

FURMAN
PURIFY YOUR POWER

The **PST-10D**



Owners Manual

Introduction

Thank you for purchasing the Furman Power Station-10D Power Conditioner. For over 30 years, Furman has pioneered the development of AC power products for the most demanding audio, video, and broadcast professionals. Furman's Series Mode Protection Plus (SMP+), Linear Filtering Technology, and Digital-HD Television Ready circuitry delivers the purest AC power and the most comprehensive protection available – going far beyond what is found in both traditional and multi-stage-filter AC power strips.

Today's power grid typically experiences numerous electrical surges and spikes on a daily basis. At best, these irregularities can degrade your equipment's performance; at worst, they can severely damage individual components or your entire system. Not so with Furman. With our exclusive Maintenance-Free SMP+ circuitry and automatic over-voltage shutdown, the Power Station-10D assures years of trouble free service with no damaged components, no service calls, and no down time.

Safety Information

To obtain best results from your Furman Power Station 10D Power Conditioner, please be sure to read this manual carefully before using.

Warning

To reduce the risk of electrical shock, do not expose this equipment to rain or moisture. Dangerous high voltages are present inside the

enclosure. Do not remove the covers. There are no user serviceable parts inside. Refer servicing to qualified personnel only.

Important Safety Instructions

1. Please read and observe all safety and operating instructions before installing your Power Station-10D (PST-10D). Retain these instructions for future reference.
2. Your PST-10D should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, etc.
3. Do not place your PST-10D near heat sources such as radiators, heat registers, stoves or other appliances that produce heat.
4. The PST-10D should only be connected to a 120 VAC, 60Hz, 15 amp grounded electrical outlet. Do not defeat the ground or change polarization of the power plug.
5. Route the power cord and other cables so that they are not likely to be walked on, tripped over, or stressed. Pay particular attention to the condition of the cords and cables at the plugs, and the point where they exit your PST-10D. To prevent risk of fire or injury, damaged cords and cables should be replaced immediately.
6. Clean your PST-10D with a damp cloth only. Do not use solvents or abrasive cleaners. Never pour liquid on or into the unit.

7. Your PST-10D should be serviced by qualified service personnel when:
- The power supply cord or the plug has been frayed, kinked, or cut.
 - Objects have fallen or liquid has spilled into the unit.
 - The unit has been exposed to rain or other moisture.
 - The unit does not appear to operate normally, exhibits a marked change in performance, or the *Protection OK* indicator is not lit.
 - The unit has been dropped, or the enclosure damaged.
8. Your PST-10D requires that a safety ground be present for proper operation. Any attempt to operate the unit without a safety ground is considered improper operation and could invalidate the warranty.

Operation –

AC, Telephone, and Coaxial Connectors

Digital – Video Outlets:

All (10) AC outlets feature Furman's exclusive Linear Filtering Technology, and will noticeably improve audio and video performance by dramatically lowering incoming AC noise.

However, many video and digital processing components can actually induce noise into adjacent circuits since all of the system's components are joined at the power strip's AC outlets. The PST-10D employs additional ultra-sonic filtering for both digital and video components. This additional filtering assures peak system performance by preventing AC noise or *back-wash* from cross-

contaminating an adjacent unit. For example, a television plugged into the digital – video filtered outlets will not affect an audio receiver-controller connected to one of the PST-10D's standard or delayed outlets.

Delayed AC Outlets – Trigger Switch and 12VDC inlet:

The PST-10D features (3) delayed AC outlets. Today's Home Theater and Home Recording- Studio components rarely require delayed soft-start from an external AC outlet because their circuits feature soft-start turn-on. Delayed turn-on prevents annoying loudspeaker "pops" as well as preventing circuit breaker nuisance tripping. Since some amplifiers, powered loudspeakers and powered sub-woofers do not have this feature internally, they will require the PST-10D's delayed turn-on circuit. Simply plug power amplifiers and subwoofers into the delayed outlets. This will create about a two second delay before these outlets are energized.

The mini switch should be in the *trigger bypass* position for **normal operation**. If the mini switch is in the *trigger input* position, these outlets will not energize.

If an external 12V sequencer or a receiver with a 12V sens circuit is used, simply connect the sens circuits mini phone jack to the 12V input, and change the mini switch setting to *trigger input*. The other (7) AC outlets will still be controlled by the PST-10D's main AC switch, but the (3) delayed AC outlets will be energized and turned off by your remote 12V sens circuit. 12 volts (+/- 2V) must be present for the delayed outlets to energize from a remote sens trigger.

