MCS3S Media Control Station

RS-422 Version
with Sony® Jog/Shuttle Mechanism
for use with AVID® Systems, Professional VTRs and DDRs

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Introduction

Thank you for purchasing a JLCooper Electronics product.

The JLCooper MCS3S - Media Control Station is a remote control device for use with AVID Symphony 3.0 for Windows NT, Media Composer 10.0 for Windows NT and Mac, and Xpress 4.0 for NT and MAC or later versions.

Capabilities include Jog and Shuttle in Digitize, Digital Cut and Deck Windows and in Source Record. Shuttle has selectable maximum speed 1x, 2x, 4x, 8x, 16,x 32x. Key commands can be assigned for switches and shuttle speed functions.

Alternately, the MCS3S may be used for controlling professional video tape recorders (VTRs), digital disk recorders (DDRs), and other RS-422 machines that support Sony 9 Pin/P2 protocol.

The MCS3S features a Sony jog shuttle mechanism, high quality transport buttons, and function keys.

As shipped from the factory, the MCS3S is normally configured and "ready to use" as an AVID controller.

When the MCS3S is intended to be used as a VTR or DDR controller, it will need to be reconfigured internally. Instructions for doing this are provided in this manual.

This manual primarily relates to the features and operation of the MCS3S as a 9 Pin/P2 controller. If the MCS3S is used as an control device to an AVID computer-based system, follow the instructions included with your software.

Please take a moment to send in your product registration card, so we can notify you in the future about any new products or updates as they become available.

Connecting the MCS3S

Connect the supplied external power supply to the power jack on the MCS3S captive cable.

In case a replacement supply ever is used, see to it that it has the same rating as the original supply: The power supply's output is rated at 9 volts DC, 500 mA, with a center positive 2.1 mm plug.

Connect MCS3S 9 Pin cable to the 9 Pin remote input of the machine that you are controlling.

Configuring MCS3S for VTR/DDR Control

The RS-422/P2 MCS3S can operate in either of two modes, as a computer controller, meant to be attached to an AVID system, or as a stand-alone Master Controller for machines that respond to the "P2" format.

As shipped from the factory, the MCS3S is configured for AVID, but is easily re-configured as an RS-422 device for controlling professional VTR's . To do so, a 5/64" Allen wrench (supplied) and a small flat-blade screwdriver are needed.

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(1) Remove the four screws from the top panel.

(2) Carefully slide the cable strain relief from its slot on the unit bottom chassis.

(3) On the small circuit board, remove the 8-pin IC which is inserted into U3 "To Host" and move it over to the "To Mach." socket. Make sure orientation is preserved.

(4) Take the jumper that is stored over only one pin of JP1 and replace it so that it is connecting both pins.

(5) Carefully re-insert the strain relief, dress the inside section of cable away from the sensitive Jog Wheel assembly, and re-insert the four screws.

Using MCS3S with VTRs/DDRs

Transport Functions

The Transport controls Rewind, Fast Forward, Stop, Play, and Record. Pause is enabled by pressing the button marked W7.

The Record button is interlocked with the Play button. *To enable Record, hold down play and press record.*

Record only operates if tracks have been enabled ("armed") first. (See Track Enabling below.)

To Record, first arm tracks. Then press and release Play, and allow the machine to come up to speed.

Then press Play again and hold it down. While holding down Play, press Record.

Then release both switches.

While in Record mode, the pressing of the Play button send a Record Exit command, dropping the controlled unit out the record state.

Jog and Shuttle Functions

The MCS3S has a professional "Sony" wheel that incorporates the Jog and Shuttle into a single mechanism.

To change between Jog and Shuttle, press on the wheel. When in its 'tall' position, it acts as a shuttle control, and has center detent and rotation stops.

Pressing on the wheel changes it into a Jog control, with no rotation stops or detent.

The two arrow leds above the wheel will extinguish when in the Jog mode, and will indicate whether the Shuttle position is reverse, forward, or stopped when lit.

Jog Mode

In Jog mode, playback speed and direction is proportional to the speed and direction that the wheel is rotated.

Rotate the wheel clockwise for forward playback.
Rotate the wheel counter clockwise for reverse playback.

In Jog mode, continuously rotating the wheel results in 1X play speed, either forward or backward.

To stop the tape, simply stop turning the wheel.

Shuttle Mode

In Shuttle mode, playback speed is related to the extent of rotation away from the starting position of the wheel.

