

AMS Neve Genesys Control Plugin User Manual

Version 1.4



The Genesys/Genesys Black are hand-built expandable analogue recording consoles with digital workstation control. The consoles build upon Neve's 50+ years of technical heritage, including legendary mic pre-amplifiers and highly revered analogue circuit design.



The AMS Neve Genesys Black GB32 Console



The Genesys Control Plugin allows DAW users to connect to and control a Genesys or Genesys Black console by automating EQ, Dynamics, Aux sends, Fader motions, Insert and routing switches. The plug in controls the console hardware processing, routing and automation from within the DAW. Please note the plugin works only with consoles running 32-bit communications.

This plugin provides a fully featured and comprehensive channel strip, which includes all of the channel strip processing elements available on the Genesys console.

The plugin controls comprise of:

- Neve 88R-style 4-band EQ (depending on console configuration)
- Neve 1084 Classic 3-band EQ (depending on console configuration)
- Neve VCA Compressor & Expander/Gate (depending on console configuration)
- Sidechain Processing (depending on console configuration)
- Input and Output gain
- Fader controls (small/large)
- Insert On/Off switches
- Auxiliary send In/Out switches
- 8-Track master section
- Reverb returns
- Master fader control section

Table of Contents

Communication Setup	4
Stereo Channels	5
Master Channels	5
Plugin Elements	6
GEQ884 E.Q	7
GEQ1084 E.Q	9
GDYN882 Compressor	10
GDYN882 Gate/Expander	13
G5840 Channel Control Section	15
Master Section	17
Settings/options Page	19
Genesys Control Timecode	20
Mouse & Keyboard Commands	21
Pro Tools Automation	22
Genesys Console Channel Indication	23

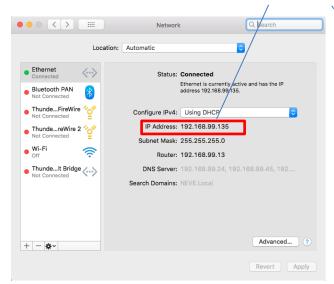
Communication Setup

The Genesys Control Plugin will only function when a valid license number has been entered into the Genesys software and the DAW and Genesys Control plugin are connected together.

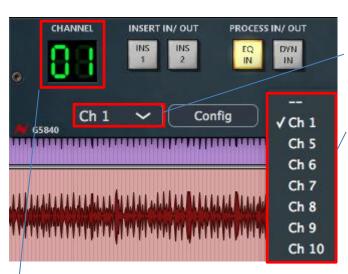
Connection is achieved by matching the Genesys Control plugin I.P. address with the Network IP address for on the DAW computer.

This is found within settings>automation>GenesysControl Plugin>Set New IP

I.P Addresses must be identical







When placed on DAW tracks, the plugin is assigned to control and automate the corresponding console track. Once assigned, any changes made within the plugin will now control the processing on the corresponding console channel.

The channel selection button will open the channel option window.

In order for the plugin to function correctly, the selected channel number on the plugin track must match the selected channel on the console. 1 for 1, 2 for 2, etc.



When the DAW and the Genesys console are in sync and communicating, the channel number indicator will appear green.

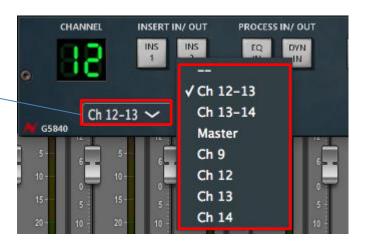


If the DAW and the Genesys console are not in sync, the channel number will appear in red, this indicates there is a problem with automation communication between the DAW computer and the console, follow the steps above and restart both DAW computer and the Genesys Console to resolve.

Stereo Channels

When applying the Genesys Control plugin onto a stereo track within the DAW, the stereo track option from the channel selection box will appear as well as the mono track option.

