Pyramix 5

DIGITAL AUDIO WORKSTATION

MIDI for Sony DMX-R100

User Guide

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MIDI Control for Sony DMX-R100 User Guide

Introduction

Overview

This document details the physical and logical connections required to enable the Sony DMX-R100 Digital Mixing Console to control and be controlled by Pyramix Virtual Studio using the optional Remote Control MIDI protocol.

Scope

The Sony DMX-R100 Digital Mixing Console is supported by the Pyramix MIDI remote control option. **Channel Faders**, **Master Faders**, **AUX Master Faders, Channel Cuts**, **Aux Return 1 - 6 Cuts** and the channel strip **Rotary Pan Encoders** can address Pyramix parameters on up to 3 layers and 48 channels. Transport, Locate, Track Arming and jog/shuttle functions are also supported.

Setup

Requirements:

Components required for operating a Sony DMX-R100 with Pyramix:

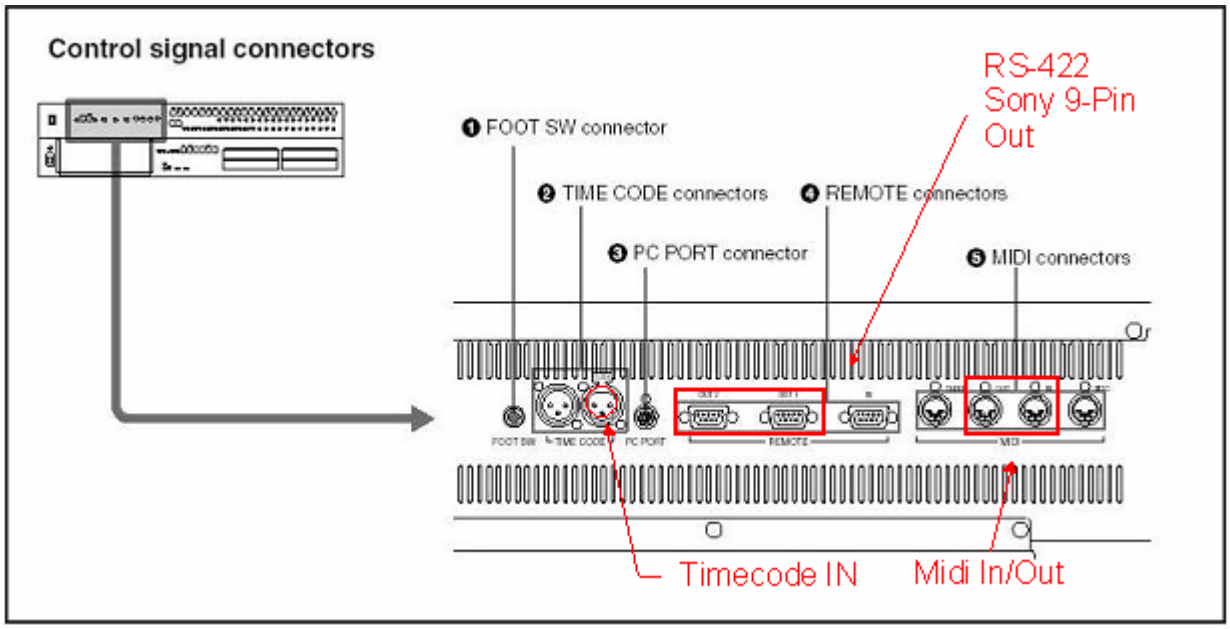
- A Sony DMX-R100 digital console with Version 2 software.
- Pyramix 4.2 or higher with TimeCode, Sony 9-pin and Remote Control MIDI protocol options authorized.
- The PC Workstation running Pyramix must be equipped with an RS422 port (or RS-232 port with RS-232 to RS-422 converter)
- The PC Workstation running Pyramix must be equipped with a MIDI interface.

Communication

Pyramix and the DM-2000 communicate using the Sony 9-pin (P2) protocol plus LTC and via MIDI. Please also refer to the DMX-R100 Operation Manuals.

