

Mystique Y



User Manual for all Mystique Y Digital-to-Analog Converters

Mystique Y Fe

Mystique Y AM

Mystique Y NC

Mojo Audi©

A bit closer to live music

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Introduction

At Mojo Audio we are all about the music. Because our customers are looking for the most transparent window into their favorite recordings, the aesthetics, function, and features of our DACs tend to be rather simple. And the recommendations we offer our customers are usually quite different than other companies.

There are quite a few misconceptions regarding digital audio that are surprisingly accepted as truths in the audiophile community. To help clear up many of these misconceptions we have several blogs which explain technology in layman's terms:

[7 Myths of Digital Audio Dispelled](#) [The 24-Bit Delusion](#) [DSD vs PCM: Myth vs Truth](#)

At Mojo Audio we base our DAC designs on scientific facts rather than marketing concepts. Mojo Audio does not believe the laws of physics have changed in the past 100 years nor that Dr. Nyquist or Sony and Philips did not know what they were talking about. Based on their designs, it would appear that is not true of many DAC manufacturers.

Modern electronic components are engineered to be smaller, cheaper, more energy efficient, and more versatile, often at the expense of sonic performance. Because of this, Mojo Audio uses the best of 100-year-old, 40-year-old, and modern technologies, to achieve the most natural sound possible from digital recordings.

To bring you every subtlety and nuance on your favorite recording, we use LC choke input power supplies: the largest, heaviest, most expensive, and least efficient of all power supply typologies. LC choke input power supplies yield the best time and tune and the most articulate attack/bloom/decay because they store both current and voltage. Capacitive input power supplies used by most DAC manufacturers only store voltage resulting in the more energy a note requires the more off time and tune that note will be.

Modern Delta-Sigma DAC chips are smaller, cheaper to manufacture, more versatile, and more energy efficient. This is part of what makes them so popular. But Delta-Sigma DAC chips interpolate rather than decode the music. They take in the bit stream faster than the music is playing, analyze it for inconsistencies, and "correct" it using statistical error correction algorithms. They then export a flawless interpolated wave form. Sadly it's not the same wave form that's on the original recording.

R-2R is the only DAC typology to decode what is on the recording. At Mojo Audio we build our DACs around the last generation of vintage R-2R ladder DAC chips. These chips are the most linear, lowest noise, most dynamic, and most resolving of any R-2R DAC chips.

We are music lovers first and foremost. We optimize every part and every circuit to achieve musical fidelity. Form follows function. Less is more. hearing is believing.

At Mojo Audio we bring you [a bit closer to live music](#)

Unpacking

CAUTION: Our DACs ship with NO FEET on the Bottom.

When unpacking always place DAC on a soft surface to avoid scratching.

Since many of our customers use high-performance aftermarket anti-resonance products, we do not ship our DACs with the footers attached. Using more than one anti-resonance product could degrade rather than enhance performance.

Installing Stock Anti-Resonance Footers

Enclosed is a packet with three Sorbothane anti-resonant footers in a small bag attached to the plastic covering around your DAC.

The high-performance peel-and-stick Sorbothane anti-resonance footers we provide will sound better than many aftermarket anti-resonance products.

You can compare the footers we provide to your reference anti-resonance products without adhering our them to the chassis by placing them adhesive backing side down between your DAC and your audio rack without removing the peel off backing.

Mystique Y Footer Placemet



If you decide to use our stock footers, please refer to the above graphic. Place two footers close to the left and right edges of the chassis directly behind the face plate. Place the third footer centered directly in front of the rear plate. Note that there is a center notch on the bottom edge of the rear plate to aide in center alignment.

USB Input

The Mystique Y has one digital input: USB type B.

It can accept any type of Pulse-Code Modulation digital music format up to 24-bit 192Khz.

This would include: WAV, FLAC, ALAC, AIFF, AAC, MP3, MP4, M4A, WMA, APE, and OGG.

Our USB input uses a high-performance XMOS receiver chip, is galvanically isolated, asynchronous, and has ultralow-noise femto clocking. To completely isolate the digital and analog power supplies on the Mystique Y our USB input module has it's own secondary on the power transformer, it's own Silicon Carbide zero-recovery Schottky diode rectification, and uses two Belleson SPX ultralow-noise ultrahigh-dynamic discrete regulators, one for input and one for output.

Always power up the Mystique Y before booting up your music server or streamer.

