

DacMagic XS

Cambridge Audio

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This guide is designed to make installing and using this product as easy as possible. Information in this document has been carefully checked for accuracy at the time of printing; however, Cambridge Audio's policy is one of continuous improvement, therefore design and specifications are subject to change without prior notice.

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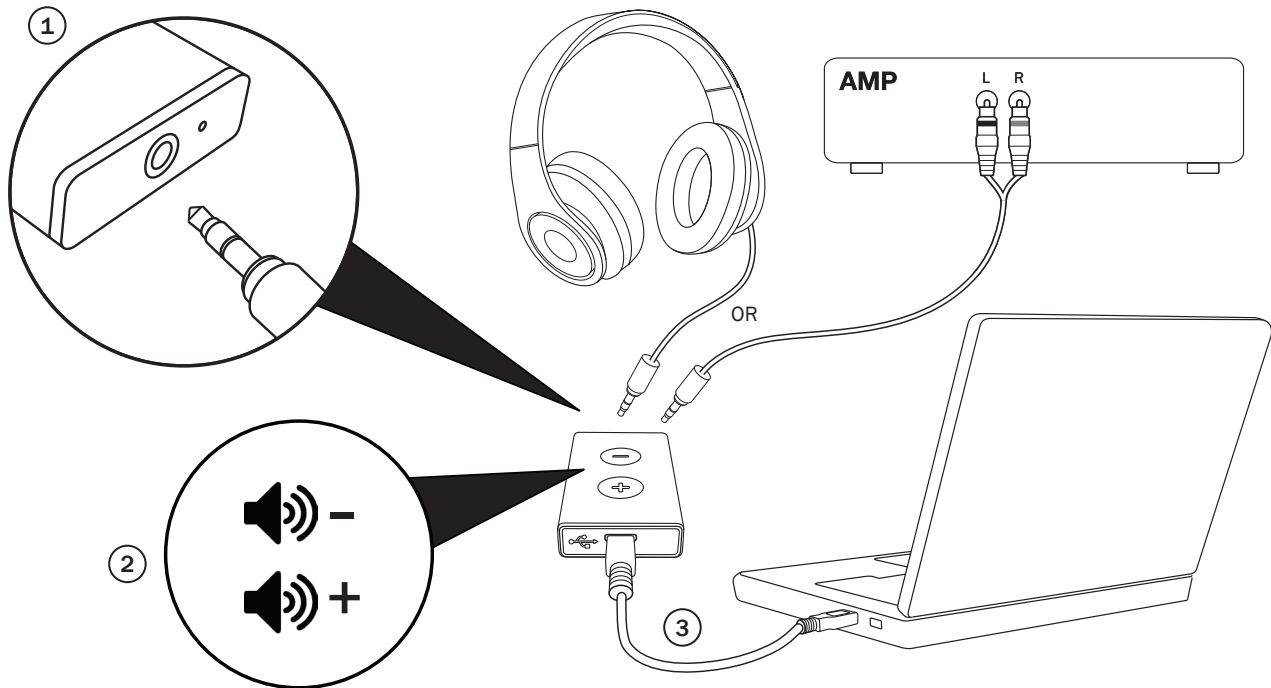
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for 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. However, there is no guarantee that interference will not occur in a particular installation. 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:

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

The user or any other party is not permitted to change or modify this device as this could void the user's authority to operate the equipment.

Connections



1. 3.5mm jack input

Plug in the headphone 3.5mm jack or the 3.5mm to RCA connector (if connecting to an amplifier)

2. Volume buttons

Press to increase or decrease the volume level.

3. Micro USB

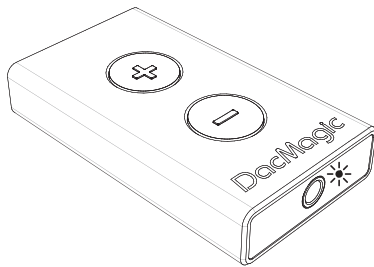
Use the supplied MicroUSB cable to connect the DacMagic XS to the PC's USB input.

4. Go to your computer's 'Sound' settings and set 'CA USB Audio 1.0' as the default speaker or output device.

Note : You will need to enable USB Class 2.0 to play files at sample rates greater than 24-bit/96kHz. Please see page 4 onwards for details of USB Class 2.0 operation.