DMX-R100 Setup

Connections



Sony DMX-R100 rear panel connections

LTC Timecode

Connect the LTC OUT XLR of the Mykerinos Sync/Timecode breakout cable to the Timecode Input XLR of the DMX-R100.

Sony 9-pin (RS-422)

Connect one of the serial RS-232 or RS-422 (better) ports of your PC to a REMOTE OUT RS-422 of the DMX-R100

Note: The RS-232 ports of a standard PC are slightly different from the RS-422 format used for the Sony P2 protocol. We recommend the use of an external RS-232/RS-422 adapter. One example is the Antona ANC 6090 which can be ordered from your Merging Sales Representative under the item number MRS422. This adapter is intended to be connected directly to the serial port of your PC (either COM1 or COM2) with the other end used to connect a standard Sony P2 RS-422 cable. As both connectors on the adapter are Female DB9, please be aware of the orientation and please check that the printed indication “RS-232” is connected to the PC COM port. Please also note that, some COM ports do not supply sufficient power for the converter so an external power supply may be required. If no physical serial port exists please contact your dealer to ask him about a USB/PCI to RS422/232 solution.

MIDI

Connect 2 MIDI cables between the DMX-R100 IN/OUT ports and the computer MIDI IN/OUT ports.

This feature requires that a hardware device with MIDI port functionality be installed in the computer an external USB to MIDI interface will also work fine, or a soundcard with Midi I/O, e.g. a SoundBlaster.

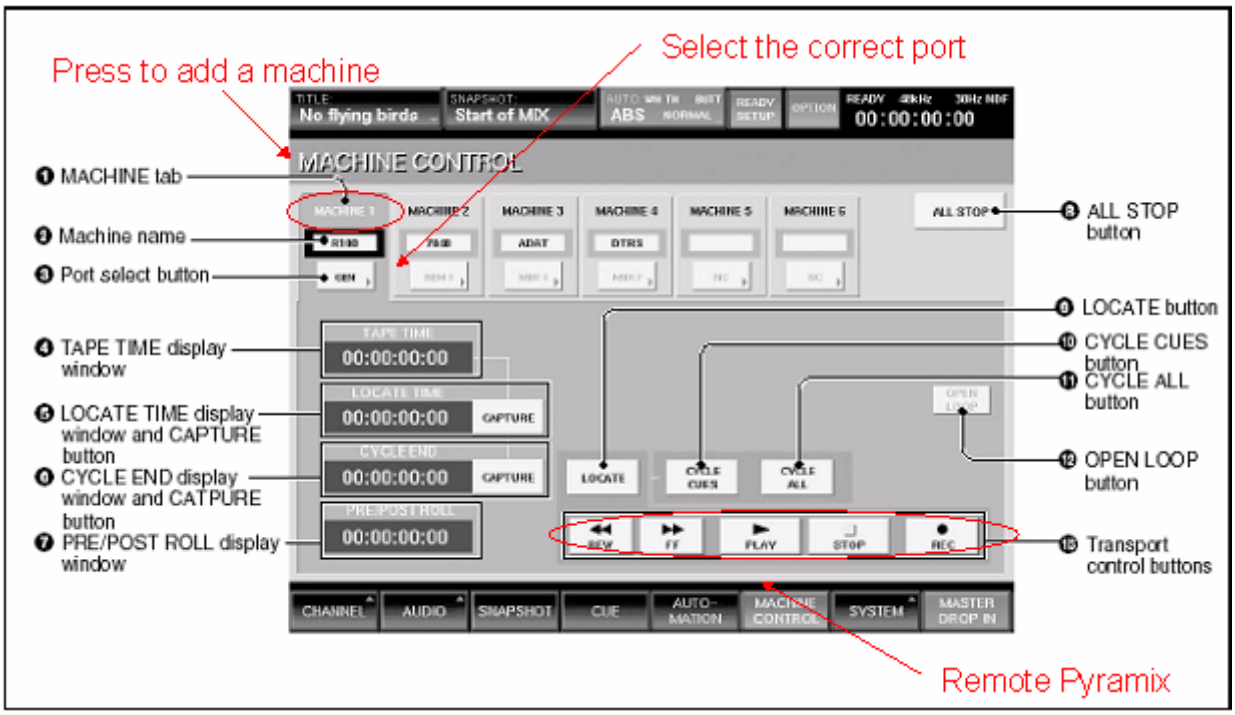
DMX-R100 Settings

TimeCode In to DMX-R100 from Pyramix

- Check in the **SYSTEM MENU > SYNC/TIMECODE MENU : TIME CODE READER** field, that the Timecode input source is set to **TIMECODE IN** and the Timecode format is the one you require. It must be the same as the one you set in Pyramix.

