

# Isolation Power Distribution Products

## Owner's Manual



SubStation  
SubStation RM Pro  
PowerHouse



Made in the USA  
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1-800-880-3474  
[www.richardgrayspowercompany.com](http://www.richardgrayspowercompany.com)



## **Congratulations**

Your purchase of Richard Gray's Power Company products represents an investment and improvement in Audio Video performance , Home Automation and Integration that no other power product can provide. Our products are engineered to protect your expensive components from AC Interference, Transients, Surges and Spikes that can degrade and destroy today's highly sophisticated AV systems. All Richard Gray's products are part of the Consumer Electronics industry's only comprehensive Power Delivery System that includes our patented "Parallel Power" devices (i.e., 200LD, 400Pro , 600S, 800RM Pro and 1200 Custom), and the world's finest AC Power Isolation and Purification systems, Whole House AC Surge Protection, UPS's, Communications Protection, Power Delivery Accessories and AC power cords personally hand-crafted by Richard Gray. Utilizing a combination of these products assures your audio/video and Home Automation system receives only the purest power possible, free of noise and AC current limitations as well as dangerous surges and spikes. Richard Gray's Power Company products are available exclusively from our authorized dealers (they're part of the investment, too!) who have been factory-trained to diagnose your system and recommend the precise combination of models which will best address your needs. Our corporate website ([www.richardgrayspowercompany.com](http://www.richardgrayspowercompany.com)) and toll-free consumer hotline (800-880-3474) enable you to speak directly to one of our Power Professionals, further ensuring quick and accurate response to any questions you might have. We're certain you'll be delighted with your investment, and look forward to providing you with outstanding customer service.

## **What Makes Richard Gray's Power Company Better?**

Richard Gray's Power Company's success in a crowded marketplace is due to one simple fact: superior performance with no trade offs. This is no idle boast. Compared to any other power product sold today, Richard Gray's Power Company (RGPC) delivers more and cleaner power while preventing equipment-damaging surges and spikes. How does Richard Gray's Power Company accomplish this? To understand why RGPC works better, we first need to examine how typical "line conditioners" operate. From the simplest power strips to the most sophisticated "Power Stations", these products all work in series to the AC line: the device is plugged into an AC wall outlet, your A/V components are plugged into it, and the electrical power passes through it (being filtered or otherwise processed) before that power finally reaches your components. This is the definition of a series device. The problem is that, as current passes through the device, its flow is inevitably affected. Although many series devices are able to remove some noise and power disruptions from the AC line, all have the negative consequence of limiting the amount of current that reaches your audio and video equipment. As a result, audio dynamics are compressed, video displays lose their ultimate dimensionality and black level, and both sounds and images are robbed of their immediacy or realness. Interestingly, many consumers who purchase these series devices ultimately choose not to use them, preferring the audio and video quality of an RGPC current-unlimited system, where AV components receive the full, current rich power provided by the most effective patented power delivery system available.

RICHARD GRAY'S POWER COMPANY is a US owned and operated manufacturer of AC Power Delivery Systems and Communications Protection/Connectivity products. RGPC's mission is to utilize its focus, experience and expertise in providing an enhanced, secure and safe environment where AC power, Communications and Data operate in harmony and maximum efficiency in today's converged infrastructure.

## Installing Your RGPC Models

### **IMPORTANT SAFETY INSTRUCTIONS:**

**CAUTION! (No User serviceable Parts):** Risk of electrical shock, do not remove cover.  
Refer servicing to qualified service personnel.

**CAUTION!** Intended for indoor use only.

**CAUTION!** Never install during lightning or storm activity.

**CAUTION!** Installation and Grounding of All RGPC Power Delivery Systems must be in accordance with local and National Electrical Codes.

