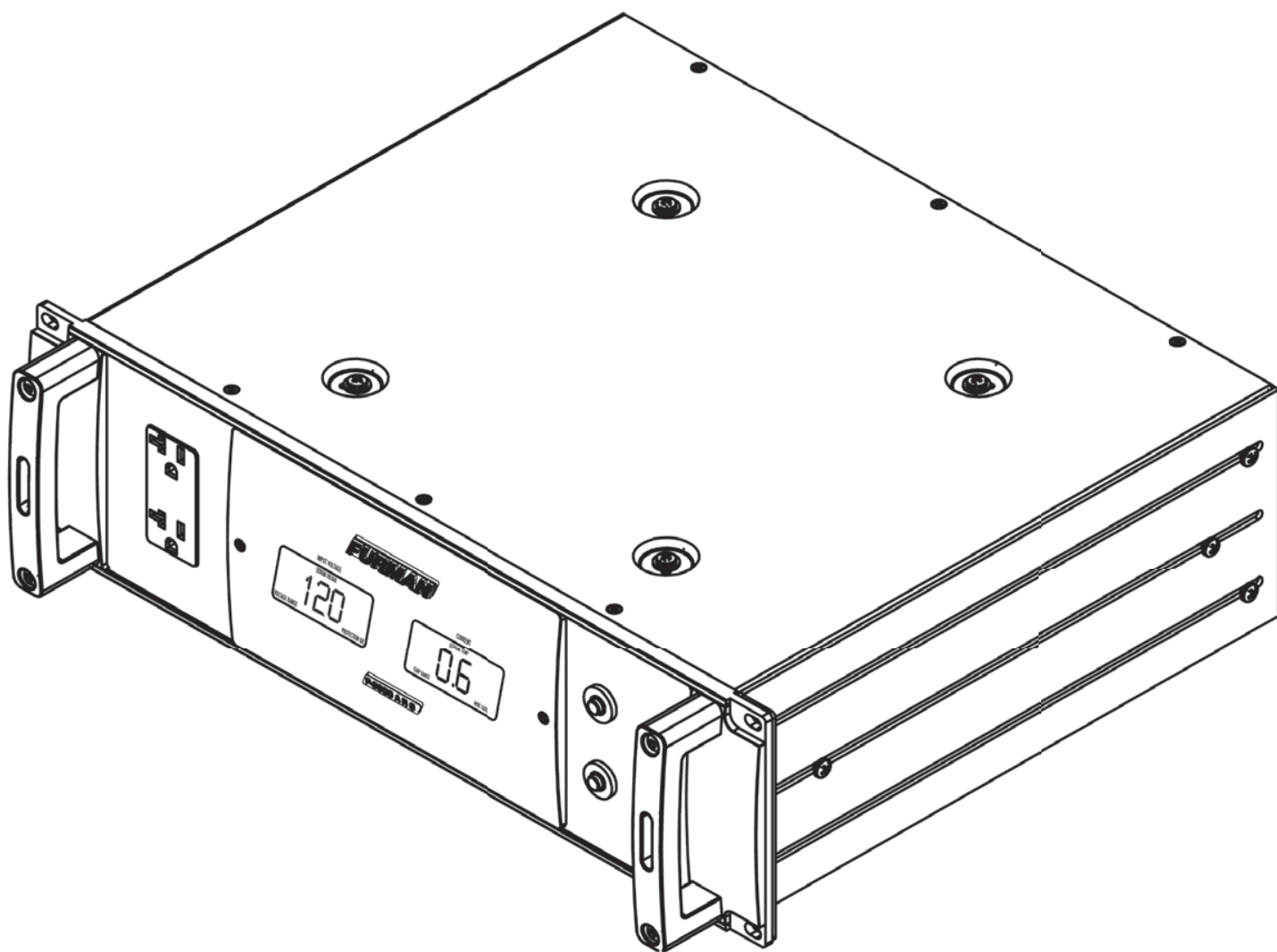


FURMAN[®]

P-3600 AR G POWER CONDITIONER

CONDITIONNEUR D'ALIMENTATION P-3600 AR G / P-3600 AR G ACONDICIONADOR DE ENERGÍA



PRESTIGE SERIES OWNER'S MANUAL

SÉRIE PRESTIGE GUIDE DE L'UTILISATEUR / SERIE PRESTIGE MANUAL DEL PROPIETARIO

IMPORTANT!

1. Carefully inspect your P-3600 AR G for signs of damage that may have occurred in shipping. Any such damage is the responsibility of the carrier. If necessary, file a claim directly with them.
2. The P-3600 AR G is a complex electronic instrument with various wiring options. You cannot simply "plug in and go." The supply cable must be adequate for your installation needs. Take the time to read this manual, especially the sections on Installation and Operation. If in doubt, obtain the assistance of a licensed electrician.
3. To ensure full protection under the terms of the Limited Warranty, please notify Furman of the defects by calling 877-486-4738 or via email (techsupport@furmansound.com) immediately. Verify that the serial number shown on the shipping materials matches the serial number on your unit.
4. Save your sales receipt – it is your proof of purchase and will be needed to process any warranty claims.

SAFETY INFORMATION

To obtain best results from your Furman P-3600 AR G, please read this manual 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 cover. Refer servicing to qualified personnel only.

