JLCooper Electronics

Control, Automation, Synchronization and Interfacing Products

SERIOUS ABOUT CONTROL

"Precision control unleashes creativity."

JLCooper is serious about precise control. We're devoted to producing professional–quality Control, Interfacing, Synchronization and Automation Products. Our mission succeeds when a difficult task is accomplished faster, easier and with increased reliability.

Effortless control expands your imagination. JLCooper controllers let you work faster and with increased proficiency. They provide the ease–of–use and mission critical tactile assurance that's missing from mouse-based or touch screen user interfaces.

With the largest line of control products for computer based systems and specialized applications, our products set the standards that others follow.

Our record speaks for itself with over 30 years of award winning products hard at work every day.

Our clients include ABC, Agfa Healthcare, Apple, BBC, CBC, CBS, CNN, DIRECTV, ESPN, HBO, Heartlab, IBM, IMAX, Industrial Light & Magic, The Juliard Academy, Lockheed Martin, MIT, MTV, National Center for Macrobiological Research, NBA, NBC, NFL, NFL Films, Pixar, Sony Pictures, Technicolor, Universal Studios, Walt Disney Studios, Warner Brothers Studios, the U.S. Congress, and the Library of Congress.

Thousands of leading companies in audio and video production, television and radio broadcast, animation, sound reinforcement, lighting, aerospace, education, scientific research, medical imaging, recording artists and others rely on JLCooper products every day.

Contact us today to find out how serious we are about making your job faster and easier. Call 310-322-9990 or email sales@jlcooper.com.
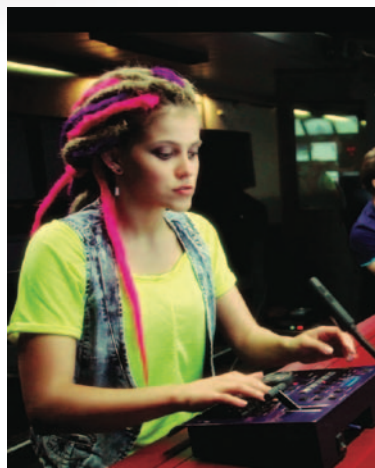
slomo.tv operator

US Senate Chambers

JLCOOPER ELECTRONICS

Control, Automation, Synchronization, & Interfacing Products

WWW.JLCOOPER.COM

Catalog Index

Professional Surround Panner for ProTools HD and Logic Pro X

JLCooper's new AXOS Panner for AVID Pro Tools is a high–quality professional controller. It combines a Touch-Sensitive Joystick, 5 Rotary Encoders and 9 Tactile Switches for lightning fast, real–time performance mastery of surround panning and mixing parameters.

AXOS gives you comprehensive control including Pan, Divergence, Volume, Mute, LFE, Center Percentage and Channel Navigation. It connects to your Pro Tools System on Mac or Windows using a supplied 3 meter USB cable.

Software plug-ins for Mac OSX gives the AXOS Panner the added ability to precisely control automated surround mixing in Apple Logic Pro, Steinberg Nuendo and Cubase. Controls X/Y, Track Next/Prev., Angle, Radius, LFE, Spread, Center and more.

Direct support in MDA Creator version 1.2.

New - Direct support in Dolby ATMOS Tools 1.6 with Dolby ATMOS RMU.

- ■ *Lightning Fast and Easy To Use*
- ■ *Works with AVID Pro Tools HD for Mac/Windows*
- ■ *Plug In Support for Apple Logic Pro on Mac*
- ■ *Works with Steinberg Nuendo and Cubase Mac*
- ■ *Touch-Sensitive Joystick*
- ■ *Low Profile Compact USB Class Compliant Design*
- ■ *Durable All Metal Construction*
- ■ *Host Mode for Software Developers*

3.5 in
8.89 cm

3.85 in
9.78 cm

7.9 in
20.07 cm

Weight
2.4 lbs
1.09 kg

Eclipse PX - *Surround Panning Joystick Controller*

Eclipse PX combines a high-quality, three axis joystick with five touch-sensitive, push-button, rotary encoders, nine illuminated buttons and a three digit white LED display for indicating track number.

The controller can be connected to a computer, using it's own built in 10/100 Ethernet interface, or to other Eclipse units via internal expansion port. It can be physically connected with other Eclipse units using Eclipse Joiner Kit.

Eclipse PX is functionally identical to the Nuage Panner listed below and can be used to directly control surround mixing in Steinberg Nuendo and other applications.

3.25 in
8.255 cm

With it's own custom software plug-in for Steinberg Nuendo, Eclipse PX provides precise control of all automatable surround automation parameters.

Controls include real time control and automation of Joystick X, Y, Global Divergence, Auto Orbit, Front Divergence, Rear Divergence, Center Distribution, Front-Rear Divergence, LFE Level, Manual Orbit and more.
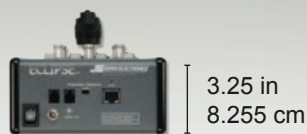
11.5 in
29.21 cm

Weight
6 lbs
2.72 kg

Software developers can take advantage of the Eclipse PX as a stand alone unit or combine it with other Eclipse components to make a specialized controller for your specific needs.

Eclipse PX is also compatible with Pro Tools Mac Version.

6 in
15.24 cm

New - Direct support in Dolby ATMOS Tools 1.6 with Dolby ATMOS RMU.

Nuage Surround Panner
Surround Panning Controller for Yamaha & Steinberg Nuage Console

Nuage Surround Panner combines a high-quality, three axis joystick with five touch-sensitive, push-button, rotary encoders, nine illuminated buttons and a three digit LED display, for indicating track number.

2.25 in
5.715 cm

The controller can be easily connected using it's own built in 10/100 ethernet interface.

With it's custom software plug-in for Steinberg Nuendo (Mac and Windows), the panner is specifically designed to mount directly into the Yamaha/Steinberg Nuage Console expansion chassis. (NWS500-SM)

Weight
4 lbs
1.81 kg

10.5 in
26.67 cm

Controls include real time control and automation of Joystick X, Y, Z, Global Divergence, Auto Orbit, Front Divergence, Rear Divergence, Center Distribution, Front-Rear Divergence, LFE Level, Manual Orbit and more.

Nuage Panner is also compatible with Pro Tools Mac Version.

New - Direct support in Dolby ATMOS Tools 1.6 with Dolby ATMOS RMU.

7 in
17.78 cm

Nuage Panner in Yamaha NWS500-SM Nuage Expansion Chassis
(Chassis Sold Separately by Yamaha)

Eclipse BTX Midnight
Primary Transport Controller

Weight
7.35 lbs
3.34 kg

11.5 in
29.21 cm

3.25 in
8.255 cm

13.5 in
34.29 cm

Eclipse BTX is the heart of the Eclipse product family and our standard transport/edit controller for computer-based applications. It's a low profile, compact design with professional controls and quality construction.

It features JLCooper's custom optically encoded jog wheel with concentric shuttle ring, professional transport buttons and 23 white illuminated function keys, Navigational Switches, 5 Rotary Encoders with aluminum knobs, 2 x 40 VF Display and LED Timecode Displays.

Eclipse BTX can combine with other Eclipse Midnight controlers to form a larger console and it's supported in Eclipse Ethernet Software for Mac. *(920394 Ethernet Interface Required)*

Software developers can connect to it using built in MIDI or optional *(Standard Size)* USB, Ethernet, RS-422 or RS-232 Interface Cards.

Eclipse TX Midnight
Compact Transport Controller

Eclipse TX is a basic transport and jog/shuttle controller for computer based applications. It's compact size lets you arrange your workspace to incorporate tablets, keyboards and other expansion options like the Eclipse MX Midnight.

It features JLCooper's custom optically encoded jog/wheel with concentric shuttle ring, professional transport buttons and 23 function keys, with white LED indicators. Optional Compact interface cards provide stand-alone flexibility for developers.

Supported in JLCooper Eclipse Ethernet Software for Mac.
Requires 920444-4 Compact Ethernet Interface

8 in
20.32 cm

11.5 in
29.21 cm

3.25 in
8.255 cm

Weight
6 lbs
2.72 kg

Eclipse 24 Midnight
Tactile Command Palette

Eclipse 24 Midnight is a desktop controller for mission critical playback and control for broadcast automation, post production and other applications.

It features 24, next–generation, hi-res, RGB, remotely-relegendable 64 x 32 LCD keyswitches, 10 bank buttons, and 17 additional function and navigation switches.

The hi-res LCD keyswitches can display text up to 40 characters (multiple fonts) and graphics using built in command driven serial interfaces. Software controls the interface, display, and backlighting (64 colors). Data only needs to be transmitted when a change is made to the display or background colors.

Eclipse 24 Midnight can be used as a stand alone controller or it can be physically connected with other Eclipse Midnight units, including Eclipse MXL. Interfaces include built in Ethernet and USB along with optional serial connections. New Eclipse Software for Mac offers enhanced support for Eclipse 24, allowing users to program custom controls for any applications.

11.5 in
29.21 cm

3.25 in
8.255 cm

10 in
25.4 cm

Weight
5.35 lbs
2.42 kg

JLCooper has the most complete line of standard products using remotely relegendable LCD keyswitches.

SHARPSHOT - ULTRA-COMPACT COMMAND PALETTE

SharpShot™ is an ultra–compact desktop controller with eight, hi-res, remotely-relegendable 64 x 32 LCD keyswitches and one push-button, rotary encoder. They display text (up to 40 characters) and graphics using built in command driven serial interfaces. They integrate a graphical LCD with RGB backlighting and are capable of displaying up to 64 colors. Software controls the interface, display and backlighting. Data only needs to be transmitted when a change is made.

SharpShot provides instant audio or video playback and control for broadcast automation and other specialized uses. It can alert users to changing operating conditions by showing different colors, text and icons. This enables a customized user interface that reacts instinctively to the task at hand. It helps users work faster and reduces the possibility of human error in critical applications. Its unique, compact shape uses minimal space.

Other uses include control systems, automation systems, call centers, financial services, telecom and industrial controls.

Requires Compact Interface Card for USB, Ethernet, RS-232 or RS-422 connection. *(Ethernet Interface Shown)*

Weight - 1.25 lbs
.57 kg

Length
6.25in
15.88 cm

2.88 in
7.3 cm

2.25 in
5.7 cm

Eclipse MXL Midnight
8 Fader Controller/Expander w/LCD Buttons

Eclipse MXL™ is our professional fader controller, featuring high-quality, touch-sensitive, 100mm motorized faders and high-resolution backlit LCD display buttons. New for 2016 - we've updated the design with higher quality faders for better feel and improved reliability.