Telco – Satellite – Cable Transient Voltage Surge Suppressors:

The PST-10D features transient voltage surge suppression for both standard telephone lines, as well as cable and satellite lines utilizing standard coaxial connectors. As these surge suppressors are *in-line*, they will require an additional cable to connect from their output to the control device requiring protection.

All in-line surge suppressors feature our exclusive ground contamination free technology. This aids in eliminating audio buzzing, and the video hum-bars that can result from typical in-line suppressors. Further, our cable and satellite suppressors are TIVO friendly as well as HD-Digital Television ready. Both DC carrier signals as well as high bandwidth signals can pass through our circuit. In fact the bandwidth is less than 0.1dB loss at 1GHz!

To connect your cabling to these in-line protectors, simply follow the *in* and *out* indications marked next to the Telco, Cable and Satellite connectors.

Note: *It is not possible to make an in-line cable or satellite protector “maintenance-free” as we have accomplished with the 120 VAC line. This would necessitate limited signal bandwidth that would not allow the signal to pass. Under extreme conditions, it is possible that the surge suppression in one of these devices could sacrifice itself after a catastrophic event. If the telephone, cable or satellite signal will no longer pass through our protector, please send your Power Station to Furman for servicing. To test this, simply disconnect the incoming*

and out going cable from the PST-10D. Connect the incoming connector to the component that formerly received the out going connector, thus by-passing the in-line protection. If the signal is present (but not when used with the PST-10D's) then the protection circuit is damaged (assuming it worked properly before the storm or catastrophic event).

Circuit Breaker

If the PST10D is connected to an AC outlet where sufficient voltage is present, the unit should operate properly with the protection OK indicator lit, after the main power switch is turned to the on position. If the unit still does not function under these conditions, check the circuit breaker button! It is the round black button adjacent to the incoming AC cord. If the circuit breaker trips immediately, there may be too great of a current load placed upon it. Simply disconnect one product at a time until this no longer happens. If the breaker trips with no components connected, there may be a wiring defect that requires Furman service.

Indicators

Extreme Voltage Shutdown Indicator

Furman's SMP+ circuit senses sustained voltages that are high enough to cause damage to your components, and shuts the power down before damage can occur. Such conditions can include accidental connection to a 240VAC source (where 120VAC is expected), or an open neutral from a 208 or 240VAC source.

The Extreme Voltage Shutdown LED is normally off. If an input

voltage in excess of 137VAC is sensed, either on initial power-up or during normal operation, the PST-10D will shut off power and this indicator will light.

NOTE: *If the mains power is above the high cutoff voltage and has caused the unit to remove power from its outlets, it can not restore power without the operator manually turning the unit off, then on again. Avoid turning the unit back on without first checking the source of the problem and perhaps changing the AC source.*

Protection OK Indicator

Although the Furman SMP+ circuit assures virtually maintenance-free protection from transient voltage spikes and surges, nature has a way of occasionally creating electrical forces that are beyond the capabilities of any transient voltage surge suppressor device to absorb without some degree of damage. In the *rare* instance that this occurs, the blue "Protection OK" LED indicator will turn off. If this happens, some level of protection from voltage surges will remain, but Furman's clamping voltage rating will be compromised. The unit must be returned to Furman Sound or an authorized Furman Service center for repair.

Mounting

If the Power Station needs to be mounted to the inside panel of a rack or hung from a wall, a convenient crossed oval cutout is provided on the unit's bottom panel. A standard No. 6 pan head screw can be used in the same way a picture is hung from a wall. Simply measure the centers on the bottom of your Power Station. This will be the

distance from the two mounting hole drilled into your wall, rack or cabinet surface. Once the screw is fastened flush with the surface, back it out approximately 1/2". The screw head should push through the crossed cutout on the bottom surface of the Power Station. Next, simply allow the Power Station to move down and seat into the end of its oval cut-out. Adjust the pan head screw if necessary.

Warranty

To Register for the following warranty please visit Furman's website at www.furmansound.com and click on the "warranty" page, or call Furman at (707) 763-1010.

Furman Sound, Inc. warrants to the original purchaser of this product, the Furman PST-10D, that the product will be free from defects in material and workmanship for a period of three years from the date of purchase. The purchaser of the product is allowed fifteen days from the date of purchase to complete warranty registration by mail or on-line at the Furman website. If the purchaser fails to complete the aforementioned registration, the warranty period will be reduced to one year from the date of purchase.

