## Using the USB input

The Triode 25 USB input uses a last generation D/A converter capable of converting PCM signals up to 384kHz and DSD up to 5.6448MHz, that is all formats and sampling frequencies available today.

To use the input, the user needs to connect the Triode 25 to a computer with Windows, OSX (Mac) or Linux operating system and follow the instructions below. Even some Android-based devices with certain players able to drive an USB device without the need for an additional driver (user space mode) and some iPads provided with the Camera Connection Kit can drive this input. In case of small size portable devices, we recommend to check the current capability of their USB port, as it must fulfil the Triode 25 USB input requirement (300mA).

## Using the Triode 25 USB input with a computer provided with a Microsoft operating system

Supported versions are Windows 7 and later. When using with a computer provided with Windows operating system, it is necessary to install the driver that can be downloaded from www.unisonresearch.com

#### **Installing Windows driver**

Before proceeding with installation, it is necessary to switch the Triode 25 on and connect it to the computer using an USB cable.

To start driver installation it is sufficient to double-click on the icon of the file downloaded from Unison Research website. Once started, depending on the operating system version, the user could be asked to confirm the permission to the program to modify the system. Give confirmation. Once this operation, when required, is performed, the window in figure 1 will appear.



#### Figure 1

Follow the instructions shown in the window and click on "Next" button to launch installation. At first, the installation program will check that the Triode 25 USB input is connected to the computer. Whenever the connection is not made or when the computer doesn't recognize the Triode 25 USB input, the window shown in Figure 2 will appear.





Should this happen, i twill be necessary to connect the Triode 25 USB input to the computer or to disconnect it and reconnect it to allow the USB controller to properly recognize it. Then, click on "Next" button.

One the installation program has checked the presence of the Triode 25 USB input on the USB bus, the window shown in figure 3 appears.



## Figure 3

The use must accept the license agreement terms by clicking on the checkbox in the lower left of the window, as already happened in figure 3, then click on "Next" button. The window shown in figure 4 will appear, in which the user may, if necessary, indicate a path for driver installation.

Setup		×
Choose Install Location Choose the folder in which to install USB Audio 2.0 Stereo Driver v2.23.0.		P
Setup will install USB Audio 2.0 Stereo Driver v2.23.0 in the following folder. T different folder, dick Browse and select another folder. Click Install to start th		
Destination Folder C: \Program Files\XMOS\USBAudioStDriver_302D Br	owse	
Space required: 2.3MB Space available: 789.4GB		
< <u>B</u> ack <u>I</u> nstall	Cance	el

Figure 4

Once the installation path is chosen or confirmed, the user needs to click on "Install" button to proceed with the driver and ancillary components installation. The window shown in figure 5 will appear, in which a progress bar will show the installation process progress.

Setup	-	□ ×
Installing Please wait while USB Audio 2.0 Stereo Driver v2.23.0 is being installed.		P
This may take some time to complete. Please wait		
Preparation.		
Preparing installation. This may take some time to complete. Please wait		
< <u>B</u> ack <u>N</u> ext >		Cancel

Figure 5

Once the file copy and the system update is completed, the window will announce the installation completion as shown in figure 6.



Figure 6

Click on "Next" to proceed. The window shown in figure 7 will appear. Click on "Finish" to terminate the installation program.



Figure 7

#### Uninstalling the Windows driver

It may be necessary, for certain reasons, to uninstall the driver. The uninstall process can be started in two ways: by opening the applications installation utility and selecting the driver for uninstall, or by accessing the driver folder and starting the uninstall program. Either way, the window shown in figure 8 will appear.





Click on "Uninstall" to launch the drive uninstall process. The window shown in figure 9 will appear, in which a progress bar will show the uninstall progress.

🗊 USB Audio 2.0 Stereo Driver v2.23.0 Uninstall 🛛 – 🗖 🗡	
Uninstalling Please wait while USB Audio 2.0 Stereo Driver v2.23.0 is being uninstalled.	
This may take some time to complete. Please wait	
Execute: 'C:\Program Files\XMOS\USBAudioStDriver_302D\xmosusbaudiost302D_cpl Waiting Uninstalling drivers. This may take some time to complete. Please wait	
< <u>B</u> ack <u>N</u> ext > Cancel	-

Figure 9

At uninstall completion, the window will be as in figure 10 to announce the uninstall success.

