"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, BBC, CBC, CBS, CNN, ESPN, HBO, Home & Garden Television, Heartlab, IBM, IMAX, Industrial Light & Magic, Lockheed Martin, MIT, MTV, National Center for Macrobibological 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.

Contact us today to find out how serious we are about making your job easier.
JL Cooper's MCS-3800 - Media Command Station™ is a compact, control surface that provides flexibility for professionals, and compatibility with Pro Tools, Nuendo, CUBase SX, Logic*, Digital Performer, Pyramix and most MIDI/audio software.

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

MCS-3000 Series products are designed with a modular approach. This lets you customize the control surface for your specific needs and budget. Optional RS-422/9PIN (P2) RS-232, GPI, USB, and Ethernet interface cards provide extended control capabilities others can’t match.

MCS-3000X™ provides additional faders or it can be used as a stand-alone controller with Pro Tools, and most systems. Up to 7 expanders can be added providing 64 fader channels.

MCS-Panner™ controls 5.1 surround mixing with DP4, Pro Tools, Nuendo and most computer based systems. It can also serve as a stand-alone “MIDI Joystick” (using an optional adapter) with most digital mixing consoles.

Can't wait to get your hands on your own MCS-3000 Series Media Command Station? Call JL Cooper Electronics today to get ahead of the curve and in control of 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 Control Options including...
- RS-422 Master (P-2 Compatible 9PIN for VTR Control), RS-422 Slave, RS-232, USB, Ethernet and GPI.
- Expandable up to 64 Fader Channels Using MCS-3000X
- Optional Contoured Simulated Stone Wrist Rest
- Physical Specs - MCS-3800 - Size 20.15” x 9.75” x 2.00

*Logo Requires Direct Web Page
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 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-3800 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-light LCD with Contrast Adjustment
- Full Size Numeric Keypad
- Programmable Fader Touch Sensors
- Sends Various MIDI Messages - Including MIDI Machine Control
- 2 Interface Card SLOTS for Control Options including GPI, RS-422 (9-PIN for VTR Control), RS-232, USB and Ethernet.
- Expandable to 64 Fader Channels Using MCS-3000X
- "W" Models Include Contoured Simulated Granite Wrist Rest
MC5-3000 Series
Base Models & Options

OTHER MC5-3000 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.

MC5-3800 MEDIA COMMAND STATION

The MC5-3800™ 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.

The MC5-3800™ 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.

MC5-3400 MEDIA COMMAND STATION

The MC5-3400™ 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 serves as 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 MC5-3800.

MC5-3000 MEDIA COMMAND STATION

The MC5-3000™ is the basis of the MC5-3000 Series product family. It is a smaller main console for applications where space is at a premium or no faders are required. MC5-3000 Series controllers are used daily in audio editing, video editing, compositing, broadcast, slo-motion control, animation, virtual reality, live sound reinforcement, fighting control and other specialized applications.

MC5-3000X 8 CHANNEL EXPANDER/CONTROLLER

The MC5-3000X™ is a fader expander for the MC5-3000, MC5-3400, and MC5-3800. 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 MC5-3000X’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, Digidesig’s Pro Tools, and most computer based MIDI software including programs from Cakewalk, Enagic, Mark of the Unicorn, Steinberg and others.
MCS-CLIPSHOT - TACTILE CONTROL PALETTE

MCS-ClipShot™ is a new addition to the MCS-3000 Series - Media Command Station product family. It's a switch palette with 40 relegendable 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 422/9Pin and GPI.

MCS-ClipShot provides Instant Video Clip Access or Audio Playback Triggering in broadcast, post production and other professional applications where relegendable buttons are very useful.

Its LCD buttons can also function as a QWERTY keyboard for your computer, eliminating the need for a traditional keyboard for naming clips.

New advanced features in MCS-ClipShot provide direct support for Dorenli and other Vuko Disk Recorders and Servers via RS-422 or ethernet. Odetics Protocol is also supported.

Stand-alone support for MCS-Wiper is now possible in some host mode applications.

New Macintosh support for our USB interface, now available for any OSX applications.

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 14 for more information.)

MCS-Bridge™ further expands the physical controls of Media Command Station. It mounts behind the fader section of an MCS-3800 or MCS-3000X when used as an expander. The MCS-Bridge provides a large, relegendable back-lit/push-button LCD display for each channel. The unique LCD display/buttons can show text (like channel and parameter labels) and graphic control elements. They 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 on each channel. MCS-Bridge is compatible with DP4, Pro Tools, Pyramis and other audio programs and supported in developer host modes.
MCS-3000 Series
Joystick and Control Options

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 you can use it by itself as a stand alone Surround Panning Controller using the optional MCS-Panner MIDI Adapter. MCS-Panner interfaces with Pro Tools, Pyramis, Nuendo and a variety of digital mixing consoles to control surround features. In addition, MCS-Panner also sends MIDI Controllers, which your mixer can "map" to control a variety of other features.

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

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™ is a video fader that controls cuts, dissolves, slow-mo and other transitions in video editing and animation software. It provides a smooth, high quality T-Bar with five rotary encoders and eight buttons for controlling on screen functions. It can be attached to a MCS-3000, MCS-3400, MCS-3800 or MCS-ClipShot 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 rotary 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 available with or without simulated some wrist rest and trim.

Physical Specifications
- Size: 6.25" x 11.25" x 2.5"
- Weight: 3 lbs.
MCS-SPECTRUM - COLORIST CONTROL STATION

MCS-Spectrum Colorist Control Station is the newest addition to the family of award winning MCS-3000 Series - Media Command Station products. It is designed for use with advanced video color correction software and other applications where multiple trackballs with control rings are beneficial.

Controls include 3 transparent, backlit, trackball mechanisms with purpose-designed, free spinning control rings, 6 high-resolution rotary encoders, Dual VF 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 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 422/9Pin and GPI.

MCS-Spectrum is compatible with IEX Piranha Cinema, FilmLight Baselight and other applications.

Available with or without simulated stone wrist rest and trim.

- Optional simulated stone wrist rest
- Physical specifications - Size 12" x 10" x 2.5"
- Weight 20 lbs.

MCS-3800 - Media Command Station with 3-MCS-3000s, 4-MCS-Bridges and MCS-Panner

MODULAR MCS-3000 SERIES - MEDIA COMMAND STATION

EXPANDED CONFIGURATION EXAMPLES

"JL Cooper has been a proven leader in controllers for years... and it shows!""MCS-3000 is totally professional!""MCS-3000 is an excellent choice"" - Electronic Musician (Feb 2002)
MCS-3000 Series Interface Cards and Software

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 keyer examples are included for popular audio, video and animation programs.

Our smart USB driver knows which application is running in the foreground and switches keyers automatically for seamless control of key commands, mouse clicks and macros. This innovative application is the first to provide this combined with programmable MIDI control all over a single USB connection. Windows 2000, NT, Me, XP and MAC OS9, OSX. New Mac OSX support for MCS-ClipShot now available.

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 Ethernet Interface Card
This new 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.

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 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 JL Cooper representative to discuss specific interfacing requirements for your specific applications.
ES-SloMo Universal Instant Replay Controller

ES-SloMo is a compact new controller for News, Sports, Scoreboard and other editing operations. It makes precise control of professional VTRs, DDRs or Server Channels quick and easy. It's a full featured 4-machine editor and universal Jog/Shuttle remote. It's sleek design and low cost, make it the perfect addition to edit suites, remote trucks and other studio applications.

ES-SloMo features include professional transport buttons, choice of Sony or Panasonic Jog/Shuttle Wheel for convenient picture search operations, a high-quality T-Bar for slo-mo and shuttle tape operation, an easy to read 2 x 16 VF display for accurate editing, a full size numeric keypad, fast access function keys and an integrated quad snake/power cable to minimize desktop clutter.

ES-SloMo Advantages
- Controls a wide range of VTRs and DDRs
- Assemble, Insert, Crash and Disable (Lock) Editing Modes
- Mark In and Mark Out keys store up to 500 total cue location points
- Simultaneous Control up to 4 VTRs, DDRs or Server Channels via 4 RS-422 9Pin Serial Ports
- T-Bar Control for slow motion control sends Shuttle, Jog or Variable Play
- Dynamic slow motion replays directly accessed from the 'T' bar
- 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/PR switching
- Global record lock feature
- Direct support for Doremi V1 and V1 MP2
- Integrated quad snake/power cable minimizes desktop clutter. A single cable extends 10' so that all connections can be hidden neatly away from the operator including a remote power connection.

Editors Work Faster and with Greater Precision Using JLCoooper's Tactile Control Products.

ES-4/100 Motorized Fader Controller

ES-4/100 and 8/100 are our new Edit Suite Series compact automation controllers. Audio mixing has never been this fast and easy. The ES-4/100 features four 100mm touch-sensitive, motorized faders, 16 channel switches, 4 function keys and bank shift buttons for control of Select, Solo, Mute and other functions.

It's easy to refine and perfect your mix with the right tool for the job. The ES-4/100 is available in RS-232, RS-422, USB and MIDI versions.

ES-4/100 Physical Specifications
- Size: 6.5" x 10.5" x 3"
- Weight: 4 Lbs.

ES-8/100 Motorized Fader Controller

ES-8/100 features 8 touch-sensitive motorized faders, 32 channel switches, 4 function keys and bank buttons.

The ES-8/100 is available in RS-232, RS-422, USB and MIDI versions.

ES-8/100 Physical Specifications
- Size: 10.75" x 10.5" x 3"
- Weight: 6 Lbs.
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/102 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-matic 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 more efficiently.

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.

There's an alternative to 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. The ES-450 can effectively edit sound or music as well as it does video.

New - Ethernet Interface

ES-450 is offered with a variety of interfaces for specific applications. Consult your JLCooper Dealer for more information.

A new Ethernet Interface provides long range control over LAN. It interfaces with Doremi Labs Video Disk Recorders, or use it with the our eBOX (listed on page 21) to remotely control serial equipped RS-422 and RS-232 decks and other devices over LAN or WAN.

**ES-450 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

**ES-450 Physical Specifications**

- Size: 6.5" x 10.5" x 3.5"
- Weight: 4 lbs.
MCS-Pro Series
MCS3 - Media Control Station

MCS3 - Media Control Station

Media Control Station 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 RS-422/9-Pin w/Sony Jog/Shuttle
  - MCS3 RS-422/9-Pin w/Sony Jog/Shuttle

MCS3 USB Version
Controls Macintosh and Windows Applications

Media Control Station's 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, Movie, Media 100, Premiere, Pro Tools, Vegas Video, Virtual VTR and others.

JL Cooper controllers let you work faster. They provide the ease-of-use and tactile elegance that can be missing from "software only" user interfaces. Professionals can depend on JL Cooper control products to provide reliable service that far outlasts plastic alternatives.

MCS3 works with virtually any software program.

"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 RS-232 Version
Controls Windows Applications

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 MIDI/MMC Version
Controls Audio Hard Disk Recorders

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

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 as a full function controller, capable of controlling up to 4 professional video decks.

MCS3 RS-422/9-Pin Version

MCS3 - with JL Cooper Jog/Shuttle Mechanism
MCS3 RS-422/9-Pin 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 VTR/DDR jog/shuttle remote with Sony BVU 800/900 emulation. It couples to MCS-Locator as a full function controller, capable of controlling up to 4 professional video decks.

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. An optional deep chassis is available to match the MCS3s and MCS3p.
FaderMaster Professional - 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-controlled audio mixers, synths, samplers, and signal processors and computer based video editing systems from AVID Technology and more.

Professional Automated Mixdown System
FaderMaster Professional 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, one-at-a-time. And it is fully programmable, for controlling volume, panning, EQ, effects, and other parameters.

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

FaderMaster Professional has 20 programmable banks for storing controller configurations, plus, 50 Factory Presets banks.

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

More than 50 Factory Presets
- All Metal Construction
- Eight Programmable MIDI Buttons
- Optional FMPro Software for Mac
- 12.25" x 6.75" x 1.5"
- Weight - 7 lbs.

FaderMaster 4/100

FaderMaster 4/100 is our newest, low-cost MCS-Pro Series (deep profile) Automation Controller. It features 4-100mm multi-channel, 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 MCS3000 or MCS3000™ for use with editing software including AVID Symphony, Composer, Xpress, NewsCutter and others. The MIDI version emulates the MCS-3000 and can be used with most MIDI and audio software programs.

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

F 4/100 Physical Specifications
- Size - 6.5" x 8.5" x 3"
- Weight - 3 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

Media Control Station2 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.

MCS2 software, included with the RS-232 version, lets you use and customize presets for controlling software from Adobe, AVID, Media 100, Macromedia Sony 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.

MCS2 RS-422/9-Pin Version

Media Control Station2 9Pin features professional transport buttons, a precision optically encoded jog wheel and jog/shuttle control button. Shift and Option modifier keys let the MCS2 send more than 20 different control messages including RTZ, Video, Insert, Reverse Shuttle at Play Speed, Audio Track Arming and more.

MCS2 9Pin is our compact, low-cost RS-422/P2 compatible universal VTR or DDR jog/shuttle remote.

MCS2 RS-232 Version

Media Control Station2 RS-232 features professional transport buttons, a precision optically encoded jog wheel and jog/shuttle control button. Shift and Option modifier keys let the MCS2 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.

MCS2 MIDI/MMC Version

Media Control Station2 MIDI/MMC features transport buttons, a precision optically encoded jog wheel and jog/shuttle control button. Shift and Option modifier keys let the MCS2 send more than 20 different MIDI Machine Control (and General Purpose Controller) Messages, including Track Arming.

MCS2 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.

MCS2 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)
  - MCS2 Mac (ADB) with Software for Mac OS
  - MCS2 MIDI with MIDI Machine Control
  - MCS2 9-Pin for VTR Control
  - MCS2 RS-232 with 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, Steinberg, Sony 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

**CS-10X Control Station Expander**

The CS-10XTM 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 now supports the use of three CS-10X units plus the CS-10² for a total of 32 physical faders.
Amazing 32-Channel Miniature Control Console
Fits In the Palm of Your Hand!

The new CS-32 MiniDesk™ is a miniature control surface for fast access to the most commonly used functions in most audio programs. It works with Digidesign ProTools, Steinberg Nuendo, Cubase SX, VST, MOTU Digital Performer, Cakewalk Sonar, Sonic Foundry, Ableton Live, Propellerhead Reason, Merging Technologies Pyramix, Apple Logic, Garage Band and Most Audio Software Programs!

The CS-32's radically small size does not reduce its intense capabilities as an extremely powerful controller with 32 Dedicated Faders/Channel Strips for real-time control of volume levels, Mute, Solo, Track Arming and more. The "Mini" has Tactile Transport Buttons, Cursor Keys and Weighted Jog/Scrub Wheel, just like the big guys. Six Rotary Knobs give you hands-on, automation control of Panning and Plug-Ins. A full bank of quick function keys are ready for frequently used editing features.

MiniDesk takes up less space than a sheet of paper, but it's nobody's baby. Use it almost anywhere, even on the most crowded desk. It's perfect for portable recording applications with a laptop computer.

You can record, edit and mix your projects to perfection, using the CS-32 MiniDesk from JLCooper, the pioneer and proven leader in audio control surface design. With a controller this small, you might want to get an extra one to keep in your car.

CS-32 MiniDesk Specifications

- Size: 8.8" x 9.25" x 1"
- Weight: 5.1 lbs.

CS-32 MiniDesk Features

- Adds Tactile Controls to Most Digital Audio Editing Systems
- MIDI Sequencers and Animation Software
- 32 Dedicated Channels with 20mm Faders and Channel Buttons
- Eliminates Fader Bank Switching Confusion
- Puts Over 150 Dedicated Controls At Your Fingertips
- Perfect for Project Studies and Home Studios
- Weighted Jog/Scrub Wheel (Optically Encoded)
- 2 Digit Alphanumeric LED Display
- Dual LED Activity Indicators
- Sends Various Messages - CS-10 Emulation, General Controllers
- Low Profile and Compact Design with Heavy Duty Construction
- MIDI/MMC, USB and RS-232 Models Available
- USB Version Includes Software (Mac and Win) and Keysets
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**

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

The dataSYNC 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 synced to ADAT sample clock.

**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 Synchronizer/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 Rate Supported
- 4.25″ x 4.7″ x 1.6″ Weight - 3 lbs.

**PPS-2 Plus Option (Now 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 you 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 422/2P 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+ transcodes 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.

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

JLCooper's new 9Pin/MMC connects popular hard disk recorders including Tascam MX-2424, Mackie HDDR24/96, Roland VS Series, Pro Tools 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 audio editing systems to be controlled by video-editing systems that were originally intended to control professional Video Tape Recorders and DDVs.

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

**DAFV² Digital Audio Follows Video Interface**

DAFV² connects popular digital audio mixers including the Sony DMX-R100 Ramza WR-DA7, Tascam TM-DS008, 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 decodes commands from the edit controller, determines which protocol is being sent and configures itself to receive either GVG or ESAM2 protocols.
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-10 MIDI Line Amplifier**

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.

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

MLA Line Amplifiers are ideal for permanent installations anywhere a longer MIDI cable run is required. MLA's are designed to be easily networked to multiple locations such as from the master control room to a series of separate MIDI room systems. This allows you to de-center the location of MIDI devices in the system.

**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-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

**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

**Dimensions**

- MLA-10: 19" x 1.75" x 3.87"
- MLA-XLR: 4.25" x 4.7" x 1.67"
- Weight: 3.25 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-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 flexibility 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.

**eBOX Quad Serial to Ethernet Interface**

eBOX is a 10/100BASE-T (Ethernet) to RS-232/422(9-Pin)/485 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 four serial connectors, activity LED’s, 24 GPI Inputs and 24 GPI Outputs as a standard feature (General Purpose Interface - facilitates switch closure control).

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 a facility’s central server.

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

JLCooper’s SDK 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 Features**
- 4 9-Pin D Sub Serial Connectors
- 1/2 Rack Version
- Two 24Pin 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.

**eBOX 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 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.
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 for 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 www.jlcooper.com/dev.html for additional information and details.
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, animation, 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. JLCooper 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 25 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 the wheels turning fast!

For the Latest 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 server. Contact us with your credit card information or mail check or money order to the address below.

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. We cannot process COD shipments.

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