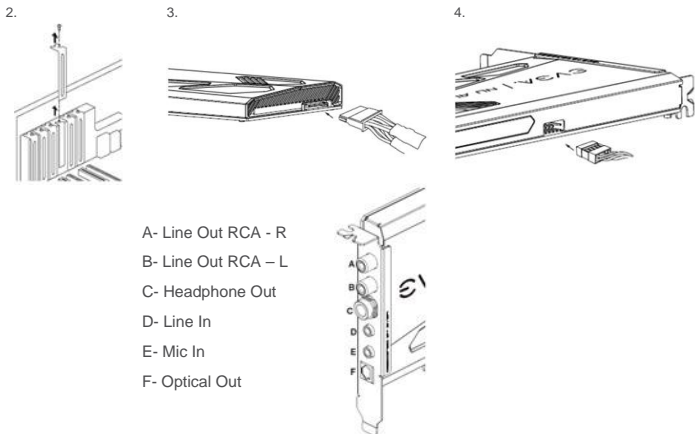


EVGA[®]
NU AUDIO

EVGA. NU AUDIO

Hardware Installation

1. Turn off your computer, disconnect the power cord and remove any existing sound cards.
2. If applicable, remove the slot covers that correspond to the PCIe slots you are installing the EVGA Nu Audio.
3. Connect system power to the EVGA Nu Audio.
4. Connect front panel header to the EVGA Nu Audio.



Connecting to the speaker, headphone or mic

1. Connect the speaker, headphone or mic to your EVGA Nu Audio.
2. Reconnect your power cord to the PC.

Driver Installation

With the hardware installed, it is now time to install the audio driver.

1. Power up your computer.
2. Download the driver file from www.evga.com/drivers.

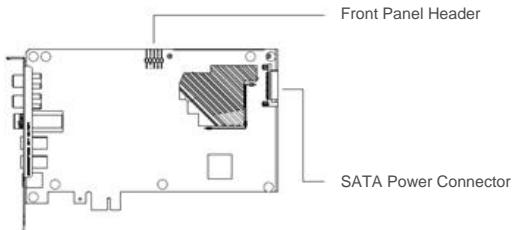
The setup program will take over and walk you through the driver installation process.

3. You may need to reboot your PC once the driver installation is complete.

Included Equipment

The following equipment is included in the EVGA Nu Audio box

- RCA L/R to 3.5mm adapter
- 6.5mm to 3.5mm adapter



Minimum System Requirements

To ensure a successful installation of the EVGA Nu Audio, your computer must meet the following requirements:

- 32/64bit Microsoft® Windows® 7/Windows® 8/Windows® 8.1/Windows® 10
- Intel® Pentium® 4 1.4GHz,AMD Athlon 1400 CPU, or faster CPU
- 256MB system memory
- 60MB available storage space for driver installation

EVGA Support

Thank you for purchasing an EVGA product. Please remember to register your product at: www.evga.com/register

For the latest drivers and updates for your product please visit: www.evga.com/support/drivers

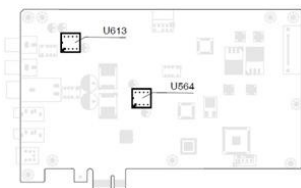
To visit and search our knowledge base and product FAQ please visit: www.evga.com/FAQ

To visit the EVGA community message boards please visit: forums.evga.com

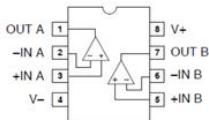
For more information about these services as well as our terms and conditions please visit: www.evga.com

OP-Amp Rolling

A great feature of the EVGA NU Audio card is the capability for future upgrades and modification by swapping op-amps, sometimes referred to as 'OP-Amp Rolling'. For this we have provided two sockets, U613 and U564, as shown on the plain view:



The pre-installed op-amps, AD8056 (U613) and OP275 (U564), were selected, first and foremost, to create a lush vivid and immersive soundscape for gaming and music. Both of these op-amps have the standard 8 pin dual op-amp layout:

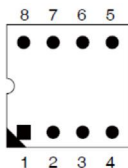


However, the AD8056 op-amp is a very specialized IC and has a maximum operating voltage of 6V (symmetrical +6V, -6V), which means it can only operate in the 5V environment of the Line amplifier, which is socket U613.



