

DMX512 Enhanced Combine Unit

model: 221E - 621E
technical data sheet



The DMX512 Combine unit solves the problem of combining multiple DMX input signals into a single DMX output signal. The most common configuration of the unit allows two consoles to control a single set of dimmers in a *highest takes precedence* or *pile on* mode. Examples of where this might be necessary include booth console/stage manager's console, primary console/backup

console, and where one console controls intensity of a moving light fixture while a second console is used for color and/or position. Units with up to six inputs are available. More than six inputs can be accommodated using a Master/Slave arrangement.

Units that patch and/or route the DMX dimmer channels are available for applications where two consoles control a single dimmer rack with loads in separate rooms. Such units prevent the operator in room "A" from bringing up the lights in room "B".

The custom possibilities based on the DMX512 Combine Unit are almost endless. We can accept Colortran Multiplex (CMX) on one or both inputs as well as output CMX. We can concatenate the two DMX inputs to form a 1024 dimmer look up table and output from that table in any order in DMX or CMX protocols. In fact we probably haven't thought of all the possibilities for this versatile product. If you have a custom need, give us a call. We like to talk with our customers.

SPECIFICATIONS

Baud rate:	250 Kilobaud
Input circuit:	EIA-485 receiver with 120 ohm termination between +data and -data
Input connectors:	Gold plated 5 pin male (Neutrik D1 series) Terminal Block Optional
Output circuit:	EIA-485 driver
Output connector:	Gold plated 5 pin female (Neutrik D1 series) Terminal Block Optional
Input to output delay:	1/100 second average 1/50 second maximum
Power input:	100 - 120 volts, 50/60 hertz, 12 watts (208 - 240 volt optional)
Power cord:	Attached 5' 18/3 cord with parallel blade w/ ground plug.
Color:	Silver hammertone with black front and back panels.
Size and weight:	11.25" deep, 1.74" high, 8.25" wide, 4.9 pounds

*All specifications meet or exceed DMX512 requirements

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DMX512 Combine Unit -- Selected Features

The following information is provided to assist you in determining if the DMX512 Combine Unit would be of benefit in your installation. If you have any questions, please feel free to call, write, or FAX us.

FEATURE

Only one fiftieth of a second delay.
No user adjustments.
Chassis is 1/10" powder coated aluminum.
Two 1/2" holes are provided for clamps,
Carry handle allows access to connector

DMX pinouts are printed on the unit.
Uses standard 5 pin connectors.
All integrated circuits are socketed.
Power and input signal indicators
Dimmer 1 output level mimic.
Internal power supply.
Internally jumpered "hold" feature.
In the lighting industry since 1979.
5 year warranty.

BENEFIT

No visible delay. Bumps are fast. Fades are smooth
Easy "fool proof" installation.
Rugged and attractive for years of service.
Easily mounts to truss or pipes.
Output connectors are easy to release, even with gloves on.
release tabs.

Assists in proper control wiring.
Assures reliable connectability
Eases field service
Simplifies system trouble shooting.
Verifies data is being received correctly
No "wall wart" transformer to break off or come unplugged
Allows unit to hold the last received levels indefinitely.
We'll be here if you need us.
Peace of mind.

The DMX512 Combine Unit is based on a 20 MHz high performance microcontroller. The program is written in assembly language for maximum speed. The unit accepts any DMX signal: DMX512, DMX512/1990, 4 or 8 uS mark-after-break. The unit may be ordered to accept Colortran Multiplex on one or both inputs allowing the Unit to serve as a CMX to DMX combiner/converter. The unit may be ordered to output Colortran Multiplex allowing the Unit to serve as a DMX to CMX combiner/converter.

Meeting custom requirements is our specialty. If your needs are not met by a standard product, contact us for a quotation on your specific challenge.