JLCooper Electronics

Control, Automation, Synchronization and Interfacing Products   *WWW.JLCOOPER.COM*

Serious About Control

*"Precise control unleashes
your creativity and freedom."*

JLCooper is serious about control. We're devoted to building professional–quality Control, Interfacing, Synchronization and Automation Products. Our mission succeeds when an impossible problem is solved or a difficult job is made easier.

Effortless control expands the essence of your imagination. JLCooper controllers let you work faster and with more proficiency. They provide the ease–of–use and tactile elegance that can be missing from "software only" 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 20 years of award winning products, hard at work every day.

Our clients include ABC, Agfa Healthcare, Apple Computer, CBS, CNN, HBO, Home & Garden Television, Heartlab, IMAX, Industrial Light & Magic, Lockheed Martin, MIT, MTV, National Center for Macrobiological Research, NBC, NFL Films, Pixar, Sony Pictures, Universal Studios, Walt Disney Studios, Warner Brothers Studios, the U.S. Naval Undersea Warfare Center 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, recording artists and others rely on JLCooper products every day.

We can help you too!
Contact us today to find out how serious we are about control and interfacing solutions.

Passionate About Quality

JLCooper's MCS-3800 - Media Command Station™ is a compact remote controller featuring touch–sensitive, motorized faders. It provides the features professionals need, and compatibility with AVID D|S, Discreet (smoke, fire, flame, flint, effect), Kaydara Filmbox, Incite Multimedia, Inscriber (VMP, Supreme, CG Extreme, E-Clips, Videocarte), Alias Maya, Steinberg (Cuebase VST, Nuendo), MOTU Digital Performer, Digidesign Pro Tools, Merging Technologies Pyramix, Soundscape R.Ed, Digigram miXart and others.

Videography magazine liked it so much that they chose the MCS-3800™ for their "Editors Choice Award". This third generation design has continued to evolve into a world class product ever since.

Features include touch-sensitive motorized faders, an array of 60 function keys, back lit LCD and LED dual displays, 5 detented rotary encoders, professional transport controls, a full size numeric keypad, and our balanced, concentric, optically–encoded jog wheel with shuttle ring.
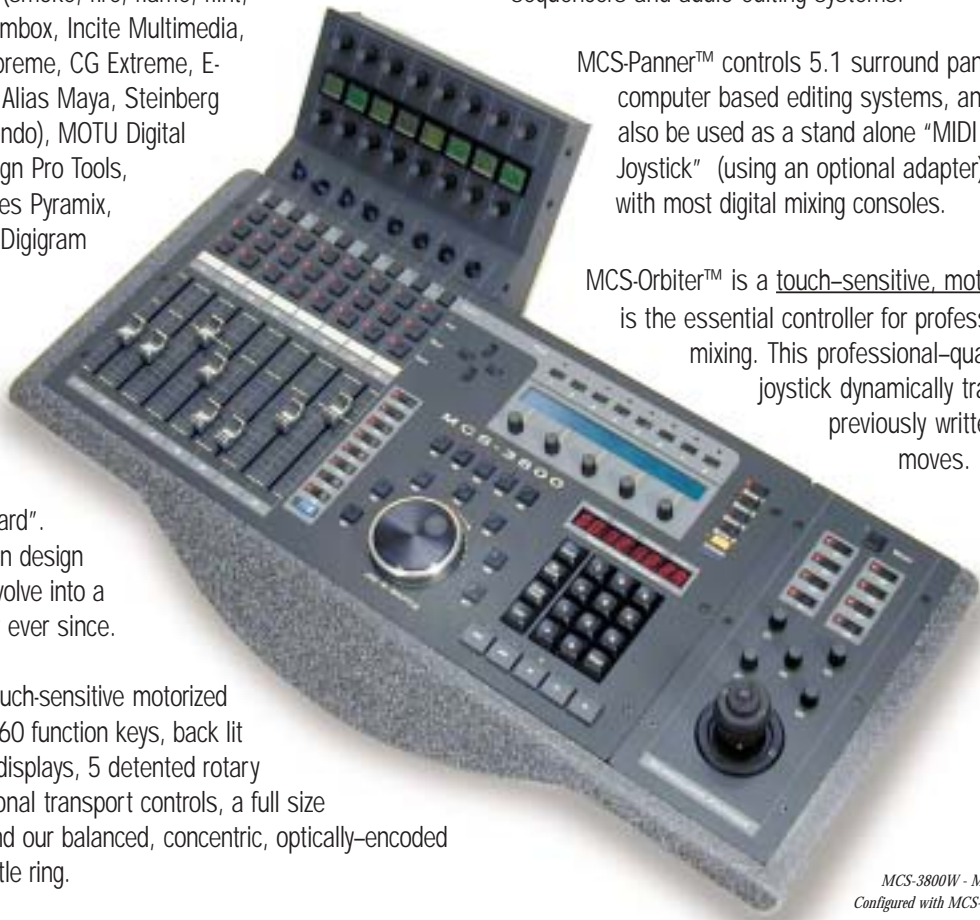
MCS-3000 Series™ products are designed with a modular approach. This lets you customize the controller for your specific needs and budget. Optional RS-422/9PIN, RS-232, GPI, USB, Ethernet interface cards and others allow extended control.

Custom controllers can easily be configured for any application. No other control product offers the flexibility, compatibility or proven reliability of the MCS-3000 Series.

MCS-3000X™ provides additional physical faders or can be used as a stand alone controller with systems including Avid, Pro Tools, most MIDI sequencers and audio editing systems.

MCS-Panner™ controls 5.1 surround panning on computer based editing systems, and may also be used as a stand alone "MIDI Joystick" (using an optional adapter) with most digital mixing consoles.

MCS-Orbiter™ is a touch–sensitive, motorized Joystick and is the essential controller for professional 5.1 surround mixing. This professional–quality joystick dynamically tracks previously written moves.

MCS-3800W - Media Command Station Configured with MCS-Panner and MCS-Bridge.

Can't wait to get your hands on your own MCS-3000 Series Media Command Stations? Contact JLCooper Electronics today to get serious about controlling your system.