🗊 🔰 USB Audio 2.0 Stereo Driver v2.23.0 Uninstall 👘 🗖 🗆	×
Uninstallation Complete Uninstall was completed successfully.	8
Completed	
Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \custom.ini Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \xmosusbaudiost302D_cp. Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \xmosusbaudiost302D_df Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \xmosusbaudiost302D_df Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \xmosusbaudiost302D_cp. Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \xmosusbaudiost302D_cp. Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \xmosusbaudiost302D_cp. Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \setup.ini Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \setup.imi Delete file: C: \Program Files \XMOS \USBAudioStDriver_302D \setup.bmp Remove folder: C: \Program Files \XMOS \USBAudioStDriver_302D \setup.bmp	:
Completed	~
< <u>B</u> ack Car	ncel

Figure 10

Click on "Next" to proceed. The window shown in figure 11 will appear. Click on "Finish" to terminate the uninstall program.



Figure 11

#### Configuring Windows to use Triode 25 as predefined output peripheral

Some players, as Windows Media Player, use the system predefined audio peripheral. Some streaming services, too, (which rely on the browser) do the same. In these cases, it is necessary to choose the Triode 25 as predefined audio peripheral. To do that, the user needs to access the Audio configuration utility in the Control Panel. A window with various tabs will appear (figure 12). Select the "Playback" tab to access the list of available output peripherals. Select "XMOS USB Audio" as predefined device, as already done in figure. From that moment on all sounds made or handled by Windows (including the ones from the browser and from players relying on the system to deliver audio) will be sent to the Triode 25.



Figure 12

The system, in a similar way as happens with OSX, resamples the signals to make their sampling frequency same as a certain value chosen by the used. To choose the output sampling frequency it is necessary to access the properties of the selected peripheral (in this case, the Triode 25) and show the advanced properties, as shown in figure 13. A drop-down menu will allow for choosing the desired sampling frequency between 44.1kHz and 192kHz (the latter being the highest sampling frequency which Windows can handle). Please note that an ASIO-compatible player is needed when the user wants to use the Triode 25 USB input with sampling frequencies higher than 192kHz, as Windows is unable to handle such high sampling frequencies.

۹	Proprietà - Altoparlant	i ×
Generale Liv	velli Caratteristiche avanzate Avanz	ate
- Formato (	predefinito	
	are la frequenza di campionamento e ilizzare nell'esecuzione in modalità co	
16 bit, 4	4100 Hz (Qualità CD)	✓ Prova
Modalità	esclusiva	
Conse del di	enti alle applicazioni di assumere il con spositivo	ntrollo esclusivo
	uisci priorità ad applicazioni in modal	ità esclusiva
Ripristin	a p <u>r</u> edefinite	
	OK Ann	nulla <u>A</u> pplica

Figure 13

## Configuring a player under Windows: FooBar 2000

FooBar (www.foobar2000.org) is able to operat with all modes compatible with the Triode 25 USB input: Direct Sound, Kernel Streaming, WASAPI e ASIO. The installation of the program is beyond this manual scope: we'll explain how to configure it to operate in ASIO mode, which is the optimum solution to use with the Triode 25 USB input.

Foobar offers ASIO support through the installation of a specific DLL. It must be downloaded from the "Components" section of FooBar, website, from the following link: http://www.foobar2000.org/components/view/foo\_out\_asio.

NOTE: unlike many other FooBar DLL's, which are contained in a zip file and therefore must be manually extracted and copied in the "Components" subfolder into FooBar main folder, the ASIO file which is downloaded from FooBar website is an auto-installing program which automatically installs the DLL in the right folder, without any user action. It is sufficient to double-click on the downloaded file.

Once this operation is done, the user can launch FooBar and access the Preferences window by clicking the CTRL+P keys combination, or by the specific "File" menu item. Then, select the "output" item, which will show an "ASIO" subitem: the windows shown in figure 14 will appear.

	Preferences: Output ? ×
Components ▷ · Display ···· Keyboard Shortcuts ▷ · Media Library ··· Networking	Device ASIO : XMOS USB Audio 2.0 ST 302D V Buffer length
Playback     DSP Manager     Output     MASIO     Shell Integration     Fools	1160 ms Warning: setting too low buffer length may cause some visualization effects to stop working,
Advanced	Output format         Output data format;         Output data format will be chosen automatically for the selected device.
	Reset all         Reset page         OK         Cancel         Apply

#### Figure 14

Select "ASIO: XMOS USB ASIO 2.0 ST302D" in the drop-down menu called "Device". FooBar is already capable of using the Triode 25 USB input as output device in ASIO mode, to playback bit-perfect PCM audio up to 384kHz and 32 bits.

