CB Electronics

P2MMC

Tascam RS422-Midi Machine Control Interface

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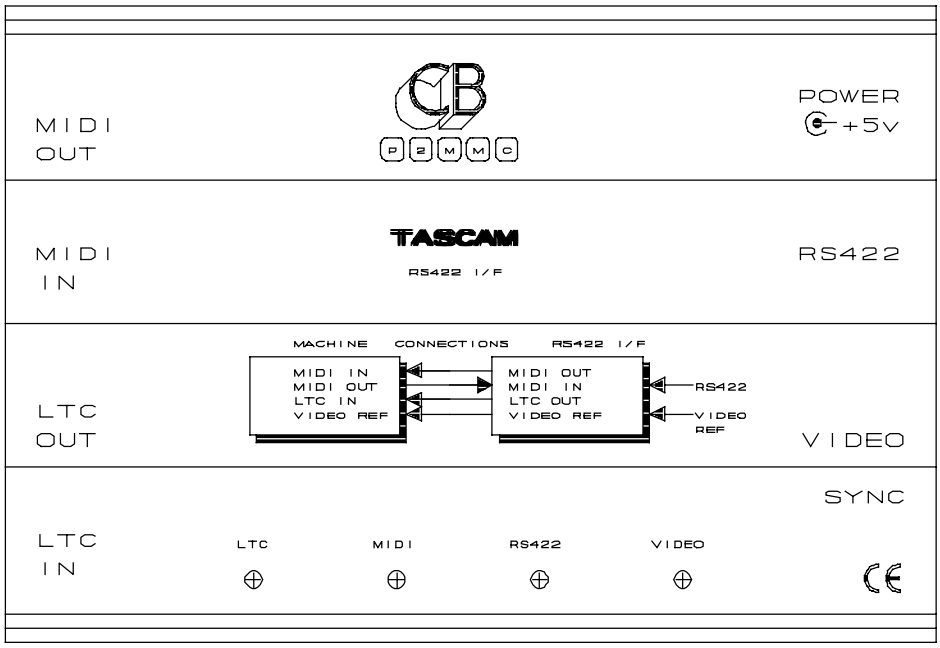
P2MMC Tascam RS422-Midi Machine Control Interface

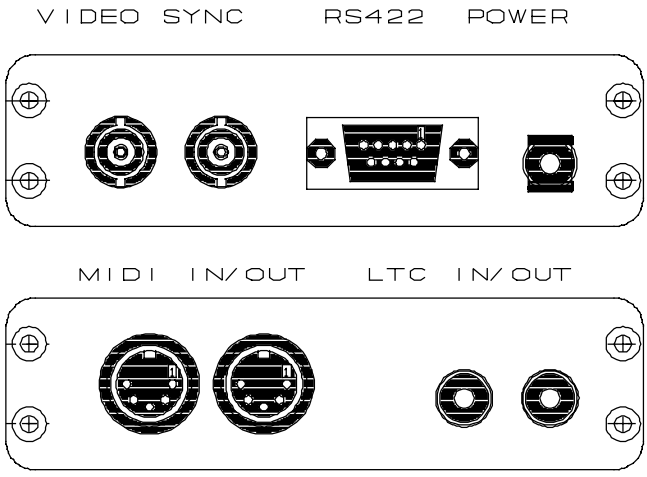
* Record and Record Track Arming . . . . . Muti-Track arming passed to MX2424
* RS422 Input . . . . . For use with Consoles, DAW or Video Editors
* Timecode Output . . . . . Virtual Master for the MX2424
* Timecode Input . . . . . More Accurate position information
* MIDI, RS22, LTC Reader, Video Indicators . . . . . Self Test

The Tascam P2MMC Interface uses experience gained from both the SR and MR series remote control system. Designed to be used with existing consoles and DAW's and synchronisers the interface will connect any Sony P2 Protocol serial port to the MX2424 Midi Port.