General Features
- *Provides Fast Access to On-Screen Mixing and DSP Functions*
- *Attractive, Low Profile, Compact Design, Quality Construction*
- *Professional and Solid-VTR Style Jog Wheel and Shuttle Ring*
- *Full Size Numeric Keypad*
- *2 Card Slots for Additional Interfacing Options*
- *Optional Contoured Simulated Stone Wrist Rest*
- *Physical Specifications - Size 20.15" x 9.75" x 2.00"*

JLCooper ELECTRONICS

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MCS-3800 Media Command Station

MCS-3800w – Media Command Station

MCS-3000 Series products are the pinnacle of our control station product line. The Winner of Videography Magazine's "Editors Choice Award", MCS-3800 and other Media Command Station's are being used and supported by AVID, CBS, CNN, Digidesign, Digigram, Discreet, DPS, ETC, Leitch, Incite, Inscriber, MOTU, Merging Technologies, NBC, Panasonic, Phillips, Pinnacle, Softimage, Soundscape, 3DV Systems and many others.

MCS-3000 Series – Media Command Stations provide direct control of popular computer–based workstations and hard disk recording systems for audio and video production, post production and other applications.

You can record, edit and mix your projects to perfection, using an automated, moving fader, tactile control surface from JLCooper Electronics, the industries most widely used control surface technology.

Features include touch-sensitive motorized faders, an array of 60 programmable function keys, back lit LCD and LED dual displays, 5 rotary encoders, professional transport controls, a full size numeric keypad and a balanced concentric jog wheel with shuttle ring.

MCS-3800™, MCS-3400™ and MCS-3000™ expand to offer as many as 64 moving faders with over 300 physical function keys and a wide variety of control options.

Beautifully sculpted with an optional simulated stone (granite) trim and wrist rest, the MCS-3800 is a solid professionally crafted controller. It's a proven control solution in demanding professional environments.

With 100 locate points and built in SMPTE/EBU and MTC readers, Command Stations provide a coherent universal control of your busy production environment.

MIDI I/O is standard. Two expansion slots let you include interface cards for complete control. Cards include RS-422 P2 for 9-Pin VTR Control or Host Mode, RS-232, GPI, USB, Quad 9-Pin, Quad-MIDI and Ethernet.

As a third generation moving fader controller, the MCS-3000 Series truly advances the state of modular, tactile, virtual control for non–linear editing systems, hard disk recorders and digital mixers. With a variety of expansion options, its uses are limited only by your imagination!

MCS-3000 Series Features
- *Adds Tactile Controls to Digital Audio and Video Workstations*
- *For Professional Music & Video Production and Post Applications*
- *Provides Access to On–Screen Mixing and DSP Functions*
- *Built in SMPTE/EBU and MIDI Time Code Reader*
- *A Variety of Flexible Configuration Options*
- *New - Optional USB Interface and Software Lets You Add Additional Controls to Any Application*
- *Low Profile and Compact Design with Heavy Duty Construction*
- *100mm Motorized Touch Sensitive Moving Faders*

- *5 Physical Rotary Encoder Controls*
- *Concentric Jog Wheel and Shuttle Ring (Optically Encoded)*
- *2 x 40 Character Back-lit LCD with Contrast Adjustment*
- *Full Size Numeric Keypad*
- *Programmable Fader Touch Sensors*
- *Sends Various MIDI Messages - Including MIDI Machine Control*
- *2 Card Slots for Control Options including GPI, RS-422 Master (9-PIN for VTR Control), RS-422 Slave, RS-232 and Ethernet.*
- *Expandable to 64 Fader Channels Using MCS-3000X*
- *"W" Models Include Contoured Simulated Granite Wrist Rest*

Other MCS-3000 Series Models and Expansion Options

The demands placed on a controller differ widely, depending on the type of editing and the amount of space available. That's why Media Command Stations are designed with a unique, modular approach.

MCS-3000 Series controllers are offered in a variety of flexible configurations. Options can be combined to form a custom configuration for your specific requirements and budget.

MCS-3800 Media Command Station

The MCS-3800™ is an eight fader console with a full complement of necessary controls. It features touch–sensitive motorized faders, 60 function keys, full size numeric keypad, professional transport controls, LCD and LED displays, MIDI I/O and 2 expansion slots for other optional interfaces. It serves as a hub for an expanded system with a wide variety of optional accessories for custom requirements.

MCS-3800 Physical Specifications
- 20.15" x 9.75" x 2.00" (W/O Wrist Rest)
- Weight 15 lbs.

MCS-3800w Physical Specifications
- 22" x 12.5" x 2.00" (W/Wrist Rest)
- Weight 18 lbs.

MCS-3800w

MCS-3400 Media Command Station

The MCS-3400™ is a smaller main console for applications where space is at a premium or fewer than eight faders are required. It features four touch–sensitive, motorized faders and it's smaller size makes it the ideal addition to personal editing suites. It may be fully expanded with a variety of options and it can be used with a many computer-based editing systems. It is otherwise identical to the MCS-3800.

MCS-3400 Physical Specifications
- 16.5" x 9.75" x 2" (W/O Wrist Rest)
- Weight 10 lbs.

MCS-3400w Physical Specifications
- 18" x 12.5" x 2.00" (W/Wrist Rest)
- Weight 12 lbs.

MCS-3400w

MCS-3000 Media Command Station

The MCS-3000™ is the basis of the MCS-3000 Series product family. It is a smaller main console for applications where space is at a premium or no faders are required. MCS-3000 Series controllers are used daily in audio editing, video editing, compositing, broadcast, slo-motion control, animation, virtual reality, live sound reinforcement, lighting control and other specialized applications.

MCS-3000 Physical Specifications
- 13" x 9.75" x 2 (W/O Wrist Rest)
- Weight 8 lbs.

MCS-3000w Physical Specifications
- 14.5" x 12.5" x 2" (W/Wrist Rest)
- Weight 10 lbs.

MCS-3000w

MCS-3000x 8 Channel expander/Controller

The MCS-3000X™ is a fader expander for the MCS-3000, MCS-3400, and MCS-3800. Alternately, it can be used as a stand alone controller with most MIDI software programs. It features 8 touch-sensitive motorized faders, 32 switches, and built in MIDI I/O. Up to seven MCS-3000X's can be joined to form a console with up to 64 touch sensitive moving faders.

