

# DAC-2v2 & DAC-2v2SE

DIGITAL-TO-ANALOG CONVERTERS  
WITH REMOTE AND VOLUME CONTROL



**USER MANUAL**

## What's Included

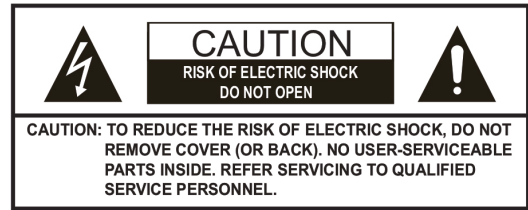
- User Manual
- 6 ft. AC Power Cable
- 1.5 meter USB 2.0 A to B cable
- 1.5 meter DC trigger cable (3.5mm Mono cable)
- Remote control
- 2x AAA batteries for remote control
- Wyred 4 Sound USB driver disk (for Windows)
- DAC-2v2 or DAC-2v2SE Digital-to-Analog converter

We strongly suggest keeping the original packaging in case of the need to ship the DAC in the future.

# Important Safeguards

- All the safety and operating instructions should be read before this product is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the appliance and in the operating instructions should be adhered to.
- Follow all instructions.
- The appliance should not be used near water or moisture – for example, in a wet basement or near a swimming pool, and the like.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way such as the power cord or plug is damaged. Other damage may occur if liquid or objects have been dropped or spilled into the apparatus. Dropping the apparatus, exposure to rain, and excessive moisture may cause additional damage.
- Keep the unit in a well ventilated environment. Ensure at least 4" clearance around top and sides.
- CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- WARNING: To reduce the risk of electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
- WARNING: The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.

- The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- **WARNING:** The terminals marked with symbol of “+/-“ may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready made insulated leads or cords.
- Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.
- Keep your packaging! It is custom made for your unit and will effectively protect it for possible future use.
- Be sure to register your product. It is very important to complete the warranty registration form located on our website. Complete and submit the form within 30 days of purchase to activate your warranty.



### FCC Warning

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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# Introduction

Wyred 4 Sound products are a perfect example of what is accomplished when practical engineering and knowledge are combined. All components are selected for the greatest possible functionality, durability, and most importantly, quality. Wyred 4 Sounds' excellence in engineering will provide you with first-class performance and years of satisfaction. All Wyred 4 Sound products are proudly designed and assembled in California.

Our product goal is simple: to deliver the beauty and realism of your music into your home with as little change as possible. We know what our competition has to offer, and you can be sure that we constantly strive to make the value of our products substantially more. We hope you enjoy your new Wyred 4 Sound product for years to come, and that you consider us in the future as we continue to provide exceptional and innovative audio components to music lovers worldwide.

## DAC-2v2 Design Features

The DAC-2v2 and DAC-2v2SE represent our latest step forward in DAC design and innovation. These new DACs offer some of the latest technology available today and bring new life to digital music. At their hearts, the new 2v2 series features the ESS Sabre 9028PRO DAC chip with the latest Hyperstream technology. The ESS Sabre Pro DAC is the world's highest performance 32-bit audio DAC solution. In our implementation, we utilize the 8ch chip in quad-differential mode meaning that there are actually four differential D-A conversion circuits for each channel in parallel. This helps achieve a spectacular S/N ratio and output drive capability. The I<sup>2</sup>S DSD format offers a jitter-free solution to transmitting digital data from our cutting-edge USB interface to the Sabre chip. Newly implemented technology and hardware now takes full advantage of this remarkable feature. The upgraded interface instantly detects the native DSD data and routes the signal to the appropriate internal processors resulting in unparalleled sonic performance.

Another design feature is the galvanically isolated I<sup>2</sup>S USB interface which prevents computer noise from interfering with the quality of the audio signal. Setup with your source via USB is driverless for Linux and Mac, while Windows users will require a quick driver install to begin playing your favorite tracks.

The DAC-2v2 can process signals up to 24/200 kHz via the coax digital inputs. Toslink inputs are tested to function up to 192 kHz sample rate, although due to limitations inherent in toslink transmission, a maximum of 174.6 kHz has proven to be more reliable. The DAC-2v2 USB input will process signals up to 32 bits in length and sample rates of up to 384 kHz PCM and DSD 256.

Each of the coax inputs are transformer coupled to isolate the source while maintaining proper loading. To ensure that the lowest input signal level will satisfy the digital conversion engine, the signals also pass through TTL buffers to maintain consistent signal integrity. To simplify input selection, the ESS chip is also used as the receiver chip and performs all the signal selection and routing. Automatic signal up-sampling is done internally to keep output filtering to a minimum, and is a crucial part of the jitter elimination. To ensure source immunity, the time domain jitter elimination is executed as the signal enters the DAC chip by re-clocking to the desired rate selected by the ESS chip.

