

Tube Digital Analogue Converter



Version 2.5 – April 19, 2021



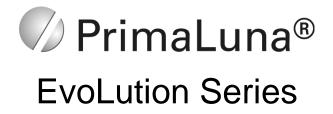


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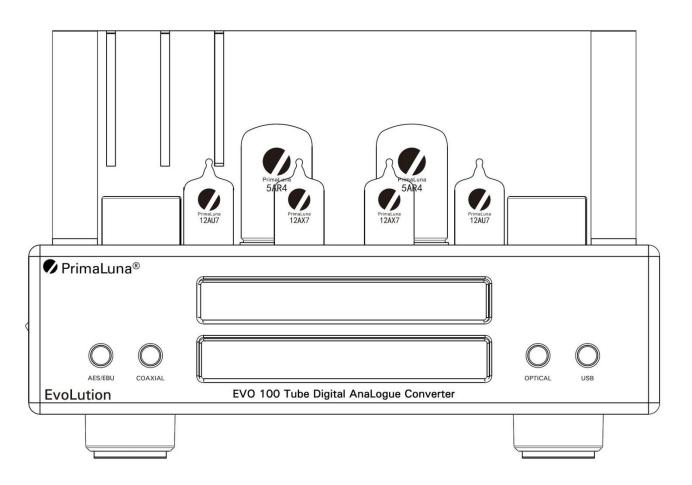
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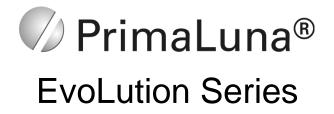


Front Panel Controls

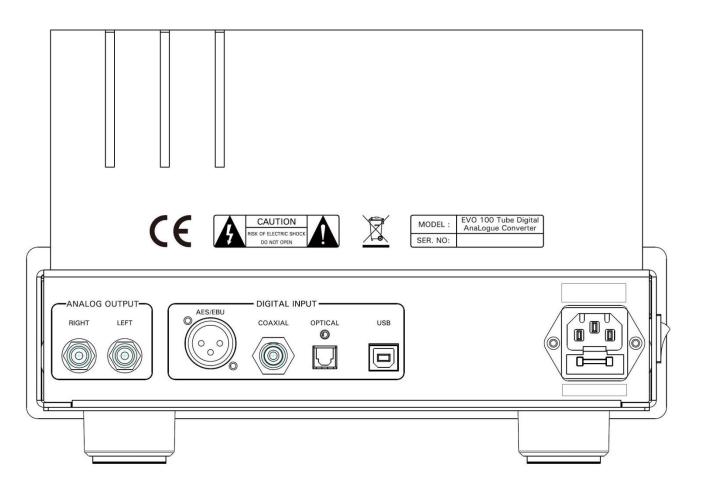


On the front panel you will find the following:

- 1. AES/EBU input selector
- 2. COAXIAL input selector
- 3. OPTICAL input selector
- 4. USB input selector
- 5. Top Display (shows the selected input)
- 6. Bottom Display including Remote Sensor (shows the sample rate)

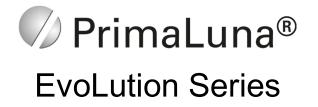


Rear Panel Inputs & Outputs

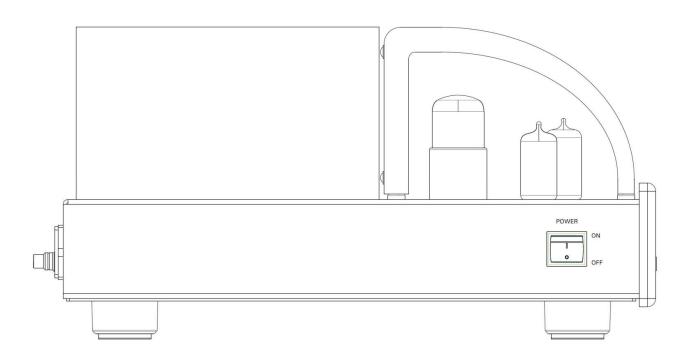


On the rear panel you will find the following:

- 1. RCA Stereo analog output connectors
- 2. AES/EBU digital input connector
- 3. COAXIAL digital input connector
- 4. OPTICAL digital input connector
- 5. USB digital input connector
- 6. AC connector including fuse holder



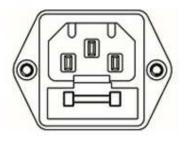
Left Side Panel



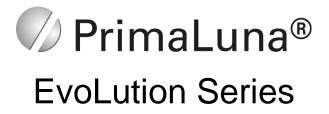
On the left side panel, you find the Mains On/Off switch. The related AC fuse you find on the rear.

