

# ECLIPSE<sup>24</sup>

**Midnight Finish**

*Compact Tactile Control Surface*






Users Manual



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*Eclipse 24 User's Manual, First Edition  
Part Number 932120*

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# Introduction

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The Eclipse24 Midnight is a tactile control surface intended for clip layout systems.

The unit features a 10/100 RJ-45 Ethernet connector and a DC power jack. The unit can be power from the supplied power adaptor or powered from 12 volts DC. An LED indicator shows status of Ethernet activity.

The Eclipse 24 has an expansion slot that allows the addition of the MCS-Series RS-232 Interface or the MCS-Series RS-422 Interface.

# Installation

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## Unpacking

When you receive your Eclipse 24 Midnight, you should receive the following items:

- Eclipse 24 Midnight
- This Users Manual
- Power Supply
- Power Cord

Please take a moment to register your product at:

<http://www.jlcooper.com>

This will allow us to notify you of important updates and changes to software or features.

## Setup

The compact design of the Eclipse 24 makes it easy to locate wherever you need it. The Eclipse 24 must be setup up in a location that does not experience vibration, excessive humidity, dust or temperature extremes.

## Connecting the Eclipse 24

The Eclipse24 can connect to the host directly using the building Ethernet Interface or using an interface card installed in the expansion slot. This can be an RS-422 or RS-232 Interface card. Refer to the next section for specific instructions on how to connect the Eclipse24 to your host computer.

The Eclipse 24 typically uses the MCS-Ethernet Interface which connects to any 10baseT or 100baseTX Ethernet network.

1. Connect the Eclipse 24 to the Ethernet network
2. Connect the included power supply to the Eclipse 24.

## **Self Test**

The Eclipse24 has a self test mode which aids in troubleshooting the controller. The self mode is accessed by pressing and holding Page 1 during power up.

# Technical Reference

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## Electrical Connections

The Eclipse24 can have a variety of interface options. Among these are:

- Built In Ethernet Interface
- MCS-3000 Series RS-422 Card #920465
- MCS-3000 Series RS-232 Card #920466

### ***Built In Ethernet Interface***

The Ethernet Interface is intended for operation with a host computer. It provides the advantages of a standard interface, long cable runs, use over private/public/wired/wireless networks, the ability of being shared among computers and the ability to work with any platform that supports TCP/IP.

To use the Ethernet Interface, the software application **MUST** be written to specifically support the Ethernet Interface. Consult your software's users documentation for details on how to configure the software.

To configure the Eclipse24 Ethernet settings, an Ethernet Interface card must be in slot 1. You can verify this by visually checking slot 1 for the presence of an Ethernet card.

To set the IP address, press Page4 + Page6 to access the configuration page. Follow the display prompts to configure the Ethernet settings.

Use the Bank buttons to enter the numeric buttons. Use Bank 10 for zero.

The Enter and Clear buttons enter or clear the value respectively.

*Note: You must power cycle the Eclipse24 for the Ethernet settings to take effect.*

## **MCS-3000 Series RS-422 Interface Card**

The RS-422 Interface is intended for operation with a VTR, controller or a host computer. It provides the advantages of RS-422, which allows for long cable runs. With low loss, low capacitance cable, the RS-422 Interface Card can accommodate cable runs up to 1km.

The RS-422 Interface has a female D-Sub connector. The interface can be configured to connect to either a deck or a host. Five jumpers on the interface card configure the pinout. All five jumpers must be placed in either the "To Computer" or "To Machine" position. The port is configured to communicate at 38400 bits/sec, 1 start bit, 8 data bits, 1 stop bit and odd parity.

### **MCS-RS422 Interface Pinout**

	Setting on Card	
	"To Computer"	"To Machine"
1	Ground	Ground
2	Transmit A	Receive A
3	Receive B	Transmit B
4	Ground	Ground
5	not used	not used
6	Ground	Ground
7	Transmit B	Receive B
8	Receive A	Transmit A
9	Ground	Ground

*Note: These signals are at the RS-422 Interface card.*

## **MCS-3000 Series RS-232 Interface Card**

The RS-232 Interface is intended for operation with a host computer. It provides the advantages of a standard interface, which is found on many computers.