It controls AVID's Media Composer, Film Composer and Xpress, Digidesign's Pro Tools, and most computer based MIDI software including programs from Cakewalk, Emagic, Mark of the Unicorn, Steinberg and others.

MCS-3000x Physical Specifications
- 9.25" x 9.75" x 2.00" (W/O Wrist Rest)
- Weight 8 lbs.

MCS-3000xw Physical Specifications
- 11" x 11.25" x 2.00" (W/Wrist Rest)
- Weight 9 lbs.

MCS-3800xw

MCS-ClipShot - Tactile Palette

MCS-ClipShot™ is a new addition to the MCS-3000 Series - Media Command Station product family. It's a tactile switch palette with 40 multi-colored 24 x 32 LCD buttons (capable of displaying text and graphics), 20 lighted buttons and a 2 x 40 backlit LCD display.

It can be used as a stand-alone controller or it can be interfaced with other MCS-3000 Series modules to form a larger console. It connects with an MCS-3000, MCS-3400 or MCS-3800 using a modular telephone cable and has 2 - MCS-3000 Interface Card Slots for a variety of connections including RS-232, RS-422, USB, Ethernet, Quad MIDI, Quad 422/9Pin and GPI.

MCS-ClipShot provides Instant Video Clip Access or Audio Playback Triggering in broadcast, post production and other professional applications. It's LCD buttons also function as a QWERTY keyboard for your computer, eliminating the need for a traditional keyboard for naming clips.

Physical Specifications
- ■ *Size - 13" x 10" x 2.5"*
- ■ *Weight - 20 lbs.*

MCS-Spectrum - Colorist Control Station

MCS-Spectrum™ is the newest MCS-3000 Series - Media Command Station. It's designed for use with advanced video color correction software and other applications where multiple trackballs with control rings are beneficial.

It provides 3 transparent, back-lit, trackball mechanisms with specially designed free spinning control rings, 6 high-resolution rotatary encoders, backlit LED displays and 14 function keys.

It can be used as a stand-alone controller or it can be interfaced with other MCS-3000 Series modules to form a larger console. It has two MCS-3000 Interface Card Slots for a variety of connections including RS-232, RS-422, USB, Ethernet, Quad MIDI, Quad 422/9Pin and GPI.

MCS-Spectrum is avaliable with or without simulated stone wrist rest and trim.

Physical Specifications
- ■ *Size - 13" x 10" x 2.5"*
- ■ *Weight - 20 lbs.*

MCS-Bridge - Channel Display and Pan Option

MCS-Bridge™ further expands the physical controls of Media Command Station. It mounts behind the fader section on an MCS-3800 or MCS-3000X. The MCS-Bridge provides a large, back–lit/push–button LCD display for each channel. The unique LCD display/button can show text and graphics, and can change color to indicate track status or other mission critical information. Additional controls include two push–button, rotary encoders, and a 2–axis joystick for each channel.

Physical Specifications
- ■ *Size - 9.25" x 6.25" x 2.0"*
- ■ *Weight - 3 lbs.*

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MCS-Panner

Three Axis Joystick Controller

The MCS-Panner™ is a high-quality, 3–axis joystick mechanism with five rotary encoders and 10 switches, that controls surround panning for digital audio mixers and workstations. You can join it to an MCS-3000, MCS-3400 or MCS-3800 to form a larger console or or you can use it by itself as a stand alone Surround Panning Controller using the optional MCS-Panner MIDI Adapter. MCS-Panner interfaces with a variety of digital mixing consoles to control surround features via the optional MCS Panner MIDI Adapter. In addition, MCS-Panner also sends MIDI Controllers, which your mixer can "map" to control a variety of other features.

MCS-Orbiter

Touch-Sensitive – Motorized Joystick Controller

MCS-Orbiter™ is a Motorized Joystick Controller for the MCS-3000 Series. It features a high-quality professional controller that is both motorized and touch sensitive, making it the essential controller for surround mixing, animation and other applications. The joystick allows you to precisely input position-related automation moves. Like motorized faders, it dynamically tracks previously written moves. Touch-sensitivity lets you perform "takeover" edits; you can grab the joystick at any time to enter new positional information. The MCS-Orbiter features 5 rotary encoders and 9 function keys. It operates as a stand-alone controller, or may be joined to other MCS-3000 Series products to form a larger console. Optional MCS-Orbiter MIDI Adapter Sold Separately.

Physical Specifications
■ *Size - 6.25" x 11.25" x 2.5"*
■ *Weight - 3 lbs.*

MCS-Wiper – transition Controller

MCS-Wiper™ controls cuts, dissolves, slo-mo and other transitions in video editing and animation software. It provides a smooth, high quality (Penny & Giles) T-Bar style video fader with five rotary encoders and eight buttons for controlling on screen functions in your editing software. It can be attached to a MCS-3000, MCS-3400 or MCS-3800 to form a larger console.

Physical Specifications
■ *Size - 6.25" x 11.25" x 2.5"*
■ *Weight - 3 lbs.*

MCS-Navigator – Precision Trackball Controller

MCS-Navigator™ is a single trackball version of our MCS-Spectrum. It can be used with advanced video color correction software or as a mouse replacement and navigational device.

It has a single transparent, back-lit, trackball mechanism with specially designed, free spinning control ring, 6 high-resolution rotatary encoders, and 8 function keys.

MCS-Navigator can be used as a stand-alone controller, or it can be physically connected with other MCS-3000 Series modules to form a larger console. It interfaces via USB, RS-232, RS-422, MIDI (specify when ordering) or it can interface to your system via other MCS-3000 Series Modules.

MCS-Spectrum is avaliable with or without simulated stone wrist rest and trim.

Physical Specifications
■ *Size - 6.25" x 11.25" x 2.5"*
■ *Weight - 3 lbs.*

MCS-ViewPoint - Expander/Controller

MCS-ViewPoint™ is an industrial-quality, 15.1" LCD TFT/VGA display and touch screen monitor that mounts behind the control section of an MCS-3000, MCS-3400 or MCS-3800. It provides a fast and convenient way to control virtually any software applications on Mac and Windows computers. It is a multi-resolution display, capable of up to 1024 x 768 screen resolution. MCS-ViewPoint eliminates the need for a mouse to control basic software functions and saves valuable desk space.