If the product does not conform to this Limited Warranty during the warranty period (as herein above specified), purchaser shall notify Furman in writing of the claimed defects. If the defects are of such type and nature as to be covered by this warranty, Furman shall authorize the purchaser to return the product to the Furman factory or to an authorized Furman repair location. Warranty claims should be accompanied by a copy of the original purchase invoice showing the purchase date; this is not necessary if the Warranty Registration was completed either by mailing in the completed warranty card or by registering on-line at the Furman website. Shipping charges to the Furman factory or to an authorized repair location must be prepaid by the purchaser of the product. Furman shall, at its own expense, furnish a replacement product or, at Furman's option, repair the defective product.

Return shipping charges back to purchaser will be paid by Furman.

CONNECTED EQUIPMENT WARRANTY: Furman Sound's Connected Equipment Warranty covers equipment that is damaged by transient voltage (an "Occurrence") while properly connected through the Furman PST-10D to a properly wired AC power line with a protective ground in an indoor location. Furman's Connected Equipment Warranty is limited to the amount of the deductible on the Purchaser's personal property insurance policy up to \$500.00. In order to make a claim for this Connected Equipment Warranty, the Purchaser must forward a copy of his/her personal property insurance claim for the damaged equipment to Furman and complete the Furman Connected Equipment Warranty claim form (call Furman at (707) 763-1010 to obtain the form). Furman reserves the right to review the damaged Furman product, the damaged connected equipment, and the site where the damage occurred. All cost of shipping damaged equipment to Furman for inspection shall be borne solely by the Purchaser. Damaged equipment must remain available for inspection until the claim is finalized. The Connected Equipment Warranty is also in effect for a period of three years unless the Purchaser does not complete the warranty registration within fifteen days from date of purchase, at which time, the Connected Equipment Warranty period is also reduced to one year from the date of purchase.

All warranties contained herein are null and void if: the Furman Surge Protector in use during the occurrence is not provided to Furman for inspection upon Furman's request at the sole expense of the Purchaser, Furman determines that the Furman Surge Protector has been opened, improperly installed, altered in any way or tampered with, Furman determines that the damage did not result from the Occurrence or that no Occurrence in fact took place or Furman determines that the connected equipment was not used under normal operating conditions or in accordance with Manufacturer's instructions for the connected equipment. All Furman Surge Protectors must be plugged directly into a properly wired AC power line with a protective ground and must not be "daisy-chained" together in serial fashion with other power strips, UPS's, other surge protectors, three-to-two-

prong adapters, or extension cords. Any such installation voids this warranty. The Furman warranty only protects against damage to properly connected equipment where Furman has determined, at its sole discretion, that the damage resulted from an Occurrence and does not protect against acts of God (other than lightning) such as flood, earthquake, war, terrorism, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, damage due to low-voltage disturbances (i.e. brownouts or sags), non-authorized program, or system equipment modification or alteration. Do not use this product in anyway with a generator, heater, sump pump, water-related device, life support device, medical device, automobile, motorcycle, or golf-cart battery charger. To be used indoors only and in dry areas. All warranties contained herein are null and void if used in anyway with any of the aforementioned devices.

THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Furman does not warrant against damages or defects arising out of improper or abnormal use or handling of the product; against defects or damages arising from improper installation, against defects in products or components not manufactured by Furman, or against damages resulting from such non-Furman made products or components. This warranty shall be cancelable by Furman at its sole discretion if the product is modified in any way without written authorization from Furman. This warranty also does not apply to products upon which repairs have been affected or attempted by persons other than pursuant to written authorization by Furman.

THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of Furman shall be to repair or replace the defective product in the manner and for the period provided above. Furman shall not have any other obligation with respect to this product or any part thereof, whether based on contract, tort, strict liability, or otherwise. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Furman be liable for incidental, special, or consequential damages. Furman's employees or representatives' ORAL OR OTHER WRITTEN

STATEMENTS DO NOT CONSTITUTE WARRANTIES, shall not be relied upon by purchaser, and are not a part of the contract for sale or this limited warranty. This Limited Warranty states the entire obligation of Furman with respect to the product. If any part of this Limited Warranty is determined to be void or illegal, the remainder shall remain in full force and effect.

Warranty claims should be accompanied by a copy of the original purchase invoice showing the date of purchase (if a Warranty Registration Card was mailed in at the time of purchase or if the product was registered on-line, this is not necessary). Before returning any equipment for repair, please be sure it is adequately packed and cushioned against damage in shipment, and that it is insured.

Service

All equipment being returned for repair must have a Return Authorization (R/A) Number. To get an R/A number, please call the Furman Service Department at (707) 763-1010 ext 121, between the hours of 8:00 am and 5:00 pm US Pacific Time. When returning equipment for repair, please use the original packaging to ship the product. Also, please enclose a note giving your name, address, phone number, e-mail address, and a description of the problem. Please display your R/A Number prominently on the front of all packages.

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