAW.

4.5 Plug-in and Hardware Controls

After you have installed the plug-in, activated the iLok license, and optionally connected the DYN 3000-DT desktop controller hardware unit via USB, you can begin using it.

The controls of the plug-in and desktop controller are described in more detail later in this manual.

Plug-in User Interface:



Optional Desktop Controller Hardware Unit:



4.6 Connection Status to the Hardware Unit

The TC Icon family all use the same method to show the connection status between the plug-in and the hardware unit.

Connection status is indicated on the lower left side of the plug-in window. Successful connection is indicated with a green chain icon. The Tooltips area will show the plug-in instance name that the hardware unit is currently connected to. This is often the DAW channel name. If your DAW does not support this, you may enter a name for the instance. This may be especially convenient when using DAW project templates.



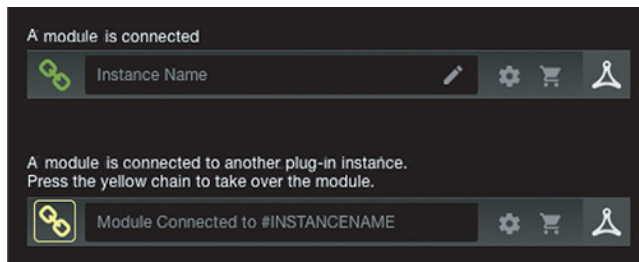
When using the NATIVE version only, this chain icon will remain grey:



If another instance of the plug-in already exists on another track, the chain icon will appear yellow, and the text box will notify you where the plug-in is currently active. Click the chain icon to connect the hardware unit to the new plug-in location.



To summarize the connection status possibilities:



Most DAWs offer the ability to move or drag plug-ins from one track/bus to another, and DYN 3000 supports this as well.

Most DAWs also feature an on/off switch for plug-ins, accessible inside the plug-in window and/or the track itself. Muting the plug-in will make the effect inaudible, but will not shut down the connection to the hardware unit.

5. User Interface

The DYN 3000 is controlled using the plug-in, or by using the optional hardware unit (when you have purchased the DT version).

Overview

The DYN 3000 includes the following features:

- Compressor and Gate
- Mono and Stereo use for both channel, submix bus and master bus operation
- 4 content and use-dedicated compressor types: Adaptive, Corrective, Creative and Vintage
- 3 individual Gate types: Normal, Transient, and Ducker
- Presence function and Parallel compression
- Flexible sidechain filter with internal and external input
- Scrolling History for signal and gain reduction overview
- Constant-Q Real-Time Analyzer for sidechannel investigation

Main View

The DYN 3000 consists of five elements; the input/output PPM at the right, the controls section at the bottom, the main view with Compressor and Gate static gain responses, gain reduction meters, and the sidechain view.

- Input/output PPM meters, 0 to -80 dB dBFS, +0 dBFS indication at the top
- Compressor static gain response, 0 to -60 dBFS, 12 second scrolling sidechain signal history, and gain reduction meter, 0 to -36 dB
- Gate static gain response, 0 to -80 dBFS, 8 second scrolling sidechain signal history, and gain reduction meter, 0 to -24 dB

- Sidechain filter views and Real-Time signal Spectrum
- Scrolling History can be enabled/disabled
- LISTEN outputs the sidechain signal of either the compressor or the gate
- Note: All details are greyed out in the display when the DYN 3000 is bypassed

Controls section

The controls section is where all the relevant parameters are located.

- Enable/disable Compressor or Gate by clicking the enable button/LED in the controls section
- Access the Compressor or Gate controls by using the headline/panes in the controls section or by clicking the filter handles in the sidechain view
- Adjust all controls of the Compressor and the Gate to your liking using the dials and buttons in the controls section
- The Parallel compression or Presence function is enabled using the enable button/LED. This is also great for A/B'ing the function

Sidechain Section

- There are two sidechain filter controls sections, one for the compressor and one for the gate. The view follows what is viewed in the left controls section. If the left section is showing the compressor main controls, then the sidechain will also show its compressor filter controls
- Enable/disable the sidechain filter for either the compressor or gate by clicking the enable button/LED next to the FREQ dial
- Adjust the frequency either by dragging the sidechain filter "handle" or by using the FREQ dial in the sidechain controls section
- Adjust the sidechain filter width/slope using Command + drag (Mac) / Ctrl + drag (Win) on the filter handle, or by using the selection button in the sidechain controls section



At the right hand edge:

- Input meters and Output meters with peak indicators

At the bottom left:

- Connection status "Chain" icon
- Connection status message and Tool Tips

At the bottom middle/right:

- Preset number, preset name, factory or user, favorite, preset up/down
- Setup
- Shopping cart

At the bottom right corner:

- User Interface size adjustment

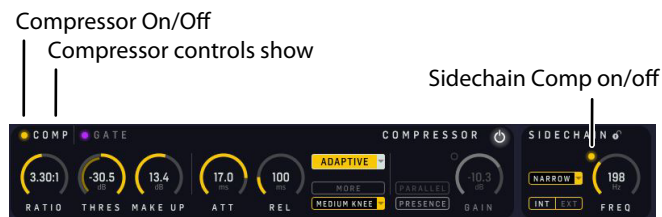
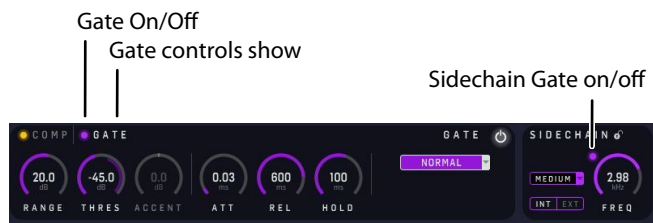
The controls and features are described in more detail below.

5.1 In/Bypass and Gate/Compressor on/off

Press the In/Bypass button to bypass or engage the DYN 3000. This makes it easy for you to listen and compare the overall effect of your work.

The Compressor and Gate may be turned on and off using their On/Off buttons as shown below. Click on the adjacent text to show the compressor or gate controls.

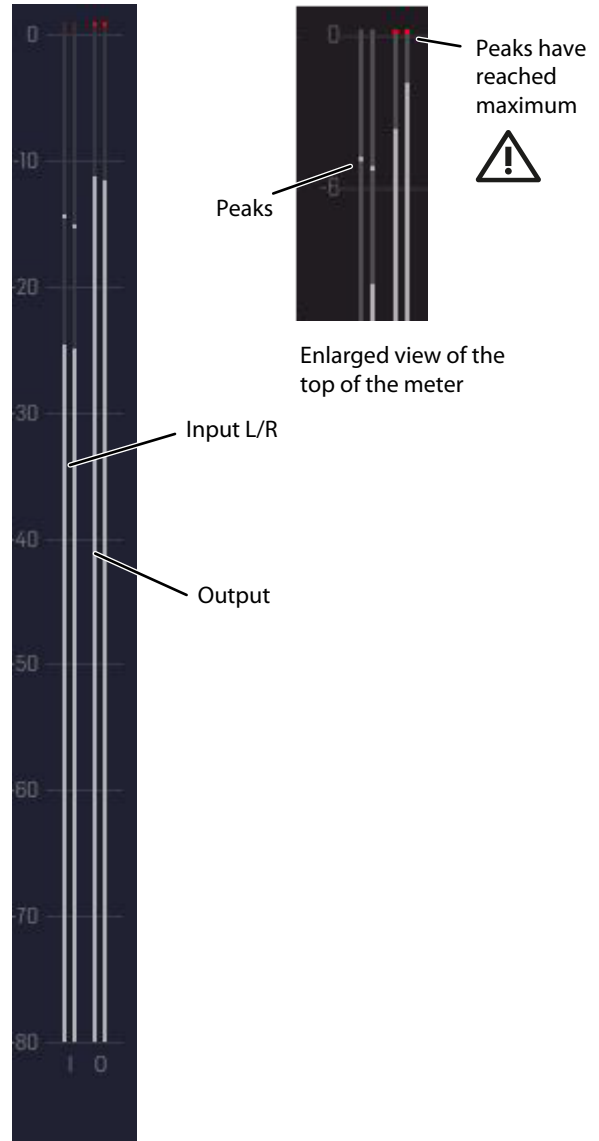
The sidechain view also has individual on/off buttons for the gate and compressor filters.



5.2 Meters

The PPM meters (Peak Program Meters) at the far right include a very accurate Peak-Hold function.

CAUTION: You must ensure that no peaks exceed 0dBFS. These peaks will be shown in red for a short time, before decaying. Keep an eye on them, and do something about it if you see them.



5.3 The DYN 3000 Compressor

The DYN 3000 is divided into two dynamic processor blocks: the compressor and gate. The GUI treats both blocks independently, highlighted by different colored controls: Purple for gate settings, and yellow, green, blue, or orange for compressor settings (depending on the compressor type).

Swapping between the compressor and gate can be done using the headline/panes in the controls section, or by clicking the filter handles in the sidechain view.

The sidechain features a swept band-pass filter, or a low-cut filter, which acts on the dynamic's sidechain of the compressor, and which covers the full audio spectrum. The sidechain LISTEN button, outputs the filtered sidechain signal, allowing the audio signal to be monitored.

Tip: Try compressing a bass guitar using a bass drum signal to trigger the sidechain of the compressor using the external sidechain input and signal routing in the DAW. This will let the bass drum cut through a mix a little more.

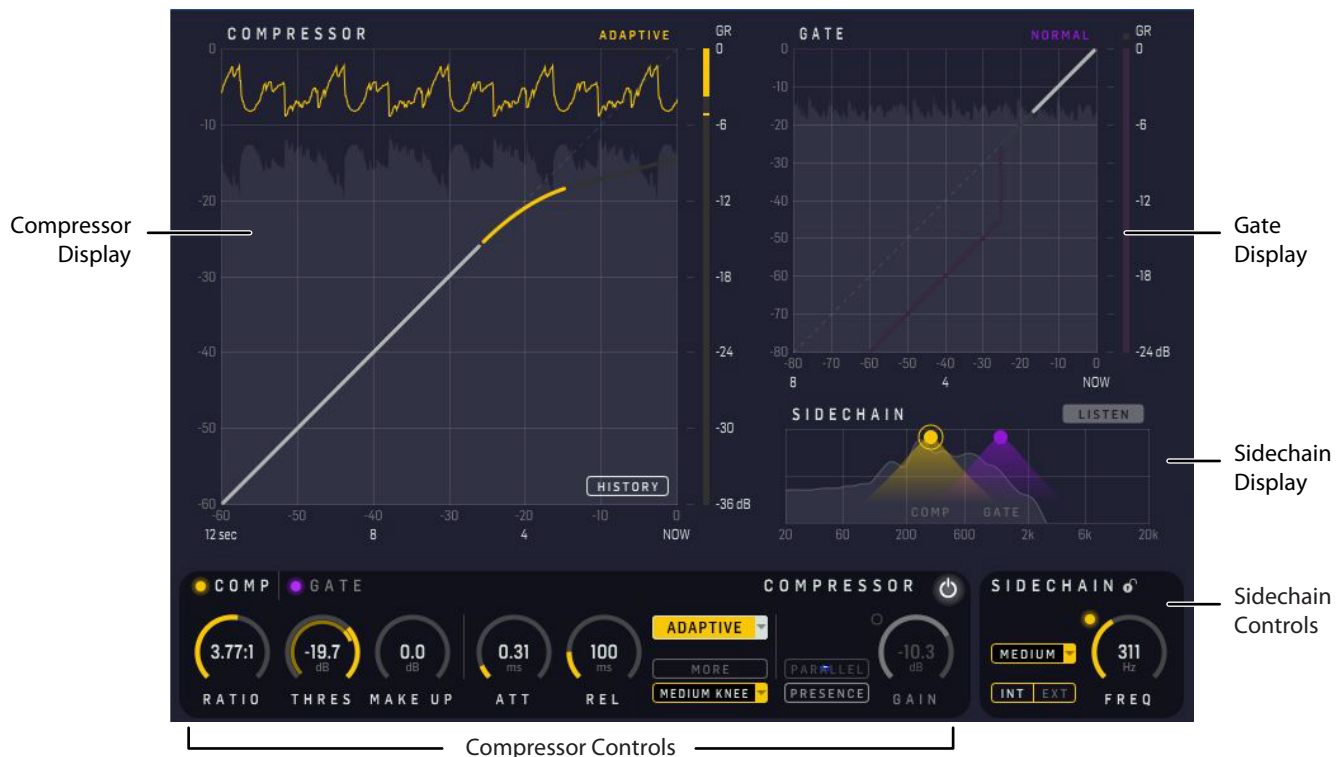
Parameters

- Enable button/LED - enables the compressor block in the signal path. When switched off, compressor is bypassed. (Both the comp and gate switches can be on at the same time.)
- Threshold - sets the signal level above which gain reduction starts to be applied. Range is from 0 dBFS to -60 dBFS
- Ratio - adjusts amount of compression applied to signals above threshold. Range is from infinity 1:1 to INF:1. When set to 10:1 or higher, the compressor acts somewhat as a limiter
- Attack - adjusts the time for the compressor to respond after an over-threshold signal. Range is from 0.2 ms to 40 ms
- Release - adjusts the time for compressor to recover after program material falls back below threshold. Range is from 0.05 s to 3.00 s
- Make-up gain - compensates for the reduced loudness of a compressed signal. Range is 0dB to +24dB