WARNING

The P-3600 AR G is a robust contractor grade AC power management device. As such, the weight of the P-3600 AR G Voltage Regulator should not be construed as easy and manageable for a single person. Please use caution when loading or installing the unit. Please remember safety first and please ask for assistance when necessary.

WARNING

Please verify the electrical input voltage before selecting a L14-30 configuration. The P-3600 AR G is capable of world-wide use; therefore it is imperative that any installation be verified to avoid injury or damage to supply cables or connections. Qualified personnel should identify source voltage before attempting operation.

WARNING

Since the USA 220-240 doesn't use a neutral, you don't need to wire it. However, because of the lack of a neutral, it is essential that all equipment powered by a P-3600 AR G be properly grounded! Never cut off the power cord ground pin or use a "cheater" adaptor on any of your equipment. Output neutral will have voltage.

IMPORTANT SAFETY INSTRUCTIONS

(Please read prior to installation)

1. Please read and observe all safety and operating instructions before installing your P-3600 AR G. Retain these instructions for future reference.
2. Your P-3600 AR G should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.
3. Do not place your P-3600 AR G near high heat sources such as radiators, heat registers, stoves, or other appliances that produce extreme heat.
4. Your P-3600 AR G should only be connected to a grounded electrical source. Do not attempt to operate the P-3600 AR G without a proper safety ground.
5. **NO ELECTRICAL SUPPLY CABLE IS PROVIDED**, please read the section on electrical supply cables in this manual. Do not wire the P-3600 AR G with a lesser gauge cord set or inferior cord set not capable of providing a full operational capacity (3600 Watts).
6. Route the chosen electrical supply cable and/or other cables so that they are not likely to be walked on, tripped over, or stressed. Pay particular attention to the condition of the cables and cords at the plugs, and the point where they exit your Furman P-3600 AR G. To prevent risk of fire or injury, damaged cords and cables should be replaced immediately.
7. Clean your P-3600 AR G with a damp cloth only. Do not use solvents or abrasive cleaners. Never pour liquid on or into the unit.
8. Your P-3600 AR G should be serviced by qualified service personnel when:
 - The input connection show signs of heat damage
 - Objects have fallen or liquid has spilled into the unit.
 - The unit has been exposed to rain or extreme moisture.
 - The unit does not appear to operate normally.
 - The "Protection OK" indicator is not lit.

- The unit has been dropped, or the enclosure has been damaged.
9. Your P-3600 AR G 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.
10. Do not attempt to service your P-3600 AR G beyond what is described in this manual. All other servicing should be referred to qualified service personnel.

P-3600 AR G Limitations

AC power is, to some extent, unpredictable. The available voltage may vary from place to place and from moment to moment. The waveform may not be a perfect sine wave, and high or low frequency noise may be present. AC power also varies from country to country in terms of voltage and frequency. The P-3600 AR G is a one-of-a-kind solution that will eliminate many of the problems these issues may cause. However, you should be aware that there are certain things the P-3600 AR G cannot do. These include, but are not limited to:

- Protecting from complete loss of power (blackouts).
- Performing frequency conversion to 60 Hz.
- Isolating ungrounded equipment.
- Handling multiple-phase power.

FURMAN P-3600 AR G FEATURES

- **True RMS Voltage Regulation** - A 30 amp ultra-low noise toroidal autoformer with microprocessor control delivering 120 VAC $\pm 4\%$ globally within auto-selecting input voltage ranges of 88 to 134 and 170 to 264 volts
- **Dual SMP Technology (Series Multi-Stage Protection)** - Protects against transient voltage spikes and surges
- **LiFT (Linear Filtering Technology)** - Filters AC line noise
- **EVS (Extreme Voltage Shutdown)** - Protects against catastrophic voltage conditions
- **Wire Fault Detection** - Protects against badly wired electrical feeds
- **Input Voltmeter** - A laboratory precise digital voltmeter to verify source voltage
- **Output Ammeter** - A true RMS digital ammeter to avoid overloading
- **Tri-color voltage range indicator** - Complements numerical voltage reading
- **Temperature Fault Detection** - For high temperature and extreme voltage
- **30 Amp Current Capacity** - Effectively 3600 watts world-wide
- Ten regulated NEMA 20 amp AC outlets; two on the front panel
- One regulated NEMA 30 amp outlet on rear panel L5-30R twist-lock
- Very low stray magnetic field leakage
- Robust NEMA L14-30 twist-lock connectors
- Adjustable built-in rear rack ears for commercial integration
- Removable front panel handles for space saving installs
- Five year limited warranty

FEATURE DEFINITIONS

True RMS Voltage Regulation Technology

True RMS Voltage Regulation within the P-3600 AR G is designed around an ultra-low noise ten-tap toroidal autoformer. A microprocessor monitors the incoming RMS voltage with each cycle, measuring the phase angle in time with the advancing cycle. Most commercial voltage regulators using multiple-tapped transformers switch taps at uncontrolled times. This creates voltage spikes and clicks that can leak into audio. When a voltage fluctuation requires correction by the P-3600 AR G, True RMS Voltage Regulation advances a new tap with less stress and in turn avoids distortion to the AC waveform. Hysteresis in the P-3600 AR G circuits avoids the unnecessary switching back and forth between the adjacent taps (or "chatter") found in many commercial voltage regulators. If necessary, True RMS Voltage Regulation technology can switch taps as often as twice each AC cycle and do so with a shorter recovery time than a commercial voltage regulator. In addition and unlike voltage regulators that employ ferroresonant transformers, the P-3600 AR G is not sensitive to small errors in line frequency, making the unit ideal for generator use. Furthermore, the autoformer's toroidal design assures minimal leakage of stray magnetic fields.