Sony 9-Pin out from Sony DMX-R100 to Pyramix

- Go to the **MACHINE CONTROL MENU**.

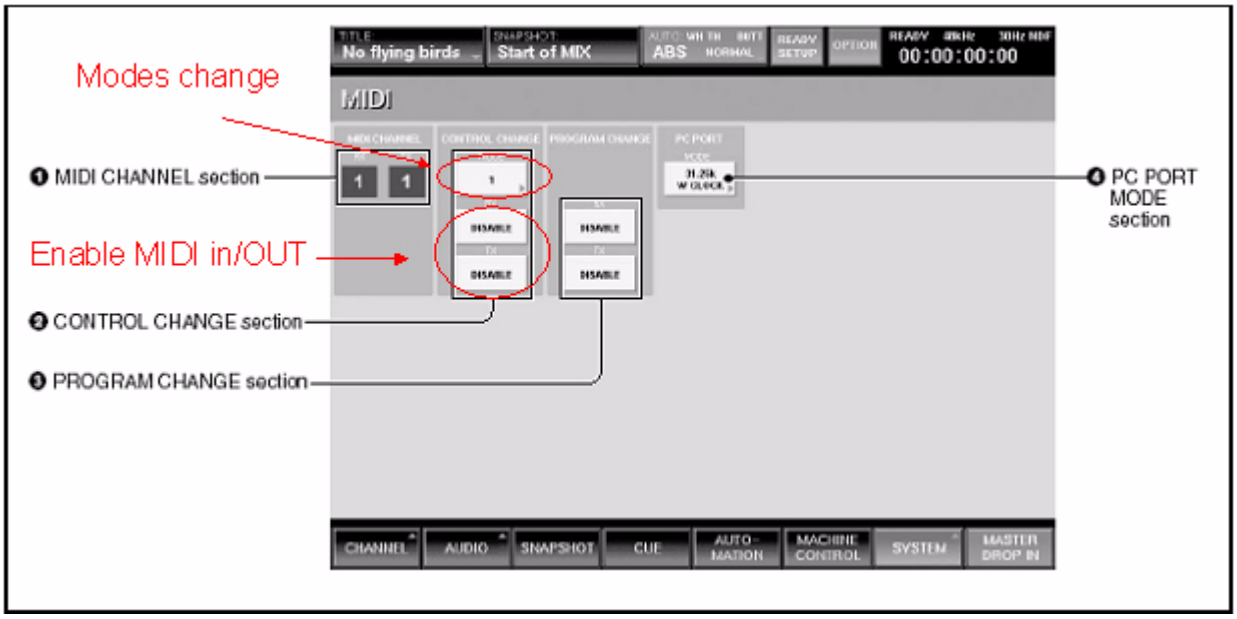


Sony DMX-R100 MACHINE CONTROL MENU SCREEN

- Add a machine under one of the six machines tabs.
- Select the correct port (REMOTE OUT 1 OR 2)

MIDI Control

- Go to the **SYSTEM MENU > MIDI**, **CONTROL CHANGE** zone:



Sony DMX-R100 SYSTEM MENU

- Check **RX** and **TX** to **ENABLE**

3 different modes are available:

Mode 1: All channel faders and rotary pans.

Mode 2: Channel faders 1 - 24, all master faders, cuts and pans for channels 1 - 24, and faders and cuts for Aux returns; it also enables access to Aux send 1 for channels 1 - 22.

Mode 3: No effect in Pyramix.

