UNPACKING PROCEDURES

Inspect the shipping container and unit for indication of improper handling. This unit was carefully checked and packed before leaving the factory. If the unit has been damaged, make an immediate claim to the dealer or distributor from whom it was purchased. If the unit was shipped to you, notify the transportation company without delay, saving all packing materials, in order to process the claim.

REV C

Grommes~Precision
Precision Electronics

TLS
Tel-Page Line—Lightning Suppressor

Grommes~Precision
847-599-1799 800-SINCE-46 FAX: 847-599-6178
1331 Estes Ave. Gurnee, IL 60031 USA
www.grommesprecision.com

TLS INSTRUCTIONS

Description

The TLS is uniquely designed to prevent induced lightning surges that can occur to Tel-Page lines from damaging the connected equipment. Simply locate the TLS within the Tel-Page line after the phone system and close to the electronic equipment that you wish to protect (i.e. amplifier).

Features

Induced lightning strike protection
Triple protection—primary and secondary series and shunt.

Specifications

Maximum Signal Voltage:	1V RMS balance
Switching Voltage:	Approximately 25V

CONNECTING THE TLS TO PROTECT THE ELECTRONIC EQUIPMENT

Verification of Electronic Equipment's Earth Ground

Verify that the powered equipment that you wish to protect (i.e. the amplifier) is connected to a good earth ground. If the AC receptacle is grounded, then equipment with a 3-prong line cord will also be grounded. If the amplifier to be protected uses only a 2-conductor AC line cord, then a separate ground wire should be connected from earth ground to the amplifier chassis. To ensure the integrity of the earth ground, consult a licensed electrician.

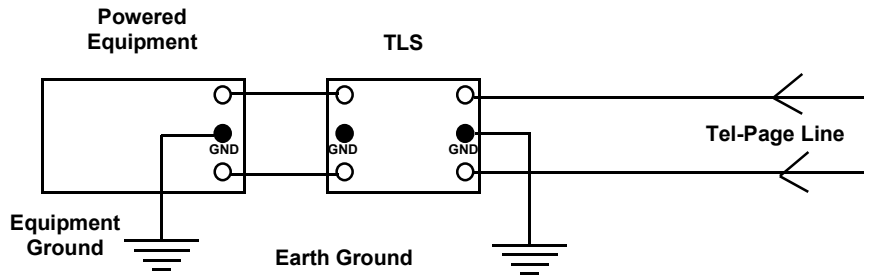
Verification that the Tel-Page Line does not carry DC Voltage

Ensure the Tel-Page line does not carry a DC voltage with respect to ground. This can be verified by using a DC volt meter to ensure there is no DC voltage present on the line with respect to ground. The TLS is not designed to be connected to a Tel-Page line carrying DC voltage and will not work effectively.

Connecting the TLS

1.	The TLS should be located close to the electronic equipment you wish to protect on the Tel-Page line. The TLS is not designed to protect the telephone system; it does not pass ringer voltage (REN=Z). Ground the TLS by connecting one of the center screw GND terminals of the TLS to a good earth ground.
2.	Connect the second GND terminal of the TLS to the chassis GND of the electronic equipment you wish to protect.
3.	Connect the equipment's input to the EQUIPMENT terminals of the TLS.
4.	Connect the Tel-Page line to the LINE terminals of the TLS.

Typical hook-up example:



NOTE:

The TLS is uniquely designed to prevent induced lightning surges that can occur to Tel-Page lines from damaging the connected equipment. It is not intended to replace any other surge protectors. For the protection of all other lines entering and leaving your equipment, consult a professional who specializes in surge protection.

REV C