

user **manual**

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Acoustic Research UA1



It is important to read this user manual prior to using your nre product for the first time

Getting Started

Dear Acoustic Research customer

Thank you for purchasing the Acoustic Research UA1 High Fidelity HD USB DAC with headphone amplifier. This product will enable genuine high definition music playback with high fidelity on your Windows or Mac computer system. You can also manage your music contents on your computer with the JRiver Media Center included with this product.

To start using your High Fidelity HD USB DAC with headphone amplifier, please follow the setup instructions in the following pages.

1. Content of the box

- UA1 High Fidelity HD USB DAC with headphone amplifier
- USB cable
- Software CD (Acoustic Research UA1 Installation CD)
- Quick Start Guide

2. System requirements

Windows Operating Requirements

- Intel Core i3 or better
- Windows 7 or Windows 8 (32-bit or 64-bit)
- An available USB 2.0 port
- Internet Connection

Mac Operating Requirements

- Mac with Intel processor
- Mac OS X 10.6.8 (Snow Leopard) or above (10.9 or above required for integer mode playback)
- An available USB 2.0 port
- Internet Connection

3. General controls



* Optical output supports up to 96 kHz

LED Status Display							
White	44.1kHz	Blue	88.2 kHz	Red	176.4 kHz		
Cyan	48 kHz	Purple	96 kHz	Yellow	192 kHz		

4. Driver installation for Windows 7 or Windows 8 (32-bit or 64-bit)

1. Connect the High Fidelity HD USB DAC with headphone amplifier to an available USB 2.0/3.0 port with supplied USB cable The following installation message and error message will appear on screen. These is the normal behavior during the installation process.



Device driver software was not successfully installed 🔌 🗙 Click here for details.

- 2A. Installation through CD
 - Insert Acoustic Research UA1 Installation CD into CD/DVD/BD Drive
 - Browse CD content with Windows Explorer
 - Double-click the folder *Windows* to browse the content
 - Run XMOS-Stereo-USB-Audio-Class2-Driver-300C(v2.19.0).exe
- 2B. Installation through Internet Download
 - Visit Acoustic Research web site http://www.acoustic-research.com
 - Enter **UA1** in the search bar to find the UA1 product information
 - Under the product information, click Downloads
 - Click Driver for Windows 7/Windows 8 (32-bit or 64-bit) to download the driver
 - Run the downloaded driver
- 3. After running the installation program, you will see the *User Account Control* Click *Yes* to continue the installation process



4. Click *Next*



5. The installation program will detect the existence of the USB sound module. Click Next. If the program fails to detect the hardware



6. The license agreement will appear. Please read through the content carefully. To continue, please check "I accept..." and click Next



7. Choose the installation path if you would like to change it. Click Install to continue

Setup	
Choose Install Location Choose the folder in which to install USB Audio 2.0 Stereo Driver v2.19.0.	P
Setup will install USB Audio 2.0 Stereo Driver v2.19.0 in the following folder. different folder, click Browse and select another folder. Click Install to start	. To install in a the installation.
Destination Folder	
Ct\Program Files(XMOS(USBAudioStDriver_300C	Browse
Space required: 2.3MB Space available: 59.6GB	
< Back Install	Cancel

8. Click *Finish* to complete the installation



5. Driver Installation for Mac OS X 10.6.8 or above

1. Connect the High Fidelity HD USB DAC with headphone amplifier to an available USB 2.0/3.0 port with supplied USB cable

2. Driver software for High Fidelity HD USB DAC with headphone amplifier has been built into the Mac OS X Operating System (10.6.8 or above). The Installation has completed.

6. Default audio device for Windows and Mac

By default, UA1 High Fidelity HD USB DAC with headphone amplifier is an auxiliary audio device in Windows. While music applications are typically set to output sound through the primary audio device, you will not hear any sound from the High Fidelity HD USB DAC with headphone amplifier. Please expect it as the normal behavior.