It's now necessary to setup FooBar to playback DSD files. To this purpose the user needs to install another DLL, the one for SACD compatibility, that can be downloaded from http://sourceforge.net/projects/sacddecoder/files/latest/download on Sourceforge website.

The zip archive contains two executable files, both to be used: one to install the component for SACD ISO files compatibility and one proxy file to send DSD to compatible audio devices through their ASIO compatible driver. One such device is the Triode 25 USB input.

After installing DLL and proxy, two ASIO objects will appear in the "ASIO" section of "Output" (figure 15): the Unison driver and the proxy ("foo\_dsd\_asio"). Double-click on "foo\_dsd\_asio" to make the configuration window appear. Set parameters as in figure: FooBar is now ready to send DSD streams from DSD files to the Triode 25 USB input.

	Preferences: ASIO	? >
Components ▷·Display ···Keyboard Shortcuts ▷··Media Library ···Networking	ASIO drivers foo_dsd_asio XMOS USB Audio 2.0 ST 302D	
<ul> <li>✓ Playback</li> <li>✓ DSP Manager</li> <li>✓ Output</li> </ul>	foo_dsd_asio v0.7.1.2	×
ASIO Shell Integration > · Tools Advanced	Double       ASIO Driver:       XMOS USB Audio 2.0 ST 302D         Run       DSD Playback Method:       DoP Marker 0x05/0xFA         Custr       DSD to DSD Method:       None       Fs:       DSD64         MUSB/       PCM to DSD Method:       None       Fs:       DSD64         DSD/PCM Transition:       10 ms       Image: Contract of the second secon	
		Remove
	This feature allows you to configure alternate channel mappings for your ASIO-enab soundcards. You may need to close and re-open the foobar 2000 preferences dialog for your new added mappings to appear as output devices in the "output" page.	
	Reset all Reset page OK Cancel	Apply

Figure 15

For best operation of the player with DSD files, it is advisable to setup the SACD tool as shown in figure 16.

	Preferences: SACD	? ×
Components Display Keyboard Shortcuts Dimedia Library Networking Playback DSP Manager Output Shell Integration Tools Shell AccD Advanced	ASIO Driver Mode: DSD V PCM Volume: +0dB V PCM Samplerate: 44100 V DSD2PCM Mode: Multistage (Fixed-Point) V Load Save Preferable Area: None V Editable Tags Store Tags With ISO Edited Master Playback	e Cancel Apply

Figure 16

Moreover, it is necessary to select the DSD proxy as output device to listen to DSD files as indicated in figure 17.

	Preferences: Output ? ×
Components Display Keyboard Shortcuts Media Library Networking Playback DSP Manager Output ASIO Shell Integration Tools SACD Advanced	Preferences: Output ? ×     Device     ASIO : foo_dsd_asio     Buffer length     50 ms   Warning: setting too low buffer length may cause some visualization effects to stop working.   Output format   Output format:   Output data format:   Output data format will be chosen automatically for the selected device.
	Reset all     Reset page     OK     Cancel     Apply

Figure 17

# Configuring a player under Windows: JRiver Media Center

JRiver Media Center (www.jriver.com) is a commercial player, therefore is a closed solution and provided from the scratch with all necessary features to support the various audio transfer modes and audio formats.

As with FooBar, we won't go through the program installation. Access JRiver options window and select "ASIO" as "Output mode" in "Audio" (figure 18).

	Options	
Audio	▼ Audio Output	
🚝 Burning	Output mode: ASIO	
CD, DVD & BD	Output mode settings	
	▼ Settings	
Encoding	DSP & output format	
File Location	Bitstreaming: None (recommended)	
File Types	Prebuffering: 6 seconds (recommended)	
General	Play silence at startup for hardware synchronization: None	
Handheld	Play files from memory instead of disk (not zone-specific)	
	Disable display from turning off (useful for HDMI audio)	
lmages	▼ Track Change	
Library & Folders	Switch tracks: Cross-fade (aggressive) - 4s	
Redia Network	Do not play silence (leading and trailing)	
Podcast	✓ Use gapless for sequential album tracks	
	▼ Stop, Seek & Skip	
C Remote Control	Seek: Smooth (normal)	
Services	Stop: Fadeout (fast)	
Startup	▼ Pause: Fade (fast)	
Television	Jump behavior: Forward 30 seconds, backward 10 seconds	
Theater View	▼ Volume	
	Volume mode: System Volume	
Tree & View	Volume Protection	
👩 Video	NOTE: Changes take effect once playback is stopped	
Type your search here	OK Cancel	Help

