# **TASCAM** GigaStudio 3

# **Version History**

V3.04 December 20, 2004

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# Installing a GS3 Patch Update

- It is NOT necessary to uninstall GigaStudio or use GigaClean before running the Patch Updater.
- 1. Download and run the GS3 Patch Updater. You will need your GS3 CD-Key to access the download page.
- 2 Restart

# Changes in v3.01

## Main App Maintenance Items

- System configuration text boxes now validated on Apply/OK
- Stacked instruments with release triggers are now working correctly
- Changes have been made that eliminate audio artifacts when stacking instruments
- A non-functional Debug Mode checkbox has been removed
- Dropping non-Giga related file on the MIDI Mixer could previously crash GigaStudio. Changes have been made to eliminate this issue.
- An out of date error dialog when clicking on CD drive in the DriveTree has been updated
- The shortcut Select File > Diagnostics now opens the correct window
- Various Unclear phrases/directions in the UI have been cleaned up
- Changes have been made to eliminate possible crashes upon loading a library after using preview
- GigaPiano-II .gsi files now operate correctly on all MIDI channels
- Clicking Cancel after opening the New File dialog will not affect mixer settings
- When Edit Wave is used and a variation saved (under a new name), Distributed Wave now replaces the cue in the Distributed Wave instrument list and updates QuickSound
- UI handling of topmost window has been improved.
- The selected channel in the MIDI mixer now correctly defaults to #1 after resetting with a stacked member instrument selected
- Incorrectly pressing "Restore Now" in the Registration screen will not corrupt the registration. NOTE: This only applies to new V3.01 disks. Users with 3.00 installed & registered should use the Registration Backup/Restore mechanism available in the GS3 License Manager

#### Feature Additions

- "Edit As" feature has been added to the Distributed Wave edit menu. This prompts for a new path, makes a copy of the selected wave at that path, displaces the original sample in Distributed Wave with the copy, and launches the selected wave editor against the copy. The original sample at this point is out of the picture.
- Support for VST plug ins with no UI has been added

## **Editor Changes**

- Deleted split no longer reappears when changing dim controller to None
- Simultaneously saving/opening files has been disabled to avoid crashes until improvements can be made
- F2 shortcut has been implemented for sample renaming
- Blue editing dots no longer get stuck at the top of a region in the Editor
- Replace all for ALL folders has been implemented. The new option is on the right-click menu in the wave tree, "Replace all samples in all folders." Because the app would be processing a potentially large number of samples, each with several possible outcomes (normal replacement, file not found, file found but not a valid .wav file) there's a dialog similar to the one for "Convert wave pool format" where you can view the results.

For each sample, the app searches recursively under the specified root directory for a file with the same name as the sample. If the original sample is not accelerated, the app searches for for \*.wav first and then \*.dxl; the other way around if the original is accelerated. If every sample in the instrument has a unique name, the replacement is straightforward. If there are multiple samples with the same name distinguished only by folder then use the option to require a subdirectory match. In the case below the sample called "021" in the "Velocity1" folder would only be replaced by a file called

<specified-root>\Velocity1\021.wav

or

<specified-root>\Piano\Velocity1\021.wav

As with the older feature for replacing a single folder, missing files are not considered a fatal error – the app just replaces the ones it does find and continues.

# Changes in v3.02

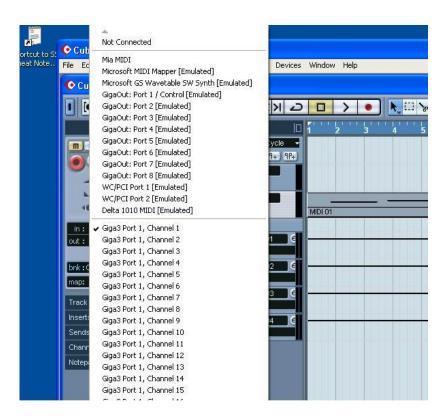
#### ReWire

Problems when rendering audio while GS is ReWired into a DAW have been addressed. Please note the following:

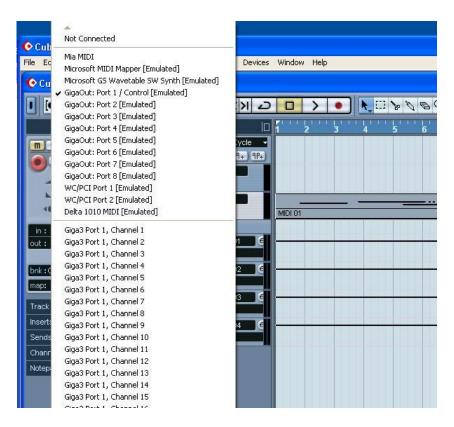
- When using GS3 in ReWire mode, without MIDI port processing tools such as the VSL Performance tool or Garritan's Maestro Tool, the ReWire MIDI ports should be used. This will allow either real time or faster than real time ReWire audio rendering. Do not use the GS3 MIDI ports.
- When using GS3 in ReWire mode, with MIDI port processing tools, the midi
  track will be routed to the MIDI port processing tools and ReWire audio
  rendering must be done in real time mode. Please refer to your DAW's
  documentation on how to set this.

Below are DAW screen shots with descriptions showing how to set up audio rendering for use with ReWired GS3.

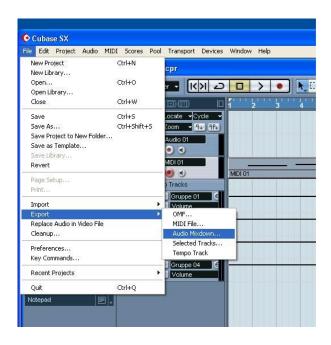
#### Cubase 2.2 / Nuendo 2.2



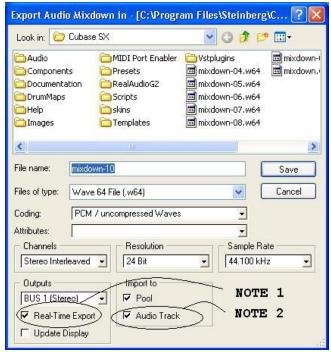
Cubase SX/Nuendo 2.2 Selecting the Giga Rewire port to route midi to GigaStudio



Cubase SX/Nuendo 2.20 Selecting the GS MIDI port to route midi to GigaStudio



Cubase SX/Nuendo 2.2 Rendering a Giga ReWire track to an audio file or track

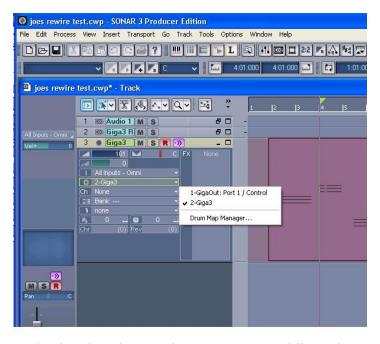


Cubase SX/Nuendo 2.20 Configuring how to render a Giga ReWire track.

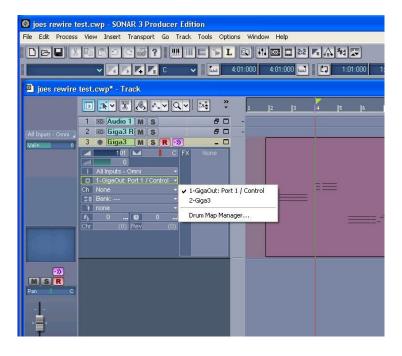
NOTE 1: Use this setting to determine if the ReWire track is rendered in real-time as fast as the software will allow. This must be checked when using MIDI processing tools.

NOTE 2: Use this setting to determine if the rendered audio track is automatically imported into an audio track.

