

1740 Series Coaxial Surge Protector

BOURNS®

INSTALLATION INSTRUCTIONS

IMPORTANT: The Protector(s) described in this Installation Instruction shall be installed in accordance to the applicable

requirements described in the National Electric Code, ANSINFP A 70, Article 800, Section C.

General

Bourns® Model 1740-15 (150V), 1740-23 (230V) and 1740-35 (350V) provide surge protection for coax cable.

Where to Install

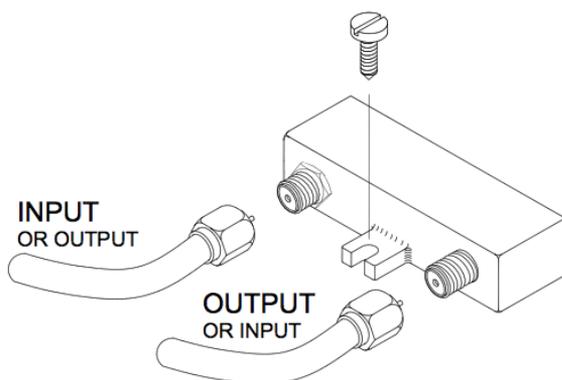
The protector may be installed indoors or outdoors, without or within a compatible UL Listed enclosure. If located outdoors, the protector should be oriented so the F connectors face down. Rubber 'boots' or weatherproof male connectors should be used. Video equipment protection will be improved if the protector is installed close to the main electrical service panel (where the power neutral is grounded).

The protector must be installed on the output side (video equipment side) of any Network Interface Device (NID) provided and installed by the cable company (generally at the service entry point of the cable into the building). This NID is used only when network-powered broadband voice/data/video services are delivered to the subscriber. This NID does not refer to the simple box wherein the provider's cable ends and the building cable takes over, nor does it refer to a cable modem connecting a PC to an unpowered CATV network.

How to Install

The protector can be secured to the mounting surface (wall, joist, stud, etc.) employing the #10 AWG (5 mm) self-tapping screw supplied with the protector.

The protector is symmetric and bidirectional, so either end may be used for connection to the input and output cables. The connecting cables should be 75 ohm impedance with solid center conductors, and with Type F male connectors.



If the protector is installed further than approximately 30 feet (10 m) from the cable service entry point, the overall protection level to the video equipment can be improved if the cable shield is grounded at the cable service entry. Refer to NEC 820-33 for

grounding of the shield basically, the grounding conductor should be insulated copper wire, #14 AWG or larger, and should connect to the electrical service grounding electrode system (a grounded interior metal water pipe, building steel, electrical service equipment enclosure, ground wire, or ground bar).

The cable on the service side of the protector should be RG-59B/U or RG-59/U with a center conductor size of #22 or #23 AWG with a diameter of .025 inches (.065 mm) or smaller. (Note that RG-59/U is available with a range of center diameters from #20 to #23). If the protector is installed at the service entry point, then the restriction on center conductor size would apply to the service provider's cable drop. Note: Most recent and new cable service drops utilize RG-6/U which has a larger center diameter. If the protector is located further downstream, then the restriction on size can apply either to the cable drop or to the cable between the service entry point and the protector. To ensure the proper failsafe coordination with the protector, if the upstream center conductor diameter(s) are larger than this, a 12 inch (300 mm) or longer stub of RG-59B/U, or RG-59/U with a #22 or #23 sized center conductor should be added in line, on the service side of the protector.

The cable from the protector to the video equipment can be any 75 ohm cable of any center diameter (RG-59/U, RG-59B/U, RG-6/U, or RG11/U).

Grounding

Common Ground = Chassis, Power and Earth Ground. Ground per applicable requirements described in the National Electric

Code, ANSI/NFPA, Article 800.

Maintenance

The protector is able to withstand multiple large lightning surges. At the protector's end of life, it may become shorted or resistive. If poor picture quality occurs, bypass the protector with a female/

female coupler. If the bypass eliminates the problem, then the protector should be replaced.

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