The P-3600 AR G has a low range capability of 88VAC to 134VAC and a high range capability of 170VAC to 264VAC. There is no need to select the range. The P-3600 AR G automatically recognizes a useable voltage and immediately begins to regulate. This impressive capture range ensures a 120VAC output. In order to provide the regulated AC voltage, the P-3600 AR G has eight outlets on the

rear panel and two convenience outlets on the front panel. Also on the rear panel is one L5-30R output capable of delivering 30 amps. All outputs are not only regulated, yet surge-suppressed and linearly filtered, making the unit a full-function power conditioner.

NOTE: P-3600 AR G is for use with AC voltage only. DC voltages should never be applied. Also, it does not change or regulate line frequency. The output frequency will always be the same as the incoming frequency. The unit should only be connected to a grounded electrical source.

Transient Voltage Surge Suppression - Dual SMP Technology (Series Multi-Stage Protection)

Furman's SMP (Series Multi-Stage Protection) surge suppression virtually eliminates service calls and costly "down time". Traditional surge suppression circuits sacrifice themselves when exposed to multiple transient voltage spikes, requiring the dismantling of your system, and repair of your surge suppressor. Not so with Furman's SMP. With SMP, damaging transient voltages are safely absorbed, clamped, and dissipated. Your connected equipment is protected, while your P-3600 AR G protects itself. Unique to the P-3600 AR G is its unparalleled SMP dual voltage clamping capability. While other power management devices throughout the world offer clamping voltages that are well above Furman's SMP technology, Dual SMP Technology clamps 188V peak at 120V standards (375V peak in 240V applications) - even when tested with multiple 6000 Vpk/3000 amp surges. This unprecedented level of protection is only available with Furman's SMP technology.

LiFT (Linear Filtering Technology)

Furman's Linear Filtering Technology (LiFT) reduces AC line noise in a linear manner across a very wide bandwidth. Traditional AC filters/conditioners have been designed for unrealistic laboratory conditions ; whether multiple pole filters or conventional series mode, prior technologies could actually harm audio and video performance more than they help. Under certain conditions these designs can actually add more than 10 dB of noise to the incoming AC line. Furman's LiFT takes a different approach. The technology ensures optimal performance through linear filtration.

Catastrophic Voltage Protection – Extreme Voltage Shutdown

Furman's trusted EVS (Extreme Voltage Shutdown) circuitry protects against catastrophic overvoltage conditions. EVS technology constantly monitors incoming voltage. When voltages rise to an unsafe level, or a fault is detected, the SMP circuit reacts cutting power to all connected equipment. Once the voltage returns to normal levels, the EVS can resume monitoring.

Wire Fault Detection

Wire Fault detection, along with EVS, protects against accidental connections to intermittent neutrals and poorly wired supply cables. In either case, each circuit protects against catastrophic conditions by cutting off the incoming power until the adverse condition is corrected.

INTRODUCTION

Thank you for purchasing a Furman Prestige Series Voltage Regulator/Power Conditioner, and congratulations on your choice. The P-3600 AR G has been precisely engineered to more than meet the critical demands of recording studios, broadcast facilities, and touring productions throughout the world. The unit incorporates features such as Furman's True RMS Voltage Regulation, Series Multi-Stage Protection (SMP), and our exclusive Linear Filtering Technology (LiFT). Together, these technologies comprise precisely what our customers have grown to expect from Furman: uncompromised protection and purification. These features make the P-3600 AR G the ideal component in a world use 120V power scheme, accommodating national voltages of 100, 120, 220, 240, or others, with equal ease and without the need for readjustment.

The Furman P-3600 AR G is intended to protect sensitive electronic equipment from problems caused by AC line voltage irregularities. Brownouts or over-voltages can cause audio tonal changes, digital equipment malfunction (such as loss of data), or, in extreme cases, permanent damage. The unit accepts a world-wide AC voltage range and converts the source to a steady, stable 120V output range (120V plus or minus 4%). Voltages beyond the capture ranges may be converted to usable levels. Amplifiers, consoles, and digital workstations will benefit from stable voltage as the P-3600 AR G protects the equipment and promotes optimal performance. If you travel internationally, derive power from generators, use excessively long extension cords, or are in an area prone to brownouts, you will secure an outstanding advantage with use of your new Furman P-3600 AR G Voltage Regulator.

DESCRIPTION

Front Panel Meters and Indicators

The P-3600 AR G offers precision digital meters that display incoming voltage in 1-volt steps and a RMS ammeter measuring current to the fifth of an amp. The voltmeter's accuracy is ± 1.5 volts and features a tri-color voltage range indicator. This informs the user whether voltage is in or out of a safe range. The ammeter measures current draw for an instant analysis of system requirements. The front panel also includes indicators regarding operating temperature and wiring faults for comprehensive monitoring.

