

GigaStudio

Getcha' Goin' Guide!

**A Comprehensive Four-Part, Easy-To-Use
Reference Guide for Preparing, Installing,
Launching, Setting-Up and Using GigaStudio**

by Dave Casey, TASCAM Senior Product Specialist

TASCAM.
a whole world of recording

Do you have to have a degree in rocket science to make the most of Giga? Of course not. Following the steps outlined in this guide will make your Giga learning curve a lot less steep.

Part One: Seven Things to Keep In Mind When Putting Giga Onto a PC

1. Processor

The speed and type of processor will directly affect the performance of Giga on your PC. Serious Giga users are working with Pentium or AMD processors. The number of voices (samples played at once) will be determined by the speed of the processor. To get the optimal performance from GigaStudio 160, it is recommended that you run at least a 1 GHz Pentium or Athlon processor.

2. RAM

Even though GigaStudio streams the samples from the hard drive, the program still utilizes a small amount of the installed RAM to buffer the first 64k (approximately $\frac{1}{10}$ of a second) of each sample included in an instrument (the 1 GB Gigapiano will require approximately 40 MB). The amount of available RAM will directly affect the amount of instruments that can be loaded into GigaStudio, and for this reason it is recommended that a user install as much RAM as their motherboard supports, or as much as they can afford. A range of 256 MB to 768 MB will deliver a respectable instrument count.

3. Hard Drives

All of the instruments that GigaStudio uses exist on the installed hard drives that are connected to the PC. There are two parameters of a hard drive that are important to consider when using it with GigaStudio:

- A. Drive speed. A minimum drive speed of 7200 RPM is recommended.
 - B. Seek time. This is how fast the drive can access the data from the drive. A rating of 8-10 milliseconds or less is recommended.
-

4. Operating System

You need to be running Windows 98SE, ME, 2000, or XP. As with any type of audio specific application, the less additional software

and hardware you run on the same machine, the more stable your system will be.

5. GSIF Compatible Sound Card

The ultra-low latency GSIF (Gigasampler Interface) driver is the key to GigaStudio's amazing performance. Just about every major sound card manufacturer offers GSIF drivers included in their products, covering a wide variety of I/O options that should handle just about any GigaStudio application. The list is constantly being updated, and a complete listing is offered on the TASCAM website.

6. Multi-Client Sound Cards

If you plan on using GigaStudio on the same machine as your DAW software, you will need to make sure that your chosen sound card is also multi-client. A multi-client sound card will allow you to output audio simultaneously from two audio applications (Cubase and GigaStudio for example) by splitting the available audio outputs on the sound card between the two applications. Cubase can be using outputs 1-4, while GigaStudio is using outputs 7-8 on a PCI-822. The GSIF compatible sound card list on the TASCAM website will also show if the sound card is multi-client.

7. MIDI I/O

GigaStudio 160 can support up to four separate MIDI inputs, and if the user ever plans on taking full advantage of GigaStudio's playback potential, they may want to get a MIDI I/O that will allow four separate MIDI inputs. PCI, serial, and parallel I/O solutions have delivered the best performance with GigaStudio.

Now that your computer is tuned up and running like a Ferrari, you're ready to install Giga.

Part Two: Installing GigaStudio

Congratulations! After considering the system recommendations, you have decided to purchase GigaStudio and take advantage of its amazing power. You just got home from your favorite Giga retailer and that new copy of GigaStudio is burning a hole in the bottom of the bag.....so let's not waste any time!

- 1. Boot up your computer and put the GigaStudio installation disk in the CD-ROM drive** (not the Gigapiano disk....that comes later). Double click on "My Computer" and then double click on the CD ROM drive the disk is in. Once the contents of the disk is displayed, double click on the "Setup" icon (It is represented by a computer system icon).
- 2. "End User License Agreement":** This just makes sure you understand all of the legal issues involved with GigaStudio. Read it, live it, become it.....then click "I Agree"
- 3. "Owner Info":** This is where you enter the information about yourself. Keep in mind that this info is used for other aspects of the installation and registration as well as any sort of future support, updates and upgrades. The CD Key is on the outside of the jewel box, pay close attention when inputting these numbers and letters. Click "next"
- 4. "Select Installation Type":** For simplicity sake, select "Typical". Click "Next"
- 5. "Select Installation Options":** This will give you the run down on what is being installed, and where it is being installed. Unless you need to make changes, click "Next".
- 6. "Settings Verification":** This shows you all of the information involved with the installation. Make sure everything is correct (Name spelling, etc.), and click "Finish".
- 7. The installer will begin installing the first group of files.** After a moment or two you will be prompted to insert the Gigapiano disk. Take the first install disk out of the CD-ROM drive, and put the Gigapiano disk in. Give the disk a second or two to spin up, and click "Retry".

*Note: GigaStudio 32 and GigaStudio 24 users will not be prompted for the Gigapiano disk. These users can skip this step and move on to the next one.