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Operating instructions



Important note: The DacMagic XS will get hot when in normal use.

LED colours/flashes

* Max volume

Press and hold the Vol+ button until the LED flashes red. The volume will also stop increasing at this point, indicating maximum volume output.

Warning! Listening at high volume through your headphones for long periods may damage your hearing.

* Mute

Press and hold the Vol- button until the LED starts flashing. The volume will also stop decreasing at this point, indicating minimum volume output.

Note: The colour of LED flashing will depend on the current sample rate input.

LED colours

Below are the LED colours corresponding to the sample rate input.

- 44.1kHz/48kHz
- 88.2kHz/96kHz
- 176.4kHz/192kHz (only available via USB Class 2.0)

USB Class 1.0

Following the steps in the supplied Quick Start Guide, you will be able to improve the sound from your computer by using the DacMagic XS in its default USB Class 1.0 mode. Instead of connecting your headphones or 3.5mm cable directly to your computer, you will instead be connecting them to the DacMagic XS. By doing this, you are bypassing the computer's own internal soundcard and allowing the DacMagic XS to perform the Digital to Analogue conversion in far higher quality, resulting in a much better sound.

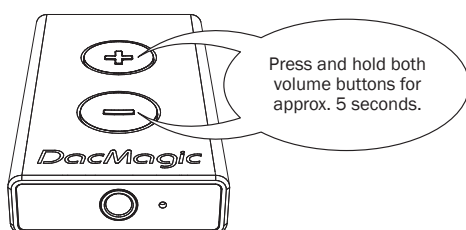
USB Class 2.0

To improve the sound even further, it is possible to use the DacMagic XS in USB Class 2.0 mode.

Press and hold both Volume buttons to switch between USB Class 1.0 and 2.0:

Note:

- Switching between USB Class modes during playback is not recommended.
- Always stop any playback before switching between USB Class modes.



* x 3 = Class 1.0 USB

* x 3 = Class 2.0 USB

The benefits of USB Class 2.0 are as follows;

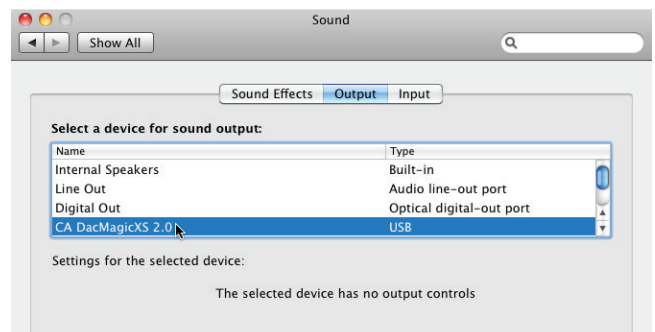
For Mac

Allows you to play up to 24-bit/192kHz audio files through the DacMagic XS. (USB Class 1.0 supports a maximum of only 24-bit/96kHz).

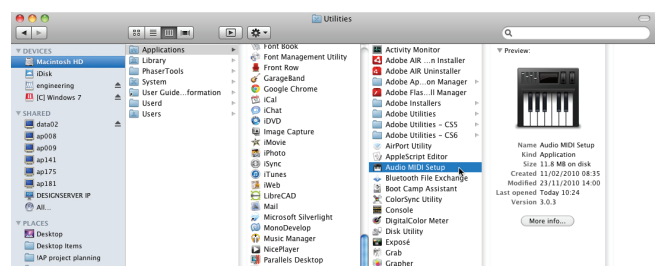
Connect the DacMagic XS to an available USB port on your Mac.

Switch the DacMagic XS into Class 2.0 mode by pressing and holding both volume buttons until the LED flashes pink three times.

