MYDAC II

DIGITAL-TO-ANALOG CONVERTER

OPERATING   MANUAL

Musical Surroundings

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1.0) INTRODUCTION

The MYDAC II's new technology recovers low-level musical, textural and spatial information for "analog-like" sound from all digital files including high resolution files up to 192KHz, Redbook CD, and even compressed digital music files such as MP3. Made in California, the MYDAC II has S/PDIF, USB and Toslink inputs, and is available in silver and black finish. The MYDAC II's power supply is internal and connects to the wall with the supplied wall mount transformer.

Mike Yee's patented digital reconstruction technology, MODR or Musically Optimized Digital Reconstruction, was developed over the past 3 years. It is software driven, executed with a FPGA or field-programmable gate array, and operates in both the digital and analog domain.

Design attributes of the MYDAC II are:
- 3 digital inputs:
  - S/PDIF for up to 24bit/192kHz files
  - Toslink for up to 24bit/96kHz files
  - USB for up to 16bit/48kHz files
- Front panel indicators of Sampling Rate in kHz
- Texas Instruments (TI) 16 bit and 24 bit DACs
- FPGA running patented MODR software
- Absolute Phase Switching
- TI (National Semiconductor) OPAMP based audio output stage

The Installation of the MYDAC II is quite simple and involves:
- a.) Connecting the various digital inputs with proper configuration settings (see section 2)
- b.) Connecting the power source (see section 3)
- c.) Connecting the Audio Outputs (see section 4)
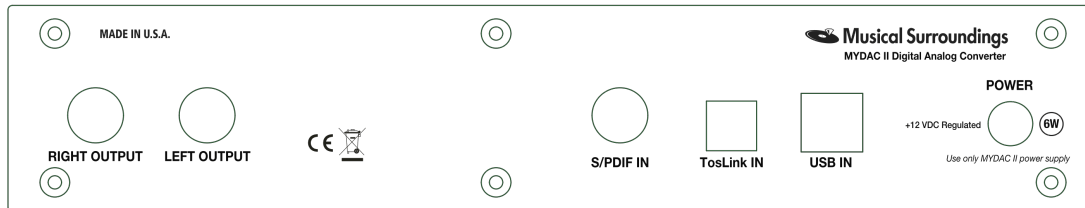- d.) Placing the unit (see section 5)

2.0) DIGITAL INPUT CONFIGURATION SETTINGS

The MYDAC II features 3 discrete digital inputs that can be connected simultaneously to multiple digital sources and selected via the front panel selector switches. The selected input and sampling rate of that input's digital fie will illuminate. Please note that the quality of the digital cables used can impact sound quality. Please consult with your audio dealer.

2.1) CD or DVD player using S/PDIF

Plug an RCA terminated digital cable between the RCA Digital Out of your CD or DVD player and the S/PDIF input of the MYDAC II. Select S/PDIF on the front panel. The Sampling Rate indicator on the front panel of the MYDAC II should illuminate at 44 kHz. If the front panel Sampling Indicator does not illuminate, check your connection and verify that your CD or DVD player requires its digital output to be switched on.

2.2) CD or DVD player using Toslink or "Optical" cable

Plug a Toslink digital cable between the Toslink Digital Out of your CD or DVD player and the Toslink input of the MYDAC II. Select Toslink on the front panel. The Sampling Rate indicator on the front panel of the MYDAC II should illuminate at 44 kHz. If the front panel Sampling Indicator does not illuminate, check your connection and verify that your CD or DVD player requires its digital output to be switched on.

2.3) Apple Computer using USB

Using a high-quality USB cable, connect the USB output of your MAC computer to the USB input of the MYDAC II. Your MAC should "see" the MYDAC II. Look in System Preferences for Sound and be sure the MYDAC II is selected as the device for sound output. See your computer's manual for more connection information.

2.4) Apple Computer using USB to S/PDIF converter

Use a high-quality USB to S/PDIF converter. Connect the USB to your MAC computer and the output of the converter to the S/PDIF input of the MYDAC II. Similar to the set-up in 2.3, your MAC should "see" the USB-S/PDIF converter (but not the MYDAC II) in System Preferences for Sound as the output device. Be sure the S/PDIF adapter is selected as the device for sound output. See your computer's manual or the device's manual for more connection information.