The RS-232 Interface has a male D-Sub connector. The port is configured to communicate at 1 start bit, 8 data bits, 1 stop bit and odd parity. Five jumpers allow the port speed to be set for 38400, 19200, 9600, 4800 and 2400 bits/sec to accommodate various situations.

### MCS-RS232 Interface Pinout

1	DCD*
2	Transmit
3	Receive
5	Ground
6	DSR*
8	CTS*

*Note: These signals are at the RS-232 Interface card*

*\* These pins are not used by the card and are connected together for ports that require handshake.*

## **Power**

The Eclipse24 requires a 12 volt DC supply capable of delivering at least 3 amps. The unit comes with a power supply appropriate for the country in which the unit was sold. If you need a power supply specific to your location, please contact your local distributor or JLCooper Electronics.

<b>Location</b>	<b>JLCooper Part Number</b>
North America	TBD
Outside North America	TBD + appropriate cord for location

**Table 2: JLCooper approved Power Supplies**

*Warning: Using a power supply other than the units specified in the above table can result in damage to the Eclipse24 and/or other equipment which is **not** covered by the JLCooper Factory Warranty.*

## Troubleshooting

If for some reason the Eclipse24 does not give you the expected results, take a moment to do some investigating. The most important concept is that you have your Eclipse24 connected properly as outlined in *Installation and Use*. Take a moment to double check your setup.

A common problem is forgetting to turn the power switch on or turning the unit on after the software application has launched.

In addition, the JLCooper website ([www.jlcooper.com](http://www.jlcooper.com)) will contain up to date information on drivers, applications and troubleshooting.

If all else fails, you can contact the JLCooper Service Department at: [service@jlcooper.com](mailto:service@jlcooper.com).

## Care and Service

If properly cared for, your Eclipse24 should provide years of troublefree performance. While the Eclipse24 is built in a rugged metal enclosure, please avoid dropping the Eclipse24.

Clean with a soft, damp cloth. Do not allow liquids, dust or other foreign matter to get inside the unit.

There are no user-serviceable parts in the Eclipse24. Please refer to the JLCooper Electronics Limited Factory Warranty on the following page for detailed warranty and service information

## Configuring the Host Application

Now that the IP settings of the Eclipse 24 have been set, the host application must be configured to connect to the Eclipse 24.

To configure Apple Color to connect to the Eclipse 24, refer to Appendix C, “Setting Up a Control Surface“ in the Apple Color User Manual.

# RoHS Statement of Compliance

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June 28, 2006

Re: Eclipse 24 Midnight

This is a declaration that the items described (herein as RoHS "Class 1") do not contain one or more than one:

RoHS restricted substances above the homogeneous material concentration limit (Threshold Level) per the EU/RoHS directive effective July 1, 2006 and amending document(s).

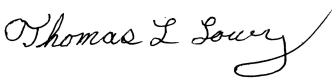
JLCooper Electronics products will meet MIL-I 45208. The Company is currently implementing procedures for ISO 9000:2000, after which feasibility research will begin for ISO 14000 considerations.

RoHS Class 1 OEM Products:

<b>Hazardous Substance</b>	<b>Allowed PPM Level</b>
Cadmium (Cd)	100ppm (0.01%)
Lead (Pb)	1000ppm (0.1%)
Mercury (Hg)	1000ppm (0.1%)
Hexavalent Chromium (CrVI)	1000ppm (0.1%)
Polybrominated Biphenyl's (PBB's)	1000ppm (0.1%)
Polybrominated Diphenyl Ethers (PBDE's)	1000ppm (0.1%)

Supplier evidence of compliance on file meets or exceeds trace ability requirements of ISO 9000:2000. Where feasible, JL Cooper seeks suppliers with ISO 9000:2000 Quality and ISO 14000 Environmental Certification.