Sound X	Sound
Playback Recording Sounds Communications	Show All
Select a playback device below to modify its settings:	Sound Effects Output Input
Speakers Acoustic Research AR-UA1	Select a device for sound output:
Ready	Name Type
Speakers	Internal Speakers Built-in
Default Device	Acoustic Research AR-UA1 USB
Headphones Not plugged in	Settings for the selected device: Balance:
Configure Set Default ♥ Properties OK Cancel Apply	Output volume: Show volume in menu bar

We recommend keeping UA1 as the auxiliary device the following reasons:

- Audiophile music software requires exclusive access to the audio device
- Sound notifications will still be available through system audio device when UA1 is occupied by audiophile music software

7 Software Installation and Configurations for Windows

• Installation through CD (CD/BD/DVD drive required)

Insert Acoustic Research UA1 Installation CD into CD/DVD/BD Drive
 Browse CD content with Windows Explorer
 Double-click the folder *Windows* to browse the content
 Run *MediaCenter190117.exe* Follow instructions on screen to complete the installation

Installation through internet download (Internet connection required)
1.Visit JRiver web site http://www.jriver.com/download.html
2.Download the latest Windows version of JRiver Media Center
3.Run the downloaded file
4.Follow instructions on screen to complete the installation

Activating the software (Internet connection required)

The required license key can be found on the envelope of the CD

Configuring JRiver Media Center to utilize the USB audio module in Windows

1. Make sure UA1 is connected and driver has been installed. Run JRiver Media Center

2.Click Tools and select Options...

3.Under Audio Device, select XMOS USB Audio [WASAPI] or XMOS USB Audio ST 300C [ASIO]

	Options	
audio	Zone to configure: Player	~
🚰 Burning	* Audio Device	•
CD, DVD & BD	Acoustic Research AR-UA1 [WASAPI]	
Encoding	Default Audio Device [Direct Sound]	
File Location	+ International Audio 2.0 ST 300C [ASIO]	
File Types	Acoustic Research AR-UA1 [WASAPI]	
General	More	
Handheld	Play silence at startup for hardware synchronization: None	
o Images	Play files from memory instead of disk (not zone-specific)	
Library & Folders	Track Change	
Media Network	Switch tracks: Cross-fade (aggressive) - 4s	
Podcast	Do not play silence (leading and trailing)	
Remote Control	Use gapless for sequential album tracks	
Capicar	Stop, Seek & Skip	
Services	Seek: Smooth (normal)	
Startup	Stop: Fadeout (fast)	
Television	▼ Pause: Fade (fast)	
Theater View	Jump behavior: Forward 30 seconds, backward 10 seconds	
Tree & View	* Volume	
o Video	Volume mode: system Volume	
lype your search here	OK	Cancel Help

4.Under Settings..., click DSP & output format...

5.In Output Format, select 192,000 Hz Output for Input Greater than 192,000 Hz

		DSP Studi	o			
Output Format Volume Leveling	Output Format Playback stopped or current playback doesn't support processing				<u>Options</u>	
Equalizer Parametric Equalizer Effects	Sound can be output in any form output or high sample rates requi Output Encoding (<u>more info</u>)	at. For example, you can listen ire a sound card capable of thes	to an audio e modes.	CD in 5.1 surrou Channels (m	nd at 32-bit / 192 kHz. Advanced settings like mult <u>ore info</u>)	i-channel
Headphones	None		~	Channels:	Source number of channels	~
Room Correction Convolution Parametric Equalizer 2	Sample rate (more info) Click in the output column to select a sample rate for each input sample rate. Right-click to set all at once.		Mixing:	JRSS™ mixing (recommended) □ For stereo sources, only mix to 2.1,		
Analyzer	Input	Output			Move center to front L/R	
	48,000 Hz	No change	^	Subwoofer ((more info)	
Processed in order listed (drag to reorder)	o 88,200 Hz No change 90,000 Hz No change			When source has no subwoofer (CD audio, etc.) and 'Channels selection includes a subwoofer:		
Manage Plug-ins	176,400 Hz	No change		JRSS Se		~
Clip protection	Greater than 192,000 Hz	192,000 Hz	Ţ	🗹 Subi	clarity ^m for cleaner, tighter subwoofer output	
Peak Level: n/a	Sour	ce: n/a			Internal: n/a	Help

6.Close the DSP Studio window and click **OK** to save the configurations

8 Software Installation and Configurations for Mac OS X

Installation through CD (CD/BD/DVD drive required) 1.Insert Acoustic Research UA1 Installation CD into CD/DVD/BD Drive 2.Browse CD content with Finder 3.Double-click the folder Mac to browse the content 4.Double-click the file *MediaCenter190118.dmg*5.In Media Center 19 window, drag the *Media Center 19* icon to *Applications* folder to install the software

Installation through internet download (Internet connection required)
1.Visit JRiver web site *http://www.jriver.com/download.html*2.Download the latest Mac version of JRiver Media Center
3.Run the downloaded file
4.In Media Center 19 window, drag the *Media Center 19* icon to *Applications* folder to install the software

• Activating the software (Internet connection required) The required license key can be found on the envelope of the CD

Configuring JRiver Media Center to utilize the USB audio module in Mac OS X

1. Make sure UA1 is connected and driver has been installed. Run JRiver Media Center

2.Click Tools and select Options...

