

BY PRO-JECT AUDIO SYSTEMS

# INSTRUCTIONS FOR USE Pro-Ject Pre Box S2 Digital

Dear music lover,

thank you for purchasing a Pro-Ject Audio Systems preamplifier. In order to achieve maximum performance and reliability you should study these instructions for use carefully.



Warning of a hazard for the user, the unit or possible misuse



Important notice

#### Safety instructions

AC outlet voltages vary from country to country. Before connecting to the mains, make sure that the voltage in your area meets the voltage requirements printed on the power supply.

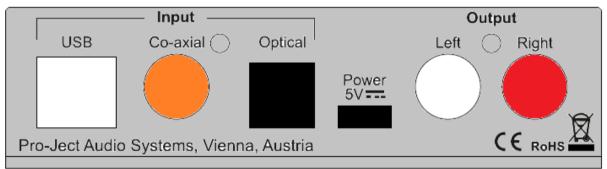
The power supply is used to disconnect the unit from the mains. Make sure that the power supply is easily



accessible at all times. Never handle the device or the power supply while your hands are wet or damp. Avoid letting liquids enter the device or the power supply. Never place any item containing liquid, such as a flower vase on or near the device. Never spill any liquid on the device or the power supply. Never place any naked flame sources, such as lighted candles on or near the device. The product shall not

be used in damp or wet locations, next to a bathtub, sink, swimming pool or any other similar conditions.

## Connectors



Make all connections whilst the preamplifier is **disconnected from the power supply** 

Take care to connect the left and right channels correctly. The right channel is usually marked red, the left channel black or white.

## Mains power connection

The unit offers 2 possibilities:

1. USB input is not used: Connect the low voltage plug from the power supply to the micro-USB socket Power 5V DC before connecting the power supply to the mains.

2. USB input is in use: Unit can be powered directly from computer via USB input. In this case is highly recommended to disconnect Power 5V DC cable from the unit - power disturbances from two power supplies could affect sound performance.

# Outputs

The unit is equipped by a pair of analogue output RCA sockets on the back panel and a headphone output connector (Jack 6,3mm) on the front panel. Connect the Output RCA socket to a line input on your amplifier.

## Headphone connection

Connect the headphones to the socket on the front panel (Jack 6,3mm). Rear output is muted when headphones are in use. Green headphone icon in the left top corner of the display indicates active headphone output.

#### Inputs

The unit offers 3 digital inputs: USB, Optical and Co-axial <u>USB</u>: is dedicated for connection to a Computer. Connect the USB input of the unit to a free USB-socket on your computer and turn it on/make sure it is powered on.

#### Driver installation (Windows® operating systems only)

\* For Windows<sup>®</sup> operating systems an USB driver (supplied on CD) has to be installed. Mac OS<sup>®</sup> operating systems do not need an additional driver.

For example - Windows 7<sup>®</sup> and newer operating system:

 $\rightarrow$  Control Panel  $\rightarrow$  Hardware and Sound  $\rightarrow$  Sound  $\rightarrow$  Playback:

select Speaker/Project Pre Box S2 USB 2.0 Audio Out

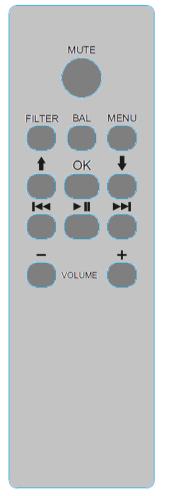
- $\rightarrow$  Properties  $\rightarrow$  Supported formats: make sure nothing is assigned
- $\rightarrow$  Level  $\rightarrow$  Sound: setting must be 100
- → Enhancements: disable all enhancements → Advanced → Default Format: set to studio quality 24/192



Please note: Connection should be made to an USB-socket of your computer directly. Connecting to USB-hubs or switches can cause problems.

<u>Co-axial</u> and <u>Optical</u>: Use apropriate cables to connect to sources of digital signal like CD players, streamers, TV set etc.

## Remote control - Aluminium (optional accessory)



MUTE activates and deactivates mute. Mute is indicated on the display.