Physical Specifications
■ *Size - 10" x 7.75" x 1.75"*
■ *Weight - 4 lbs.*

MCS-Tracker 3000 - Track Arming Controller

MCS-Tracker™ provides dedicated track arming buttons, function keys and track status indicators for the MCS-3000 Series. It features 32 track arming buttons, and Dual LED's for each channel provide highly visible confirmation of track status. Function keys provide track grouping, all safe, bank change and three user-definable groups.

(The MCS-Tracker is also available as an MCS-Pro Series low profile package that operates as a stand alone MIDI/MMC version. See Page 15 for more information.)

Physical Specifications
■ *Size - 11.5" x 8.0" x 2.5"*
■ *Weight - 6 lbs.*

"JLCooper has been a proven leader in controllers for years ... and it shows!"

"MCS-3800 is totally professional"

"MCS-3800 is an excellent choice"

- Electronic Musician (Feb 2002)

Expanded MCS-3000 Series - Media Command Station Configuration Examples

MCS-3800 – Media Command Station with (3) MCS-3000x, (4) MCS-Bridge and MCS-Panner

MCS-3000 – Media Command Station with MCS-Wiper

MCS-3800w – Media Command Station with (1) MCS-3000xw, (2) MCs-Bridge and MCS-Panner in custom chassis.

MCS-3000 Series Interface Cards

MCS-3000 Series USB Interface Card
This plug in card option for the MCS-3000 Series – Media Command Station allows connection to computers via USB.

Use our new USB interface and software to adapt the Media Command Station to work efficiently with virtually any application. Software keysets are included for popular audio, video and animation programs.

Our smart USB driver knows which appliation is running in the foreground and switches keysets automatically, for seamless control of key commands, mouse clicks and macros. This innovative appliation is the first to provide all this combined with programmable MIDI fader control all over a single USB connection. Windows 98, 2000, NT, Me, XP and MAC OS9, OSX compatible.

MCS-3000 Series RS-232 Interface Card
The addition of this plug in card for the MCS-3000 Series lets you configure your Media Command Station for direct computer control. Simply plug the interface card into one of the slots in a MCS-3000, MCS-3400 or MCS-3800 and you're in control. Baud rate is adjustable.

MCS-3000 Series 9-Pin/RS-422 Interface Card
This card provides direct 9-Pin control of professional VTR's and DDR's, or it can be used to interface your Command Station directly to a serial port on your computer. Commands from a host computer can be passed through the MCS and be directed to the individual machines.

MCS-3000 Series Quad 422 Card
This card allows connection of up four professional VTR's or DDR's for control of transport, track arming, locates and other functions. Commands from a host computer can be passed through and directed to individual machines. With the addition of the Quad 422 Card, the MCS is not only a remote for your NLE or broadcast system, but also an interface for multi-machine control.

MCS-3000 Series Quad MIDI Card
This card adds additional MIDI Inputs and Outputs to the MCS-3000 Series. The MCS, with the Quad MIDI Card installed, has four separate MIDI Ins and Outs. This facilitates connection to multi-port MIDI interfaces and reduces the MIDI bandwidth per port for improved overall efficiency.

MCS-3000 Series Ethernet Interface Card
This new interface card provides a direct 10baseT 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.

MCS-3000 Series GPI Interface Card
This plug in card for the MCS-3000 Series – Media Command Station interfaces to any device that needs a General Purpose Interface (switch closure) connection. It provides eight GPI Outputs and one GPI input. Simply install the interface card into a slot in the MCS-3000, MCS-3400 or MCS-3800.

unequalled interfacing Flexibility

As you can see, MCS-3000, MCS-3400 and MCS-3800 Media Command Stations have a variety of interface types to work in virtually any application. Most MCS-3000 Series expansion options interface via our internal bus and connect with a modular cable.

Built in MIDI ports, a SMPTE and MTC reader are included. Two additional interface card slots provide you with a the ability to adapt the controller to your requirements. Easy to install interface cards provide additional functionality with various applications that include direct support. Contact your JLCooper representative to discuss specific interfacing requirements for your specific applications.

ES-450s Universal Jog/shuttle remote

The ES-450s - Universal Jog/Shuttle Remote makes the operation of professional video recorders fast and easy.

Controls Most Professional VTR's and DDR's

The ES-450 is a fully functional 9-Pin/P2 Universal Jog/Shuttle Remote Controller for VTR's or DDR's.

It's completely compatible with most professional machines including most BVW, UVW and other decks.

The remote is designed for fast and easy editing. It incorporates a keyboard layout which minimizes key strokes, a Jog/Shuttle Wheel for convenient picture search operations, a back-lit LCD Time Code display for easy and accurate editing and much more.

It can be connected to various machines, such as the VO-9850 series U-matics and other 9-pin equipped VTR's and DDR's from Sony, Panasonic, JVC and others.

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

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.

The Numeric Keypad provides easy entry of "search to time" locate operations.

Now there is an alternative to large, cumbersome and costly 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. The ES-450 can effectively edit sound or music as well as it does video.

ES-450p

Universal Jog/shuttle remote

ES-450p is a new version of the ES-450 featuring the Panasonic Jog/Shuttle wheel.

ES-450p provides the same world–class performance as the ES-450s with a lower cost.

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

ES-450s Universal Jog/Shuttle Features

- ■ *Professional Quality Compact Remote Control*
- ■ *Sony Jog/Shuttle Mechanism*
- ■ *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 and Others*
- ■ *Back-Lit LCD Time-Code Display*
- ■ *RS-422/9-Pin Interface*
- ■ *Numeric Keypad for Time Code Entry*
- ■ *Durable All Metal Construction*

MCS3s RS-422/9-Pin Version

MCS3s – with Sony Jog/Shuttle Mechanism

Features the familiar push-push jog/shuttle controller. Push wheel once for Jog mode. Push wheel again for shuttle mode. In shuttle mode, it features a detent "click" at play speed. Available in a RS-422/9-Pin version for controlling AVID Xpress, Symphony, Media Composer and Newscutter or professional P2 compatible VTRs and hard-disk based VTR emulators. Couples to MCS-Locator as a full function controller, capable of controlling up to 4 professional VTR's.