Pyramix Set up

Connections

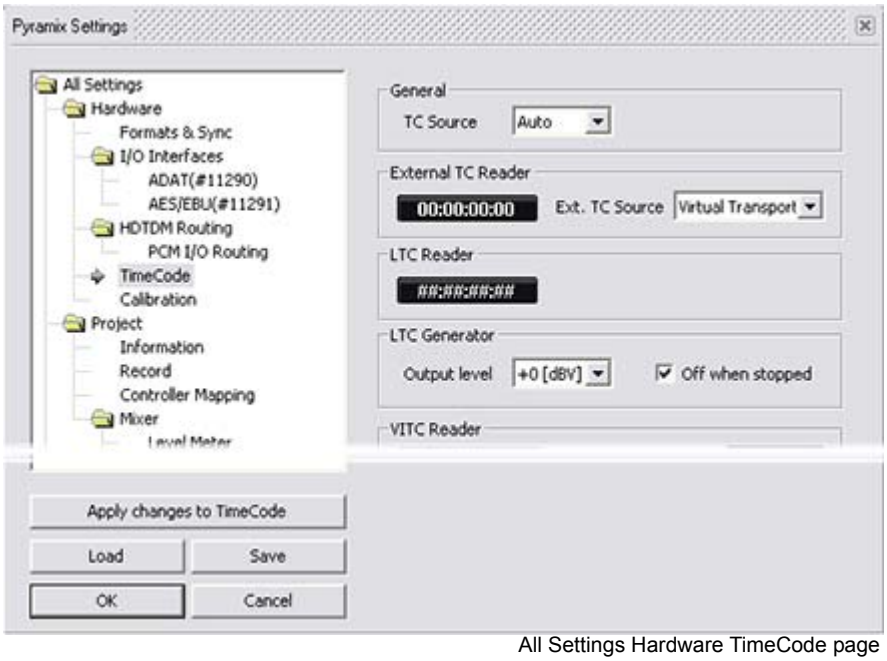
Make sure that the DMX-R100 is connected to your computer via RS-422, LTC and MIDI.

Pyramix Settings

In order to allow Pyramix to communicate with the DMX-R100, you have to ensure the Timecode settings are correct, add and set-up a 9-pin controller and add and set-up a MIDI controller.

Timecode Settings

Go to the **All Settings > Hardware > TimeCode** page:



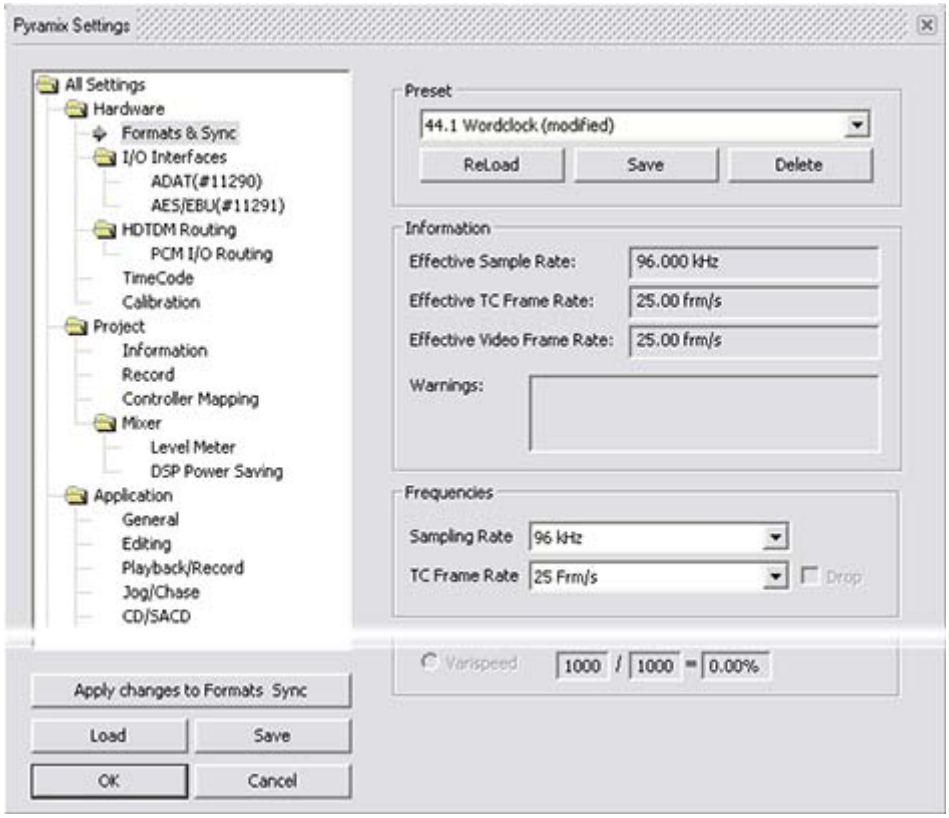
All Settings Hardware TimeCode page

- Check in the **LTC Generator** field that the level is set to +**0[dBV]**
- Ensure the **Off when stopped** check-box is ticked

Note: In Stop mode, there can be an offset of 1 frame between the LTC displays of Pyramix and the DMX-R100 respectively. Checking the **Off when stopped** check-box suppresses the display discrepancy. The displayed Timecode in the DMX-R100 (at the right top corner of the touch screen) will then be identical to the one in Pyramix.

- Click on **OK** to save the changes.

Go to **All Settings > hardware > Formats & Sync**:



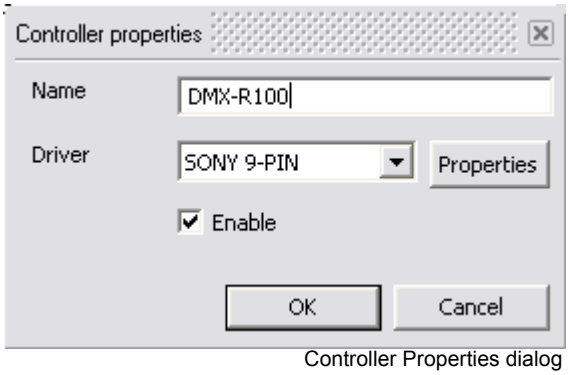
All Settings Formats & Sync page

- Set the required TimeCode Frame Rate in the **Frequencies** section **TC Frame Rate** combo box.
- Click on **OK** to save the change (if any)

9 Pin controller

To enable transport control a 9 Pin controller must be added in Pyramix.

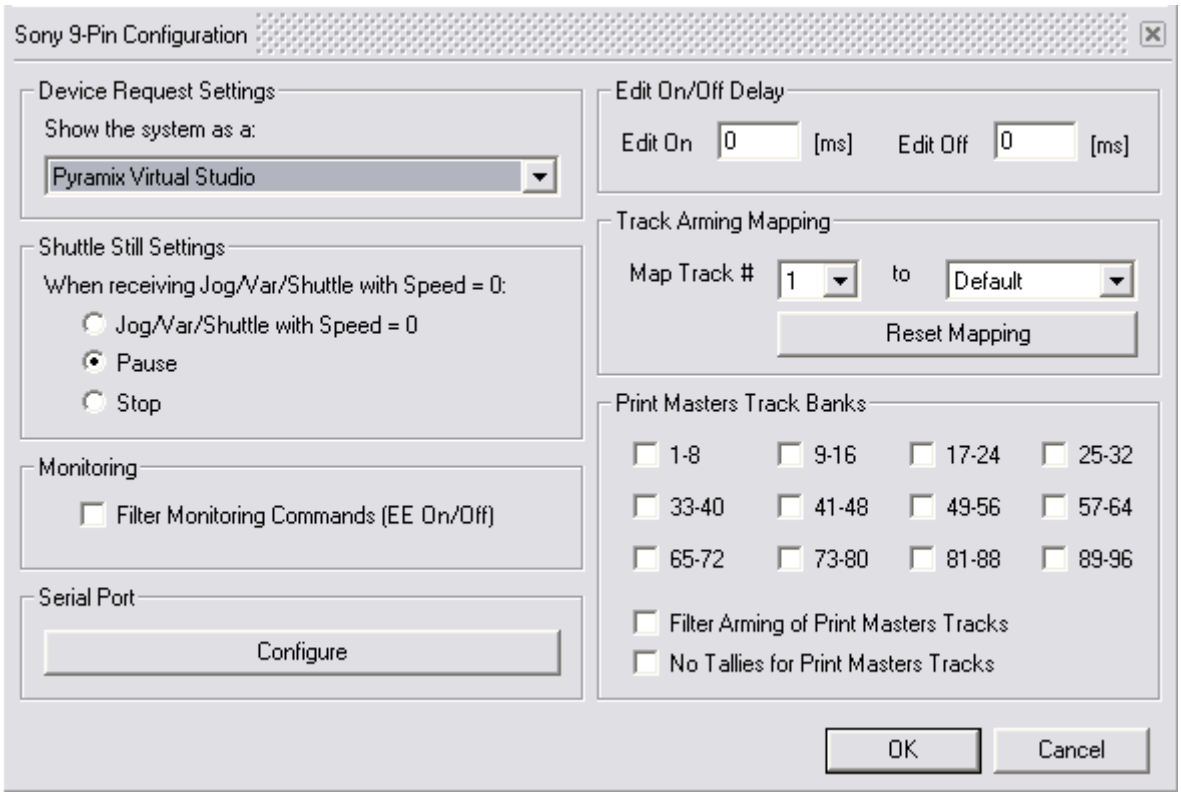
Go to **All Settings > Remote Control > Controller** and click on the **Add** button. The **Controller properties** dialog opens:



Controller Properties dialog

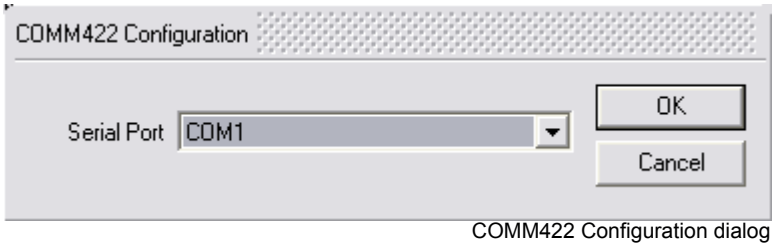
Type a suitable **Name** for your Sony console, e.g. **DMX-R100** and select **Sony 9-pin** from the **Driver** drop-down list. Make sure the **Enable** box is checked.

Now click the **Properties** button to open the **Sony 9-Pin Configuration** dialog box.



Sony 9-Pin Configuration dialog

Make the settings you require then, in the **Serial Port** section, click the **Configure** button to open the **COMM422 Configuration** dialog:



COMM422 Configuration dialog

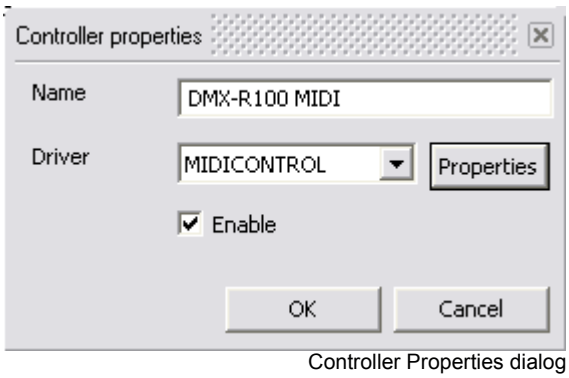
Choose the serial RS-232 port to which your RS-232 to RS-422 converter is attached. If no ports are present. Please either enable one in the PC's **bios** or the **Hardware** section of the **System** entry in **Windows Control Panel**.

Click **OK** on all open dialogs to close them.

MIDI Controller

Each individual Pyramix control can be mapped to a specific MIDI message but before this can be achieved with the DMX-R100, it is necessary to add a **MIDI Controller**.

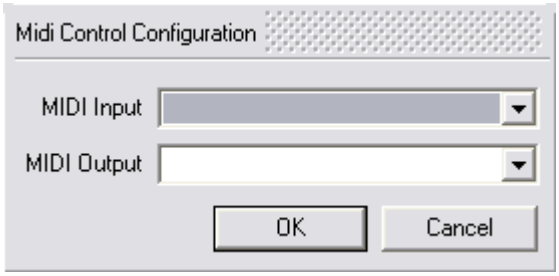
Go to the **All Settings > Settings > Remote Control > Controller** page and click on **Add** to open the **Controller Properties** dialog:



Controller Properties dialog

Type a suitable **Name** for your Sony console, e.g. **DMX-R100 midi** and select **MIDICONTROL** from the **Driver** drop-down list. Make sure the **Enable** box is checked.