- Envelope Mode selection - selects compressor type. There are four compressor types available: Corrective, Adaptive, Creative and Vintage
- Knee Type - switches between three types of Knee settings, and this controls how the compressor starts to apply gain as the signal goes through the threshold. See Knee (below) for a description of the types
- MORE - adds to the legendary Midas sound set by the other settings including Envelope Mode (Compressor Type) in a unique and balanced way
- Parallel/Presence Enable button/LED - enables Presence or Parallel compression
- Presence button - presence feature. Brings presence back after heavy compression. The direct/dry signal is frequency range limited
- Parallel button - parallel/upward compression. The direct/dry signal is full frequency range
- Presence Gain - gain for the frequency range limited (presence) direct/dry signal. Range is from -30 dB to -3 dB
- Parallel Mix - wet/dry balance in parallel/upward compression. Direct/dry signal is full frequency range. Range is from 0 (dry, fully uncompressed) to 100% (wet, fully compressed)

Sidechain Parameters

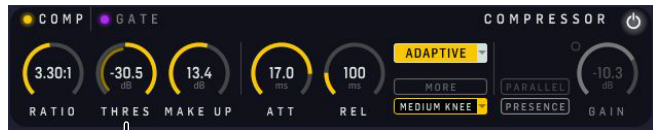
- Sidechain Int/Ext - selects internal or external (from DAW) sidechain
- Sidechain Filter Enable button/LED - enables compressor sidechain filter
- Sidechain filter type - select from: Low-cut filter: 6 or 12 dB/Octave. Band-pass filter: Wide, medium, or narrow (2, 1, and 0.3 Octave)
- Sidechain filter frequency - adjusts the sidechain filter frequency in the range 50 Hz to 15 kHz. (Visually, this moves the filter envelope on the graph left or right, rather like a spotlight on the RTA.)
- Sidechain Listen - to aid set up, the compressor has a sidechain Listen function that sends the filtered sidechain signal to the output. The Listen button illuminates to warn you that soloed material is from the filtered sidechain, and not the program channel



5.3.1 Threshold

The threshold adjusts the operating point of the compressor. Signals that go over this point, or over-threshold, will be affected by compressor action. Signals that stay below threshold will not trigger any compression although they may still be affected by compression releases from previous over-threshold signals.

Note: The Threshold control has a helpful display of the signal level on the inner ring, and the Threshold level on the outer ring. A highlighted overlap area on the inner ring indicates the amount of compressor action, where the input signal exceeds the Threshold level.



Threshold



5.3.4 Release

The release control adjusts the time the compressor takes to recover after the program material falls back below threshold. Both attack and release also respond to changes in program level that remain over-threshold. For example, a signal that reduces in level but remains above threshold will still trigger a release, but in this case it will only be a partial release - because the compressor will still be required to generate gain reduction, but now, as appropriate for the new lower signal level.



Release Time

5.3.5 Knee

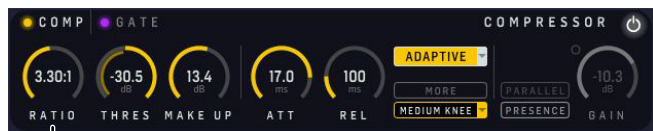
Most compression sounds more natural in soft knee mode. Soft knee compression blurs the distinction between over-threshold and under-threshold signals, such that signals that are a long way below threshold remain unaffected by compression, and signals that near the threshold get compressed, but at greatly reduced ratios. When signals are just over-threshold the compressor ratios are still somewhat reduced; it is only when signals go well over threshold that the full ratio compression is applied. When using a harder knee setting, the compressors operate in a more clinical way with a more defined transition between under-threshold and over-threshold; this is better suited to limiting style compression.



Knee Selection

5.3.2 Ratio

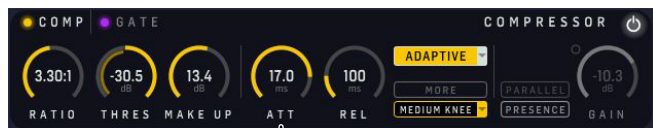
The compression ratio control provides control of the amount of compression that is applied to over-threshold signals. This is expressed as a ratio of signal level changes from input to output. For example, when the compressor is set to 2:1, every 2 dB of input level change will only generate a 1 dB output level change (assuming the signal levels are over the threshold).



Ratio

5.3.3 Attack

The attack control adjusts the time taken for the compressor to respond to an over-threshold signal. The shape of the attack can be selected from one of the four mode combinations mentioned above, making the compressor easily adaptable for a wide number of creative and corrective applications.



Attack Time

5.3.6 Make Up Gain

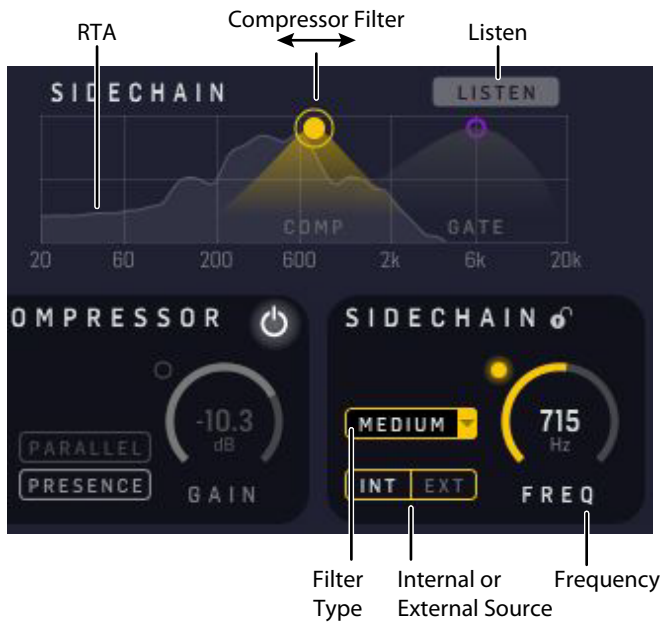
The gain control provides adjustment of the make up gain so that the level of the outgoing compressed signal can be matched to the incoming uncompressed signal.



Make Up Gain

5.3.7 Sidechain Filter

A low-cut filter and band-pass filter are provided to act on the sidechain signals. This can be used to make the compression frequency-selective.



The controls are as follows:

- Frequency, adjustable from 25 Hz to 15 kHz
- Band-pass bandwidth selectable: wide, medium, or narrow (2, 1, or 0.3 Octaves)
- Low-Cut selectable: 6 dB or 12 dB/Octave
- LISTEN: This sends the filtered sidechain to the output, so you can audition the effect of the filter controls on the sidechain source
- INT/EXT: The sidechain source can be internal, or an external source. The output from other tracks can be added to the sidechain inputs of the DYN 3000, using the Setup procedures in most DAWs

Note: The Low-Cut sidechain filter is often used with success on a full range mix signal, so the full-range compressor does not react as much on low frequency energy.

Note: The Real-Time Analyzer signal and the LISTEN function follow which of the Compressor and Gate blocks are selected and shown in the controls

Engage/Disengage the Sidechain Filter

To engage or disengage the sidechain compressor filter, either double-click on the compressor handle in the graph, or click on the small button next to the FREQ control. Without the sidechain, the compression is triggered by the full-frequency range of the source, rather than a filtered frequency section of it.

Click on the small Lock and the sidechain control settings will not change when a new preset is chosen.

Sidechain Compressor Filter Engaged

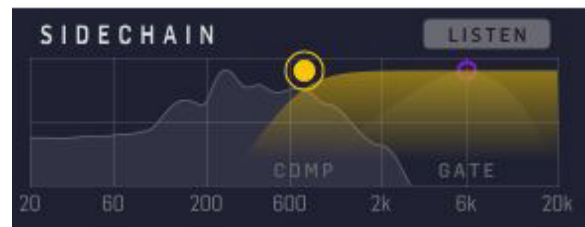


Sidechain Compressor Filter Disengaged

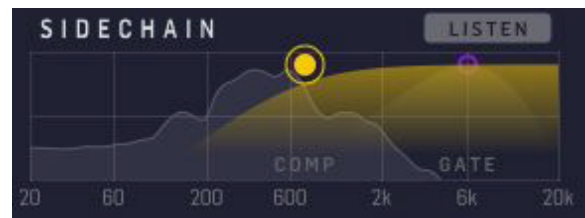


Low-Cut Examples

12 dB/Octave



6 dB/Octave

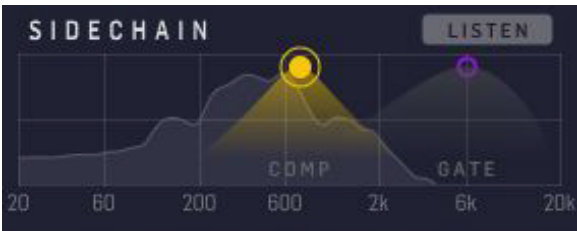


Band-Pass Examples

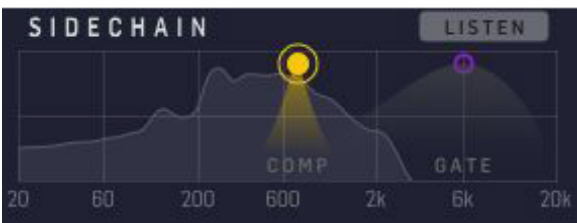
Wide



Medium



Narrow



Sidechain Internal and External Source

The sidechain source can be internal, or an external source. Once this is set up in your DAW, you can quickly switch between INT or EXT.

Click on the INT or EXT buttons in the sidechain control section to choose the source.

INT: Internal Source, the DYN 3000 compressor will be triggered by the levels of the track the plug-in is applied to. Its effect will depend upon the settings of the sidechain filter, such as its bandwidth, or low cut slope, and the frequency.

Sidechain Source = Internal



Internal Source

EXT: External Source, the DYN 3000 compressor will be triggered by the levels of a different track than the plug-in is applied to. The selection of the external source for the sidechain is set using your DAW. The compressor will still affect the track that the plug-in is applied to, but it will be triggered by the audio of the external source. Its effect will depend upon the settings of the sidechain filter, such as its bandwidth, or low cut slope, and the frequency.