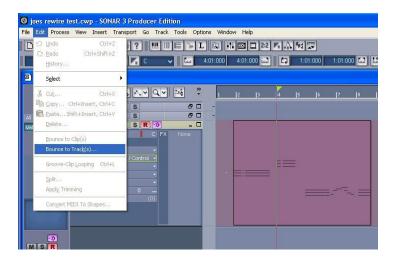
#### Sonar



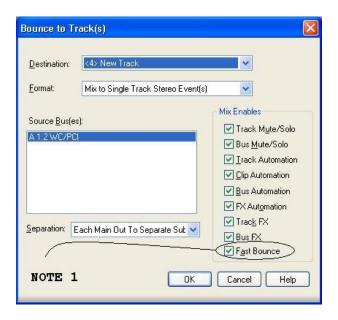
Sonar Selecting the Giga Rewire port to route midi to GigaStudio.



Sonar Selecting the GS MIDI port to route midi to GigaStudio



Sonar Rendering a Giga ReWire track to an audio track



Sonar Configuring how to render a Giga midi track

NOTE 1: Use this setting to determine if the ReWire track is rendered in real-time as fast as the software will allow. This box should not be checked if using MIDI processing tools.

# Changes in v3.03

## Main App Maintenance Items

- Problems with missed program/patch changes on banks not equal to 0 have been corrected.
  - Currently if the GSIF2 MIDI In driver (low-latency) is being used and GS receives a patch change, the patch change occurs but will not be reflected in the UI until the UI has been refreshed.
  - o If you try to patch change an instrument with built in convolution ON to or OFF of a channel, the engine will block that patch change.
- A problem with held notes before a program change not being turned off by the note off after the program change, leaving a stuck note, has been corrected.
- Error messages no longer get stuck under progress meters.
- MIDI Mixer Mute/Solo behavior has been improved.
- Crash when changing hardware settings while the GigaPulse UI is open has been fixed
- Incompatibility with the TC PowerCore has been fixed.
- Correct show/hide cursor behavior in the QuickEdit UI has been implemented.
- NFX and VST plug-in bypass state is now correctly restored after a save. Existing projects that have had this problem must be re-saved using v3.03.

#### **Enhancements**

- The QuickSound search edit box is now the control that has UI input focus when GS is launched. This allows immediate entry without clicking in the box.
- The File > Save command, Save toolbar shortcut and CTRL+S keyboard shortcut are now always available. Previously, they were only available when an app parameter had changed. Since plug-ins do not communicate their changed state to the app, the project could not be saved after a plug-in parameter had been changed. It is now possible to Save any time.
- Changes have been made to improve compatibility with Hyper Threading enabled CPUs. However, due to the wide variety of PC hardware, there still may be some systems that exhibit instability. If you find your system unstable with HT, disable it and send us detailed system specs and a Diag report to TASCAM Operational Support. Further improvements are planned to be made in this area.

## System Memory Configuration Manager

A new feature that has been added into v3.03, called the *System Memory Configuration Manager*.

This feature was added to help the user test and configure their system memory for optimal use with GigaStudio 3. Field reports have indicated that the default Windows XP settings are not optimal for GigaStudio 3 when the system is populated with 1 Gig or more of memory. The *System Memory Configuration Manager* allows the user to test and verify their system, as well as configure the memory settings.

#### **Using the System Memory Configuration Manager**

This new feature can be accessed via the GigaStudio System Settings control panel. This control panel can be invoked either from within the GigaStudio application or from the Windows XP Start Menu (please see your GigaStudio technical documentation for more details). However, we recommend that when testing and configuring the system memory that your invoke the feature from the Windows Xp Start Menu. The first step will be to start the *GigaStudio Configuration Manager*, see figure 1.



Figure 1

Next, select the *ToubleShoot* tab and hit the 'Configure' button under the System Memory Configuration section, see figure 2.