With an oversized toroidal transformer, more than 115,000uF of capacitance, 3 stages of filtering and 13 regulation points, the power-supply in the DAC-2v2 is incredibly robust. The analog output stages are powered by a separate power-supply to ensure isolation from the digital front-end. House-keeping voltages also use separate supplies to guarantee minimal supply contamination. The digital board is supplied with 7 out of the 13 dedicated regulators to ensure tight tolerances and consistent power delivery.

Another key component adding to the incredible sound quality of the DAC-2v2 is the proprietary discrete output stages. Instead of choosing the simple path like many others, we took the “dirt road” and it paid off in a big way in the form of transparency and naturalness of sound. The grain-free soundstage reproduction is the product of our discrete dual-differential FET input amplifier stage which uses all Dale RN55d resistors for precise control. Because of the dual differential circuits, the completely balanced signal offers balanced and unbalanced outputs which both take advantage of common-mode rejection.

## **The New Reference: DAC-2v2SE**

The DAC-2v2SE starts with the already incredible DAC-2v2 and elevates it to even further design and sonic heights. Key components throughout the entire audio circuit are upgraded, culminating in a reference-level DAC that rewards the listener with the most engaging and life-like sonic experience possible.

Upgrades bestowed on the all-important power circuit include low-loss ultra fast Schottky diodes, premium inductors, upgraded fuse, a series of custom low ESR capacitors and newly designed discrete regulators, which are more than 100 times quieter and faster than stock.

The analog signal is significantly improved with custom-made naked Vishay Z-Foil resistors in 20 locations. Compared to the stock Dale resistors which offer 1% tolerance and +/-100ppm/°C temperature coefficient, the new resistors are 0.1% and +/-0.5ppm/°C respectively.

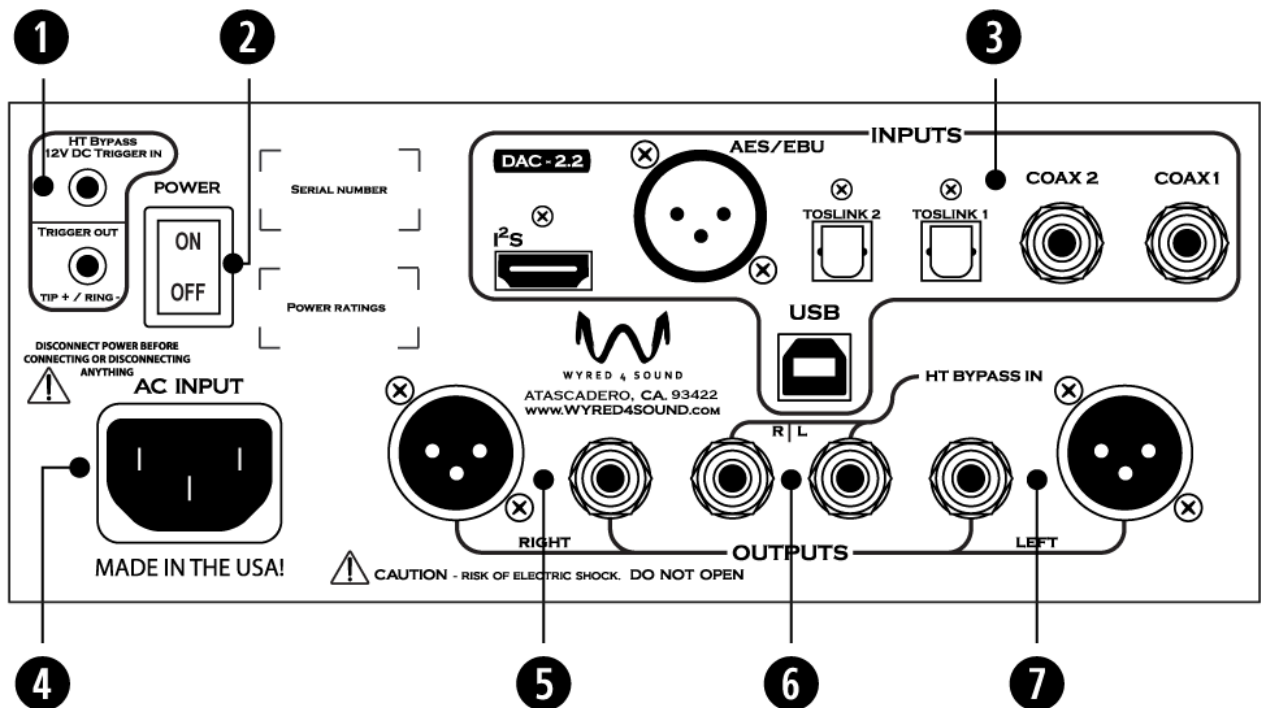
For the most accurately timed digital signal, we replace the standard clock with a Femto-grade clock—one of the best available. The new clock optimizes audio quality by lowering phase jitter by over 80% as well as greatly reducing phase noise in the digital circuit. This is crucial in obtaining the highest fidelity, distortion-free output.

Finally, we complete the 2v2SE package with a quieter, green OLED display, further distinguishing this model. The result of such extensive labor and attention to detail is that the DAC-2v2SE is simply one of the best DACs on the market today.

