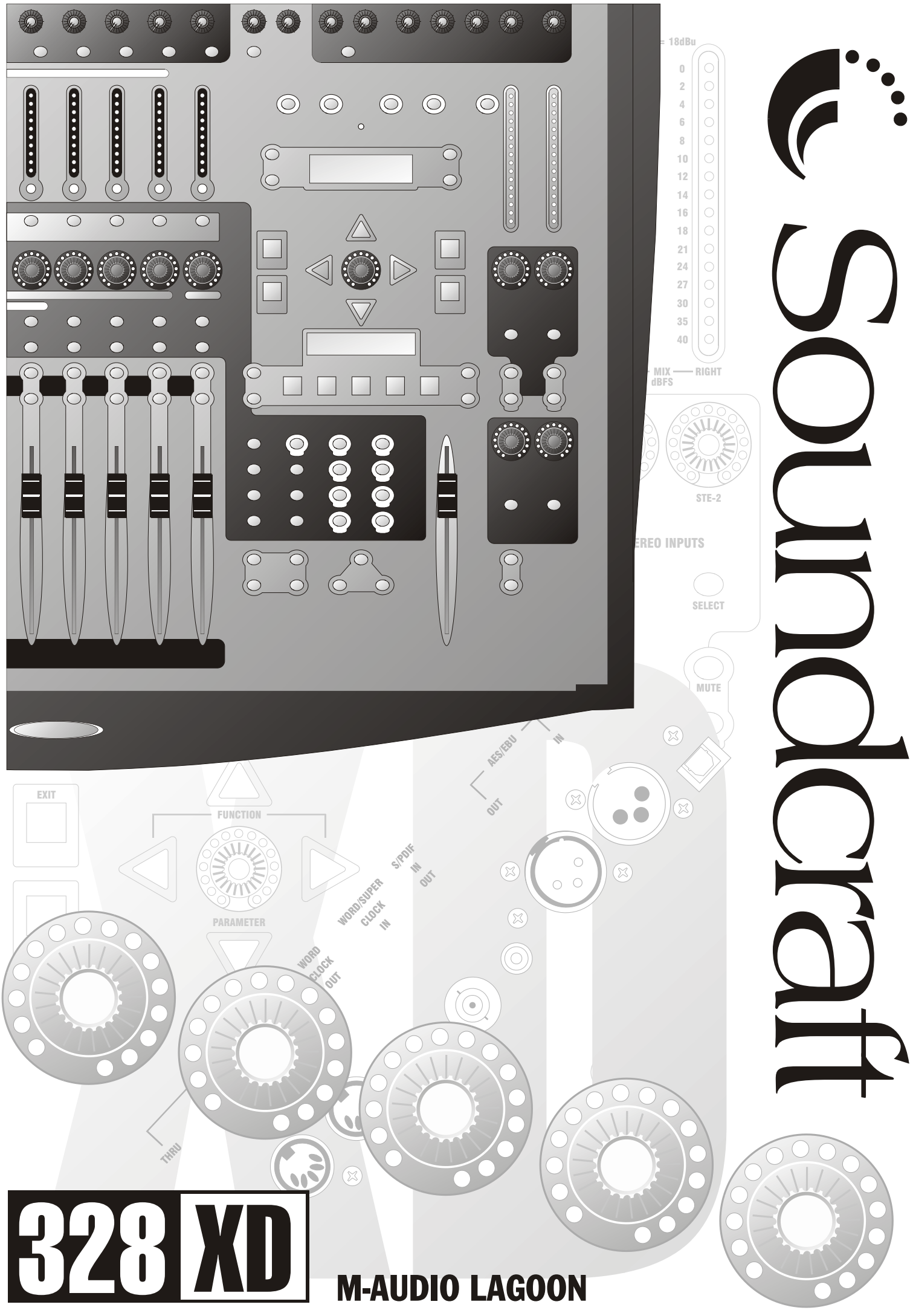


Soundcraft

328 XD

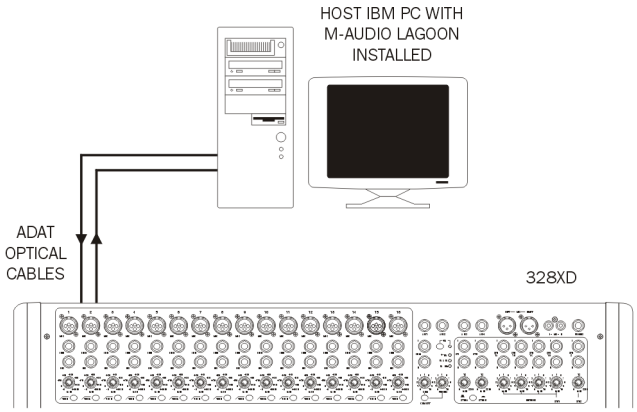
M-AUDIO LAGOON

328XD AND M-AUDIO LAGOON

CONNECTING THE SYSTEM

Audio Connections

Audio connections should be made as shown in the diagram below. ADAT optical cables must be connected both from ADAT Out port of the Lagoon card to the 328XD ADAT In 17-24 and vice versa.



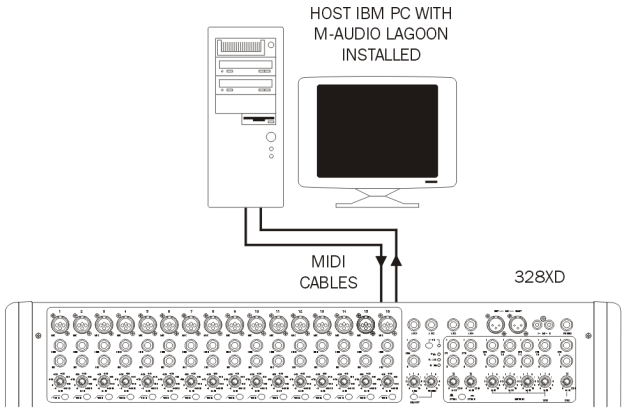
The optical plugs should remain in the 328XD ADAT port 25-32 input and output.

In this configuration, the ADAT connections allow digital transfer of either direct outputs from the 328XD's input channels 1-8 to the Lagoon card, or the 328XD's 8 Group outputs.

Other Connections

You may also wish to connect the 328XD to the Lagoon card with MIDI cables to allow MIDI automation / System Exclusive dumps from the 328XD to be recorded and played back from your PC.

If you wish to connect the 328XD MIDI I/O to the Lagoon, the following connections must be made:



328XD CONFIGURATION

The Lagoon card and the 328XD (plus any other devices in the studio setup) must have their internal clocks synchronized to allow correct transmission and reception of digital information throughout the system. This is achieved by configuring one of the devices as a wordclock master, and configuring all other devices in the studio setup to slave to this wordclock, hence synchronizing all clocks in the studio setup.