2.5) Apple Computer or Device using a Toslink cable

Many Apple computers, iPads, iPods, and Airport Express units have the ability to output digital audio via their headphone jack as an optical connecter to the MYDAC II. One can use either a special connector known as a 3.5mm "mini adapter" with a standard Toslink cable, or a specially made 3.5mm "mini" to standard Toslink digital cable. Connect this 3.5mm "mini" optical cable to the headphone jack of the Apple device and the
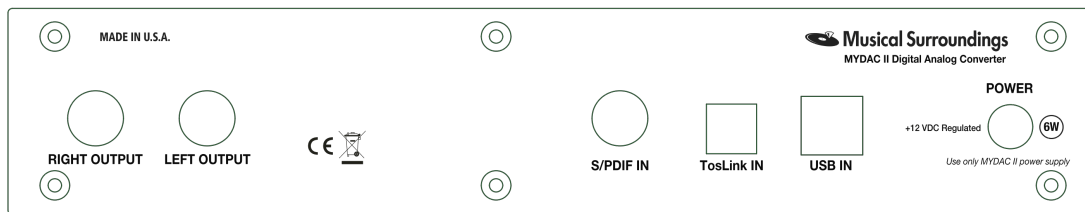
Toslink input of the MYDAC II. See each device's instruction manual for more connection information.

2.6) Windows Computer via USB, S/PDIF, or Toslink

Windows computer users should refer to the instructions for their computer and/or sound card, as well as music library software setup to interface with the MYDAC II. See the above connection notes for specific connector access via the MYDAC II.

3.0) POWER SUPPLY

The MYDAC II wall-mount transformer connects to the power jack on the rear of the unit and a wall outlet or power strip.

4.0) AUDIO OUTPUTS

Please make sure that the volume control on your receiver, integrated amp, or pre-amp is turned completely down before plugging in the audio connections. Using a high-quality stereo RCA to RCA interconnect cable, connect the outputs of your MYDAC II to a line-level input of your receiver, integrated amplifier, pre-amp, or headphone amplifier, noting proper left and right channels.

5.0) AUDIO CHASSIS PLACEMENT

The MYDAC II may be placed on a separate shelf in your audio rack, or on top of another source or line-level component. Please make sure that ventilation to the unit is not restricted, and the unit is away from magnetic fields or noise from other components' motors, transformers or displays.

6.0) USING YOUR MYDAC II

If you have followed the above instructions, your MYDAC II is ready to play music. Chose your favorite track, select the correct input on your receiver, integrated amp or pre-amp, and slowly bring up the volume level. Then sit back and enjoy the music.

6.1) Absolute Phase Switching

To invert absolute phase, hold the selected input button for 3 seconds, the indicator LED will go dark, indicating that the audio signal is now reverse phase. To return to non-inverted absolute phase, hold the appropriate input selector for 1 second. NOTE: You must be in non-inverted absolute phase to select another input.

7.0) SPECIFICATIONS

- 3 digital inputs:
  S/PDIF for up to 24bit/192KHz files
  Toslink for up to 24bit/96KHz files
  USB for up to 16bit/48KHz files
- Frequency Response: 20Hz to 20KHz
- Output Voltage: 4 volts
- Output Impedance: 100 Ohms
- Distortion: .02%
- Dimensions: 9 7/8" x 9 7/8" x 2"
- Weight: 3.4lbs

8.0) WARRANTY INFORMATION

The MYDAC II comes with a 1-year warranty against Manufacturing Defects, extendable for 3 years. Fill out the warranty card enclosed and return it to us within 30 days of purchase with a copy of your sales receipt to extend your warranty to the full 3 years. The unit is now fully warranted against failure for three years after purchase. Only the original owner receives the warranty, it is non-transferrable. Damage due to improper use, modifications or acts of nature are not covered under this warranty. This warranty covers parts and labor only. We do not assume any liability for any damage to any other component in the system due to a failure in the MYDAC II.

If you believe your MYDAC II is malfunctioning, please contact the dealer where you purchased the unit or contact:

Musical Surroundings
5662 Shattuck Ave.
Oakland, CA USA 94609
Telephone: (510) 547-5006 (x-101)
Fax: (510) 547-5009
Email: service@musicalsurroundings.com

If the unit requires to be returned for repair, contact Musical Surroundings and you will be issued you a Return Authorization (RA) number to send the unit (packed in its original box) back to Musical Surroundings.