Sidechain Source = External



External Source

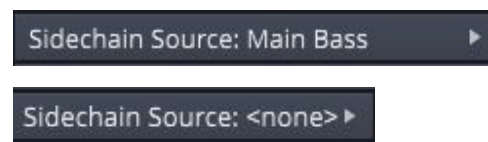
The first DAW example below shows a typical method of choosing a sidechain external source from a drop-down list of the currently-loaded tracks in your DAW session.

The selected track here is called "Main Bass." As the track plays, the RTA will show the "Main Bass" analysis, and you can press LISTEN to audition it as you adjust the sidechain filter controls.

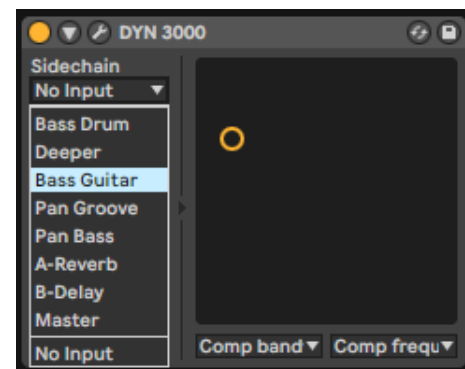
The second example shows another DAW, and the drop-down list of current tracks to choose from.

Choose "none" or "no input" if an external source is not used, or just select INT in the sidechain controls of the DYN 3000 GUI.

Typical DAW method of choosing a sidechain source:



Another DAW method of choosing a sidechain source:



Sidechain Real-Time Analyzer (RTA)

The Real-Time Analyzer in the sidechains of the DYN 3000 is an informative version of well-known and popular spectrum analyzers. This does not mean that we present more information than you need, which is often seen with popular analyzers on the market where the spectrum in the high frequencies nearly looks like 'grass'. In the same analyzers, there is often little useful low frequency information to benefit from.

In the DYN 3000, we have gone a good step further to find the right and most-useful information for the delicate and sometimes difficult task of tuning the sidechain filter in a compressor or gate.

The DYN 3000 features a Constant-Q Real-Time Analyzer showing a combined peak and RMS spectrum. This will help you view both transients, and the slower-moving average spectrum.

The vertical y-axis covers the range from -60 to 0 dBFS. Note that a correlated stereo signal such as a sinewave for example will measure up to 6 dB higher than an uncorrelated signal.

Set your source playing, and the RTA will appear in the sidechain display. Note: it will appear, even if the HISTORY button is not on. The RTA will help you decide upon the best placing of your filter, and the best type of filter to select.

(In the example below, the gate and compressor filters have been disabled, just so you can see the RTA graph more clearly.)



Sidechain Key Commands, for smooth navigation

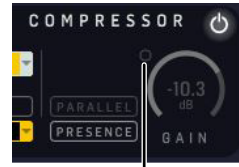
The following details will help you adjust the sidechain filter controls:

- Enable/disable filter: Double-click handle (Mac/Win)
- Change frequency: Mouse drag (no modifier key) (Mac/Win)
- Change width/slope: Command + drag (Mac) / Ctrl + drag (Win)

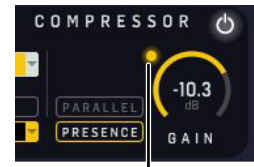
5.3.8 Presence and Parallel Compression

Enable the Presence and Parallel Compression by pressing the small button/LED in the right side of the compressor controls section.

Parallel/Presence



Disabled



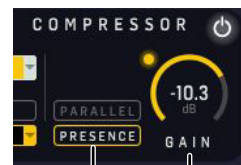
Enabled

Presence

When applying compression either as a corrective or an artistic touch, you often lose a bit of presence. That is why Midas has invented the clever and famous trick on the biggest mixing consoles: the Presence feature. It allows a selected and fine-tuned frequency range around 5 kHz of the untouched input signal to be passed by the compressor and added to the compressed output signal, bringing back some of the potentially lost presence. This way you can decide whether to go extra gentle on sensitive content or go a bit harder in an artistic approach.

- Enable the Presence and Parallel Compression and select Presence
- Adjust the Presence GAIN control for the frequency range limited (presence) direct/dry signal

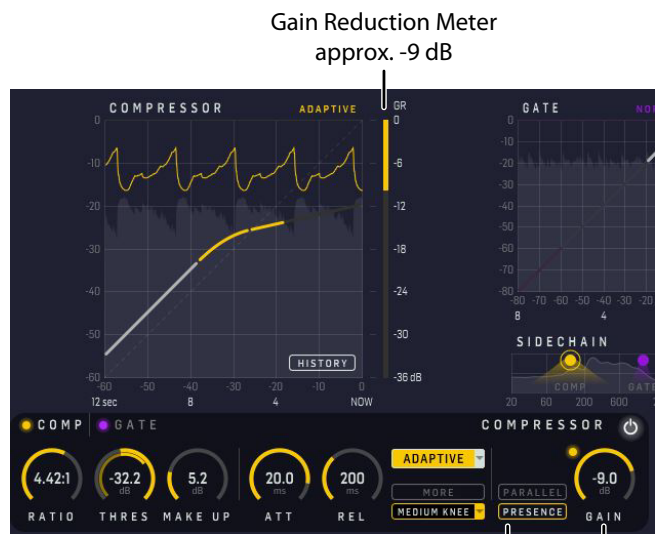
Presence



Presence Gain

Presence Adjustment Example

For an example, when the Compressor gain reduction meter sits around -9 dB, then adjusting the Presence GAIN to -9 dB will make the compressed signal and the non-compressed "presence" signal approximately equally-leveled.



Presence Gain set to -9 dB

Parallel Compression

Parallel, upward, or New York compression is a widely used and great-sounding compression technique.

The Dry signal is mixed with the Compressed signal, and the two signals are time-aligned perfectly within the DYN 3000, eliminating any potential phase issues. This is something that can be a challenge in some DAWs, and it makes the DYN 3000 perfectly suited for placing as an insert on either a channel, a sub-mix bus or the master bus output.

Parallel compression reduces the dynamic range of your content by bringing up the softest parts, enhancing the details while preserving the transients.

Sometimes, upward and downward (disable Parallel) compression is used in series for less audible “compression” or for really “heavy compression.”

- Enable the Presence and Parallel Compression and select Parallel
- Use the MIX control to adjust the compressed (wet) and the non-compressed (dry) signal balance in the parallel/upward compression to your liking

Parallel



5.3.9 Compressor Type - the Envelope Modes

The four envelope modes, or signatures, are the key to the sonic character of the DYN 3000 compressor, and they allow adjustment far beyond the normal capabilities of simple attack and release settings. They largely fall into two application types:

- Corrective and Vintage: Compressors that are good at capturing and controlling dynamic transients
- Adaptive and Creative: Compressors that emphasise dynamic transients and provide creative control of levels within a mix



Compressor Type Selection

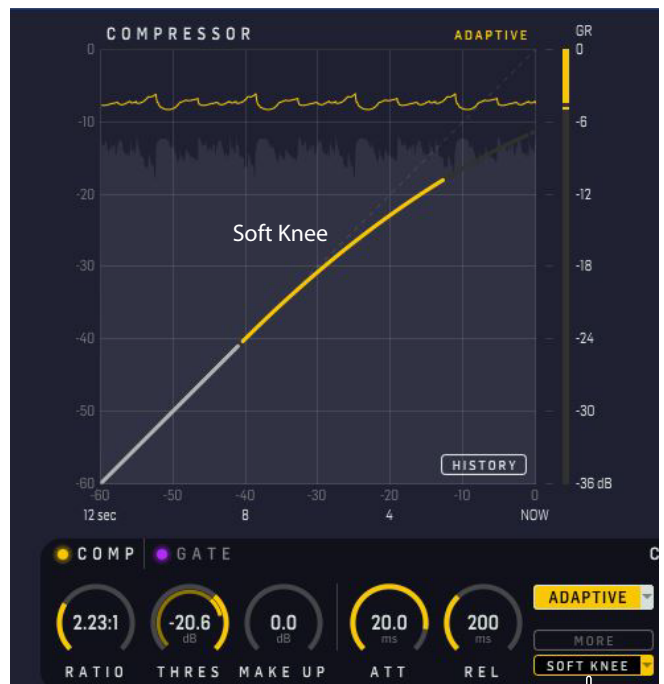
The Vintage and Adaptive compressors tend to morph a little between these two categories depending on threshold control settings. This makes them easy to use intuitively with minimal fine-tuning of the envelope control settings.

Further refinement and enhancement of the envelope modes is provided by combination settings of the three-position KNEE switch. It is best to understand the operation of these two functions in more depth before looking at the detail of the compressor signature switching.

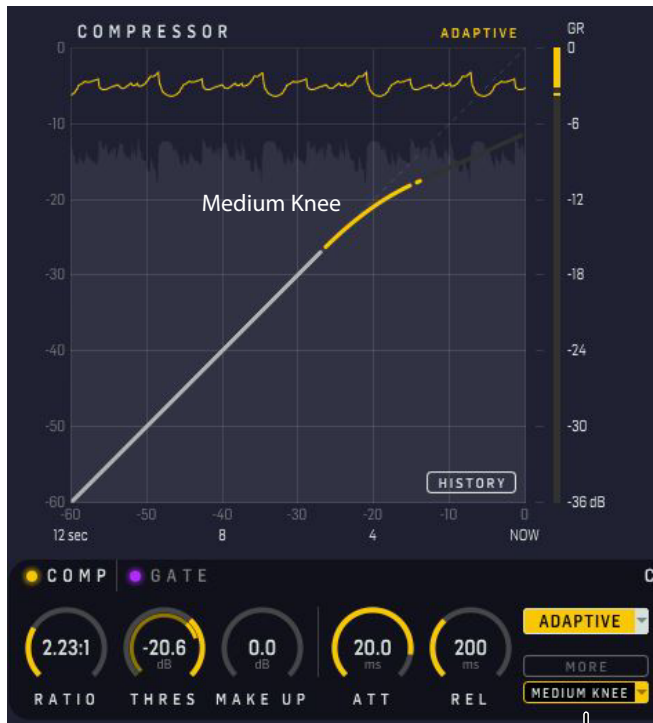
Knee

The soft knee curves behave in a traditional way to blend the compression ratio around the threshold setting (as described above), but more importantly they also have a significant effect on the attack envelope shapes. The soft knee typically slows down attack speed on signals in the knee area, which is desirable for natural sounding compression because it compliments the reduced ratio effect of the soft knee. This produces very gentle compression in the knee region.

The KNEE switch has three settings: hard (4dB); medium (12dB); and soft (40dB). In hard setting, the compressor still retains some soft knee characteristics. This is because the implementation of an extremely hard knee produces undesirable sounding distortion on low frequency program material.



Soft Knee



Medium Knee

Adaptive Mode (exponential RMS - accurate)

This is a root-mean-square (RMS) sensing compressor with exponential attack and release. The RMS averaging process interacts with the attack and release to produce a very adaptive envelope character. This allows faster attacks on large (over-threshold) signal changes and produces slower attacks on small signal changes, regardless of attack time setting. It is also sonically accurate and works well for both compression and limiting of vocals and many other sources. The attack control is still active, allowing some user intervention although the adaptive nature makes envelope control setting fairly non-critical. The compressor is therefore very fast and simple to set up on most program material. The most natural sounding compression is normally achieved with soft knee settings.



Adaptive

Corrective Mode (exponential peak - fast)

This is a peak-sensing compressor (like many older designs) with exponential attack and release. It produces aggressive compression that gives good fast control/limiting of dynamic material. It can be used to add color to low frequency signals, thus making it ideal for controlling extremely dynamic instruments like bass guitar. The compressor tends to sound best with fast attack time settings that capture transients and with release time adjusted to taste to either emphasise or reduce distortion and pumping effects.