In this case, the 328XD will be set to wordclock master, and the Lagoon will be set to slave to the 328XD, via the Lagoon ADAT input – see **Lagoon Configuration**. Any other devices interfacing digitally with the 328XD within the studio setup will also be configured to slave to the 328XD's wordclock.

NOTE: Wordclock information is embedded into the 328XD ADAT output data stream, allowing the Lagoon to slave to the 328XD's ADAT output

To configure the 328XD as the wordclock master, enter the 328's Main Menu page by pressing the <MENU> button to the right hand side of the LCD display. Using the PARAM encoder beneath the display, scroll up or down until the 'Clock Source Sel' menu is highlighted, and press <ENTER>. Here, either 'Internal: 44.1kHz' or 'Internal: 48kHz' clock must be selected for the 328XD to function as wordclock master. With the PARAM encoder set this to the sample rate you wish to work at, press <ENTER> to confirm the sample rate setting and <MENU> to return to the menu pages.

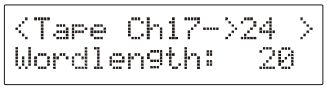
Tape Port Setup

To ensure that the 328XD Tape Port 17-24 is configured to 'ADAT' to work with the Lagoon, enter the 328XD Menu pages by pressing the <MENU> button to the right hand side of the LCD display. Using the PARAM encoder beneath the display, scroll up or down until the 'Tape Port Select' menu is highlighted and press <ENTER>.