The LCD buttons can display 64 colors and up to 32 characters of text and graphics. Optional USB, 10/100 Ethernet, RS-232 and RS-422 *compact* interface cards provide connections to host systems. It displays channel labels, color coded track arming status and other mission critical information.

Eclipse MXL is supported by LAWO L-S-B Virtual Studio Manager, Peavey MediaMatrix NWare, Sony ELC Enhanced Live Production Control System, Viz MOSART Studio Automation and other advanced software applications.

11.5 in
29.21 cm

Weight
5.75 lbs
2.62 kg

3.25 in
8.255 cm

10 in
25.4 cm

Eclipse MXL2 Midnight
8 Fader Controller/Expander w/LCD Buttons and Rotaty Encoders

Eclipse MXL™ is our newest professional fader controller, featuring high-quality, touch-sensitive, 100mm motorized faders and high-resolution backlit LCD display buttons and push-button rotary encoders. Includes high quality faders with better feel and improved reliability.

The LCD buttons can display 64 colors and up to 32 characters of text and graphics. It can display channel labels, color coded track arming status and other mission critical information. Built in USB and Ethernet interfaces provide connections to host systems without the need for interface cards. Ethernet is TCPIP and UDP compatible.

JLCooper has an existing Developer Program to provide engineering suport, SDK's and protocol documents for our products.

Contact us directly to find out how you can interface the new Eclipse MXL2 with your software.

11.5 in
29.21 cm

Weight
5.75 lbs
2.62 kg

8.255 cm

10 in
25.4 cm

Eclipse MX Midnight
8 Channel Fader Expander/Controller

Eclipse MX Midnight lets you perform real-time automated audio mixing in Soundtrack Pro, Logic Pro and most audio software.

It's a professional-quality, motorized fader control surface, with controls placed conveniently at your fingertips.

Eclipse MX features 8 touch sensitive, motorized faders, 32 switches and built in MIDI I/O. It connects to other Eclipse controllers via expansion port, using a supplied modular cable and communicates with your computer via a single interface card in Eclipse CX, SX or Eclipse 24.
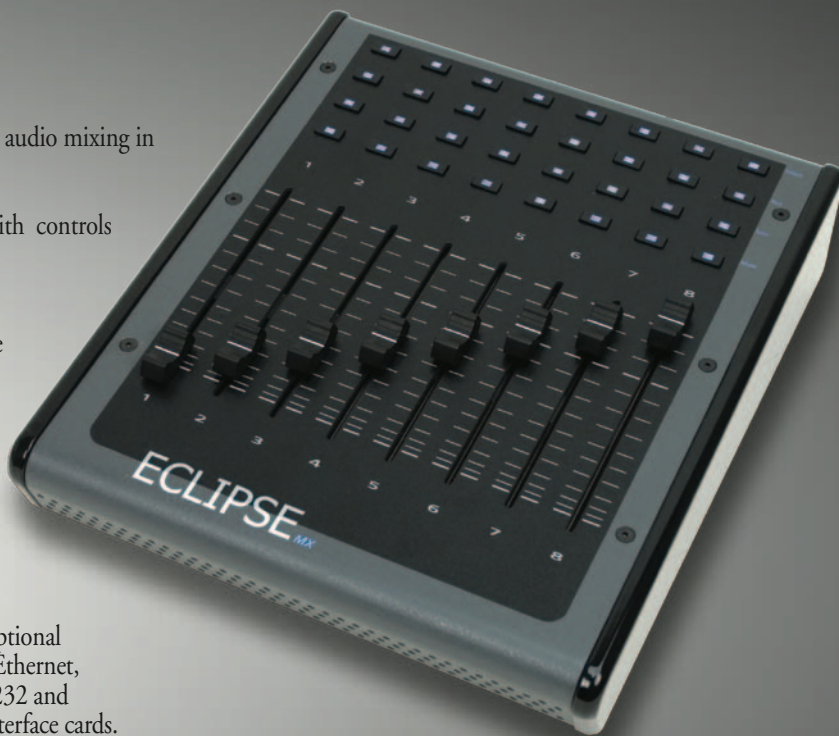
For stand alone use or custom applications, Eclipse MX SA Midnight (Stand Alone Version) can be used with optional Compact Ethernet, USB, RS-232 and RS-422 Interface cards.

11.5 in
29.21 cm

Direct support for the Eclipse MX Midnight, with 920444-4 Ethernet Interface is available in Peavey MediaMatrix NWare and QSC Audio's Q-SYS.

Weight
5.75 lbs
2.62 kg

3.25 in
8.255 cm

It can be physically joined with other Eclipse Midnight products using Eclipse Joiner Kit.

10 in
25.4 cm

Eclipse Products can be combined in various configurations to provide a custom tailored surface for your specific needs. Units are physically joined using the Eclipse Joiner. (See example of joined Eclipse Midnight controllers below)
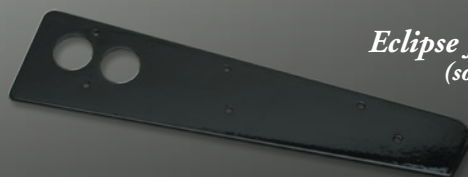
Eclipse Joiner - Midnight
(sold separately)
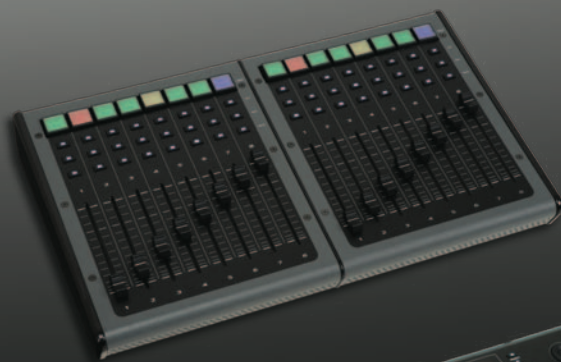
Eclipse 24, joined with two Eclipse MXL units using two Eclipse Joiners

Eclipse CX Joined to Eclipse MX with Eclipse Joiner

ECLIPSE cx

Eclipse CX Midnight
Integrated Color Control Surface

DIRECT SUPPORT IN DAVINCI RESOLVE & SNELL ARCHANGEL PH.C-HD

Eclipse CX Midnight provides control of professional video color correction and editing software, including DaVinci Resolve, Snell Archangel Ph.C-HD and Apple Final Cut Studio/Color. It lets you precisely adjust multiple parameters in real–time, accellerating your workflow in ways you've never imagined.

The CX is a professional-quality, 3rd generation control surface with abundant controls conveniently placed at your fingertips. Our "Midnight" finish, with white LED's and indicators, reduces light emission and intrusion on colorist's eyes.

It features a full array of controls including 3 custom trackball mechanisms with purpose designed, free–spinning control rings. You get fast access to color parameters with 6 smooth, high–resolution rotary encoders (each with individual reset buttons). There are 41 illuminated function keys, 7 edit keys, 3 VF displays, white LED timecode display, professional transport buttons with status indicators and JLCooper's custom optically encoded jog/wheel with concentric shuttle ring.

New software provides tighter control than ever before with Apple Final Cut Pro and other Mac applications. Eclipse CX Midnight is the perfect addition to your digital intermediate or finishing suite.

11.5 in
29.21 cm

Weight
14 lbs
6.35 kg

25.75 in - 65.4 cm

- Works with DaVinci Resolve
- New support in Snell Archangel Ph.C - HD
- Speeds Color Grading Workflow
- Integrated Compact Control Surface Saves Space
- Precise, Hi–Resolution, Professional Quality Controls
- Easy–to–See Illuminated Keyswitches
- Attractive, Low Profile and Compact Design
- Software for OSX Lets You Use Eclipse CX with Any Application. (A JLCooper Exclusive)

3.25 in
8.255 cm

Eclipse Software for Mac OS X

Mapping software for Mac allows Ethernet equipped units to control Cubase, Final Cut Pro, Logic Pro, Media Composer, Nuendo and other pro applications.

It provides context-sensitive Jog/Shuttle and user control of text displays and user mapping of controls in any software.

Our smart software driver knows which application is in the foreground and switches automatically for seamless control.

Enhanced support for Eclipse 24, Eclipse MXL and Eclipse PX makes the Eclipse Midnight Series the most powerful programmable controllers for Mac.
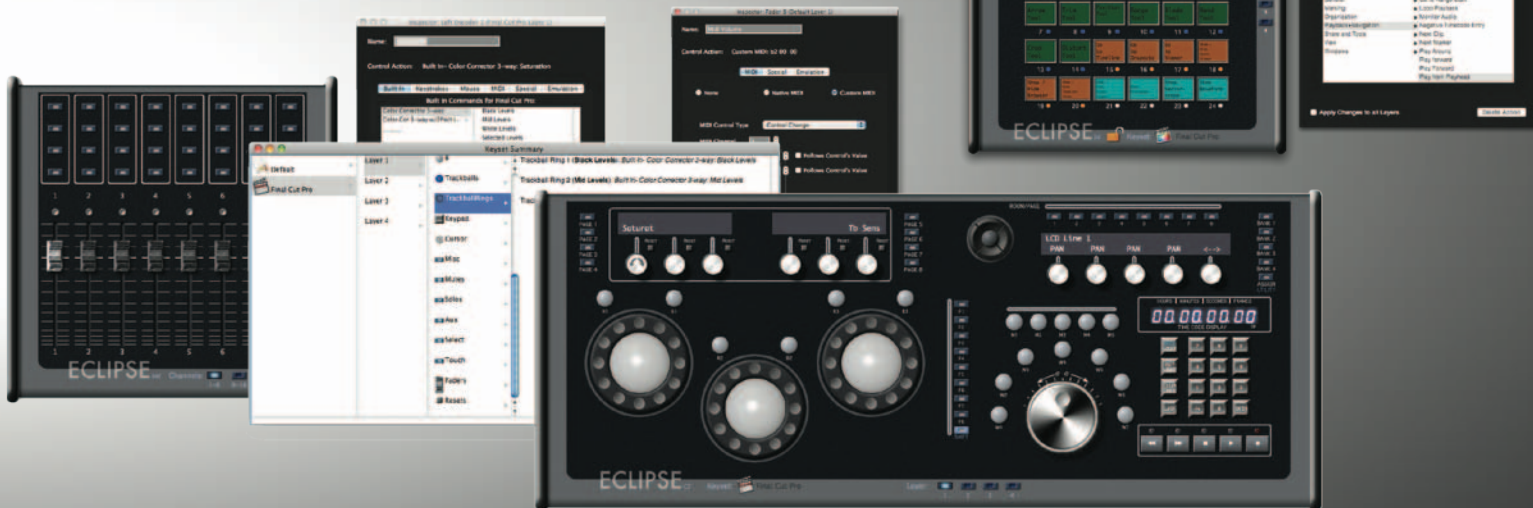
Unequalled Interfacing Flexibility

As you can see, JLCooper control products have a variety of interface types to work in many different applications. Some Eclipse Series expansion units can interconnect using our internal bus with modular cable. Built in MIDI ports are included on some models. Additional interface card slots provide you with a the ability to adapt the controller to your requirements. Plug-in interface cards provide additional functionality with various applications that include direct support. Contact your JLCooper representative to discuss interfacing requirements for your specific applications.