Rotate the ring clockwise for forward shuttle.
Rotate the ring counter clockwise for reverse shuttle.

The program continues to shuttle until the ring is returned to its center position. Alternately, simply press Stop.

Shuttle LEDs

Normally, on power up, the shuttle ring LEDs will not light until the shuttle ring is centered.

After that, the shuttle ring LEDs will light depending upon the direction of rotation from center. Both LEDs are on when the ring is centered.

V-Stick Functions

The "V/Stick" is located to the upper right of the jog/shuttle control. It is a soft, four position switch.

The switch is activated by applying pressure either left, right, toward you, or away from you. (It is not necessary to press down or rotate the control.)

It performs the following functions:
- V-Stick Down   = Reverse   2x Speed
- V-Stick Up   = Forward   2x Speed
- V-Stick Left   = Reverse   1x Speed
- V-Stick Right = Forward   1x Speed

Locate Functions

The MCS3S may be "taught" locations either on the fly (program is playing) or while stationary (program is stopped.)

Locates are stored by pressing and holding the Record button, and while holding the Record button, press W1 thru W6.

A location request will be sent, and the response stored within the MCS3S. This will be remembered until power is removed from the MCS3S.

The MCS3S stores six locate points:
- W1   Locate 1
- W2   Locate 2
- W3   Locate 3
- W4   Locate 4
- W5   Locate 5
- W6   Locate 6

Stored Locate Points are recalled by pressing the W1-W6 buttons.

Important - Locate Points are not retained when the MCS3S is turned off

Track Arming on Analog or Digital Machines

The MCS3S can send the appropriate commands for track arming analog or digital machines.

The unit normally is configured for digital track arming.

To change modes, press and hold down buttons F5 and F6 at the same time.

While holding down F5 and F6, press F2 to change to analog mode.
While holding down F5 and F6, press F1 to return to digital mode.

Track Number Shifting

Function Keys F1 - F4 can be used to arm tracks 1 - 4, and Function Keys F1 - F4 can be used to arm tracks 5 - 8.

Function Keys F5 & F6 act as track number "shift buttons".

For example,
F1 through F4 toggle the track arming state of tracks 1 - 4.

Press and release F6:
F1 through F4 now toggle the track arming state of tracks 5 - 8.

Press and release F5:
F1 through F4 now toggle the track arming state of tracks 1 - 4 again.

Be aware that the MCS3S has no knowledge of any track enabling done on the front panel of the VTR machine itself. Nor does it know the status of the machine when the MCS3S is first powered on. The MCS3S powers-up operating under the assumption that all tracks are not enabled.

Analog Machine Track Mapping

Actual mapping of tracks to audio/video is machine dependent, and should be confirmed before doing any real editing.

Typically, the mapping is:
Track 1- Audio Track 1
Track 2- Audio Track 2
Track 3- Time Code
Track 4- not used
Track 5- Video
Track 6- Assemble
Track 7- Insert
Track 8- not used

Technical Information

Specifications
Dimensions 6.5" x 7" x 3" (165.10 mm x 177.80 mm x 76.20) mm
Weight   - 4 lbs.   (1.81 Kg.)

Care and Service
If properly cared for, your MCS3S should provide years of trouble-free performance. Avoid dropping the MCS3S, or hard banging on the keys.

Clean with a soft cloth dampened with window cleaner. Do not allow liquids to get inside the unit.

There are no user-serviceable parts in the MCSS. Please refer to the really fine print following for detailed warranty and service information.

MCS3S Avid Switch Protocol Event Code Table

Switch	User Key #
W3	1
F2	2
F4	3
F5	4
F6	5
F3	6
W4	7
F1	8
Fast Fwd	9
Stop	10
Play	11
Record	12
W1	14
W2	15
Rewind	16
W5	17
W6	18
Down	19
Right	20
Up	21
W7	22
Left	23

JLCooper Electronics Limited Factory Warranty

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 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 (310) 335-0110, with a detailed description of the service required.

Upon issuance of return authorization, the product should be properly packed and shipped to Service Department, JLCooper Electronics, 142 Arena St., 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, without charge for parts or labor, either repair or replace the defective part(s). 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. 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, modification, alteration, improper use, unauthorized servicing, tampering, or failure to operate in accordance with the procedures outlined in the owner's manual; nor for acts of God such as flooding, lightning, tornadoes, etc.

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