MCS³ Physical Specifications
- *Size - 6.5" x 7" x 1.25"*
- *Weight - 5 Lbs.*

MCS3p RS-422/9-Pin Version

MCS3p – with Panasonic Jog/Shuttle Mechanism

A new lower cost version of our MCS3s with a Panasonic push-push jog/shuttle controller. Push wheel once for Jog mode. Push wheel again for shuttle mode. Available in a RS-422/9-Pin version for controlling AVID Xpress, Symphony, Media Composer and Newscutter, or professional P2 compatible VTRs and hard-disk based VTR emulators. It couples to MCS-Locator to as a full function controller, capable of controlling up to 4 professional video decks.

MCS³ Physical Specifications
- *Size - 6.5" x 7" x 1.25"*
- *Weight - 5 Lbs.*

MCS³ RS-422/9-Pin Version

MCS3 – with JLCooper Jog/Shuttle Mechanism

Media Control Station³ RS-422/9Pin version features professional transport buttons, a precision optically encoded jog wheel with a concentric shuttle ring and 18 function keys. It's a 9-Pin/P2 compatible universal VTRor DDR jog/shuttle remote with Sony BVU 800/900 emulation. It couples to MCS-Locator to as a full function controller, capable of controlling up to 4 professional video decks.

MCS³ Physical Specifications
- *Size - 6.5" x 7" x 1.25"*
- *Weight - 5 Lbs.*

MCS-Locator Video Cue Controller

This low profile machine controller has the ability to quickly cue up to four VTR's or DDR's via RS-422/9-Pin. Typical applications include Start, Stop and Cueing of video tape recorders and digital disk recorders. MCS-Locator features a full size numeric keypad for inputting locate points and a large 7 segment LED time–code display. It can be physically joined with MCS³ and other MCS-Pro Series Controllers.

MCS³ Physical Specifications
- *Size - 6.5" x 7" x 1.25"*
- *Weight - 5 Lbs.*

Expanded MCS-Pro Series
RS-422/9-Pin Examples

MCS3 9PIN with MCS-Locator

MCS3s with MCS-Locator

MCS3-Media Control Station³

Media Control Station³ is a central component of our MCS-Pro Series.

It features professional transport buttons for Record, Play, Stop, Fast Forward and Rewind. It has 18 physical buttons for a variety of editing functions and the new V/Stick Navigation Control.

A precision, optically encoded jog wheel with a concentric shuttle ring lets you control audio or video effortlessly and with frame accuracy.

MCS³ Features

- *Professional Remote Control for VTR's, MIDI, Audio, Video and Multimedia Software*
- *Provides Remote Transport Control*
- *Balanced, Optical Jog Wheel with Shuttle Ring*
- *Remotely Controls up to 24 Different Functions*
- *Permits Remote Track Arming*
- *RTZ and Shuttle Back at Play Speed*
- *Durable All Metal Construction*
- *Available Models (Specify When Ordering)*
  MCS³ RS-232 with Software for Windows
  MCS³ USB w/ Software for Windows or Mac
  MCS³ RS-422/9-Pin for VTR Control
  MCS³ MIDI with MIDI Machine Control
  MCS³ ADB with Software for Macintosh
  MCS³S RS-422/9-Pin w/Sony Jog/Shuttle

MCS³ Physical Specifications
- *Size - 6.5" x 7" x 1.25"*
- *Weight - 5 Lbs.*

Expanded MCS-Pro Series Configuration Examples

The MCS-Pro Series provides a number of custom configuration options for improved control of computer-based editing systems, VTR's and DDR's.

MCS³ USB Version

Media Control Station³ USB version features professional transport buttons, a precision optically encoded jog wheel with a concentric shuttle ring and 18 function keys.

MCS3 USB software for MCS³ supports Mac OS9 and OSX, Windows 98, 2000, Me and XP. It lets you use and customize supplied keysets for advanced control of Quicktime compatible applications including Cinestream, Final Cut Pro, iMovie, Media 100, Premiere, Pro Tools, Vegas Video, Virtual VTR and others. MCS³ works with any software program.

MCS³ RS-232 Version

Media Control Station³ RS-232 Version features professional transport buttons, a precision optically encoded jog wheel with a concentric shuttle ring and 18 function keys. Supplied software is compatible with Windows 98, 2000, NT, Me and XP and can be used with any editing software program. MCS³ is directly supported by Discreet, Incite, Philips and other systems.

MCS³ MIDI/MMC Version

Media Control Station³ MIDI/MMC version features professional transport buttons, a precision optically encoded jog wheel with a concentric shuttle ring and 18 function keys.

It sends MIDI Machine Control messages for controlling a variety of compatible hard disk recorders and computer based editing systems. Use it with recorders from Alesis, Akai, Fostex, Mackie, Roland, Tascam, and others. It can be coupled with FaderMaster Pro, FM4/60, FM 4/100 or MCS-ProTracker to form a compact custom MIDI console.

"The addition of JKL shuttle control, a speed slider, key command sequences, and multiple keysets per application, make the MCS3 the controller of choice for professionals."

"MCS3 software for Windows is included with USB and RS-232 versions. It lets you use and create keyset (templates) for all of your favorite audio and video editing applications and more"

MCS³ Edit Station

MCS³ Edit Station combines standard MCS3 USB, RS-232 or RS-422 components (as shown above) with a high–quality compact keyboard in a single low profile unit.

It's small size makes it perfect for applications where space is at a premium. It's perfect for 19" rack mounting using optional rack ears, or with a third party rack shelf or drawer.

Remote connections for USB or RS-232/422 and PS2 allow a single captive cable to extend to the controller, eliminating desktop clutter from multiple device connections.

A remote mouse input lets you connect the pointing device of your choice if needed.

Mac OS9 and OSX, Windows 98, 2000, Me and XP compatible.

MCS³ Physical Specifications
- *Size - 16.5" x 7" x 1.25"*
- *Weight - 7 Lbs.*

With expertise in both automation hardware design and software development, JLCooper Electronics is a leader in quality mixing automation technology. A straight ahead user-interface makes our products extremely easy to learn and use.

