

Apogee ONE

User's Guide for Windows November, 2017



Contents

Overview	3
Introduction	3
Apogee ONE	3
Legendary Sound Quality	3
ONE (Silver) Package Contents	4
ONE for iPad & Mac (Black) Package Contents	5
Panel Tour	6
Built-in Microphone	6
Input/Output Selection Indicator	6
Input/Output Level Meters	6
Multi-function Controller Knob	7
1/8" Stereo Headphone/Speaker Output	7
Mic/Instrument Input	7
USB	7
DC Power	7
External Power	8
Getting Started	10
Connecting to your Windows PC	10
System Requirements	10
Install Apogee USB Windows Software	10
Choosing Apogee ONE for Windows Sound I/O	12
Sample Rate Considerations	13
Connect to Headphones or Speakers	13
Configuring Apogee ONE's Inputs on Windows	13
Adjusting Input & Output Levels	15
Input level	15
Output level	16
Maestro Software	17
Primary Window	17
Toolbar	18
System Sidebar	18
Channel Section	19
Mixer Section	20
Monitor/Output Section	21

Apogee ONE | User's Guide for Windows

Operation	22
Using Apogee ONE's built-in mic	22
What sample rate should I record at?	22
Can I record my session on my Windows (startup) hard drive?	22
How do I set a recording level?	23
What is phantom power?	23
How do I set my software's I/O buffer?	24
Maestro Low Latency Mixing	25
Software Setup	28
Windows OS: Select Apogee ONE in Pro Tools	28
Windows OS: Select Apogee ONE in Ableton Live	29
Windows OS: Select Apogee ONE in Cubase	30
Additional Support	32
For more information:	32
Specifications	32
Warranty & Notifications	

Overview

Introduction

Thank you for purchasing Apogee ONE. This User's Guide describes how to set up Apogee ONE (both Silver and Black versions) with your Windows PC, connect headphones to play back music and record your own creations with the built-in mic, an external mic or an electric instrument.

Apogee ONE

The Swiss Army Knife for Personal Recording and Audio Production.

Apogee ONE is an all-in-one portable, USB audio interface that gives you everything you need to make professional recordings on the go. Connect a microphone, guitar or use ONE's exceptional built-in omnidirectional microphone to easily capture your music without compromise. Apogee ONE even let's you record with a microphone (built-in or external) and guitar simultaneously.

Using Apogee's industry-leading AD/DA conversion and mic preamp technology, ONE produces pristine music, podcast, and voice-over recordings while also delivering studio quality sound to your headphones for precision mixing or hi-fi listening. With an intuitive controller knob and seamless compatibility with Windows, Apogee ONE is easy for anyone to use and works great with Ableton, Cubase, Pro Tools, and many Windows compatible applications.

Legendary Sound Quality

Why Apogee ONE is the best choice for your studio.

Apogee is an award-winning industry leader in digital recording technology with over 30 years of experience. Preferred by recording pros around the world, Apogee products like ONE, Duet, Quartet, Ensemble and Symphony I/O have been instrumental in creating countless GRAMMY® and OSCAR® winning recordings and have set the industry standard in professional recording for over two decades.

ONE (Silver) Package Contents

The following items are included in the Silver ONE box:

- ONE (Silver)
- Breakout cable with:
- 1 XLR Mic input
- 1 1/4" Instrument input
- Microphone stand clip
- USB cable
- QuickStart guide



Software, firmware and the ONE User's Guide are available online only. Please register your product and download the latest installer here:

www.apogeedigital.com/support

ONE for iPad & Mac (Black) Package Contents

The following items are included in the Black ONE for iPad & Mac box:

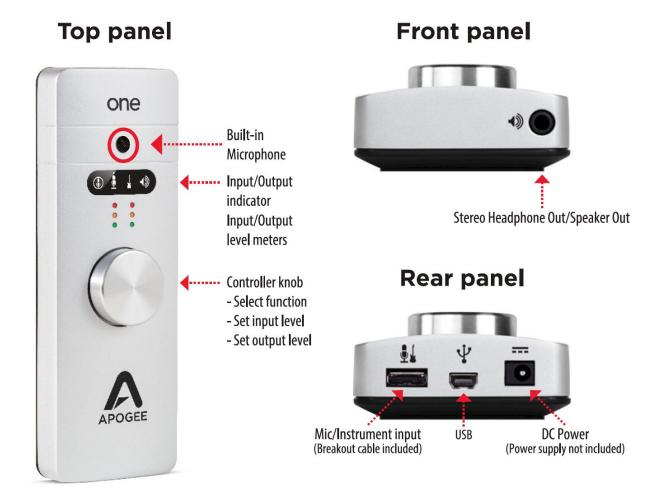
- ONE for iPad & Mac (black)
- USB cable
- QuickStart guide PSU + adapters Lightning cable
- Breakout cable with:
- 1 XLR Mic input
- 1 1/4" Instrument input
- Microphone stand clip



Lightning cable

Power Supply + adapters

Panel Tour



Built-in Microphone

Apogee ONE's built-in microphone capsule is located at the top of the front panel. When using the built-in microphone, orient the capsule towards the sound source being recorded.

