Synthesizer Effects

The Synthesizer Effects option allows you to enable the XG synthesizer. Using XG synthesizer, you can richly enhance the acoustic sound variations with reverberation, chorus and variation.

The XG synthesizer utilizes the Wavetable sound generation method, supports the three command-compatible interface modes, and is fully compliant with the XG specification proposed by YAMAHA. Note that the option of Sondius-XG is supported only when Virtual Acoustic Modules are installed.

The Reverberation option adds a resounding effect to the acoustic sound and provides concert hall ambience to the echo-back sound.

The Chorus feature provides a chorale effect to the musical sound.

Variation allows different sound effects defined by XG format such as distortion, equalizer and pitch change to be added to the sound. Reverberation and Chorus can be adjusted by using Variation.

The Sondius-XG produces acoustic sound outputs by running a virtual simulation of the actual acoustic instrument operation. The sound can be more real for the Sondius XG does not use the processed acoustic sound recordings generated by the Wavetable sound generator.
The DS-XG supports a single virtual acoustic sound source by combining the virtual acoustic sound signals with MIDI data. The Sondius-XG runs on PCs with Pentium II 233MHz or higher.

* Sondius-XG (http://www.sondius-xg.com) is a trademark jointly held by Stanford University in the United States and YAMAHA Corporation.
* XG is a trademark of Yamaha Corporation.

Checking this box enables only the Reverberation option abailable.

The MIC Echo applies an echo effect to the microphone input and can change the settings of the current Mic echo. Note that recording will be disabled while Mic echo is in use and will not be enabled until Mic echo is turned off. Volume control on MIC is done by adjusting the microphone input level in the standard Windows Volume Control.

When this option is selected, the Mic echo sound effect will be enabled to the microphone input. (It will be disabled when Windows is re-started.)

The Delay Time function allows you to set a cycle period for Mic echo to repeat. To lengthen the cycle period, move the slider towards the right.

The Feedback Gain function allows you to set the duration period for Mic echo. To lengthen the duration period, move the slider towards the right.

DS-XG supports DOS applications for running on the Windows DOS-BOX. The settings for running DOS application are shown here, but cannot be changed.

This option allows to select the MIDI data that MPU401 received from DOS application to be output to either the external MIDI port or the internal XG synthesizer.

When this option is selected, DS-XG MIDI port will be used to output the MIDI data that MPU401 received from DOS application to the external MIDI port.

This will enable transferring MIDI data that MPU401 received from DOS application to DS-XG's internal XG synthesizer. With this feature, DS-XG can generate acoustic sound via XG Synthesizer on Windows DOS BOX.

The 3D Sound supports the 3D positional stereo audio mode compliant with the “Sensaura” technology developed by Central Research Laboratories Limited in England. When this mode is effective, sound can be experienced from all positions at 360 degrees by using stereo speakers or headphone. In general, DirectSound 3D applications define where the output should be routed. If a 3D application does not decide where to route the sound output, then DS-XG will take over the decision to force the 3D sound output.

* Sensaura is a trademark of Central Research Laboratories Limited.

Checking this box will force the 3D sound mode to changeover to optimal for the headphone. Note that the DirectSound settings for the output routing changeover in 3D sound mode will be ignored.

Checking this box will force the 3D sound mode to changeover to optimal for the stereo speakers. Note that the DirectSound settings for the output routing changeover in 3D sound mode will be ignored.

Checking this box will follow the output routing changeover under the DirectSound settings.

The sound can be output via a 4-channel speaker. Turn on this check box before starting the DirectSound application.

The DirectSound H/W Accelerator handles the DirectSound application and minimizes CPU utilization. If the hardware accelerator and the DirectSound application do not function properly, click on the checkbox to avoid the problem. DO NOT click on the checkbox while the application is running.

When playing DirectSound game “NHL97”, noises occur occasionally. Click this checkbox to avoid the noise problem. Do not turn on this option when you are not playing NHL97.

Check this box to enable the H/W accelerator.

This will disable the H/W accelerator and enable the DirectSound application.

Check this box to disable the 3D H/W accelerator.

DS-XG supports digital output.
Supported digital outputs: PCM Output, Dolby Digital Output and Direct Digital output of IEC958-compliant digital input.
PCM data of Wave and MIDI are output via PCM Output. The Elementary Stream of Dolby Digital from Soft DVD player is output via Dolby Digital Output. IEC958-compliant digital inputs are directly output by Digital Output.
Set up this option before starting the application.
Since the volume of Digital Output is fixed and independent from Windows standard volume control, you will need to adjust the volume via an external amplifier.

This will disable all digital outputs. Acoustic sound outputs will only playback via analog signal pins.

This will only output the digital sources of Wave and MIDI data.
External inputs such as Microphone and Line will not be output. When Mic Echo is in use, only echo will be output.
For analog outputs, all sounds will be output.

This will output all sound sources via digital output. Analog outputs will become muted. Besides, during recording or when Mic Echo is in use, sound can not be output via external outputs such as Mic and Line.

This will enable DS-XG to directly output the digital input. When this option is on, other sound sources are disabled for digital output.

The Elementary Stream of Dolby Digital output will be enabled.
When this is on, sound can only be output via Dolby Digital output.

Prefer Dolby Digital Output.

The Elementary Stream of Dolby Digital data will be output first.

DS-XG supports 2-channel speaker output as well as 4-channel speaker output if the system supports 4-channel speaker. The number of output channels requires to be set up before the application is started.

This will enable 2-channel speaker output.

This will enable 4-channel speaker output.

Stereo or monaural sources of Wave, MIDI and DirectSound Output can be re-arranged and sent out as 4-channel output.

Select the output destination for docking-station system in Note PC.

This option will enable sound output on main computer.

The option will enable sound output on the docking station.

This option will enable sound output on both main computer and the docking station.

The WaveOut feature uses software SRC to change THD Audio Quality (Total Harmonic Distortion) to higher quality when Sampling Frequency is 44.1kHz.

Turning on HiFi mode will enable the Software SRC feature.

Initialize DS-XG Config. to default value.

Display DS-XG driver version number.