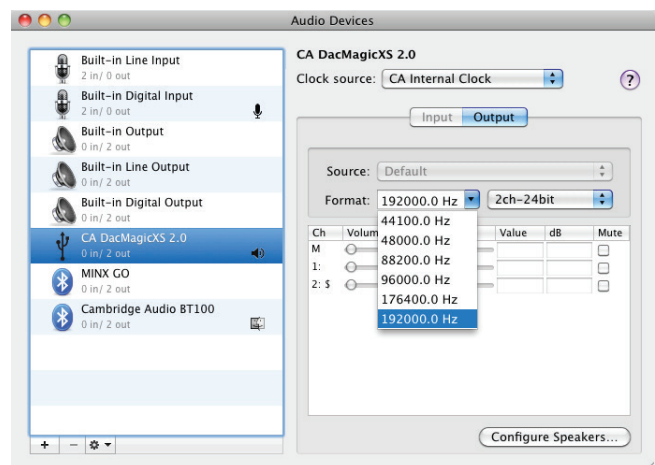
1. Go to System Preferences > Sound. Select CA DacMagic XS 2.0 as the output:



2. Go to Applications > Utilities > Audio MIDI Setup.



3. Set the audio output to the desired sample rate.



Note: There are 3rd party apps available (eg. BitPerfect) that will dynamically adjust this output for you, depending on the resolution of the audio file being played at any given time.

For Windows

Allows you to install the Cambridge Audio Class 2.0 USB driver. Using this dedicated USB driver replaces the standard Windows USB driver and consequently;

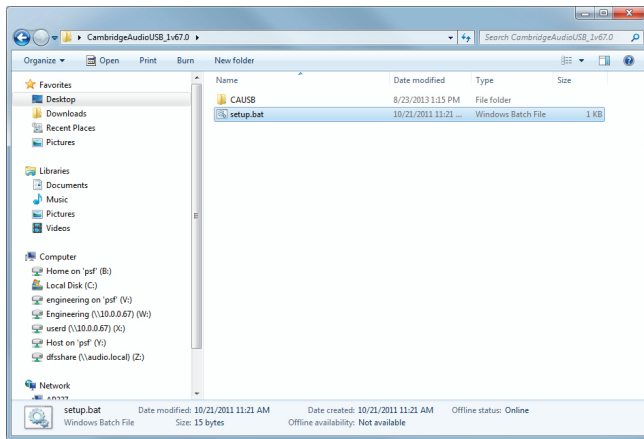
- Delivers better audio performance (lower jitter) to the DacMagic XS.
- Allows you to play up to 24-bit/192kHz audio files through the DacMagic XS. (USB Class 1.0 supports a maximum of only 24-bit/96kHz).
- Allows you to use ASIO – see Audiophiles Guide to USB Audio, available on our website.

1. Connect the DacMagic XS to an available USB port on your computer. Switch the DacMagic XS into Class 2.0 mode by pressing and holding both volume buttons until the LED flashes pink three times.

2. The DacMagic XS uses the latest Cambridge Audio Class 2.0 USB driver. Visit the Cambridge Audio support website to download the latest USB 2.0 driver.

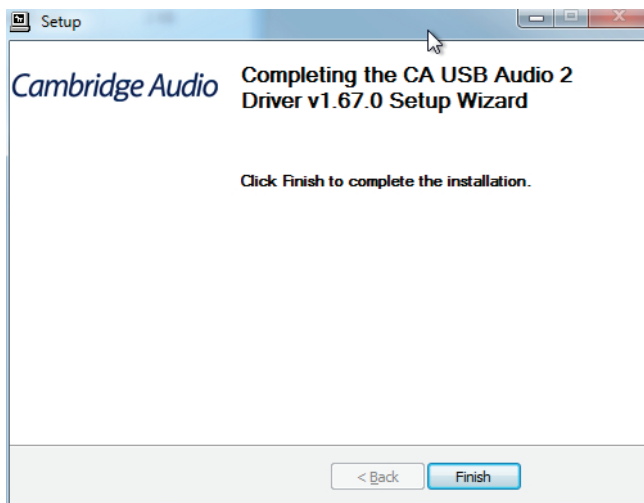
Note: Before installing the latest driver, uninstall any previous versions of the CA USB 2.0 driver.