## Figure 18

Then, open the configuration window of output mode ("Output mode settings"), that is obviously devoted to ASIO, and select the "XMOS USB ASIO 2.0 ST302D" driver, as shown in figure 19.

Device		Buffering		-
XMOS USB Aud	dio 2.0 ST 302D			-0
Channel offset:	0 Channel offset determines which outputs to use on the selected device. Try different values (0, 2, 4, etc.) until the audio is routed to the desired output.	More Skip 0, Resistant Vise large hardware buffers NOTE: Increasing buffering ma		
Channel swap: Volume	None	also increases latency (the time etc. to take effect).		
	mes do not always match Windows device names. e corresponding Windows device for volume control.	Open Driver Control Panel	)	
Volume device:	(Automatically try to choose at playback time)	Play silence on pause (inste pause)	ad of performing a hardwa	re level
		Device uses only most signi	ficant 24-bits (Lynx, etc.)	
			ОК	Cancel

JRiver is now able to handle DSD by the DoP (DSD over PCM) format. From the drop-down menu that shows up clicking on "Bitstreaming" item, select the "Custom..." value, as shown in figure 20.

Figure 20

A window will automatically appear in which the user can manually set the bitstream configuration parameters (figure 21). Set parameters as shown in figure.

Bitstreaming Formats X
☑ Dolby Digital (AC3)
☑ Dolby Digital Plus (E-AC3)
☑ Dolby TrueHD
☑ DTS
☑ DTS-HD
☑ DSD
DSD over PCM (DoP)
DoP Format: DoP 1.0 (0xFA / 0x05)
OK Cancel



The configuration procedure is almost done: it's still necessary to tell JRiver not to downsample data stream with sampling frequency more than 192kHz, feature that's usually enabled to correctly drive all DAC's the can handle no more than 192kHz, still the majority on the market. Of course this would impede the correct DSD128 decoding, as this is same as a 352.8kHz PCM stream. Access the "DSP and output" menu item and set the parameter about handling of files with sampling frequency more than 192kHz as in figure 22.

		DSP Studio		-	
Output Format Volume Leveling	Output Format Playback stopped or current playback doesn't support processing Opti				
Equalizer     Parametric Equalizer     Effects		nat. For example, you can listen to an audio ire a sound card capable of these modes.	CD in 5.1 surrou	nd at 32-bit / 192 kHz. Advanced settings like multi-	channel
Headphones	Sample rate (more info)		Channels (m	ore info)	
Tempo & Pitch	Click in the output column to select a sample rate for each input sample		Channels:	Source number of channels	~
Room Correction	rate. Right-click to set all at o	nce.	c		
Convolution	Input	Output		<ul> <li>Output surround sound as Dolby Digital (require and external Dolby Digital decoder)</li> </ul>	
Parametric Equalizer 2	Less than 44,100 Hz	No change			
Analyzer	44,100 Hz	No change	Mixing:		~
	48,000 Hz	No change		For stereo sources, only mix to 2.1	
	88,200 Hz	No change		Por stereo sources, only mix to 2.1	
	96,000 Hz	No change		Move center to front L/R	
	176,400 Hz	No change			
	192,000 Hz	No change	Subwoofer (	(more info)	
Processed in order listed (drag to reorder)	Greater than 192,000 Hz	No change		rce has no subwoofer (CD audio, etc.) and 'Channels' ncludes a subwoofer:	
Manage Plug-ins	]				~
Clip protection			🗹 Sub		
Peak Level: n/a	Sou	rce: n/a		Internal: n/a	Help

Figure 22

JRiver configuration is done and the user may now listen to PCM files up to 384kHz and DSD files up to DSD128.

## Using the Triode 25 USB input with an Apple computer

The Triode 25 UPS input complies with USB Audio Class 2.0 specification, therefore it's natively supported by OSX operating system since 10.6.8 version and doesn't need any driver. The Triode 25 USB input is recognized by any Apple computer as soon as it's connected to one of its USB ports and is listed amongst the output audio devices as shown in figure 23.