3.Under Audio Device, select Acoustic Research AR-UA1 [Core Audio]

🔊 Audio	Zone to configure: Player	~			
Encoding	- Audio Device	^			
File Location	✓ Acoustic Research AR-UA1 [Core Audio]	1			
General	(Default) [Core Audio]				
Library & Folders	≠ S <mark>e</mark> t ≺ Acoustic Research AR-UA1 [Core Audio]				
Media Network	Built-in Output [Core Audio]				
Podcast	✓ More				
Contast	 Prebuffering: 6 seconds (recommended) 				
Services	 Play silence at startup for hardware synchronization: None Play Silence at startup for hardware synchronization: None 				
Startup	Play files from memory instead of disk (not zone-specific) Disable display from turning off (useful for HDMI audio)				
Tree & View	Trad. Chases				
	Track Change				
	Switch tracks: cross-late (aggressive) – 4s Do not play silence (leading and trailing)				
	Use gapless for sequential album tracks				
	The store seek & Skin				
	Seek: Smooth (fast)				
	✓ Stop: Fadeout (fast)				
	✓ Pause: Fade (fast)				
	Jump behavior: Forward 30 seconds, backward 10 seconds				
	- Volume				
	NOTE: Changes take effect once playback is stopped				

4.Under Settings..., click DSP & output format...

5.In Output Format, select 192,000 Hz Output for Input Greater than 192,000 Hz

000		DSP Stu	dio			
Output Format Volume Leveling Adaptive Volume Equalizer Parametric Equalizer	Output Format Playback stopped or current playback doesn't support processing Sound can be output in any format. For example, you can listen to an audio CD in 5.1 surround at 32-bit / 192 kHz. Advanced se like multi-channel output or high sample rates require a sound card capable of these modes.				<u>Options</u> ed settings	
Effects	Output Encoding (more info)			Channels (more info)		
Headphones	None		~	Channels: Mixing:	Source number of channels	~
Room Correction Convolution Parametric Equaliz	Sample rate (<u>more info</u>) Click in the output column to select a sample rate for each inp sample rate. Right-click to set all at once.		each input		JRSS TH mixing (recommended)	
Processed in order listed (drag	Input 48,000 Hz	Output No change No change	•	Subwoofer (<u>i</u>	more info)	(Channela)
Manage Plug-ins	88,200 Hz 96,000 Hz 176,400 Hz	No change No change No change	selection includes a subwoofer:		Channels	
Clip protection	192,000 Hz Greater than 192,000 Hz	No change 10 Hz 192.000 Hz		Subclarity [™] for cleaner, tighter subwoofer output		
Peak Level: n/a	Source	: n/a			Internal: n/a	Help

6.Close the DSP Studio window and click **OK** to save the configurations

9. Technical Specifications

Product

Acoustic Research UA1 High Fidelity HD USB DAC with headphone amplifier

Digital-to-Analogue Converter

Burr-Brown PCM1794a

Current-Voltage Converter

Dual Burr-Brown OPA2134

Headphone Amplifier

Texas Instrument TPA6120A2

Input

• USB 2.0 (host powered)

USB Audio Specifications

USB Audio Class 2.0 (Asynchronous mode)

Output

- Headphone Output (6.3 mm type)
- Gold Plated Brass Made RCA (Right)
- Gold Plated Brass Made RCA (Left)
- Optical (TOSLINK)

Supported Formats

- 44.1 kHz
- 48 kHz
- 88.2 kHz
- 96 kHz
- 176.4 kHz
- 192 kHz (Analogue output only)
- Higher than 192 kHz (Supported through high precision conversion in JRiver Media Center)
- DSD64/DSD128 (Supported through high precision conversion in JRiver Media Center)

Warranty information

For warranty information, please contact the local distributor. The contact information of the local distributors is available on *http://www.acoustic-research.com*.

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