Sincerely,



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Thomas L. Lowry  
Quality Assurance Department

# Declaration of Conformity

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JLCooper Electronics declares that the product named below conforms to:

**Low Voltage Directive (LVD) 2006/95/EC**  
(Superseded LVD73/23/EEC) on 16th January 2006.

**Low Voltage Directive (LVD) 73/23/EEC**  
(Directive 73/23/EC has recently been the subject of a codification, requiring a new number)

## Eclipse 24

***Warning:** The installer is responsible for protection against personal contact with all live connections to power supplies, which contain hazardous voltages.*

**Company Address:**  
142 Arena Street  
El Segundo, CA, 90245 U.S.A.

**Product Name:** Media Command Station  
**Product Type:** Multimedia Controller  
**Model Number:** Eclipse 24  
**Date of Issue:** 16 September 2009

**Authorized by:** Thomas L Lowry

**Title of Authority:** Quality Assurance  
**Declaration Reference:** CE/EEC2007TLL

# JLCooper Electronics Factory Warranty

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JLCooper Electronics ("JLCooper") warrants this product to be free of defects in materials or workmanship for a period of 12 months from the date of purchase. This warranty is non-transferable and the benefits apply only to the original owner. Proof of purchase in the form of an itemized sales receipt is required for warranty coverage. To receive service under this warranty, customers in the United States should contact the JLCooper factory at (310) 322-9990 and talk to a service technician. If necessary, a Return Authorization number may be issued. For our customers outside the United States, it is recommended that you first contact your Dealer or Distributor, since they may offer their own service or support policy. If local support is not obtainable, please send a FAX to JLCooper's Service Department at +1 310 335 0110 with a detailed description of the service required. Upon issuance of return authorization, the product should be packed in the original shipping materials and shipped prepaid and insured to: Service Department, JLCooper Electronics, 142 Arena Street, El Segundo, CA 90245. Please include the following: copy of the sales receipt, your name and address (no P.O. Boxes, please), a brief description of the problem, and any other related items discussed with the service department and considered necessary to evaluate the product or effect a repair. The return authorization number must be clearly written on the outside of the package. JLCooper will at its option, without charge for parts or labor, either repair or replace the defective part(s) or unit. Shipping costs are not covered by this warranty. JLCooper's normal repair turn around time at the factory is approximately 15 business days from receipt of product to shipping. Your actual turn around time will include return shipping. Actual turn around time will vary depending upon many factors including the repeatability of the customer's reported complaint, the availability of parts required for repair, the availability of related products needed to evaluate the product if necessary. Priority services are available at additional cost. These should be discussed with the service technician at the time the return authorization is issued. This warranty provides only the benefits specified and does not cover defects or repairs needed as result of acts beyond the control of JLCooper including but not limited to: abuse, damage by accident/negligence, damage from using incorrect power supply, modification, alteration, improper use, unauthorized servicing, tampering, or failure to operate in accordance with the procedures outlined in the owner's manual; nor for natural or man-made events such as, but not limited to flooding, lightning, tornadoes, earthquake, fire, civil unrest, war, terrorism, etc.

THE DURATION OF ANY OTHER WARRANTIES, WHETHER IMPLIED OR EXPRESS, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. JLCOOPER HEREBY EXCLUDES INCIDENTAL AND CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO: LOSS OF TIME, INCONVENIENCE, DELAY IN PERFORMANCE OF THIS WARRANTY, THE LOSS OF USE OF THE PRODUCT OR COMMERCIAL LOSS, AND FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY APPLICABLE TO THIS PRODUCT. JLCOOPER SHALL NOT BE LIABLE FOR DAMAGES OR LOSS RESULTING FROM THE NEGLIGENT OR INTENTIONAL ACTS OF THE SHIPPER OR HIS CONTRACT AFFILIATES. THE CUSTOMER SHOULD CONTACT THE SHIPPER FOR PROPER CLAIMS PROCEDURES IN THE EVENT OF DAMAGE OR LOSS RESULTING FROM SHIPMENT. THIS WARRANTY SHALL BE GOVERNED BY THE LAWS OF THE STATE OF CALIFORNIA.