# Getting Connected

⚠ **CAUTION:** Disconnect the power cord or turn the rear switch off before making connections to the DAC. Doing so will minimize any risk of equipment damage.

- 1. DC trigger in/out**  
For details on configuration and usage, see “Remote Control/DC Trigger” section.
- 2. Rear power switch**  
Turn the switch on to supply power the DAC, off to disconnect power.
- 3. Digital inputs**  
Toslink inputs are tested up to 24 bit/192 kHz, coaxial inputs can receive up to 200 kHz. The USB and I<sup>2</sup>S inputs are capable of up to 32 bit/384 kHz PCM files as well as DSD 256.
- 4. AC input**  
Use supplied power cable or your own. Be sure to observe proper voltage and grounding.
- 5. Right analog outputs**  
Connect to the right input of your preamplifier or amplifier. XLR and RCA cables are acceptable.
- 6. HT Bypass inputs**  
The inner RCA jacks are HT Bypass inputs (not outputs). For details, see “Remote Control/DC Trigger” section.
- 7. Left analog outputs**  
Connect to the left input of your preamplifier or amplifier. XLR and RCA cables are acceptable.





# Front Panel Operation

The front panel of the DAC-2v2 is a model of elegance, simplicity and efficiency. An LED display and three simple buttons give the user a wealth of control and configuration options.

1. **LED display**

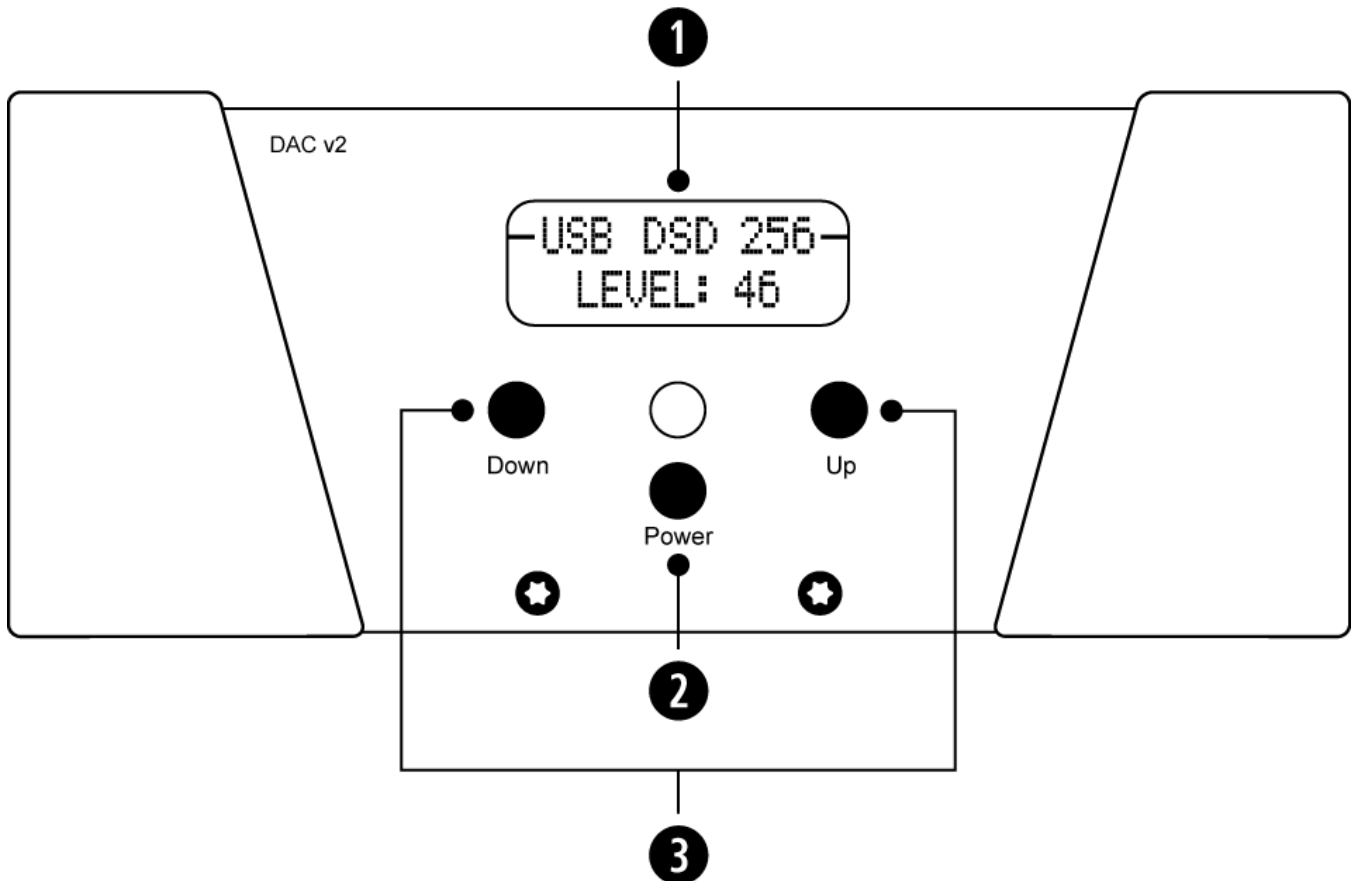
The two-line LED display will show input and file information on the top line and volume information on the bottom line (either the volume level or the word “FIXED”). The active line is indicated with a “-” on each side. When a sample rate is displayed, the DAC is receiving and locked onto that rate. “< ? >” indicates no or lost signal. When in the Setup Menu, the display will show menu items and settings.

