



"On many levels, I found the sound of the Rega DAC more akin to that of their flagship turntable, the P9 (which has been a long term component in my reference system). It shares the P9's quick and open presentation with a healthy dose of pace and timing." TONE AUDIO 12/10

Rega DAC Retailers Guide

Like Asynchronous: The USB input is not asynchronous per se, but there are attributes, which make the USB input a high-quality input, as it incorporates a PLL based clock for low jitter audio signal recovery. This recovered audio data is then passed through the WM8805 PLL based receiver, so it can be said the USB audio data has been re-clocked and cleaned-up by the WM8805 receiver.

Unique Filters: 5 filters for standard res and 5 unique filters for hi res files. Like more expensive DACs on Rega uses filters that work at the extreme high end of the frequency response of the selected sample rate.

24/192 Playback: TOSLINK and Coax can accept the highest native resolution currently available.

Mission Critical Electronics: Careful attention has been paid to the power supplies, analog amplifiers(Class A) and use of capacitors in critical areas. The control code, the part that tells the IC's and power what to do, is designed by Rega.

Special Power Supplies: The heart of the power supply is a generously rated Toroidal transformer with separate windings for the digital and analog audio and the micro controller. There are total of 9 separate power supplies using audio grade and low impedance capacitors throughout. Fast diodes are used in the rectifiers to help keep the switching noise down. Isolated audio ground for SPDIF and USB connections. Dirty power from the computer is completely eradicated.

Entirely made in the UK and it costs only \$995!

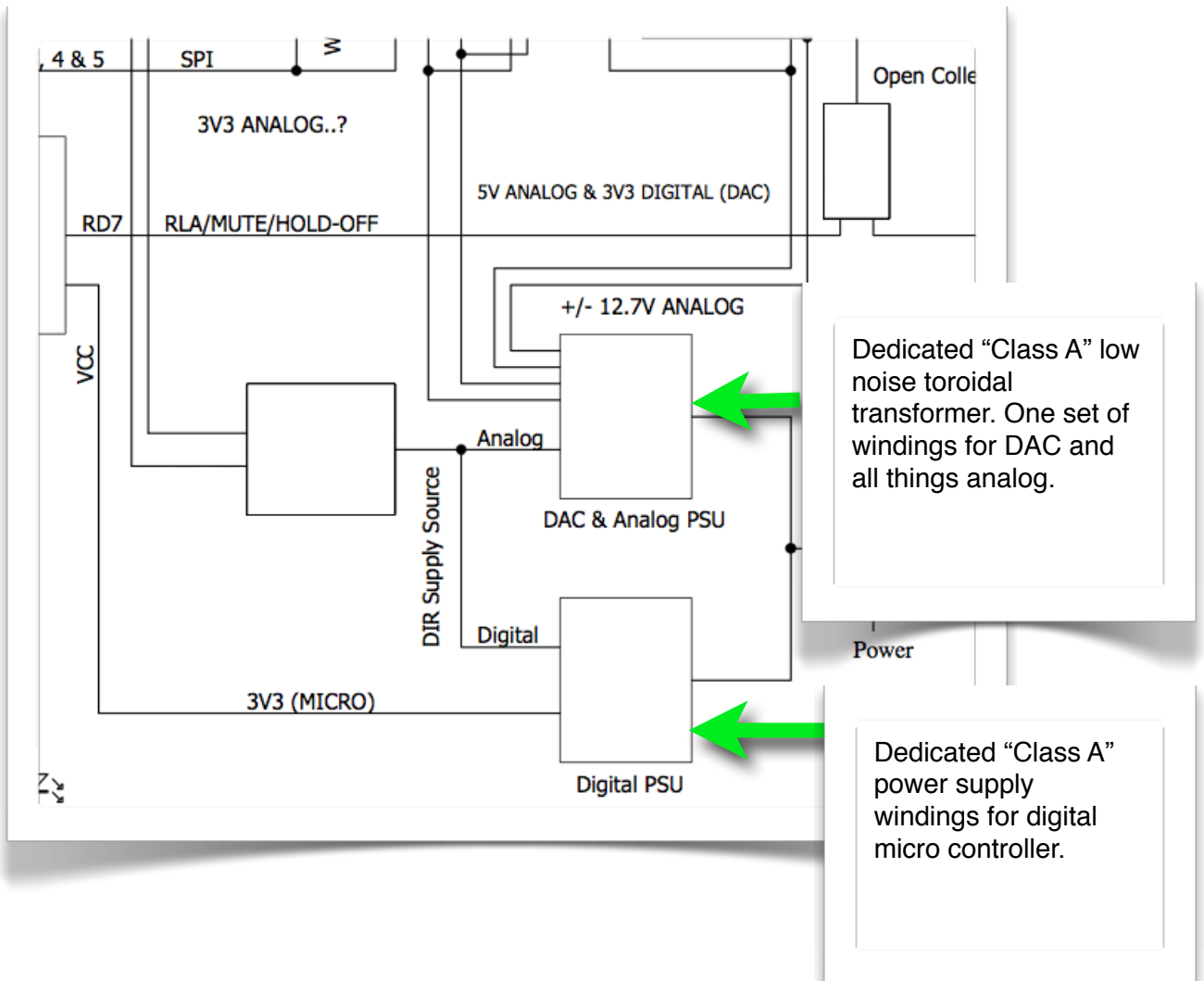
"Simplicity - as I wanted to keep the signal path to a minimum. I know it's a bit of a traditionalist approach, but I felt the inclusion of an up sampler would over complicate the unit. The WM8805 and WM8742 running at the incoming sample rate do a good job on their own, along with a nice drop of old school audio mojo in the discrete post DAC analogue circuitry keep things straightforward."