When a stereo track is selected, the Genesys console will link the two adjoining tracks together copying every option that can be seen from within the plugin window; Fader position, EQ, Dynamics, Aux on/off, insert on/off etc.



Master Channels

When applying the Genesys Control plugin onto a stereo track and choosing the 'Master' option from the channel selection box

The plugin display window will now change to master mode and reveal a host of new controls. These functions allow automation control of the master section of the Genesys console. The Master plugin window is explained in greater detail in later pages of this plugin manual.



Plugin Elements

1a) The GEQ884 element features 4 band Semi-Parametric equalisation with bands low, mid1 mid2 and high bands, as well as a variable frequency high pass filter and is shown when controlling installed 88R-style EQ hardware on the Genesys channel strip;



1b) The GEQ1084 element features 3-band Neve vintage 1084 EQ with low shelf, mid bell curve (with Hi-Q selection) and high shelf bands and is shown when controlling installed 1084 EQ hardware on the Genesys channel strip;



2) The GDYN882 element features Compressor and Gate/Expander controls and is shown when controlling installed VCA Dynamics hardware on the Genesys channel strip;



3) The GS840 element features insert on/off switches, EQ/Dynamics in/out switches, aux 1-6 in/out switches and monitor path fader (small fader) level and CUT controls;



Please note that the small fader controls will only work on Genesys consoles with motorised channel faders

4) The large fader element features fader name, fader level and cut controls.

Please note that the large fader controls will only work on Genesys consoles with motorised channel faders



GEQ884 EQ



The GEQ884 EQ has 9 rotary controls – High Pass Frequency, Low Freq, Low gain, Mid1 Frequency, Mid1 Gain, Mid2 Frequency, Mid2 Gain, and HI Frequency, High Gain.

Change the frequency and EQ Cut/Boost levels by rotating the associated rotary controls within the plugin. The EQ section includes four switches, High pass in/out, low shelf and high shelf switches which change the Lo and High band from bell curve EQ to shelving EQ and a Bypass switch that will bypass any EQ processing.



The High pass filter will cut all frequencies below the user defined threshold, ranging from 32 - 290Hz

The high Pass in/out will activate the high pass filter circuitry (Lit =High Pass active, Unlit = High Pass inactive)



The Low band EQ frequency control ranges from 31-340Hz

The Gain control will cut or boost the selected frequency ±17 dB

The high/low shelving button switches the Low EQ from a bell curve to a high/lo shelf EQ (Lit = shelf, Unlit = bell curve)



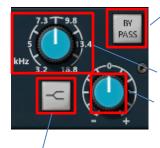
The Mid1 band EQ frequency control ranges from 132Hz to 1.47KHz

The Gain control will cut or boost the selected frequency ±17 dB



The Mid2 band EQ frequency control ranges from 1.35Khz to 9.64Khz

The Gain control will cut or boost the selected frequency ±17 dB



The Bypass switch will deactivate the EQ circuitry when pressed (Lit = Bypassed, Unlit = active).

The High band frequency control ranges from 3.2Khz to 18.8KHz

The Gain control will cut or boost the selected frequency ±17 dB

The high/low shelving button switches the Low EQ from a bell curve to a high/low shelf EQ (Lit = Shelf, Unlit = bell curve)

To enable touch automation when using Genesys console EQ/Dynamics encoder controls, hold down the PLI button underneath the encoders while making automation adjustments.

GEQ1084 EQ



The GEQ1084 EQ features three dual concentric controls low shelf frequency, low shelf gain, mid frequency, mid gain, high shelf frequency and high shelf gain.

Change the frequency and EQ Cut/Boost levels by rotating the associated rotary controls within the plugin.

The EQ section features two switches, the Hi Q presence button switches the bandwidth of the mid bell frequency curve to a narrow, focused curve and the EQ Bypass switch bypasses any EQ processing.



