

- Provide additional grounding to the transmission line sheath wherever possible. Make it a point to ground the transmission line where it is supported on poles and where it enters a building.
- It is wise to take at least part of the transmission line through a length of grounded conduit.
- **Bond all equipment cabinets together to a single point.** Then, ground that point to a grounding rod network using as short and as straight a ground wire as possible. If bends in the ground wire are necessary, make them as large a radius as practical.
- Transmission lines should be brought into the equipment cabinets adjacent to the single point ground connection where a good low impedance bond can be made with the transmission line sheath.
- Install a gas tube protector between the equipment cabinet ground and AC-neutral where it enters the equipment cabinet. Install gas tube protectors where the control lines enter the building and at the point of entry into the equipment cabinet. Also, install gas tube protectors wherever control lines enter a building and install additional protectors as close to the remote control console as possible.
- Keep ground wires from gas tube protectors to ground rods or perimeter grounds as straight and short as possible. Avoid sharp bends in ground wires.
- Never bundle a ground wire with any other cabling or wiring. Also, never run a ground wire along any metal wall, along any electrical conduit, or inside a conduit.

Remember, the lower impedance the grounding system is in relation to the equipment being protected, the greater the protection afforded to the equipment. Keep the lightning strike current in the grounding network; not running through the equipment to ground.

RECOMMENDED PROTECTORS

The devices listed below are available from your local Motorola Parts Center. Other devices are available from different manufacturers for special applications and may be used in place of those listed herein. Installation

instructions are generally packed with each device. The following listing contains phone line suppressors, ac line surge protectors, coaxial cable in-line lightning arrestors, and coaxial cable ground clamp kits. Refer to the Motorola Buyers Guide for additional information.

PHONE LINE SUPPRESSORS

- TRN8187A** Single Line Suppressor, 3-electrode gas tube protector
- TRN4589A** Dual Line Suppressor, 3-electrode gas tube protector
- RRX4021B** Single Line Suppressor, 3-electrode gas tube protector

AC LINE SURGE PROTECTORS

- TLN4399A** AC Line Surge Protector, 117 V ac line, 7/8" × 14 conduit hole mounting
- TLN5920A** AC Line Surge Protector, 240 V ac line, 7/8" × 14 conduit hole mounting.

COAXIAL CABLE IN-LINE LIGHTNING ARRESTORS

- RRX4024** UHF type connector
- RRX4025** "N" type connector
- RRX4032** Tower Mount Kit

COAXIAL CABLE GROUND CLAMP KITS

- ST-788** For 1/2" jacketed heliax and pipe or grounding rod
- ST-853** For 7/8" jacketed heliax and pipe or grounding rod
- ST-789** For 1/2" unjacketed heliax, includes bushings for better contact without collapsing line
- ST-790** For 7/8" unjacketed heliax, includes bushings for better contact without collapsing line