Corrective

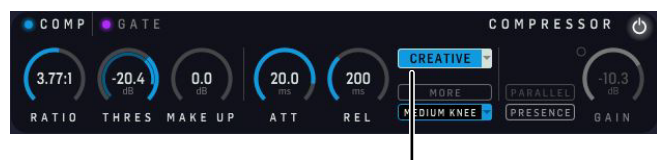


Hard Knee

Creative Mode (linear peak - slow)

This is a peak-sensing compressor with linear (dB rate) attack and second order release. The compressor is very transparent, providing some dynamic control but without unduly affecting the intentional dynamic content of the source material. The linear attack provides a constant rate of attack, such that large changes in source signal level take longer to become compressed than smaller changes. Adding soft knee noticeably delays these attacks, which can be particularly useful on drums where compression can be applied to emphasise transients giving more punch while retaining a good deal of artistic dynamic range from the drummer.

The compressor normally sounds best with slower attack time settings, when it can be used on difficult instruments, such as the acoustic guitar, with relatively fast release to keep equal perceived loudness within a mix without producing excessive flutter or distortion.



Creative

Vintage Mode (adaptive peak - bright)

This is a peak-sensing compressor with a partially adaptive nature. It produces extremely subtle attack and release curves during the onset of compression that are largely independent of the envelope control settings. However, as it is driven harder, that is, signals are further over-threshold, the attack and release times become more aggressive and gradually return to manual control so that the operator can optimise the capture (or otherwise) of larger transients etc. The peak sensing algorithm intentionally increases harmonic overtones during compression, which adds a tube or valve-like brightness and sparkle to the signal, producing extremely natural and lively sounding compression of acoustic instruments.



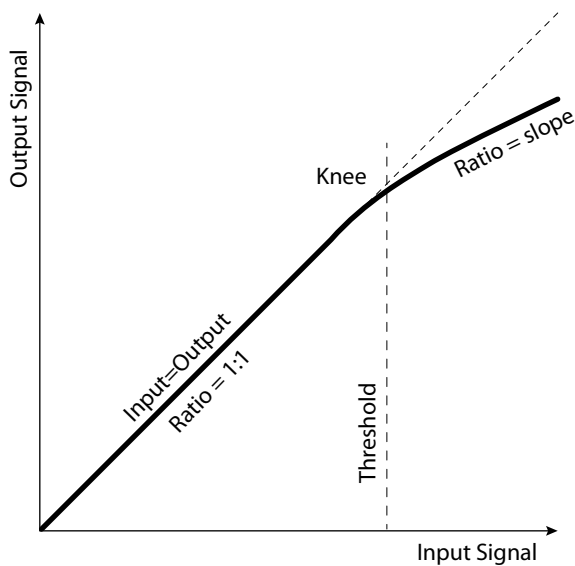
Vintage

5.3.10 Compressor Graphs

The graphs below show the effect of adjusting the compressor's parameters.

Ratio

This graph shows a signal on the compressor with ratio applied; it shows the point of threshold and how ratio affects the gradient of the signal following this.



- Input level. The 'x-axis' of the graph
- Output level. The 'y-axis' of the graph
- The portion of the graph before the input Threshold level is unaffected by compression, that is, the gradient is 1:1
- Upper slope: The portion of the graph after the input Threshold shows the effects of compression. The gradient is the same as the compression ratio
- Threshold is the point where the gradient changes and where compression starts to be applied

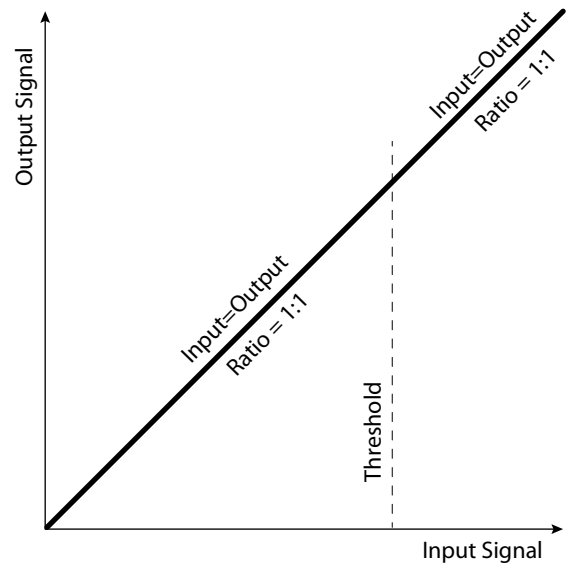
Knee

- Hard knee compressor: Immediately applies gain reduction at the selected ratio, once attack time has elapsed
- Medium knee compressor: Intermediate knee type
- Soft knee compressor, starting from before the threshold, it gradually makes the transition to applying gain reduction at the selected ratio

Ratio = 1:1

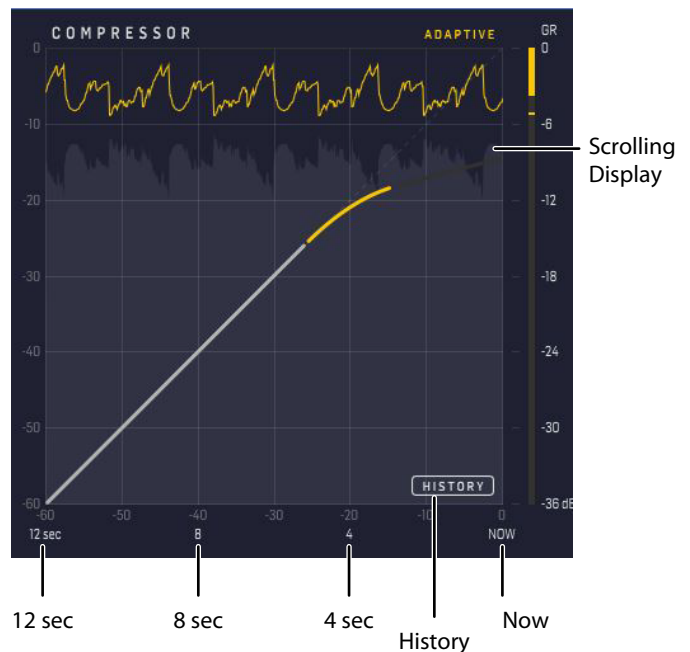
The graph below shows an uncompressed signal, that is, with no ratio applied.

The Ratio is set to 1:1. It has a 1:1 gradient, where Input signal = Output signal, and there is no effect on the audio.



History

The History button enables a scrolling view of the potentially filtered sidechain signal along with the gain reduction. This is an informative view of how the input signal, the sidechain filter and the compressor settings will interact.



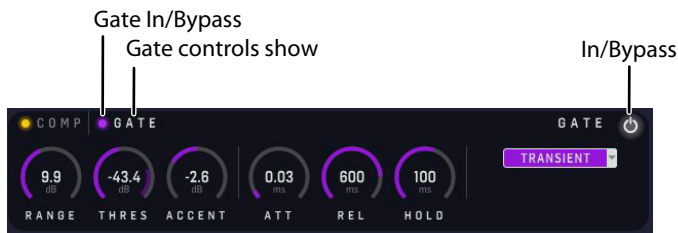
5.4 The DYN 3000 Gate

The second processor block in the DYN 3000 is the gate. It is shown in Purple for all settings and processing views. Swapping between the gate and compressor blocks can be done via the headline/panes in the controls section or via clicking the filter handles in the sidechain view.

The sidechain filter features, just like for the compressor, a swept Band-Pass type filter or a Low-Cut filter, which acts on the dynamic's sidechain of the gate/ducker and which covers the full audio spectrum. The sidechain Listen button outputs the potentially filtered sidechain signal, allowing the audio signal to be monitored.

Parameters

- Enable button/purple LED - enables the gate block in the signal path. When switched off, gate is bypassed. (Both the comp and gate switches can be on at the same time.)



- Threshold - sets the signal level at which the gate opens. Note: It is opposite for the Ducker Gate mode. Range is from 0 dBFS to -80 dBFS
- Range - adjusts the amount of gain reduction applied to the signal below threshold. Controls the maximum gain reduction that is possible. Range is from minus infinity to 0 dB

- Accent (only available for Transient Gate mode) - sets the amount of transient envelope accent applied to signal when crossing the threshold. Range is from -6 dB to 6 dB
- Attack - adjusts time taken for gate to open after an over-threshold signal. Range is from 0.02 ms to 20 ms
- Release - adjusts time taken for gate to close after program material falls back below threshold. Range is from 2 ms to 2.0 s
- Hold - Minimises chattering in conjunction with internal hysteresis. Once the signal drops below the threshold, this defines a waiting period before the gate starts to close. Range is from 2.0 ms to 2.0s
- Gate Mode: Switch between Normal Gate, Transient Gate or Ducker

Sidechain Parameters

- Sidechain Int/Ext - selects internal or external (from DAW) sidechain
- Sidechain Filter Enable button/LED - enables gate sidechain filter
- Sidechain filter type - selects sidechain filters: Low Cut, 6 or 12 dB/Oct. Wide, Medium or Narrow Bell (0.3 Oct, 1 Oct and 2 Oct)
- Sidechain filter frequency - adjusts the sidechain filter frequency in the range 50 Hz to 15 kHz. (Visually, this moves the envelope on the graph left or right.)
- Sidechain Listen - to aid set up, the gate has a sidechain Listen function that sends the potentially filtered sidechain signal to the output. The Listen button illuminates to warn you that soloed material is from the sidechain, and not the program channel

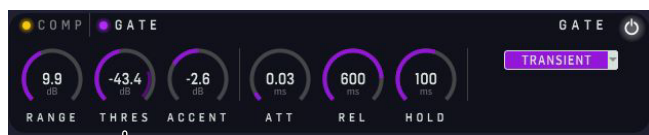


5.4.1 Threshold

The threshold adjusts the operating point of the gate. Signals that go below this point, or under-threshold, will be affected by gate action. Note: It is opposite for the Ducker Gate mode.

Note that the Threshold control has a helpful display of the signal level on the inner ring, and the Threshold level on the outer ring. This display is different for the Ducker Gate, compared to the Normal and Transient Gates.

A highlighted overlap area on the inner ring indicates the amount of gate action, whenever the input signal drops below the Threshold level (or above, for the Ducker gate).

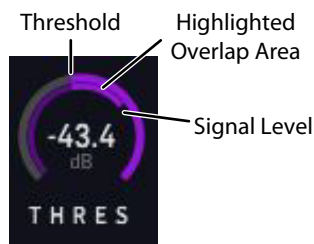


Threshold

Normal and Transient Gates

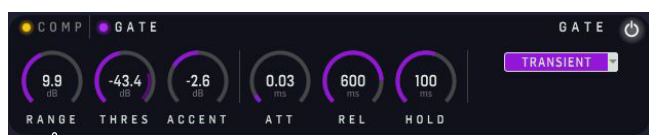


Ducker Gate



5.4.2 Range

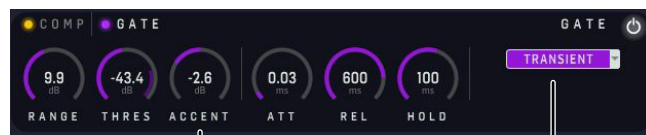
The range adjusts the amount of gain reduction applied to the signal below threshold. Note: It is opposite for the Ducker Gate mode. It controls the maximum gain reduction that is possible. The range is from minus infinity to 0 dB.



Range

5.4.3 Accent

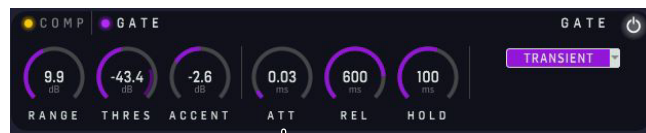
Accent is only available for Transient Gate mode. It sets the amount of transient envelope accent applied to signal when crossing the threshold. The effect is not unlike known gates that seem to overdo the transition from closed to open and therefore has seen great use on especially percussive content like drums. Unlike a normal gate, a higher threshold say around -30 dBFS may fit the signal better. High Accent settings may suit hard music styles well, and add great punch on the drums. Settings below zero may sound similar to reduction of signal "attack" and this is great for "tucking" a signal a bit further into the mix without touching levels or EQ.



