

The need to run MIDI signals over long distance is essential for use in recording facilities, theatres, arenas, churches, schools, cruise ships, casinos, nightclubs and other venues using simple twisted pair wiring. Touring professionals also rely on JLC Cooper MIDI Line Amplifiers to carry MIDI signals long distances over standard audio snakes.

## MLA-XLR MIDI Line Amplifier



MLA-XLR is a single channel, bi-directional, long distance amplifier or driver for MIDI signals. It extends the range of MIDI to over 1000 feet using standard balanced audio lines (audio snakes, mic cables, etc.).

MLA-XLR is refreshingly simple to use. There are no settings to configure. Just plug in the power supply and connect two MLA-XLRs together with a pair of standard mic cables. Then, connect your MIDI gear as you would normally.

While the MIDI protocol specifies a maximum cable distance of about 50 feet (more or less, depending on the type of cable and other variables), more than 50 feet of MIDI transmission requires amplification.

MLA-XLR takes a MIDI input and converts it to a balanced, differential signal using the RS-422 specification. At the other end, another MLA-XLR detects the signal using a sensitive receiver that has a high degree of noise immunity. This combination lends itself to long distance, error free installations required in professional applications with absolutely no latency.

Since the MIDI signal is converted into a non-MIDI signal, an installation requires a MIDI Line Amplifier at each end of the cable.

MLA-XLR also provides a lower cost expansion option for interfacing with other MLA-1 and MLA-10 units in a network application with custom wiring.



MLA-XLR Rear Panel XLR Connectors

### MLA-XLR MIDI Line Amplifier Features

- 1 MIDI Input - 1 MIDI Output
- XLR and MIDI connections
- 1/4 Rack or desktop use
- MIDI cable runs over 1000' Using common twisted pair wire, XLR Cables or Audio Snake
- Multiple units may be networked
- Can be used in pairs or in combination with MLA-1's and MLA-10's
- Sold Individually
- Dimensions 4.25" x 4.7" x 1.6"
- Weight 3 lbs.



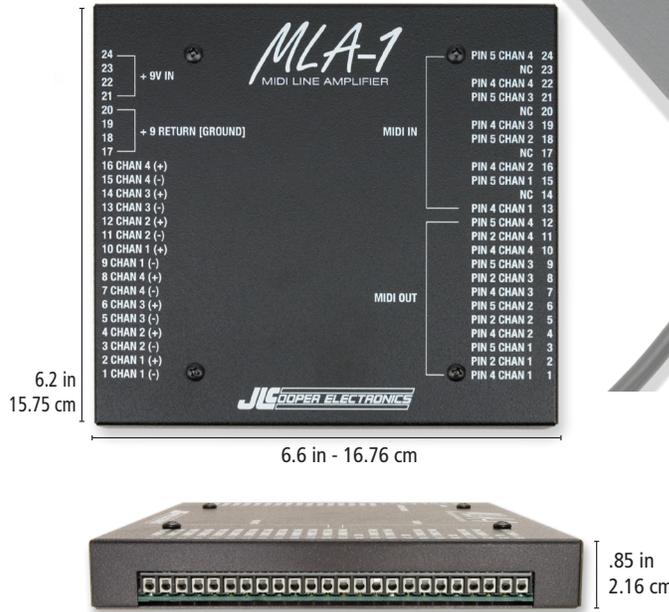
Mount up to four MLA-XLR units in the optional JLC-19" RackTray



# MLA-1 MIDI Line Amplifier

The MLA-1 is a four channel MIDI Line Amplifier that can be surface mounted and used with a separate MIDI jack panel. This facilitates greater flexibility for installations where MLA units can be in every required location.

MLA-1 can be powered by an MLA-10 or used alone with a separate power supply. Its compact size allows it to be mounted on or inside a wall or panel, truss mounted, etc. A single output can be connected to as many as 4 inputs of another MLA-1 or MLA-10.



### MLA-1 MIDI Line Amplifier Features

- 4 MIDI Inputs - 4 MIDI Outputs
- Panel mount version
- All barrier strip connections
- Multiple units may be networked
- Can be used with other MLA units.
- Dimensions 6.6" x 6.2" x 0.85"
- Weight 2 lbs. - .91 kg

*The choice between the MLA-1 and MLA-10 depends on mounting requirements. Combine MLA units in whatever configurations best suits your needs. MLA-10 and MLA-1 are functionally identical and offer different form factors. Each provides 4 long distance connections in either direction. MLA-1 or MLA-10 can be combined with up to 4 MLA-XLR units.*

# MLA-10 MIDI Line Amplifier

*"Best in Show Winner – AES"  
- EQ Magazine*



JLCooper Electronics extends the distance of MIDI with the MLA - MIDI Line Amplifiers. They let you effectively extend MIDI cable length using twisted pair wire or a standard audio snake.

MIDI Line Amplifiers sending MIDI data over long distances with the capability to send information in excess of 1000 feet without latency, delays or errors.

Ideal for touring systems or permanent installations, MLAs can be used in schools, recording and production facilities, boardrooms, live performances, convention centers, churches, theaters, stadiums, amusement parks and more.

### When to Use a MIDI Line Amplifier

MIDI (Musical Instrument Digital Interface) is an increasingly important consideration for schools, recording facilities, stadiums, arenas, hotels, amusement parks, or other facilities where MIDI messages are required to be sent a long distance, or to multiple locations.

The MIDI standard only permits a maximum cable run of less than 50 feet. The innovative MLA Series MIDI Line Amplifiers overcome this limitation.

The MLAs convert the MIDI signal into a balanced high speed digital protocol that can travel over common twisted pair wire. The signal is converted back to MIDI through another MLA at the other end of the cable run.

MLAs are ideal for permanent installations or anywhere a longer MIDI cable run is required.

The MLAs can be easily networked to multiple locations such as from the master control room to a series of separate MIDI rooms in a recording studio, broadcast facility or educational lab. This allows you to de-centralize the location of MIDI devices in the system.

MLA-10™ is designed to fit in a standard single 19" rack space. Each MLA-10 features 8 MIDI lines configured as 4 inputs and 4 outputs. It has 4 MIDI input connectors, 4 MIDI output connectors and individual activity LEDs.

### MLA-10 MIDI Line Amplifier Features

- 4 MIDI Input connectors
- 4 MIDI Output connectors
- Detachable terminal strip connectors
- MIDI activity LEDs
- MIDI cable runs over 1000'
- Uses common twisted pair wire
- Multiple units may be networked
- Low power consumption
- Can supply power to multiple MLA-1's
- Front panel power switch
- Single 19" rack space
- Heavy duty rack enclosure

- Dimensions 19" x 1.75" x 3.87"
- Weight 3.25 lbs



MLA-10 Rear Panel with Weidmüller terminal block screw connectors