The Low shelf frequency control switches between selectable frequencies 35Hz, 60Hz, 110Hz and 220Hz

The Gain control will cut or boost the selected frequency ±16 dB



The mid band frequency control switches between selectable frequencies 0.35KHz, 0.7KHz, 1.6KHz, 3.2KHz, 4.8KHz and 7.2KHz

The HI Q switches the EQ curve to a narrow, focused bandwidth (Lit = HI Q)

The gain control will cut or boost the selected frequency ±12dB or ±18dB with HI Q switch in on position (lit)



The High shelf frequency control switches between selectable frequencies 10KHz, 12KHz and 16KHz

The Gain control will cut or boost the selected frequency ±16 dB



The bypass button will deactivate the EQ circuitry when pressed (Lit = Bypassed, Unlit = active)

To enable touch automation when using Genesys EQ/Dynamics encoders, hold down the PLI button underneath the encoders while making automation adjustments.

GDYN882 Compressor



The GDYN882 Compressor features 3 rotary controllers – RAT (ratio), THR (threshold) and REL (release).

Change the compressor settings of the installed VCA Dynamics hardware in the Genesys console by rotating the associated rotary controls within the plugin.

The Compressor section features four switches - BYPASS, FAST ATTACK, LOC (local link) and GLOB (global link) and 2 shared side chain switches that function for both compressor and gate/expander – SC Input Key and EQ.



The Bypass switch will deactivate the compressor circuitry (Lit = Bypassed, Unlit = active)

The ratio controller sets the level of compression above the set threshold ranging from 1:1 ratio up to ∞ .

The gain reduction meter displays the level of gain reduction that the compressor is affecting upon the audio.



The Threshold controller sets the level at which any signal passing above will be compressed ranging from 10dB to -20dB.



The fast attack button changes the attack time of the compressor, pressing this switch, will set the Attack time from Slow (3ms to 30ms, programme controlled) to Fast (3ms for 20dB of gain reduction), (Lit = fast attack, unlit = slow attack).

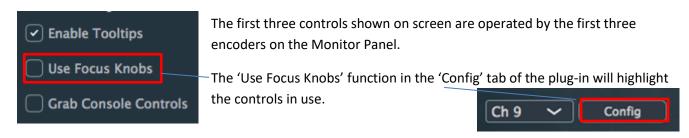
The release controller sets the release time of the compressor, ranging from 0.1 to 4 seconds.



LOC (local link mode) switch links the compressor/gate to the adjoining channel to the right.

GLOB (global Link mode) switch links all available compressors/gates to act as one compressor/gate.

GLOB (global Link mode) switch links all available compressors/gates to act as one compressor/gate.



The 1st encoder sets the Ratio, and runs from 1:1 (off) to ∞ :1 (Limiting).

The 2nd encoder sets the Threshold, and runs from 10 to -20.

The 3rd encoder sets the Release time (in seconds) and runs from 0.1 of a second to 4 seconds.

The Fast attack Button sets the Attack time from Slow (unlit - 3ms to 30ms, programme controlled) to Fast (Lit - 3ms for 20dB of gain reduction).

To enable touch automation when using Genesys EQ/Dynamics encoders, hold down the PLI button underneath the encoders while making automation adjustments.

The Sidechain Input switches select from the EQ output on that Channel, or from the Key Input via the 25-way D-type connector on the Dynamics cassette.

Both switch lights OFF means the signal is coming from the associated Channel. • The EQ LED lit means the signal is coming from the associated EQ output. • The KEY LED lit means the signal is being taken from an external trigger.

In Local Link mode, the compressors within an 8-fader section can linked together to form any size links in any combination, so that all the link members being compressed are treated as one and compressed identically.

It is always the loudest signal within this link-group that causes the compressor to action once the threshold has been reached, regardless of which signal this actually is.

Creating links will always link that path with the path to its right.

Links can be any size (from 2 to 8-wide) in any combination.

It is possible to set up a single 8-wide link.

It is not possible to link across different 8-fader sections of the console.