Now press the Up cursor key until the '<Tape Ch17-24 >' menu page is displayed. Using the PARAM encoder set the 'Bank Source' to 'ADAT':

The Lagoon is capable of 24 bit recording, and so for optimum results, 24 bit wordlength can be selected here. If your audio sequencer supports only 16 or 20 bit resolution, set the wordlength appropriately– check your sequencer manual for more information.

Set the desired wordlength on the 328XD with the PARAM encoder.



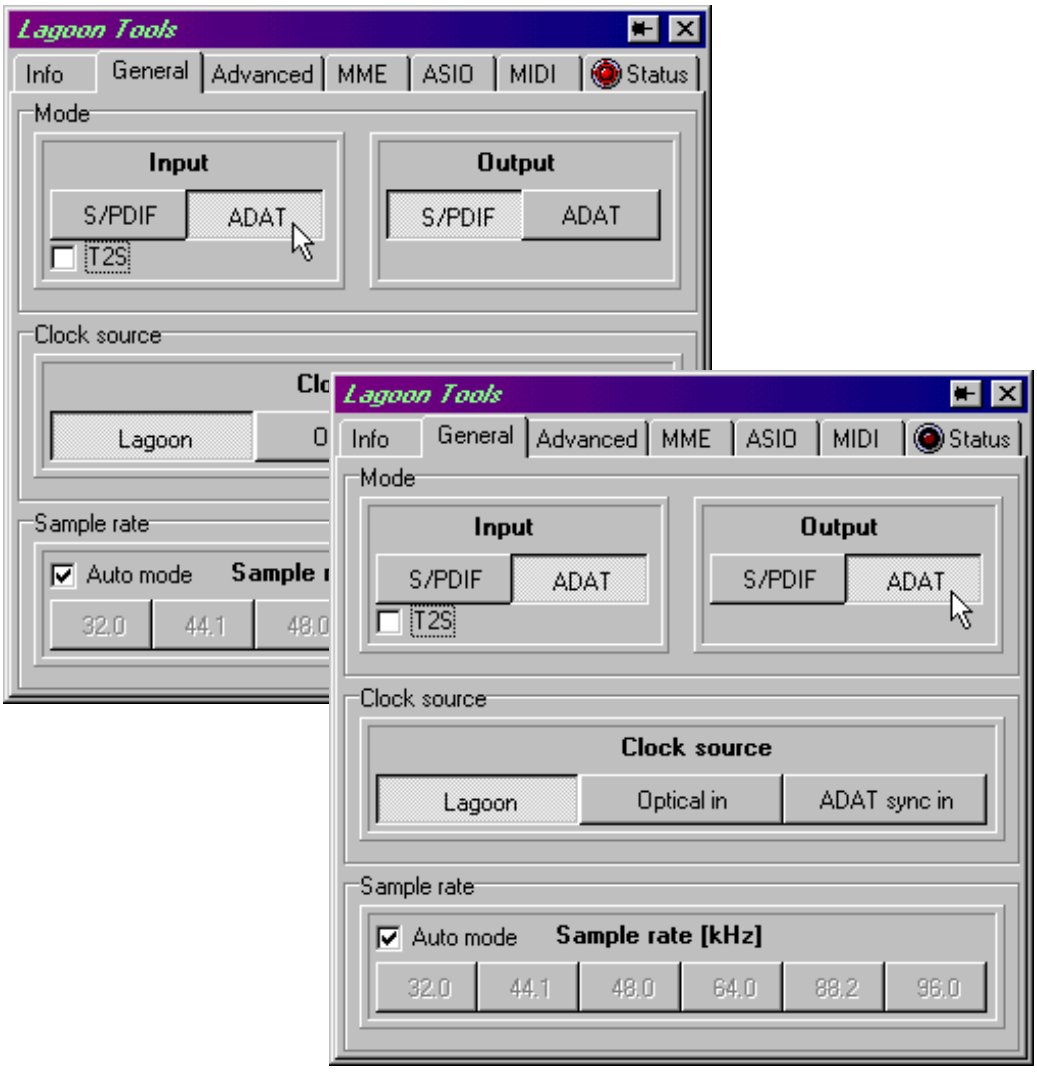
NOTE: In a setup with the Lagoon connected to 328XD ADAT input and output 17-24, Tape Port 25-32 should be left set to TDIF. Alternatively, the Lagoon can be connected to 328XD ADAT input and output 25-32, and Tape Port 17-24 set to TDIF. In this case, the above settings should be made to Tape Port 25-32.

