



SoundGrid 301

Appendix

SoundGrid Troubleshooting Basics

After viewing the SoundGrid 301 SoundGrid video course, take some time to get familiar with the following basic troubleshooting steps, which can help you resolve issues that may arise in your SoundGrid system.

This troubleshooting guide applies to all SoundGrid host applications; it is not application-specific.

To troubleshoot and resolve any issues with a SoundGrid that are not listed here, or that the suggested steps did not solve, we strongly recommend you [contact Waves Tech Support directly](#).

This document includes links to various support articles on waves.com which are updated periodically.

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SoundGrid Host Application Errors

“Application failed to initialize” message in a Waves host application

1. Follow the instructions described in [this article](#).
2. If the message still occurs after re-installing the SoundGrid Driver as instructed in the link above, refresh the Waves preferences. To refresh preferences, please refer to [this article](#) and refer to “Step #2 – Rescan for Plugins”.

“The following Waves products do not have licenses”

1. Make sure your licenses are properly activated on the system you are using, in Waves Central’s Licenses > Connected devices tab.
 - a. If licenses are not activated (they are in your license cloud) – [learn how to activate here](#).
 - b. If licenses are activated to a different device – [learn how to move licenses here](#).
 - c. If your licenses are activated on a disconnected device which you do not have access to (lost, stolen, or damaged USB flash drives or computer), [follow these instructions to recover Waves licenses](#).

Plugins don’t load in your SoundGrid host application

Rule of thumb: keep your plugin and SoundGrid Host application versions aligned to the same.

1. Make sure that the plugin version you have installed is [supported](#) on the version of the SoundGrid host application you are using.
For example – V9 plugins are not supported in SuperRack V11, but V10 and V11 plugins are.
Note that V11 licenses can activate V11, V10 and V9 plugins, V10 licenses can V10 and V9 plugins and V9 licenses can only activate V9 plugins.
2. If you cannot find your plugins in your SoundGrid host application, [follow the steps in this support article](#) to locate and load them properly.

“Please install Driver” / “No driver installed”/ another computer’s driver is not available in system inventory

Waves SoundGrid platform currently has three available versions: V9, V10 and V11. [Use this guide](#) to set up your SoundGrid system with the correct driver version for your SoundGrid host application and learn how to toggle between versions as needed.

Network Issues

Can’t locate the correct SoundGrid network LAN port

If you are setting up your SoundGrid network, but are not sure which to select in the list of available LAN ports [follow the steps in this article to locate the correct network](#).

Network disconnections

If you have assigned your LAN port but components disconnect or disappear from the inventory, follow these steps:

1. Make sure you are using a supported switch model. See a list of [qualified network switches for SoundGrid systems](#).
2. Make sure you are using supported cable types and lengths. See a list of [Ethernet cables for SoundGrid systems](#).
3. Connect components directly to the host computer’s ethernet port to rule out network / switch issues.
4. Make sure all ethernet adapters, connectors, switches and ports are in working condition. Replace these one at a time and test as needed to rule out physical connection issues.

“Super-System” network assignments

If you are setting up a SoundGrid “super-system” with multiple I/Os, servers and computers, but are not sure which network entities should be assigned where, this is what we recommend:

Connect each systems’ components to a different switch and set the host application’s system inventory assignments separately.

Once the systems are set up – connect the systems switches with a single ethernet cable. Now there will be no confusion.

Server Issues

Server does not appear in the system inventory

If you are trying to use your SoundGrid server in a Waves host application but the server does not appear in the inventory, [follow the steps in this article to locate and enable your server](#).

Server is assignable, but displays N/A once assigned

If you are trying to use your SoundGrid server in a Waves host application but the server appears as N/A immediately after assigning it, [follow the steps in this article to enable your server](#).