A typical linking example would be channels 1 & 2 linked together, and channels 4 & 5 linked together to form two link groups. It would then be possible to include channel 3 to join these links together to form one complete link, but noting that channel 3 would also be included in the link group if selected. To isolate channel 3 it would be necessary to remove the compressor from the channel or the monitor path by using the DYN button (turned off) on the channel strip to isolate it.

In Global Link Mode all of the compressors across the entire width of the console will act as a single compressor across all of the signals fed into it.

It is always the loudest signal within this link-group that causes the compressor to action once the threshold has been reached, regardless of which signal this actually is.

In Local or Global Link Mode, the Threshold, Ratio, etc values can all be different for paths that are linked, and all of these controls can be set independently of each other. It is the loudest signal in the group that will cause all of those linked dynamics to action at once.

If an EQ is being used as the Sidechain EQ signal, it will no longer be available in the Channel (or Monitor) path.

The EQ pick-off point when used in this mode will always be Pre- the Dynamics processing (but can be Post Insert if the Inserts are set Pre- Dynamics).

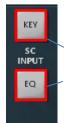
GDYN882 Gate/Expander



The GDYN882 Gate/Expander features 3 rotary controllers – RAT (ratio), THR (threshold) and REL (release).

Use the rotary controls within the plugin to alter the Gate/Expander settings of the installed console hardware.

The gate/Expander section features 3 switches EXP (expander), fast attack, Bypass and two shared side chain switches that function for both compressor and gate/expander – SC Input Key and EQ.



Key switch activates the external side chain input for the Gate/Expander.

EQ switch selects the channel EQ as the side chain input for the Gate/Expander.



The Range controller sets the level at which the gate/expander reduces signal below its chosen threshold.



The EXP (Expander) button switches the processor between Gate (not-lit) and Expander (Lit) mode.

The Threshold controller sets the level at which the gate activation is triggered.



The Fast Attack button switches the attack time of the gate from slow - 1.5ms (unlit) to fast - 100us (lit).

The release controller sets the release time of the gate, ranging from 0.1 to 4 seconds.

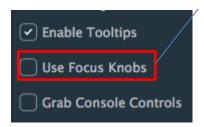
The bypass will deactivate the Gate/Expander circuitry (Lit = Bypassed, Unlit = active).



The gain reduction meter displays the gain reduction in dB when the gate is active.



The Gate/Expander controls are activated by pressing the 'DYN IN' button, (Lit =active, Unlit = bypassed).



The rotary controls on screen map directly to the first three encoders on the Monitor Panel of the console. The 'Use Focus Knobs' function in the 'Config' tab of the plug-in will highlight the controls in use.

The 1st encoder sets the Range of the Gate (or Expander) and runs from 0db to 50dB.

The 2nd encoder sets the Threshold at which the Gate (or Expander) should operate and runs from -30dB to 10dB.

The 3rd encoder sets the Release time, and operates within a range of 0.1 second to 4 seconds.

To enable touch automation when using Genesys EQ/Dynamics encoders, hold down the PLI button underneath the encoders while making automation adjustments.

The Sidechain Input switches select from the EQ output on that Channel, or from the Key Input via the 25-way D-type connector on the Dynamics cassette.

Both switch lights OFF means the signal is coming from the associated Channel. • The EQ LED lit means the signal is coming from the associated EQ output. • The KEY LED lit means the signal is being taken from an external trigger.

By pressing the Fast Attack button attack time from being 1.5ms for 40dB of range (Slow) to 100micro seconds for 40dB range (Fast).

The EXP button swaps the process between acting as a Gate or an Expander, and this is shown on screen with as lit when acting as an Expander and unlit when acting as a Gate.

If an EQ is being used to be the Sidechain into the Gate (or Exp), it will no longer be available in the Channel (or Monitor) path. The EQ pick-off point when used in this mode will always be Pre- the Dynamics processing (but can be Post Insert if the Inserts are set Pre- Dynamics).

