ELYSE Tube DACOwner's Manual



Manufactured by ModWright Instruments, Inc. 21919 399th St., Amboy, WA 98601 USA

www.modwright.com

CAUTIONS:

Do not operate or power up unit without ALL tubes installed in tube sockets. Failure to do so will result in damage to tubes.

WARNING: DO NOT POWER UNIT ON UNTIL LID IS ENTIRELY FASTENED. VERY HIGH VOLTAGES ARE PRESENT INSIDE UNIT DURING OPERATION. IT IS CRITICAL THAT PREAMP ENCLOSURE NOT BE OPEN WHEN UNIT IS POWERED ON. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

WHEN CHANGING TUBES, POWER UNIT OFF AND DISCONNECT FROM ALL POWER SOURCES. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

Introduction:

Thank you for purchasing a ModWright Instruments product. This unit is designed to offer high performance and exceptional reliability.

The ELYSE Tube DAC offers high bandwidth, low noise and distortion, and exceptional musicality. We have designed this DAC to allow the reproduction of all digital recordings in a way that is accurate, transparent and musical.

The ELYSE DAC has a direct-transformer coupled, all tube analog stage with zero coupling caps in the signal path. This gives the analog signal the greatest fidelity and most natural and resolving presentation.

The ELYSE DAC digital processing includes both data and clock buffering via a unique digital algorithm. The result is vanishingly low jitter levels and the greatest detail for all formats, from 16/44.1 Redbook recordings, to 24/192 hi-rez streaming.

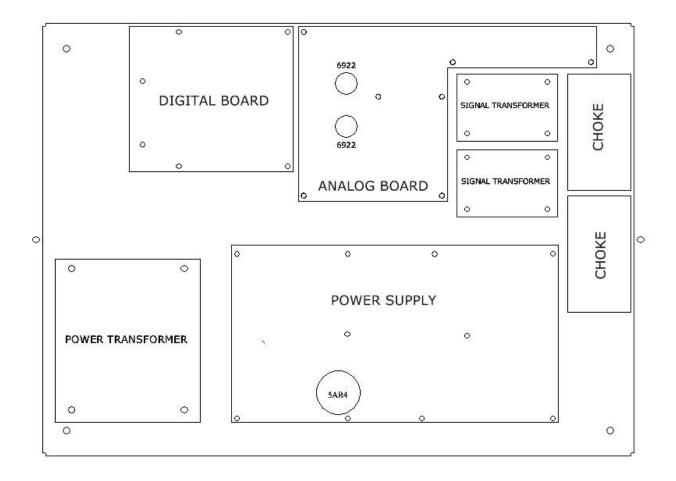
The ELYSE DAC was designed purposely with a tube rectified and solid-state regulated power supply. Different types of rectifier tubes may be used in the ELYSE DAC, safely, and allow for different tonality and presentation, to suit the taste of the listener.

Setup:

It is always recommended to remove all tubes before shipping the unit. Be sure that the ELYSE DAC is NOT connected to AC power and that the power plug is disconnected from the unit and wall outlet. Use supplied 5/64" hex driver to remove four lid screws in top panel and install (2) 6922 signal tubes in 9-pin ceramic tube sockets and the supplied 5AR4 rectifier tube in the ceramic 'octal' tube socket. Align tube pins with socket and gently but firmly press the tubes down into socket until seated.

After all tubes are installed, replace lid and secure with four screws. Only after this, should the ELYSE DAC power cord be connected.

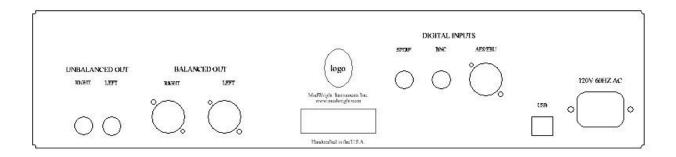
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Operating voltage is indicated on the back panel of the ELYSE DAC. The PS 150 uses a single SLO-BLO fuse, 5mmx20mm in size. For 120V operation, the fuse should be rated for 1.5A. For 240V operation, the fuse should be rated for .75A.