"It's worth bearing in mind that both the Saturn and the Isis don't use up sampling either, and I wanted the DAC to follow the same spirit of these units."

"it's worth remembering 192K is on the high end of what the TOSLINK can handle, so the quality of the optical cable has to be taken into account for reliable operation. I've had the DAC working reliably at 192K with a 2 Meter commercial grade optical cable being driven from both a Xonar ASUS Essence and Prodigy HD2 sound cards."

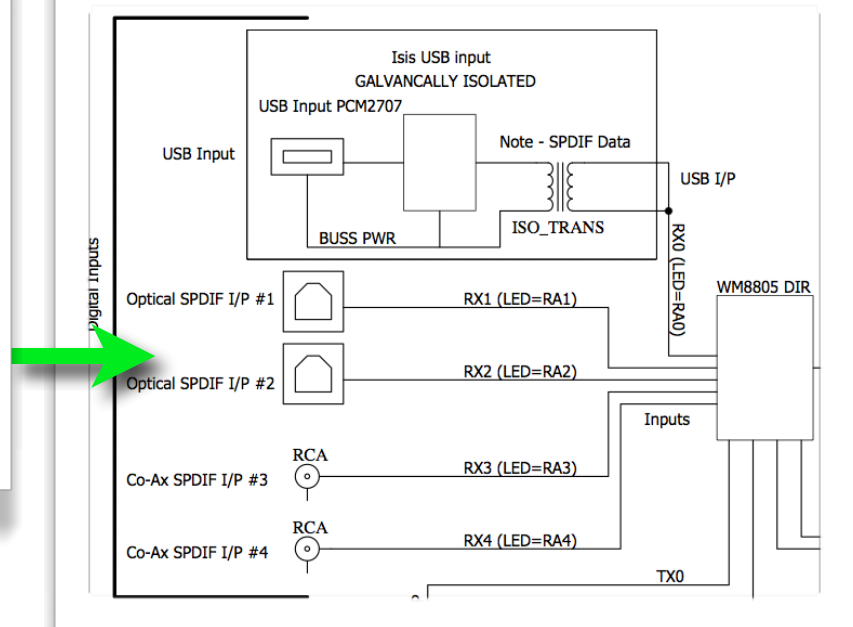
"The PCB uses ground planes to ensure low impedance earth paths, which keeps earth induced noise in the digital and analogue domains to a minimum. The micro-controller has its own ground and power supply."