FaderMaster 4/60

FaderMaster 4/60 is our new, low–cost MCS-Pro Series (low profile) Automation Controller. It features 4 - 60mm motorized faders, bank shift buttons, function keys and transport controls.

It's available in MIDI, RS-232, RS-422 and USB versions. FM 4/60 can used as a stand-alone device or may be physically coupled with MCS3, MCS-Tracker, MCS-Locator, FaderMaster Pro of multiple FM 4/60 units to form a larger console. The MIDI version is compatible with Pro Tools, Nuendo, Logic, DP3, Sonar, Vegas and other applications.

FaderMaster 4/60 Features
- *Controls MIDI, Audio, Video and Multimedia Software*
- *Select, Solo, Mute, Transport Controls and Other Functions*
- *Durable All Metal Construction*
- *Available Models (Specify When Ordering)*
    Fadermaster 4/60 MIDI/MMC
    Fadermaster 4/60 RS-232
    Fadermaster 4/60 RS-422
    Fadermaster 4/60 USB

FM 4/60 Physical Specifications
- *Size - 6.5" x 8.5" x 1.25"*
- *Weight - 3 Lbs.*

FaderMaster 4/100

FaderMaster 4/100 is our newest, low–cost MCS-Pro Series (deep profile) Automation Controller. It features 4-100mm touch-sensitive, motorized faders, bank shift buttons and function keys.

It's available in MIDI, RS-232, RS-422 and USB versions. FM 4/100 can used as a stand-alone device or it may be physically coupled with the MCS³S (with Sony Jog/shuttle) for use with editing software including AVID Symphony, Composer, Xpress, NewsCutter and others. The MIDI version emulates the MCS-3000x and can be used with most MIDI software programs to automate levels and other features.

FaderMaster 4/100 Features
- *Controls MIDI, Audio, Video and Multimedia Software*
- *Select, Solo, Mute and Other Functions*
- *Durable All Metal Construction*
- *Available Models (Specify When Ordering)*
    Fadermaster 4/100 MIDI
    Fadermaster 4/100 RS-232
    Fadermaster 4/100 RS-422
    Fadermaster 4/100 USB

FM 4/100 Physical Specifications
- *Size - 6.5" x 8.5" x 3"*
- *Weight - 5 Lbs.*

FaderMaster Professional - MIDI Automation Controller

**Works with
AVID Symphony,
Composer, Xpress,
NewsCutter
and
Fast Silver!**

FaderMaster Professional™ is engineered 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-controlled audio mixers, synths, samplers, and signal processors and computer based video editing systems from AVID Technology and more.

Professional Automated Mixdown System

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 controlling volume, panning, EQ, digital effects, and many other parameters.

And if eight faders and buttons are not enough, multiple FaderMaster Pro units can be linked to form a larger console.

FaderMaster Pro has 20 programmable banks for storing controller configurations, plus, 50 Factory Presets for controlling Synths and Signal Processors.

FaderMaster Professional Features

- *Eight Programmable High-Quality 100mm Faders*
- *Eight Programmable MIDI Buttons*
- *1/4" Footswitch and Foot Pedal Inputs*
- *Internal Grouping, Scaling and End Point Adjustments*
- *Multiple Units can be Linked Together*
- *Lithium Battery Backed RAM*
- *More than 50 Factory Presets*
- *All Metal Construction*
- *Optional FMPro Software for Mac*
- *12.25" x 6.75" x 1.5"*
- *Weight - 7 lbs.*

MCS-ProTracker - Low Profile MIDI Version

The "MCS-Tracker" features 32 track arming buttons and additional function keys. Dual LED's for each channel provide highly visible confirmation of track status. Function keys provide track grouping, all safe, bank change and other functions.

It may be interfaced with most popular digital audio recording devices that support remote track arming via MIDI Machine Control. MCS-Tracker may also be used with a variety of computer-based editing systems and music software programs for track arming and status functions.

MCS-ProTracker Physical Specifications
- *Size - 6.5" x 8.5" x 1.25"*
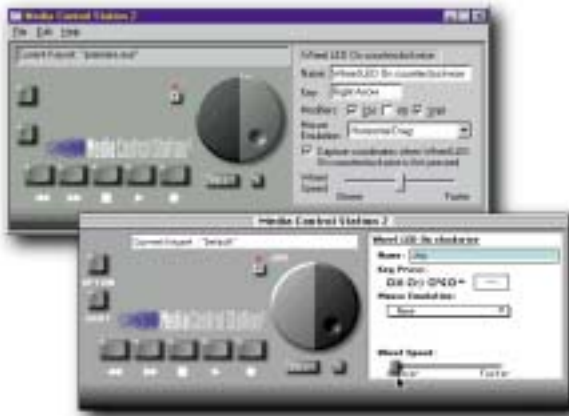- *Weight - 3 Lbs.*

MCS2 Media Control Station^2

Media Control Station^2 is the ultimate compact remote. It features large buttons for Record, Play, Stop, Fast Forward, Rewind and other editing functions. A precision optically encoded jog/shuttle wheel lets you jog or shuttle effortlessly with frame accuracy.

MCS^2 software, included with the Mac and RS-232 versions, lets you use and customize presets for controlling software from Adobe, AVID, Media 100, Macromedia and many others.

Four versions are available for controlling 9-Pin/RS-422 compatible Video Tape Recorders, computer based audio and video editing systems, hard disk recorders and more.

Mac OS   QuickTime   MICROSOFT WINDOWS COMPATIBLE

MMC
MIDI MACHINE CONTROL

MCS^2 Physical Specifications
- Size - 8.5" x 3.25" x 1.5"
- Weight - 2 lbs.

MCS^2 RS-422/9-Pin Version

Media Control Station^2 9Pin features professional transport buttons, a precision optically encoded jog wheel and jog/shuttle control button. Shift and Option modifier keys let the MCS^2 send more than 20 different control messages including RTZ, Video, Insert, Reverse Shuttle at Play Speed, Audio Track Arming and more. MCS^2 9Pin is our compact, low–cost RS-422/P2 compatible universal VTR or DDR jog/shuttle remote.