Now click the **Properties** button to open the **MIDI CONTROL Configuration** dialog box:



Midi Control Configuration dialog

The **MIDI Input** and **MIDI Output** ports must be set here. The available MIDI Input and MIDI Output settings are related the installed driver(s) and interface(s) installed on your computer. Choose the MIDI ports which the DMX-R100 is connected to.

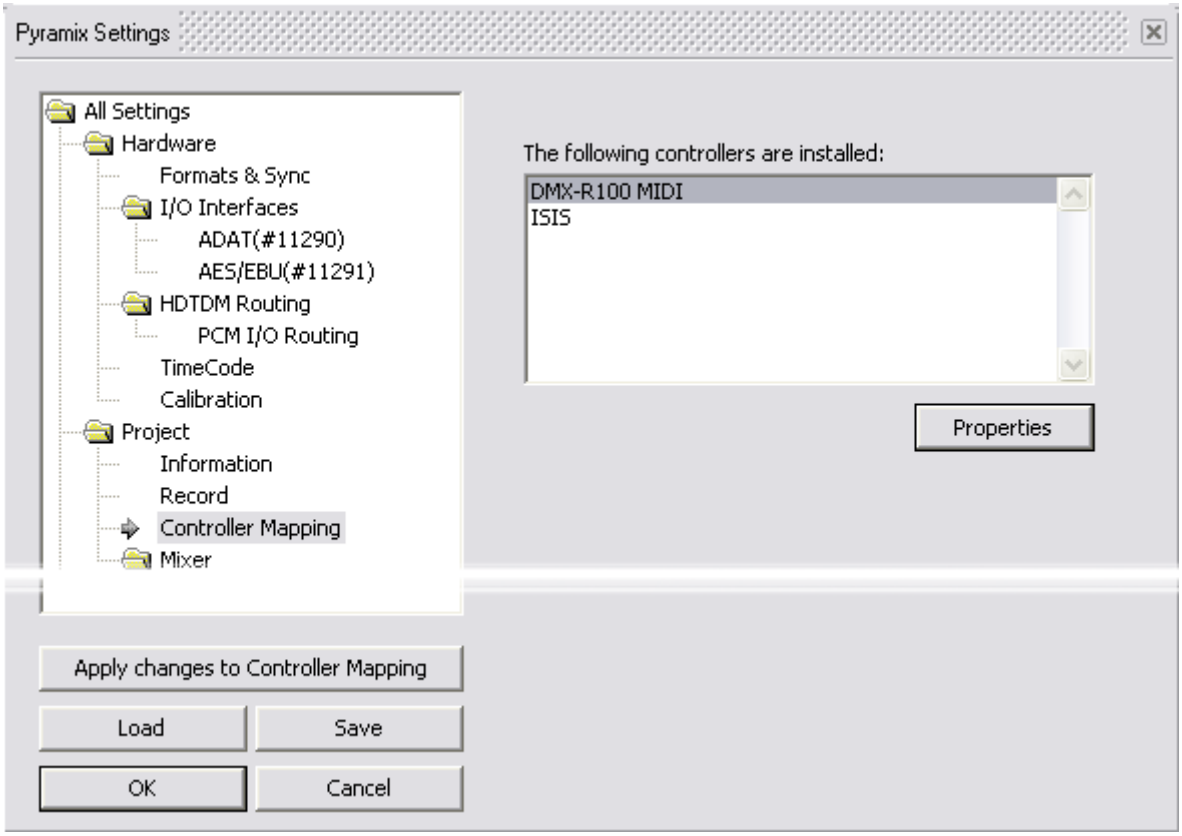
MIDI Input: Determines which MIDI input port will receive the DM-2000 commands