NB: Whichever Sidechain Input you select will be common to all the other available processes.

For example, if you have the Compressor set to take its sidechain from the External Key Input, then the Gate (and Exp) will also automatically be set to the External Key Input.

If you change this selection on one process, it will impact that same selection on other available processes on the same Channel or Monitor path.

G5840 Channel Control Section



The channel control section contains the routing controls for the multiple input/output sections of the channel strip. Insert points 1 & 2, EQ in/out and Dynamics in/out switches. Aux sends 1-6 on/off, AUT, SWAP and CUT.



Channel number indicator displays which Genesys console channel that the Genesys Control plug in is linked to.

Make sure this plugin channel number on corresponds to the correct channel number on your console.



The insert in/Out switches will activate the insert 1 and insert 2 hardware signal chain paths within the console. Inserts are active when lit.



The Process In/Out switches will activate the installed EQ and Dynamics processing within the console. EQ and Dynamics processing are active when lit.



The Aux 1-6 In/out routing buttons will activate or deactivate the auxiliary sends from the corresponding desk channel. Aux sends are active when lit.



The AUT (Automation) allows the large fader to act as the position of the small fader when Swap is enabled, this enables small fader (monitor return) automation moves to be recorded by using the large fader when Swap switch is activated.

The swap Button swaps the monitor (small fader) and the channel (large fader) controls. When lit, the small fader is controlled by the large fader in the fader section of the plug in, when unlit, the monitor return is controlled by the small fader rotary controller.

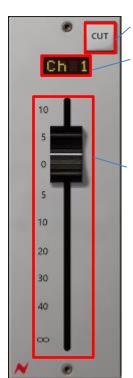


The cut button mutes the corresponding monitor return channel when lit. The monitor return for the channel is active when unlit.

The small Fader rotary controller controls the monitor return level for the corresponding channel.

Please note that the small fader control will only work on Genesys consoles with motorised channel faders.

The Fader section of the Plug-In controls the fader automation and levels for the corresponding desk channel.



The cut button mutes the desk channel when lit and the channel is active when unlit.

The channel name section displays the channel name for the corresponding desk channel, it can also be renamed from within the plug in and the desk LED will be altered accordingly.

The fader can be automated and adjusted from within the plug in to alter the channel level.

Please note that the fader controls will only work on Genesys consoles with motorised channel faders.

Master Section





The Genesys Control Plugin has two main views, the Channel view and Master view. When the plugin is applied onto any Stereo DAW track, the Master option will appear at the bottom of the channel selection window. When selected, this will add a Master section plugin to the applied track.



The top section of the Master plugin shows the rotary level encoders for the Genesys reverb returns. Each of which can be activated/deactivated by the on switch. Reverb returns console encoders are not touch sensitive, to enable touch automation hold the PLI (plugin) button under the EQ encoders on the console while making adjustments to the reverb return controls.



AUX Master on/off controls are accessed from this section.



IMR on/off controls the Insert Mix Return function.

INS activates the main mix insert circuit.

8-Track controls are accessed from the bottom section of the master plug in screen.

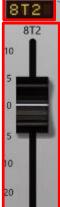


AUX on/off switches for each 8-Track channel are located at the top of the fader, Lit = AUX send active, Unlit = AUX send inactive

INS activates the insert point circuit for the 8-Track channel.



CUT switch will deactivate the 8-Track channel when clicked.

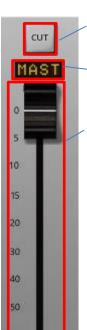


The 8-Track names can be adjusted from within the plugin in the same way as the channel naming section.

Fader movements and automation can be controlled with the 8-Track faders at the bottom of the screen.

