Optimizing Windows 10 for Apogee USB Interfaces One, Duet, Quartet

Installation:

The Apogee Control Windows USB interface release is only supported on Windows 10

1. Double Click the Control Installer and follow Setup Wizard instructions, opt to create a desktop shortcut.
2. When complete quit the Installer, shutdown the PC, and disconnect USB. Then re-connect USB and power up the PC.
3. Verify Apogee Control App is installed and launches and that it shows the Interface is connected.
4. Verify you can Change Sample Rate, Gains, and Volumes of Interface from Control.

Optimizing for Windows 10:

Why should you optimize your system ?

Due to the huge number of possible combinations of hardware and system settings , drivers, and variances in PC hardware sold around the world it is possible to easily encounter audio problems. Pops, clicks, distortion, or stuttering audio can all be caused by background processes, hardware, system, and power saving settings.

Optimizing these often solves common audio issues. It is advised to have a clean install of Windows 10 on a music only dedicated PC for digital audio recording. It is best not to install games, graphic design, video streaming, or other non music related apps on it.

The following instructions assume that you've opened the Control Panel and set View by: to Small icons as shown below. Open the Control Panel in Windows 10 Creators Update by typing Control Panel in the Taskbar Search box.
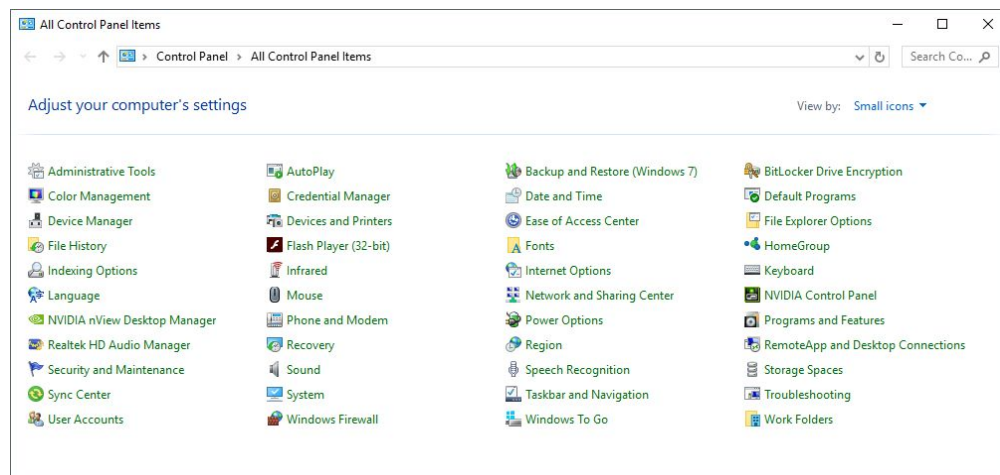
Power Options