Input/Output Selection Indicator

These indicators show the input or output selected for level adjustment using the multi-function Controller Knob.

Input/Output Level Meters

These meters display the input level when any input is selected or the output level when the output is selected for level adjustment using the Controller Knob.

Multi-function Controller Knob

Apogee ONE's multi-function controller knob allows you to easily switch between Inputs and Outputs as well as adjust their levels.

1/8" Stereo Headphone/Speaker Output

Apogee ONE's 1/8" stereo output may be connected to headphones or powered speakers. To connect to powered speakers, use an adaptor cable with a stereo 1/8" connector on one end and the appropriate mating connector for the powered speakers on the other end.

Mic/Instrument Input

This port is for connecting the Apogee ONE breakout cable, which includes a female XLR connector and a female 1/4" connector.

USB

Apogee ONE utilizes a single USB connector to interface with a Windows PC, Mac, or iOS device (iPad/iPhone).

DC Power

When connecting to a Windows PC or Mac, ONE is capable of being powered by USB bus power so no external DC power is needed. For PC's that do not provide enough power through the USB bus, you must connect the ONE's external DC power supply (sold separately). DC Power is also required when connecting to an iOS device (iPad or iPhone).

External Power

Both versions of ONE are capable of being powered completely by the USB bus power provided by the computer's USB port. However some Windows PC's may not provide adequate bus power. In this case, connect the ONE's DC power supply to guarantee proper performance.

When connected to iPad, iPod Touch, or iPhone, external power is required. Here are the options for DC power:

ONE for Mac (Silver)

Connect ONE for Mac's power supply (sold separately) to power ONE for Mac and charge the iOS device.

ONE for iPad & Mac (Black)

1. Connect ONE's for iPad & Mac's power supply (included) to power ONE for iPad & Mac and charge the iOS device

OR

2. Install two AA batteries (not included) in ONE's battery compartment as shown. The iOS device runs from it's internal battery while ONE runs from the AA batteries. This allows the entire system to be completely mobile.





To install AA batteries, use a coin or screwdriver to remove ONE's battery compartment door. Orient the 2 batteries as shown below so that the batteries' minus (-) terminals are installed against the compartment's springs. Once batteries are installed, replace the compartment door.

When powering ONE from two AA batteries, it is highly recommended to use NiMH rechargeable batteries for the best battery life when recording and playing back audio. Approximate battery life is shown below for minimal and maximum load conditions when using standard and rechargeable NiMH batteries.

	Standard AA	Rechargeable NiMH AA
Playback from iTunes	2 hours, 40 minutes (See note below)	3 hours, 40 minutes
Recording - max load	30 minutes	2 hours, 10 minutes

About 5-10 minutes before ONE, the level meters' red LEDs will flash to warn of the approaching loss of power under most conditions.

After changing batteries, it is necessary to power cycle ONE by removing and then re-inserting the USB connector.

Note - Max Load condition is as follows:

Input 1 set to Ext 48v Mic with a 10mA phantom power load. Input 2 accepts a 1kHz tone at -1dBfs
Output set to maximum.
Unit is set to 96kHz sample rate.

Getting Started

Connecting to your Windows PC

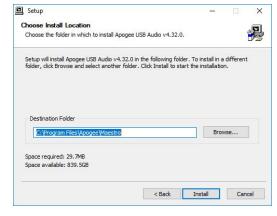
System Requirements

- OS: Windows 10 Enterprise, Pro or Home Editions (64-bit) Anniversary Update or greater
- Driver: Apogee USB Windows Driver
- Computer: Windows PC with Intel Core i3 processor or greater
- Memory: 8GB recommended (4GB minimum)
- Connection/power: USB port on computer; DC power supply optional

Install Apogee USB Windows Software

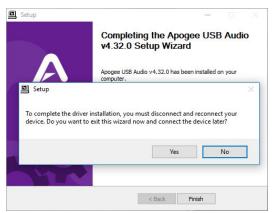
- 1. Connect Apogee ONE to a USB port on your Windows PC using the supplied USB 2 cable.
- 2. Go to www.apogeedigital.com/support/software-downloads
- 3. Download the latest Apogee USB Windows software installer, double-click the installer icon and follow on-screen instructions. Some, but not all, steps are shown below



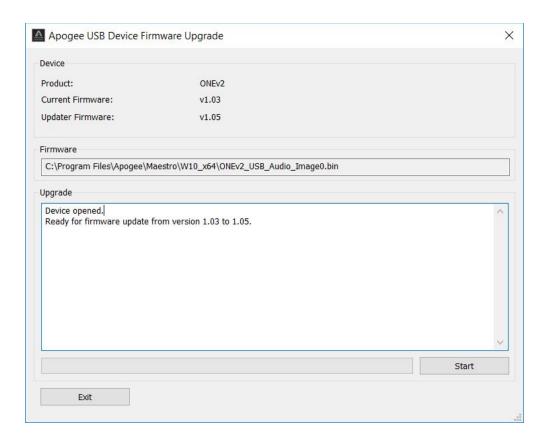


4. Click Finish to complete the installation.

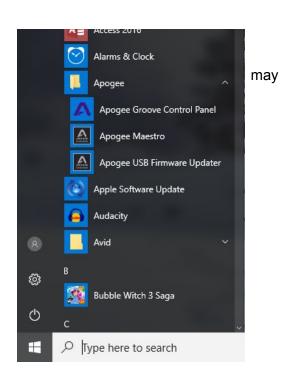
*If your Apogee hardware interface isn't connected, connect it now, then click Finish.



5. Immediately following the software installation, the firmware updater will launch and verify that the Apogee interface's firmware is up-to-date. Click Start if an update is required, otherwise click Exit to close the Firmware Updater app.

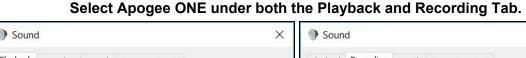


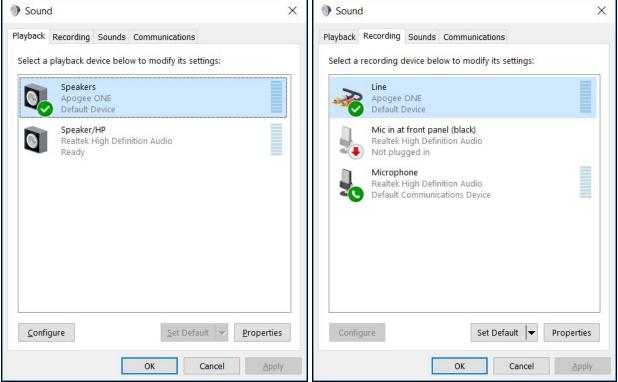
6. Once installation is complete, Apogee Maestro software and the Apogee USB Firmware Updater be opened via the Windows Start menu.



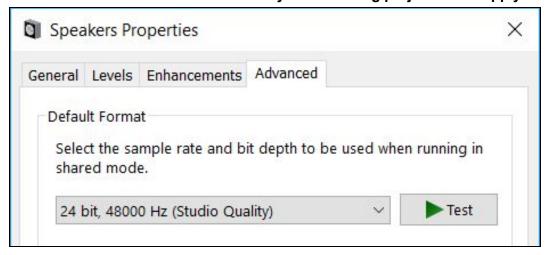
Choosing Apogee ONE for Windows Sound I/O

After connecting Apogee ONE, installing the software and updating the firmware, go to the windows search bar and type 'sound' to open the sound control panel.





Click Properties under both tabs, click the Advanced tab, and set the Default Format to match your recording project. Click Apply.



Sample Rate Considerations

When setting the Sound Control Panel sample rate, it's crucial to match this rate with the rate of DAW sessions that are running simultaneously. So, if you open an Ableton session at 96kHz, you should set the Sound Control Panel rates to 96kHz as well. This will ensure that you can play the session and audio from apps like Youtube, Spotify and others without freezes or crashes.

Connect to Headphones or Speakers

Connect headphones to the 1/8" output jack on Apogee ONE's front panel. Alternatively, you can connect Apogee ONE's output to speakers by using an adapter cable. The cable should go from a stereo 1/8" connection (from ONE) to two separate connectors suitable for your speakers (1/4", RCA, etc.).

Configuring Apogee ONE's Inputs on Windows







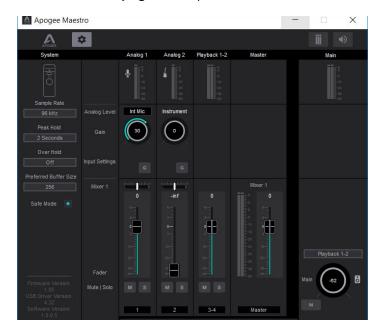
Apogee ONE's two inputs may be configured in the following manner:

- Internal (built-in) microphone + 1/4" instrument
- External (XLR) microphone + 1/4" instrument
- External 48V (XLR) microphone + 1/4" instrument

When using an XLR microphone or 1/4" instrument, connect to Apogee ONE's breakout cable.



1. Open Apogee Maestro software (found in your Start Menu).





- 2. Select the Analog Level setting that corresponds to the microphone source you'd like to record.
 - For example, if you have a microphone connected to the XLR connection on the breakout cable, select Ext Mic from the Analog Level menu on channel 1.
 - If you would like to utilize the built-in microphone, select **Int Mic**.
 - Channel 2's source is always the 1/4" Instrument input.

Note: If you are using a condenser microphone that requires phantom power, select **Ext Mic 48V**. Phantom power is indicated on the display by a red dot above the microphone icon.



Adjusting Input & Output Levels

Input level

To change the input level (i.e the preamp gain of microphones and instruments):

1. Push the Controller Knob until the built-in microphone, external microphone or instrument icon is lit on the display.





2. Turn the Controller Knob until the desired recording level is obtained.





The controller knob operates in parallel with Maestro's input controls.