2. **Power button**

When the rear switch is on, the Power button turns the DAC on or puts it in low-power standby mode. When the DAC is powered on, tapping the Power button will toggle between top and bottom lines on the display. When in the Setup Menu, the Power button is used to select and confirm options.

3. **Down and Up buttons**

Depending on which line is active on the display, use the Down and Up buttons to switch inputs or change volume level (if set to “VARIABLE” in the Setup Menu). While in the Setup Menu, use the Down and Up buttons to toggle through menu options



# Powering Your DAC

When a power cord is connected to the AC input and the rear switch is turned on, the DAC is ready to be turned on. Use the Power button on the front to turn the DAC on or put it into a low-power “standby” mode (display will be off). Leaving the rear switch in the on position will keep power supplied to the DAC. Turning the rear switch off disconnects all power.

## Setup Menu

The extensive Setup Menu gives the user many options to configure the DAC-2v2. To enter the Setup Menu, ensure the DAC is in standby mode (the rear switch is on but the DAC is not powered on with the front Power button).

1. Push and hold the Up and Down buttons and simultaneously push the Power button. The Setup Menu is now shown on the display (you will see the first menu item, “IIR BNDWITH”).
2. Once the menu is activated, you can use the Up and Down buttons to scroll through the menu.
3. When an item is displayed that you wish to adjust, press the Power button quickly (do not press and hold or the unit may turn off) to enter that item and use the Up or Down arrows to scroll through item options. When the desired option is displayed, press the Power button quickly again to save the selection and return to the main menu.
4. When finished, press and hold the Power button while in the main menu. The unit will go back in standby mode and your changes will be ready for use the next time the DAC is powered on.

**Default Reset:** Should you wish to reset all menu items to factory default settings, first power the unit off front panel Power button. Next, push and hold the Up and Down buttons while pressing and holding the Power button. This is similar to the procedure to enter the Setup Menu, except you will continue to hold all three buttons in for a few seconds. You will then see “----RESET----” on the display, at which point you can release all buttons. Once the screen goes blank, the reset has been applied and all settings are restored to their factory configuration.

See next page for a table of the Setup Menu items.

# Setup Menu Table

Default settings are **bolded** and are our recommendation for most users, with the exception of input level which should be set to Fixed if you use a separate preamplifier. The pages following further explain the Setup Menu items.