Accent (available for Transient Gate only)

5.4.4 Attack

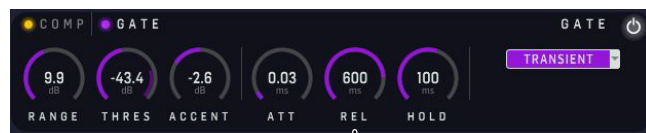
Attack adjusts the time taken for gate to open after an over-threshold signal. For percussive signals the attack should be set short, but for less percussive signals a longer attack time will reduce the artefacts from the fast reacting processing.



Attack Time

5.4.5 Release

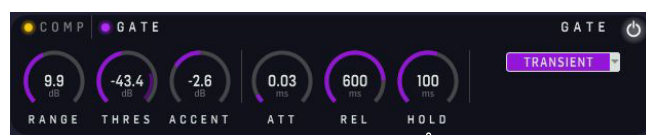
Release adjusts time taken for gate to close after program material falls back below the threshold. Range is from 2 ms to 2.0 s. The optimal setting is often a compromise between fast-enough-reacting noise reduction in the recording and un-natural cut off of instrument sustain.



Release Time

5.4.6 Hold

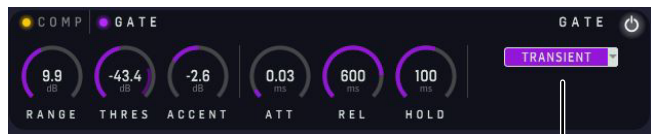
Hold minimises chattering in conjunction with internal hysteresis that enables unequal threshold for signals with increasing level, versus decreasing level. The few-dB hysteresis often gives a more natural sounding gate operation. Once the signal drops below the threshold, this defines a waiting period before the gate starts to close.



Hold Time

5.4.7 Mode

There are three available Gate types that can be selected from the Mode drop-down menu.



Gate Type
 • Normal
 • Transient
 • Ducker

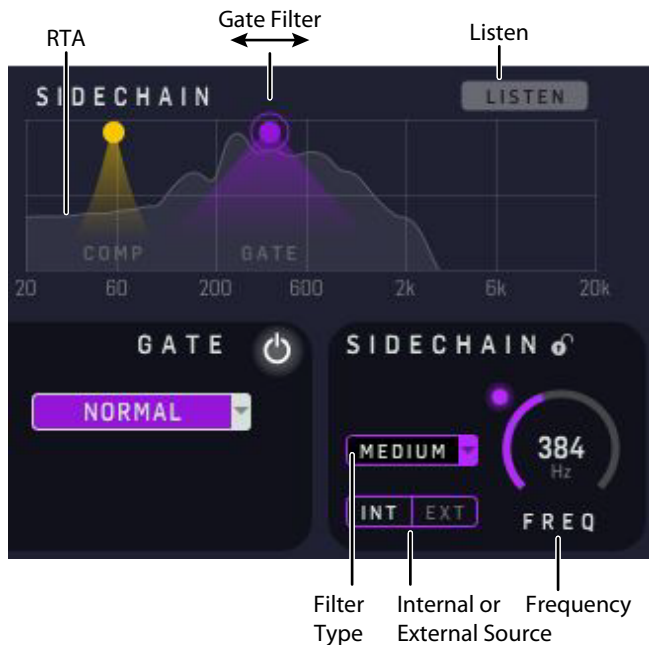
- Normal Gate - this is for standard noise and cross-talk gating tasks
- Transient Gate - this is similar to the Normal gate but includes the transient envelope accent, which is applied to the signal when crossing the threshold. The effect is not unlike known gates that seem to overdo the transition from closed to open, and therefore has seen great use on especially percussive content like drums
- Ducker - in radio this can typically be achieved by lowering (ducking) the volume of a secondary audio track when the primary track starts and lifting the volume again when the primary track is finished. A typical use of this effect in a daily radio production routine is for creating a voice-over. Use of the External sidechain allows the ducker on the channel you wish to turn down, to be triggered by the channel you wish to have priority (routed via the sidechain handling in the DAW)

5.4.8 Sidechain filter

A low-cut filter and band-pass filter are provided to act on the sidechain signals. This can be used to make the gating function frequency-selective.

The sidechain filter controls for the gate are independent of those for the compressor, but they are otherwise identical in operation. Gate controls are always purple. For more information regarding the sidechain filters and controls, please see the details shown on page 13 and 14 for the compressor. See page 15 for details of the sidechain RTA.

Note that for the Ducker Gate option, the sidechain's external input is used. Please see page 14 for details regarding how to set up the external input in a DAW.



Filter Type Internal or External Source Frequency

The sidechain controls are as follows:

- Frequency, adjustable from 25 Hz to 15 kHz
- Band-pass bandwidth selectable: wide, medium, or narrow (2, 1, or 0.3 Octaves)
- Low-Cut selectable: 6 dB or 12 dB/Octave
- LISTEN: This sends the filtered sidechain to the output, so you can audition the effect of the filter controls on the sidechain source
- INT/EXT: The sidechain source can be internal, or an external source. The output from other tracks can be added to the sidechain inputs of the DYN 3000, using the Setup procedures in most DAWs

Note: The Real-Time Analyzer signal and the LISTEN function follow which of the Compressor and Gate blocks are selected and shown in the controls.

Tip: For snare drum gating, try setting the width at 0.3 Octave and the frequency around 2 kHz. This can help cut out spill from other close drums and give a cleaner drum sound.

Snare bottom mics could also be triggered or keyed from the snare top mic (using the DYN 3000 External sidechain input from the DAW) to allow the gate to open faster and allow super quick transients through.

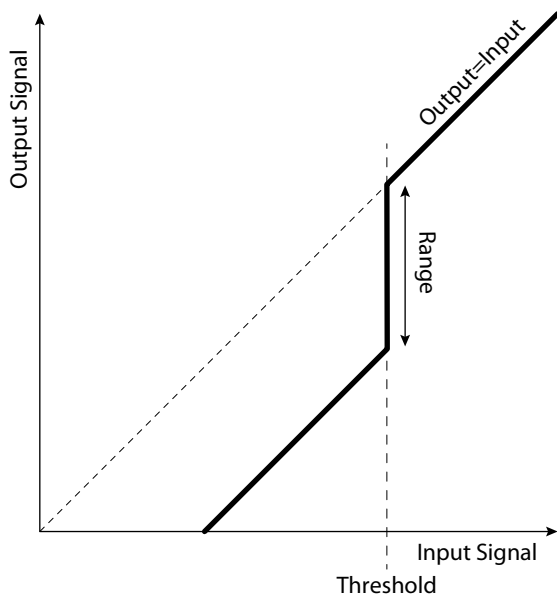
Sidechain Key Commands, for smooth navigation

The following details will help you adjust the sidechain gate filter controls:

- Enable/disable filter: Double-click handle (Mac/Win)
- Change frequency: Mouse drag (no modifier key) (Mac/Win)
- Change width/slope: Command + drag (Mac) / Ctrl + drag (Win)

5.4.9 Gate Graphs

The graphs below show the effect of the gate threshold and range parameters.



Range and Threshold (Normal and Transient Gates)

- Input level: The horizontal 'x-axis' of the graph
- Output level: The vertical 'y-axis' of the graph
- Threshold: If the input signal level drops below the Threshold level, the output level is reduced by a dB value set by the Range control
- The Range is the amount of reduction added to the input level, when it drops below the Threshold level
- Lower slope: The portion of the graph before the Threshold is reduced in level by a dB value set by the Range. The output is less than the input
- Upper slope: The portion of the graph after the Threshold is not affected by any gate controls, and the output equals the input

Range and Threshold (Ducker Gate)

The Ducker gate works in the opposite way than the Normal gate or Transient gate.

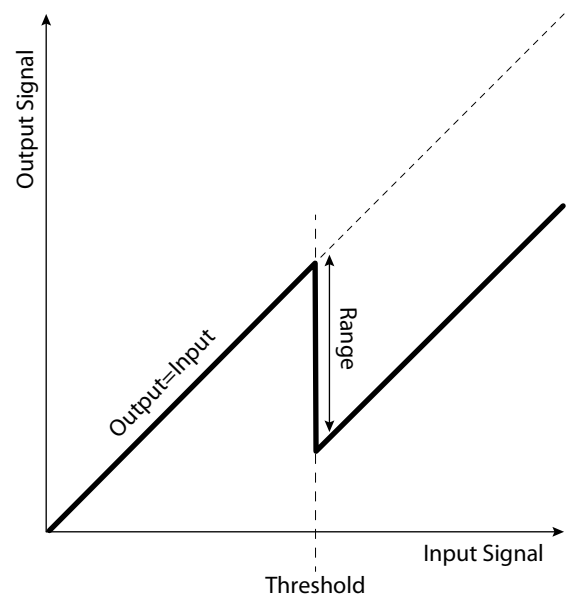
The Ducker could also be considered a kind of two-state compressor (either compressing or not), which can be useful in special cases and with some content. Adjusting the timing parameters will soften the behaviour.

As an example, Duckers are often used in office buildings, restaurants and other installed sound applications, where background music is playing:

- An announcement is made over the Tannoy
- The background music is automatically reduced (ducked)
- After the announcement, the background music reverts to its original level

For the DYN 3000, the Ducker Gate is set up as shown in the example below:

- Add the DYN 3000 plug-in onto a desired primary track
- In the DAW, choose a secondary track to be the external input to the gate sidechain. See page 14 for details of setting the sidechain external source in a DAW
- Set the gate sidechain to EXT (external source)
- When the secondary track exceeds the Threshold level, then the primary track will be reduced by the level set by the Range control
- When the secondary track drops below the Threshold level, then the primary track will revert to its original level
- Press LISTEN to audition your secondary track and the effect of the sidechain filter controls to choose the best settings

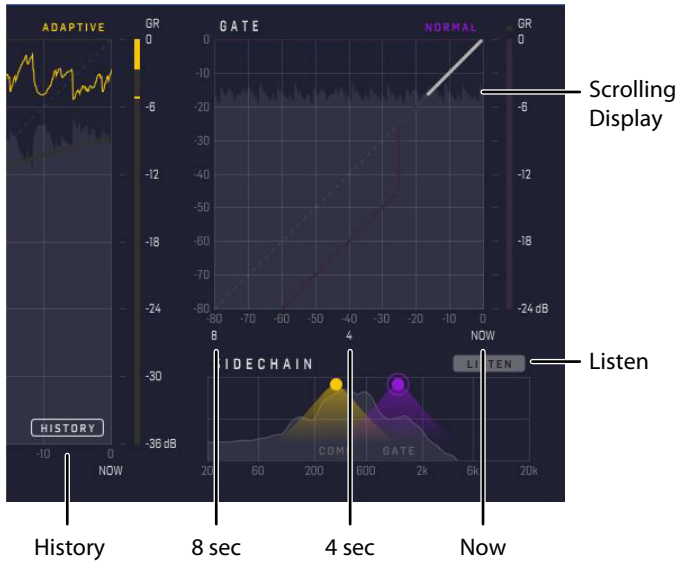


- Input level (primary track): The horizontal 'x-axis' of the graph
- Output level (primary track): The vertical 'y-axis' of the graph
- Threshold: If the sidechain external input signal level (of the secondary track) exceeds the Threshold level, the primary track's output level is reduced by a dB value set by the Range control
- The Range is the amount of reduction of the primary track
- Lower slope: The portion of the graph before the Threshold is not reduced in level. The output equals the input