Note: You will not hear your input until you enable software monitoring from a recording application or engage the low latency mixer in Apogee's Maestro control panel (see How Latency Mixer for more info).

Output level

To change the output volume (i.e. the headphones jack volume):

1. Push the Controller Knob until the Speaker icon is lit on ONE's display.



2. Turn the controller knob to the desired listening level.



The controller knob operates in parallel with any software output controls.



Maestro Software

All features and settings of the Apogee ONE interface can be controlled from the Apogee Maestro software. It is broken down into several sections:

Primary Window



- Toolbar
- System Sidebar
- Channel Section
- Mixer Section
- Monitor/Output Section

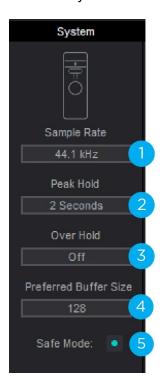
Toolbar



- 1. System Sidebar Button
- 2. Clear Meters Button
- 3. Mute All Button

System Sidebar

Provides System-wide settings that apply to your recording system as a whole.



1. Sample Rate - Selects ONE's sample rate. In most cases this setting will be overridden by software running on the computer (i.e. When a DAW session project is open). If no audio apps are open, then the sample rate can be freely set. As soon as an audio app is open, sample rate is forced to either the systems sample rate (<u>Sound>Properties>Advanced</u>) or the DAW's sample rate.

Note: It's recommended that users set the DAW and the Systems Sample Rate to the same where possible.

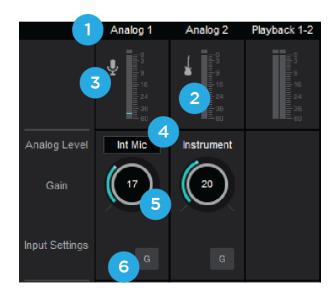
- 2. **Peak Hold** Sets the time that peak indications are held on the level meters.
- Over Hold Sets the time that over indicators are held on the level meters.
- Preferred Buffer Size Set the desired I/O buffer size for the ASIO driver with this dropdown menu. See "How do I set my software's IO buffer" for more details.

Note: The lowest Buffer Size settings 8 and 16 may not be compatible with all DAWs and may result in the DAW crashing or the actual buffer being set to 32.

- 5. **Safe Mode** When Safe Mode is off, output latency (i.e. the size of the playback side buffer) is reduced in order to lower overall throughput latency.
 - Experiment with the Preferred Buffer Size and Safe Mode to arrive at the lowest throughput latency without clicks and pops or CPU overloads.

Channel Section

This portion of the Primary Window displays Channels for Analog input, and Playback from audio software.



- Channel Top Label Indicates the channels source.
- Input Channel Level Meter Shows the post-gain digital signal level coming into the channel.
- 3. **Input Icon** Shows the input type selected from the Analog Level drop-down
- 4. **Analog Level** Use this pop-up menu to select the source for Input 1 the built-in mic (Int Mic), an external mic connected to the breakout cable's XLR connector (Ext Mic), or an external mic that requires phantom power connected to the XLR connector (Ext Mic 48v)
 - a. Input 2 is always the ¼" connector and can be used for any high impedance (Hi-Z) instrument. The signal is sent through a Hi-Z to Low-Z conversion circuit before sent through the microphone preamplifier circuit.
- 5. **Gain Control** Use to adjust the gain of the microphone preamp. Not available when the input is set to +4dBu or -10dBV
- 6. **Group** This button groups the gain setting of both inputs so that Apogee ONE's multi-function knob or software gain knob controls both input gains simultaneously. If a gain offset is present between inputs when Group is set to On, this offset is preserved.

Mixer Section

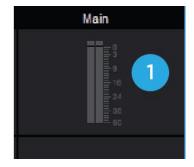
The mixer section provides a Direct Monitor mixer for workflows that utilize the low-latency Direct Monitoring features of your ONE interface.



- 1. **Mixer 1** Signal from each channel can be sent through this mixer by raising the corresponding Mixer 1 Channel Fader.
 - a. This mixer's Master signal can then be selected as a source for the Headphones or Speaker outputs, providing a low-latency direct monitoring signal path.
 - b. This mixer can also be sent back into the computer as a separate stereo input available in your DAW.
- 2. **Channel Fader** Set the level of the channel signal in the mixer master stereo output.
- 3. **Mixer Channel Pan Control** Set the left-right placement of the channel signal in the mixer master stereo output.
 - a. ctrl-click to reset the pan to center (0)
- 4. **Channel Mute button** Cut the signal routing to the mixer stereo output. Ctrl-click to cut all channels
- 5. **Channel Solo button** Mute all channels that do not have this solo button engaged in this mixer.
- **6. Mixer Master Fader** Controls the level sent to the hardware output when Mixer is set as the Source

Monitor/Output Section

The Monitor/Output section provides controls for routing signal to the outputs, and controlling the analog output volume.