	Suono	00
		▲   ▶ Mostra tutte
	Effetti sonori Uscita Ingresso	
	r l'uscita audio:	Scegli un dispositivo pe
	Tipo	Nome
uricolari	Porta au	Auricolari
	USB	UNISON USB DAC 1
_	itivo selezionato:	Impostazioni per il dispo Bilanci
stra	Sinistra	
	5	
(?)		
menu	ta: 🛋 🚽 👘 👘 👘 👘 🖬 ta: 🖬	Volume di uso
uricolari stra ?	r l'uscita audio: Tipo Porta au USB itivo selezionato: amento: Sinistra Tipo Porta au USB	Nome Auricolari UNISON USB DAC 1 Impostazioni per il dispo Bilanci

The user must select the "Unison USB DAC 1" peripheral to send her/his computer's audio to the Triode 25 USB input. The OSX operating system allows for choosing the sampling frequency of the audio signal sent to the Triode 25 USB input. This can be done through the MIDI Control Panel, as shown in figure 24. Whichever the sampling frequency of the tracks listed in the playlist being played back, the player does a sample rate conversion to obtain an output stream with the chosen sampling frequency.

Figure 23

00	Dispositivi audio	
Microfono integrato 2 ingresso/ 0 uscita	UNISON USB DAC 1	
Ingresso integrato 2 ingresso/ 0 uscita	Sorgente clock: UNISON RESEARCH Internal Clock	?
Uscita integrata 0 ingresso/ 2 uscita 🙀 🐳	Ingresso Uscita	
UNISON USB DAC 1 0 ingresso/ 2 uscita	Sorgente: Default	
	Formato: 44100,0 Hz 💌 2can-16bit Num. interi 🗘	
	Canale   Volume   Valore   dB   M	Muto
	Master 1 0	
	1: An 1 0 2: An 1 0	
+ - **	Configura altoparlanti	

Figure 24

This may not be desirable with the user wants to listen to the a playlist made of different sampling frequencies files and doesn't want the system to perform a real-time sampling rate conversion. In this case, a player capable of disabling this system feature must be used. Many such players are available, both free and commercial.

## Configuring a player under Apple OSX: Audirvana

Audirvana is a last generation player which allows for listening to DSD files with DSD-compatible devices, such as the Triode 25 USB input. To use Audirvana at best it's sufficient to set the various options as shown in figure 25.