Receptacles and Connections

The P-3600 AR G is equipped with ten NEMA 20 amp regulated AC outlets. The rear AC outlets feature discrete noise isolation in two banks. The two round SPST 20 amp magnetic breakers for Bank A and Bank B are clearly indicated on the front panel of the P-3600 AR G. The front panel duplex opposite the magnetic breakers should be considered as an extension of Bank B and therefore any current derive through the convenience outlets will be linked to the Bank B magnetic breaker.

In instances where a 120 volt 30 amp service is required, the rear panel NEMA L5-30R outlet provides a regulated and linear filtered source. A male twist locking L5-30P AC plug will securely seat in the outlet delivering the P-3600 AR G's full capability. The high in-rush magnetic breaker / main power switch acts as the primary safety device for the L5-30R outlet. The magnetic breaker and L5-30R outlet are rated for 30 amps at 120 volts or 15 amps at 240 volts.

A female NEMA L14-30R Twist-Lock is supplied. The voltage supplies will differ from continent to continent. Touring productions may require more than one L14-30R configuration due to the multitude of options found internationally. It is recommended that electrical supply cables and L14-30R Twist-Lock connectors be wired in advance based on the anticipated electrical requirements to ensure quick set up. If you have any questions while wiring the connectors, please call Furman for assistance or obtain the assistance of a licensed electrician.

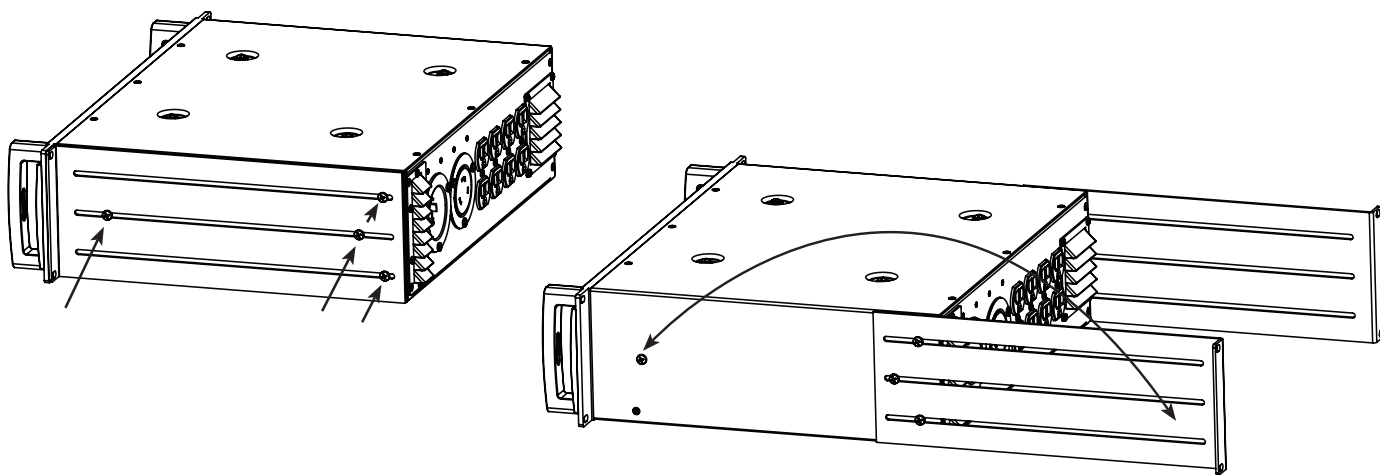
INSTALLATION

Because of the toroidal transformer design, the Furman P-3600 AR G may be positioned near most other equipment without fear that the other equipment will be disrupted by leakage of a strong 50/60 Hz magnetic field. Nevertheless, suggested rack locations would be either at the top or bottom. Use extreme caution when loading or racking the P-3600 AR G. The weight of the unit may become cumbersome and require assistance. Ask for assistance when racking the P-3600 AR G.

Rear rack mounting ears are located at each side of the P-3600 AR G. The adjustable ears should be removed prior to using with rear rack rails. The rear rack ears may be used in conjunction with the front panel chassis ears, if no rear rack rails are available. As with any rackmount equipment, be sure to use 10-32 machine screws for mounting in the rack's tapped holes (this is not a metric size). In particular, beware of 10-24 screws, which may fit if forced but which will strip the threads. To avoid marring the front panel finish, use plastic washers under the screw heads. While in the rack, you may remove the P-3600 AR G front panel handles.

Rear Rack Mounting:

If you are installing the P-3600 AR G in a rack that has rear as well as front mounting rails, you may easily secure it to the rear of your rack. Simply remove the securing screws* from the side and front portions of the P-3600 AR G's adjustable rear rack ear and reinforcement side plate (located on either chassis side), reverse it and re-attach to the P-3600 AR G chassis (See illustration below).



*** NOTE:** Please use the screws which are provided. If screws must be obtained elsewhere, do not use screws longer than 5/16 of an inch. Screws longer than 5/16" may contact internal components rendering the unit inoperable.

L14-30R Input Connector and Electrical Supply Cable:

The P-3600 AR G is accompanied with a female L14-30R Twist-Lock connector. NO ELECTRICAL SUPPLY CABLE IS PROVIDED. Due to the countless differences in electrical code requirements around the world, plus the varying cable length needs in individual installations, it is not possible to include a complete supply cable with your P-3600 AR G. The cable-mount connector that mates with the P-3600 AR G's twist-lock connector is supplied, but it is up to qualified personnel to hook up the electrical supply cable with one of appropriate gauge, number of conductors, length, and source-end connector.