Fuse Protection

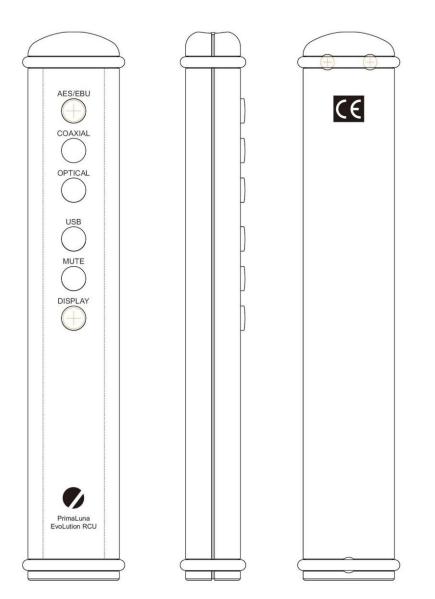
Warning! Fuses are safety valves. They should always be replaced with the exact same value and type. Never attempt to check or replace a fuse while the DAC is plugged in. Turn it off and unplug the AC cord before continuing. Wait 10 minutes to let tubes cool down and the circuit to fully discharge.



Mains Fuse: The mains fuse is located on the rear of the amplifier, just below the power cord socket (see picture on the left). The fuse rating is 1 x **Littelfuse 213 Series** 1A Slow Blow 5 x 20mm fuse for 100-125VAC and **Littelfuse 213 Series** 0.5A Slow Blow 5 x 20mm fuse for 200-250VAC. Always replace with the same type and value fuse! **Littelfuse 213 is a special time-delayed slow blow fuse! Not a standard slow blowe fuse!** The fuse holder can be opened using a small slotted flat blade screwdriver.



Remote Control



The remote control handles your source selection, as well as mute on/off and the display setting. Attention! Due to increasingly stringent safety measures, it can happen that the remote control arrives without batteries installed.

The Remote Control has two highquality silicon rubber rings on each end to protect it from becoming damaged or damaging your furniture. These rings can be easily removed in case batteries have to be replaced.

In the event your remote control does not function, please first check the battery and if necessary, replace it with a new CR2032 model battery. To access the battery compartment, remove the rubber rings and unscrew the backplate.

If the remote still does not function, contact your dealer for further assistance.



Connections and start-up sequence

1. Digital input connection:

Connect your digital source to one of the digital inputs:

- AES/EBU (use a good quality 110 Ohm cable with XLR connectors)
- Coax (use a good quality 75 Ohm cable with RCA connectors)
- Optical (use a good quality optical Toslink cable)
- USB (use the supplied USB cable or another high-quality USB cable of your choice)

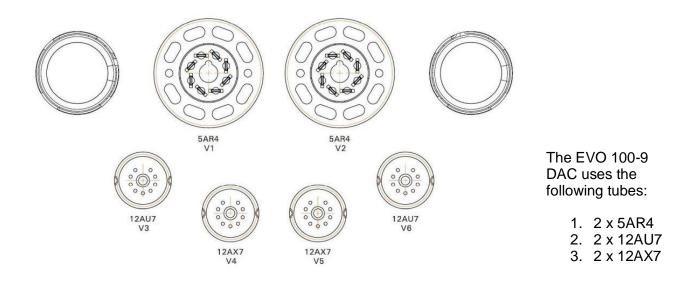
2. <u>Analog output connection:</u>

Connect good quality RCA cables between the stereo analog RCA output connectors from your DAC to the input from your integrated amplifier or preamplifier.

3. Start-up sequence:

The vacuum tubes take 60 seconds to warm up to desirable working conditions. The DAC will be muted during this period of time and there will be no audio signal-output coming from the DAC.

Tube Info





Installing a Windows Driver

If you plan to use the EVO 100-9 DAC with a Windows-based computer, you need to install a USB Audio Driver in your computer before you can use the DAC as an outboard USB sound card for your audio system.