Midi Output: Determines which MIDI output port will send commands to the DM-2000

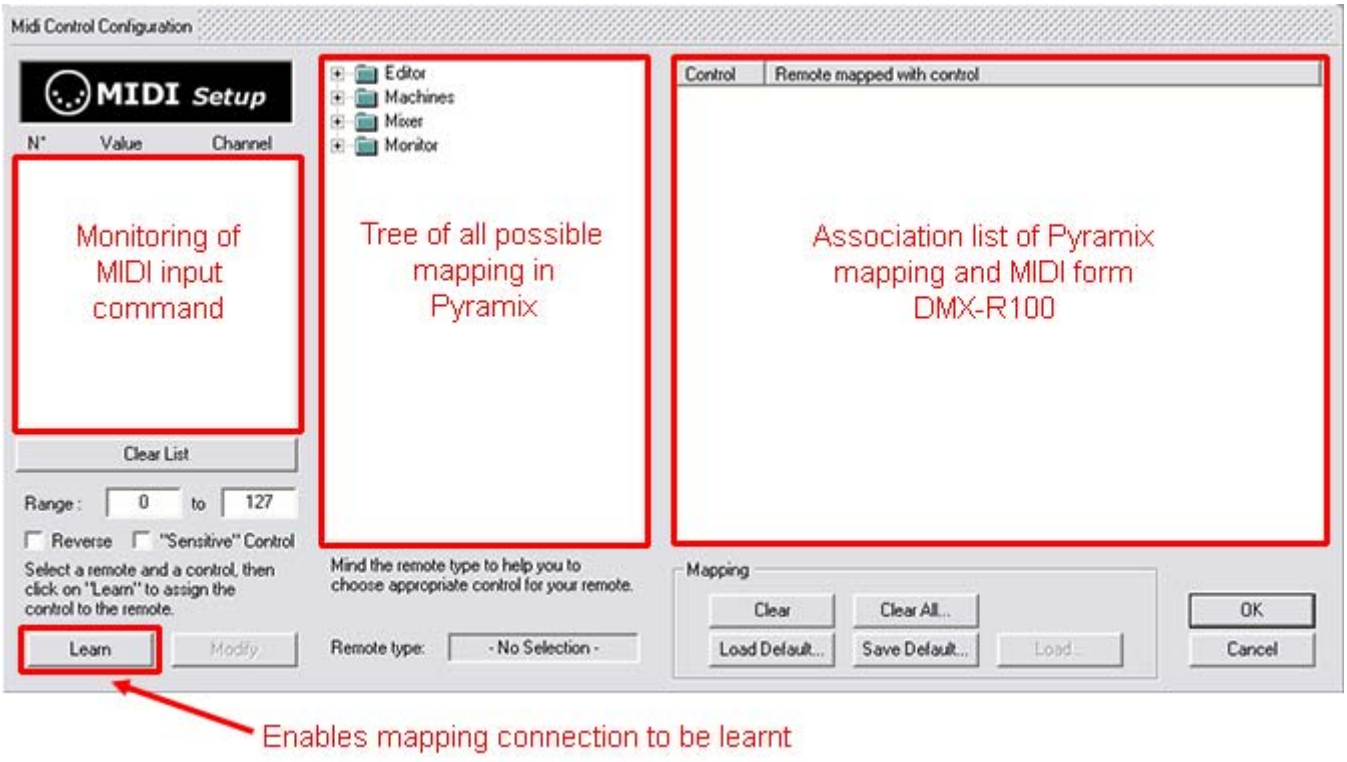
Click **OK** on all open dialogs to close them.

MIDI Mapping

Go to the **Settings > All Settings > Project > Controller Mapping** page:



Select **DMX-R100 midi** (or whatever you named the console as) in the list and click on the **Properties** button to open the **Midi Control Configuration** dialog:



Midi Control Configuration dialog

Make sure the DMX fader layer is in **MIX** or **MASTER** mode. Now, when you move a DMX-R100 fader you will see the input MIDI commands on the monitor view.

Mapping

Select a MIDI message by clicking on it, select a Pyramix mapping in the tree view by clicking on it and then click the **Learn** button to associate the DMX-R100 control that generated the message with the selected function in Pyramix.

Repeat this for all controls you wish to map.

When finished, click on the **OK** button on all open dialogs to save the mappings.

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