LAGOON CONFIGURATION

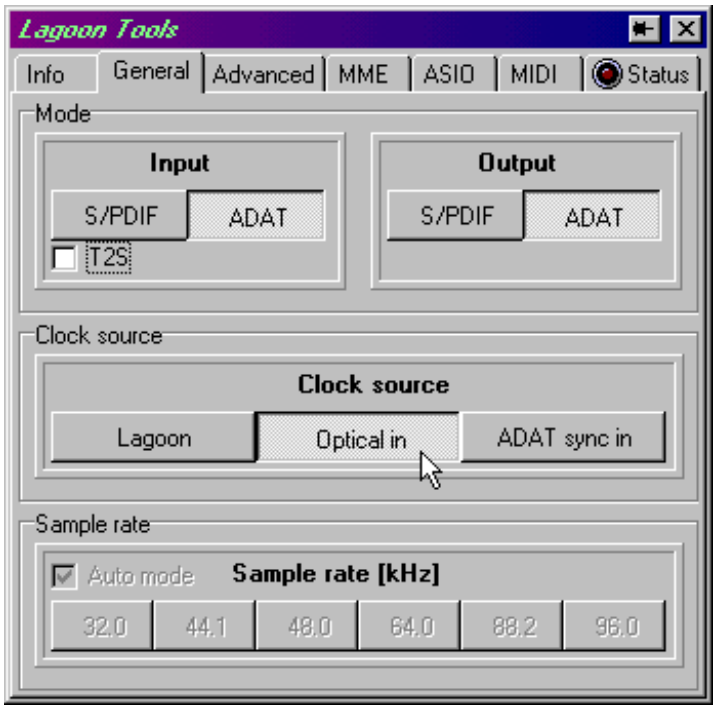
Input Setup

To set up the Lagoon for connection to the 328XD, first click on the Lagoon Tools icon on the Windows taskbar:

The Lagoon Tools application should open. Click on the 'General' tab. The following window should open. Set both the input and output to be ADAT format:



The Lagoon clock source must then be set so that its internal clock is slaved to the incoming ADAT wordclock output from the 328XD. Set 'Clock Source' to 'Optical In':

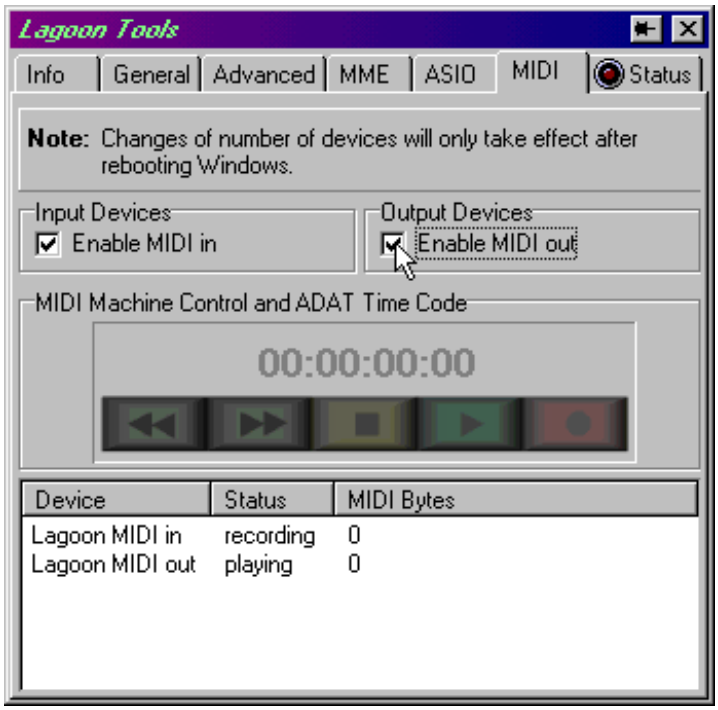


The Lagoon card will automatically detect the sample rate at the ADAT input, and so to alter the sample rate, the 328XD internal clock frequency should be adjusted - see page 3.