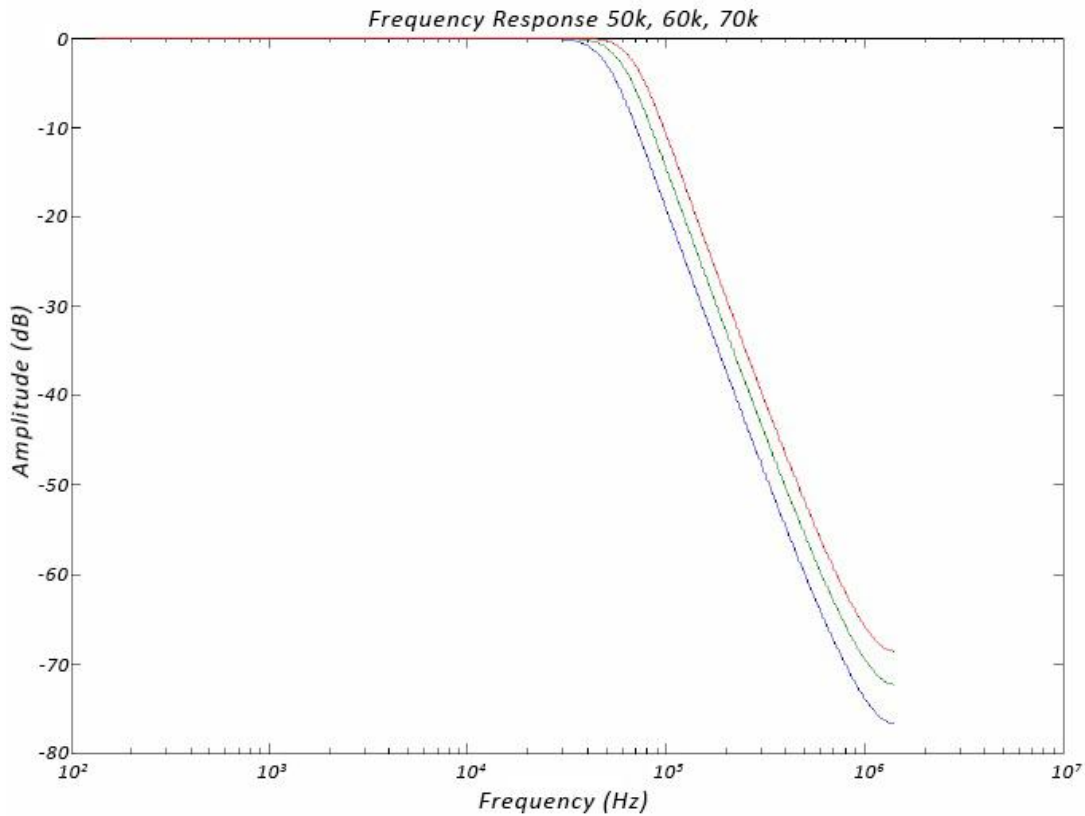
IIR bandwidth	(< <b>50k</b> / 50k / 60k / 70k)
Filters	( <b>Slow rolloff, linear phase</b> / Slow rolloff, minimum phase / Fast rolloff, linear phase / Fast rolloff, minimum phase / Apodizing fast rolloff, linear phase / Hybrid fast rolloff, minimum phase / Brickwall)
I <sup>2</sup> S type	(I <sup>2</sup> S / Left justified / Right justified)
Remote/Trigger	( <b>On-Off</b> / Off-Off / On-On / Off-On)
2v2 HT display dim level 2v2SE HT display dim level	(Off / Low / Medium / <b>High</b> ) (Off / <b>High</b> )
Coax level	( <b>Variable</b> / Fixed)
Coax minimum level*	(0-70)
Coax maximum level	(0- <b>70</b> )
Toslink level	( <b>Variable</b> / Fixed)
Toslink minimum level*	(0-70)
Toslink maximum level	(0- <b>70</b> )
USB level	( <b>Variable</b> / Fixed)
USB minimum level*	(0-70)
USB maximum level	(0- <b>70</b> )
AES/EBU level	( <b>Variable</b> / Fixed)
AES/EBU minimum level*	(0-70)
AES/EBU maximum level	(0- <b>70</b> )
I <sup>2</sup> S level	( <b>Variable</b> / Fixed)
I <sup>2</sup> S minimum level*	(0-70)
I <sup>2</sup> S maximum level	(0- <b>70</b> )
Discrete input	(On / <b>Off</b> )

\*Note: Default minimum level is 5.

# Setup Menu Option Details

## Bandwidth/IIR Settings

The Bandwidth/IIR Setting more for personal taste and fine-tuning. The default setting is typically the best for most users, however, feel free to adjust it according to your preference. PCM bandwidth selects the range of which the DAC will filter the signal. Allowing higher bandwidths may introduce more information, but also more noise. IIR stands for Infinite Impulse Response. Please note that these settings will likely not offer significant sonic differences and might not be appreciated until the unit is fully “broken-in”.



## Filter Options

- Slow rolloff, linear phase
- Slow rolloff, minimum phase
- Fast rolloff, linear phase
- Fast rolloff, minimum phase
- Apodizing fast rolloff, linear phase
- Hybrid fast rolloff, minimum phase
- Brickwall

## I<sup>2</sup>S Type

The DAC-2v2 is equipped with a balanced I<sup>2</sup>S connection via HDMI. This selection of signal type adjusts the signal timing alignment based on what you connect. It will be obvious if this is set improperly (very distorted sound). Please note, this is NOT a typical HDMI connection and cannot be used with typical HDMI-equipped devices like DVD players, game consoles, A/V devices, etc. The corresponding source must also be specifically I<sup>2</sup>S equipped.

## Remote Control/DC Trigger

Your new DAC is equipped with both a DC trigger output and input on the back panel. The Trigger input is on the top and is used for the HT Bypass or Trigger-on feature. In the Setup Menu, you can select the trigger input to be configured as a HT Bypass or Remote turn-on feature.

- **HT (Home Theater) Bypass mode:**  
When the setting under “TRIG” is Off, then the HT Bypass on trigger input is active. To use the HT Bypass feature, connect the pre-outs of your home theater receiver or surround sound processor to the HT Bypass inputs on the DAC (be sure both DAC and receiver are off before doing so). When either the HT input is selected on the remote control or the trigger input is activated, the HT Bypass inputs will activate and the display will read “HT BYPASS”. Caution: be aware that the HT Bypass inputs are a line-level signal at full volume. Be sure that your receiver or processor’s volume is turned down before playing any music or home theater material.
- **HT dim level:**  
When in the HT Bypass mode, different display dim settings can be set in the Setup Menu. When going back to normal operation the pre-selected dim level will be restored, regardless of the HT dim level setting.
- **Remote Trigger On mode:**  
When the setting under “TRIG” is On, the remote turn-on with trigger input is active. When the DC trigger input is applied, the DAC will power up as if you pushed the Power button on the front panel. The last used input will be selected upon power up. The trigger input signal needs to remain active for the unit to stay on. Once the trigger falls low, the unit will return to the off state.
- **Trigger output:**  
The lower trigger connector is used for a trigger output to remotely power up power amplifiers when the DAC is on or in HT mode. Connect one 3.5mm DC trigger cable from the trigger output of your source to the DAC trigger input to remotely activate the HT bypass or remote turn on feature (one or the other based on the set-up setting). Connect another 3.5mm cable from the trigger output of the DAC to the trigger input on your power amps if supplied with one. This will remotely activate your power amps anytime the DAC is operational even when in HT MODE.
- **Remote:**  
When the setting under “REMOTE” is Off it will disable the remote communication with the unit. This can be beneficial when you are operating the DAC with another Wyred component such as the STI or STP-SE in order to eliminate interference between them. A setting of On leaves the remote control active.