The steps for installing the Windows driver are as follows:

- 1. Connect the DAC to the computer with a USB cable.
- Turn on the DAC by pressing the Power ON/OFF button on the left side. Select the USB AUDIO input by pressing the USB button on the front panel, or press the USB button on the remote control.
- 3. Get your USB audio driver from your dealer, distributor or direct from Durob Audio BV: <u>service@durob.nl</u>.
- 4. Activate the driver installation process, skip all warnings until the installation process is completed.
- 5. If the driver has installed successfully, you should be able to see the name "XMOS USB AUDIO" at the Device Manager interface of your computer,or sometimes the device name will be displayed as "PrimaLuna EVO 100 Tube Digital Analogue Converter".
- 6. Select "XMOS USB AUDIO" or "PrimaLuna EVO 100 Tube Digital Analogue Converter" as an audio output device in your computer playback software.

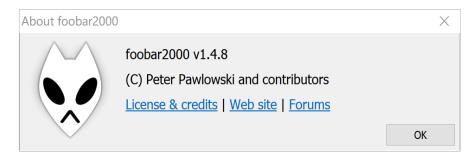


Using USB Decoding on a Windows computer

- 1. Install the appropriate driver on your computer (see page 8).
- 2. Connect the USB port of the DAC to the USB port of a computer.
- 3. Select the USB input from your DAC.
- 4. Once the DAC can lock into the USB connection, the screen will display the bit rate and sampling frequency for your reference.

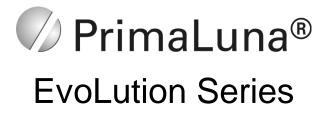
Please setup your playback software, such as Foobar2000, in your computer correctly, otherwise, the system will not be able to output the original unaltered bitstream to the DAC for decoding.

You might need to install a plugin such as ASIO or WASAPI to achieve that (see page 10).



Using USB Decoding on an Apple (MAC) computer or audio network streamer

- 1. Connect the USB port of the DAC to the USB port from your Apple (MAC) computer or audio network streamer.
- 2. Select the USB input from your DAC.
- Ps. There is no driver needed.



Installing the ASIO Plugin As An Example

- 1. Download the latest version of ASIOProxyinstall from <u>www.sourceforge.net</u>. Run the file and also check here for additional set-up information if needed.
- Click "File" > "Preferences" > "Components" > "Install" in Foobar2000 and install the plugin "foo_input_sacd.fb2k-component" and "foo_out_asio.fb2k-component" separately like the following picture shows.

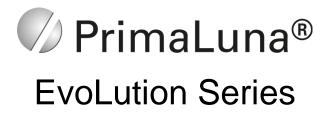
Components	Installed components: Right-click a component for additional optic			additional option
> Display	Name	Version	Module	
Keyboard Shortcuts	Album List	4.6	foo albumlist	
> Media Library	ASIO support	2.1.2	foo_out_asio	
Networking	CD Audio Decoder	3.0	foo_cdda	
Playback	Converter	1.5.3	foo_converter	
Decoding	Default User Interface	foo_ui_std		
DSDIFF Decoder	DSDIFF Decoder	1.6 foo input dsdiff		
DSP Manager	DTS decoder	0.5.4	foo_input_dts	
 ✓ Output ▲ASIO 	Equalizer	1.2.1	foo_dsp_eq	
-Shell Integration	FFmpeg Decoders 3.4.5 foo input s			
Tools	File Operations	2.3	foo_fileops	
ReplayGain Scanner	foobar2000 core	1.4.8	Core	
SACD	Monkey's Audio Decoder	2.1.9	foo_input_monkey	
Tagging	Online Tagger	0.7	foo_freedb2	
> UPnP	ReplayGain Scanner	2.3	foo_rgscan	
Advanced	Standard DSP Array	1.3.2	foo_dsp_std	
	Standard Input Array	1.4.8	foo_input_std	
	Super Audio CD Decoder	0.9.6	foo_input_sacd	
	UPnP/DLNA Renderer, Server, Control Point	0.99.49	foo_upnp	
	ZIP/GZIP/RAR Reader	1.8	foo_unpack	
	Cet more componente			
	Get more components Why are some components grayed out?		Install Copy report	Get update
	why are some components grayed out!		Сорутерог	Get update
	Reset all Reset page		OK Cancel	Apply