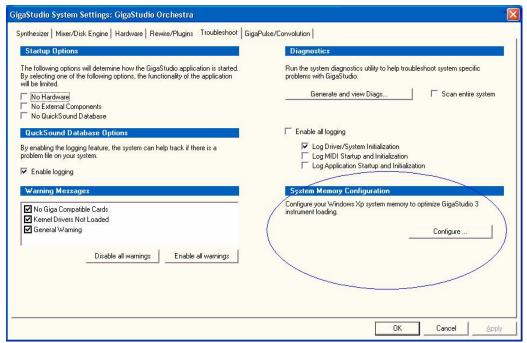


Figure 2

Finally you will be presented with the *System Memory Configuration Manager* control panel, see figure 3.

Current System Memory Statistics		
Total Physical Memory:		1023 Mbytes
Total Memory Available for Instrument lo	oading:	767 Mbytes
Tested Memory Available for Instrument	it loading:	Run Memory Test
Memory Test Progress		Run Memory Test
Avaliable Memory Configuration Presets		
Note: If you were unable to acquire a sig Instrument loading' after running the mem		
configuration preset.		
configuration preset.  Use the system original configuration		

Figure 3

This feature was designed to aid the user in optimizing their system for the best possible Windows XP memory configuration. The first thing that should always be done is to test the current memory configuration. Simply hit the button 'Run Memory Test ...' to start the test. You can cancel the test at any time by hitting the same button. This test will simulate how GigaStudio 3 will use system memory, and will report exactly how much memory it was able to secure from Windows XP.

On a system with 2Gig of RAM installed, when everything is properly configured, the maximum memory that Windows XP will allow the application is between 65% and 70% of the available memory.

Please see following table for an explanation the information displayed:

Total Physical Memory	This represents, in Mbytes, the total physical memory populated on your motherboard. This should be the same amount that Windows XP reports in the General tab of the System Properties control panel.
Total Memory Available for Instrument loading	This represents, in Mbytes, the total size of the memory available for Giga3 instrument loading. This represents the 100% of the 'memory' meter in the GigaStudio application.
Tested Memory Available for Instrument loading	This represents, in Mbytes, the total size of memory that was successfully acquired when running the memory test. The goal is to get this number as close to or equal to the 'Total Memory Available for Instrument loading'. This number will only fill in after running the test to completion. If you cancel this test before completion then this field will continue to display 'Run Memory Test'. If after running this memory test, this number approaches the 'Total Memory Available for Instrument loading' then there is no reason to change your memory configuration. Otherwise you will need to change the current memory configuration preset, reboot your system, and rerun the test.

## **Editor Changes**

- The number of instrument layers that can be created has been increased from 8 to 127
- UI improvements in Wave Pool Convert:
  - o In the scrolling results list, "Too Short" with a red X has been changed to "Too short for conversion" with a gray check mark. This more accurately shows that the file is still valid in an un-converted state, rather than convey the impression that a serious error has occurred.
  - The Close button has been moved to a more convenient location and relabeled "Close this window".
- Velocity switch to layer (or other dimension controller) conversion has been added
- A crash when attempting to close the Editor during a file operation has been fixed.
- An incorrect error message is no longer displayed when opening a .gig file with more than 128 sample folders.

# Changes in v3.04

## Main Application Enhancements

- More improvements with Hyper Threading compatibility have been made, particularly with USB audio interfaces. This includes dual processor machines.
- Note: GigaStudio is coded to provide performance benefits on Hyper Threading enabled PCs in the following ways:
  - o Projects with heavy VST usage will benefit.
  - o HT may provide more polyphony than non-HT systems.
- Many improvements to the QuickSound database engine have been implemented to speed up searches. Also fixes were implemented to address apparent system hangs when using search delimiters such as "NOT".
- Compatibility with the UAD-1 DSP card has been added.
- Further improvements have been made to MIDI Mixer mute behavior when used
  with stacked instruments. Now stack masters act as mute masters without
  affecting the mute state of the stack members. Also the bright/dim illumination
  state of the buttons has been given greater contrast. The stack master continues to
  function as a solo macro, clearing any/all stack member solos when doubleclicked.