## Input (Coax, Toslink, USB, AES/EBU, I<sup>2</sup>S) Level

For each input type, you can choose a volume mode of “FIXED” or “VARIABLE”. Choosing Fixed mode bypasses the internal DAC volume control, while Variable mode engages it. Fixed mode should be used if you are connecting the

DAC to a separate preamplifier, receiver, etc. and you would prefer to use its volume control. If you will be connecting the DAC directly to your amplifier, choose Variable to engage and use the DAC's internal volume control.

## Minimum/Maximum Volume Level Settings

The Min/Max volume level settings can be set differently for each input type and allow you to tailor and optimize the DAC's output to your preamplifier (or amplifier if connecting directly). For many users, the default settings will work best. However, with so many gain variables inherent in different systems, being able to raise the minimum output level or lower the maximum one can be an invaluable feature.

The volume table for the DAC is 70 steps in size and offers different size steps depending on the location of the step. When the minimum level for the corresponding input is set to 5, the maximum level will be 65. Essentially, the Min level is the amount of steps skipped in the first position. When used, the Min amount is subtracted from the 70 possible steps total. If a system doesn't have enough gain to utilize the bottom several steps, you can remove them from the table by raising the Min setting to within the playback range of the system. Similarly, if you find the DAC output level too high, you can adjust the Max level down to within your personal preferences.

*Example:* With a less efficient system requiring a DAC volume level of 12 to hear anything, setting the Min level of 10 removes steps 1-10 which likely will be desirable. In this instance, the Max volume would then equal 60. The volume table offers from 3db to 1dB steps as follows (refer to the end of this manual for a chart correlating volume level to output voltage):

- 0 = mute
- Steps 1-9 = 3dB
- Steps 10-24 = 2dB
- Steps 25-70 = 1dB

## Discrete Input

Input selection with the standard remote is accomplished by scrolling up or down through all available inputs. While our remote control does not have the option for direct input selection, many universal remotes can support that feature. The Discrete Input Setting (on/off) enables or disables the direct input commands that can be received by the DAC. The database for the Logitech universal remotes has these commands pre-loaded for your convenience.

## Remote Control

The remote control supplied with the DAC-2v2 offers you If you find the need to, you can always program a universal remote to control the DAC as well (set the Discrete Input in the menu to "On"). For your convenience we have uploaded the remote commands to the Logitech universal remote database.

Balance and display dim controls are exclusive to the remote control. Distances of up to 20 ft. or so shouldn't be a problem for the remote, but further distances might not behave properly. Note: The phase button is disabled and non-functional.

### Dim settings accessible from the remote:

- DAC-2v2: (High / Med / Low / Automatic OFF after 2 seconds of no input from remote)
- DAC-2v2SE: (Constant ON / Automatic OFF after 2 seconds of no input from remote)

# USB Configuration

The USB interface of the DAC-2v2 is driverless for Mac and Linux, thus the DAC-2v2 is 'plug-n-play' for those operating systems. For Windows, the included driver disk has standard drivers as well as ASIO drivers. All users (Mac, Linux, PC) will need to configure the DAC as the output device for their computer. Please see step 6 below.

## Windows Setup

When using the DAC with a Windows machine via USB you **MUST** install the drivers before connecting the DAC. Do not connect the DAC with a USB cable until the drivers are completely installed. The included ASIO drivers are not required for audio playback but can be beneficial in some configurations. If you do choose to install the ASIO® drivers, be sure to install them after the standard driver installation is complete.

1. Insert the included CD into the disk drive of your computer
2. Locate and open folder that shows the contents of the CD
3. Double click the correct Setup32 or Setup64 file to initiate the install.
4. Once the install process has begun, follow the on-screen instructions. The install wizard will prompt you when the process is complete.
5. Connect the DAC to your computer with a USB cable, power the DAC on, and select the USB input. You may be prompted by an install wizard that additional installation steps are required. Follow the on-screen instructions. The install wizard will prompt you when the process is complete.