- 1. **Output Level Meters** This meter displays the level of the analog output before D/A conversion. Therefore, it is not affected by the output level control.
- 2. **Output Level** Set's the listening level of the output.
- 3. **Output Source Selector** Selects the sound source for each output. The options are:
 - a. Playback Sends a playback channel stereo signal directly to this output, bypassing the mixer.
 - b. **Mixer -** to send the output of the low latency mixer to the hardware output.
- 4. **Mute** Click this button to mute the output.

Operation

In this section you'll find answers to questions that might arise while you're recording with Apogee ONE on your Windows PC.

Using Apogee ONE's built-in mic

The Apogee ONE includes a built-in mic for those instances when you want to record quickly and easily - to preserve an inspiration, capture an ambience or record a conversation. Once you've selected Int Mic as ONE's active input in Maestro, here are a few hints for getting a great sound.

Placement - Apogee ONE's built-in mic has been designed to provide a clear, precise sound even when it's sitting on a desk and the source is off -axis (meaning that the sound source isn't directly over ONE's top panel). By changing the angle of ONE to the sound source, it's possible to vary the amount of presence in the captured sound. For the most present and direct sound, use the included mic stand clip to mount ONE on a mic stand, and position ONE approximately 12-18" from the sound source.

What sample rate should I record at?

Apogee ONE offers a choice of four sample rates, 44.1, 48, 88.2 and 96kHz. So, what's the best sample rate to record your project at? It's a good idea to avoid unnecessary sample rate conversion stages, so the answer is determined by the sample rate of media on which you plan to distribute your recording. If the fi nal distribution media is CD, record at 44.1kHz. If the media is video or TV, most often 48kHz is the best choice. Apogee ONE also operates a 88.2-96kHz sample rate, in the case where you're recording in a session started at these rates. If you're part of a larger production chain, and aren't sure, ask whomever is responsible for assembling the final product - they'll undoubtedly appreciate the forethought.

Can I record my session on my Windows (startup) hard drive?

It's an accepted "best practice" of most audio software providers that audio files should be recorded on a hard drive other than the Windows Startup drive (i.e. the drive on which the operating system is installed). With modern computers, you can usually get away with recording several tracks to your computer's Startup disk before encountering any problems. But once your project becomes big enough and you encounter hiccups, it's time to record tracks onto a separate SSD, ATA/IDE, SATA, or USB 3.0 drive whose spindle speed is at least 7200 RPM.

How do I set a recording level?

Once your microphone or instrument is connected, your audio software is configured and you've created a new recording track, just how do you set the input gain for a proper recording level in your audio software? There's no simple answer, but with a few guidelines and a bit of experience, you'll find the perfect recording level for any situation.

When setting the recording level, here are a few guidelines you'll want to think about:

- 1. Digital overs (where Apogee ONE's Over indicators light) should be avoided.
- 2. The recording level shouldn't be so low that the underlying noise becomes a significant part of the total signal.
- 3. It's best to strive for some consistency in the level of a recorded track. In other words, try not to radically adjust the recording level from one take to the next you'll appreciate some consistency when it's time to mix.

Given these guidelines, it's a better strategy to set your recording levels rather conservatively to avoid unexpected overs. In the early days of 16-bit digital audio, it was important to set a higher level to maintain the greatest dynamic range, but that's simply not necessary with a 24-bit system. In other words, it's better to "undershoot" the level than overshoot and

have digital overs. Just how much to undershoot the gain setting is determined by the nature of the sound being recorded. As a general rule, instruments such as bass and organ have a more consistent level than percussive instruments, such as a tambourine, and may be recorded at a higher level. Also, the performer's skill and playing style can dictate more or less caution when setting levels. As you gain experience, you'll be able to more accurately set a good recording level while avoiding digital overs.

When using Apogee ONE's built-in mic, it's inevitable that manipulation of the top panel encoder will be heard over the mic. In this instance, use the software control panel (described on page 12) to set input gain and output level.

What is phantom power?

Phantom power (also known as 48V) is a DC voltage necessary to power condenser microphones such as the Neumann U87 or AKG 414. If you're connecting a condenser mic, be sure to select Ext 48V Mic in the Maestro Control Input menu.

Through a bit of electronic trickery, phantom power is supplied *to* the mic via the same cable used to transmit the audio signal *from* the mic. There are a few precautions to take when using phantom power: don't connect a ribbon mic when phantom power is on, and mute headphones or speakers before toggling 48V on or off.

How do I set my software's I/O buffer?

The I/O Buffer setting found in most audio software is one of the most crucial, but often ignored, settings in a Windows-based recording system.

When choosing a buffer setting, a compromise between the latency through the application and the amount of computer processor power accessible to the application must be made. A lower buffer setting results in lower latency but less available processing power. If the application can't access enough processor power, processor overruns may occur, resulting in audible clicks and pops or error messages that interrupt playback and recording.

A higher buffer setting, on the other hand, results in a greater amount of accessible processor power (i.e. less chance of overruns) but increases the latency. Determining the best setting requires some trial-and-error in order to find the best compromise.