## Main Application Maintenance

- Previously, Aux send levels would always restore to -inf if they were saved OFF. This has been fixed, but after loading a pre-3.04 performance, all aux sends will default to OFF. You must check and manually turn on the aux sends you require. After a performance has been saved in 3.04 or later, it will remember the level and on/off status. GS2 performances loaded into GS3.04 will also have all aux sends turned OFF and will need to be re-saved with 3.04 or higher.
- Collapsed/expanded state of existing stacked instruments will be retained when loading further .gsi files that are also stacked instruments.
- Previously, some GigaPulse content would come up cut off at 3 seconds until Tail Model was clicked off then back on. This has been fixed.
- Incompatibilities between some MIDI keyboard controllers and iMIDI rules have been fixed. The issue was with controllers that send out a NOTE off using a NOTE on with velocity 0.
- When opening an Accelerated Wave instrument in Quick Edit, it is necessary to click the wave display area to cause the engine to draw the waveform. This is to optimize processor usage when drawing an accelerated waveform.
- Problems with 16-bit GSIF2 audio input have been corrected.
- Instruments with 256 Dimensions could previously cause a system crash. This has been fixed.
- Audio will now be muted when loading an instrument to prevent unwanted sounds being triggered by extraneous MIDI input.

- Previously, when opening a stack member instrument in the Full Editor, the stack would not be loaded upon closing the Editor & returning to GigaStudio. Now, the stacked instrument will automatically be reloaded upon closing the Editor and returning to GigaStudio.
- Problems loading projects containing VST plug-ins have been corrected. After updating to 3.04, it is necessary to rescan the system for VST plug-ins:
  - 1. With all other application closed, start the 'System Configuration Manager' from Start Menu|Programs|Tascam|GigaStudio 3|GigaStudio Configuration Manager.
  - 2. Select the 'Rewire/Plugins' tab
  - 3. Hit the 'Configure plugins' button.
  - 4. Hit the 'Rescan system for plugins ...' button.
  - 5. Hit the 'OK' button.
  - 6. Hit the 'OK' button.
  - 7. Run GigaStudio
- MIDI Mixer output assignments are now saved with a custom .gsp performance when the following is checked:
  - Include instruments currently loaded into GigaStudio
    - i. Preserve the port and channel assignment on load
  - Include all MIDI Controller values
  - Include settings for the GigaStudio User Interface
    - i. MIDI Mixer windows (all MIDI ports)
- The 'Save Performance as Default' check box in the File|Save dialog is now functioning correctly.
- FX UI problems when docking a floated DSP Station window have been fixed.
- Previously, EQ and Compressor settings on Group Channels were not saved with a performance. This has been corrected. However, performances saved with v3.04 cannot be opened on earlier versions of GS3 (ie. 3.03 or earlier).
- Issues when installing content only over a patch installer have been corrected:

#### From a DVD/CD Install -

If you install using setup.exe, and the version of the GigaStudio currently installed is newer, then you will be prompted with a message, indicating that you are about to install an older version, do you want to proceed? It also mentions that if you wish to install just content then you can proceed with the installation.

If you install using the AutoRun, and select the 'Content Only' option then it will not prompt you and will go immediately to allowing the content-only installation.

 Previously, Group Aux Sends set to Pre would only send to the left side of GigaPulse. This has been corrected.

## **Editor Changes**

- When opening an Accelerated Wave instrument in the Full Editor, it is necessary to click the wave display area to cause the engine to draw the waveform. This is due to processor requirements when drawing an accelerated waveform.
- Previously, opening an instrument in the Editor where not all regions have the same number of splits could crash the system. This has been fixed.
- Previously, when proportional drag mode was selected and multiple splits were selected, the Editor may have set some splits to incorrect values. This has been fixed.