## The Asynch-1 USB input and WASAPI Mode in Windows

Current versions of Microsoft Windows are by default (Windows 7, WIndows 8, Windows 8.1, and Windows 10) configured to use a single user-specified sample rate. Digital audio recorded at this sample rate will be played back without resampling, but digital audio at any other sample rate will be re-sampled to the configured sample rate before being sent to the DAC or other playback device. So, for example, if you play a 24/96 audio file in Windows, and your default sample rate is set to 44.1kHz, the file will be re-sampled to 44.1kHz. If you prefer to play high defenition audio files at the sample rate in which they were recorded , you must use a special mode called WASAPI. The WASAPI mode is part of the Windows OS. There is no need to install it or turn it on, but WASAPI mode can only be used by playback programs that are specifically designed to use it.. Windows Media Player does not support WASAPI mode.

This document explains how to configure some popular Windows PC audio player programs to use WASAPI mode.

WASAPI mode is independent of the DAC or other audio playback device you're using. It will work with any USB audio device. But if WASAPI mode attempts to send audio to a device at a sample rate which is not supported by the hardware or drivers, you will receive an error message.

NOTE: WASAPI is a Windows interface mode. Before configuring WASAPI mode in your application, you should install the appropriate USB audio drivers for your DAC or pre/pro into Windows and verify that the drivers and your USB cable are working. There are NO special settings or options in the drivers necessary to allow them to support WASAPI mode. Some players differentiate between WASAPI EVENT and WASAPI PUSH modes.

NOTE: Windows "itself", and Windows Media Player, do NOT use WASAPI Mode. WASAPI Mode must be configured in EACH player program that you wish to use it with.

THE CONFIGURATION INSTRUCTIONS ON THE FOLLOWING PAGES are for the Asynch-1.

#### Configuring jRiver Media Center To Use WASAPI Mode

To configure WASAPI Mode in jRiver Media Center, do the following:

- 1 (If you haven't already) install and run the *jRiver Media Center program*.
- 2 Under the *Tools* menu, go to *Options*.
- 3 Select the *Audio* category.

4 On the right, under Audio Device, select USB2.0 High-Speed True HD Audio (WASAPI).

5 Now, under *Audio Device*, click *Device Settings*. (This option won't be available until you select the Audio Device in the previous step).

6 In Device Settings... Check the box next to Open device for exclusive output. Uncheck the box next to Disable event style. Leave Bit Depth set to Automatic. Leave Buffering set to 100 milliseconds.

7 Click *OK* twice to save your settings and exit.

NOTE: For each source sample rate, jRiver Media Center can be independently configured to convert files of that sample rate to a specified sample rate, or to play them at their native sample rate. For "bit perfect playback", you want each file to play at its native (unconverted) sample rate. However, there are certain situations where converting the sample rate can be useful.

NOTE: Configuring WASAPI Mode in jRiver Media Center will NOT configure Windows itself, or other Windows audio player programs (including Windows Media Player) to use WASAPI.

### Configuring Foobar2000 To Use WASAPI Mode

To configure WASAPI Mode in Foobar2000, do the following:

- 1 (If you haven't already) install and run Foobar2000.
- 2 Download the WASAPI Output Support plugin for Foobar (from the Components page)
- 3 Double click on the WASAPI Output Support plugin to install it (Reply to any prompts as necessary.)
- 4 Under the *Files* menu, go to *Preferences*.
- 5 Click on the *Components* category.
- 6 Locate WASAPI output support in the components list and click once on it to highlight it.
- 7 Click Apply to activate the WASAPI plugin.
- 8 Click on the *Playback* category.
- 9 Under *Playback*, click on the *Output* category.
- 10 Use the Device pulldown list to select the CMedia USB device and WASAPI PUSH mode WASAPI

(push): Speakers (USB2.0 High-Speed True HD Audio).

- 11 Click *Apply* to accept your changes.
- 12 Click OK to exit Foobar2000 configuration.

NOTE: When you choose an output device in Foobar2000, that output device will be used by Foobar, but will not become the Windows default output device. (If you configure things this way, Foobar2000 will play music through your Asynch-1, but Windows noises and other sounds may be configured to play through other devices - like your computer's speakers.)

Configuring WASAPI Mode in Foobar2000 will NOT configure Windows itself, or other Windows audio player programs (including Windows Media Player) to use WASAPI.

#### Configuring Media Monkey 4 To Use WASAPI

To configure WASAPI Mode in Media Monkey 4, do the following:

1 (If you haven't already) install and run Media Monkey 4.

- 2 Under the *Tools* menu, go to *Options*.
- 3 Under the *Player* category pick *Output Plug-ins*.
- 4 Click the radio button next to *MediaMonkey WASAPI output*.
- 5 Click Configure.

6 On the MediaMonkey WASAPI output plugin configure page... Select USB2.0 High-Speed True HD Audio as your output device (you may also select Default Device IF your Asynch-1 is configured to be your Windows default output device). Check the box next to Exclusive Mode. Under Exclusive Mode select Automatic choice of format (per track).

7 Click Advanced.

8 On the *Advanced* screen... CHECK the box next to *Event driven Exclusive mode (recommended)*. CHECK the box next to *Event driven Shared mode (recommended)*. But you can also try selecting the UNCHECK box box option and decide from listening to music which one works best for you.

9 Click *OK* three times to save your settings and exit.

# Configuring WASAPI Mode in Media Monkey will NOT configure Windows itself, or other Windows audio player programs (including Windows Media Player) to use WASAPI.

NOTE: Media Monkey lets you explicitly choose an audio output device, or simply tell it to use the Windows default setting. If you set the Asynch-1to be your default audio output device (in Control Panel), then Windows programs without specific output settings will use it, and Media Monkey will use it if you set Media Monkey to use the Default Device. However, if you specifically set Media Monkey to use the Asynch-1 as your Windows default output device, then Media Monkey will use it but other Windows devices will not. (If you configure things this way, Media Monkey will play music through the Asynch-1, but Windows noises and other sounds may be configured to play through other devices - like your computer's speakers.)