Compact Interface Cards

920444-1 - Compact RS-422 Interface Card - This provides direct 9-Pin control of professional VTRs, DDRs and servers, or it can be used to interface your controller directly to a RS-422 serial port on your computer.

920444-2 - Compact RS-232 Interface Card - Lets your controller interface with computers, messaging systems or any device that can be controlled via RS-232.

920444-3 - Compact USB Interface Card - This compact interface card option allows convenient connection to computers via USB.

920444-4 - Compact Ethernet Interface Card - Provides a direct 10/100 Ethernet connection for controlling network based applications or situations where a long cable run is required. Simplifies connection to your computer or LAN, and keeps cable clutter to a minimum.
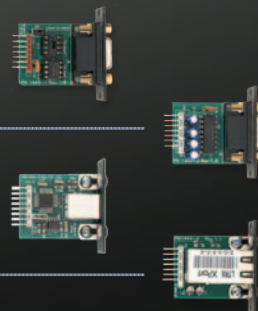
Standard Interface Cards

920394 Ethernet Interface Card
This interface card provides a direct 10/100 Ethernet connection for controlling network based applications . It simplifies the connection to your computer or LAN, and keeps the clutter of cables to a minimum. Use with Eclipse software for Mac OSX to control virtually any application.

920467 USB Interface Card
This interface card allows connection to computers via USB. It simplifies the connection to your computer. Use with Eclipse software for Mac OSX to adapt the controller to work efficiently with virtually any application. Software keysets are included for popular audio and video programs.

920466 RS-232 Interface Card
The addition of this plug in card lets you configure your Eclipse or other JLC product for direct computer control. Simply plug the interface card into one of the slots in an Eclipse and you're in control. Baud rate is adjustable.

920465 RS-422 Interface Card
This card provides direct 9-Pin control of professional VTRs and DDRs, or it can be used to interface directly to a RS-422 serial port on your computer. Commands from a host computer can be directed to the individual machines.

Check with JLCooper to see if the GPI Interface is supported in your application.
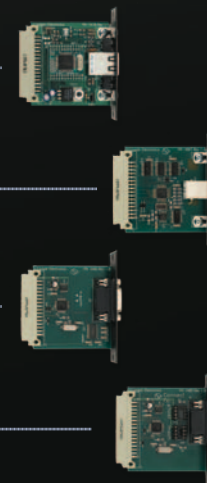
SloMo Elite - Video Server Controller

*ELITE-SM-JLLSN w/JLC Jog/Shuttle &
Dual Color LED Relegendable Keyswitches)*

SloMo Elite is a new Sports/SloMo control surface, expressly made for software developers and OEMs.

Its advanced design provides an incredible number of configuration options, without any of the costs normally associated with developing hardware, by allowing us to create custom configurations using standard parts.

It's packed with every possible feature we could think of, plus future upgrade capabilities. It closely integrates with your proprietary software, creating an elegant and complete control package. Virtually every aspect of the product can be customized to your precise needs.

This is a completely new controller, built for speed and designed to withstand the rigors of daily use in broadcast, sports, instant replay, scoreboard and other applications. It includes built in USB and Ethernet Interfaces.

Contact JLCooper today for additional configuration information, customization options, protocol, development documents and other details.

Weight
7.35 lbs
3.34 kg

11.5"
29.21 cm

3.25"
8.255 cm

13.5" (-) 34.29 cm
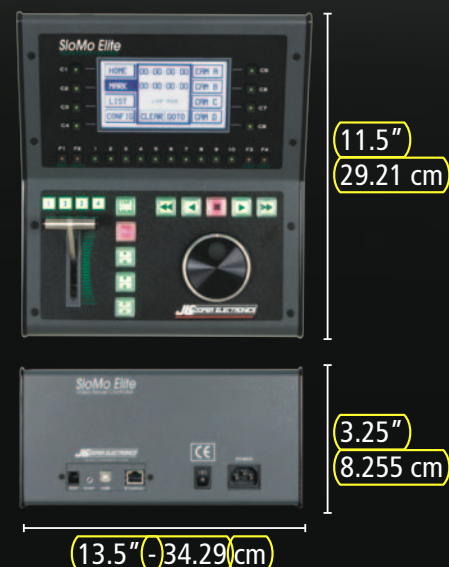
SloMo Elite - Video Server Controller

ELITE-SM-S66SN w/Jog Only Mechanism &
NKK Remotely Relegendable Keyswitches

Options Include...

- Precise, High-Resolution, Professional Quality Components
- 4.5" x 2.5" LED Backlit White Graphic Display, 240 x 128 pixels (Optional Touch Screen)
- Jog/Shuttle Options; JLC Jog/Shuttle, JLC Tall Jog Only w/Rubber Cap, JLC Electro-Magnetic Jog/Shuttle with variable Stops (available soon)
- Standard T-Bar, Detented T-Bar
- Dual Color LED Relegendable or NKK LCD Remotely Relegendable Compact Hi-Res 64 x 32 Pixel, RGB Backlit Keyswitches (either group of 5 switches can be LED or LCD Type)
- USB 2.0 Full Speed - Drivers & Libraries for Windows and Mac
- USB Serial Port Emulation
- Both USB and 10/100 Ethernet Interface (Standard)
- Supports TCP (Client/Server) & UDP - Static or DHCP Configuration
- Custom finishing and silkscreen available for quantity orders
- Internal international switching power supply (Standard)
- IAP – Field Software Updates can be installed via USB or Ethernet

Weight
7.35 lbs
3.34 kg

11.5"
29.21 cm

3.25"
8.255 cm

13.5" - 34.29 cm
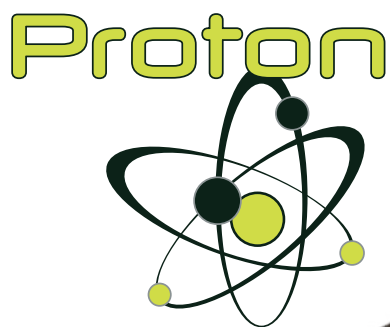
Switcher Control Surface

Compact Broadcast Switcher Panel for BlackMagic Design ATEM
Developer Host Mode for Easy Integration into Custom Software Applications

JLCooper's new Proton™ – Switcher Control Surface is a full featured compact hardware control panel for fast video switching in live production environments.

It features the ability to control Blackmagic Design ATEM Production Studio models and an open "Host Mode" for software developers and special applications.

It's powerful features and low cost make it perfect for mobile, sports, educational, corporate, internet, computer control, house of worship and other applications.

- Lightning Fast Tactile Control Panel
- Precision Control Knobs with Push-Button Encoders
- Backlit Relegendable Buttons
- 16.77 Million Colors on Switcher Buttons
- 240 x 96 Backlit Graphic Display
- 2 x 40 Backlit LCD Display
- Variable Brightness on All Displays and Buttons
- 5 Assignable Macro Buttons
- Smooth Precision Aluminum T-Bar Transtion Control
- LED Bar Displays Transition Progress

- Nearly All Functions of Larger and More Costly Panels
- Extensive ATEM Parameter Control
- Labels Automatically Appear on Scribble Strip
- Fast Selection of Macros at the Push of a Button
- Fade to black
- Graphic Display of Wipe Patterns
- Internal Switching Power Supply
- Install it on a Sliding Rack Shelf or 19" Rack Tray
- UDP - Multiple Panels Can Be Used Simultaneously
- Host Mode for Software Developers

8.25 in
21.00 cm

14.8 in
37.59 cm

Weight
4.7 lbs
2.13 kg

3.35 in
8.51 cm

SloMo Mini
Four Channel Instant Replay Controller

- **New Automated Replay Features!**
- **One Touch Replay with Hyperdeck & KiPro**
- **Browse Clips and View Clip Names***

SloMo Mini's small footprint and low cost makes it perfect for sports, scoreboard, trucks, transfer, QC, dubbing and other editing operations.

It makes precise control of professional servers, file-based recorders and VTRs incredibly fast and easy.

Features include illuminated transport buttons, Optical Jog Mechanism, High-Quality T-Bar, Backlit LCD Display, Numeric Keypad & Fast Access Function Keys.

New One Touch Replay, Deferred Replay and In/Out Replay modes simplify Slomo operation so that even inexperienced operators can get reliable and consistent results with minimal training.

Expandable by connecting SloMo Mini to GangWay for remote control of up to 32 channels!

Controls... AJA Ki Pro, Ki Pro Rack, Ki Pro Ultra
BlackMagic Hyperdeck Studio, Studio Pro,
FFV Micron HD, Omega HD, Studio Pro Replay,
Video Devices Pix 250i, 260i, 270i
and Most Professional RS-422 VTRs,
Servers and File Based Video Recorders!

- Simultaneous Control of up to 4 RS-422 Video Decks and file-based Video Recorders
- Quickly store up to 1000 Cues - 500 In and Out Points with Varispeed
- T-Bar for Dynamic Slow Motion - Sends Shuttle, Jog or Variable Play
- Programmable T-Bar Min-Max, Preset Speeds, Active or Passive Modes
- Log Operation useful in QC Applications
- Ultra Compact Design Saves Desk Space
- Durable All Metal Construction
- JLCooper Optical Jog Wheel
- Host Mode for Developers (ES-SloMo Code Compatible)

Included 10' (3m) quad snake/power cable minimizes desktop clutter.

7.5 in
19.05 cm

3.75 in
9.53 cm

7.75 in
19.69 cm

Weight
2.1 lbs
1.70 kg

15

New Features for AJA Ki Pro and FFV Micron Let you Browse Clips and View Clip Names

3 in
7.62 cm

10.25 in
26.03 cm

Weight
4.9 lbs
2.22 kg

10.25 in
26.03 cm

ES-SLOMO J RS-422 UNIVERSAL INSTANT REPLAY CONTROLLER

ES-SloMo™ is a compact controller for News, Sports, QC, transfer, dubbing and other editing operations. It makes precise control of professional VTRs, DDRs and Video Servers quick and easy. It's a full featured 4-machine editor and universal Jog/Shuttle remote. It's compact design and low cost, make it the perfect addition to edit suites, remote trucks, sports facilities and other applications.