Please note that 8-track fader controls will only work on Genesys consoles fitted with motorised 8-track faders

The master fader can also be controlled and automated from within this section of the plugin



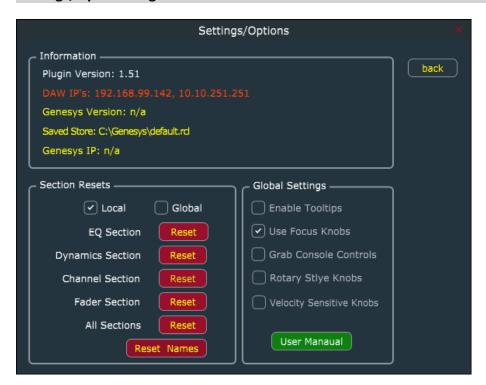
CUT will mute the main master output of the console.

The master track can be renamed from this window within the plugin in the same way as the channel/8-Track channels.

Master fader positions and automations can be controlled within the plugin by using the on screen master fader.

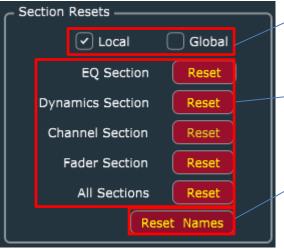
Please note that the master fader controls will only work on Genesys consoles with motorised 8-track/master faders

Settings/Options Page





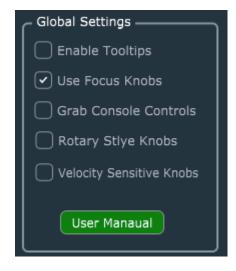
The settings/options page can be accessed by clicking the Config button on the main Plug-In Window



Section Resets can be set to either Local or Global, the Local option will apply changes to the plugin channel only. The Global option will apply the changes to the entire console.

Several parameters can be reset independently, EQ, Dynamics, channel routing and Fader position. The All sections reset button will reset the processing/routing for the entire channel.

The Reset Names button will reset the channel name to its default.



The **Global Settings** section of the Genesys Control settings page allows users to tune the operation of the software to their individual requirements.

Enable Tooltips will give users extra help with button full names/functions, when this option is ticked, short text tips will appear when hovering the cursor over any plugin parameter.

Use Focus Knobs enables focused encoder action when operating the EQ/Dynamics encoders on the Genesys Console. When this option is ticked, the available parameters being used by the encoders will be focused on the plugin display and the remaining functions will be greyed out. When this option in use, pressing the console F5 button will cycle through the available focus groups.

Grab Console Controls toggles between the Plugin and the console as a master source of control data for the console. When this option is unticked, the plug in can be copied within the DAW onto another track and the corresponding console settings such as EQ, DYN, fader motions, routing etc, will be copied over to the applied track and console settings will be updated. When the option is ticked, the plugin will reflect the same settings as the console when applied to new tracks.

Rotary Style Knobs allows for two different methods of operation when following on-screen mouse movements.

Unticked - knobs will change value with mouse up/down and left/right movements.

Ticked – control position follows mouse pointer actions.

Pressing the *Shift Key* before clicking a control will reverse this option during that mouse operation.

Velocity Sensitive Knobs allows users to select the sensitivity of the on-screen controller response

Unticked - Knobs are linear to the mouse movement Ticked - Knobs are dependent on the speed of mouse movement

Hold *Ctrl* (Windows) or *Command* (Mac) to enable velocity sensitive movements irrespective of this setting, but only when rotary style is off.

User Manual displays the User Manual from within the plugin.

Genesys Control Timecode

The Genesys Control plugin uses its own proprietary comms code to send and receive data from the DAW. This allows for non-HUI data to be transmitted and received if the HUI interface is either not working or unused in your studio setup. The **GC TC** button located underneath the TC Counter display on the Genesys software main screen, will enable non-HUI timecode to be received by the console. DAW timecode is now displayed in the counter above which follows the DAW session. In addition, the transport keys will now transmit Play, Stop, Rewind, fast-forward and Record commands directly to the DAW. Clicking the **DAW TC** button will revert the TC counter display back to HUI based timecode and the transport buttons will operate over HUI again.