MCS^2 MIDI/MMC Version

Media Control Station^2 MIDI/MMC features transport buttons, a precision optically encoded jog wheel and jog/shuttle control button. Shift and Option modifier keys let the MCS send more than 20 different MIDI Machine Control (and General Purpose Controller) Messages, including Track Arming.

MCS^2 sends MMC messages for controlling a variety of compatible hard disk recorders and computer based editing systems. Use it with recorders from Akai, Fostex, Mackie Roland, Tascam, and others.

MCS^2 RS-232 Version

Media Control Station^2 RS-232 features professional transport buttons a precision, optically encoded jog wheel and jog/shuttle control button. Shift and Option modifier keys let the MCS^2 send more than 20 different control messages. Supplied software is compatible with Windows 98 and NT and can be used with any editing software program. It's our compact, low–cost jog/shuttle remote for Windows compatible applications.

MCS^2 Features

- Professional Quality Compact Controller
- Provides Remote Transport Control
- Remotely Controls up to 20 Different Functions
- Durable All Metal Construction

- Available Models (Specify When Ordering)
  MCS^2 Mac (ADB) with Software for Mac OS.
  MCS^2 MIDI with MIDI Machine Control.
  MCS^2 9-Pin for VTR Control.
  MCS^2 RS-232 w/Software for Windows 98/NT.

JLCooper's Award Winning Control Station technology is being used industry wide in television and radio broadcast, recording, video post, and multimedia production. JLCooper CS-10² Control Stations are used and supported by Autodesk, Digigram, Digidesign, Merging Technologies, Soundscape, Steinberg and many others.

CS-10² Control Station

The CS-10² Professional Control Station™ is the definitive control surface for Digidesign, Digigram, SoundScape, Steinberg and most other professional digital audio editing systems and software.

Musicians, video & film professionals, audio post and broadcast facilities love the CS-10²'s easy-to-use controls.

It provides complete transport, automation and digital signal processing functions without tedious mouse and key commands.

With large, tactile buttons for Record, Play, Stop, Forward, Rewind and other frequently used editing functions, you can concentrate on your project, not on your computer.

The optically encoded jog/shuttle wheel provides precise positioning and effortless scrub editing.

CS-10² Features
- *Professional Tape Recorder Style Controls*
- *Footswitch Input for Hands-free Operation*
- *Optional CS-10x for up to 64 faders*

- *CS-10² Size 17.5" x 7.5" x 1.4"*
- *Weight - 13 Lbs.*

- *CS-10x Size 8.75" x 7.5" x 1.4"*
- *Weight - 5 Lbs.*

- *Available Models (Specify When Ordering)*
  CS-10² MIDI
  CS-10² RS-232
  CS-10x MIDI
  CS-10x RS-232

Expanded CS-10² joined with three CS-10x Expanders

CS-10X Control Station Expander

The CS-10X™ is an expander for the CS-10² that can be attached to provide additional controls. Use of up to 7 expanders are supported by the CS-10². Digidesign's Pro Tools 4 now supports the use of three CS-10X units plus the CS-10² for a total of 32 physical faders.

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 the most reliable and innovative solutions to solve the complex synchronization challenges in today's studio and post environments.

dataSYNC² ADAT/MIDI SYNCHRONIZER

"A brilliant addition for the ADAT... a gotta-have-it"
-Roger Nichols, EQ

JLCooper improves on the successful dataSYNC with dataSYNC²™, the ADAT MIDI SMPTE synchronizer.

The dataSYNC² connects right to your Alesis ADAT and provides SMPTE and MIDI Time Code to drive sequencers and digital audio workstations without wasting a valuable tape track for time code.

As a standard function, it also includes the ability to send MIDI Clock with Song Position Pointer for hardware sequencers, workstation keyboards and drum machines. Complete variable tempo and meter data is sent without the restrictions of other products.

dataSYNC² features automatic sample rate detection and supports 44.1 and 48k.

Now with bi-directional MIDI communication to the ADAT, you can use MMC to control ADAT's transport, track enable and locate functions from your computer.

A merging MIDI input lets you record new MIDI tracks while sync'ed to ADAT sample clock.

dataSYNC² Features

- *No Wasted Tracks for Sync*
- *Two 9-Pin Sync Cables Included*
- *8.5" x 4.7" x 1.6"   Weight - 3 lbs.*

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.

Optional PPS-2 remote software for Windows and Macintosh 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*
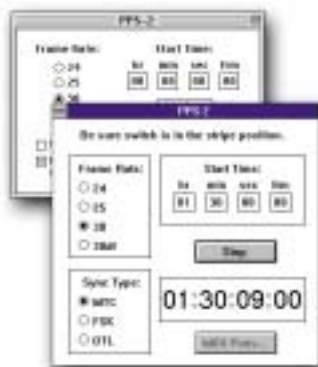- *4.25" x 4.7" x 1.6"   Weight - 3 lbs.*

PPS-2 Plus Option

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.

Unique and Innovative MIDI applications are a hallmark of JLCooper Electronics. New products for audio/video interfacing and control allow you to streamline the way you work and enhance the way your existing products function together.

MMC/9PIN+ *MIDI Machine Control to 9-Pin Converter*

MMC/9PIN+ is an innovative device integrating the world of MIDI to the world of professional video. It allows computer–based sequencers, audio mixing consoles and digital editing systems to control 422/P2 compatible video tape recorders (VTRs) and disk based recorders. Audio editors, film and video composers can control both a VTR and workstation at the same time.

MMC/9PIN+ translates MMC transport functions, locate points, shuttle and track arming messages into corresponding RS-422 (Sony 9 Pin/P-2) commands. BVU-800/900 emulation is supported. By referencing 9-Pin sync with video, it outputs SMPTE and MTC without wasting an audio track.

MMC/9PIN Features
- *Converts MMC Transport Functions, Autolocates, Track Arming and Shuttle Commands to 9-Pin (Sony BVU-800/900 Emulation)*
- *Allows remote control of VTRs from any PC*
- *Size - 8.5" x 4.7" x 1.75" Weight - 3 lbs.*

9PIN/MMC *9-Pin to MIDI Machine Control Converter*

JLCooper's new 9Pin/MMC connects popular hard disk recorders including Tascam MX-2424, Mackie HDR24/96, Roland VS Series, Fostex and most computer–based audio editing systems to a standard video edit controller or switcher, for automated audio-follows-video control.

