How To Mac

Setting up a Network with the Yamaha 01X, Motif XS and Mac computer
mLAN TOOLS for Macintosh version 1.2.0 (November 2008)
Motif XS w/mLAN16E2 - Operating System version 1.55.xx, IEEE1394 Firmware version 1.07

Setup the Motif XS
Press [UTILITY]
Press [F1] GENERAL
Press [SF4] AUTO LOAD
Ensure that the IEEE1394 Driver = mLAN
If not, change the setting, then press [STORE] to write this preference to your Flash ROM
You will need to reboot the Motif XS for this setting to take place.
Next, you want to make sure that the MIDI communication is set to mLAN:
Press [UTILITY]
Press [F5] CONTROL
Press [SF2] MIDI
Ensure that the MIDI IN/OUT = mLAN
Press [STORE] to write this preference to your Flash ROM.

Setup the 01X
Press [UTILITY]
Press [KNOB 3] W.CLK
Press [KNOB 1] ENABLE
Select YES ([KNOB 8])
Just to the right of the screen press the DOWN DISPLAY arrow to view PAGE 2 of 2
Press [KNOB 1] INTERNAL to set the 01X to use its INTERNAL CLOCK
You will be offered different operating sample rates… For this example, press [KNOB 1] INT44.1kHz
Press [INTERNAL] to select the Internal Mode

Setup your Macintosh computer:
Go to APPLICATIONS > UTILITIES > AUDIO MIDI SETUP
Set the AUDIO DEVICE as shown to use the mLAN NETWORK
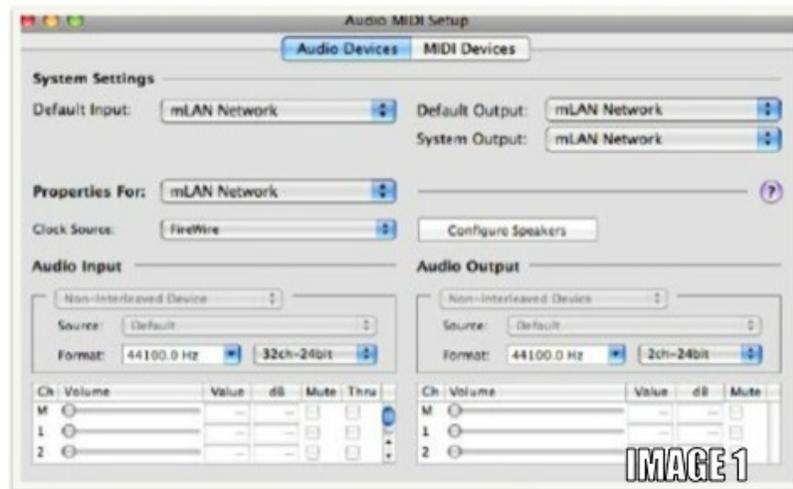
How To Mac (continued)

On upper tool bar of your Mac click on the mLAN icon and launch the GRAPHIC PATCHBAY


IMAGE 2

Here we will setup the three views: Word Clock, MIDI and Audio. Select the WCLK view (Word Clock)
_ Here we are going to make the 01X the Master clock. By far this is the most flexible setup because by making your mixer the master clock, you can use the 01X and the Motif XS via firewire without the computer having to be on or present.
_Use the [TAB] key on your computer to move the highlight to the different Nodes. You want to highlight the 01X node.
_ Click on the yellow "1 MSTR" (One Master) icon on the tool bar to select the MIDI view.
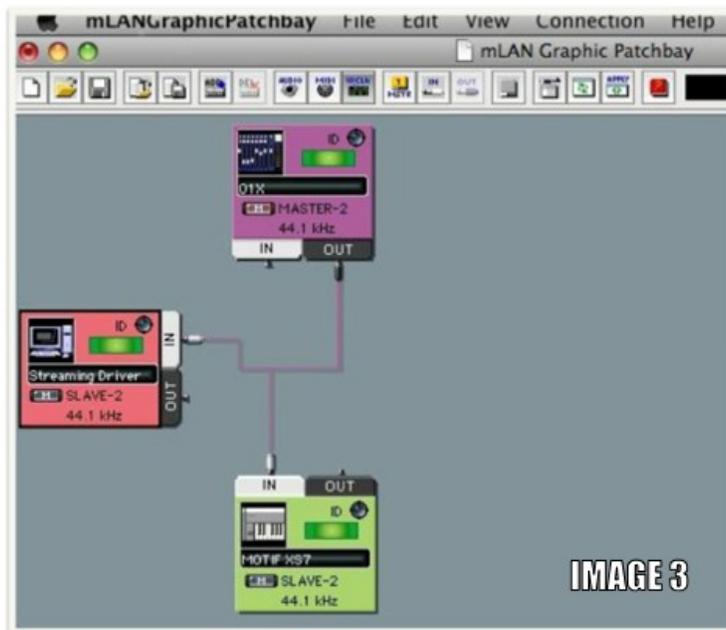
IMAGE 3

How To Mac (continued)

Select the MIDI view
_ Here we will patch the 01X (top/purple) to the computer (left/pink) with 5 'patch cables'. To do so on the 01X node, click on the word OUT to open the patchable connectors.
_ Click in the empty clear space just to the right of 1; a cable jack will appear
_ While holding down the [SHIFT] key on your QWERTY click in the clear space just to the right of the number 5; this will ready 5 jacks
_ Click on the word IN on the Computer Node (Streaming Driver) and complete the connection by clicking in the space just to the right of the number 1; this will connect the 5 jacks to the first 5 INPUTS of the computer.
In this fashion, connect the first 5 OUTS from the Computer Node back to the IN of the 01X. When viewing the Graphic Patchbay, the OUT 'cable' will match the color of the source. So always follow signal OUTPUT to INPUT.