Setting The Output Device

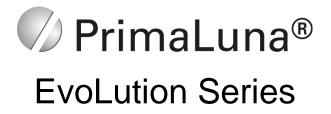
Click "output" and select "ASIO: foo_dsd_asio" under "Device" like in the following picture:

eferences: Output		?	×
Components	Device		
Display	ASIO : XMOS USB Audio 2.0 ST 30CE		~
Keyboard Shortcuts			~
Media Library	Null Output		
Networking	ASIO : DSD Transcoder (DoP/Native)		
Playback	ASIO : foo_dsd_asio ASIO : Realtek ASIO		
 Decoding 	ASIO : TUSBAudio ASIO Driver		
DSDIFF Decoder	ASIO : XMOS USB Audio 2.0 ST 30A4		
DSP Manager	ASIO : XMOS USB Audio 2.0 ST 30CE		
~ Output	DS : Speakers (XMOS USB Audio)		
ASIO	DS : Speakers / Headphones (Realtek Audio)		
Shell Integration	DSD : ASIO : DSDTranscoder		
Tools	DSD : ASIO : foo_dsd_asio		
ReplayGain Scanner	DSD : ASIO : Realtek ASIO		
SACD	DSD : ASIO : TUSBAudio ASIO Driver		
Tagging	DSD : ASIO : XMOS USB Audio 2.0 ST 30A4 DSD : ASIO : XMOS USB Audio 2.0 ST 30CE		
> UPnP	DSD : ASIO : AMOS OSB AUdio 2.0 ST SUCE		
Advanced			
		C	A 1
	Reset all Reset page OK	Cancel	Apply



Setting ASIO Output Driver

r Components ⊳ · Display	ASIO drivers
Keyboard Shortcuts Networking Networking Playback DSP Manager Output ASIO Shell Integration Tools Advanced	foo_dsd_asio foo_dsd_asio v0.6.5
	ASIO Driver: XMOS USB Audio 2.0 ST 30A4 DSD Playback Method: DoP Marker 0x05/0xFA PCM to DSD Method: None Fs: DSD512 DSD/PCM Transition: 0 ms Add New Edit
	Remove This feature allows you to configure alternate channel mappings for your ASIO-enabled soundcards. You may need to dose and re-open the foobar2000 preferences dialog for your newly added mappings to appear as output devices in the "output" page. Reset all Reset page OK Cancel Apply



Setting SACD Output Mode

Click "SACD", and select "DSD" on "ASIO Driver Mode" like the following picture shows:

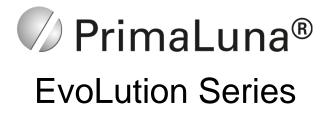
Preferences: SACD		2 ×
 Components Display Keyboard Shortcuts Media Library Networking Playback DSP Manager Output ASIO Shell Integration Tools SACD Tagging Advanced 	ASIO Driver Mode: DSD PCM Volume: +0dB PCM Samplerate: 44100 DSD2PCM Mode: Multistage (Fixed-Point) Load Save Preferable Area: None Editable Tags Store Tags With ISO Edited Master Playback	
	Reset all Reset page OK Cancel	Apply

Click "OK" and the setting should be completed now.



Technical Specifications

Digital Input				
Inputs	Specifications			
USB AUDIO	Audia Farmat	PCM	16Bit-32Bit, 44.1kHz-192kHz	
	Audio Format	DSD	DSD64-DSD128 (DoP Mode)	
	Operating System	Windows	Support (Driver needed: XMOS-Stereo-USB-Audio-Class2-Driver-30CE_v4.13.0.exe)	
		MAC OSx	Support (Driver unnecessary)	
		Android	No Support	
		iOS	No Support (Support with Camera Kit)	
	Operation Mode	Asynchronous	s USB Audio 2.0 Class	
	Audio Format	PCM	16Bit-24Bit, 44.1kHz-192kHz	
AES/EBU	Audio Format	DSD	DSD64 (DoP Mode)	
(XLR)	Input Impeda	ince	110 Ω	
	Input Termi	nal	XLR Female	
	Audio Format	PCM	16Bit-24Bit, 44.1kHz-192kHz	
COAXIAL	Audio Format	DSD	DSD64 (DoP Mode)	
(RCA)	Input Impedance		75 Ω	
	Input Termi	nal	RCA	
OPTICAL	Audio Format	PCM	16Bit-24Bit, 44.1kHz-176.4kHz	
(TOSLINK	Addio Format	DSD	DSD64 (DoP Mode)	
)	Input Terminal		TOSLINK	
			Analogue Output	
Outputs	Outputs Specifications			
	Output Level	$2.2V \pm 2dB (47k\Omega Load)$		
	Frequency Response	20-40kHz (±0.5dB,Fs=192kHz)		
RCA	THD+N	≤1.8% (Fs=192kHz)		
	S/N Ratio	≥90dB (20-20kHz)		
	Channel Seperation	≥80dB		
	Output Impedance	2.7 κΩ		
Others				
Size	Size of the DAC	14.9" x 11" x 7.5" / 378 mm x 280 mm x 190 mm (L x W x H)		
UIZG	Size of the Package	18.4" x 15.2" x 12.5" / 468 mm x 385 mm x 316 mm (L x W x H)		
Weight	Net Weight	28.7 lbs /13 kg		
Gross Weight		37.5 lbs /17 kg		
Max Pov	ver Consumption	55Watts		