Mouse and Keyboard Commands

The operation of the Genesys Control Plugin can be controlled and modified by using several key and mouse commands.

Faders

Faders will not jump position when you click on them, rather, any mouse movement will be applied as an offset, if the **Shift Key** is held then the fader will jump to position on the first click.

Mouse Wheel

Shift Key Held - Coarse movements

Command/Ctrl Key Held - Fine Movements

Keyboard

Once a Knob is selected (i.e. clicked on):

Up/Right Key - Fine increments (Shift Key -> coarse movements)

Down/Left Key – Fine decrements (**Shift Key** -> coarse movements)

Page Up Key – Coarse increments Shift Key -> fine movements

Page Down Key -- Coarse decrements (Shift Key -> fine movements)

Command/Ctrl Key - Holding this in conjunction with any of the above keys will always do the minimum step, fine movements are 2 steps and coarse movements are 8 steps.

Alt Key - Set the default value when a knob is clicked (as does double click)

Transport

NOTE: These will only work if the DAW has keyboard focus

If HUI is **not** connected then basic transport operations from the surface will work through the plugin, Play and Stop work on most DAWs as this is achieved by simulating the space-bar. ProTools specific buttons for rewind, fast forward and record -

RW - Simulated by NumPad 1

FW - Simulated by NumPad 2

REC - Simulated by NumPad 3

The Timecode position is also shown on the Genesys Screen.

Pro Tools Automation

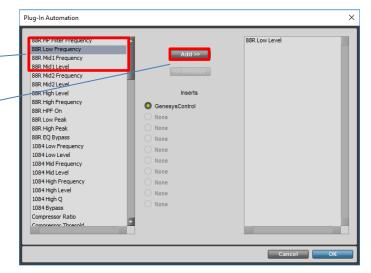
In order to automate console parameters from the Genesys Control Plugin from within Pro Tools, each parameter must be assigned to the automatable features window within Pro Tools. This process must be completed for each instance of the Genesys Control Plugin on each Pro Tools track.

There are several ways to enable automation for the plugins various parameters from within Pro Tools.



Click the automation window on the plugin. This will bring up the automation assignment window

Select the parameter you wish to automate by highlighting it on the left screen, then click 'Add' and OK at the bottom of the screen

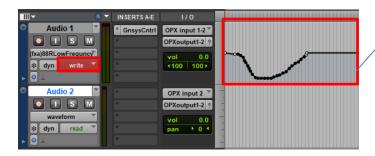




The selected parameter will now appear on your Pro Tools track view timeline.

the parameter is now ready to be automated. Automation is enabled on a track by track basis by selecting **write**, **touch or Latch** from the pro tools track automation window.



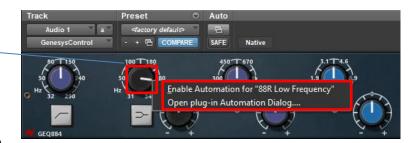


Plugin parameter motions are now recorded on each tracks timeline and are played back along with the session timecode.

Hold **CTRL+Alt+Win** (PC) or **Ctrl+Alt+option** (Mac) and click the parameter you wish to automate.

This will bring up an automation shortcut window which allows for quickly assigning automatable parameters.

Once clicked, the parameter will now appear on the track timeline view options.





Hold **Ctrl+Alt+win** (PC) or **Ctrl+Alt+option** (Mac) and click the auto button at the top of the plugin to add all of the automation parameters to the track's timeline. This is a quick way to automate every possible plugin feature.

Genesys Console Channel Indication

In order to easily identify which of your console channels have a Genesys Control Plugin assigned, redundant button Indication lights have been utilized to show which of your console channels are being automated by the Genesys Control Plugin.

- Genesys Black users, the **AUTO** button at the top of each channel fader will illuminate Yellow.
- Genesys users, the GLIDE button above each channel fader will illuminate Yellow.