\*Ask your Dealer for details on **RGPC 1 2 3 plus C** (Ultimate Performance and Complete Protection)

## **SubStation 240/120 or 120/120**

Designed to provide 2.0KVA 240V/120V or 1.5KVA 120/120 Isolated Pure AC Power utilizing AV grade magnetics for optimum performance allows you to deliver true balanced power all the way to the back of the equipment rack before it is stepped down to 120V. This results in added protection against lightning, EMI/RFI and Harmonics and in a more efficient way of Powering and Protecting your equipment. Both SubStation's have 4 (5-20R) protected outlets and a 7.5ft power cord. The 240V version ships with a Nema 6-20 plug, while the 120V version ships with a NEMA 5-15 plug.

### **Wiring for 240 Input**

If you have purchased the 120V SubStation, then you simply need to plug it into a standard (dedicated) 120V outlet. If you purchased the 240V SubStation, you will need a licensed electrician to do some wiring before you can enjoy your SubStation, unless you already have a 240V, 20 Amp outlet. Install a NEMA 6-20R Outlet, protected by a 2-pole 20A circuit breaker, and utilize 12 AWG wire. Richard Gray's Power Company recommends that this installation be completed by a licensed electrician and that local electrical code always be followed.

### **Installing your Richard Gray's SubStation**

While the SubStation does run cool, it should have at least six inches of room on all sides for proper ventilation. Please keep this in mind when determining the best location for your system rack.

Plug the SubStation into the wall outlet and the Blue indicator light will light. If not, ensure the breaker on the side of the unit is On and that the breaker in the electrical panel has been thrown to the On position. Remember, this is an isolation transformer so all equipment need to be plugged into the outlets of this unit. For unparalleled "IsoGray" performance, we strongly recommend adding an RGPC 400, 600, 800 or 1200. This will remove digital/analog inter-component crosstalk, and provide power-on-demand as well as providing additional commercial-grade outlets.

Begin bringing the system on line by connecting the amplifier/pre-amp/speakers and ONE source component to test for hums that may be caused by improperly wired, or 'leaky' gear. Once this is up and running, add one additional component at a time and make sure it is functioning properly. By doing this, any equipment-borne ground loops can be easily discovered as the faulty component will hum or display erratic behavior when installed in the system.

### **Troubleshooting**

If at any time the unit ceases to function, please check all the Circuit Breakers on the unit to ensure they are Not tripped. Make sure the Power Cord is fully inserted in the wall outlet. Check the Circuit Breakers in your Electrical Distribution Box to make sure they are Not tripped. Make sure the unit is not overloaded, beyond its specified rating.

## **SubStation RM Pro**

Designed to provide 4.0KVA 240V/120V Isolated Pure AC Power utilizing AV grade magnetics for optimum performance, allows you to deliver true balanced power all the way to the equipment rack before it is stepped down to 120V. This results in added protection against lightning, EMI/RFI and Harmonics and a more efficient way of Powering and Protecting your equipment.

The SubStation RM Pro has 6 (5-20R) protected outlets and a 7 ft 12 AWG power cord terminated to a NEMA 6-20P plug.

### **Wiring for 240 Input**

You will need a licensed electrician to do some wiring before you can enjoy your SubStation RM Pro, unless you already have a 240V, 20 Amp outlet.

Install a NEMA 6-20R Outlet, protected by a 2-pole 20A circuit breaker, and utilize 12 AWG wire. Richard Gray's Power Company recommends that this installation be completed by a licensed electrician and that local Electrical Code always be followed.

### **Installing your Richard Gray's SubStation RM Pro**

Install at the bottom of equipment rack or as close as possible to the Powered/Protected equipment, the SubStation RM Pro is a 4U rack mountable with rack ears provided.

Plug the SubStation RM Pro into wall outlet and ensure that the Circuit Breaker on the front of the unit is On and all the Ckt Breakers on the rear output panel are On.

Remember, this is an isolation transformer so all equipment of your system need to be plugged into the outputs of this unit. For unparalleled "IsoGray" performance, we strongly recommend adding an RGPC 400, 600, 800 or 1200. This will remove digital/analog inter-component crosstalk, provide power-on-demand and as well provide additional commercial-grade outlets.

Begin bringing the system on line by connecting the amplifier/pre-amp/speakers and ONE source component to test for hums that may be caused by improperly wired, or 'leaky' gear. Once this is up and running, add one additional component at a time and make sure it is functioning properly. By doing this, any equipment-borne ground loops can be easily discovered as the faulty component will hum or display erratic behavior when installed in the system.