PLACING AD8056 IN U564 WILL DAMAGE THE OP-AMP AND POSSIBLY OTHER CONNECTED ELECTRONICS - INCLUDING YOUR HEADPHONES!

Furthermore, when experimenting with ANY op-amp replacement, extreme care must be taken to ensure the IC is inserted in the correct orientation, and that all the pins are inserted properly. If care is not taken, it is easy to bend a pin when inserting the IC.



Pin assignment			
1	Out A	8	Positive Input Voltage
2	-IN A	7	Out B
3	+IN A	6	-IN B
4	Negative Input Voltage	5	+IN B

Socket voltage specification:

- U613: +5V, -5V symmetrical, three stage regulated
- U564: +14.5V, -14.5V symmetrical, two stage regulated

Remember, the AD8056 op-amp will be damaged or destroyed if it is placed in the U564 socket!
TIP: Although sockets are provided for 'OP-Amp Rolling' not all op-amps will work satisfactorily or provide better audio quality. EVGA and Audio Note will endeavor to help wherever possible, but we cannot guarantee against poor performance or damage caused by swapping op-amps.

Software Installation

Thank you for purchasing the EVGA NU Audio Card! This guide will walk you through where to find software for your audio card, how to install the software, and a basic walkthrough of the NU Audio software and features. Please keep in mind that over time the software may change.

Where can I find software for my NU Audio card?

NU Audio software may be located on our Download Center at:

<https://www.evga.com/support/download/>

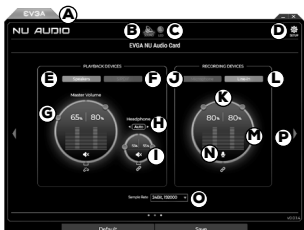
Once there, select Other Products, select NU Audio from the Category dropdown, select 701-P1-AN01-KR from the Part Number dropdown, select All from the Type dropdown, and click Submit. Download the software.

How Do I Install the Software?

Double-click the file you downloaded and you will be prompted to select an install location. After selecting the location, the software will install and notify you when the installation is complete. You may choose to run the NU Audio software at this time.

EVGA NU Audio Software

The NU Audio software offers you control over the volume, input/output ports, EQ options, RGB LED lighting, and some basic settings.