This Interface may be used as a serial slave with most RS422 editors/synchronisers

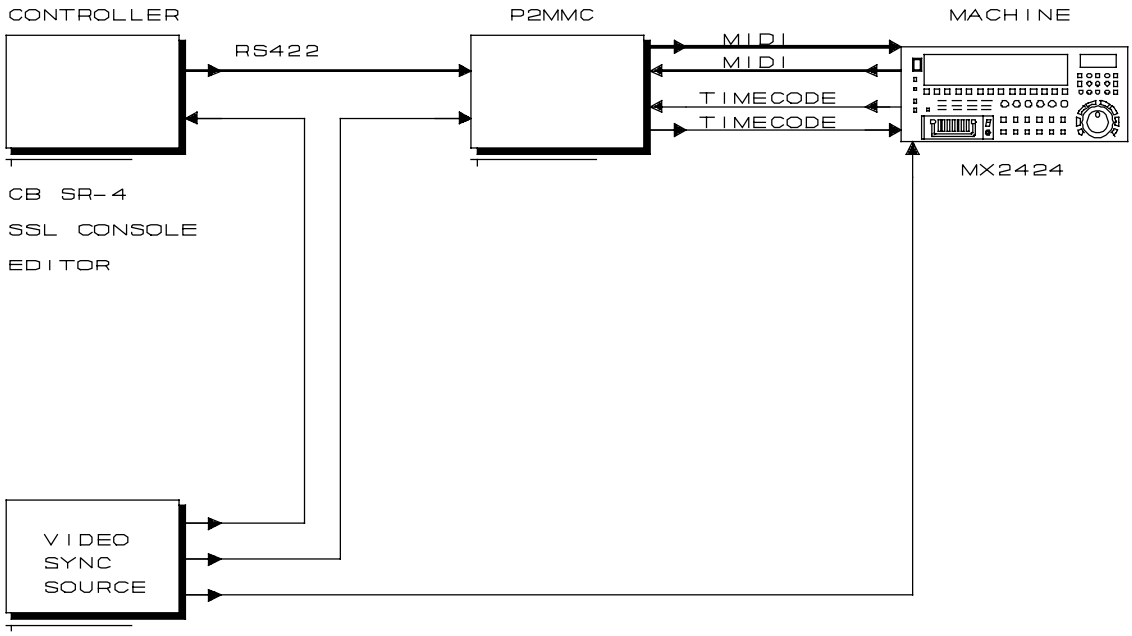
Size 170x114x31mm





USING THE P2MMC TO SLAVE A MACHINE

IN A SYSTEM WITHOUT MASTER TIMECODE



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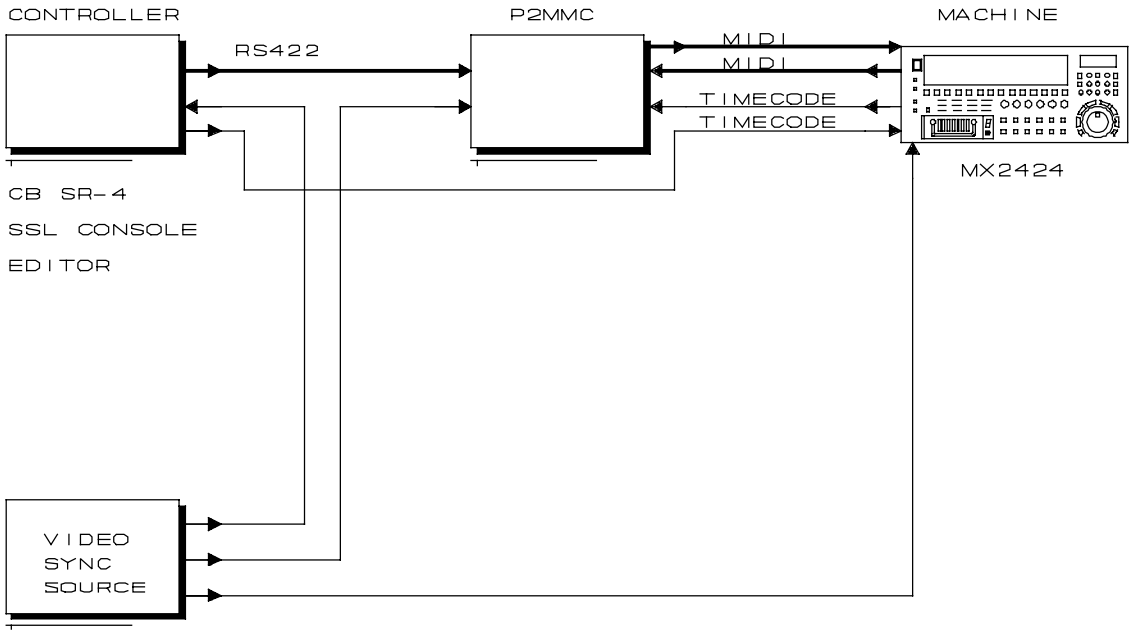

DIP SWITCH SETTINGS

The DIP switch is read regularly by the interface and may be changed at any time.