### **Troubleshooting**

If at any time the unit ceases to function, please check all the Circuit Breakers on the unit to ensure they are Not tripped. Make sure the Power Cord is fully inserted in the wall outlet. Check the Circuit Breakers in your Electrical Distribution Box to make sure they are Not tripped. Make sure the unit is not overloaded, beyond its specified rating.

## PowerHouse

Designed to provide 6.0KVA 240V/120V Isolated Pure AC Power utilizing AV grade magnetics for optimum performance, allows you to deliver true balanced power all the way to the equipment rack before it is stepped down to 120V. This results in added protection against lightning, EMI/RFI and Harmonics and a more efficient way of Powering and Protecting your equipment.

The PowerHouse has 20 (5-20R) protected outlets and a 8 ft 10 AWG power cord terminated to a NEMA 6-30P plug.

### Wiring for 240 Input

You will need a licensed electrician to do some wiring before you can enjoy your PowerHouse, unless you already have a 240V, 30 Amp outlet.

Install a NEMA 6-30R Outlet, protected by a 2-pole 30A circuit breaker, and utilize 10 AWG wire. Richard Gray's Power Company recommends that this installation be completed by a licensed electrician and that local Electrical Code always be followed.

Wiring for 3 phase 208/120VAC, The functionality of the PowerHouse is identical to the 240V unit, but it has to be ordered specific for 208 Input. Please check with your electrician to determine your voltage.

### Installing your Richard Gray's PowerHouse

Install at the bottom of equipment rack or as close as possible to the Powered/Protected equipment, the PowerHouse is 8U rack mountable with rack ears provided.

Plug the PowerHouse into the wall outlet and ensure that the Main Circuit Breaker on Rear Distribution Panel of the unit is On.

Remember, this is an isolation transformer so all equipment of your system need to be plugged into the outputs of this unit. It also incorporates the 1200 dual choke Parallel technology to benefit equipment that are plugged into it with Power Cords not exceeding 6 ft. For unparalleled "IsoGray" performance, and when powering equipment with cords exceeding 6 ft. we strongly recommend adding an RGPC 400, 600, 800 or 1200 near the equipment. This will remove digital/analog inter-component crosstalk, provide power-on-demand and as well provide additional commercial-grade outlets.

Begin bringing the system on line by connecting the amplifier/pre-amp/speakers and ONE source component to test for hums that may be caused by improperly wired, or 'leaky' gear. Once this is up and running, add one additional component at a time and make sure it is functioning properly. By doing this, any equipment-borne ground loops can be easily discovered as the faulty component will hum or display erratic behavior when installed in the system.

### Troubleshooting

If at any time the unit ceases to function, please check all the Circuit Breakers on the unit to ensure they are Not tripped. Make sure the Power Cord is fully inserted in the wall outlet. Check the Circuit Breakers in your Electrical Distribution Box to make sure they are Not tripped. Make sure the unit is not overloaded, beyond its specified rating.





## Assessing the Improvements

One of the great misconceptions of high-end audio/video is that only critically trained listeners and viewers can appreciate performance differences. Our sincerest apologies to the "Golden Ears", but We find the opposite is true: The improvements in sight and sound wrought by RGPC products are obvious to virtually everyone.

**Video:** More dynamics that yield to the eye truer and more apparent black level, deeper, more three-dimensional images with finer shadow gradations, dramatic reduction in video noise and enhancement of detail and color contrasts.

**Audio:** Elimination of background and line noise for true inter transient silence and "black" background. Improved resolution of micro dynamic detail and dynamic shadings, effortless volume swings, larger, wider soundstage and more palpable images.

### Notes

RGPC Model Number:
RGPC Serial Number:
Date Installed:
AC Power <input type="checkbox"/> 120VAC <input type="checkbox"/> 240VAC <input type="checkbox"/> 208VAC
Total Load (Watts)

### Equipment Connected to Isolation Power Deliver System

1
2
3
4
5
6
7
8