Keep in mind that as tracks and plug-ins are added to a software session, processor requirements increase. Thus, the buffer setting that works during the early stages of a session might result in processor overruns during later stages. The best strategy is to set the buffer to a lower setting during recording and accept certain limitations on plug-in usage, and then raise the buffer during mixing to utilize the computer's full processor power when latency isn't an issue.

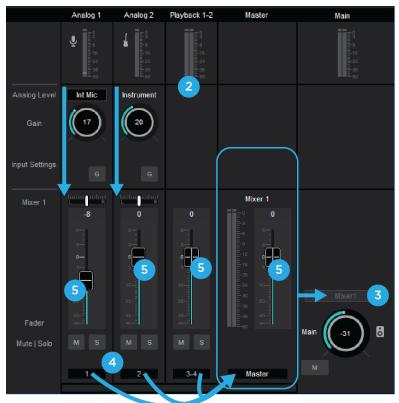
With the processing power of today's computers, you may find that adjustment of the buffer isn't necessary, and you can leave it at a setting for low latency and still access a sufficient amount of processing power when adding tracks and plug-ins. If you do encounter clicks, pops or software errors, don't hesitate to experiment with the buffer setting.

Maestro Low Latency Mixing

While recording, if you notice a delay between the moment you play or sing a note and when you hear it in your headphones you are experiencing latency. With Maestro's low latency mixer, you can set up a signal path to hear yourself with minimal latency.

How to set up a session using the Low Latency Mixer

- 1. In your audio software, turn off software monitoring or simply mute the track while you're recording into it.
- 2. In your audio software, set up a mix of all playback tracks and route the mix to Out 1-2. It's suggested to set the audio software Master fader to 0 dB.
- 3. In Maestro, set the Output Selection to **Mixer**. This sends the output of Maestro's low latency mixer to ONE's output, rather than sending your audio software's output directly to ONE's output.



- 4. After configuring ONE's inputs, the input signal will route through the Mixer faders and audible at ONE's output.
- 5. Use the Mixer's Input and Playback 1-2 faders to establish a balance between the input and playback signals. If you've found a good balance but the Mixer Master's Over indicators light, reduce the Mixer Master fader.

When recording with most computer-based digital audio applications, the delay between the input and output of the recording system often disturbs the timing of the musicians performing. This delay, known as latency, means that the musician hears the notes played a few milliseconds after having actually played them. As anyone who has spoken on a phone call with echo knows, relatively short delays can confuse the timing of any conversation, spoken or musical.

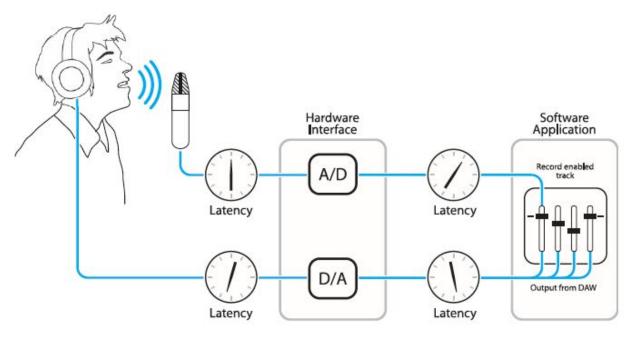


Figure A.

To illustrate the effect of latency, **Figure A** depicts the typical signal path of a vocal overdub session. A vocalist sings into a microphone, which is routed to an analog to digital converter, then to the audio software application for recording. In the software application, the vocalist's live signal is mixed with the playback of previously recorded tracks, routed to a digital to analog converter, and finally to the vocalist's headphones. A slight delay accumulates at each conversion stage, while a much greater amount of delay occurs through the software application, resulting in the vocalist hearing his performance in headphones delayed by several milliseconds.

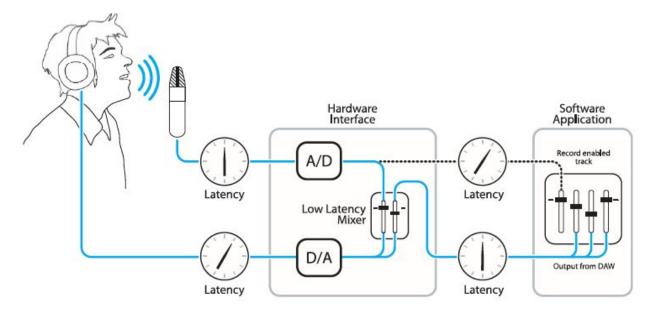


Figure B.

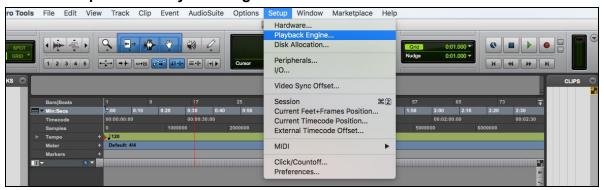
By routing the hardware input directly to the hardware output and mixing in playback as shown in **Figure B**, it's possible to provide the vocalist a headphone monitoring signal with a much shorter delay. First, the signal being recorded (in this case, a vocal mic) is split just after the A/D stage and routed to both the software application for recording and directly back to the hardware outputs without going through the latency-inducing software. This creates a low latency path from mic to headphones. Next, a stereo mix of playback tracks is routed to the low latency mixer and combined with the hardware input(s). This allows the performer to hear himself while listening to playback tracks without a confusing delay in order to comfortably record overdubs.