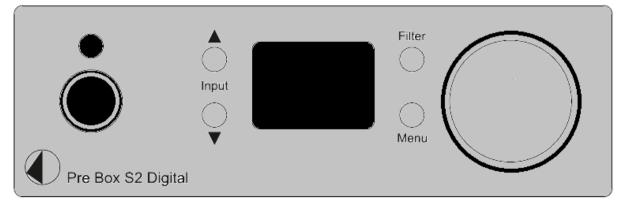
Filter selects filters in turn

Menu access/exit menu, ↑ and ↓ change pages in menu, ▲ < and ► ► change value. OK exit menu

Volume + and - set volume level

 $\blacksquare \blacktriangleleft \blacklozenge$  ,  $\blacktriangleright \triangleright \blacksquare$  ,  $\triangleright \blacksquare \blacksquare$  allows to control player in computer: track +, track-, play/pause

#### Front panel



#### Volume

Adjust the volume to the desired level from -80dB to 0dB, using the knob on theright side of the front panel. Volume settings are stored separately for headphone output and RCA output.

#### Input selector

After the unit is powered on, operating the buttons marked with Input  $\blacktriangle$ ,  $\triangledown$  select the inputs. The selected input is indicated by its name (USB, OPT, COAX) when changed and then by a small icon in the bottom left corner of the display. Small icon of selected input indicates whether the input is connected to the source or not: white - connected, red - not connected

Sampling frequency (or DSD rate) of the input signal is displayed in the right bottom corner of the display.

#### Menu

front panels menu control: Input buttons: list between pages Volume changes the value

pages in menu offers following settings:

Distortion Compensate - enable / disable ESS on-chip distortion compensation feature Audio Quality - test/Best : test: gives the best value when tested on measuring device (lowest distortion etc) Best : Pro-Ject designers preffered sound setting. SW version - display sw version

#### Filter

Optimal transient Fast Rollof Slow Rollof Minimum Phase Fast Minimum Phase Slow Linear Apodizing Hybrid Filter Brickwall Filter

Filter setting is always stored

## DSD playback

Up to now DSD playback on a computer using a Windows<sup>®</sup> operating system is only reliably possible with the PC software player Foobar2000.

Nevertheless, this player has to be prepared, out of the box it is not capable to play DSD. Please read the following instructions how to prepare the player.

You will need to download the following software and drivers from the internet:

The software player Foobar2000 http://www.foobar2000.org/download

The Foobar2000 for ASIO playback http://www.foobar2000.org/components/view/foo out asio

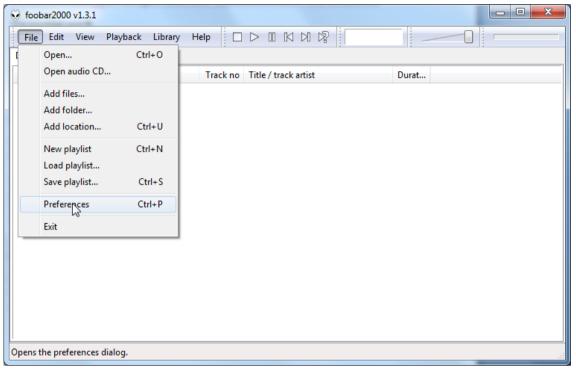
The Foobar2000 for SACD playback <u>http://sourceforge.net/projects/sacddecoder/files/foo\_input\_sacd/</u>. Unzip the enclosed files and store into a folder of your choice.

The actual Windows<sup>®</sup> USB driver comes with the unit on CD. Store all files from the CD on your computer into a folder of your choice.

Please install the USB driver first. To do that, in the folder, where you stored the files to, start the installation by double clicking on **Setup.exe**. Follow the instructions of the installation program.

Please install Foobar2000 now by double clicking on the downloaded file. Please start Foobar2000 after that.

Now you have to integrate the downloaded components into Foobar2000. Please do the following: In the upper menu bar, click on **File** and then on **Preferences**.



In the window that now opens, please click on Components.

Components	Installed components: Right-click a component for additional option			
Displa	Name	Version	Module	
- Context Menu	Album List	4.5	foo_albumlist	
<ul> <li>Default User Interface</li> <li>Keyboard Shortcuts</li> </ul>	CD Audio Decoder	3.0	foo_cdda	
· Media Library	Converter	1.5	foo_converter	
Networking	Default User Interface	0.9.5	foo_ui_std	
Playback	Equalizer	1.0	foo_dsp_eq	
Shell Integration	File Operations	2.2	foo_fileops	
Tools	foobar 2000 core	1.3.1	Core	
Advanced	Online Tagger	0.7	foo_freedb2	
	ReplayGain Scanner	2.2	foo_rgscan	
	Standard DSP Array	1.3	foo_dsp_std	
	Standard Input Array	1.0	foo_input_std	
	ZIP/GZIP/RAR Reader	1.6	foo unpack	
	Get more components		Install Copy report Get	updat
	Why are some components grayed ou	112	Copy report Get	ipoat

Now click on **Install...** (lower right) und search for **foo\_out\_asio.fb2k-component** in the opened explorer window. Click on it and after that on **Apply** to activate the Component. Foobar2000 asks now, if you agree to start, restart the program to activate the changes. Confirm with **Yes**. Foobar2000 restarts.

