

ART - PS8 PRO Professional Power Sequencer

OPERATION MANUAL



INTRODUCTION

The PS8 PRO provides controlled power sequencing to 8 rear AC outlets. Each output is delayed by a fixed amount that is determined by the front panel Sequence Delay control. This allows you to control the power up and down sequence in a system to minimize turn-on transients and the damage that they may cause. Sequencing power on also smooths out inrush currents. Remote switching is also provided for via a rear mounted Remote connector, handy when you want to keep noisy or hot equipment in one room and control power remotely.

The PS8 PRO is also a full-featured power conditioner with Advanced Power Filtering, fast acting breaker, EMI and RFI filtering, as well as surge and spike protection to protect your system. Additionally, a front panel LCD display gives you a constant read of AC line voltage and load current as well as a built in system clock. The PS8 PRO is designed to sequence and protect a wide range of equipment from sensitive tube preamps to powered speakers, large displays, or digital systems. Your equipment will sound and work better and live longer.

- Adjustable sequence delay range from 0.5 to 2.0 seconds per output step
- 8 individually sequenced outputs with front panel LED indicators for each
- Rear mount remote control terminal block for remote sequence control
- LCD display of AC line voltage, total load current, time (clock)
- Front panel unswitched and unregulated output
- 1800 Watt total power capacity
- Front panel master breaker and power switch
- EMI and RFI filtering
- Surge and Spike Protection
- 1.75" (165mm) high x 19.0" (482mm) wide x 11.5" (292mm) deep
- 9.7 lbs. (4.4kg)

OPERATION

POWER SWITCH

The PS8 PRO has a master POWER switch for the rear outlets. This switch glows when the unit is enabled. If the rear REMOTE is not being used, turning on this switch initiates a power on sequence for the rear outlets. Turning off the switch initiates a power off sequence and the rear outlets are then sequenced off.

CH1-CH8 LED INDICATORS

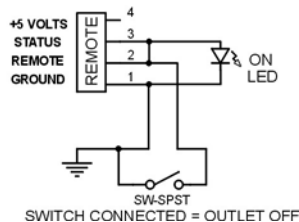
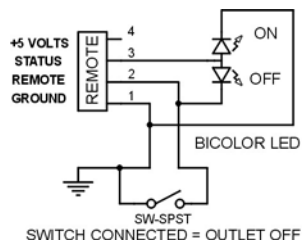
The CH1-CH8 LED indicators, on the front panel, indicate the current power (on/off) status. If power is available at a rear outlet then it's corresponding front panel indicator will be lit.

SEQUENCE DELAY

The front panel sequence delay control allows you to set the delay time between activation of each outlet. Its range is from 0.5 to 2.0 seconds. If set to 2.0 seconds, for example, there will be a 2 second delay between each outlet turning on or off in the sequence (16 seconds total delay from initial power on to CH8 power on). This gives you a wide range of control when setting the application of power to your system, thereby minimizing any unwanted effects.

REMOTE SWITCHING

The rear panel REMOTE connection block allows for external control of the power on and off sequence. If there are no connections to this block then the PS8 functions normally with all sequencing initiated by the front panel power switch. Connecting the REMOTE and GROUND terminals together at this block initiates a power off sequence and all rear outlets are held in the OFF position. Once this connection is removed the PS8 PRO will sequence the rear outlets back on as long as the front panel power switch on. This allows you to run a simple 2-wire low voltage (+5Volt) connection to a remote switch or relay to remotely control the system. Useful for fixed install, conferencing, multimedia systems, recording studio/control rooms, and central control of equipment on stage in a live venue. A status indicator terminal, with internal 1K-Ohm resistor connected to +5Volts, allows for direct powering of a remote indicator LED (if required). A +5 Volt terminal is also provided to power an external relay or other control circuitry (if required). The following diagrams give just 2 examples of how you would connect.



LCD

The LCD display on the front panel indicates current AC line voltage and the total load current that the PS8 PRO is supplying. It also indicates time of day (in 24 hour format) as set by the hour and minute switches. The clock draws power from an internal battery whenever power is not available.

MAXIMUM LOAD

The eight circuit breaker protected outlets are rated at 15 amps total, which is equivalent to 1800 watts at 120 volts. If the total load on the PS8 PRO exceeds 15 amps, the circuit breaker on the front panel will trip, cutting off power to all outlets. If this happens, reduce the overall load by unplugging one or more units from the PS8, then push the circuit breaker button in to reset it.

ADVANCED POWER FILTERING

The PS8 PRO has specialized internal circuitry to filter out digital and dimmer hash as well as any high frequency noise that is above the audio range.

By using both Common Mode and Differential Mode topologies in series for the filter design we are able to block virtually all of the unwanted noise that is between the AC line and ground, and also the two sides of the AC line. This has the additional benefit of reducing ground loop problems in your system.

High frequency noise currents in particular are highly attenuated in both directions so that any line noise that could be generated by one of your components is not allowed to get back into your main AC wiring, so if you use a PS8 PRO in your setup, you can distribute and isolate the noisy components from the sensitive components in your system. Additionally, any signals above 10kHz are filtered from the line with typically 40dB of attenuation above 100kHz.

The PS8 PRO also protects your delicate electronic equipment with high voltage varistor (MOV) surge and transient suppressors. The fast-acting suppression circuit responds in less than a nanosecond, clamping transient voltages to safe levels.

WARNINGS

All operating instructions should be read before using this equipment.

To prevent the risk of electrical shock, do not remove the cover or the back.

There are no user-serviceable parts inside. Please refer servicing to a qualified service technician.

Do not expose this unit to rain or moisture or to heat sources such as radiators, stoves, or other items that generate excessive heat.

This unit should be cleaned only with a damp cloth. Do not get moisture inside the unit.

When moving this equipment, it should be placed in its original carton and packing, to reduce the risk of damage in transit.

WARRANTY INFORMATION

Limited Warranty

Applied Research and Technology will provide warranty and service for this unit in accordance with the following warrants:

Applied Research and Technology, (A R T) warrants to the original purchaser that this product and the components thereof will be free from defects in workmanship and materials for a period of **three years** from the date of purchase. Applied Research and Technology will, without charge, repair or replace, at its option, defective product or component parts upon prepaid delivery to the factory service department or authorized service center, accompanied by proof of purchase date in the form of a valid sales receipt.

Exclusions:

This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. This warranty is void if the serial number is altered, defaced, or removed.

A R T reserves the right to make changes in design or make additions to or improvements upon this product without any obligation to install the same on products previously manufactured.

A R T shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights and you may have other rights, which vary, from state to state.

For units purchased outside the United States, an authorized distributor of Applied Research and Technology will provide service.

SERVICE

The following information is provided in the unlikely event that your unit requires service.

- 1) Be sure that the unit is the cause of the problem. Check to make sure the unit has power, all cables are connected correctly, and the cables themselves are in working condition. You may want to consult with your dealer for assistance in troubleshooting or testing your particular configuration.
- 2) If you believe the ART unit is at fault, go to www.artproaudio.com. You may contact Customer Service for more assistance, or directly request a Return Authorization for service in the "resources" area of the website.
- 3) If you are returning the unit for service, pack the unit in its original carton or a reasonable substitute. The original packaging may not be suitable as a shipping carton, so consider putting the packaged unit in another box for shipping. Print the RA number clearly on the outside of the shipping box.
- 4) Include, with your unit, a note with the RA number and your contact information including a daytime phone number, preferably attached to the top of the unit.