Signal Line Protectors
Installation Instructions
1. Introduction

1.1 These installation instructions apply to the Novaris SLM range of signal line protectors.

Cat No: SLM - 7v5 - 2

1.2 These products are 3-stage signal line protectors that protect against the effects of lightning induced surges and other transient overvoltages. Each SLM can protect up to 12 signal lines from the effects of transient overvoltage.

They provide both common-mode and transverse-mode protection, which is essential for the effective protection of any system.

2. Before Installation

2.1 Ensure that the maximum operating voltage of the signal line does not exceed the maximum continuous operating voltage of the signal line protector.

2.2 Ensure that the operating current of the signal line does not exceed 350mA for standard versions or high frequency versions, or 2A for the 2 Amp versions.

2.4 Turn the power off before beginning the installation.

3. Installation

3.1 Point of Connection: The surge protector should be connected at the closest practical point to the equipment to be protected.

3.2 Mounting: Novaris SLM range are designed to be panel or wall mounted via the four mounting holes in each of the four corners of the product.

If the unit is to be positioned in an exposed environment it should be mounted in a suitably rated enclosure. Suitable polycarbonate enclosures are available from Novaris.
3.3 **Wiring:** Signal line protectors are connected in series with the equipment (Figure 3).

Signal pairs from the incoming signal lines should be connected to the terminals labelled L1, L2 etc on the line side of the protector.

The cable screen (or ‘common’ conductor) should be connected to the terminal on the line side of the protector labelled with an earth symbol.

Connect the equipment to be protected from the equipment side of the signal line protector (labelled ‘EQPT’).

0V referance for the equipment to be protected should be connected to the EQPT side terminal marked with an earth symbol

3.4 **Earthing:** The surge protector must be earthed to the same point as the equipment to be protected. The device may be connected to the common earth from the earth on the equipment side of the device.

The earth connection should be made from the equipment side of the SLM to the 0v reference of the amplifier or device receiving the signal.

The earth connection should be made using multistranded conductor with cross-sectional area of at least 6mm².

**IMPORTANT:** Because the earth is shunt-connected, the inductance of the connection has a significant effect on performance. Most importantly, the length of the earth connection must be kept as short as possible. This is not the case with the other connections because they are series-connected.

4. **After Installation**

4.1 Check the installation by testing that the equipment is still operating correctly.

4.2 Novaris signal line protectors are extremely robust and require very little maintenance. They feature failsafe overcurrent fusing. In the event of a surge that is large enough to damage the surge protection components, the fuses will operate. This is easily detectable as the signal will no longer pass. Under these circumstances the signal line protector should be replaced as soon as possible.