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## LIGHTING CONTROL SYSTEMS

### Enhanced<sup>2</sup> DMX512 Isolated Splitter



The *Enhanced<sup>2</sup> Isolated Splitter* includes all the features of our standard models with added protection to meet the needs of harsh operating conditions. As with our standard splitters, all outputs are isolated from the input and from the other outputs by optical couplers. Every output has its own power supply and line driver. For protection against electrical storms, the Enhanced Splitter adds four transient absorbers on the input, two on each output, and one on the power line. To protect against miswiring, the Enhanced Splitter has self resetting fuses on the DMX512 input and outputs that protect the Splitter against damaging voltages up to 120 volts. Indicators on each output display power and termination status. Indicators on the input display signal present and valid DMX. The Enhanced Splitter is designed to work on any voltage between 90 and 240 volts.

The Enhanced Splitter allows connection of DMX receivers (dimmers, color changers, moving lights, etc.) in a star configuration as opposed to a daisy chain configuration. In a star configuration, each control cable is run to a central point, in this case the splitter. In a daisy chain configuration all the devices are connected on one control cable, the output of one feeding the input of the next. It is good practice to limit the number of receivers on a DMX512 output to 32 devices. The Enhanced Splitter gives you five outputs from one input allowing up to 160 receivers (32 per output).

#### Technical Data

**Specifications:** All specifications meet or exceed DMX512 requirements

**Baud rate:** 0 to 250 Kilobaud

**Input circuit:** EIA-485 receiver protected by two self resetting fuses

120 ohm input terminator protected by a self resetting fuse  
 Four transorb diodes: two on +Data, two on -Data

**Input signal:** 0.5 volts minimum, 12 volts maximum  
 Input can withstand up to 120 volts without damage, transients up to 5KV

**Output circuit:** Slew rate limited EIA-485 driver protected by two self resetting Polyswitch fuses.  
 One transorb diode on +Data, one on -Data.

**Output signal:** EIA-485 driver yields an approximate 3 volt signal into 120 Ohms  
 Outputs can withstand up to 12 volts without damage, transients up to 5KV.

**Connectors:** Gold plated 5 pin Neutrik D-1 Series

**Isolation:** 2500 volt optical coupler, 5000 volt split bobbin transformer

**Power input:** 90 - 240 volts, 50/60 hertz, 0.1 amp (24 watts)IEC-320 (international) input connector

**Color:** Silver hammertone with black front and back panels

**Size & Weight:** 11.25" deep, 1.74" high, 8.25" wide, 4.9 pounds (19" rack adapter available)  
 Wall Mount 2" deep, 8.5" high, 10.5" wide, 5 pounds  
 Mounting Hole Locations 6" Vertical 9.5" Horizontal

FEATURE	BENEFIT
Input is electrically isolated from output.	Console is protected from failed dimmers, lightning damage, and any other cause of high voltage on the control cable.
Outputs are isolated from each other.	Color changers, moving lights, other dimmers are protected from each other.
Outputs are separately buffered.	Reflections, short circuits, etc. on one output cannot affect another output.
Input and output DMX lines are protected by transorb diodes.	The splitter can withstand very high transient voltage spikes without damage.
Input and outputs are fused.	DMX lines can withstand up to 120 volts continuous fault or miswiring.
No user adjustments.	Easy "fool proof" installation.
DMX pinouts are printed on the splitter.	Assists in proper control wiring.
Chassis is 1/10" powder coated aluminum.	Rugged and attractive for years of service.
Two 1/2" holes are provided for clamps, four 3/8" slots are provided for safety cables.	Easily mounts to truss or pipes.
Carry handle allows access to	Output connectors are easy to

connector release tabs.	release, even with gloves on.
IEC-320 (International) power connector.	Enables use in foreign countries.
Gold plated Neutrik 5 pin connectors.	Assures reliable connections.
All integrated circuits are socketed.	Eases field service.
Uses 2500 volt optical couplers.	Easily isolates line voltage failures. Withstands electrical storm damage.
5000 volt line transformers.	Meets European line isolation safety requirements.
"Air gap" circuit board under isolator.	Prevents arcing across circuit board.
60 mA drive current. Slew rate and current limited.	Reliably drives long control cables. Reduces the data errors caused by improperly terminated DMX512 lines.
Input indicators display signal present and "valid" DMX.	Built in DMX validator checks break time > 88uS, MAB > 6uS, and start code equals zero.
Output indicators display power and unterminated status.	Simplifies system trouble shooting.
Great designs	Products are designed to latest specifications.
5 year warranty	Peace of mind.



model: 125EE Front View



model: 125EE-5 with optional feed through Rear View



model: 125EE with RK-FMC rack kit Front View



model: 125EE with RK-FMC rack kit Rear View

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