

VPI ADS

Manual



Setup and Instruction Manual



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<http://www.vpiindustries.com>

ADS Design and Functionality

DESIGN OVERVIEW

The ADS design includes two pure analog frequency generators featuring low distortion and noise; a high current Class-A/B amplifier that is transformer-coupled to the turntable output; analog control logic for low noise operation; 33/45 RPM analog speed adjustment controls with center detent positions that are factory calibrated for 60/81Hz; analog logic controlled run/stop switching with the output RMS voltage @ 120VAC on startup, followed by a step down to 90VAC after an 8-second delay for quick starting of heavy platters.

THE ADS: OPERATION

Operation

The ADS is intended to remain powered on during listening sessions, allowing the analog oscillators to remain warmed up for lowest distortion. There is a separate run/stop switch to control the motor operation, which is used to control the starting and stopping of the motor.

To operate the ADS apply power using the front panel power switch, power on is indicated by the illuminated blue bar included in the switch. Next turn on power switch on the motor and leave in the on position. The turntable is now started and stopped using the run stop switch in the middle of the ADS faceplate. Speed is chosen using the 33/45 RPM switch.

When the run/stop switch is momentarily depressed the AC power is applied to the motor. The initial power applied is 120VAC, after 8 seconds the voltage level drops to 90VAC which is the run voltage. When 45 RPM is chosen and the start switch is momentarily pushed the platter starts up as just described at 33 RPM and after 6 seconds switches to 45 RPM which then lowers the output to the motor to the 90VAC run level. This sequence allows the ADS to quickly start heavier platters to 45 RPM.

The ADS utilizes separate 60 Hz and 81 Hz oscillators to eliminate unnecessary switching circuitry in the oscillator circuits for long term speed stability and low oscillator distortion. LEDs indicate the Run/Stop condition and chosen speed. Speed adjustment controls provide a center detent position that is factory calibrated to 60 and 81Hz +/- .02 Hz in their center detented position. The controls also provide fine speed adjustment of approximately 3 Hz through continuously variable linear adjustment controls.

Speed Control and adjustment

The front panel contains a two-position pushbutton switch for selecting either 33 RPM or 45 RPM operation. Pressing the switch either latches it in or releases the switch to its outward position for 33 RPM operation. There are separate speed adjustment controls for 33 and 45 RPM. The controls have a detented center position that is factory calibrated for 60 Hz (33 RPM) and 81 Hz (45 RPM). The speed is also continuously adjustable +/- 3 Hz for fine tuning of the platter speed using a stroboscopic disk and 60 HZ light source. Blue LED indicators adjacent to the controls indicate which speed is set at a glance.

Motor Stop and Run

The platter is started and stopped by the front panel Run/Stop momentary pushbutton switch. There is an LED indicator the glows red when stopped and green when the platter is turning.

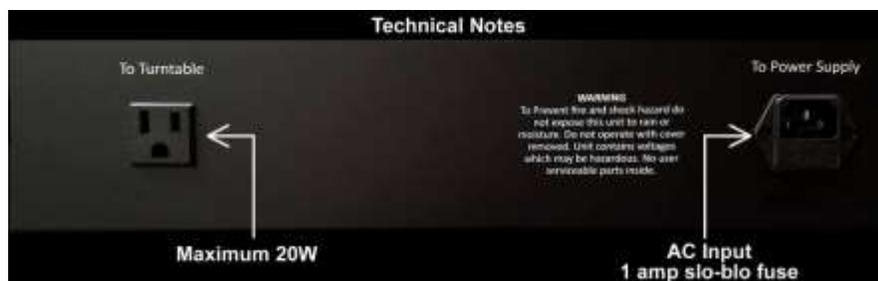
System power

There is an IEC power module on the rear panel to supply AC power to the ADS. The IEC module contains a fuse drawer that holds a 1-amp slow blow fuse protecting the ADS from electrical system malfunctions.

AC power to the ADS is controlled by the power switch located on the left-hand side of the front panel. When the ADS is powered up, the indicator in the switch glows blue indicating the internal power supplies are functioning properly.

Output to Turntable

The 125 VAC max output to the motor is supplied by the identified AC receptacle on the rear panel. The receptacle output provides a maximum 15 watts. Higher wattage loads will seriously damage the ADS.



SPECIFICATIONS:

Line Voltage: 115/230 VAC Factory set

Line Frequency: 50/60Hz

Line Fuse: 1 amp (Slo-Blo)

Output voltage: 115/230 VAC Factory set

Start Voltage: 120/240 VAC

Run Voltage: 90/180 VAC

Output Frequency: 50Hz/60Hz Factory Set

Output Frequency Range:

60 Hz Center Detent: 60Hz @33 RPM & 81Hz@ 45 RPM

50 Hz Center Detent: 50Hz @33 RPM & 68Hz@ 45 RPM

Control Range +/- 3Hz

Output Power: 15W

Dimensions: 16" X 4" X 12" (W X H X D)

Weight: 10lbs

Specifications subject to change without notice.

VPI INDUSTRIES- LIMITED WARRANTY

VPI Industries, Inc. (VPI) warrants the ADS against defects in materials and/or workmanship for one (1) year from the date of purchase by the original retail purchaser. VPI's sole obligation under this warranty is limited to the repair or replacement, at VPI's option, of any part(s) found to be defective.

VPI's obligation to repair or replace defective parts is the purchaser's sole and exclusive remedy, and VPI shall not be liable for any direct or indirect injury and/or property damage arising out of the use of the product or defect in or failure of the product.

This warranty does not extend to any unit whose serial number has been defaced or altered, or any product that VPI determines contains a defect or malfunction due to incorrect installation, modification, or misuse. Therefore, any evidence of overheating such as melted or charred parts will be taken as evidence of misuse, or servicing by the purchaser, or service technician not authorized by VPI to perform such service. It does not cover trivial or cosmetic defects that do not impair the unit's normal function.

VPI reserves the right to make changes in this product without assuming any obligation to install such change in any product previously manufactured without charge.

This warranty to repair or replace defective parts is in lieu of all other express or implied warranties of merchantability or fitness for a particular purpose. There are no warranties that extend beyond the description herein.

Some states do not allow exclusion of implied warranties or limitation of incidental or consequential damages, so the above exclusion or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Register your Product Online:

<http://vpiindustries.com/warranty/>



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