Control of the second sec	7 – Peter Gunn Theme.wav DAC: 16/44.1kHz Steree	Audirva 0 da 0 da		General       Audio System       Audio Fitters       Audio Volume       AudioUnits       SysOptimizer         Preferred       Audio Device       UNISON USB DAC 1       Change         Active       Stereo       Stereo       DSD Capability       DSD over PCM standard 1.0 ±
# Title Album				Harve bib capability bib over relimitandaria 1.0 4
# The blues brothers = 05 = Gimme some	Artist	omposer Duration		
The Blues Brothers - 05 - Soul Man.wav	Artist	03:05		Low level playback options
The Blues Brothers – 05 – Guillie Sone The Blues Brothers – 05 – Soul Man.wav The Blues Brothers – 15 – Flip Flop And	Artist	03:05 03:25		Low level playback options
The Blues Brothers – 0.3 – Gamine Some The Blues Brothers – 0.5 – Soul Man.wav The Blues Brothers – 1.5 – Flip Flop And The Blues Brothers – 17 – Peter Gam	Artist	03:05 03:25 03:48		✓ Exclusive access mode
The blues brothers - 0.5 - Soul Man.wav The Blues Brothers - 15 - Filip Flop And The Blues Brothers - 15 - Filip Flop And The Blues Brothers - 17 - Peter Cun. The Blues Brothers - 06 - Soul Finger.wav	Artist	03:05 03:25 03:48 01:45		<ul> <li>✓ Exclusive access mode</li> <li>✓ Direct Mode</li> <li>✓ Integer mode (if avail. on devi</li> </ul>
The Blues Brothers - 0 - Sould Man way The Blues Brothers - 0 - Sould Man way The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 17 - Peter Gan. The Blues Brothers - 06 - Soul Finger way The Blues Brothers - 07 - Messin' With	Artist C	03:05 03:05 03:25 03:48 01:45 02:55		✓ Exclusive access mode
The Blues Brothers - 0.5 - Sould Man.wav The Blues Brothers - 1.5 - Flip Flop And The Blues Brothers - 1.7 - Pieter Gun The Blues Brothers - 0.7 - Mesin' With The Blues Brothers - 0.7 - Mesin' With The Blues Brothers - 0.1 - Opening; I Ca	Artist C	03:05 03:05 03:48 01:45 02:55 01:53		<ul> <li>✓ Exclusive access mode</li> <li>✓ Direct Mode</li> <li>✓ Integer mode (if avail. on devi</li> <li>Integer Mode : Mode 1 ÷</li> </ul>
The Blues Brothers - 0.5 - Soul Man.wav The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 17 - Peter Gun. The Blues Brothers - 06 - Soul Finger.wav The Blues Brothers - 07 - Messin' With The Blues Brothers - 01 - Opening: [Ca The Blues Brothers - 01 - Shake A Tail F	Anise C	03:05 03:05 03:25 03:48 01:45 02:55 01:53 02:50		<ul> <li>✓ Exclusive access mode</li> <li>✓ Direct Mode</li> <li>✓ Integer mode (if avail. on devi Integer Mode : Mode 1 ÷</li> <li>Maximum memory allocated for tracks pre-load</li> </ul>
The Blues Brothers - 0 S- Sould Man way The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 0 S- Soul Finger way The Blues Brothers - 0 T - Assin' With The Blues Brothers - 0 I - Opening; I Ca The Blues Brothers - 0 I - Shake A Tail F The Blues Brothers - 0 I - Shake A Tail F	Anise C	03:05 03:05 03:48 01:45 02:55 01:53 02:50 03:23		Exclusive access mode     Direct Mode     Integer mode (if avail. on devi     Integer Mode : Mode 1 +
The Blues Brothers - 0.5 - Soul Man.wav The Blues Brothers - 1.5 - Flip Flop And The Blues Brothers - 1.5 - Flip Flop And The Blues Brothers - 0.6 - Soul Finger.wav The Blues Brothers - 0.7 - Mesin' With The Blues Brothers - 0.1 - Opening: I Ca The Blues Brothers - 0.1 - Shake A Tail F The Blues Brothers - 0.2 - Shevy Ne The Blues Brothers - 0.2 - The Old Land	Anise C	03:05 03:25 03:45 01:45 02:55 01:53 02:59 03:23 02:59	ß	<ul> <li>✓ Exclusive access mode</li> <li>✓ Integer mode (if avail. on devi Integer Mode : Mode 1 ÷</li> <li>Maximum memory allocated for tracks pre-load</li> <li>7.168 MB</li> </ul>
The Blues Brothers - 0 - Sould Man way The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 0 - Soul Finger way The Blues Brothers - 0 - Soul Finger way The Blues Brothers - 0 - O - Messin' With The Blues Brothers - 0 - Shake A Tail F The Blues Brothers - 0 - Shake A Tail F The Blues Brothers - 0 - Shake A Tail F The Blues Brothers - 0 - Shake A Tail F The Blues Brothers - 0 - Shake A Tail F The Blues Brothers - 0 - Shake A Tail F The Blues Brothers - 0 - Theme from		03.05 03.25 03.44 01.45 02.55 01.53 02.50 03.23 02.59 02.59	Β	Exclusive access mode     Direct Mode     Integer Mode : Mode 1 +  Maximum memory allocated for tracks pre-load     7.168 MB
The Blues and there is the source The Blues Brothers - 0.5 - Soul Man way The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 0.6 - Soul Finger way The Blues Brothers - 0.7 - Messin' With The Blues Brothers - 0.1 - Opening; I Ca The Blues Brothers - 0.1 - Shake A Tail F The Blues Brothers - 0.2 - Everybody We The Blues Brothers - 0.2 - The Old Land The Blues Brothers - 0.3 - Theme From The Blues Brothers - 0.4 - Minnie The M		03:05 03:25 03:48 01:45 02:55 02:55 02:50 03:23 02:59 03:23 02:39 02:39 03:24	5	<ul> <li>✓ Exclusive access mode</li> <li>✓ Direct Mode</li> <li>✓ Integer mode (if avail. on devi Integer Mode : Mode 1 ÷</li> <li>Maximum memory allocated for tracks pre-load</li> <li>7.168 MB</li> </ul>
The Blues Brothers - 0.5 - Soul Man.wav The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 0.6 - Soul Finger.wav The Blues Brothers - 0.7 - Mesin' With The Blues Brothers - 0.7 - Mesin' With The Blues Brothers - 0.7 - Shake A Tail F The Blues Brothers - 0.7 - Everybody Ne The Blues Brothers - 0.2 - The Old Land The Blues Brothers - 0.2 - The Old Land The Blues Brothers - 0.4 - Think.wav		03:05 03:25 03:45 01:45 02:55 01:53 02:50 03:23 02:59 02:59 02:59 03:24 03:24 03:15	Ð	<ul> <li>✓ Exclusive access mode</li> <li>✓ Direct Mode</li> <li>✓ Integer mode (if avail. on devi Integer Mode : Mode 1 ÷</li> <li>Maximum memory allocated for tracks pre-load</li> <li>7.168 MB</li> </ul>
The Blues and there is the source The Blues Brothers - 0.5 - Soul Man way The Blues Brothers - 15 - Flip Flop And The Blues Brothers - 0.6 - Soul Finger way The Blues Brothers - 0.7 - Messin' With The Blues Brothers - 0.1 - Opening; I Ca The Blues Brothers - 0.1 - Shake A Tail F The Blues Brothers - 0.2 - Everybody We The Blues Brothers - 0.2 - The Old Land The Blues Brothers - 0.3 - Theme From The Blues Brothers - 0.4 - Minnie The M		03:05 03:25 03:48 01:45 02:55 02:55 02:50 03:23 02:59 03:23 02:39 02:39 03:24	5	Exclusive access mode     Direct Mode     Integer mode (if avail. on devi     Integer Mode : Mode 1 + +     Maximum memory allocated for tracks pre-load     7.168 MB     177mn @44.1kHz 20mn @384kHz



