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LIGHTING CONTROL SYSTEMS

VDMX DMX OUTPUT



The development of the VDMX DMX OUTPUT hardware interface enables users to control over 1000 different types of automated and conventional theatrical fixtures, within a 512 DMX channel specification via the USB protocol on their computer. This powerful yet small in size black box is an ingenious way to enable you to control the lighting in a live or programmed light show.



POCKET SIZED

Handy and competitively priced, this tool is powerful enough to realize your lighting design in VDMX and transpose it to a full live show; yet small enough to fit in your pocket and travel easily from venue to venue with you.



NO PSU REQUIRED

The DMX Output interface requires no external Power Supply Unit; it draws its power directly from the computer.

OPTICAL ISOLATION

Optical Isolation safe guards both your computer and your lighting equipment. Optical Isolation is standard to the VDMX Output hardware interface.



PROTECT YOUR LIGHTING EQUIPMENT

Each industry introduces its own dangers, in the environment in which Lighting Operators control their lighting-rigs, there are several eminent hazards which must be addressed for safe working practice.

This text will cover and offer a solution to problems that threaten the technician's ability to operate his lights and may seriously damage the equipment.

What can garble the communication between your control board and the fixtures; resulting in them not "reading" the DMX signal you're sending out?

Why does a fixture sometimes end up being damaged, disabling its DMX communication, for no obvious reason?

Why do some types of equipment have a higher failure rate than others, requiring you to replace 'line driver' chips with a rate as if they were batteries in your Mini-Maglite?

What would happen to your control board if there was a short-circuit in one of the fixtures, causing a high voltage to spark onto the DMX cabling?
Or the other way around: What if your board, for any reason, starts putting 220 Volts on the DMX bus?
A disturbing thought if you are a freelancer owning your own board, hired to control somebody else's rig full of expensive lights.

Concerning issues to say the least, fortunately, some events are less likely than others:
A short-circuit in a board or fixture can be prevented with proper maintenance on the equipment and cabling. Other problems are inherent to the environment we work in. Consider the scenario in which the Front of House and the stage are being fed with separate power sources, this can create a difference in potential between the two grounded points of your board and your fixtures. When two devices are connected and their ground potentials are different, voltage flows from high to low by traveling through the data cable. If the voltage potential is large enough, your equipment will not be able to handle the excess voltage, and one of your ports will be damaged. Even small ground loop voltages cause transmission errors with data signals riding on top of the ground loop current. At worst, ground loops are a long-term condition that can slowly heat, and even cook your circuits. Additionally, the DMX wiring could be surrounded by power lines, motors, or equipment that produces static electricity. If this is the case, the communication parts of your lights could be damaged by sudden surge waves produced by these types of equipment.

To address these problems and prevent any miscommunication and damaged equipment, you should choose lighting equipment fitted with a proper protection against these hazards. This protection comes in the form of Surge Suppression and Optical Isolation. Devices equipped with these security measures will prove to be more stable and more fault tolerant, allowing you to rely on them during your time-critical work.

But what exactly are Surge Suppression and Optical Isolation?
Surges are high amplitude electrical pulses lasting only several millionths of a second in duration. They can be caused, for example, by heavy-duty equipment, power lines, short circuits, or large motors. A Surge Suppressor has the ability to effectively absorb the high energy in an extremely short period of time, preventing the connected devices from damage.
The purpose of Optical Isolation is to electrically isolate two circuits that need to communicate with each other. This is achieved by using a photo coupler that transforms an electrical signal into light, and then retransforms the light back into an electrical signal on the other end. In this way, the two circuits are completely isolated from each other electrically.
Does VDMX offer Surge Suppression and Optical Isolation?

Yes: VDMX feels that it is imperative to supply reliable and high quality DMX products. VDMX engineers have incorporated Surge Suppression and Optical Isolation in their design of the hardware products. Our aim is to develop safe and stable DMX control products that can be relied upon by our users and protects the client's investment.

SPECIFICATIONS

No. of DMX channels: 512
Data isolation: typically 1600V rms (1 minute)
Dimensions: 100 x 86 x 37 mm (3.9 x 3.4 x 1.5 inches)
Weight: 300 gram (0.7 lbs)

MINIMAL SYSTEM REQUIREMENTS

- Microsoft Windows 2000/XP
- USB-port

DUE TO CONTINUOUS IMPROVEMENTS, SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE.