# MX-2424 REAR PANEL

ANALOG OUTPUT
1 - 8    9 - 16    17 - 24

ANALOG INPUT
1 - 8    9 - 16    17 - 24

MX-2424 ANALOG MODULE

TDIF
1 - 8    9 - 16    17 - 24

MX-2424 TDIF MODULE

TASCAM MODEL NO. MX-2424
BY TIMELINE
24 TRACK RECORDER, TEAC CORPORATION

TIME CODE
IN    OUT    THRU

REMOTE

MIDI
IN    OUT    THRU

S/PDIF
IN    OUT

AES/EBU
IN    OUT

FOOT SWITCH
( LRC )

WORD CLOCK
IN    OUT    THRU

TL BUS
IN    OUT

VIDEO SYNC
IN    THRU

NET

WIDE SCSI

51  52  53  54  55

56  57  58  59  60  61  62  63  64
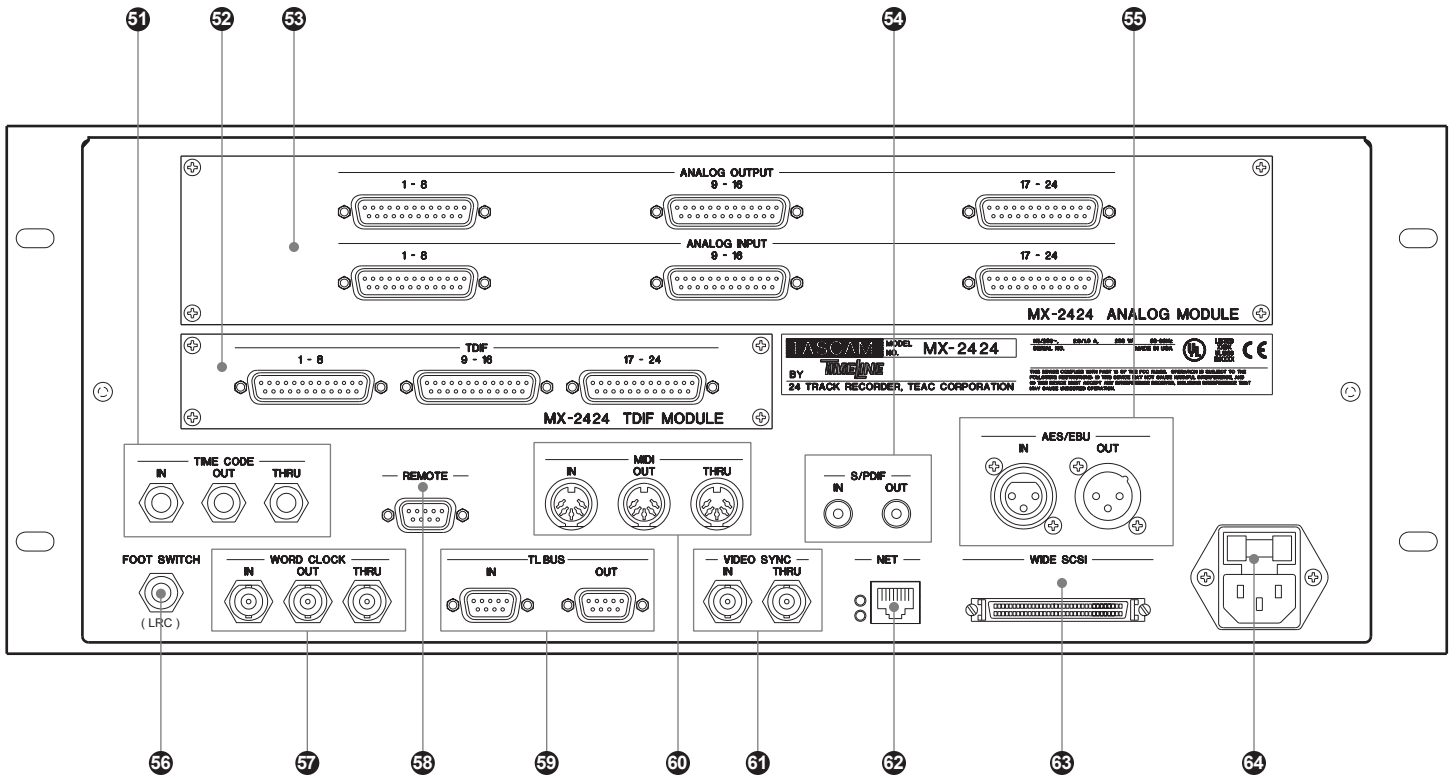
## REAR PANEL

The back panel is where all connections are made and user-installable modular I/O options may be installed. The internal auto-switching power supply provides both 110 and 220 volt operation. For installation instructions of any optional I/O modules please refer to *MX-2424 Installation*.


**[53]     Analog to Digital/Digital to Analog Module**
The A/D/D/A module provides 24 channels of analog to digital and digital to analog conversion at 24 bit 44.1k/48k or 12 channels of 24 bit 96k on six DB-25 connectors. All converters used are the same to ensure consistent high quality audio across the entire machine.


**[52]     Digital I/O Options**
There are three different 24 track digital options for the MX-2424: TDIF, ADAT™ Optical, and AES/EBU. The AES/EBU module supports input sample rate conversion.


**[55]     AES/EBU Connectors**
*AES/EBU Female Connector:*
This connector allows the input of AES/EBU stereo digital audio, which can then be routed to any odd/even pair of tracks. Sample rate conversion may be applied to audio coming in on this connector.

AES/EBU digital clock may be received by the MX-2424 on this input as needed.

*AES/EBU Male Connector:*
This connector will output stereo AES/EBU digital audio and clock from a selectable stereo pair of adjacent odd/even tracks. The default setting is clock only.


**[54]     S/PDIF Connectors**
*S/PDIF Coaxial Input Connector:*
This connector allows the input of S/PDIF stereo digital audio, which can then be routed to any odd/even pair of tracks. Sample rate conversion may be applied to audio coming in on this connector.
S/PDIF digital clock may be received by the MX-2424 this input as needed.

*S/PDIF Coaxial Output Connector:*
This connector will output stereo S/PDIF digital audio and clock from a selectable stereo pair of adjacent odd/even tracks. The default setting is clock only.


**[58]     Remote Connector**
This connector is used to connect the RC-2424 remote control unit. (Do not confuse this connector with the TL-Bus connectors!)


**[56}     Footswitch**
This connector allows the use of a foot switch for Record Punch In/Out. The MX-2424 will sense the polarity of the footswitch when the unit is powered on with the footswitch connected. (Do not hold down the footswitch during power up as this will cause the MX-2424 to incorrectly sense the polarity.) See *MX-2424 Installation* for details on supported types of footswitches.

This connector will also accept input from an Alesis™ LRC for basic transport control.

**[59]      TL-Bus**
These connectors provide communication and sample accurate synchronization between multiple MX-2424's and/or a TL-Sync synchronizer.  The total length of all cables connected to the TL-Bus cannot exceed 100 meters.  ID numbers must be different for each unit on the TL-Bus.  Note that a unit in the middle of the bus can be off and still sending bus communication through its connectors.  Units are "daisy-chained" with these connectors from Out to In.


**[61]      Video Sync In/Thru**
The BNC VIDEO SYNC IN connector provides the ability to lock the MX-2424 sample clock to incoming black burst or color bars using NTSC or PAL video signals.  The MX-2424 will auto-switch to the appropriate incoming format.

The Video Thru connector passes the video signal fed to the Video Input straight through the MX-2424 so that devices later in an equipment chain can utilize the video signal with no added delay.  This connector is self-terminating.


**[62]      Net**
This RJ-45 connector is used for 100Mb Ethernet connection to a personal computer for the ViewNet GUI program and network connections to the MX-2424.  Software updates downloaded from the TASCAM web site can be loaded into the MX-2424 from a personal computer via this port.  See the *ViewNet Operations Manual* for more detail.


**[63]      Fast/Wide SCSI Connector**
This connector is used for connection of external storage devices to the MX-2424.  (Please refer to *SCSI Tips for MX Users* for more detail.)


**[57]      Word Clock In/Out/Thru**
The **Word Clock In** connector allows the MX-2424 to lock to a variety of standard word clock sources.  If the MX-2424 is set to read digital clock and it is not present or there is a mismatch in the frequencies, the **Sample Lock [50]** indicator will flash.

The **Word Clock Out** connector always outputs digital clock generated by the MX-2424.

The **Word Clock Thru** connector allows the incoming clock present at the **Word Clock In** connector to pass through the MX-2424 without regeneration.  This eliminates the slight delay caused by regenerating the incoming clock.  This connector is always active whenever digital clock is present at the **Word Clock In** connector.


**[51]      Time Code In/Out/Thru:**
These are balanced ¼ inch TRS connectors.

The Time Code In connector allows the MX-2424 to synchronize playback to incoming SMPTE and derive digital clock from that time code.  The time code coming in on this connection is displayed in the LCD when **<SHIFT> [19]** then **OUT [31] <TC READER>** is pressed on the front panel.

The Time Code Out connector outputs the time code generated by the MX-2424 including any offset when the MX-2424 is in play or record modes.

The Time Code Thru connector will send out reshaped time code that matches the time code coming in on the IN connector.  This feature allows the creation of an offset inside the MX-2424 yet passes the time code present at the In connector through to be read by another device.

**[60]    MIDI In/Out/Thru:**
The MIDI In connector will allow the MX-2424 to lock to MIDI time code for chase play and record.  The MX-2424 will also respond to standard MIDI machine control messages for play, track arm, record, rewind, fast forward, stop, jog/shuttle and scrub.  NOTE:  When slaved to incoming MIDI time code it may be necessary to also lock the MX-2424 to the digital clock of the device that is sending the MIDI time code.

The MIDI Out connector will generate MIDI time code that corresponds to the current position of the play head including any offset.

The MIDI Thru connector will pass the MIDI information present on the MIDI In connection through the MX-2424 unaltered.

**[64]    IEC 3-Prong AC Connector:**
This is where the power cord goes.