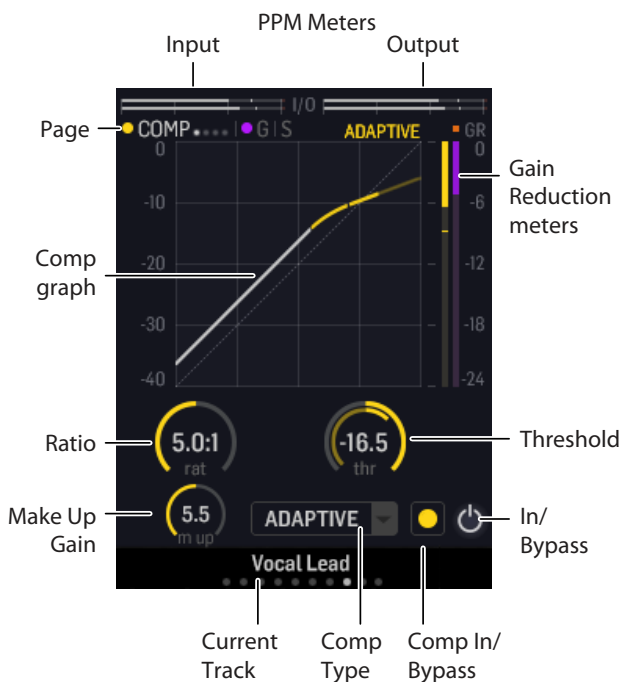
- Upper slope: The portion of the graph after the Threshold shows that the primary track is reduced by the amount set by the Range control, allowing the secondary track to be heard

5.4.10 History

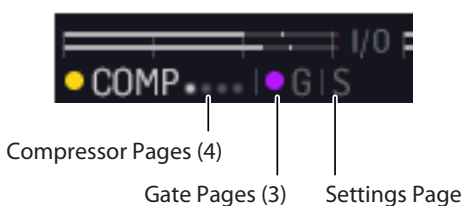
The History button in the lower right of the compressor graph display enables a scrolling view of the potentially filtered Gate sidechain signal along with the gain reduction. This is an informative view of how the input signal, the sidechain filter and the gate settings will interact.



6. Navigating the DYN 3000 Desktop Controller (optional)



Page Indicators (enlarged view)



Display

The DYN 3000 Compressor and Gate plug-in takes mixing audio to a new level, especially when used in combination with the optional but highly dedicated Desktop Controller. It adds intuitive and true analog feel user-controls, informative compressor and gate views and sidechain displays right on your desk, without the need for opening plug-in instances all the time. The DYN 3000 Desktop Controller is designed with focus on speeding up work flow, inspirational hands-on experience, and letting you concentrate on the mix. It allows simultaneous display and control of all the critical information required to craft an unprecedented mix experience.

- Input PPM, dBFS, 0 to -60 dBFS, with +0dBFS indicators
- Output PPM, dBFS, 0 to -60 dBFS, with +0dBFS indicators
- Gain reduction and static gain response views for Compressor and Gate
- Real-Time Analyzer in the sidechain view
- Controls section: Shows the selected compressor or gate controls, the sidechain controls or global settings page
- Page order: Four compressor pages, three gate pages, and a global settings page

Dials and Buttons

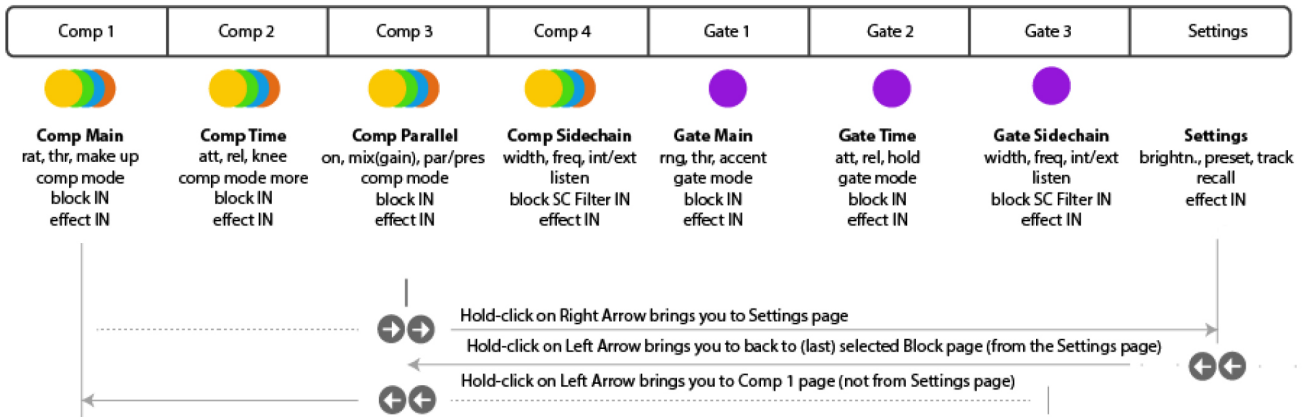
Note: The dials and buttons have different actions depending on which page is selected: One of four compressor pages, one of three gate pages or the global settings page.

- Ratio/Attack dial
- Threshold/Release dial
- Gain/Hold dial
- Arrow left/right buttons - selects the previous/next controls page of the compressor and gate. The Global settings page is at the far right. See the page order below
- Hold the right arrow button to go straight to the Global settings page
- Hold the left arrow button to return to the previous page
- Mode button (selects various modes and types)
- IN button (overall DYN 3000 IN/bypass toggle). Same behaviour on all pages. All processing views are greyed out in the display when the DYN 3000 is bypassed
- Block IN (hold Mode and IN) (IN/bypass toggle for the selected compressor or gate block)
- Hold the Mode button and turn the Gain/hold to select other plugin instances (tracks), without the need for opening the plugins

Page Order

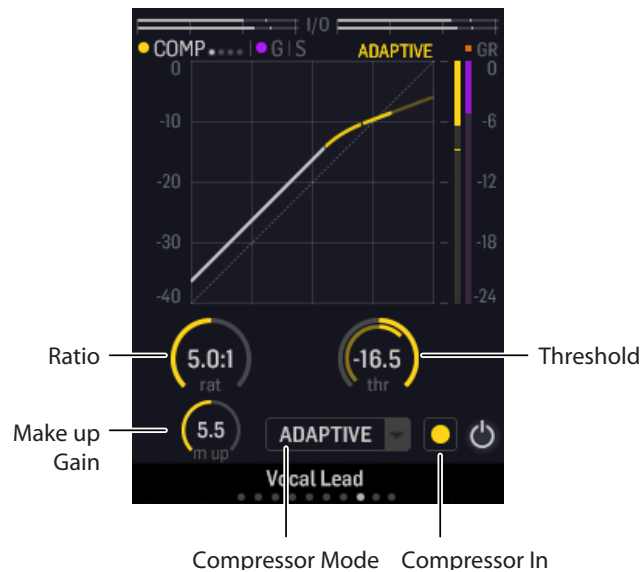
- Note: The top left corner of the display shows the page indicators
- Compressor page 1 to 3
- Compressor sidechain (Comp page 4)
- Gate page 1 and 2
- Gate sidechain (Gate page 3)
- Settings page

Page Order



6.1 Compressor Page 1

- Ratio/Attack dial: Sets the compression Ratio. Range is from infinity 1:1 to INF:1
- Threshold/Release dial: Sets the compression Threshold. Range is from 0 dBFS to -60 dBFS
- Gain/Hold dial: Sets the compression Make-Up gain. Range is 0dB to +24dB.
- Mode button: Selects the compressor types, envelope modes: Adaptive, Corrective, Creative, and Vintage
- Block IN (Mode + IN): Enables/disables the Compressor block



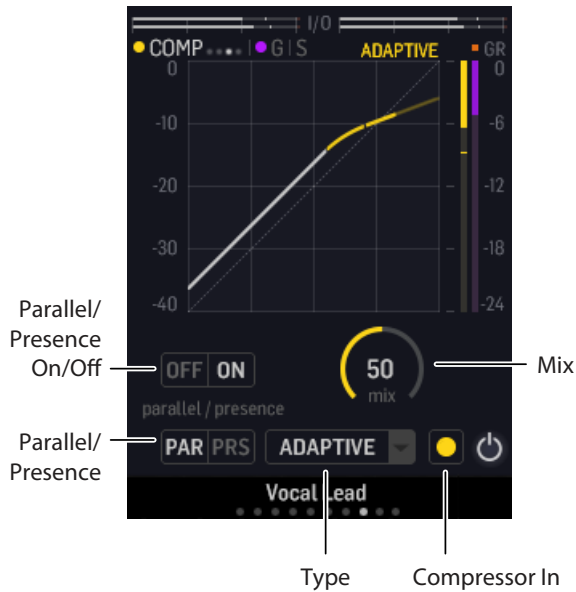
6.2 Compressor Page 2

- Ratio/Attack dial: Sets the compressor Attack time. Range is from 0.2 ms to 40 ms
- Threshold/Release dial: Sets the compressor Release time. Range is from 0.05 s to 3.00 s
- Gain/Hold dial: Selects the compressor Knee: Soft, Medium, Hard
- Mode button: Toggles the compressor MORE function on/off
- Block IN (Mode + IN): Enables/disables the Compressor block



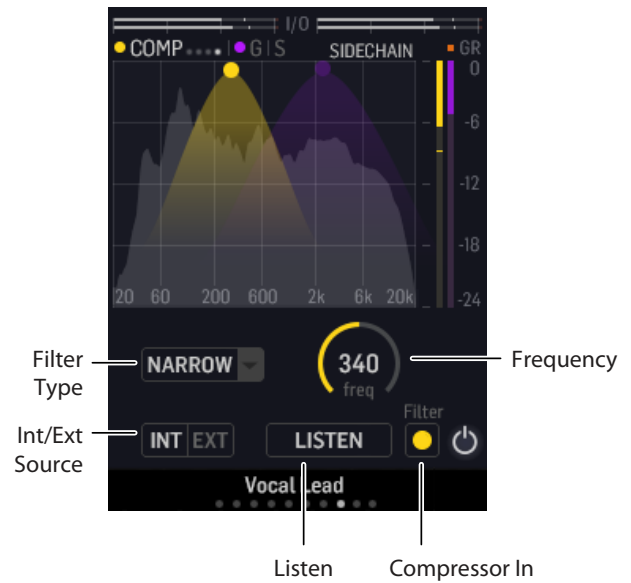
6.3 Compressor Page 3

- Ratio/Attack dial: Toggles the Presence function and Parallel compression on/off
- Threshold/Release dial: Sets the Presence Gain or Parallel compression Mix parameter. Presence Gain range is from -30 dB to -3 dB. Parallel Mix range is from 0 (dry, fully uncompressed) to 100% (wet, fully compressed)
- Gain/Hold dial: Selects Presence function or Parallel compression
- Mode button: Selects the compressor types, envelope modes: Adaptive, Corrective, Creative, and Vintage
- Block IN (Mode + IN): Enables/disables the Compressor block



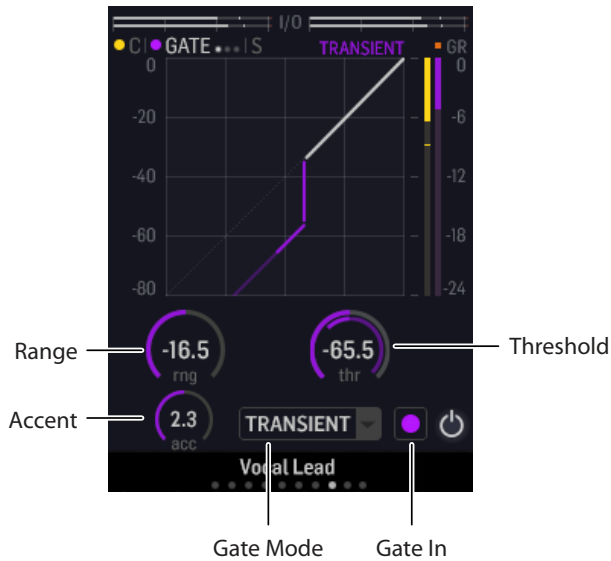
6.4 Compressor Sidechain Page 4

- Ratio/Attack dial: Selects the compressor sidechain filter width/type. Low Cut, 6 or 12 dB/Octave. Wide, Medium or Narrow Bell (2 Oct, 1 Oct and 0.3 Oct)
- Threshold/Release dial: Sets the compressor sidechain filter frequency. Range is from 50 Hz to 15 kHz
- Gain/Hold dial: Selects the compressor sidechain to source Internally or Externally from the DAW
- Mode button: Toggles compressor sidechain Listen on/off
- Block IN (Mode + IN): Enables/disables the compressor Sidechain filter