ES-SloMo features include professional transport buttons, JLCooper's Custom, Optically–Encoded Jog Wheel with Shuttle Ring for convenient picture search operations, a high-quality T-Bar for slomo and shuttle tape operation, an easy to read 2 x 16 VF display, a full size numeric keypad and fast access function keys. It provides Odetics seamless clip playout functions for use with popular video servers. GangWay integration allows individual control of up to 32 machines or server channels!

New One Touch Replay, Deferred Replay and In/Out Replay modes simplify operation so that even inexperienced operators can get reliable and consistent results with minimal training.

Controls Most Professional RS-422 VTRs, DDRs, Servers including AJA KiPro, BlackMagic Hyperdeck, Fast Forward Video, Video Devices and more!

• *Integrated 10' quad snake/power cable minimizes desktop clutter.*

ES-SloMo J Side View

ES-SloMo Features
• Assemble, Insert, Crash and Disable (Lock Out) Editing Modes
• Quickly store up to 1000 Cues or 400 In and Out Points with Varispeed
• Simultaneous Control of up to 4 VTRs, DDRs or Server Channels
• T-Bar Control for slow motion control sends Shuttle, Jog or Variable Play
• Dynamic Slomo replays accessed from the T-Bar, Jog or Variable Speed Play
• T-Bar Programmable - Min-Max, Preset Speeds, Active or Passive Modes
• Programmable Cueing Modes - Automatic Play All Cues Function
• Log Operation useful in QC Applications
• 16 Variable Replay Speeds
• EE/PB switching

SloMo & GangWay Together = 16 to 32 Channel SloMo + Gang Roll Power

GangWay16 and GangWay 32 are compact, easy-to-use, multi-port RS-422 Gang Roll Switchers. The front panel includes lighted buttons for clear indication as to the status of each machine. GangWay has 16 or 32 RS-422 ports on the rear panel and a rear mounted RS-422 control input.

ES-SloMo J RS-422 and SloMo Mini interface directly with GangWay to provide simultaneous control up to thirty-two RS-422 machines or server channels. GangWay's port assignments are remotely controlled and indicated on SloMo. They combine to form the largest and most advanced control system we've ever created.

ES-SloMo and Gangway 16 are the perfect low cost alternative to overpriced control systems costing thousands more. See GangWay models on page 33 for more information.

- *Simultaneous Control of up to Sixteen VTRs, DDRs or Server Channels*
- *Remote Channel Enable/Disable*
- *Direct support for Odetics compatible video servers*
- *16 Variable Replay Speeds*
- *Mark In and Mark Out Keys to Quickly Store Cue Points*
- *Capacity to store 1000 Cue Points or 400 In and Out Points w/Varispeed*
- *Log Operation - Useful in QC Applications*

ES-SloMo Je
SloMo Control Surface with Ethernet Interface

ES-SloMo Je is made for computer–based Slow Motion applications. It's virtually identical to the RS-422 Version, but with a built in Ethernet interface.

ES-SloMo Je uses JLCooper's Custom, Optically–Encoded Jog Wheel and Concentric Shuttle Ring.

Developers and OEMs can easily build direct support into your applications. Use ES-SloMo Je as your front end controller.

ES-SloMo Ethernet Rear View

ES-SloMo J USB
SloMo Control Surface with USB Interface

ES-SloMo J USB is made for computer–based Slow Motion applications. It's virtually identical to the RS-422 Version, but with a built in USB interface. USB powered.

ES-SloMo J USB uses JLCooper's Custom, Optically–Encoded Jog Wheel and Concentric Shuttle Ring.
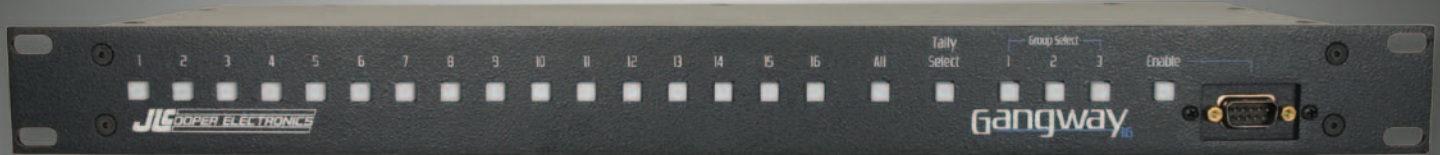
Developers and OEMs can easily build direct support into your applications. Use ES-SloMo J USB as your front end controller. Directly supported by Dalet on the BRIO3 Server.

ES-SloMo USB Rear View

ES-SloMo + GangWay Together = 16 to 32 Channel SloMo + Gang Roll Power

GangWay16 Front Panel

GangWay16 Rear Panel Shown with Optional 920444-4 Ethernet Interface

ES-SloMo is the compact controller for News, Sports, QC, transfer, dubbing, scoreboard and other editing operations. It makes precise control of professional VTRs, DDRs and Video Servers quick and easy. It's a full featured 4-machine editor and universal Jog/Shuttle remote. Its sleek design and low cost, make it the perfect addition to edit suites, remote trucks, sports facilities and other applications.

The ES-SloMo features professional transport buttons, VTR style Jog/Shuttle mechanism, high-quality T-Bar for slow motion and shuttle operations, an easy-to-read 2 x 16 VF display, a full size numeric keypad and fast access function keys. It provides Odetics seamless clip playout functions for use with popular video servers.

GangWay16 and GangWay32 are compact, easy-to-use, 16 port and 32 port Gang Roll Switchers.

Their front panels includes lighted buttons for clear indication as to the staus of each machine.

A front mounted RS-422 port on GangWay provides a convenient connection for a jog/shuttle remote or other device. GangWay16 has sixteen RS-422 ports on the rear panel and a rear mounted RS-422 control input. GangWay32 has thirty-two RS-422 ports on the rear panel and a rear mounted RS-422 control input.

ES-SloMo now interfaces directly with GangWay to provide simultaneous control using the GangWay as the machine interface. GangWay's port assignments are remotely controlled and indicated on ES-SloMo adn SloMo Mini.

ES-SloMo and Gangway combine to form the largest and most advanced control systems we've ever created.

ES-SloMo and Gangway are the perfect low cost alternative to overpriced control systems costing thousands more.

Contact us today for more information or the name of your nearest dealer.

GangWay & ES-SloMo Features

• Control of up to 32 VTRs, DDRs or Server Channels
• Controls a Wide Range of VTRs, DDRs and Servers
• Direct support for Odetics compatible video servers
• Dynamic Slow Motion Replays
• Programmable T-Bar Behavior
• 16 Variable Replay Speeds
• Mark In & Mark Out Keys to Quickly Store Cue Points
• 1000 Cue Points or 400 In and Out Points w/Varispeed
• Assemble, Insert, Crash and (Lock Out) Editing Modes
• Programmable Cueing Modes
• Log Operation - Useful in QC Applications
• Transfer Cues to/from Another ES-SloMo or Computer
• Ability to Import/Export Cues from/to Ash Vale SM-2a
• EE/PB Switching
• Global Record Lock Feature
• Two User Assignable Buttons
• Integrated 10' (3m) Detachable, Quad Snake/Power Cable, with Recessed Connector to Minimize Desktop Footprint and Cable Clutter

VTC1
Video Transport Controller

VTC1 is a compact remote for file-based recorders including: AJA Ki Pro/Ki Pro Rack, Ki Pro Ultra, Blackmagic Hyper-deck Studio/Studio Pro, Datavideo HDR-60/70 DN-600/700, Fast Forward Video Studio Pro Replay/Micron/Omega, Video Devices PIX 250i/260i/270i and other recorders. It works with most RS-422 VTRs.

It's small enough to fit in your pocket or toolbox, but tough enough to stand up to daily use in professional environments.

The controller provides remote control of standard tranport functions like Play, Reverse Play, Still, Stop, Shuttle and automatically configures itself to provide clip browsing on AJA, FFV, Video Devices and other decks that support this feature. For most machines, the Clip+/- feature provides a shortcut to quickly skip 10 seconds forward or back in time.

VTC1 is made with professional transport buttons and a durable steel enclosure and. It requires no external power supply, making it even more convenient and portable, and it quickly connects using integrated 3m 9-Pin/RS-422 cable.

- *Compact Universal RS-422 Remote*
- *Play, Reverse Play, Still, Stop, Record, 2x, 4x, 8x, 16x Shuttle*
- *Supports Frame +/- With Most Recorders*
- *Professional Transport Buttons - Steel Enclosure*
- *No External Power Supply Required*
- *Supplied 3m cable*
- *Automatically configures for clip browsing on KiPro, Micron, Video Devices and other decks*

- *Controls Most Disk-Based Video Recorders Including:*
- *Blackmagic Design HyperDeck Studio/Studio Pro*
- *AJA Ki Pro, Ki Pro Rack, Ki Pro Ultra*
- *Datavideo HDR-60/70 - DN-600/700*
- *FFV Studio Pro Replay, Micron, Omega HD*
- *Video Devices PIX 250i, 260i, 270i*
- *Most Professional RS-422/9PIN VTRs*

Weight
.55 lbs
.249 kg

.563 in
1.43 cm

1.63 in
4.14 cm

6.625 in
16.82 cm

ES-450J RS-422 - Universal Jog/shuttle remote

The ES-450 J RS-422 - Universal Jog/Shuttle Remote makes operation of professional video recorders fast and easy.

ES-450 is a fully functional RS-422/9-Pin Universal Jog/ Shuttle Remote that controls most professional video servers, file–based recorders and VTRs.

It's compatible with most professional machines including AJA, Blackmagic Design, Datvideo Fast Forward Video, Video Devices, BVW, UVW, DSR, DVW, HVR, DVCAM and other 9-pin equipped VTRs, DDRs and servers from Sony, Panasonic, FFV, Grass Valley and others.

The remote is designed for fast and easy operation. It incorporates a key layout that minimizes key strokes, JLCoopers custom, aluminum, weighted, optically encoded, Jog/Shuttle mechanism for years of trouble free use. It incorporates a back lit LCD Time Code display for accurate time code location.

The ES-450's functions are laid out for fast and intuitive operation without having to tediously scroll through menus to get to often accessed features.

Functionality is at your fingertips with clearly labeled buttons and a natural-feeling key arrangement that helps you work efficiently.

Fast access to Forward Play, Reverse Play, Rewind, Fast Forward, Still/Stop, Shuttle Select, Frame +, Frame, Mark In, Mark Out and Eject are arranged in an array around the wheel in easy reach. Record controls include Crash/Full, Assemble, Insert Video, A1, A2, A3 and A4 modes.

A numeric keypad function provides easy entry of "search to time" locate operations.

There's an alternative to large, costly and cumbersome remotes that consume valuable desk space. ES-450 is the first choice for professionals in control.

Audio Editing - The ES-450 employs an audio split function, which allows the audio edit in-point to be set differently from the video edit in-point.

ES-450 Physical Specifications
- *Size - 6.5" x 10.5" x 3.5"*
- *Weight - 4 Lbs.*

(ES-450 J Side View)

ES-450 Features
- **Professional Quality Compact Remote Control**
- **High–Quality, Tactile Transport Keys**
- **Function Keys Provide Direct Access to Frequently Used Editing Features Including Shuttle Select, Frame+, Frame-, Mark In, Mark Out, Eject & More**
- **Back-Lit LCD Time-Code Display**
- **RS-422/9-Pin Interface**
- **Numeric Keypad for Time Code Entry**
- **FFV mode for Omega and Micron**
- **Durable All Metal Construction**
- **7 Easily Programmed, One Touch Locate Points**
- **Direct timecode Entry**

Multi-Channel RS-422 Controllers

ES-450 J2 RS-422

Dual Channel Jog/shuttle remote

A new version of the proven ES-450 J that incorporates a Dual Channel RS-422 interface. It provides fast, precise control of 2 VTRs, DDRs or two channel servers. New FFV mode for Omega HD and Micron.

ES-450 J4 RS-422

Four Channel Jog/shuttle remote

All the features of the single channel version with a Four Channel RS-422 interface. It provides fast, precise control of up to four VTRs, DDRs or server channels.

(ES-450 J2 Rear Panel)   *(ES-450 J4 Rear Panel)*

• *Integrated quad snake/power cable minimizes desktop clutter included with ES-450J4 RS-422 version.*

Ethernet Controllers

ES-450 Je

Ethernet Jog/shuttle remote

ES-450 Physical Specifications
- *Size - 6.5" x 10.5" x 3.5"*
- *Weight - 4 Lbs.*

ES-450 JE™ is a new version of the ES-450 featuring the JLCooper Jog/Shuttle mechanism. A 10/100 Ethernet Interface provides long distance control over LAN, WAN or the internet. It interfaces directly with Doremi Labs Video Servers and Disk Recorders, or use it with eBOX (listed on page 34) to remotely control serial equipped RS-422 servers or RS-232 devices over Ethernet.

(ES-450 Je Rear Panel)   *(ES-450 Je Side View)*

Combine ES-450 Ethernet Controllers with EBOX

for Ethernet Control of up to four Serial channels

ES-450 Je can be used along with eBOX for remote long distance control over LAN, WAN, or even over the internet, for remote control of decks anywhere. And... it works with your existing standard wiring.

Since eBOX provides four RS-422 or RS-232 ports for controlling serial devices, this facilitates control of up to 4 serial VTRs, DDRs or servers.

Read more about the versatile eBOX on pages 26-27.

(eBOX Rear Panel)

KeyShot - Compact Desktop Control Palette

KeyShot™ is a new addition to our line of control products using remotely relegendable push-button switches which allow the user to instantly recognize the key function. Its unique, compact shape uses minimal space and it fits behind most computer keyboards.

KeyShot features 10 remotely relegendable, multi-color, backlit liquid crystal display (LCD) push-button switches. The LCDs can display 36 x 24 pixel bitmaps or 3 lines of text (6 characters per line), or a combination of text, graphic symbols or animation. They can alert users to changing operating conditions by showing any of 8 different colors. This enables a customized user interface that changes to suit the task at hand and helps users work faster and with fewer mistakes. Other controls include 13 lighted function keys and a rotary encoder. The KeyShot is capable of accepting Compact Ethernet, USB, RS-232 or RS-422 Interface Cards. (See Below)

It provides instant audio or video playback triggering in broadcast, post and other professional applications. Other uses include control systems, call centers, financial services, telecommunications, industrial controls, and automation systems.
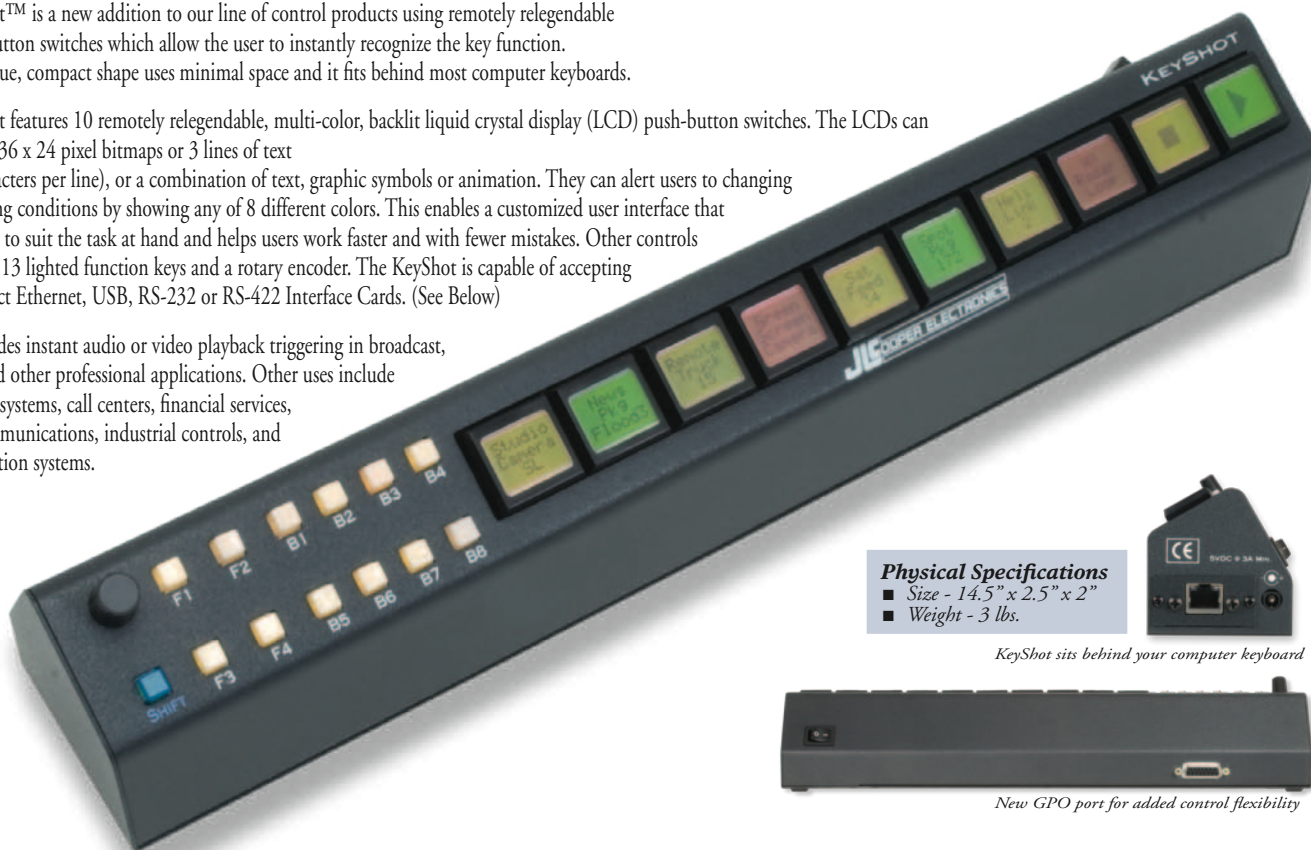
Physical Specifications
- Size - 14.5" x 2.5" x 2"
- Weight - 3 lbs.

KeyShot sits behind your computer keyboard

New GPO port for added control flexibility

RackShot - Rackmount Control Palette

RackShot™ provides the exact same control capabilities as our KeyShot in a convenient single space, 19" rack mount package. It connects via Compact RS-232, RS-422, USB or Ethernet to provide instant audio or video clip playback triggering in broadcast automation, post and other professional applications where relegendable push-button switches in a rack are useful.

Physical Specifications
- Size - 19" x 3" x 1.75"
- Weight - 3 lbs.

Compact Interface Cards for KeyShot and RackShot

920444-1 Compact RS-422 Interface Card - This card provides direct 9-Pin control of professional VTRs, DDRs and servers, or it can be used to interface your controller directly to a RS-422 serial port on your computer.

920444-2 Compact RS-232 Interface Card - This card lets your controller interface with computers, DVD players, Video Recorders, Messaging Systems or any device that can be controlled via RS-232.

920444-3 Compact USB Interface Card - This plug in card option for the KeyShot, Rackshot, MCS-3000XL and GangWay16 allows convenient connection to computers via USB.

920444-4 Compact Ethernet Interface Card - This interface card provides a direct 10/100 ethernet connection for controlling network based applications or situations where a long cable run is required. It simplifies the connection to your computer or LAN, and keeps the clutter of cables on your desktop to a minimum.
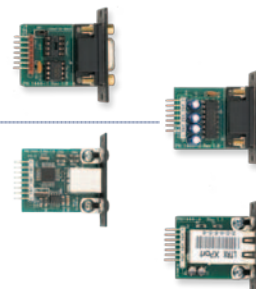
sBOX8D - Desktop Version
Remote Trigger Box for gBOX & eBOX

Connect the new sBOX to gBOX (GPI Trigger Box), or eBOX (Quad Serial/Ethernet/GPI Interface), as a simple, relegendable remote to trigger GPI events.

You can use sBOX with eBOX to trigger the sending of user programmed serial or ethernet messages. sBOX features 8 LED backlit buttons, an illuminated bank switch that allows a single sBOX to control up to 24 GPI outputs. It also has a built in GPI Out on the rear panel, allowing sBOX to be used as a stand alone GPI trigger box.

Multiple sBOX units (up to 3) can provide dedicated buttons for up to 24 GPOs.

The compact sBOX8D sits behind your computer keyboard.

Weight
1.2 lbs
.544 kg

2.5˝ - 6.5 cm

2.625˝
6.668 cm

8.5˝ - 21.59 cm

sBOX8R - 1/2 Rack Version - Remote Trigger Box for gBOX & eBOX

Connect the sBOX to our gBOX (GPI Trigger Box) or eBOX (Quad Serial/Ethernet/GPI Interface) to use it as a simple, relegendable remote to trigger GPI's. You can also use sBOX with eBOX to trigger user programmed serial or ethernet messages. sBOX features 8 LED backlit buttons, an illuminated bank switch that allows a single sBOX to control up to 24 GPI outputs. It also has a built in GPI Out on the rear panel, allowing sBOX to be used as a stand alone GPI trigger box.

Combine eBOX and sBOX8R with optional JLC RackTray

Keyshot (previous page) sits conveniently behind your computer keyboard

EBOX - Quad Serial / Ethernet / GPI Interface

eBOX is a 10/100BASE-T (Ethernet) to Quad RS-232/422 (9-Pin) and GPI hardware interface.

It acts as a portal for controlling devices across your facility or across the world.

It eliminates information bottlenecks and overcomes distance limitations typically inherent to serial communication.

It simplifies long distance cabling by using IP addressable, point-to-point architecture to send control messages over existing 10/100 BASE-T wiring.

eBOX features 4 serial connectors, activity LED's, 24 GPI Inputs and 24 GPI Outputs as a standard feature (General Purpose Interface - facilitates switch closure control).

It's ideal for LAN, WAN and Internet control of VTRs, DDRs, switchers, computer based editing systems, cameras, projectors and other devices that use RS-232/422 (9-Pin) and GPI.

Commands from a host NLE, Browser or RS-422 switcher/controller are directed to individual devices on the network.

This allows broadcast or networked facilities to control distanced machine rooms from a facility's central server.

eBOX is ideal for broadcast television, streaming media networks, multi-room editing facilities, news production, alert systems, monitor switching or in any audio/video/multimedia studio where remote hosts need to control devices over long distances or via the Web.

eBOX can be used as an IP remote RS-422 interface, controlled by ES-450 Je controllers.

Host to eBOX, eBOX to host and eBOX to eBOX communication is possible. An unlimited number of units can be addressed.

JLCooper's Developer Documentatioln provides comprehensive tools for software developers to link Visual Basic, C++, HTML or embedded devices for direct control of any device connected to any eBOX.

eBox converts 4 serial ports and 24 GPI (General Purpose Interface) inputs and 24 GPI outputs to 100/10baseT Ethernet.

The serial ports can be configured in the field to appear as EIA/TIA RS-232E and CCITT V.28 or as EIA/TIA RS-422A, RS-423 and Federal Standards 1020 & 1030 ports. Additionally, the port direction can be independantly be configured as DTE or DCE.

eBOX is directly supported by Click Effects, Ensemble Designs (Avenue), Imagine Communications, Newtek (Tricaster), Yamaha (Nuage version 1.7 or newer), ChyronHego (Vidigo Live) and other progessional broadcast applications.

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eBOX Features

- *Four 9-Pin D Sub Serial Connectors*

- *1/2 of a single 19" Rack Space*

- *Two 24Pin D Sub GPI Connectors*

- *RJ-45 Ethernet Connector*

- *LAN, WAN or Internet Control*

- *Dimensions 8.5" x 4.7" x 1.75"*

- *Weight 3 lbs.*

eBox communicates over standard TCP/IP which allows it to be used with any host computer. With TCP/IP, traffic can be routed over internal LANs, wireless LANs, MANs, WANs and even over the Internet.

Configurat3ion is accomplished through a web page server built into the eBox. Items such as port speed, parity, IP address, remote IP address and TCP port are set using supplied software. Settings are stored in nonvolatile memory.

Typically, the eBox functions as a server, passively waiting for client devices to connect to it. The device can be a computer or another eBox configured as a client. When the eBox is configured as a client, it will actively attempt to connect to the server eBox. Once accomplished, eBox will then pass data received in the serial or GPI ports to the remote eBox. If there is no data received, eBox will not send any TCP packets.

Ethernet
This eBox port is just like an Ethernet port on a computer, and can be connected to a hub, switch or router.

eBox supports IEEE 802.3u clause 28 Auto-Negotiation which automatically senses the Ethernet port speed & duplex operation and chooses the highest performance settings. Front panel LEDs indicate various operating conditions of the Ethernet connection.

Serial
The four serial ports along the top of the rear panel are 9 pin D-Sub connectors which can be configured for RS-232C or RS-422A operation.

In RS-422 mode, eBox direction can be configured to appear as a Controller or a Device. In RS-232 mode, the eBox appears as a DCE or DTE.

GPI
The GPI ports on the rear of the eBox are 25 pin D-sub connectors. The GPI In connector has 24 TTL/CMOS compatible inputs with internal pull-ups to +5 volts.

The GPI Out connector has 24 TTL/CMOS compatible outputs. On both connectors, pin 1 is the ground reference and pins 2-25 are the GPI signals.

eBOX Rear Panel

When eBoxes connected together in a client/server manner establish a connection, both client and server will send the state of its GPI In ports to each other so it can be shown on the GPI Output port on the remote eBox.

After that, only changes to a GPI In port will cause an eBox to send a GPI message to the remote eBox. A packet/keep alive message is sent every 5 seconds.

GPI to Serial Converter
eBOX can act as a GPI to Serial converter. Each of the 24 GPI Inputs can be assigned to send P2 or Odetics Commands. Assignments are retained in non-volitale memory. Basic tally back information is provided via GPI outputs.

GPI /Serial to Ethernet Converter
eBox can also work as an interface for GPI or serial to Doremi Labs Servers. eBox supports older P2 controllers via LAN, WAN and Internet.

Security
EBox contains a basic security mechanism that prevents unintended hosts from passing data through a secured eBox. A password is set on the configuration page and stored in nonvolatile memory. When password protection is enabled, eBox embeds the password in the transmitted IP packet. At the remote end, the receiving eBox must have password protection enabled and be programmed with a matching password.
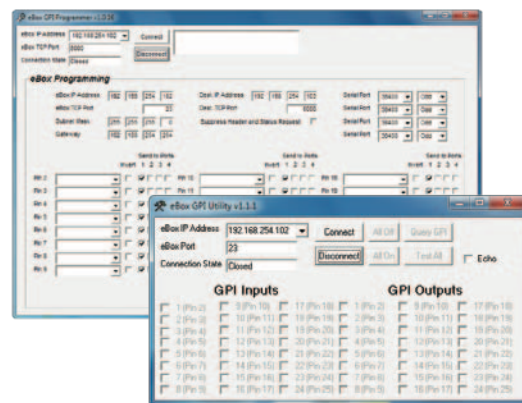
eBOX GPI Programmer & Utility

eBOX - Remote Software for Mac

JLCooper Electronics announces the eBOX Software for Mac OSX. This software provides real time control of eBOX features using the Mac mouse and keyboard. It allows your Mac to become a powerful GPI controller for triggering any external switched or serially controlled devices.

Software like Final Cut Pro X, Soundtrack Pro, Logic, Pro Tools, Cubase, Nuendo and others can take advantage of eBOX to automate control of external devices, including RS-422 tape machines, DDRs & others.

• Trigger GPIs and Transport functions from any Mac
• Live Mode lets you click on-screen buttons to trigger 24 GPI Contacts
• Map computer keys to control GPI Outputs
• GPI Inputs can be mapped to key command for remote control of Mac software features
• Remotely Configurable, Off-Location Setup
• Add Delays to precisely control Macro timing
• On-Screen Transport Controls for each of the 4 Serial Outputs
• Mapping of key commands to control Transport functions on Serial Outputs
• Gang Roll of up to 4 RS-422 or RS-232 Ports
• 8 GPI Presets
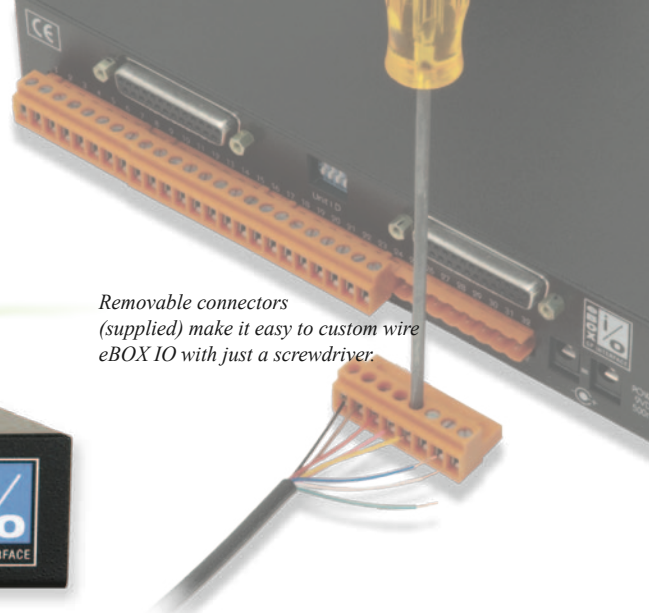• GPI Activity Indicators

EBOX IO - REAL WORLD INTERFACE

Relay outputs and opto-isolated inputs for eBOX

Removable connectors (supplied) make it easy to custom wire eBOX IO with just a screwdriver.

Introducing the companion to the eBox, the eBOX io. The eBOX io converts 8 GPI outputs to electrically isolated, relay outputs. The eBOX io also accepts 8 GPI inputs via optoisolated inputs. All connections are made on the rear panel via high density screw terminals.

A cable is included for connecting it directly to an eBOX. Up to 3 eBOX io's can be cascaded to convert all 24 eBOX GPI inputs and outputs. Front panel LEDs indicate status for easy troubleshooting. eBOX io is a half rack unit and fits alongside eBox in a single rack space.

eBOX IO Rear Panel

eBOX io Dimensions
- *Dimensions 8.5" x 4.7" x 1.75"*
- *Weight 3 lbs.*

Combine 1/2 and 1/4 rack units in JLC-RackTray

eBOX GPI8 - Ethernet IP/GPI Interface
8 Opto-Isolated Inputs/8 Relay Outputs

eBOX GPI8 is a portal for controlling devices across your facility or across the world. It's a general purpose interface box that converts 8 GPI inputs and outputs to 10/100 Ethernet. Think of it as a simpler eBOX without the serial ports and with eBOX IO functionality built in.

It includes Eight Optically-Isolated GPI Inputs and 8 Dry Relay Outputs and it's fully compatible with eBOX and sBOX. It's ideal for LAN, WAN and Internet control with switchers, computer based systems, cameras, monitors, projectors and other devices.
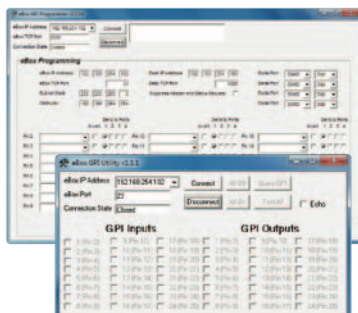

eBOX GPI8 is the perfect solution for broadcast television, streaming media networks, multi-room editing facilities, news production or in any audio/video/multimedia studio where remote hosts need to control devices over long distances or via the Internet.

It simplifies long distance control by using IP addressable, point-to-point architecture to send GPI messages over existing 10/100 BASE-T wiring. Host to eBOX, eBOX to host, or eBOX to eBOX communication is possible.

It communicates using standard TCP/IP. Traffic can be routed over internal LANs, wireless LANs, MANs, WANs and over the Internet.

Configurataion is accomplished through a provided Windows application. Parameters such as port speed, parity, IP address, remote IP address and TCP port are set. Settings are stored in nonvolatile memory.

When eBoxes establish a connection, both client and server will send the state of its GPI In ports to each other so it can be shown on the GPI Output port on the remote eBox. After that, only changes to a GPI In port will cause an eBox to send a GPI message to the remote eBox.

It supports IEEE 802.3u clause 28 Auto-Negotiation which automatically senses the Ethernet port speed & duplex operation and chooses the highest performance settings. Front panel LEDs indicate GPI and Ethernet status.

The unit functions as a server, passively waiting for client devices to connect to it. The device can be a computer or another eBox configured as a client. When the eBox is configured as a client, it will actively attempt to connect to the server eBox. Once accomplished, eBox will then pass data received in the serial or GPI ports to the remote eBox. If there is no data received, eBox will not send any TCP packets.

Physical connections are easily accomplished using supplied high density, removable, Weidmüller terminal block screw connectors with 8 opto-isolated, inputs. The GPI output connector has 8 electrically isolated dry relay outputs.

Parallel CMOS level GPI inputs with internal pull-ups to +5 volts and GPI output ports are available on 25 pin D-sub connectors.

JLCooper's Developer Documentation provides comprehensive tools for software developers to link Visual Basic, C++ or embedded devices for direct control of any device connected to any eBOX.

Need more GPI's? See our gBOX with 48 GPI Inputs and 48 GPI Outputs, expandable to 432 I/O. Serial and GPI over IP? Check out the original eBOX.
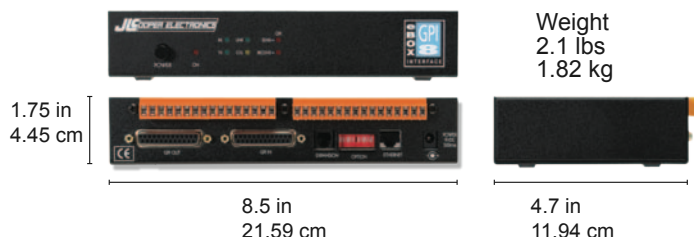
Please visit www.jlcooper.com for additional product details.

Weight
2.1 lbs
1.82 kg

1.75 in
4.45 cm

8.5 in
21.59 cm

4.7 in
11.94 cm

gBOX - GPI Trigger Box

gBOX is a general purpose interface that converts up to 48 GPI (General Purpose Interface) inputs and outputs to 100/10baseT Ethernet, USB or a serial interface.

Up to 8 gBOXes may be slaved to a master gBOX to convert up to a total of 432 GPI inputs and outputs.

When the gBOX is outfitted with an Ethernet Interface (#920394) the unit functions as either a server or client.

gBOX provides a portal for controlling devices across your facility or across the world. It's a simple way of remotely sending a large number of GPI contacts from one place to another over IP or an economical and professional GPI iunterface for computer-based applications like automations and control systems.

It's ideal for LAN, WAN and Internet control with switchers, computer based systems, cameras, monitors, projectors and other devices.

It's the perfect solution for broadcast television, streaming media networks, multi-room editing facilities, news production or in any audio/video/multimedia studio where you need to transfer a large number of GPI contacts over long distances or via the Internet.

When gBOX is configured as a client, it will actively attempt to connect to the server gBOX. Once this is accomplished, the gBOX will pass data received in the serial or GPI ports to the remote gBOX. If there is no data received in the gBOX, the gBOX will not send any TCP packets.

When the gBOX has an Ethernet Interface installed, it has two distinct modes of operation that are set by the rear panel DIP switches. The modes are: Server, Client

When the gBOX has a serial Interface installed, it has just one distinct mode of operation. This is GPI to serial conversion.

When the gBOX has an Ethernet or serial interface installed, it is a master unit, which communicates directly with another master unit or host computer. gBox works with optional eBOX io to provide opto-islated inputs and relay outputs.

gBOX features rear panel power switch, locking power connector and universal power supply.

Use with sBOX - Remote Trigger Box - to provide hot buttons to trigger GPIs.

gBOX Rear Panel

An ethernet equipped gBOX communicates over TCP/IP which allows it be used with any host computer running any operating system that uses TCP/IP protocol. gBOX can also be connected to other gBOXes to allow longer runs than traditional GPI cables.

When configured as a server, it passively waits for client devices to connect to it. The device can be a computer or another gBOX configured as a client.

Optional Standard interface cards provide for extended control over 10/100 Base-T (Ethernet), USB, RS-422 or RS-232.

Compatible Interface Cards
920394 - Ethernet Interface Card
920467 - USB Interface Card
920466 - RS-232 Interface Card
920465 - RS-422 Interface Card

Gangway₁₆ - 16 Port Gang Roll Switcher

GangWay16 is a compact, easy-to-use, 16 port RS-422 Gang Roll Switcher and GPI Trigger Box. The front panel includes lighted buttons for clear indication as to the staus of each machine, a gang roll button to quickly enable all machines, 3 User Preset Groups and a Tally Select button. A front mounted RS-422 port provides a convenient connection for a remote or other device.

It has 16 RS-422 ports on the rear panel and a rear mounted RS-422 input. The rear panel also includes 2 - 25 pin D-Sub connectors for GPI I/O, a power switch and an additional interface slot.

An optional *compact* interface card can act as a Master Input, connecting the GangWay16 to 10/100 Ethernet, USB, RS-232 or RS-422. This can be used to remotely change the switching configuration of the GangWay16 itself or as the source of commands for controlling connected VTRs, DDRs or Servers.

You can communicate with GangWay16 over LAN, or over the internet, for remote control and switching. It's ideal for remote truck or studio applications. A new feature allows ES-SloMo and SloMo Mini to directly interface with GangWay16 to provide for control up to 16 RS-422 machines.

GangWay16 Rear Panel

GangWay 16 Physical Specifications
- *Size - 19" x 5.5" x 1.7"*
- *Weight - 5 Lbs.*

Gangway₃₂ New!
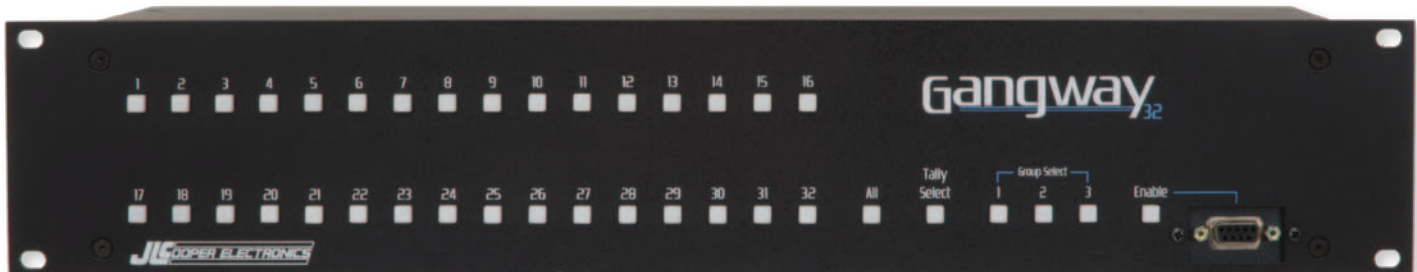
The boss of all gang roll switchers! GangWay32 is a massive 32 port RS-422 Gang Roll Switcher and GPI Trigger Box.

Like the smaller GangWay 16, this monster is an easy-to-use, RS-422 Gang Roll Switcher and GPI Trigger Box. The front panel includes lighted buttons for clear indication as to the staus of each machine, a gang roll button to quickly enable all machines, 3 User Preset Groups and a Tally Select button. A front mounted RS-422 port provides a convenient connection for a jog/shuttle remote or other device.

It has 32 RS-422 ports on the rear panel and a rear mounted RS-422 input. The rear panel also includes 2 - 25 pin D-Sub connectors for GPI I/O, a power switch and an additional interface slot.

An optional *compact* interface card can act as a Master Input, connecting the GangWay32 to 10/100 Ethernet, USB, RS-232 or RS-422. This can be used to remotely change the switching configuration of the GangWayitself or as the source of commands for controlling connected VTRs, DDRs or Servers.

You can communicate with GangWay16 over LAN, or over the internet, for remote control and switching. It's ideal for remote truck or studio applications.

A new feature allows ES-SloMo and SloMo Mini to directly interface with GangWay32 to provide for control up to 16 RS-422 machines.
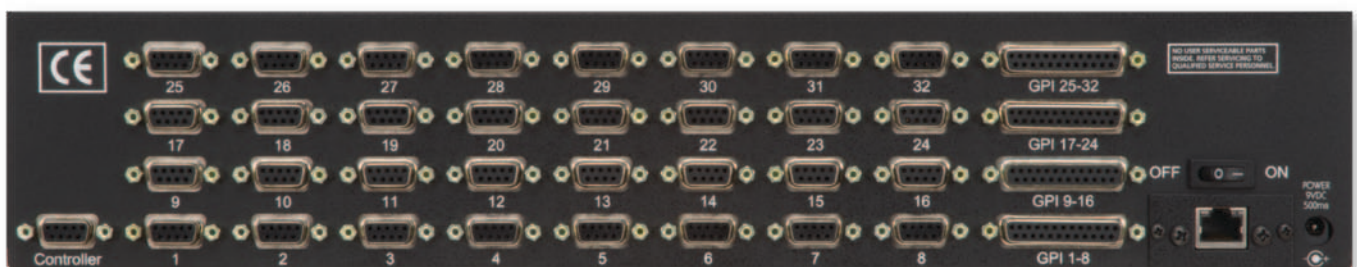
GangWay32Rear Panel

MCS5 USB - Media Control Station

New! with Relegendable LCD Button Labels

MCS5 is our newest desktop controller. It provides professional transport buttons, a precision optically encoded jog wheel, assignable function keys with live LCD labels (Key Function and label change on-the-fly for different editing operations).

You can create and customize banks of hot keys for your specific needs, including built-in/ pre-named commands for popular applications.

Programmable messages, including standard key command combinations, MIDI messages, mouse clicks and others. These can be assigned to any key and named.

The end result is that you can make a custom arrangement of controls to best suit your purpose, and you will always know what function you are going to get when you press a key.

Arrange editing functions into different banks, to logically group frequently used commands. For example, have one bank for ingest, a bank for tracking, a bank for editing, etc.) Raised display for easy viewing.

Use and customize supplied keysets for advanced control of applications including Final Cut Pro X, iMovie, Premiere Pro, Pro Tools, Nuendo and others, or make your own keyset for any program.

JLCooper controllers let you work faster. They provide speed, ease–of–use and tactile assurance that's missing when you use a mouse and keyboard for editing. Professionals can depend on JLC control products to provide reliable service that far outlasts any alternatives.

8"
20.32 cm

Weight
2 lbs
.91 kg

5.75" - 14.68 cm

3"
7.62 cm
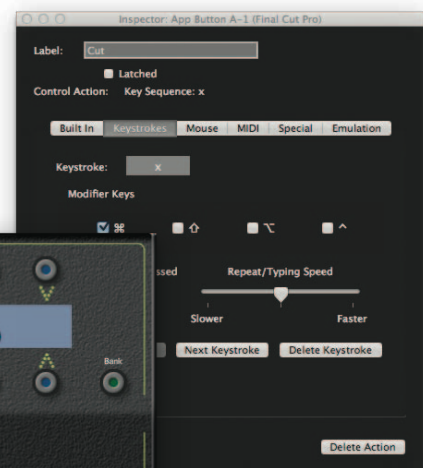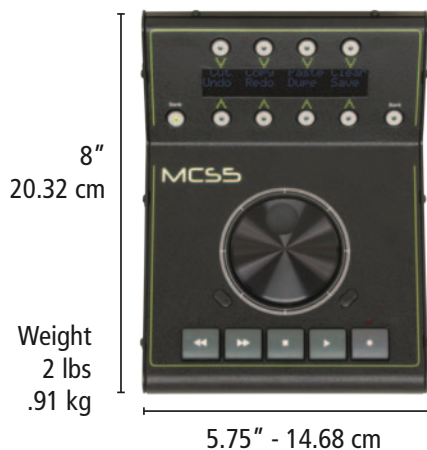
MCS5 Software for Mac

JLCooper was one of the developers of the MIDI Time Code Standard. In 1987 we designed and manufactured the world's first synchronizer that supported MTC. We continue to offer innovative solutions to complex synchronization challenges in today's studio and post environments.

PPS-2 SYNCHRONIZER

JLCooper's PPS-2™ is ideal for anyone who owns a sequencer, drum machine, workstation or hard disk recording system, and needs to sync to tape.

PPS-2 offers the advantages of several synchronizers in one versatile package. It reads and generates SMPTE time code and converts SMPTE into MIDI Time Code or Direct Time Lock. It also reads and generates JLCooper's "Smart FSK" sync and converts it into MIDI Clock with Song Position Pointer. Jam Sync/Regeneration, Flywheeling, Auto-Merge and a low price make the PPS-2 the best choice for an affordable synchronizer.

PPS-2 remote software for Windows & Mac lets you set SMPTE frame rate and start time when striping.
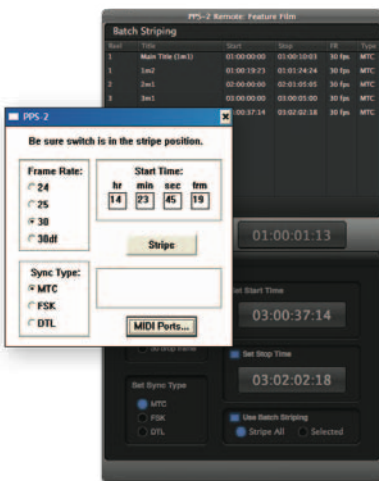
PPS-2 Features
- *Easy to Use*
- *SMPTE Jam Sync/Regeneration*
- *1 MIDI In with Auto Merge and 1 MIDI Out*
- *SMPTE Stripe can be Started at any Time*
- *SMPTE 24, 25, 30 & 30 Drop Rates Supported*
- *4.25" x 4.7" x 1.6" Weight - 3 lbs.*

PPS-2 Plus Option (Included)

The revolutionary PPS-2 Plus enhancement adds the ability to read MIDI Time Code (MTC) from any source and convert it into SMPTE time code.

This option is user-installed and lets your hard disk recorder or computer based digital workstation control machine synchronizers, automation systems and other devices requiring SMPTE Time Code.

PPS-2 Rear Panel

FaderMaster Professional - Programmable MIDI Automation Controller

FaderMaster Professional™ is perfect for the audio or video professional involved with automation or digital audio recording. You can easily control, mix and edit with MIDI sequencers, hard disk recorders, MIDI-cotrolled audio mixers, synths, samplers, signal processors and computer based video editing systems.

Professional Automated Mixdown

FaderMaster Pro – MIDI Automation Controller provides the hands-on, tactile control you've been missing from your system. It features high-quality 100mm long-throw faders. These smooth tracking faders give you precision control of your audio mix.

FaderMaster Pro eliminates the aggravation encountered when using a keyboard or mouse to tediously mix or edit the volume of multiple tracks, just one–at–a–time, and it is fully programmable, for volume, panning, EQ, effects, and other parameters.

If eight faders and buttons aren't enough, multiple FM Pro units can be linked to form a larger console.

FaderMaster Pro has 20 programmable banks for storing your own setups, plus 50 Factory Preset banks for remotely controlling classic synthesizers.

FaderMaster Professional Features
- *Eight Programmable High-Quality 100mm Faders*
- *Eight Programmable MIDI Buttons*
- *1/4" Programmable Footswitch & Foot Pedal Inputs*
- *Internal Grouping, Scaling and End Point Adjustments*
- *More than 50 Factory Presets*
- *All Metal Construction*
- *12.25" x 6.75" x 1.5"*
- *Weight - 7 lbs.*

FaderMaster Pro Side View
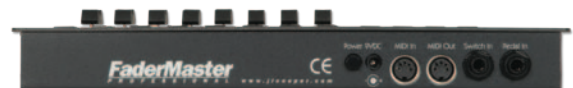
FaderMaster Pro Rear View

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 JLCooper MIDI Line Amplifiers to carry MIDI signals long distances over standard audio snakes.

MLA-XLR *MIDI Line Amplifier*

MLA-XLR MIDI Line Amplifier Features

- *1 MIDI Input*
- *1 MIDI Output*
- *1/4 Rack mount version*
- *XLR and MIDI connections*
- *MIDI cable runs over 1000'*
- *Uses common twisted pair wire*
- *Multiple units may be networked*
- *Can be used in pairs or in combination with MLA-1's and MLA-10's*

- *Dimensions 4.25" x 4.7" x 1.6"*
- *Weight 3 lbs.*

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

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

Figure 1 – Connecting 2 MLA-XLRs
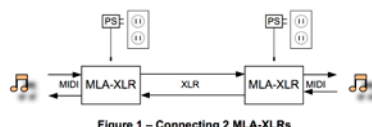
MLA-1 MIDI Line Amplifier

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.
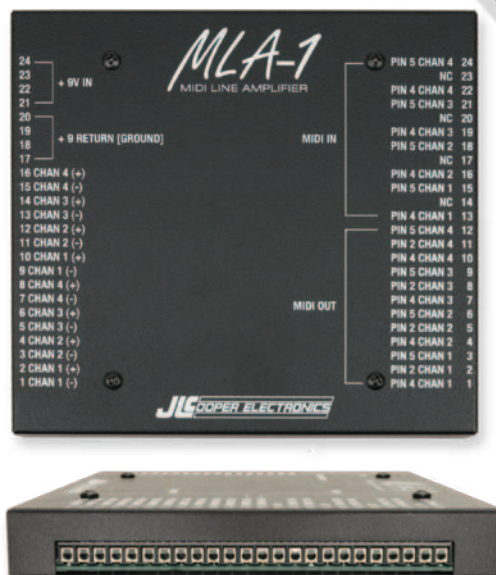
MLA-1 MIDI Line Amplifier Features

- 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.

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 are specifically designed for sending MIDI data over long distances with the capability to send information in excess of 1000 feet.

Ideal for touring systems or permanent installations, MLA's 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 MLA's 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.

MLA's are ideal for permanent installations or anywhere a longer MIDI cable run is required.

The MLA's 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
The MLA-10™ is designed to fit into 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 MIDI 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 XLR Connectors

Success Through Innovation and Partnership

Developers and OEMs Welcome

JLCooper Electronics successfully works with industry leading companies and educational institutions in a variety of OEM, private label, custom engineering, software development and other relationships.

Dedication to optimum control surface and interface engineering, quality, and reliability makes JLCooper the preeminent partner, helping your company achieve its goals on time and within budget.

We have an established developer program to provide documentation and support for our products. We offer a variety of "off the shelf" products that can be supported "as is" or customized to meet your needs. JLCooper will also help to support and evangelize your compatible products, creating additional strategies and opportunities.

Successfully working in many OEM relationships, JLCooper Electronics develops and manufactures products for companies on the forefront of digital audio, video, multimedia and other technologies.

Let us strengthen your existing development efforts by providing hardware and software products tailored to meet your needs. JLCooper's range of services include circuit board and enclosure design, manufacturing and testing, packaging and documentation. All this from the team consistently chosen by dozens of world–class manufacturers as the best in the business.

Visit our Developer page at jlcooper.com for additional information.
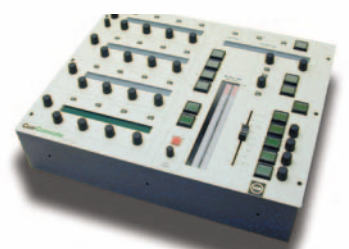
The JLCooper Story

JLCooper Electronics is truly a pioneer in the development of professional control, automation, synchronization and interfacing products.

Our solid reputation for design innovation is a testimony to the quality, reliability and performance of every product we make.

The company was founded in 1979 to make accessories for the growing music synthesizer market. Over the years, JLCooper has expanded to become a multi-million dollar corporation servicing audio and video production, television and radio broadcast, film editing, medical research and imaging, aerospace, education and many other specialized markets.

All products are manufactured in the U.S.A. and carry a full one year warranty. JLC products are sold by dealers and distributors worldwide.

JLCooper offers a complete range of branded products for the professional audio, video and multimedia markets. Our additional success as an OEM supplier can be attributed to our remarkable versatility. We understand the pressures involved in creating new product designs and we can help you define objectives and achieve them on time.

With 34 years of manufacturing experience and hundreds of finished product designs, leading companies look to JLCooper as a partner for custom control applications. We want to be your partner too.

Contact us now to get your wheels turning fast.

For the Latest News and Information, Visit Us On-Line at www.jlcooper.com

Contact your Authorized Dealer or JLCooper Electronics directly.
Customers in the U.S.A. and many other countries can order direct from JLC.
Products can be ordered by phone, mail, fax or on–line, via our secure web store.