Note that the software application's mixer is used to set a stereo mix of playback tracks while the low latency mixer is used to set the balance between the stereo playback mix and the hardware inputs.

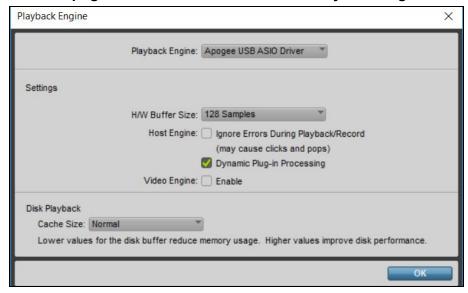
Software Setup

Windows OS: Select Apogee ONE in Pro Tools

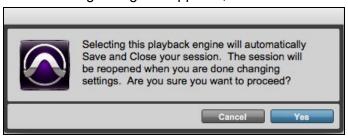
1. Choose Setup menu > Playback Engine.



2. Choose Apogee USB ASIO Driver for current Playback Engine.

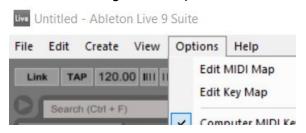


- 3. Set the H/W Buffer Size to 128 Samples and keep Safe Mode on. These settings may need to be adjusted based on your computer's performance. Click OK.
- 4. If the following dialog box appears, Click Yes.



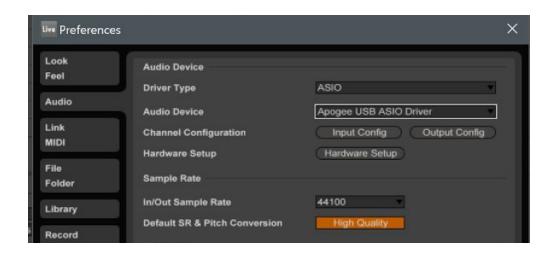
Windows OS: Select Apogee ONE in Ableton Live

1. In Ableton Live, go to the Options menu and choose Preferences.





- 2. Click on the Audio tab.
- 3. Select Driver Type: ASIO
- 4. Select Audio Device: Apogee USB ASIO Driver
- 5. Set desired Sample Rate

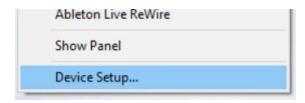


- 6. Buffer Size is set in the Apogee Maestro software. Click Hardware Setup to access Maestro. To start, set buffer to 128 Samples and keep Safe Mode on. These settings can be adjusted based on your computer's performance.
- 7. Close the Preferences window after making settings.

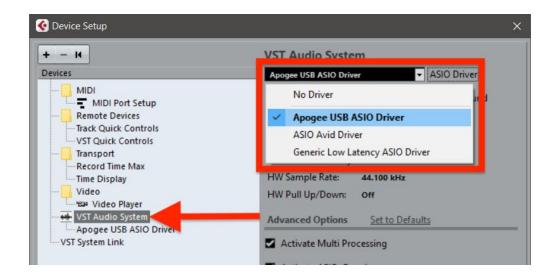
Windows OS: Select Apogee ONE in Cubase

1. Open Devices > Device Setup...

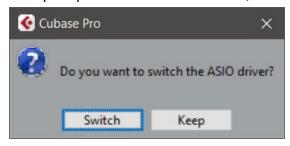




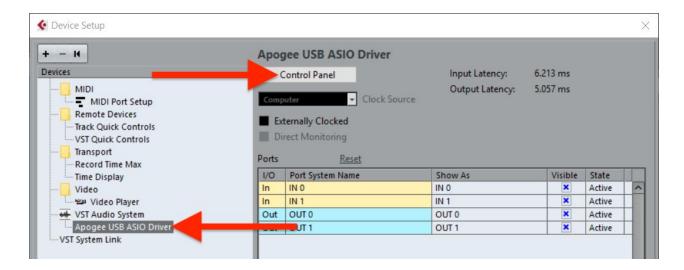
2. Select VST Audio System, then in the ASIO Driver drop-down, select "Apogee USB Audio Driver".



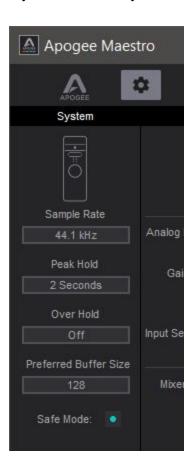
3. If prompted to switch ASIO driver, select SWITCH.



4. Buffer Size is set in the Apogee Maestro software. select Apogee USB ASIO Driver, then Control Panel. Apogee Maestro will appear.



To start, set buffer to 128 Samples and keep Safe Mode on. These settings may need to be adjusted based on your computer's performance.