Server disconnections

If you have assigned your SoundGrid server but it disconnects / disappears from the inventory, follow these steps:

1. Make sure you are using a supported switch model. See a list of [qualified network switches for SoundGrid systems](#).
2. Make sure you are using supported cable types and lengths. See a list of [Ethernet cables for SoundGrid systems](#).
3. Connect the server directly to the host computer's ethernet port to rule out network / switch issues.
4. Make sure all ethernet adapters, connectors, switches and ports are in working condition. Replace these one at a time and test as needed to rule out physical connection issues.

CPU overload

If your SG / DSP / CPU meter is red, indicating a CPU overload, you can take the following steps to resolve this:

1. Increase the SGS buffer size to give it some more room to work with. Keep in mind that:
 - a. This will increase the system latency.
 - b. Any system that has a shared device with this system, or is mirrored, must apply the same buffer settings.
2. You may be exceeding the processing capabilities of the server in use. Remove or disable some DSP heavy plugins until CPU meter is green
3. If you are using eMotion LV1, go to Setup > Mixer Settings > Mixing Engine Performance, you can determine if the system is DSP or Latency optimized. Choose DSP. *Keep in mind that DSP optimized will increase the system latency.*

If you have set up server redundancy but when the primary server is disconnected, the redundant server displays a CPU overload:

1. In general, we recommend using servers with the same specification for server redundancy to ensure that the redundant server can take the exact same load as the primary.
2. If you are using a lesser model – use that as the primary server (1st assignment) and the more powerful model as the redundant server (2nd assignment).
3. Test the redundancy performance, [following the steps in this article](#).

I/O Issues

The I/O is not available in the Inventory

The device may not be connected properly. [See relevant chapter above.](#)

The I/O is available, but red in the Inventory and once assigned, prompts 'incompatible device'

Follow the steps in [this article](#) to install the device's server & control panel via Waves Central.

The I/O is available, but red in the Inventory and cannot be assigned

See clock troubleshooting in [the relevant chapter below.](#)

Troubleshooting Dropouts, No Audio or Audible Artifacts

Clocking

Every SoundGrid System must have a logical clock flow. This means that there is one device that is defined as the Clock Master and everything else is slaved to this master clock. The master clock determines the Sample Rate the system uses.

Each SoundGrid I/O Interface has a control panel (accessible from the little gear icon in the inventory). Incorrect clock settings can result in audible artifacts or no audio passing.

Make sure that you have one device which is marked at master (**Blue / M**).

Slaved devices will appear **Green** in the inventory and show the clock type it is receiving.

You can check the device control panel's clock settings by clicking the gear icon. 'Source' and 'Current Clock Source' should display the same clock setting. If the 'Current Clock Source' is red and displays something other than "source", this indicates a clock conflict and should be addressed.

Important note:

The SoundGrid SOE (sync over ethernet) Master is the master clock for the entire SoundGrid network. Still, this device can technically be slaved to a different clock in a separate system such as a digital console or Protools HDX system.

To set up or troubleshoot advanced clock setups and flow – please [contact Waves Tech Support directly](#).

Network issues / bad network adapters

[See the relevant chapter above.](#)

Old or corrupted firmware

Rule out old or corrupted firmware by ‘force-reflashing’ the device firmware:

1. Hold **Shift+F** and click the **FW** icon on the device. This will re-flash the firmware on the device, fixing any corruptions.
2. Once this process is done, you will be prompted to physically restart the device. Without completing this power cycle, the new firmware will not be functional.

CPU overload – plugins, latency, optimize

[See the relevant chapter above.](#)

Buffer size settings

As explained in [SoundGrid 301 Part 5](#), there are different types of buffers in a SoundGrid system.

- **SoundGrid server buffer:** Adjust this setting if while you are experiencing dropouts or audible artifacts the DSP meters display a CPU overload. This is set in the SoundGrid Host application interface.

Any system that has a shared device with this system, or is mirrored, must apply the same buffer settings.

- **If you have ruled out CPU overload, adjust the network driver buffer:** Try different settings in the SoundGrid Host application’s inventory.
- **ASIO / Core Audio Buffer:** If there is a SoundGrid driver (or several) in this setup, try different settings in your DAW’s setting dialog.