Selecting The SUPPLY Cable

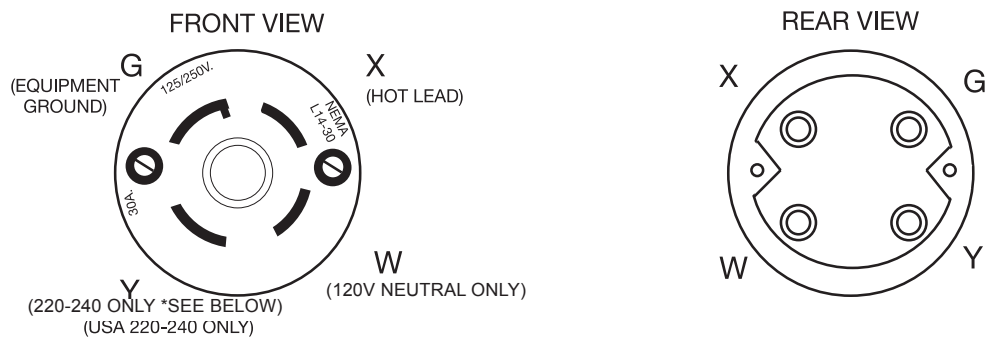
For nominal 120 VAC operation, 3 conductor cable of at least 10 AWG (.101"/2.56mm diameter) should be used, depending on distance from the power source.

For nominal 208-240 VAC operation, 3 conductor cable of at least 14 AWG (.064"/1.62mm diameter) should be used, depending on distance from the power source.

Rubber-jacketed cable is highly recommended for best flexibility and abrasion resistance. It is permissible to use 4 conductor cable, but it is not necessary to do so and is not recommended.

Supply Cable Wiring Instructions

Refer to the following diagrams for wiring the twist-lock connector:



General Wiring Requirements:

Low Range Voltage (88 to 133VAC, 30A max) is applied between X and W.
 High Range Voltage (170 to 265VAC, 15A max) is applied between X and Y.
 G is always Equipment Ground.

For 120V Wiring:

Wire hot lead to X (black in North America).
 Wire the neutral lead to W (white in North America).
 Wire the equipment ground to G (green in North America).

220-240V US Wiring:

Wire hot lead to X (black in North America).
 Wire hot lead to Y (red or blue in North America)*.
 Wire the equipment ground to G (green in North America).

220-240V Europe Wiring:

Wire hot lead to X (brown, or black with white stripes in Europe).
 Wire neutral lead to Y (blue in Europe)*.
 Wire the equipment ground to G (green with yellow stripe in Europe).

Source-End Connector On Supply Cable:

The connector used at the source end should be rated at least 250V-15A for high range operation, or 120V-30A for low range operation. If in doubt, consult a licensed electrician when installing your P-3600 AR G.

OPERATION

Ultra-Low Resistance Magnetic Power Switch/Circuit Breaker:

Furman's Prestige Series 30 amp capacity power switch / circuit breaker is specifically designed to stand up to the enormous high in-rush current demands of many power amplifiers. Additionally, Furman magnetic circuit breakers are not sensitive to temperature, nor do they raise the AC impedance as do many less costly thermal breakers. If the 30 amp maximum RMS current capacity of the P-3600 AR G is exceeded, the spring tensioned switch will immediately reset to the "Off" position. Once the problem is corrected or once the RMS current load is adjusted to no longer exceed 30 amps / 3600 watts (typically by unplugging one component), a person can switch the unit back to the "On" position. The P-3600 AR G will then resume operation as normal.

Total Current Capacity (maximum and minimum load):

The P-3600 AR G can handle loads totaling up to 3600 watts as long as the input voltage is equal to or above the unit's low range or

high range reference. The reference point for low range is 120 volts. The reference for high range is 240 volts. When voltages fall below range, the unit's capacity must be derated at approximately 170 milliamperes per volt. As a practical matter, to cope successfully with worst-case brownout conditions, one should plan the total load not to exceed 22.5 amps, or 2700 watts. Please note that this refers to the aggregate power requirement of all equipment plugged into the P-3600 AR G, not to each individual item.

NOTE: While there is no minimum load requirement for the P-3600 AR G, you may experience an audible mechanical hum coming directly from the unit when the power switch is on with nothing plugged in. Typically this will cease once the unit has a load of 50 watts or more.

Digital Voltage Meter:

Furman's laboratory precision AC digital voltmeter is on the front panel's left side. The voltmeter continually measures incoming voltages within a typical tolerance of $\pm 1.5\text{VAC}$. It should be noted that the voltage reading is determined by the incoming AC source. Additional LED indicators PROTECTION OK, EXTREME VOLTAGE, and VOLTAGE RANGE are located on digital voltmeter lens besides the voltage reading.

Protection OK LED Indicator:

The "Protection OK" LED indicator is normally on. 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 TVSS device. In the rare instance that this occurs, the green "Protection OK" LED indicator (located to the lower right of the voltage meter) will not illuminate. If this happens, the P-3600 AR G's clamping ability will be compromised. If this occurrence is encountered, please contact Furman.