Warranty Information

Two-year limited warranty

Six-month warranty on stock vacuum tubes

Terms & Conditions

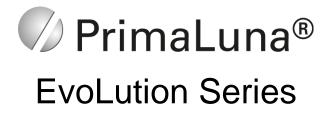
1. Limited to the original purchaser. This warranty is for the sole benefit of the original purchaser of the covered product, and may not be transferred to a subsequent owner.

2. Conditions & Limitations. This warranty is subject to conditions and limitations, as follows. This warranty is void and inapplicable if the product has not been used in accordance with the instructions found elsewhere in this manual, or if it has been misused, abused, damaged by accident or neglect, or in transport once in possession of the purchaser. The warranty is also void if the product has been tampered with or has been repaired or modified by anyone other than Durob Audio BV or its specifically authorized representatives.

3. Remedy. If this product contains material, manufacturing, or workmanship defects, it must be packed in original packaging and returned to Durob Audio BV or its authorized representative via insured freight, at the owner's expense. Returned products must be accompanied by a written description of the defect, and a return authorization number (available from Durob Audio BV or the authorized representative via e-mail). Upon receipt of the defective product, Durob Audio BV or the authorized representative agrees to repair the product without charge for parts (except vacuum tubes if the unit is more than 6 months old), or labor. The product will then returned via prepaid, insured freight, with the carrier at the sole determination of Durob Audio BV or the authorized representative sole remedy.

4. Design change. Durob Audio BV and its partners reserve the right to modify their products or change specifications at any time without obligation or liability to previous purchasers.

5. Miscellaneous. Any implied warranties relating to the above product shall be limited to the duration of this warranty. This warranty does not extend to any identical or consequential costs or damages to purchaser or third-parties. Our liability will be no more than the amount you paid for the product that is the subject of a claim. This is the maximum amount for which we are responsible. This warranty gives you specific legal rights. You may also have other rights which vary from country to country and state to state.



PrimaLuna Illumination

Herman van den Dungen: **PrimaLuna** ► *in the Italian language is* "**First Moon**". *My grandfather was the first* "**Herman**". *My grandmother, an aristocratic lady in a small Dutch village, had a special name for her husband:* "**Maantje**", *which means* **Little Moon** (*which became also the name of our small dog*), **van den Dungen.** *The people in the village adopted that name, and having a strong accent, they soon called him* "**Maontje**" *van den Dungen. My father's first name was Cor, but in the village, it was of course* "**Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**". *I was of course* "**Herman from Cor from Maontje van den Dungen**" **4**

Loris Arrigucci: **PrimaLuna** ► believe it or not ... I discovered a small town located 50Km north of Milano called **Primaluna**!!! Please get yourself a map from Italy. You'll find **Primaluna** town near the upper-right corner. It is located 50Km north of Milano near the Lake of Como. This should eliminate every doubt regarding "Italian" origin of **Primaluna** name. I've read the "history" section of the **Primaluna** village web site and found the following (literally translated):

One probable interpretation of the name of the village comes from Latin "**Primum Lumen**", which means "**First Light**" of Christianism since the very first evidence of Christianism in this region dates 495 Annus Domini. "**First Light**" translates into "**Prima Luce**" in Italian and this seems very interesting to me: **PrimaLuce** (**FirstLight**) is the first light that we, hi-fi lovers with small budgets, can see in this world of darkness populated by way too expensive esoteric gears

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Please contact us for registering your **PrimaLuna EVO** tube product. We will keep you updated on any upgrades or any other information related to your product. If you wish to comment on your **PrimaLuna EVO** tube product, please do. If you want to send us a review of your experience with the amplifier, you are more than welcome to. If you want to discuss with other **PrimaLuna** owners, join the completely independent **FaceBook PrimaLuna Amplifiers Owners Group**. If you have any technical questions, please don't hesitate to contact us. We thank you upfront for your time and attention.

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