#### **Connecting to a Linux computer**

No driver is needed with a computer provided with Linux operating system and ALSA module, as ALSA natively supports USB Audio Class 2.0.

To use the Triode 25 USB input with a computer provided with Linux operating system, it is sufficient to access the audio configuration panel and select the "UNISON USB DAC 1" peripheral in the "Output" section, as shown in figure 26.

Audio			
Volume di uscita: 🏾	🗋 Escludi audio 📄 Consen		
Riproduci suono tramite	Impostazioni per	«Uscita analogica»	
Output digitale (S/PDIF)     Audio interno     Uscita analogica     Audio interno	Bilanciamento: Dissolvenza:	Sinistra	Destra
Uscita analogica UNISON USB DAC 1	Subwoofer:	Retro	Fronte I Massimo
		Suono di prova	

Figure 26

### Configuring a player under Linux: Audacious

Of course, even with Linux, it could be necessary to select the Triode 25 USB input as predefined audio output peripheral. As an example, the configuration for the Audacious, widely used under Linux, is shown. As displayed in figure 27, the user needs to access Audacious preferences and select "ALSA output". Then, the user must click on "Preferences", right below the drop-down menu for output selection: the window shown in the lower portion of figure 27 will appear. Set its various parameters as shown in figure.

SOB Prefere	enze di Audacious	
Audio	Impostazioni di uscita	
	Plugin di uscita:	
Rete	Preferenze	
Playlist	Profondità di bit: 16 🔹	
	Dimensione del buffer: 500 – + ms	
Info Bra	no Clipping leggero	
Plugin	Utilizza controllo volume software (non raccomandato)	
~~~~	Replay Gain	
	🖾 Abilita Replay Gain	
	🗌 Modalità album	
	🖾 Evita il clipping (raccomandato)	
	Regola i livelli	
	Amplifica tutti i file: 0,0 - + dB	
	Amplifica i file senza tag: 0,0 – + dB	
Audacious 3.4.3 (Ub	untu package) Chiudi	
😣 🖨 🛛 Preferenz	e del plugin di uscita ALSA	
Dispositivo PCM:	hw:CARD=U1,DEV=0 (UNISON USB DAC 1, USB Audio Direct hardware device without any conversions)	~
Dispositivo mixer:	default (Dispositivo mixer predefinito)	•
Elemento mixer:	Master	
S Aggira interru	zione per esaurimento risorse	
		Chiudi

Figure 27