DIP Switch 1&2 RS-422 Device ID

The RS-422 Device ID tells the controlling device which machine it is controlling. The RS-422 interface can emulate the following devices:-

Switch 1	Switch 2	Emulation	Device ID
Off	Off	Mx2424	0s A0
On	Off	Sony PCM 3324	6s 03
Off	On	Tascam DA-88	Fs 10
On	On	Sony BVU-950	1s 1C

The Timecode standard is included in the Device ID and is set by reading timecode either via the LTC input or Midi Input

DIP Switch 3: Synchronisation with an Editor (Version 2 Software)

Off Once chase is enabled (Variable play command received) the system will stay in chase with the RS422 controlling the virtual machine.

On Variable Play commands will enable virtual machine control and chase, Any other transport command other than Play will be transmitted to the Midi Machine

DIP Switch 4:

LED Indicators

Video

No Video Reference	Flashing (Approx once per second)
Video Reference	Continuous

This LED is also used to indicate that the unit is powered and that the processor is working when the video reference is disconnected

RS422 On when valid Sony P2 RS422 communications are received

MIDI On when valid Midi Messages are Received, for example MTC. You can self check by connecting the input to the Output.

LTC On when valid LTC is read by the Interface.

Timecode Connections

LTC O/P

In normal operation this will output the current timecode from the machine, when used in systems without a master timecode feed then output is used as the master timecode feed to the machine.

NOTE: The LTC output is only active when video syncs are present.

LTC I/P

When LTC is present at the input this will be used in preference to the Midi timecode from the machine. In General the LTC is more accurate than the MTC.

Synchronisation

Systems with RS-422 Control of the internal synchroniser

Systems using Master Timecode (Chase type 0=Cmd on CB Electronics) send a chase command to the machine and use the machines internal synchroniser to lock the system. The offset is adjusted by sending set offset commands to the machine.

Systems with RS-422 Transport Control only

Editors and earlier SSL Consoles use there internal synchronisers (Chase type 3=-, 4=+, 5=0 on CB Electronics). These request the position from the machine and send varispeed play commands to the machine. Because the MX2424 will not except varispeed play commands correctly the P2MMC changes mode on reception of a Varispeed command and selects the internal Generator as Master. A chase command is sent on the MMC output. The generator is then controlled via the RS422 port and the MX2424(Midi Device) is then chase synchronised to the generator. Any transport command other than Play or Variplay will turn off the chase and be sent directly to the machine.

DIP Switch 3 off leaves the machine in chase at all times for faster lockups are achieved

Faster lockups may be achieved when no offset is required by using a master timecode feed directly to the Machine.

Midi Machine Control Commands and Tallies Currently Implemented			
Midi Output ($7F All Call)		Midi Input	
01	Stop	Midi Timecode 1/4 Frame	
02	Play	Midi Timecode Full Frame	
04	Fast Forward		
05	Fast Rewind		
06	Record On		
07	Record Off		
09	Pause		
0A	Eject		
0B	Chase On		
40 05	Write Offset		
40 4F	Write Record Ready Data	Read Data Response as follows	
42 01	Read Position	01	Selected Timecode
42 03	Read Offset	03	Offset
42 05	Read Lock Deviation	05	Lock Deviation
42 45	Read Timecode Standard	45	Timecode Standard
42 48	Read Motion Tally	48	Motion Control Tally
42 49	Read Velocity Tally	49	Velocity Tally
42 4D	Read Record Status	4D	Record Status
42 4E	Read Record Track Map	4E	Record Track Map
42 4F	Read Ready Track Map	4F	Ready Track Map
44	Locate		
45	Variable Play		
46	Search with Audio (Jog)		
47	Shuttle		
48	Step		