The Gigapiano is a huge instrument, and will take some time to install. A countdown timer is provided for those of you who are pot watchers. ;-)

8. You will be asked if you want to read the release notes. If you are interested in reading a View Me file, click "Yes", or "No" if you want to get on to loading and playing some GigaStudio instruments.

9. Remove the Piano disk from the CD-ROM drive.

10. Select "Yes, I want to restart my computer" and then click "Finish". This will finalize system settings, and make GigaStudio ready to launch. Congratulations!

You're almost done converting a plain old PC into a full-fledged professional sampling powerhouse, and you're only minutes away from hearing the sweet sound of Giga! To make sure everything is ready to rock, follow these 12 steps to properly set up your Giga system.

Part Three: Launching, Setting Up, and Loading A Sound Into GigaStudio

Well, you're one step closer to making music with GigaStudio. The software is installed, and you are ready to launch the program. There are just a couple of more things we need to set up, and then you are ready to go.

1. Go to "Start" (the lower left-hand side of your Windows desktop), bring the cursor up to "Programs", and then to "Nemesys", and finally to the GigaStudio Workstation icon. Left click and drag the icon onto your desktop. This will make the launching of GigaStudio much faster in the future. Once it is on the desktop, double click on icon to launch the program.
2. You will be prompted to let GigaStudio QuickSound create a database for any installed Gigs you have on your system. The GigaStudio installer loads some demo instruments during the install process, and GigaStudio QuickSound needs to locate these Gigs so they can be found and used in the program. As you add more instruments to your collection, GigaStudio will locate them and add them to the database each time you launch the program. It is a good idea to let GigaStudio maintain this database by not skipping any future update prompts. Click "Update QS Database"
3. "Custom Configuration Wizard": You can review your system configuration here, or you can make the adjustments within the program. For the sake of simplicity, we will do it later. Click "Accept Current Configuration" and click "Next"
4. "Register Your GigaStudio Now": You should register your copy of GigaStudio at this point. There are a couple of options for doing so that are listed on the next panel. Click "Next"
5. "User Information": Verify that you have spelled all of the information correctly, and click "Next"
6. "Piano Disc CD": GigaStudio will prompt you to insert your Gigapiano disk at this point. Do so, and click "Next"
7. "Registration Choices": You have three ways to register your version of GigaStudio, two need you to have your GigaStudio comput-

er hooked up to the internet, and the third allows you to register via phone or fax. Choose the best method for you and finalize the registration process.

8. Once your copy of GigaStudio is registered, launch the program.

9. Click on the "Settings" tab on the far left-hand side of the screen. You will notice a series of tabs that will read General, Sampler, Hardware/Routing, QuickSound, and SConv. We will begin with the General tab:

General: If you are running GigaStudio on the same machine as your sequencer, you can choose it as your default sequencer program here. Click "Browse" and locate the icon for the sequencer program (Cubase, Logic, Cakewalk, etc). The same can be done for your Audio editor application as well (Wavelab, Sound Forge, etc). There are a series of quick launch tabs at the top of the main GigaStudio screen that will allow you to launch these applications directly from GigaStudio in the future based on these selections. Click "Apply" when you have made your choices.

Sampler: This panel allows for subtle adjustments of the performance of GigaStudio. The default settings are a good starting point in general, but for this initial setup, we will raise the Polyphony slider to the maximum setting, and put the Transitional Voice stealing slider in the middle. These are settings based on the presumption that your system can handle the maximum polyphony offered by GigaStudio, but as you work and push your system to its limits, you may find that this will need to be adjusted in the future. Click "Apply"

Hardware/Routing. Once again, there are basic defaults that will work sufficiently with the initial use of GigaStudio, but there are a couple of settings that need to be verified. Under "Hardware" make sure your desired sound card is selected here. Under "Outputs Enabled", select the outputs that you want GigaStudio to use. If you are using a sequencer program on the same machine, be sure to select outputs for GigaStudio you do not plan on using for the sequencer's audio tracks. Under "MIDI in Ports" select the MIDI inputs from your MIDI I/O you want to use for any of the offered

MIDI ports in GigaStudio. Click "Apply"

10. You are now ready to load an instrument and make some music! Click on the "Port 1" icon in the upper left-hand corner of the main GigaStudio screen. You are now ready to put an instrument into any of the Port 1 MIDI channels 1-16. At this point, it might be a good time to get familiar with how the QuickSound database search engine works.

11. As described earlier, GigaStudio builds and maintains an ongoing database of all of your installed instruments. Just below the "Search" box in the lower left-hand corner of the main GigaStudio page, you will see a small window that resembles a Windows Explorer window. The drives specific to your system are displayed here. Click once and highlight the "Local Sampler" icon. This will tell Quick sound to search all of the included data storage devices on your system. Next, type the word "gigapiano" (Don't include the quotation marks). In a matter of seconds you will see GigaStudio has located the Gigapiano that was loaded during the installation process, and is displaying it in the window directly to the right of the Local Sampler window. Loading an instrument is as simple as dragging and dropping the instrument into one of the MIDI channel 1-16 slots at the top of the main GigaStudio page.