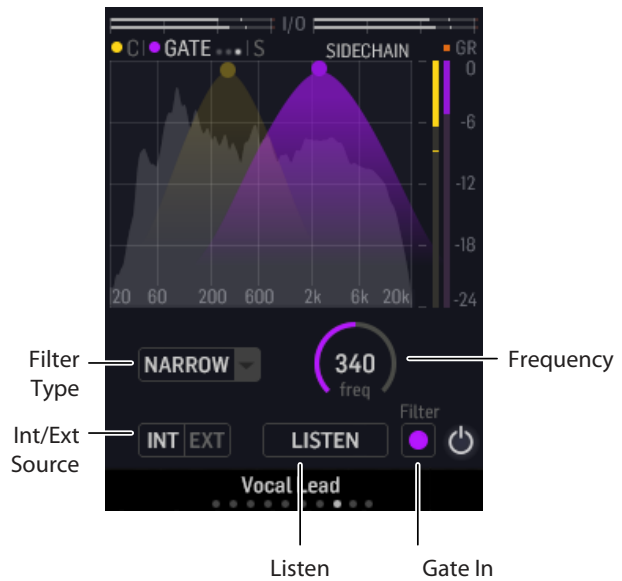
6.5 Gate Page 1

- Ratio/Attack dial: Sets the gate Range. Values from minus infinity to 0 dB
- Threshold/Release dial: Sets the gate Threshold. Range is from 0 dBFS to -80 dBFS
- Gain/Hold dial: Sets the Transient gate Accent amount. Range is from -6 dB to 6 dB
- Mode button: Select gate mode: Normal Gate, Transient Gate, or Ducker
- Block IN (Mode + IN): Enables/disables the Gate block



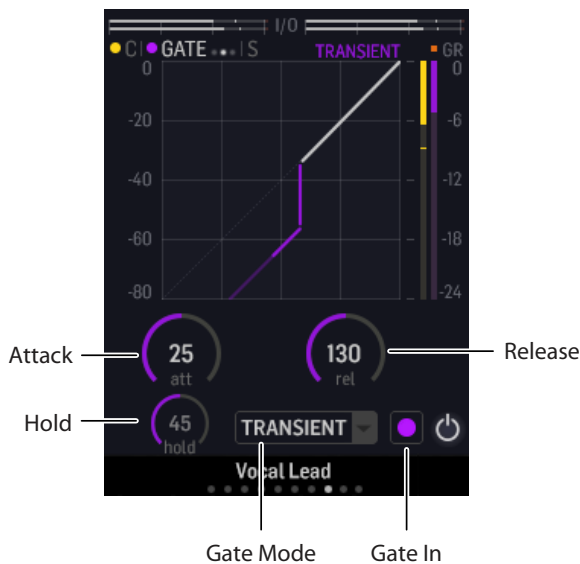
6.7 Gate Sidechain Page 3

- Ratio/Attack dial: Sets the gate sidechain filter width/type. Low Cut, 6 or 12 dB/Octave. Wide, Medium, or Narrow Bell (2 Oct, 1 Oct and 0.3 Oct)
- Threshold/Release dial: Sets the gate sidechain filter frequency Range is from 50 Hz to 15 kHz
- Gain/Hold dial: Selects the gate sidechain to source Internally or Externally from the DAW
- Mode button: Toggles gate sidechain Listen on/off
- Block IN (Mode + IN): Enables/disables the gate Sidechain filter



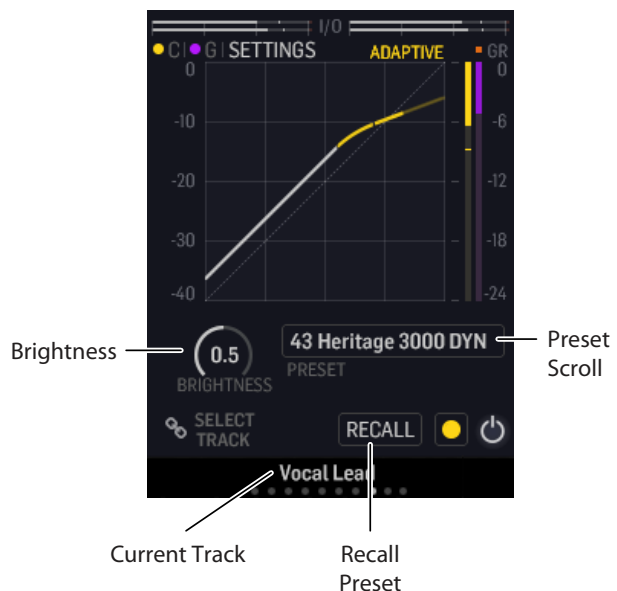
6.6 Gate Page 2

- Ratio/Attack dial: Sets the gate Attack time. Range is from 0.02 ms to 20 ms
- Threshold/Release dial: Sets the gate Release time. Range is from 2 ms to 2.0 s
- Gain/Hold dial: Sets the gate Hold time. Range is from 2.0 ms to 2.0s
- Mode button: Select gate mode: Normal Gate, Transient Gate, or Ducker
- Block IN (Mode + IN): Enables/disables the Gate block



6.8 Settings Page

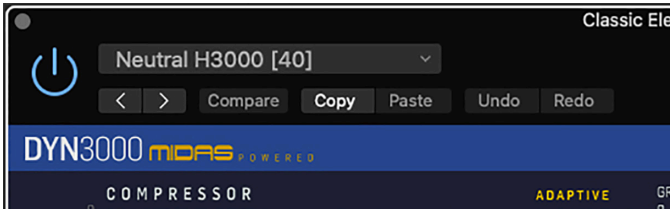
- Ratio/Attack dial: Set brightness of the Desktop Controller display
- Threshold/Release dial: Browse plug-in Presets
- Gain/Hold dial: Select which track (plug-in instance) to connect the Desktop Controller to. The Instance selection can also be done from any page by holding the Mode button and turning the Gain/Hold knob
- Mode button: Recall the selected preset



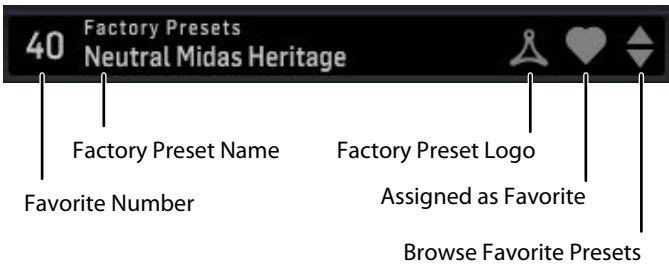
7. Presets

The DYN 3000 offers a collection of factory presets, as well as the option to create and save your own custom settings as user presets and favourites.

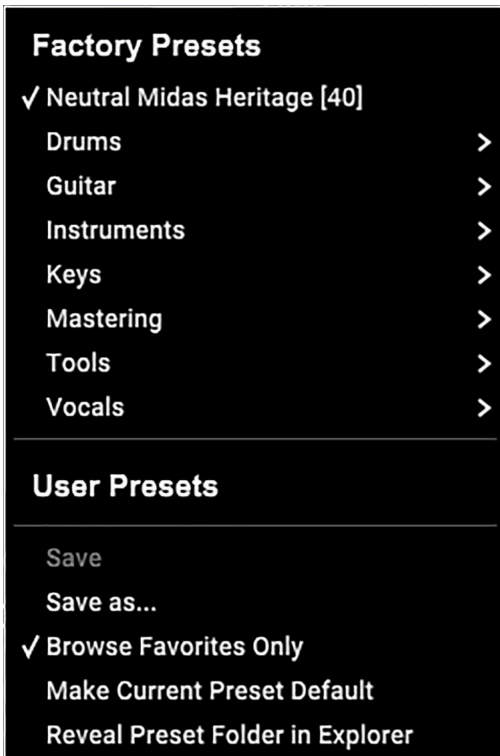
Note that most DAWs have a built-in preset function that appears on every plug-in, which is often found at the top of the plug-in window.



It is not recommended to use this as your primary method of saving presets, as it has limited functionality, and does not allow the saved presets to be transferred easily to other DAWs. Instead, we suggest using the Preset section at the bottom right area of the user interface window:



A single click on this PRESET window brings up a menu with several preset-related options. You can recall a factory or user preset from the libraries, save the current preset, or create a new user preset with the 'Save as' option.

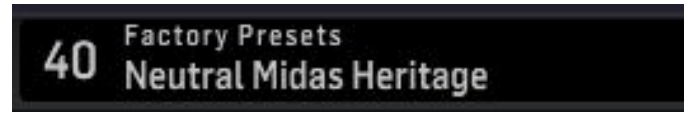


The presets menu is divided into Factory Presets and User Presets:

7.1 Factory Presets

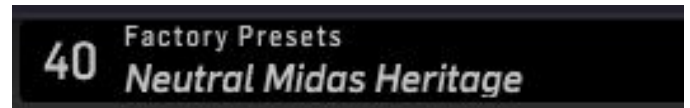
Factory presets are built into the plug-in and cannot be overwritten, so if a factory preset is modified and you want to keep the changes, you need to save it as a User preset. User presets can be edited and organized as you like.

When recalling a Factory preset or saved User preset, the name will appear in plain text as shown below.



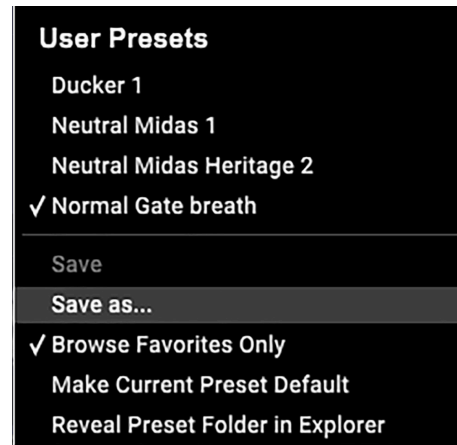
7.2 User Presets

If you make an alteration to any of the parameters in the current preset, the preset name changes to *italics* as a reminder that something has changed from the original factory preset.



To save this new setting as a User preset, click in the PRESET window, then select the Save As option. Save it with an appropriate name.

To discard the changes without saving, simply navigate away from that preset.



The altered preset will be saved as a user preset, with your new name for it, and its name will now appear in the presets window.



If you modify a saved user preset, you have the option to "Save" (rewriting over the existing user preset) or "Save As" (save as a new user preset).

If you modify a factory preset, then only "Save As" is available (to save as a new user preset). Factory presets cannot be overwritten.