Extreme Voltage Shutdown LED Indicator:

The "Extreme Voltage" LED indicator is normally off. It is located within the meter lens assembly centered directly above the blue voltage meters LED's. During normal use the EVS indicator will not be visible.

Upon initially turning on the P-3600 AR G, the Extreme Voltage indicator will illuminate to a bright red if the input voltage is above the extreme voltage cutoff. When this occurs, power will not be bussed to the P-3600 AR G's outlets. If the unit has been operating with an acceptable input voltage and subsequently a voltage exceeds 145V at the lower 120V capture range or 275V at the higher 240V capture range, the unit will shut off power to the outlets and the Extreme Voltage LED will light.

NOTE: If the mains power is above a high cutoff voltage and has caused the EVS circuit to cease power to the Furman P-3600 AR G outlets, it cannot 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.

Voltage Range LED Indicator:

This tri-color Voltage Range indicator is located in the lower left corner of the digital voltage meter lens assembly. When the incoming AC voltage is within the P-3600 AR G capture range, the tri-color indicator will be green (optimal), indicating the unit is in regulation. However, if the regulator encounters a temporary transient condition the indicator will turn amber (caution). This amber indication appears when there are excessive changes or sudden swings at the input (± 10 volts). If the incoming voltage is outside the capture range, the indicator will turn red, for example below 88V or above 134V with a 100V to 120V source; below 170V or above 264V with a 208V to 240V source. Red warnings indicate the incoming voltage is far from optimal and beyond the capture range offering a constant voltage source. In this condition, the P-3600 AR G will continue to regulate from the last tap of the autoformer, providing an output voltage as close to 120V as possible (e.g. an input voltage of 92V would equate to 110V at output). When employing the P-3600 AR G in mission critical applications where 120V output is the primary concern, the red indication is invaluable.

True RMS Current Meter:

The Furman True RMS Current Meter is located on the front panel's right side, constantly measures the total circuit AC load, with a typical tolerance of ± 0.5 amps. Because the meter features True RMS technology, the current readings are accurate regardless of load conditions (capacitive, inductive, or resistive).

Wire Fault LED Indicator:

The Wiring Fault indicator monitors a hazard common in the entertainment industry. As an example, a wiring fault can occur from an accidental connection to open series neutral at the electrical service panel. The Wiring Fault indicator is a red LED located at the bottom right of the current meter. This feature works in conjunction with the Furman EVS circuit ensuring maximum protection from improperly wired circuits and improperly wired Twist-Lock connectors. If illuminated, the P-3600 AR G will NOT operate until the wiring fault is corrected.

Temperature Range LED Indicator:

Located at the bottom left of the current meter read out, the Temperature Range LED Indicator provides diagnostic information on the internal ambient environment of the P-3600 AR G voltage regulator. The LED is green when temperatures are within an acceptable range for the autoformer, and may switch to amber when temperatures become less favorable.

Extreme Temperature LED Indicator:

Although many environments can be anticipated, not all can be considered or foreseen. In extremely high ambient temperatures, combined with sustained high current draws, it is possible for the maximum allowable temperature of the P-3600 AR G to be

exceeded. If this condition occurs, the unit will enter thermal shutdown to ensure safety. The Extreme Temperature indicator (located within the meter lens assembly centered directly above the blue current meters LEDs) will illuminate when maximum temperature is present and power to all outlets of the P-3600AR G has ceased. Note that the P-3600 AR G has an internally installed fan to provide cooling in extreme temperatures.

TROUBLESHOOTING

1.) Symptom: No power to the AC outlets; "Protection OK" indicator is not lit.

Possible Cause: Either the AC outlet to which your P-3600 AR G is connected has no AC voltage present, or there has been damage to the unit's circuitry.

Action Needed: Plug the P-3600 AR into an AC source where a nominal 120 VAC is present. If the problem persists, the internal circuitry may be damaged and the unit will require factory service (see "Service" section below).

2.) Symptom: Extreme Voltage indicator lit.

Possible Cause: Input voltage is above 140 volts or 275 volts causing power to the unit's outlets to be shut down.

Action Needed: Correct the line voltage, and then turn the P-3600 AR G off and on with the main power switch.

3) Symptom: Temperature Range indicator is lit amber.

Possible Cause: Internal temperature of the P-3600 AR G's autoformer is approaching its temperature limit.

Action Needed: Operator should check that there is sufficient air space around P-3600 AR G, the ventilation fan is running, both air vents are unobstructed, the load is not excessive, and that the ambient air temperature is not hot.

WARNING: If the temperature of the P-3600 AR G continues to rise, the P-3600 AR G may shutdown to prevent damage to itself. If the P-3600 AR G goes into thermal shutdown, it may take significant time for the unit to cool down and re-power up.

4) Symptom: Extreme Temperature indicator lit.

Possible Cause: Internal temperature of the P-3600 AR G's autoformer has exceeded safe operation levels and the unit has entered thermal shutdown.

Action Needed: Operator should check that there is sufficient air space around P-3600 AR G, the ventilation fan is running, both air vents are unobstructed, the load is not excessive, and that the ambient air temperature is not hot. Ventilation fan will continue to run and circulate air even while unit is shutdown in this state. Unit will re-power up once the internal temperature of the autoformer has cooled.

NOTE: Due to the large thermal mass of the P-3600 AR G autoformer, once the autoformer reaches its high temperature limit, it will take significant time for the transformer to cool down.

