USER MANUAL

MODEL 506 & 507
Surge Protected
DB-9 to Modular Adapters

PATTON Electronics Co.

Part #07M506/507-B
Doc. #019061U
Rev. C
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SALES OFFICE
(301) 975-1000
TECHNICAL SUPPORT
(301) 975-1007
http://www.patton.com

An ISO-9001 Certified Company

1.0 WARRANTY INFORMATION

Patton Electronics warrants all Model 506 & 507 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.

1.1 RADIO AND TV INTERFERENCE

The Model 506 & 507 Series units generate and use radio frequency energy, and if not installed and used properly—that is, in strict accordance with the manufacturer's instructions—may cause interference to radio and television reception. They have been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection from such interference in a commercial installation. However, there is no guarantee that interference will not occur in a particular installation. If these products do cause interference to radio or television reception, which can be determined by turning off the unit, the user is encouraged to try to correct the interference by one or more of the following measures: moving the computing equipment away from the receiver, re-orienting the receiving antenna and/or plugging the receiving equipment into a different AC outlet (such that the computing equipment and receiver are on different branches).

1.2 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.

1.3 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**.

NOTE: 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 506 & 507. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**

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 at (301)975-1000.

2.1 PRODUCT DESCRIPTION

The Patton Model 506 & 507 Surge Protected DB-9 to Modular Adapters allow you to simplify cabling connections and protect your RS-232 or RS-422 DB-9 equipment at the same time. Each adapter is custom wired according to your pin-out diagram (no "standard" wiring). Up to 1500 Watts of surge protections per modular pin is provided. On the Models 506, an RJ-11 jack is used, and up to 6 pins may be protected. On the Model 507, an RJ-45 jack is used, and up to 8 pins may be protected. Both the Model 506 and 507 employ Silicon Avalanche Diodes for superior transient protection. You may specify a clamping voltage of 27V for RS-232 applications or 6.8V for RS-422 applications. Surges are shunted safely to chassis ground through the D-shell connector. Male or female DB-9 connectors are available.

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 Models 506 & 507 adds four benefits to your system:

1) ***High Surge Capacity***. The Models 506 & 507 dissipate up to 1500 Watts per wire in 1.0 millisecond.

2) ***Quick Response.*** The Models 506 & 507 have a fast response time of 1 picosecond; 0.5 microsecond installed.

3) ***Low Impedance.*** The Models 506 & 507 add minimal load to your system--about the same as a gender changer.

4) ***Open Failure.*** The Models 506 & 507 fail "open" if your system experiences a severe transient or power fault above the rated voltage of the protector. This means that data and surge energy is shunted directly to chassis ground, rather that being allowed to flow throughout the system.

3.0 INSTALLATION

The Patton Models 506 & 507 are simple to install and require no user configuration. Follow these installation steps:

1) Be sure the metal D-sub connector on the device you are protecting is connected to frame ground. If not, see step 4, below.

2) Plug the DB-9 connector of the Model 506 or 507 *directly* into the DB-9 Serial port of the device you are protecting. Use of a serial cable reduces the effectiveness of the protection you would otherwise receive.

3) Plug your modular cable into the jack on the Model 506 or 507. If you have a Model 506, the cable must be terminated with an RJ-11 plug. If you have a Model 507, the cable must be terminated with an RJ-45 plug.

4) To provide an alternate ground connection, use the short strap supplied with the unit. Connect one loop to the device chassis (or other chassis ground) and the other loop to the Model 506 or 507 as shown below.

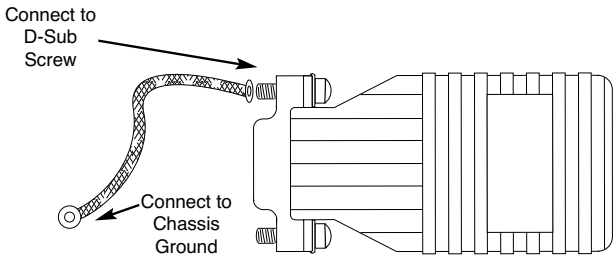

Figure 1. How to Connect the Patton Model DB-25 to Your PC, Modem or Printer

APPENDIX A

MODEL 506 & 507 SPECIFICATIONS

Peak Power Dissipation:	1500W, 10 x 1000μSec in Compliance with IEC 801-5 Level 3, 2kV (Models 506F/25, 506M/25, 507F/25, 507M/25, 507X)
Response Time:	(RS-232) Clamped to ± 27V after 0.5μsec. (RS-422) Clamped to ± 6.8V after 0.5μsec.
Breakdown Voltages:	27V for RS-232, 6.8V for RS-422
Capacitance:	less than 500pF
Cable Length Burden:	less than 9.1" (2.8m)

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:	http://www.patton.com
Sales E-mail:	sales@patton.com
Support E-mail:	support@patton.com
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.).

It is our business to serve you. If you are not satisfied with any aspect of this product or the service provided from Patton Electronics or its distributors, please let us know.

Thank you.

Burton A.Patton
Vice President

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

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