12. Next, try playing your keyboard controller. If you have all of the connections correct, and the MIDI slot you loaded the instrument into corresponds with the MIDI channel message the keyboard is sending....you should here the glorious loveliness of the Gigapiano!

*Note: You can also audition the instruments loaded into the MIDI channels by clicking once on the actual number next to the desired MIDI slot. This will move the green selection arrow to the selected instrument. Next, click the "Loaded Instruments" tab in the left center of the main GigaStudio page. This will display an auditioning keyboard that can be clicked with the mouse to hear single samples.

Giga isn't only the best-sounding sampler in the world...it also offers the most powerful feature set available on any dedicated sampling tool ever made!

Here are a few of Giga's coolest features that you can try out right away.

Part Four: Exploring Some Of The Features Of GigaStudio

Now that you have your GigaStudio installed and functioning, let's explore some of the features that makes GigaStudio such an incredibly powerful piece of software.

1. DSP Station

Once you have your instrument loaded into MIDI channel 1, the audio from the selected instrument that you loaded is being routed into what is referred to as the DSP Station. The DSP station is a built in 32 channel mixer with level control, panning, solo and muting, as well as a channel insert and Aux send that can be used with the native GigaStudio NFX plugins (included with GS96 and 160, optional with GS32 and 24). To access the DSP station, single click on the DSP Station on the left center portion of the screen.

You will now see the main page of the DSP Stations mixer section. The audio from MIDI port 1, Channel 1 will be routed to channel 1&2 by default. Try playing your instrument at this point. You should see some level on the meters for channel 1&2. You can now adjust the level, and panning for this instrument. Next, if you are running GigaStudio 96 or 160, let's try opening one of the NFX plug-ins:

Go to the top portion of channel 1&2. You will see four insert slots, that will currently read "Empty". By simply single clicking on the small green triangle directly to the right of the word Empty, you will open the window that shows you what NFX you currently have available for use. Let's open the reverb; by merely bringing the pointer over the "NFX 1 Reverb" and single clicking on it. You should now hear the reverb effect when you play the instrument. To change the preset, or make adjustments, you simply click on the "Edit" button directly to the right of the insert slot. This will bring up the edit page for the chosen effect. Preset changes can be made by clicking on the arrow in the "Program" window at the top of the effect panel. Adjustments to the effect are made by simply grabbing an adjustment fader and tweaking it to your liking.

2. Capture To Wave:

GigaStudio truly is a complete sample production tool. The power to playback, mix, and add effects to a production is finalized with

the "Capture To Wave" function. If you go to the top of the main GigaStudio page, you will see a small, red icon with the letters "REC" under it. Single click on this icon. You will now see a small window that reads " GigaStudio audio capture". What this allows you to do, is channel the audio from the main L/R outputs of GigaStudio into a final mixdown stereo .wav file.

Click the record button in the GigaStudio audio Capture window. You will be prompted to name your mixdown file, and give it a destination folder. Upon typing the name of the mixdown file, pressing "Save" will begin the recording of the file. At this point start playing the instrument, and press "Stop" when you are finished. You have now created a mixdown file that can be opened in any audio editor, or imported into your multitrack audio application like Cubase, Logic, Pro Tools, etc.

*Note. The Capture To Wave function can be set to start recording when you press play on your sequencer via MIDI start command for use with the exporting of multiple audio files into your multitrack audio application. This will ensure that all of the audio files begin at the same point, and will line up when imported into a multitrack environment.

3. Distributed Wave:

This feature allows you to quickly map out samples by simply dragging and dropping them onto a keyboard. Click "Port 1" in the upper left-hand corner of the main GigaStudio window. Next, click on the "Distributed Wave" tab in the middle of the screen. Now you are ready to select a group of .wav files to map. You will see a representation of a keyboard in the center of the screen, this is where you will lay the samples out for quick and easy auditioning.

Start by designating where the first sample will be placed. This is done by right clicking on any of the keys on the keyboard. From this point, the next sample will be placed on the next key to the right, and so on. Now, let's find a group of samples to map out.

Using the explorer window in the lower left hand side of the main screen, you can manually locate the folder containing the samples, or using GuickSound, search out any .wav files that are on the computer. Try typing "snare" in the search window. Any .wav files that contain the word snare will be displayed. Wave files will be identi-

fied in the results window. It is merely a matter of selecting individually, or in groups, any of the displayed wave files that you would like to map. Do this by dragging and dropping the files into the "Loaded Waves" window in the center of the screen. Instantly, the samples will be mapped out to keys on the keyboard. They can now be auditioned by left clicking with the mouse on any of the highlighted keys.

By single clicking on any of the samples in the "Loaded Wave" window, and clicking "Add", you can send these selected samples to the "Wave Palette" to convert the collection of samples to a Gig file. Next, press "Reset" in the "Loaded Wave" window to clear the window to add more samples for auditioning. Repeating this process will allow you to sort through large groups of .wav files and select certain ones for creating a final Gig file that can be loaded and used like any other Giga instrument available for GigaStudio.