SERVICE

Questions or issues with your Furman unit should be directed to the Furman Customer Service Department, available 8AM-4PM Pacific Time at (877) 486-4738 or via email at techsupport@furmansound.com. If a unit requires service, it must have an RA number assigned from Furman's Customer Service Department.

Before returning any equipment for repair, please be sure that it is adequately packed and cushioned against damage in shipment, and that it is insured. We suggest that you save the original packaging and use it to ship the product for servicing. Also, please enclose a brief note giving your name, address, phone number and a description of the problem. Please display your RA number prominently on the front of all packages.

5 YEAR LIMITED WARRANTY

SAVE YOUR SALES RECEIPT! The receipt is your proof of purchase and confirms the product was purchased at an authorized Furman dealer. It will need to be submitted to Furman in order to process any warranty claims.

Furman, a brand of Panamax LLC., warrants its P-3600 AR G (the "Product") as follows:

Furman warrants to the original purchaser of the product that the product sold hereunder will be free from defects in material and workmanship for a period of five years 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 of the claimed defects by calling 877-486-4738 or via email (techsupport@furmansound.com). If the defects are of such type and nature as to be covered by this warranty, Furman shall authorize purchaser to return the product to Furman headquarters. Warranty claims MUST be accompanied by a copy of the original purchase invoice or receipt showing the purchase date. Shipping charges to Furman headquarters 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.

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 use or abnormal handling of the product, or against defects or damages arising from improper installation. This warranty shall be cancelable by Furman at its sole discretion if the product is modified in any way without written authorization from Furman or Panamax LLC. 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 or Panamax LLC.

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 the products 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. 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.

SPECIFICATIONS

MAXIMUM CURRENT:

30 AMPS

VOLTAGE REGULATION:

120 VAC ($\pm 4\%$)

IN REGULATION RANGE:

(LOW) 88-134 VAC @ 50/60Hz,

(HIGH) 174-268 VAC @ 50/60Hz

OVER VOLTAGE SHUTDOWN:

145 VAC NOMINAL (120VAC INPUT)

275 VAC NOMINAL (240VAC INPUT)

SPIKE PROTECTION MODES:

LINE TO NEUTRAL, ZERO GROUND LEAKAGE

SPIKE CLAMPING VOLTAGE:

188V PEAK @ 3,000 AMPS

RESPONSE TIME:

1 NANOSECOND

MAXIMUM SURGE CURRENT:

6,500 AMPS

NOISE ATTENUATION:

10 DB @ 10KHZ, 40 DB @ 100 KHZ,

55 DB @ 500KHZ

RECEPTACLES (FRONT PANEL):

TWO 120V 20A EDISON SPEC GRADE NEMA-20 OUTLETS

RECEPTACLES (REAR PANEL):

ONE 120V L-5 30A FEMALE, EIGHT 120V 20A EDISON SPEC GRADE NEMA-20 OUTLETS

AC INPUT:

L-14 MALE TWISTLOCK INLET (TWISTLOCK CABLE-MOUNT CONNECTOR INCLUDED)

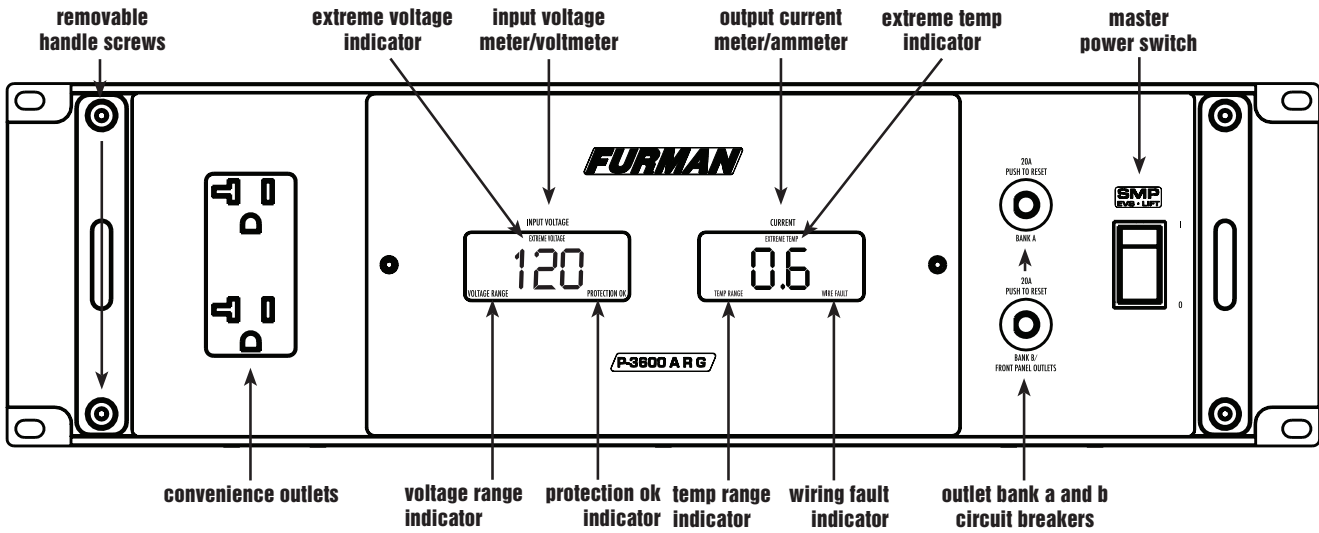
DIMENSIONS:

19" W x 14.25" D x 5.25" H (483mm W X 362mm D x 133mm H)

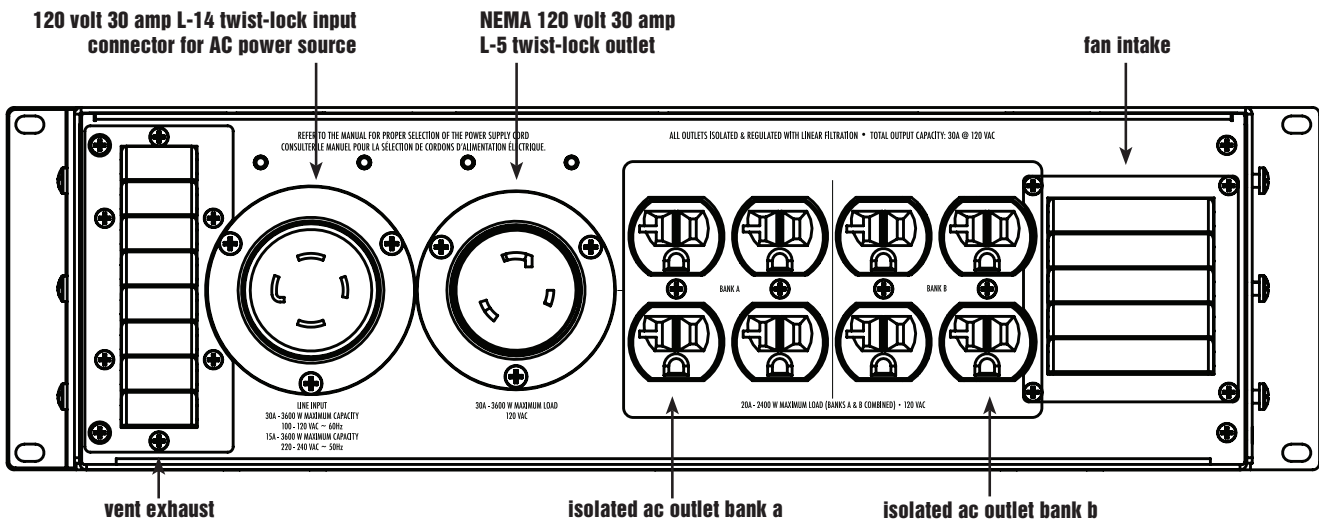
WEIGHT:

98 LBS. (44.5 KG.)

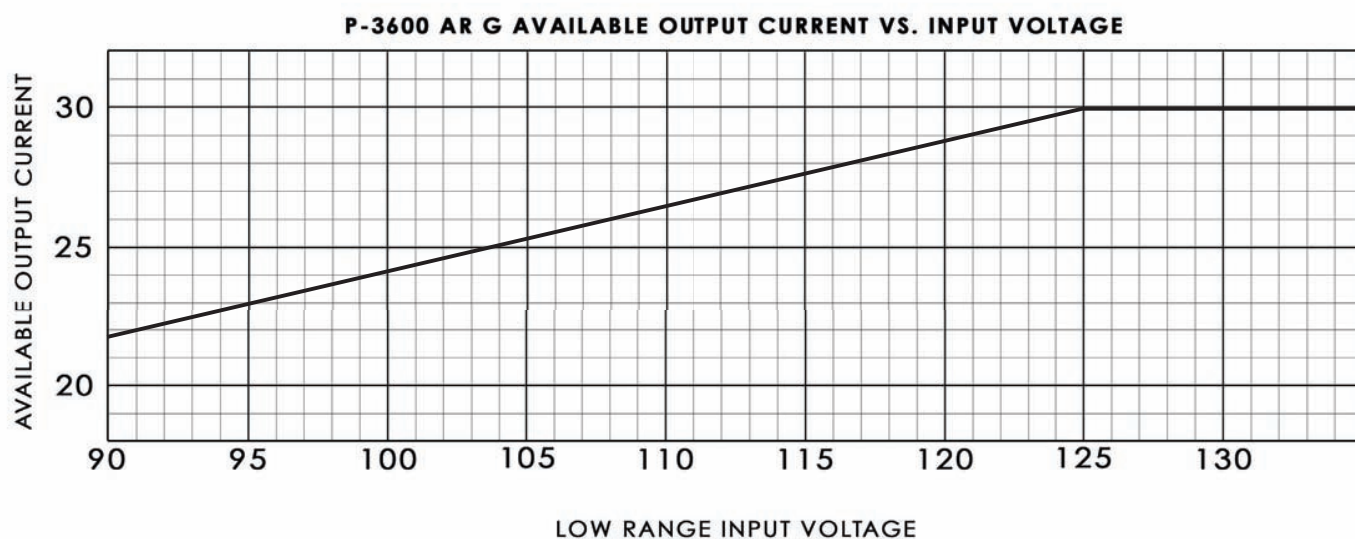
FRONT PANEL



REAR PANEL



LOW INPUT CURRENT VS. VOLTAGE GRAPH



HIGH INPUT CURRENT VS. VOLTAGE GRAPH