9Pin/MMC Interface interprets standard RS-422/P2 protocol messages and converts them to corresponding MIDI Machine Control (MMC) messages. This allows most hard disk audio recorders and computer based editing systems to be controlled by video editing systems that were originally intended to control professional Video Tape Recorders and DDRs.

Supported functions include play, stop, fast forward, rewind, record, locates, track arming, time code frame rate, program change, track record, set locate in/out points, pre-roll, post-roll and more.

9PIN/MMC Features
- *Interfaces Hard Disk Recorders like Tascam, Mackie, Roland, Fostex and Computers–based Systems with most Video Edit Controllers*
- *Supports GVG,ESAM2, MIDI, MMC Protocols*
- *Size - 8.5" x 4.7" x 1.75" Weight - 3 lbs.*

DAFV² *Digital Audio Follows Video Interface*

DAFV² connects popular digital audio mixers including the Sony DMX-R100 Ramsa WR-DA7, Tascam TM-D8000, Yamaha 02R and Mackie D8B to a video edit controller or switcher, for automated audio-follows-video applications.

DAFV² adds the essential interface which is missing from most popular digital audio mixers, the ability to respond to ESAM and Grass Valley GVG protocols.

Commands from the edit controller are converted to allow your mixer to automatically perform audio transitions, cuts and dissolves in perfect sync with video. Start and Stop Transition, Set Rate, Set Program and Preset Crosspoint and Set Fader Level Commands are supported.

Your edit controller's EDL (Edit Decision List) lets you specify the in and out points and the type of edit. The DAFV² automatically detects commands from the edit controller, determines which protocol is being sent and configures itself to receive either GVG or ESAM2 protocols.

DAFV Features
- *Interfaces Digital Mixers like Sony DMX-R100, Ramsa WR-DA7, Yamaha 02R, 03D, 01V and Mackie D8B with Video Edit Controllers*
- *Supports GVG and ESAM2 Protocols*
- *Size - 8.5" x 4.7" x 1.75" Weight - 3 lbs.*

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-1O MIDI Line Amplifier

"Best in Show Winner – 91st AES"
- EQ Magazine

JLCooper Electronics extends the distance of MIDI with the MLA Series - 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 facilitates, stadiums, arenas, hotels, amusement parks, or other facilities where MIDI messages are required to be sent a long distance, or to multiple locations.

However, 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 a 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-XLR MIDI Line Amplifier

MLA-XLR extends the range of MIDI cables to over 1000 feet using standard balanced audio lines (audio snakes, mic cables, etc.). It requires no configuration and it's simple to use.

MLA-XLR pairs can carry data over two standard XLR Mic cables and provides a lower cost expansion option for interfacing with other MLA-1 and MLA-10 units in a network application.

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.

The need to run MIDI signals over long distance is essential for use in recording facilities, theatres, arenas, churches, schools, cruise ships, casinos, nighclubs 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-1 MIDI Line Amplifier

MLA-1

The MLA-1 can be wall panel mounted or used with a separate MIDI jack panel. This facilitates greater flexiblity for installations where MLA-1 units can be in every required room.

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.

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.*

eBOX Quad Serial to Ethernet Interface

eBOX is a 10BASE-T (Ethernet) to RS-232/422(9-Pin)/485 and GPI hardware interface. It acts as a portal for controlling devices across the building or across the world.

It eliminates information bottle-necks and overcomes distance limitations typically inherent to serial communication. It simplifies long distance cabling by using IP addressable, point-to-point architec-ture to send control messages over existing 10BASE-T Ethernet wiring.

eBOX features four serial connec-tors, 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, HDRs, switchers, computer based editing systems, cameras, projec-tors and other products that use RS-232/422 (9-Pin)/485 and GPI.

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

This allows broadcast or networked facilities to control distanced machine rooms from an edit bay's central host computer.

eBOX is ideal for broadcast television, streaming media networks, multi-room editing facilities, news production or any audio/video/multimedia studio where remote hosts need to control devices over long distances or via the Web. Host to eBOX, eBOX to host and eBOX to eBOX communi-cation is possible. An unlimited number of units can be addressed.

JLCooper's SDK provides comprehen-sive tools for software developers to link Visual Basic, C++, HTML or embedded devices for direct control of any device connected to any eBOX.

eBOX Features

- *4 9-Pin D Sub Serial Connectors*
- *1/2 Rack Version*
- *Two 25 Pin D Sub GPI Connectors*
- *RJ-45 Ethernet Connector*
- *Network Units on LAN or WAN*
- *Dimensions 8.5" x 4.7" x 1.75"*
- *Weight 4 lbs.*

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Success Through Innovation and Partnership

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.

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.
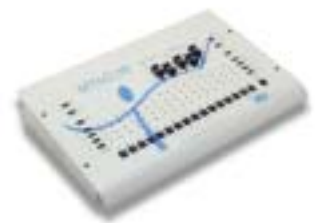
We have an established developer program for educational and commercial use to provide support and documentation for our products. We offer a variety of "off the shelf" products that can be supported "as is" or customized to meet your needs. JLCooper will also help to support and evangelize your compatible 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 www.jlcooper.com/dev.html for additional information and details.

The JLCooper Story

JLCooper Electronics is a pioneer in the development of professional products. Our solid reputation for design innovation is a testimony to the quality, reliability and performance of every product we make.

JLCooper's success can be attributed to our remarkable versatility. We understand the pressures involved in creating new products and we can help you define your objectives and achieve them on time.

We also offer a complete line of control, synchronization, automation and interfacing products for the professional audio, video and multimedia markets. Our products are sold through dealers and distributors worldwide.

For Additional Information, Visit Us On-Line at www.jlcooper.com.

Software and other products can be ordered directly from JLCooper by either phone, mail, fax or on–line. Contact us with your credit card information or mail check or money order to...
 JLCooper Electronics, Attn: Order Dept.
 142 Arena Street, El Segundo, CA 90245.

California residents please add 8.25% sales tax. For American Express, MasterCard and Visa orders, **please call 310-322-9990.** For your added convenience, credit card orders may also be faxed. Our FAX number is 310-335-0110. Sorry, we cannot process COD shipments.