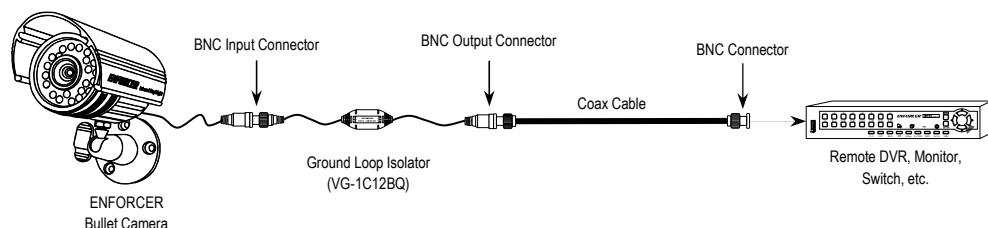


Also Available: **Ground Loop Isolator** **VG-1C12BQ**

Helps reduce ground loop interference and conveniently integrates into existing CCTV installations.



IMPORTANT: Users and installers of this product are responsible for ensuring this product complies with all national, state, and local laws and statutes related to monitoring and recording audio and video signals. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or statutes.

WARNING: Incorrect mounting which leads to exposure to rain or moisture inside the enclosure could cause a dangerous electric shock, damage the device, and void the warranty. Do not open the case of this device, as there are no field-serviceable components inside.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.

NOTICE: The information and specifications printed in this manual are current at the time of publication. However, the SECO-LARM policy is one of continual development and improvement. For this reason, SECO-LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints or typographical errors.

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SECO-LARM U.S.A., Inc.



VS-1V12BQ

Video Surge Protector

Installation Manual



- Helps prevent damage to sensitive CCTV equipment such as cameras, monitors, digital video recorders, and video splitters
- Intercepts repeated surges and grounds that could damage video equipment
- Helps protect against power surges or lightning strikes
- Passive operation – No external power required
- Gold-plated BNC connector improves reliability and product life
- Includes a 16" grounding wire for convenient connection to ground

SECO-LARM® SLI

Note: Products with model numbers that end with "Q" or that have a round green "Q" sticker are RoHS compliant.



Introduction:

The ENFORCER Video Surge Protector is a passive device that helps prevent damage to sensitive CCTV equipment from power surges or lighting strikes. The device can be deployed in new installations or added to existing installations.

The ENFORCER Video Surge Protector should be installed between a camera and a digital video recorder or video splitter to protect against surges that could damage video equipment.

NOTE: For the best protection, it is recommended that two video surge protectors be installed, one near the camera, and one near the DVR.

Specifications:

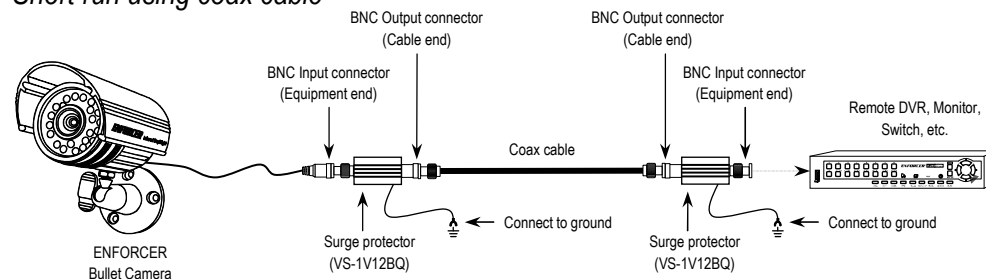
Bandwidth	0~1GHz	
Maximum input	1.0Vp-p	
Insertion loss	<0.2dB	
Return loss	16dB @ 75Ω	
Frequency response	0-3dB at 10MHz	
Isolation voltage	600VDC (min.)	
Insulation resistance	10,000 MΩ	
Maximum surge voltage	4KV	
Surge life	300 surges @ 100A	
Surge protection time	1ns	
Surge resistance	Approx. 0Ω	
Power passing capability	130 VAC/DC, 65 V _{RMS} @ 10A	
Connector	In	BNC Male
	Out	BNC Female
Impedance	75 Ω (BNC-to-BNC)	
Dimensions	3 1/16" x 1" x 1" (78 x 25 x 25 mm)	
Cable length	16" (406mm)	
Weight	2.3-oz (65g)	
Enclosure material	Aluminum	
Operating temperature	32° ~ 131°F (0° ~ 55° C)	

Installation:

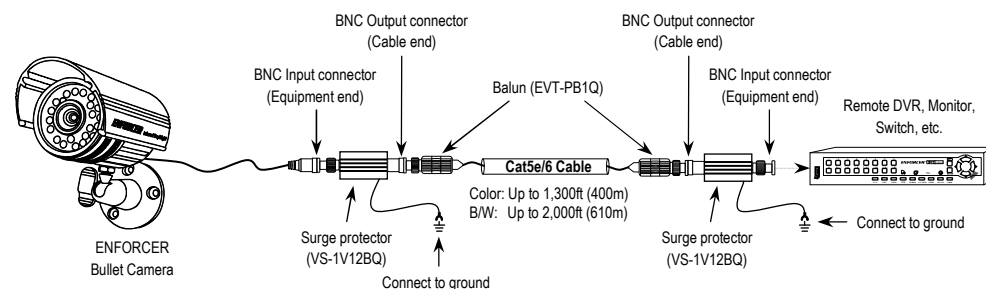
1. Detach the video cable BNC connector from the camera BNC connector.
2. Attach the equipment end (male connector) of the first video surge protector to the camera BNC connector.
3. Attach the video cable BNC connector to the cable end (female connector) of the first video surge protector.
4. Connect the ground wire from the first video surge protector to an earth ground.
5. Detach the video cable BNC connector from the DVR/Multiplexor BNC connector.
6. Attach the cable end (female connector) of the second video surge protector to the video cable BNC connector.
7. Attach the DVR/Multiplexor BNC connector to the equipment side (male connector) of the second video surge protector.
8. Connect the ground wire of the second VS-1V12BQ to the metal chassis of the protected equipment.

Sample Installations:

Short run using coax cable



Longer run using CAT5e/6 cable



CAUTION

Ground wire must be grounded directly to earth ground or to the metal chassis of the equipment being protected.

The equipment chassis must be connected to earth through a properly grounded AC power receptacle.

Troubleshooting:

Wavy or ghost image if connected to image processor (e.g., multiplexer or DVR), but not if directly to monitor.	<ul style="list-style-type: none"> • Move the cable away from possible sources of interference. • Ensure that the same twisted pair connects to a balun at both ends of the cable. • Replace the cable with a new cable.
Image background flutters between dark and light.	<ul style="list-style-type: none"> • Remove a local power source, or adjust the monitor's brightness and contrast.
Image is wavy and shakes.	<ul style="list-style-type: none"> • Try reversing the polarity of the 2 wires at one end of the cable.
Image is weak or faded.	<ul style="list-style-type: none"> • Reduce the cable length. • Replace with a higher-grade cable. CAT5 cable meets the specifications in the manual. CAT6 cable allows longer range.
No image.	<ul style="list-style-type: none"> • Double-check that the cables were connected properly. • Run a continuity test on all wires in the cable.