Unlike many DACs, the Mystique Y uses no dirty USB buss power. For this reason the Mystique Y must be powered on before booting any music server or streamer so that the XMOS USB receiver chip is powered on and can be recognized.

Because of the 100% isolation and uncompromising performance of the power supplies and the ultralow-noise femto clocking used in our Mystique Y, the USB input module performs better than most USB reclockers and regenerators. According to our customers, most of these "magic" USB boxes will degrade rather than improve performance.

Drivers for the USB input module are included in Apple OS X and Linux.

If your server or streamer is Windows based the driver must be downloaded:

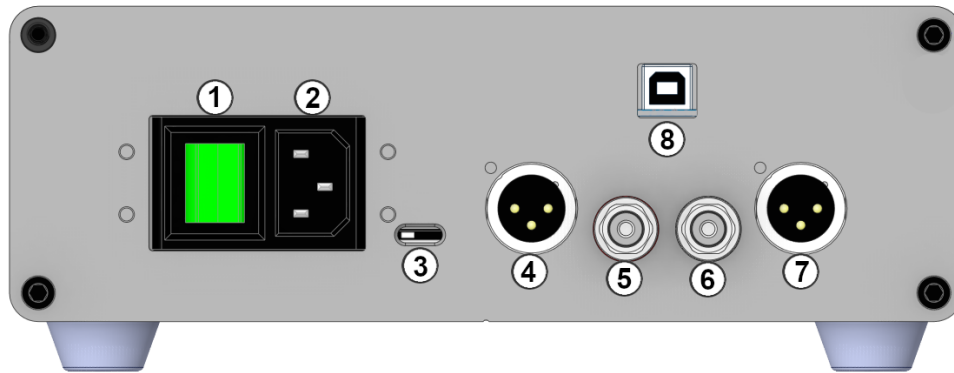
<http://jlsounds.com/drivers.html>

Our USB input module will show up in your player software as "Mystique." In player software that works with video as well as audio there will be more than one option with the name "Mystique." Select the option for "Front Speakers."

Rear Panel

Below is a graphic displaying the various connectors and switches on the rear panel of the Mystique Y. Use only cables with industry standard connectors and wiring. Do not bypass grounds. We include a ground lift switch which will allow you to disconnect DC signal ground from AC, Earth, and chassis grounds.

Mystique Y Rear Panel



1. AC main power on/off rocker switch.
2. AC IEC inlet for power cable.
3. DC ground lift micro slide switch.
4. Right XLR balanced analog output.
5. Right RCA single-ended analog output.
6. Left RCA single-ended analog output.
7. Left XLR balanced analog output.
8. USB type B digital input.

Ground Lift

There is a micro slide switch that lifts and disconnects the DC ground from the AC, chassis, and Earth grounds. Our DACs are shipped with the DC ground lifted.

When facing the rear of the DAC you can lift the DC ground by sliding the switch to the left. To connect DC to AC, chassis, and Earth grounds slide the switch to the right.

We recommend lifting the DC ground unless there is some type of audible grounding related noise. From what our customers have reported, nearly all situations where there is an active ground-loop noise coming from our DACs, connecting the DC ground to the AC, chassis, and Earth grounds, will remove it.

Analog Outputs

The Mystique Y has two types of stereo analog outputs:

1. Single-ended RCA with 2.3V peak-to-peak output.
2. Balanced XLR with 4.6V peak-to-peak output.

Most people find single-ended amplification to have better time, timbre, and musical flow. Most people find balanced amplification to have more gestalt and intensity at the expense of musical flow. Most people find the same is true with our DACs.

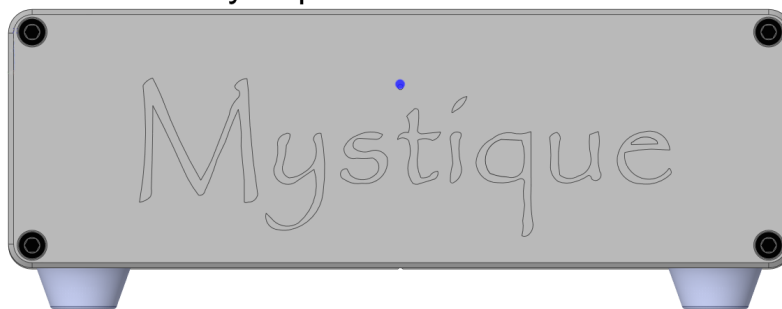
Many of our customers who have balanced inputs on their amps prefer the single-ended outputs from our Mystique Y DACs feeding the single-ended inputs on their amps.

