

# PS-PRO II

POWER CONDITIONER/SEQUENCER WITH **SMP+** TECHNOLOGY**FURMAN**

UNPARALLELED POWER PURIFICATION AND PROTECTION

## FEATURES

**SMP**  
SERIES MULTISTAGE  
PROTECTION
**LiFT**  
LINEAR FILTERING  
TECHNOLOGY
**E.V.S.**  
EXTREME  
VOLTAGE SHUTDOWN

- Series Multi-Stage Protection Plus (**SMP+**) for virtually maintenance free protection from surges and spikes. No sacrificed parts, no service calls, no downtime!
- Furman's unequaled Linear Filtering Technology (**LiFT**) rids systems of AC line noise for consistent audio/video clarity
- Automatic Extreme Voltage Shutdown (**E.V.S.**) powers down equipment during a prolonged or extreme over-voltage
- Six sequenced rear panel outlets (in 3 groups), two switched rear panel outlets, and one front panel unswitched outlet
- Momentary and Maintained sequencing via rear panel terminal block or front panel switch
- BNC connector on the rear panel allows attachment of any standard 12V gooseneck lamp to illuminate the rear of your rack
- 20 amp rating
- 3 year limited warranty

## DESCRIPTION

The most widely recognized and trusted name in AC power conditioning is proud to introduce the PS-PRO II power conditioner / sequencer, featuring Furman's revolutionary **SMP+** technology. Furman's Series Multi-Stage Protection Plus (**SMP+**) circuit features our exclusive Linear Filtering Technology (**LiFT**) and Extreme Voltage Shutdown (**E.V.S.**). Together, these technologies comprise what is, without question, the world's most advanced and comprehensive transient voltage surge suppressor.

Additionally, the PS-PRO II Power Conditioner/Sequencer is capable of powering up a rack full of equipment in a 3-step delayed sequence. The sequence is reversed for power-down. The sequence can be initiated with either momentary or maintained switches, locally or remotely. A duplex outlet is provided for each delay step. A front panel screwdriver adjustment sets the delay time for the PS-PRO II. The PS-PRO II also features a locking

switch with a removable key for maximum security. One or more Furman PS-PRO II's may be installed in remote locations and operated via low-voltage wiring. The PS-PRO II includes a rear mounted BNC jack which accepts any standard (12VAC, 0.5A) gooseneck lamp for rear rack illumination, as well as a front panel switch which controls the gooseneck's operation.

### PS-REL Relay Accessory

Allows a PS-PRO II to be turned on by sensing AC at a preamp's switched outlet; also allows daisy-chaining for 6 or more delayed outlet groups.

### Export Models

Models PS-PRO E II: "E" suffix versions are for use in countries with 220/240 volt AC lines. Furman Power Sequencers use internationally accepted IEC-320 connectors.

*(Continued on reverse)*

## Series Multi-Stage Protection Plus (SMP+)

**SMP+** is Furman's proprietary surge suppression and noise filtration system. Designed over a period of two years by our California based engineering team, **SMP+** is composed of three separate and distinct technologies which work together in a precisely tuned circuit to filter or "clean" the incoming power and to protect connected equipment from potentially damaging AC events. These technologies are Linear Filtering, Series Multi-Stage Protection, and Extreme Voltage Shutdown.

### Linear Filtering Technology (LiFT):

Unfortunately, traditional AC filter conditioners have been designed for unrealistic laboratory conditions. Prior technologies could actually harm audio and video performance more than they help, due to the resonant peaking of their antiquated, non-linear designs. Under certain conditions, these designs can actually add more than 10 dB of noise to the incoming AC line! Worse still, lost digital data, the need to re-boot digital pre-sets, or destroyed digital converters are frequently caused by excessive voltage spikes and AC noise contaminating the equipment ground. Furman's **LiFT** takes another approach, ensuring optimal performance through linear filtering and no leakage to ground.

### Series Multi-Stage Protection (SMP):

Traditional surge suppression relies on circuits that "sacrifice" themselves when exposed to multiple transient voltage spikes, requiring the dismantling of your system and repair of your surge suppressor. With Furman's **SMP+**, however, damaging transient voltages are safely absorbed, clamped and dissipated. No sacrificed parts, no service calls, no downtime. Also unique to Furman's **SMP+** is its unparalleled clamping voltage. While other designs offer clamping voltages that are well above 300Vpk, Furman's **SMP+** clamps at 188Vpk, 133 VAC RMS, even when tested with multiple 6000Vpk - 3000 amp surges! This unprecedented level of protection is only available with Furman's **SMP+** technology.

### Extreme Voltage Shutdown (E.V.S.):

When voltage rises to extreme levels because of a lost neutral line or an accidental connection to 208 or 240 VAC, Furman's Extreme Voltage Shutdown kicks in, automatically powering down all equipment quickly and safely in order to prevent damage from occurring. An indicator LED will then illuminate, alerting you to the situation until the over voltage condition is corrected.



## PS-PRO II SPECIFICATIONS

### Current Rating

20 amps ("E" version 16 amps)

### Operating Voltage

90 to 140 VAC ("E" version 180 to 280 VAC)

### Over Voltage Shutdown

140 VAC typically ("E" version 280 VAC typically)

### Spike Protection Modes

Line to neutral, zero ground leakage

### Spike Clamping Voltage

188 Vpk @ 3,000 amps, 133 VAC RMS  
(tested to UL-1449 6,000 Vpk @ 3,000 amps)

### Response Time

1 nanosecond

### Maximum Surge Current

6,500 amps

### Noise Attenuation

10 dB @ 10 kHz

40 dB @ 100 kHz

100 dB @ 10 MHz

Linear attenuation curve from 0.05 - 100 ohms line impedance

### Dimensions

19" W x 10.5" D x 1.75" H

### Weight

11 lbs (5 kg)

### Power Consumption

6 watts

### Safety Agency Listings

CE, NRTL-C

### Patent Number

CA1332074 (4,901,183)

### Three Year Limited Warranty

The PS-PRO II is protected by a limited three year warranty covering defects in materials and workmanship.