Additional Support

For more information:

- Apogee KnowledgeBase and FAQs
- Apogee Product Registration
- How to contact Apogee Technical Support

Visit: http://www.apogeedigital.com/support/

Specifications

Features ONE

Computer Connectivity	USB 2.0 High Speed
Roundtrip Latency Performance	32 buffer @ 96kHz = 3.5 ms 64 buffer @ 44.1kHz = 4.2 ms
Power	USB Bus Power, Optional DC Power Supply (Sold Separately)
Bit Resolution/Sample Rate	24-bit/44.1-96kHz
Input Channels	2 Analog Inputs
Output Channels	Stereo Headphone Output
Microphone Preamps	2
Microphone Preamp Gain	Up to 62dB
Metering	LED Segments
Phantom Power	Yes
Phase Invert	Yes
Group Inputs	Yes
Mute Outputs	Yes
Core Audio Compatible	Yes

Warranty & Notifications

Registration and Warranty Information

To receive free tech support, important information and product updates first... Register your new Apogee product here:

www.apogeedigital.com/register/

If you do so, Apogee can contact you with any update information. As enhancements and upgrades are developed, you will be contacted at the registration address. Firmware updates are free for the first year of ownership unless otherwise stated.

APOGEE ELECTRONICS CORPORATION warrants this product to be free of defects in material and manufacture under normal use for a period of 12 months. The term of this warranty begins on the date of sale to the purchaser (proof of purchase in the form of a receipt may be required). Units returned for warranty repair to Apogee or an authorized Apogee warranty repair facility will be repaired or replaced at the manufacturer's option, free of charge.

ALL UNITS RETURNED TO APOGEE OR AN AUTHORIZED APOGEE REPAIR FACILITY MUST BE PREPAID, INSURED AND PROPERLY PACKAGED, PREFERABLY IN THEIR ORIGINAL BOX.

Apogee reserves the right to change or improve design at any time without prior notification. Design changes are not implemented retroactively, and the incorporation of design changes into future units does not imply the availability of an upgrade to existing units. This warranty is void if Apogee determines, in its sole business judgment, the defect to be the result of abuse, neglect, alteration or attempted repair by unauthorized personnel. The warranties set forth above are in lieu of all other warranties, expressed or implied, and Apogee specifi cally disclaims any and all implied warranty of merchantability or of fitness for a particular purpose. The buyer acknowledges and agrees that in no event shall the company be held liable for any special, indirect, incidental or consequential damages, or for injury, loss or damage sustained by any person or property, that may result from this product failing to operate correctly at any time.

Warranty Exclusions

- Used products purchased through a third party or online.
- Products with missing or defaced serial numbers.
- Products damaged by environmental factors, such as oxidation and/or damages caused by natural disaster.
- Units that have **NOT** been opened by user within the one year warranty period.
- Physical Damages which include, but not limited to the following:
- Unauthorized modifications
 - Misuse, neglect or improper assembly
 - Transport damages due to improper packaging or carrier
 - Burns resulting from faulty or failed electric power
 - Missing/bent parts
 - Cracked components
 - Liquid/water damage

USA: Some states do not allow for the exclusion or limitation of implied warranties or liability for incidental or consequential damage, so the above exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Service Information

Your Apogee product contains no user-serviceable components; refer to qualified service personnel for repair or upgrade. Your warranty will be voided if you tamper with the internal components. If you have any questions with regard to the above, please contact Apogee.

In the event your Apogee product needs to be upgraded or repaired, it is necessary to contact Apogee prior to shipping, and a Return Merchandise Authorization (RMA) number will be assigned.

Warnings

FCC warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to take whatever measures necessary to correct the interference at his own expense.

Copyright Notice

ONE is a computer-based device, and as such contains and uses software in ROMs. This software, and all related documentation, including this User's Guide contain proprietary information which is protected by copyright laws. All rights are reserved. No part of the software and its related documentation may be copied, transferred, or modified. You may not modify, adapt, translate, lease, distribute, resell for profit or create derivative works based on the software and its related documentation or any part thereof without prior written consent from Apogee Electronics Corporation, U.S.A.

Software Notice

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Declarations of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference
- 2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a different circuit from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.

NOTE: The use of non-shielded cable with this equipment is prohibited.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

Apogee Electronics Corp.

1715 Berkeley Street

Santa Monica, CA 90404, USA

Industry Canada Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matérial brouilleur du Canada.

Declaration of Conformity – CE

Apogee Electronics Corporation hereby declares that the product, the ONE, to which this declaration relates, is in material conformity with the following standards or other normative documents:

- EN50081-1/EN55022; 1995
- EN50082-1/IEC 801-2, 3, 4; 1992

following the provisions of:

• 73/23/EEC – Low Voltage Directive

89/336/EEC - EMC Directive

Declaration of Conformity – Japan

Apogee Electronics Corporation hereby declares that ONE, to which this declaration relates, is in material conformity with the VCCI Class A standard.

Declaration of Conformity – Australia

Apogee Electronics Corporation hereby declares that the ONE is in material conformity with AN/NZS standard requirements.



Apogee Electronics Corp. Santa Monica, CA www.apogeedigital.com