NOTE: The 'T2S' filter should be left unchecked as the 328XD is fitted with Toshiba optical receivers and transmitters.

MIDI Setup

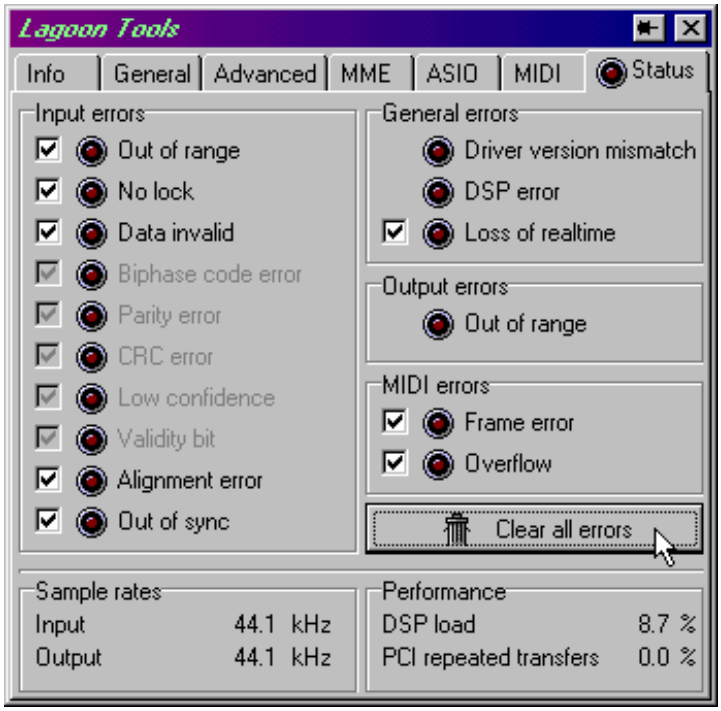
Click on the MIDI tab within the Lagoon Tools application, and enable the Lagoon MIDI input and output ports:



The Lagoon MIDI input and output ports should be selected within your chosen MIDI sequencer to enable record and playback of 328XD automation data.

Clear all Errors

Until the Lagoon is set to synchronize to the 328XD master wordclock (page 6), the clocks will run out of sync. Spurious clicks and pops or distorted audio may well be heard as a result. While configuring the system then, it is likely that the Lagoon will have registered wordclock synchronization errors. To reset the Lagoon, click on the Lagoon Tools 'Status' tab, and then the 'Clear all errors' button:



If any of the error LEDs light or remain lit, check that the ADAT connections and 328XD and Lagoon Tools settings are correct.

NOTE: Once the Lagoon registers no errors, the Lagoon and 328XD clocks are synchronized. The 328XD mix fader, control room and headphone output levels may be raised.

USING THE LAGOON WITH THE 328XD

Accessing the Lagoon ADAT I/O from the 328XD

The Lagoon will commonly be used with a software audio sequencer / hard disk recorder to allow the simultaneous playback and recording of 8 individual tracks of audio, via the ADAT I/O. Here, the software application must be configured to access the Lagoon ADAT I/O using the relevant Windows device drivers that came with the card.

When playing back audio tracks from the software application, tracks 1-8 will be accessible from channels 17-24 respectively in the BANK SELECT 17-32 on the 328XD.

See the 328XD User Guide for full instructions on how to send a channel or group to tape / audio sequencer. By default the 328XD is configured to send analogue input channels 1-8 directly to tape outputs 1-8 post-fade.

NOTE: Ensure that the relevant device drivers are fully installed for the software application to correctly access the Lagoon ADAT I/O. Consult the Lagoon manual for more information.

ADDITIONAL INFORMATION

S/PDIF

The 328XD Auxiliary Optical Out port can be set to transmit an optical format S/PDIF signal. Enter the 328XD Tape Port Select menu and press the Down cursor key until the 'Aux Optical Out' menu is active. Using the PARAM encoder set the format to 'S/PDIF'. Press <MENU> to return to the menu pages.

The configuration of this output is made in the 'SPDIF O/P Setup' menu. The signals is duplicated at the coaxial S/PDIF output.

NOTE: Settings of 'AUX/MIX' and 'GROUP' will configure the console to transmit an ADAT format output from the Auxiliary Optical Out port.

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