

# Protecting Your SightLogix Equipment from Electrical Surges

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SightLogix devices are designed to meet or exceed international standards regarding transient suppression and immunity with proper chassis grounding. It is also a best practice to provide additional protection in the form of an external Transient Voltage Suppressor (TVS). This is especially true of areas with a high amount of lightning activity because as we all know lightning does not always follow logical pathways. The TVS is an inexpensive device that, when installed properly, will provide significant additional protection.

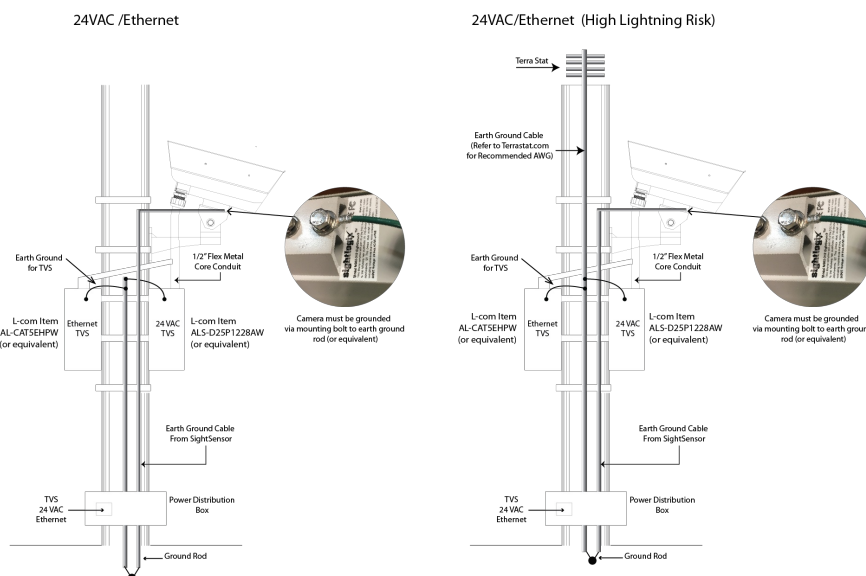
Outside of a direct lightning strike to a device itself, these surges most often enter the camera through the power and communication cables. To protect your equipment, install the suggested surge protection devices as outlined here. When installed properly as shown in this document, your equipment will be well protected from electrical surges.

Please note that all surge protection requires good grounding of the equipment chassis via low impedance earth ground for either built-in or external transient protection devices to operate as designed. This ground path is where transient voltages are directed away from the equipment's active electronics. *If a low impedance earth ground is not provided, much of the primary voltage transient protection will be rendered ineffective whether built in or external.*

For SightLogix this grounding is accomplished through providing a good ground connection to the camera mounting bolt as shown in the following illustrations.

In all installations the use of shielded power and Ethernet cabling is strongly recommended to provide maximum protection from induced transient voltage. This is important whether external TVS components are used or not.

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- TVS recommended is L-Com types below or equivalent:
  - Ethernet - AL-CAT5EHPW: <http://www.l-com.com/surge-protector-outdoor-10-100-base-t-cat5e-hi->

[power-lightning-protector-rj45-jacks](#)

- Power - ALS-D25P1228AW: <http://www.l-com.com/surge-protector-weatherproof-lightning-surge-protector-for-rs-422-rs-485-12-28vac-power-lines>
- For best protection in high-risk lightning areas, use of a TerraStat with its own ground is recommended (*lightning rods are not recommended because they tend to attract lightning strikes*):
  - <http://alltecglobal.com/products/lightning-protection/terrastat/>.

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