

The Problem

In some circumstances, the latest generations of advanced 4K/12G cameras may sustain damage to their SDI circuitry when connecting their SDI outputs to a cable. These problems typically arise from stray transient voltages present in the cables, which “earth” through the camera output BNC when first connected, placing great stress on the camera’s internal circuitry.

The Current Solution

To overcome these problems camera manufacturers have typically recommended to avoid using certain cable types and rigorously following a precise connect/disconnect sequence which typically includes attaching the power source to the accessory before attaching it to the BNC cable. Failure to adhere to these instructions may result in substantial damage to an expensive camera plus all the substantial costs and inconvenience associated with an interrupted shoot . However, many videographers have found that following these instructions is sometimes impossible during a shoot – for example when it is necessary mid shoot to change accessory batteries, or a moments inattention when members of the crew unfamiliar with these requirements are involved.

The new LEN Solution


Our PPDuo Port Protector & Doubler galvanically Isolates the Camera from the cable, preventing transient voltages in the cable reaching the camera.

The Bonus

PPDuo Port Protector & Doubler additionally incorporates our well established and market leading Splitter technology to add a second SDI signal output.



Specially designed to protect the latest generation 4K/12G cameras

- Protects sensitive ports from transient voltages when hot swapping cables
- Protects camera from induced voltages in long cable runs
- Provides an additional SDI output port
- Works with HD, 3G & 4K/12G SDI formats
- Allows easy cable connection/swapping without risk
- Passive design means no batteries or power source needed
- Easily attached with 2 universal mounting points
- Designed & manufactured in the UK by World's leading producer of passive signal enhancement devices 

For more information
please visit
www.len.co.uk



NEW!

**PP
DUO**

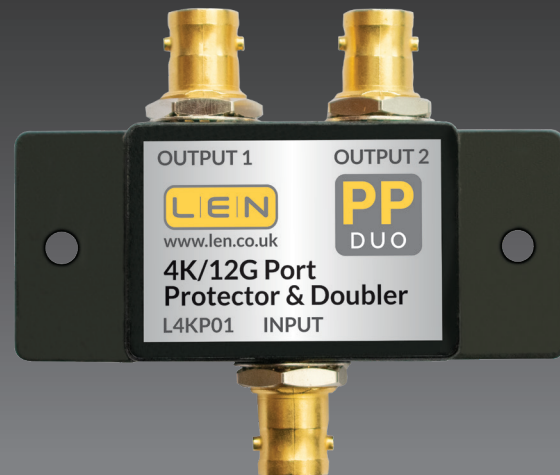
4K/12G PORT PROTECTOR & DOUBLER

Protects sensitive ports from transient voltages
when hot swapping cables

Protects camera from induced voltages in long cable runs

Provides second SDI port

HD, 3G & 4K/12G SDI compatible



The solution

PP
DUO



More about the LEN solution – PPDuo

The LEN PPDuo is a unique galvanic isolator (designed to protect the SDI port) and port doubler, specially developed to overcome problems when connecting or swapping cables on the latest generation of advanced 4K/12G cameras.

Using a PPDuo essentially removes the risk of problems associated with connecting or swapping of cables, including “hot” swapping. With its unique advanced design PPDuo not only reliably protects your camera but also provides a second SDI port. Connect PPDuo to your camera SDI port and you then have two protected SDI output ports, each capable of outputting a high quality, clean 4K/12G signal.

All LEN products are ‘passive’ designs so that you do not need a power supply or to worry about reduced battery life. PPDuo simply plugs in to provide the protection you need, plus that extra port!

**Why put your camera at risk
when the simple solution is...**



Who are LEN?

Established in 1995 LEN are signal enhancement specialists and leading players in the Television Studio and Outside Broadcast market with a wide range of passive 4K/12G products including Galvanic Isolators, Splitters, Relays etc. All LEN products are designed, developed and manufactured in the UK.



Instructions for installation and use

- After removing all packaging the device is ready for use
- Device may be mounted using the mounting holes provided
- The end flanges and holes may be freely modified to aid mounting
- Connect the device in-line using good quality coaxial cables
- The cables should be supported to avoid stress on the connections
- If the second SDI output is not used then a good quality 75 Ohm termination should be fitted to the unused output

This product **MUST NOT** be connected to mains voltages

This product is not designed for use under water and should not be immersed

Guarantee

Your LEN PPDuo is guaranteed against any manufacturing defects for one full year from the date of original purchase. If during this period of warranty the product proves defective due to improper material or workmanship, our authorized service network will, without charge for labour and parts, repair the product in the terms and conditions set out below. LEN reserves the right (at its sole discretion) to replace or repair the product.

This warranty is only provided upon presentation of the original invoice or purchase receipt indicating the date of purchase, product type and dealer's name, together with the product. LEN reserves the right to refuse free-of-charge warranty service if the above documents cannot be presented or if the information contained in it is incomplete or illegible. The label on the product must not have been defaced or made illegible and the model number must be clearly visible.

This warranty will not cover: - Repair or replacement due to normal wear and tear, or if the product has been modified, or the casing opened. - Damage caused by misuse including but not limited to failure to use the product for its normal purpose or according to the user instructions, and to installation or use of the product inconsistent with the safety standards in force in the country where it is used. - Damage to associated equipment or consequential loss - Transport costs and all risks of transport relating directly or indirectly to the warranty of the products.

A full statement of LEN' s warranty terms and conditions may be viewed at <https://www.LEN.co.uk>