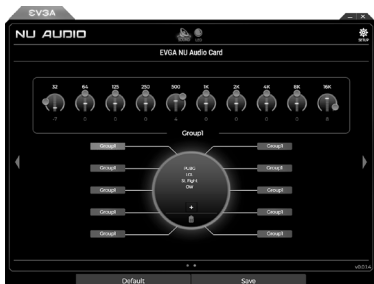


- A. EVGA.com Link – The EVGA tab links directly to our website at EVGA.com.
- B. Sound Menu – Located at the top, the Sound Menu houses the Volume and EQ menus.
- C. LED Menu – Located at the top, the LED menu houses the configurator for RGB Lighting.
- D. Setup Menu – Located in the upper-right, the Setup menu allows you to choose your language and select the frequency that the Software check for updates.
- E. Speaker Select – Use this section when listening through either Speakers or Headphones.
- F. S/PDIF Select – Use this section when listening through the S/PDIF pass through output.
- G. Master Volume (Speakers) – These are the main volume sliders for output volume. They are tied into Windows volume and will go up and down as the volume is increased or decreased. The sliders can be unlinked to allow the listener to adjust left and right audio separately. Master Volume for S/PDIF behaves similarly.
- H. Headphone Auto/Back/Front Select – This box allows you to specify if your Headphones are plugged into the audio card directly (Back) or a front-panel audio port (Front).
- I. Volume Control for Headphones – This slider independently controls the volume through the analog headphone amp. Although the Master Volume controls the output level for the system (i.e. volume in OS), the Volume Control for Headphones increases and decreases the power to the headphone OP-AMP.
- (a) This setting is similar to a Headphone Gain selector. At 100% the headphone volume is set for 600ohm impedance. At approximately 42%, the headphone volume is set for 250ohm impedance. At approximately 5%, the headphone volume is set for 32ohm.
- (b) For best practices, we suggest that you manually set the Headphone volume to the rated impedance of your headphones and adjust the volume through the Master Volume.
- (c) If you do not know the rated impedance of your headphones, begin by taking off your headphones, turn the Master Volume to 100%, and the Headphone Volume to 0%. Play some audio to make sure that you can hear audio, and put your headphones on only if the audio is too low or at a comfortable level. Continue listening and slowly raise the Headphone Volume until the audio is at your optimal listening volume. Please be careful when setting the Headphone Volume; setting the Headphone Volume too high for an extended period of time can damage headphones rated for a lower impedance. Always lower the Headphone Volume when trying a different pair of headphones.

- J. Microphone Select – Use this section when recording through the Microphone Recording Input.
- K. Recording Auto/Back/Front Select – This box allows you to specify if your recording device is plugged into the audio card directly (Back) or a front-panel audio port (Front).
- L. Line-In Select – Use this section when recording through the Line-In Recording option.
- M. Volume Control for Microphone – This slider allows you to control the volume of your microphone input.
- N. Mute Button – Mutes the volume.
- O. Sample Rate Select – This selects the bit-rate to play back audio. This selects the bit-rate to play back audio. Generally, this setting should be matched to the source audio for the highest quality playback. Setting this too high will not necessarily improve audio, and has been known to cause odd issues with applications/games. Setting it too low, however, will cause you to miss details in the source audio. Please see the FAQ section to see how to find the bit-rate of your audio tracks.
- P. Sound Menu Toggle – The arrows switch between the Main Volume menu and the EQ menu.

EQ Menu

The EVGA NU Audio Card software features a customizable EQ menu, which allows for up to 30 profiles. Each profile allows you to label one of the six categories to sort your EQ profiles in any way, and five profiles in each category, which may be named and customized. Simply click on one of the Custom Categories, and click on the “+” sign. Type in the name of the profile and click Save. These profiles do not feature preset EQ out of the box, so you will have to configure each profile yourself.



What is EQ and Do I need it?

EQ, or Equalization, is a means to subjectively improve the sound quality by adjusting the balance between frequencies. In most cases, high-end speakers and headphones need very little, if any, EQ to sound great with a wide variety of audio. However, EQ can help to improve audio quality for a wide variety of speakers and headphones, or even a type of content that just doesn't quite sound right. Only you can decide if your Audio needs EQ based on a combination of your speakers/headphones, the type of content you listen to, and your ability to hear the difference after moving the sliders.

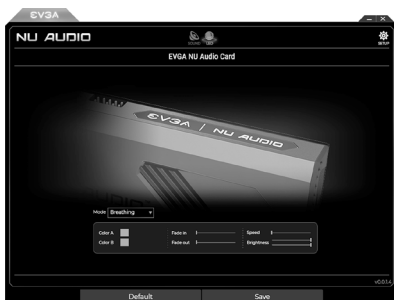
What are all those sliders for?