3. Download and unzip the driver. Save this to a known location on your PC, such as the Desktop. Click on 'setup.bat'.

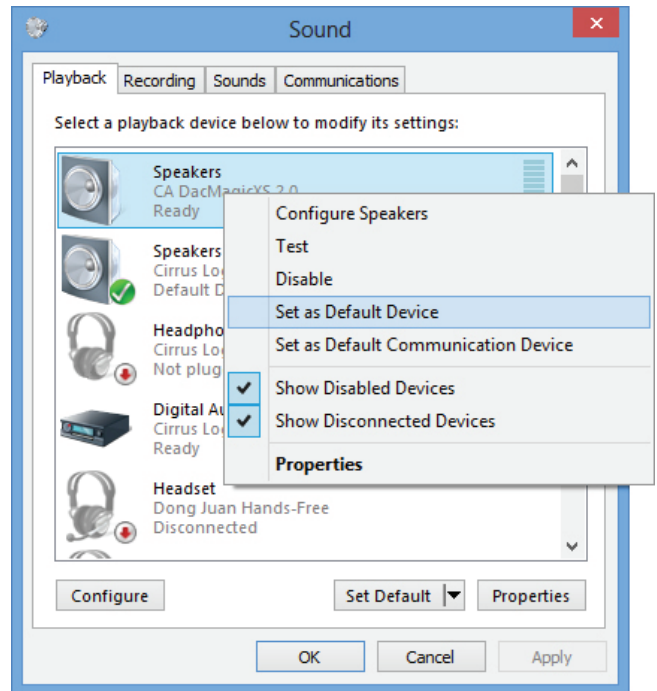


4. Click Next to install the new USB driver, then click Install to start the update. **Note:** The CA DacMagic XS must be connected and in Class 2 mode.

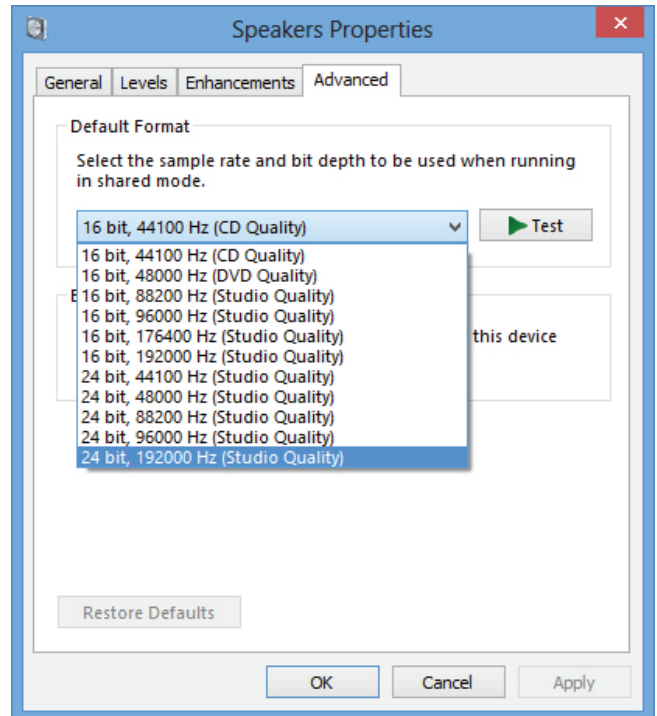
5. Allow the update to progress, then click Next and Finish to complete the installation.



6. Go to the Sound menu in Control Panel, and ensure that CA DacMagic XS 2.0 is set as the playback device.



7. Go to the Speakers Properties of the DacMagic XS and choose the sample rate output.



You are now ready to enjoy your Cambridge Audio DacMagic XS in Class 2.0 mode!

To use ASIO, please see the Windows 7 ASIO setup guide on our website for an example installation.

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Technical specifications

Connections	Micro-USB input, 3.5mm analogue output
DAC	ESS9023
Sample rates supported	USB 1.0 mode: 16/24-bit, 44.1kHz, 48kHz, 88.2kHz, 96kHz USB 2.0 mode: 16/24-bit, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
Output voltage	2V RMS
Maximum power	150mW
Minimum headphone impedance	12 Ohms
Frequency response	+/-0.2dB 20Hz - 20kHz
THD + N	<0.004%
SNR @ 1K	103 dBr (unweighted)
Cross talk	66dB
Output impedance	0.5 Ohms
Volume steps	53 steps (54 different volume levels)
Dimensions (W x H x D)	30 x 10 x 53.5mm (1.2 x 0.4 x 2.1")
Weight	100g (3.5oz)

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