Signal cables must be connected for input and outputs. You may connect SPDIF (RCA), SPDIF (BNC), AES/EBU (XLR) and USB cables into the digital inputs on the rear of the ELYSE DAC.

Analog outputs may be RCA or XLR, but not both at the same time. The analog stage is transformer output coupled and will only operate in balanced (XLR) OR single-ended (RCA) mode.



Power Up:

You are ready to power the unit up if the following has been done:

- 1) Tubes are installed in the ELYSE DAC and cover secured in place.
- 2) AC power has been plugged into IEC power inlet, of appropriate AC mains voltage as indicated on back of ELYSE DAC.
- 3) Digital input cables are connected.
- 4) RCA or XLR signal cables are connected from main outs of ELYSE DAC to preamp.
- 5) Be sure that only RCA OR XLR analog cables are connected, not both at the same time.

Depress the power button on front face of unit, to power up the ELYSE DAC. When first powered on, a blue LED above the power switch will blink and blue led above mute switch will be lit. The unit will remain in mute for approximately 15-seconds, allowing for tubes to stabilize and gently reach operating voltage. When unit is operational, mute LED may remain lit, until a digital input with valid signal is selected. On invalid signal from selected digital input, unit will automatically mute the analog outputs.

Operation:

Once the ELYSE DAC is powered up, you must first select your digital input. There are four buttons with which to select USB, RCA, BNC or AES (AES/EBU) digital inputs. The DAC will remain in 'MUTE' until a digital input is selected that has a valid digital signal present.

There are six LEDs, indicating different data sample rates: 44.1Khz, 48.0Khz, 96.0Khz, 176.4Khz, 192Khz and 384Khz. The DAC is only capable of 24/192 operation, but there will be future DSD upgrades available and for this reason, the higher sample rate of 384Khz is present.

If you are using a conventional CD or DVD or Universal Player transport, connect to RCA, BNC or XLR (AES/EBU).

If you are streaming from PC or MAC, then connect USB cable from computer to USB input on rear panel of DAC. Before using with a computer, you must install USB drivers (CD provided).

PH button allows for inverting absolute phase. Some recordings are recorded out of phase and may sound better in phase-inverted mode. This will have to be determined by the listener and based on each recording.

DISP buttons allows for front LEDs (except for MWI logo) to be turned off.



Ground:

You should **ALWAYS** use a grounded AC cord with this product. The chassis is always connected to earth ground if unit is fitted with proper grounded AC power cord.

If you find that the DAC is having trouble locking onto digital signal or there is excessive noise, then verify that AC power cable is grounded and plugged into a properly grounded AC mains outlet.

Technical Specifications:

• Output: 2Vrms.

• Valid Digital sample rates: 16/44.1, 24/48, 24/88.2, 24/176.4, 24/196.

• Weight: 23 lbs.

• Dimensions: 17"W x 13"D x 4.5"H.

Basic Specifications:

- (1) SPDIF (RCA) digital input.
- (1) SPDIF (BND) digital input.
- (1) ASES/EBU (XLR) digital input.
- (1) USB digital input (up to 24/192 fully asynchronous).
- (1) Pair XLR analog outputs (fully balanced).
- (1) Pair RCA analog outs.

Vacuum Tubes:

- (2) 6922 signal tubes may substitute ANY 6922/6DJ8/7308 compatible tubes.
- (1) 5AR4 rectifier tube may substitute 5U4G, 5U4GB, 5V4G, 5V4GB, 5R4GYS, 217, GZ34.

Warranty:

ModWright agrees to warranty product for a period of 5 years from the date of purchase from a factory authorized ModWright Instruments Dealer.

Warranty covers parts and labor for repairs due to equipment failure not related to customer abuse and/or neglect. Customer is responsible for shipping costs to and from ModWright Instruments or authorized service center.

Warranty is non-transferable to second party.

Contact Information:

If you have any questions about ModWright Instruments products or ModWright modifications or products, please do not hesitate to contact us via phone, e-mail or conventional mail.

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Thank you for purchasing a ModWright Instruments product.

Dan Wright, President, Owner ModWright Instruments, Inc.