EQ sliders represent a specific sound frequency, and raising or lowering each slider will have an effect by increasing or decreasing the loudness (in dB) of that particular frequency. Starting at the sub-bass frequencies of 32Hz to the upper bass at 250Hz, the lower midrange at 500Hz to the midrange at 2kHz and upper midrange at 4kHz, and finally up to the many treble ranges beginning around 8kHz to 16kHz, you generally want to focus on modifying the sliders between the 64Hz to

4kHz frequency range, which is where most people are able to hear the majority of audio frequency. However, some people are very sensitive to frequencies above the 8kHz range, and adjusting these frequencies can both improve the audio and make it less fatiguing. It's recommended to test by adjusting a frequency's loudness by 1-2dB at a time. You may notice that decreasing some frequencies may have the effect of making your audio quieter, you can turn the volume up to compensate. There are many guides available online to learn more about how to properly EQ many different types of audio, as well as to learn more about the EQ process itself.

RGB LED Lighting

The EVGA NU Audio Card features 10-Mode RGB lighting, including Audio Reactive Lighting. All lighting controls are available within the NU Audio software.



The lighting may always be turned off at any time by selecting "Static Off". For the rest, here's a description of each:

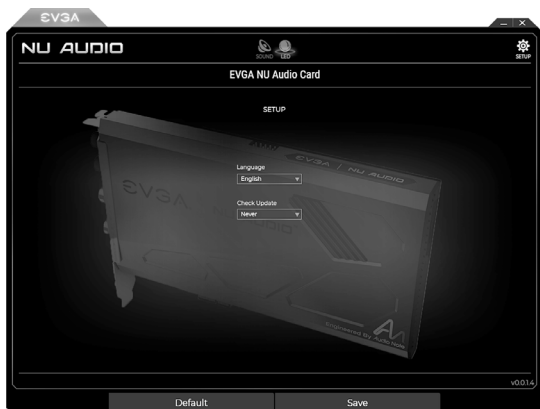
- A. Static On – Single color, basic lighting. Select the color you want and it will stay on without any additional effect.
 - B. Pulse – Single color. The lighting fades in and out. The fading speed can be controlled for both directions.
 - C. Breathing – Two colors. The lighting behaves as if breathing in and out, and changes colors as it does. The speed can be controlled in both directions.
 - D. Rainbow – Multiple colors. Rainbow effect cycles between many colors and the color cannot be controlled. Speed and brightness may be controlled, however.
 - E. Wave – Single color that makes its way from one side of the lighting plate to the other. You may control the origin of the lighting and its speed.
 - F. Mist – Single color that slowly fades in from multiple points until solid and then fades out again.
- Audio Reactive Lighting. The remaining lighting options are controlled mostly by your audio content.



- G. Sonic – Shows the peak that reacts to the audio content base on selected Frequency. additional effect.
- H. Lighting – Shows the pulse that reacts to the audio content base on selected Frequency.
- I. Fireworks – Shows the pulse in random LED that reacts to the audio content.
- J. Frequency – Shows the lights that reacts to the volume of each Frequency.

Setup

The Setup Menu contains the option to select your preferred language and the frequency that the NU Audio software checks for updates.



FAQ and Learn More

Q. I've installed the software, but I'm receiving a message saying that it cannot detect the NU Audio Card.

A. The software can be installed, even if the NU Audio card is not present, so the first step is to check if the card is installed properly and the SATA power connector is connected. If you have any further issues, please contact EVGA Customer Service.

Q. When I turn on my system or change my Speaker mode I hear a clicking noise. Is something wrong with my NU Audio Card?

A. The clicking noise is the OP-Amp turning on or off. This is completely normal.

Additional FAQ's:

There are a number of audio topics that have solutions much too long to be contained in this guide. We've compiled a list of questions and answers with more detailed answers or solutions on the EVGA.com Frequently Asked Questions (FAQ) page. Here are some examples:

- I've installed everything, but audio is playing out of / or recording from another device – <http://www.evga.com/support/faq?f=59747>
- How can I play .DSD or .DSF files? <http://www.evga.com/support/faq?f=59748>
- I'm using the optical out, but I can only get stereo output <http://www.evga.com/support/faq?f=59749>
- How can I find the bit-rate of an audio track? <http://www.evga.com/support/faq?f=59752>