Now exit Foobar2000 and double click on the program **ASIOProxyInstall-0.6.5.exe** in the folder, where you unzipped the Component **foo input sacd** to. Follow the instructions of the installation program.

Now please start Foobar2000 again and open the **Preferences** Box by clicking on **File/Preferences**. Click on **Install** and go the folder where you unzipped **foo\_input\_sacd** to. Click on **foo\_input\_sacd.fb2k-component** and confirm with **Apply**. Foobar2000 asks once again, if you agree to start restart the program to activate the changes. Confirm with **Yes**. Foobar2000 restarts.

Now you have installed all necessary components. Before you can start to playback DSD files however, you have to carry out some settings. For that please open the **Preferences** Box by clicking on **File/Preferences** again.

Click on the small triangle to the left of **Playback** now and after that on **Output**.

···· Components	Device			
⊳ · Display				
···· Keyboard Shortcuts	DS : Primärer Soundtreiber			
> Media Library				
Networking	Buffer length			
DSP Manager				
		1000 ms		
> Tools	Warning: setting too low buffe	r length may cause som	e visualization effects	; to stop working,
Advanced	Output format			
	Output format			
	Output data format:			Dither
	Output data format will be chosen a	automatically for the se	ected device.	
	Output data format will be chosen a Fading Name	automatically for the sel Fade in	ected device. Fade out	
	Fading Name	Fade in	Fade out	
	Fading			
	Fading Name Pause and stop	Fade in 100 ms	Fade out 100 ms	
	Fading Name Pause and stop Seek	Fade in 100 ms 100 ms	Fade out 100 ms 100 ms	
	Fading Name Pause and stop Seek Manual track change	Fade in 100 ms 100 ms 100 ms	Fade out 100 ms 100 ms 100 ms	
	Fading Name Pause and stop Seek Manual track change Automatic track change	Fade in 100 ms 100 ms 100 ms	Fade out 100 ms 100 ms 100 ms	

In the dropdown menu below Device, choose the driver Asio: foo\_dsd\_asio.

Display     Keyboard Shortcuts     Media Library     Networking     Playback     DSP Manager     Output     Shell Integration	ASIO : foo_dsd_asio Null Output ASIO : foo_dsd_asio ASIO : foo_dsd_asio ASIO : Project Box ASIO Driver ASIO : SB Audigy 2 ASIO [B800] DS : Primärer Soundtreiber DS : Lautsprecher (High Definition Audio-Gerät)	ß
• Media Library •• Networking •• Playback •• OSP Manager •• Output	Null Output ASIO : Creative ASIO ASIO : foo dsd asio ASIO : Project Box ASIO Driver ASIO : SB Audigy 2 ASIO [B800] DS : Primärer Soundtreiber	ß
• Networking • Playback • · · · DSP Manager • · Output	EASIO : Creative ASIO ASIO : foo dsd asio ASIO : Project Box ASIO Driver ASIO : SB Audigy 2 ASIO [B800] DS : Primärer Soundtreiber	2
Playback DSP Manager Output	ASIO : foo_dsd_asio ASIO : Project Box ASIO Driver ASIO : SB Audigy 2 ASIO [B800] DS : Primärer Soundtreiber	Ş
DSP Manager ▷ Output	ASIO : Project Box ASIO Driver ASIO : SB Audigy 2 ASIO [B800] DS : Primärer Soundtreiber	ß
Output	ASIO : SB Audigy 2 ASIO [B800] DS : Primärer Soundtreiber	h3
Output	DS : Primärer Soundtreiber	
•	DS : Lautsprecher (High Definition Audio-Gerät)	
Tools	DS : Lautsprecher (Project RS USB 2.0 Audio Out)	
- Advanced	DS : Digitalaudio (S/PDIF) (High Definition Audio-Gerät)	
Advanced	DS : Digitalaudio (S/PDIF) (High Definition Audio Gerat)	
	-	
	Output data format:	▼ Dither
	Output data format will be chosen automatically for the se	lected device.
	Reset all Reset page	OK Cancel Apply

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Click **Playback** and the small triangle on the left side of **Output** and then on **ASIO**. Below **ASIO Drivers** please double click on **foo\_dsd\_asio**.