1. In Control Panel, click Power Options
2. In Preferred Plans, select **High Performance**.
   a. Click on "Change plan settings"
      i. Set "Turn off the display" and "Put the computer to sleep" to **Never**.
3. Click on "*Change advanced power settings* "
4. In the Power Options - Advanced Settings window:
   a. Click on the Hard Drive box to reveal settings,then set "Turn off Hard Drive after" to **Never**.
   b. Click on the USB settings box to reveal it
      i. Click on "*USB Selective suspend setting*" double-click on **Enabled** and select **Disabled**
   c. Click on the " *Processor power management* " box to reveal it
      i. Click on "*Minimum processor state*" and type **100** in the text box
5. At the bottom of the window click " *Apply* " and *" OK "*
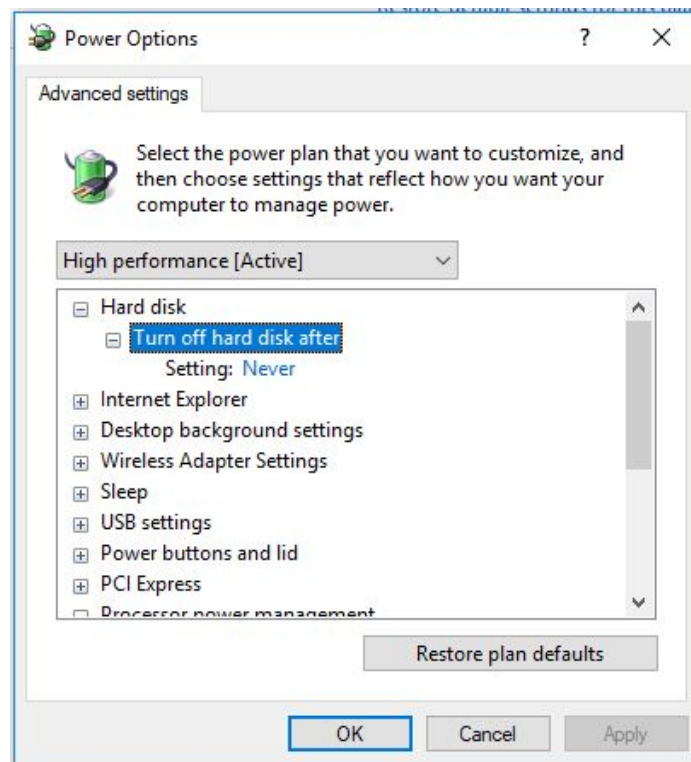
USB Port Power Saving
1. In Control Panel, click Device Manager.
2. Open the Universal Serial Bus controllers disclosure triangle.
3. Right click the first USB Root Hub and select Properties.
4. Select the Power Management tab and ensure that "Allow the computer to turn off this device to save power" check box is not checked.
5. Repeat for all USB Root Hub entries.
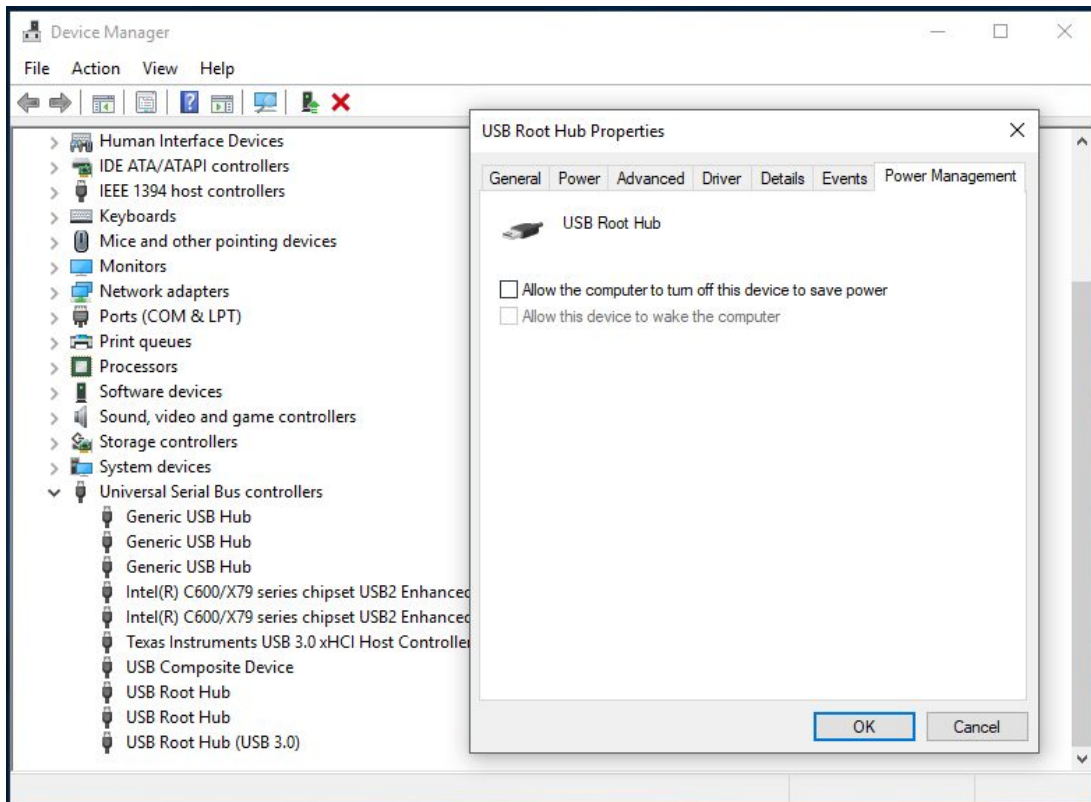
Windows System Performance Option
1. In Control Panel, click System.
2. Click "*Advanced System Settings*" then click the Advanced Tab
3. Click on "*Settings*" button in the Performance box
4. Click the Advanced Tab, then set Processor scheduling to: **Adjust for best performance of Background services**.
5. Click the Visual Effect tab, then select **Adjust for best performance**.
6. Click **Apply**, then **OK**.

Disable System Sounds
1. In Control Panel, click Sound.
2. Select the Sounds Tab and click on the Sound Scheme drop down menu and choose " *No Sounds* " Then the " *Apply* " button and then the " *OK* " button

Check Your System with LatencyMon

LatencyMon is a simple utility program created by a European programmer that's become the standard for troubleshooting Windows-based audio systems. The program monitors your computer's CPU and detects processes causing CPU delays that can result in audio clicks, pops and dropouts.

After running the program for several minutes, it will "grade" your system on its ability to run audio systems without problems. If the program detects issues, it will display which processes (drivers, programs, etc) are causing the issue. In many cases, issues can be resolved by updating the offending driver. In some cases, it may be necessary to disable the device for which the driver is installed. In our experience, issues occur most often with Network and Graphics drivers.

See the Apogee LatencyMon Guide for details.

Recording Hard Disk Optimization
1. Open File Explorer and click on "*This PC*" on the left side column.
2. Right click on the drive that your digital audio is being recorded on and select "*Properties*" .
3. At the bottom of the window ensure that " *Compress this drive to save disk space* " is NOT selected.

DAW Buffer Settings
Choosing larger audio buffers settings in your DAW will make it less likely to encounter pops and clicks. However the larger the setting the worse the latency in the audio path. Experiment to get the right buffer setting the does not cause excessive latency and does not have pops or clicks.