## Selecting the DAC as the Audio Output Device

6. It is now necessary to select the Wyred 4 Sound USB interface as the default output device for your system. The device name will vary depending on the operating system you are using.
  - a. **MAC OS: 32bit 384kHz DSD Interface**  
Locate and open the Audio MIDI Setup: Go to Finder > Applications > Utilities > Audio MIDI Setup. Select the W4S DAC as the default output device and apply the setting.
  - b. **Windows: Digital Output / Wyred 4 Sound USB Driver 1.0.56**  
Locate the Audio output device (Manage Audio Devices) selection which is found in the control panel located in the startup menu. You will need to set the default output device to the Wyred 4 Sound interface. This setting will be part of the OS and not the media player.

*Please note: Additional output configuration and device selection may be required in your media player.*

7. The last step is easy—enjoy your music!

## “Break-in” Period

Your new DAC will deliver outstanding performance brand new. However, over the course of playing it for the first 200 hours or so, the DAC will go through a “break-in” period as it reaches its ultimate sonic potential. This is a normal phenomenon of high-end audio equipment and the before/after differences are readily audible. If you are hearing bright, tight, light or dimensionally flat characteristics, those are symptoms of a product that is not quite broken in yet. Patience will reward you! After the break-in period, your unit will be ready to perform as soon as it's powered on. If you have any questions on your DAC's performance, contact your dealer or Wyred 4 Sound directly.

# Troubleshooting

No sound? If you have your input source and speakers connected, and you can't get music to play, check the following:

1. Verify that the power cord is plugged in and that the outlet is powered up.
2. Check the front panel and make sure that the display lights up.
3. If the display is on and the DAC is locked onto a signal, increase the volume to a significant level to ensure the level is high enough for music playback.
4. If you can hear the slight turn on and off noise when the DAC is activated, but there still isn't any sound, make sure you are getting a signal to it.
5. Verify that the input is selecting the proper input for what you have connected, and is displaying a sample rate.
6. If the input is in the proper position and still no sound, then try replacing the interconnects to verify the connection between the DAC and source.
7. Verify that the interconnects are conducting by replacing them on a different set from a connection that you know works.
8. Now that you have interconnects that you know work, try connecting the DAC to another source that you know has worked in the past.

If you are still experiencing problems after checking all possibilities and using the resources provided please contact your dealer or Wyred 4 Sound directly for further assistance.

*Note: Because the DAC-2v2 is really an 8ch DAC inside, make sure that all sources (where applicable, ie: DVD players, cable/satellite boxes) are programmed in their Setup Menu to output **2ch PCM or stereo digital signals**. In some cases, the DAC will actually try to decode multichannel formats, but will be unsuccessful because the DAC's outputs are tied together internally. If you hear loud switching noises, or no sound at all, this may be why.*

## Got Hum?

Is there too much hum or hiss coming out of your speakers? If you put your ear right next to the tweeter of your speaker, you should **barely** be able to hear any hiss in normal conditions, depending on amps. If the noise is easily heard at a distance, try putting your source on mute, or pause. If this eliminates the noise, it's inherent in the source. If the noise is still there when the preamplifier is muted, try disconnecting the inputs to the amplifier. If the noise is still there when the amp inputs are disconnected, and the inputs are shorted with shorting plugs, then your amplifier may need some servicing. If the noise is not there when the inputs are disconnected, try putting a cheater plug (ground isolator) on one or all components in order to eliminate a ground loop issue. NOTE: We only recommend using a ground isolator for troubleshooting purposes, and should be removed after the problem has been found. Having the ground of any unit disconnected can potentially create a dangerous situation.

An easy way to locate a noisy component is to replicate the problem then start disconnecting components one at a time, starting with a source. Digital cable boxes and satellite receivers are notorious for making ground loop hum. This is normally caused by the potential difference on the input wire (shield side) for either of the boxes when referenced to ground. If this is the case in your system, the installation of an isolating transformer would be the easiest solution and are normally readily available at your local electronics parts store. A better solution is a power strip with grounded and surge protected F-connectors that you can pass a signal through. Where possible, use the Toslink inputs. Because of the optical transmission, there isn't any audio connection path to ground between components, and the possibility of a ground loop should disappear.



# Specifications

Typical Distortion THD+N (20-20kHz A-weighted)	<0.007% THD+N
Frequency Response (20-20kHz)	+/- 0.065db
S/N Ratio	> 115 db
Crosstalk	> 120 db
Noise (A-weighted)	< 6uV
Noise	< 8uV
Balanced Output Level	5.6V (15.1 db)
Unbalanced Output Level	2.8V (9 db)
Output Impedance	100Ω
Channel Tracking	< +/- 0.50 db
Dimensions	8.5"W x 4.125"H x 13.5"D
Weight	14 lbs.

## Output Level Adjustment

For lowering the output level with the Max Level setting, see the following chart for the desired level. Note: This table assumes your Min level is set to 0.