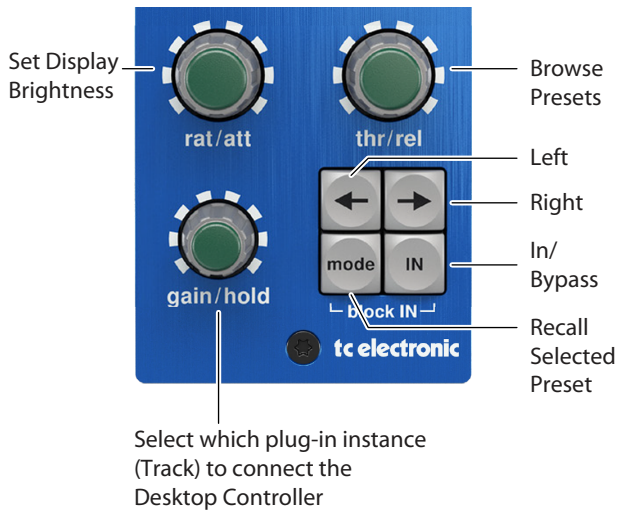
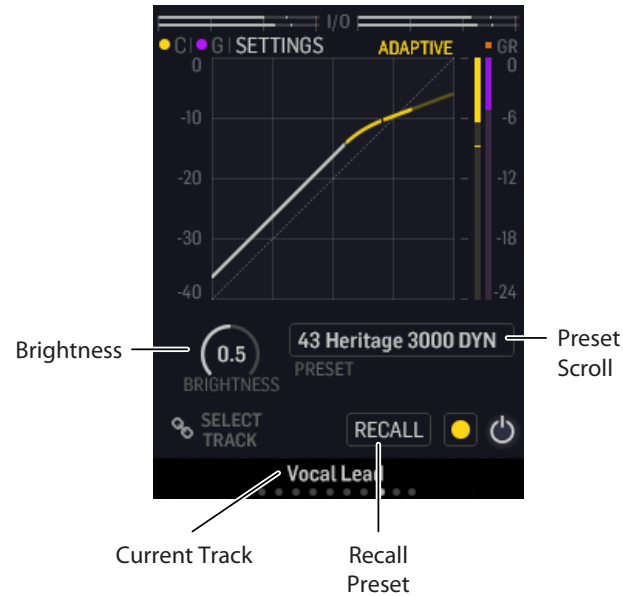
User presets are not given a number unless you first assign them as favorites. (See Favorite Presets below.)

You can use your computer's keyboard to enter a specific preset number, followed by the ENTER button.

7.3 Presets and the optional hardware unit

Presets can also be recalled from the hardware unit by navigating to the Global Settings Page.

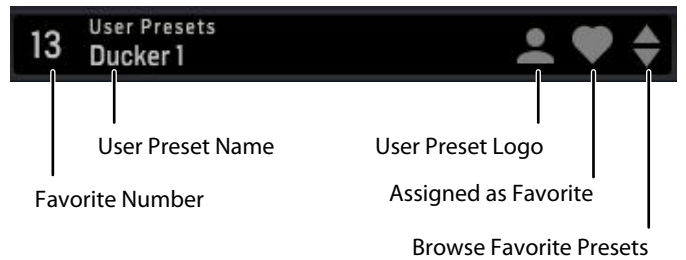
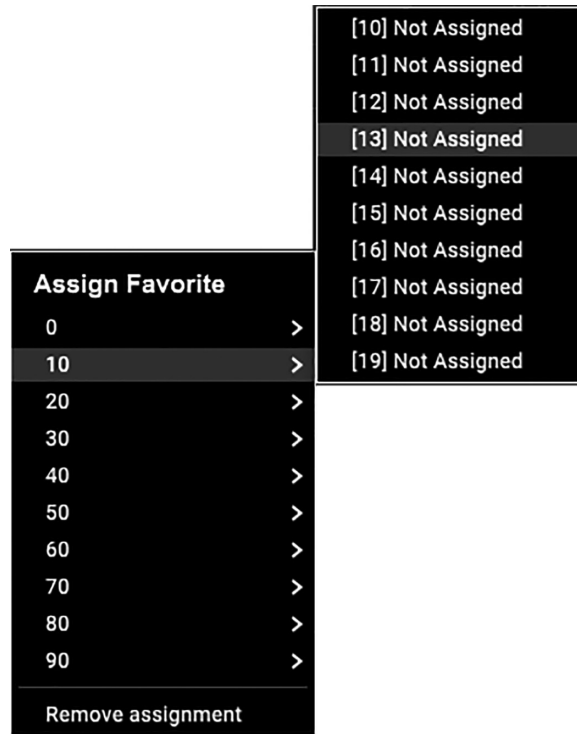
- Hold the right arrow button to go straight to the Global Settings page
- Use the Threshold/Release control to browse through the available presets
- Press the Mode button to recall and load that preset
- Use the Gain/Hold control to select the plug-in instance (track) if you have more than one DYN 3000 plug-in in your DAW session. The display shows the current track name at the bottom



7.4 Favorite Presets

Creating your own presets will make them accessible from the Preset menu, but they will only appear in the list of 100 presets in the plug-in or hardware unit if you set them as a favorite. This is done by assigning a favorite slot number to the preset using the Favorite menu.

Click the FAVORITE (heart-shaped) button in the preset window, then select one of the 10 banks. Assign one of your custom presets to a favorite slot, then the preset name will appear to the left of the preset name.



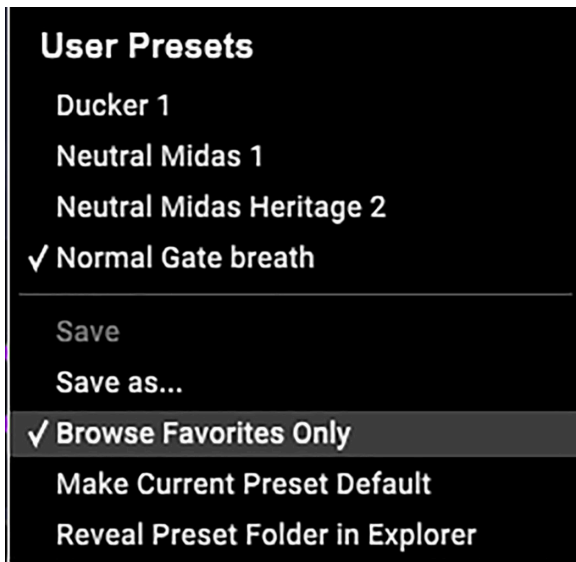
When a preset is assigned a favorite slot number:

- The preset is part of the 100 presets that can be recalled on the hardware unit
- The favorite number will be displayed on the hardware unit when recalled
- The favorite number will be locked so that two presets cannot be assigned to the same favorite slot number. This is shown in the Favorite menu by graying out the number in question
- The favorite number will be displayed in brackets when you browse the presets menu

You can remove the favorite assignment by clicking on the Heart again, and selecting the "Remove Assignment" feature at the bottom line of the Favorite menu.

Browse Favorites Only

The 'Browse Favorites Only' option in the preset menu allows the UP/DOWN arrows in the bottom bar of the plug-in, or via the hardware unit, to scroll only through the favorites list. Otherwise, scrolling goes through all presets.



7.5 Make Current Preset Default

Selecting 'Make current preset default' will cause this preset to appear every time a new instance of the plug-in is created.

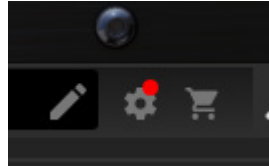
7.6 Reveal User Preset Folder in Explorer

To change the name of a preset, select 'Reveal User Preset Folder in Explorer' and modify the file name. This will open a Finder (Mac) or Explorer (PC) window where the user presets are stored. You can rename as well as delete, copy and paste presets. This allows you to share presets with other users online, simply pasting the new ones in this folder.

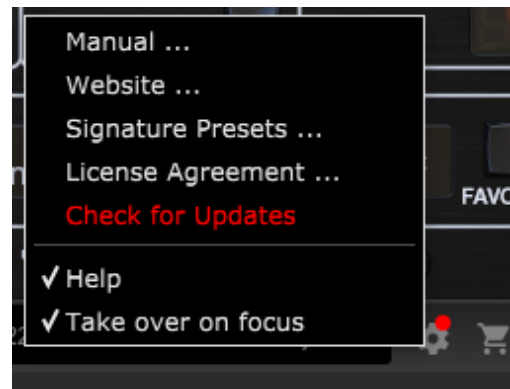
8. Software Updates

New versions of the software may be released to add new features and improve performance. Updates can be detected from the plug-in directly and can be installed after download from the website. See Chapter 2 for plug-in installation.

If the 'Automatically check for updates' option is checked inside the update menu, the red dot will appear on the settings icon when a new plug-in is available.



Click the gear icon and select "Check for Updates" to perform a scan.

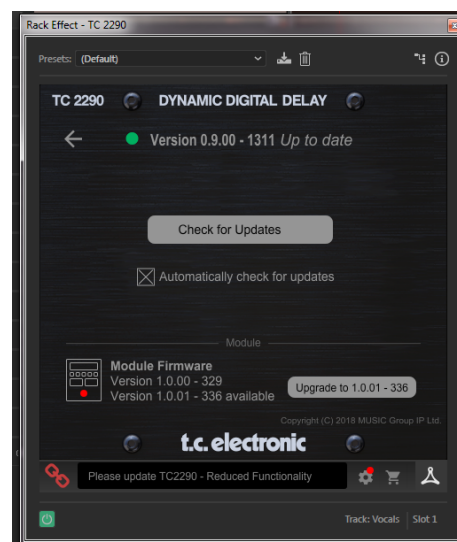


8.1 Hardware Unit Software Updates (optional)

The hardware unit firmware will be included in each plug-in update.

After you have installed a new plug-in, the system will detect mismatched firmware and indicate a need for update via a small red dot on the gear icon.

Click the "Upgrade to x.x.xx" field to start the update. Progress will be indicated in the plug-in, and the Feedback LED on the hardware unit will flash. (This example shows a TC2290 plug-in.)



9. Specifications

Sound

Processing	Processing versatile compressor and gate for channel, bus and master. Presence function and parallel compression. Flexible sidechain filtering
Operation	Mono, stereo
Analysis	Scrolling history and constant-Q real time analyzer
Sample rates	44.1, 48, 88.2, 96, 176.4, 192 kHz

Software Support

Operating systems	Mac OS X 10.13 Sierra or above, Windows 7 or above
Drivers	No additional drivers required, uses standard USB HID drivers
Plugin formats	AAX-native, Audio Units, VST2.4, VST3. 64 bit

USB Connection (DT version)

Type	USB 2.0, type micro-B
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Power (DT version)

Power supply	USB bus powered
Power consumption	Max. 2.5 W

Physical (DT version)

Display	2.4 Inch, 240x320 pixel, color TFT
Controls	High-resolution, true-analog feel, endless potentiometers, and dedicated buttons
Dimensions (HxWxD)	42 x 54 x 135 mm (1.7 x 2.1 x 5.3")
Weight	0.2 kg (0.44 lbs)

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

TC Electronic

DYN 3000-DT

Responsible Party Name: **Music Tribe Commercial NV Inc.**
Address: **901 Grier Drive
Las Vegas, NV 89118
USA**
Phone Number: **+1 747 237 5033**

DYN 3000-DT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

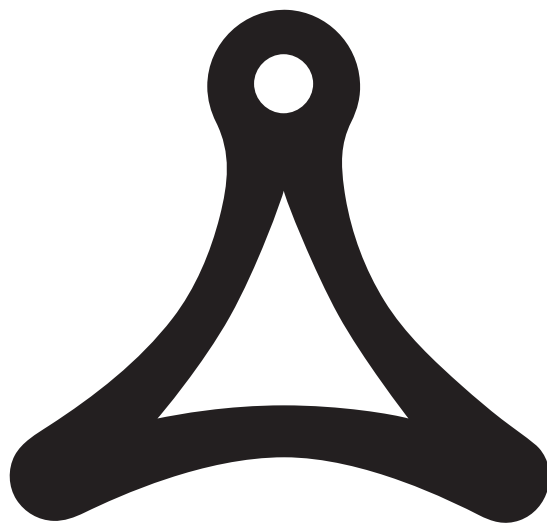
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:

Changes or modifications to the equipment not expressly approved by Music Tribe can void the user's authority to use the equipment.



TC ICON
S E R I E S