

# USER MANUAL

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## MODEL 503P & 503PC Parallel Surge Protectors



**PE PATTON**  
**Electronics Co.**



An ISO-9001  
Certified Company

Part# 07M503P-C  
Doc# 074201U  
Rev. D  
Revised 1/21/08

SALES OFFICE  
(301) 975-1000  
TECHNICAL SUPPORT  
(301) 975-1007  
<http://www.patton.com>

## 1.0 WARRANTY INFORMATION

**Patton Electronics** warrants all Model 503P and 503PC components to be free from defects, and will—at our option—repair or replace the product should it fail within one year from the first date of shipment. This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as warranted, your sole recourse shall be repair or replacement as described above. Under no condition shall **Patton Electronics** be liable for any damages incurred by the use of this product. These damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. **Patton Electronics** specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

## 2.0 SERVICE AND SUPPORT

### 1.2 SERVICE

All warranty and nonwarranty repairs must be returned freight prepaid and insured to Patton Electronics. All returns must have a Return Materials Authorization number on the outside of the shipping container. This number may be obtained from Patton Electronics Technical Support: **(301) 975-1007**; <http://www.patton.com>; or, [support@patton.com](mailto:support@patton.com).

**Notice:** Packages received without an RMA number will not be accepted.

Patton Electronics' technical staff is also available to answer any questions that might arise concerning the installation or use of your Patton Model 503P and 503C. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**

### 1.3 CE NOTICE

The CE symbol on your Patton Electronics equipment indicates that it is in compliance with the Electromagnetic Compatibility (EMC) directive and the Low Voltage Directive (LVD) of the Union European (EU). A Certificate of Compliance is available by contacting Technical Support.

## 2.0 GENERAL INFORMATION

Thank you for your purchase of this Patton Electronics product. This product has been thoroughly inspected and tested and is warranted for One Year parts and labor. If any questions arise during installation or use of the unit, contact Patton Electronics Technical Support: **(301) 975-1007**; <http://www.patton.com>; or, [support@patton.com](mailto:support@patton.com).

### 2.1 PRODUCT DESCRIPTION

**The Patton Model 503P and 503PC** guard PC parallel interfaces against data loss and damage due to transient surges. These units employ a solid state circuit using Silicon Avalanche Diodes, and can handle repeated surges up to 1500 Watts. The Model 503P connects directly between the DB-25 parallel port of a PC or workstation and the parallel printer cable. The Model 503PC connects to the parallel printer cable, and then plugs directly into the 36-pin Centronics® printer port. Both units divert surge energy to chassis ground through the metal connector shell. For complete protection of your parallel line, we recommend that a Model 503P and 503PC be used together, one at each end of the line.

**Warning:** These products will not provide complete protection should your equipment be subject to a direct lightning hit.

### 2.2 SURGE PROTECTION BENEFITS

The method of surge protection used in the 503P and 503PC adds four benefits to your system.

1. High Surge Capability. The 503P and 503PC dissipate up to 1.5 kwatts for up to 1 mes.
2. Quick Response. The 503P and 503PC feature a response time of 500 nsec, 503PC clamps at +8V and -3V the 503P clamps to 6.8V
3. Low Impedance. Connect the 503P directly to RS-232 ports with minimal load to your system — about the same as a gender changer.
4. “Fail Safe” Design. Unlike some other surge suppressors, the 503P fails short to ground should your system experience an extreme transient or severe current overload. Therefore, if the unit fails, data and surges are diverted to ground instead of back into your equipment.

### **3.0 INSTALLATION**

Patton's Model 503P and 503PC units are simple to install, and require no user configuration. Follow these installation steps.

1. Turn off your PC/printer's power and disconnect the power cord(s) from the wall outlet(s).
2. Unplug (disconnect) the existing connection between the parallel cable and your PC/printer's parallel port(s).
3. Install the Model 503P between the parallel cable and the DB-25 parallel port. Install the Model 503PC between the parallel cable and the Centronics®-36 connector of your parallel printer. For best results, both protectors should be used—one at each end of the cable.

## APPENDIX A

### PATTON MODEL 503P AND 503C SPECIFICATIONS

<b>Lines Protected:</b>	Model 503P protects 24 lines on the DB-25 parallel interface; Model 503PC protects 34 lines on the 36-pin Centronics® interface.
<b>Peak Power Dissipation:</b>	1500 Watts for up to 1 msec
<b>Clamp Voltage:</b>	503P 6.8 V; 503PC +8, -3V
<b>Grounding:</b>	Surge energy diverted to chassis ground through metal D-shell (or 36-pin Centronics®) connectors. Alternate ground connection for Model 503P provided by external grounding wire.

## **NOTES**

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Dear Valued Customer,

Thank you for purchasing Patton Electronics products! We do appreciate your business. I trust that you find this user manual helpful.

We manufacture one of the widest selections of data communications products in the world including CSU/DSU's, network termination units, powered and self-powered short range modems, fiber optic modems, interface converters, baluns, electronic data switches, data-line surge protectors, multiplexers, transceivers, hubs, print servers and much more. We produce these products at our Gaithersburg, MD, USA, facility, and can custom manufacture products for your unique needs.

We would like to hear from you. Please contact us in any of the following ways to tell us how you like this product and how we can meet your product needs today and in the future.

Web:	<a href="http://www.patton.com">http://www.patton.com</a>
Sales E-mail:	<a href="mailto:sales@patton.com">sales@patton.com</a>
Support E-mail:	<a href="mailto:support@patton.com">support@patton.com</a>
Phone - Sales	(301) 975-1000
Phone - Support	(301) 975-1007
Fax:	(301) 869-9293
Mail:	Patton Electronics Company 7622 Rickenbacker Drive Gaithersburg, MD 20879 USA

We are committed to a quality product at a quality price. Patton Electronics is ISO 9001 certified. We meet and exceed the highest standards in the industry (CE, UL, etc.).

Please contact us and let us know how we may provide you with the answers to your needs.

Thank you.

Burton A.Patton  
Vice President

P.S. Please tell us where you purchased this product.

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