Output type	Output voltage	Volume setting
RCA	2.8v	70
RCA	2v	67
RCA	1v	61
XLR	5.7v	70
XLR	4v	67
XLR	3.2v	65
XLR	2.9v	64
XLR	2v	61

# Warranty Coverage

Wyred 4 Sound, as defined below, warrants this Wyred 4 Sound-branded hardware product against defects in materials and workmanship under normal use for a period of FIVE (5) YEARS from the date of retail purchase by the original end user purchaser ("Warranty Period"). If the product has been transferred from the original owner to a second hand owner it has a ONE (1) YEAR warranty, valid from the original date of purchase by the original owner. If a hardware defect arises and a valid claim is received within the Warranty Period, at its option, Wyred 4 Sound will either (1) repair the hardware defect at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. Wyred 4 Sound may option that you replace defective parts with new or refurbished user-installable parts that Wyred 4 Sound provides in fulfillment of its warranty obligation. A replacement product or part, including a user-installable part that has been installed in accordance with instructions provided by Wyred 4 Sound, assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes Wyred 4 Sound's property. Parts provided by Wyred 4 Sound in fulfillment of its warranty obligation must be used in products for which warranty service is claimed. When a refund is given, the product for which the refund is provided must be returned to Wyred 4 Sound and becomes Wyred 4 Sound's property.

## EXCLUSIONS AND LIMITATIONS

Wyred 4 Sound does not warrant that the operation of the product will be uninterrupted or error-free. Wyred 4 Sound is not responsible for damage arising from failure to follow instructions relating to the product's use. This warranty does not apply: (a) to damage caused by use with non-Wyred 4 Sound products; (b) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (c) to damage caused by operating the product outside the permitted or intended uses described by Wyred 4 Sound; (d) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Wyred 4 Sound or a Wyred 4 Sound Authorized Service Provider; (e) unauthorized removal of cover (f) to a product or part that has been modified to significantly alter functionality or capability without the written permission of Wyred 4 Sound; (f) if any Wyred 4 Sound serial number has been removed or defaced.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, WYRED 4 SOUND SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, AND WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. IF WYRED 4 SOUND CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES THEN TO THE EXTENT PERMITTED BY LAW, ALL SUCH WARRANTIES SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY AND TO REPAIR OR REPLACEMENT SERVICE AS DETERMINED BY WYRED 4 SOUND IN ITS SOLE DISCRETION EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, WYRED 4 SOUND IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED OR USED WITH WYRED 4 SOUND PRODUCTS AND ANY

FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA STORED ON THE PRODUCT. THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS. WYRED 4 SOUND DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY PRODUCT UNDER THIS WARRANTY.

## Obtaining Warranty Service

Please access and review the resources referred to in the documentation accompanying this hardware product before requesting warranty service. If the product is still not functioning properly after making use of these resources, please contact your Wyred 4 Sound representative. Wyred 4 Sound or its Wyred 4 Sound Authorized Service Providers will provide warranty service on products that are tendered or presented for service during the Warranty Period, as permitted by law. Wyred 4 Sound is not responsible for freight charges to our facility for warranty repairs. We will cover return freight charges (domestic only) if the unit is found to be faulty and still within the warranty coverage period. You will be responsible for delivery and return shipping and handling charges if the product cannot be serviced in the country it is in. In accordance with applicable law, Wyred 4 Sound may require that you furnish proof of purchase details and/or comply with registration requirements before receiving warranty service.

## Service

In the event there is a problem with your Wyred 4 Sound component, first contact your dealer, distributor, or Wyred 4 Sound directly to discuss the issue before you return the component to our manufacturing facilities for repair.

**Products shipped to the factory will be refused and returned freight collect if not accompanied by a Wyred 4 Sound Service Department issued return authorization number (RA Number).**

### Wyred 4 Sound

Phone: +1 (805) 466-9973

Fax: +1 (805) 462-8962

Email: [support@wyred4sound.com](mailto:support@wyred4sound.com)

Website: [wyred4sound.com](http://wyred4sound.com)

Office hours: Mon - Thurs: 7am - 4:30pm. Fri: 7am - 11am, PST

## Service procedure

1. Contact your dealer or Wyred 4 Sound to discuss the issue(s)
2. If repair is deemed necessary, fill out the online Service form at [wyred4sound.com/support/service-request](http://wyred4sound.com/support/service-request)
3. After the form is received, Wyred 4 Sound Service Department will email you an RA number and instructions.
4. Write the RA number on the outside box. Insure and accept all liability for loss or damage to the product during shipment to the Wyred 4 Sound factory and ensure all freight (shipping) charges are prepaid.

The product may also be hand delivered to the California facility if arrangements with the Service Department have been made in advance. Proof of purchase from an authorized Wyred 4 Sound dealer, distributor or agent will be required for warranty validation at the time of hand delivery. Use of the original packaging to ensure the safe transit of the product is strongly recommended. To purchase additional packaging if needed, please contact your authorized Wyred 4 Sound dealer, distributor, or the Wyred 4 Sound Service Department for assistance.

Voltage changes to match your country's voltage and frequency requirements to your Wyred 4 Sound product are possible only at the time of purchase. The SX-1000R amplifier is set to a fixed voltage to match your country's requirements and may not be easily changed. Should voltage change be required, contact Wyred 4 Sound.



*Wyred 4 Sound*

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