Preferences: ASIO	8 ×
rComponents ▷·Display	ASIO drivers
Keyboard Shortcuts     Media Library     Networking     Playback     DSP Manager	Creative ASIO foo_dsd_asin Project Box AsIO Driver SB Audigy 2 ASIO [B800]
▲ Output ASIO Shell Integration	Double-dick an entry to activate the driver's control panel.
▷ · Tools Advanced	Use 64-bit ASIO drivers         Run with high process priority
	Custom channel mappings
	Add New
	Edit
	This feature allows you to configure alternate channel mappings for your ASIO-enabled soundcards. You may need to close 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

In the window that follows, please choose Project Box Asio Driver and in the dropdown menu ASIO Driver.

foo_dsd_asio v0.6.5		X
ASIO Driver:		•
DSD Playback Method:	Creative ASIO M-Audio USB ASIO	
PCM to DSD Method:	Project Box ASIO Driver ProJect_asio.dll	
	SB Audigy 2 ASIO [B800]	
DSD/PCM Transition:		

In the same window, please choose **DoP Marker 0x05/0xFA** in the dropdown menu **DSD Playback Method**. Close the window with a click on the small **X** in the upper right corner.

foo_dsd_asio v0.6.5	×
ASIO Driver:	Project Box ASIO Driver
DSD Playback Method:	ASIO Native
PCM to DSD Method:	ASIO Native DoP Marker 0x05/0xFA dCS Marker 0xAA
DSD/PCM Transition:	exD Marker

Select **Tools**, click the small triangle to the left and then **SACD**. Choose **DSD** in the dropdown menu **ASIO Driver mode**.

eferences: SACD	8 ×
<ul> <li>Components</li> <li>Display</li> <li>Keyboard Shortcuts</li> <li>Media Library</li> <li>Networking</li> <li>Playback</li> <li>DSP Manager</li> <li>Output</li> <li>ASIO</li> <li>Shell Integration</li> <li>Tools</li> <li>SACD</li> <li>Tagging</li> <li>Advanced</li> </ul>	ASIO Driver Mode: PCM PCM Volume: PSD PCM Samplerate: 44100 DSD 2PCM Mode: Multistage (Fixed-Point) DSD 2PCM Mode: Multistage (Fixed-Point) Preferable Area: None Editable Tags Store Tags With ISO Edited Master Playback
	Reset all Reset page OK Cancel Apply

Now you have completed all necessary settings. Close the **Preferences** window with a click on **OK**. Now you can playback DSD files with the extensions **DSF** and **DFF**. You can open the files in Foobar2000 either with your mouse via drag and drop or with the **File** menu in the upper menu bar.



Please be aware that downloads from the Internet are made entirely at your own risk. Under no circumstances can we carry responsibility or provide support for software products sourced from the internet or for any damage or problems arising from the use thereof. All downloads should be checked with an up-to-date anti-virus programme.

# Technical data

Digital inputs D/A-converter	1x USB (B), 1x Co-axial (RCA), 1x Optical (TOSLink) 2x ESS9038Q2M 32-bit
Playback formats	USB: up to DSD512 (DSD1024), PCM up to 32b/768kHz
1	Optical: PCM up to 24b/192kHz
	Coaxial: PCM up to 24b/192kHz
Filter settings	7 different selectable on front
Frequency response	20Hz - 20kHz
Analogue outputs	6.3mm Headphone (front), 1x Variable Out (RCA)
Output voltage	2,05 Veff
Minimal recommended headp	hone impedance 80hms
Headphone output power	6,6mW/600ohms, 68mW/32ohms
THD	0,0003% at 0dB, 2V RMS, 1kHz
Dynamic range	124dBA
Outboard Power supply	5V/1A DC (included)
Dimensions W x H x D	103 x 37 x 122 mm (including knob and connectors)
Weight (without power supply)	: 366g

#### Service

Should you encounter a problem which you are not able to alleviate or identify, please contact your dealer for further advice. Only if the problem cannot be resolved there, the unit should be sent to the responsible distributor in your country.

#### Warranty



The manufacturer accepts no responsibility for damage caused by not adhering to these instructions for use. Modification or changes to any part of the product by unauthorized persons release the manufacturer from any liability over and above the lawful rights of the customer.

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