We recommend comparing the balanced and single-ended outputs on our DACs on your amp in your system before deciding which to use. We do not recommend assuming which will sound better based on theory, statistical preferences, or the advice of other people.

Fuses and Protection Circuits

Instead of fuses our Mystique Y DACs have self-resetting solid-state Thermistors protecting the AC input. A Thermistor will perform better both sonically and in terms of protection than even the best audiophile fuse. When the Thermistors are conducting AC to the power transformer a blue LED will light on the face plate of the Mystique Y DAC.

Mystique Y Face Plate



If the core of the power transformer gets above a certain temperature, well below the temperature that could damage the power transformer, the Thermistors will open disconnecting all AC power. When the temperature of the power transformer's core drops back down again, the Thermistor will automatically reset, and continuity will be regained, allowing AC power to again flow through the power transformer.

If the Thermistor trips, the blue LED on the face plate will go out. Simply turn off the AC power switch and wait 20-30 minutes for the power transformer's core to cool, and the Thermistor will automatically reset. If it does not automatically reset contact Mojo Audio.

Breaking In

For optimal performance and longevity, we recommend leaving our DACs on 24/7.

Break in only occurs when the following conditions are met:

1. The DAC is plugged into AC power and turned on.
2. A compatible bit stream is playing through the USB input.
3. An analog output is loaded to your amp or to a passive load.

Without all three conditions met there is no current flowing and break in does not occur.

Though most of our customers have reported hearing the majority of audible break-in during the first 300 hours of play, many of our customers have reported hearing subtle audible improvements during the first 1,000 hours of break-in.

Even after the Mystique Y is fully broken in, if it is left powered down overnight, it could take several hours powered up before it will resume optimal sound.

And when the Mystique Y is subjected to any significant physical movement, such as being shipped, some additional break in time may be required to restore it to its former level of sonic performance.

For more information, please refer to our [Breaking in Cables and Components](#) blog.

During break in the only components that need to be “on” would be your digital source and DAC. You can break in your DAC silently with a passive load connected to either the single-ended or balanced analog outputs. If you are loading the Mystique Y’s outputs to your amp during break in we recommend turning your amp’s volume attenuator all the way down to provide the highest load which will result in the shortest break in time.

Warranties and Policies

All products manufactured by Mojo Audio come with a 45-day no-risk audition.

All products manufactured Mojo Audio come with a 90-day full-value upgrade option.

All new and demo products come with a transferrable 5-year warranty.

All factory reconditioned used products come with a transferrable 2-year warranty.

All products manufactured by Mojo Audio are eligible for trade in.

For more information, consult the [Terms of Sale](#) page on our website.

Quality of Recordings

Garbage in – garbage out.

There is a huge difference in the quality of recordings. Distortion, compression, background noise, brightness, hardness, and harshness can exist in the original master, can be added when creating a copy of the original master, or can be created during the digital remastering process.

Our non-oversampling, no error correction, direct-coupled, R-2R typology reveals what is on your recordings, good, bad, or otherwise. If the quality of the recording is not good, there is no way the Mystique Y can yield good sound.

Sadly, in order to hear more of the music on your best recordings, you will also hear more of the flaws in your worst recordings. Many of our customers have reported that their best recordings sound transcendent while their worst recordings sound unlistenable when played through our DACs.

These days you may have more than one option to choose from in terms of digital mastering or remastering on many popular recordings.

Though all audiophile recording companies pride themselves in the quality of their so-called original master recordings, not all audiophile recordings are created equal. Many of these so-called higher quality and/or higher resolution versions of popular recordings cost more and sound worse.

This is because during the digital remastering process often changes are made to the original master. Remasters, audiophile masters, and gold disks are often edited with pumped up bass or highs to make them sound more exciting. Though this may sound impressive at first, it often sounds quite fatiguing over time.

The good news is that different companies and different recording engineers are often known for providing either the most natural versions of popular recordings or fatiguing, edited, pumped up versions of these same popular recordings. You don't always have to purchase a remaster to hear the quality: you may be able to just read who did the remastering to get a good idea what sound quality you will be getting.

Despite all the hype about HD recordings, quite often the original Red Book CD mastering may be your most natural sounding option.

Because our Mystique Y will reveal more differences in the quality of recordings, you may find that your opinion may change on some recordings that you've known for years.