

GAM OPTO-ISO

Compact optical isolator and line splitter



The Opto-ISO is a "tool-box" accessory designed for use in overcoming unforeseen problems which can occur in a DMX system. DMX comprises of low level digital signals which are transmitted from the console output through the cabling to a number of DMX receivers, such as multiple dimmers and moving lights.

The DMX standard allows each transmitting device (ie. the console) to be loaded with a maximum of 32 receivers (ie. Dimmer inputs). Situations can occur where these loading levels are likely to be exceeded. If this is the case then the DMX line needs to be split into two or more lines actively, each active split allows another 32 receivers to be supplied. The GAM Opto-ISO is an active line driver and provides the full drive capability to supply 32 more receivers.

Another problem occurs in the linking of multiple DMX receivers. That is from mains earth potential differences occurring between multiple receivers (caused by powering from different mains power outlets). In this situation it is likely that the earth potential difference is being balanced out through the DMX cable which links the two receiving devices. Excess voltages over and above the low level DMX signal can be generated through the link and consequently they can swamp the DMX signal to a point where it may cut it out

altogether. However, in most cases the problem manifests itself as random flicker signal in the system. This problem is quickly overcome with an Opto-ISO, it has an optically isolated output which provides complete isolation between the DMX line input and output. This means that if there was an earth potential difference existing, the path for current flow in the earth line which was causing DMX flicker no longer exists and the DMX signal regains its integrity.

The GAM Opto-ISO is powered from four AA size batteries to enable it to be quickly plugged into the system at any point in the line without having to locate mains power at that point. The battery supply can provide 24 hours of continuous use, this overcomes a short term situation, however, in a more long-term situation the Opto-ISO can be powered from a low voltage DC plug pack. The Opto-ISO provides a hardwired loop-through for connection into existing lines and does not require power to maintain continuous signal flow in important house lines. The isolated output requires power and can be activated as necessary from a switch located on the front panel. The unit is constructed in a heavy gauge blackened alloy case and is fitted with high-quality 5 pin XLR connectors to meet with the demands of professional use.

WEIGHT: 296 grams.

SIZE: 145mm x 45mm x 85mm.

POWER: 6 volt DC adaptor/ 4 x AA cells.

CONNECTORS: 1 x 5pin XLR Male DMX input

1 x 5pin XLR Female Looped Output

1 x 5pin XLR Female Isolated Output