INSIDE STORY pt1



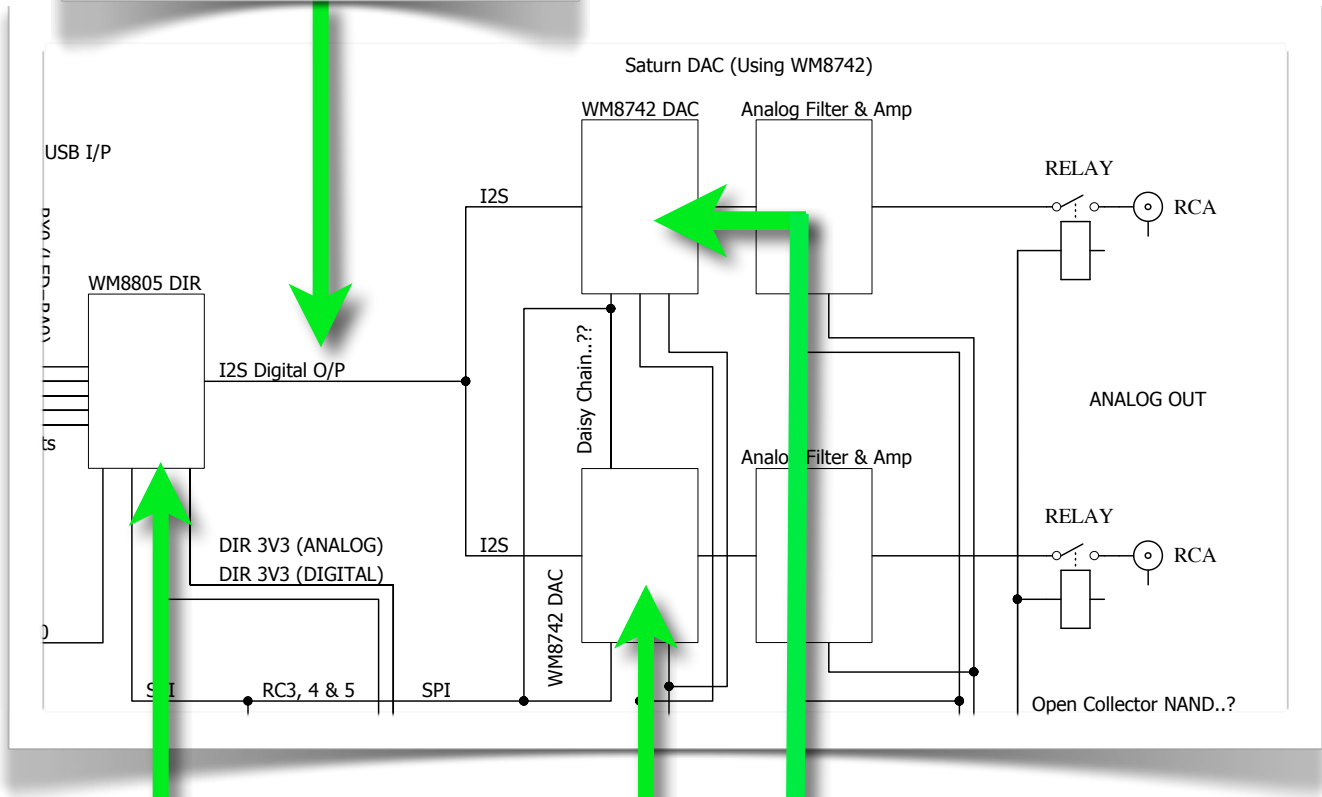
The co-axial and USB digital inputs are electrically isolated from the audio ground, which is floating with respect to the electrical ground, this helps reduce noise and hum loops when used in large multi-input system.

The PCB uses ground planes to ensure low impedance earth paths, which keeps earth induced noise in the digital and analogue domains to a minimum. The microcontroller has its own ground and power supply.



INSIDE STORY pt2

High quality I2S pipeline transmits a super low jitter clock and data signal.



Wolfson WM8805 PLL Receiver time adjusts on the fly which is a form of re clocking. Includes a hardware buffer. Results similar to using Asynchronous technique. Input phase and the output phase is matched by referencing the frequency and if all that is matched up the timing will be correct. Bass is improved, better soundstage/imaging , pacing is more accurate.

Two pro level Wolfson WM8742 DAC's. Each DAC is connected to its own discrete output.

Use an external HD. You get a bigger memory buffer and an external power supply.

Make sure your sound card is set to the native sample rate of your source. Otherwise your program will resample.

Go into your midi or sound card setting and select the external DAC you want to use.

Use a quality optical, coax and/or USB cable

For the non audiophile try to use the least amount of compression. 320k. is better than 128k.

Computer based volume controls are convenient but they trim bit resolution. Try avoiding this when seriously listening.

Use an external CD or DVD burner. Dedicated power supply and a bigger memory buffer make for better music reproduction.

Audiophiles should consider using a purpose built computer.

If you using iTunes choose Apple Lossless, WAV or AIFF. Make sure to check the "use error correction" box. Turn off all EQ settings.

TSO's RECOMMENDED APPROACH TO SAFE COMPUTER AUDIO

We recommend at least 2 gigabytes for computer's RAM. However, 4 gigs will create more room to process lossless or lossy files.

Try using a passive power conditioner to see if it makes things sound better. Even see if your computer takes an upgraded C15 power cable. You might be surprised.

Rip your files at the highest setting possible. AIFF and WAV feature no compression whatsoever. FLAC and Apple Lossless get zap empty space cutting file size down by around 50%. Lossless files are bit perfect but take more processor power to sound good.

Make sure to have your internal computer sound card handle all system noises, beeps, etc.

Both iTunes and Windows Media Player are fine for digital music file storage and playback. If you are doing lots of hi rez/normal rez listening you may want to consider a third party overlay.

If you are using a dedicated computer you will want to prevent services from loading into your task bar or menu bar. Background processes can potentially cause sonic degradation. You don't want programs hijacking your music specific resources that can cause problematic time errors. You want your file to be completely intact before it reaches the DAC. If your DAC works harder it creates more jitter.

FLAC is not a native iTunes file type. You can use programs like MAX, FLUKE and other software to convert these FLAC files to AIFF or Quicktime. Transcoding that makes this possible.

More is not always better. 48k is not a native CD format. Use the 44.1 output on your sound card when playing back redbook sourced files.