Connect the 3 OUT jacks of the Motif XS to the 6th, 7th and 8th INPUT on the computer
Connect the 6th, 7th and 8th OUT of the Computer to the IN of the Motif XS.
Shown below:
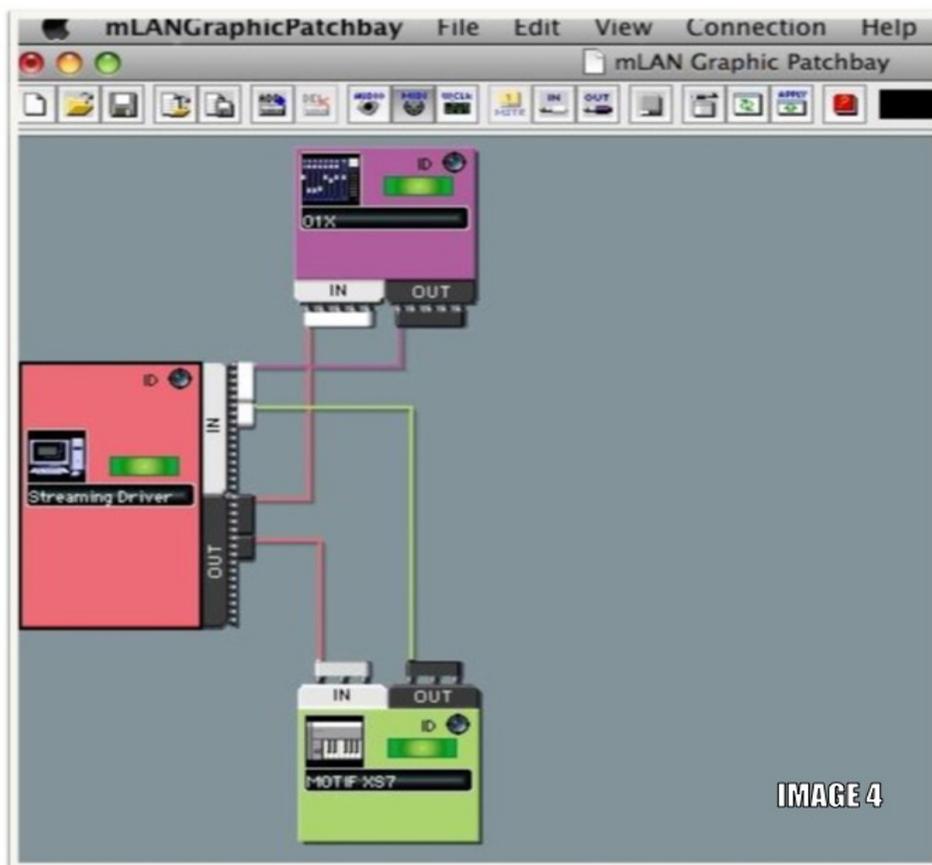
How To Mac (continued)

Select the AUDIO view
_ Here we will route the audio signals as follows… and I should mention you have flexibility in routing this. For this example, we will connect the 16 audio outputs of the Motif XS to the first 16 mLAN INPUTS on the 01X - these will appear in the 01X as 'mL1~mL8' and 'mL9~mL16'
I will mention this now because it is very important to understand this numbering system:
The first 8 input channels to the 01X are analog… repeat, the first 8 inputs of the 01X are analog and they are seen on the back panel of the 01X. These do not show up as INPUTS on the Graphic Patchbay.Patching to the analog inputs is done with real (analog) cables… So on the front panel of your 01X, find the MIXER/LAYER row of buttons:

Notice next to the green L.E.D you will see buttons labeled: [1-8], [9-16], [17-24] and [MASTER]
Channel '1-8' are analog input channels
Channels '9-16' and '17-24' are the sixteen mLAN (Digital) inputs as seen in the AUDIO view of the Graphic Patchbay.
When you press button [1-8] - you will see in the screen CH1, CH2, CH3, CH4, CH5, CH6, CH7 and CH8
When you press button [9-16] - you will see in the screen mL1, mL2, mL3, mL4, mL5, mL6, mL7 and, mL8
When you press button 17-24 - you will see mL9, mL10, mL11, mL12, mL13, mL14, mL15, and mL16
Lastly, let's connect a stereo pair from the Computer node to the 17th and 18th mLAN input on the 01X. The purpose of this connection is it is responsible for delivering stereo audio directly to your MONITOR SPEAKERS. When the [MONITOR A/B] Mode button is lit, you will be able to monitor signal from your DAW. When the [MONITOR A/B button is not lit you will be monitoring the internal 01X mixer.
Important: Be sure to connect your monitor speakers to the MONITOR OUT L/R jacks on the back panel of the 01X (not the STEREO/AUX OUT)
Connect 24 Audio OUTs from the 01X Node to 24 INs on the computer. Shown below:
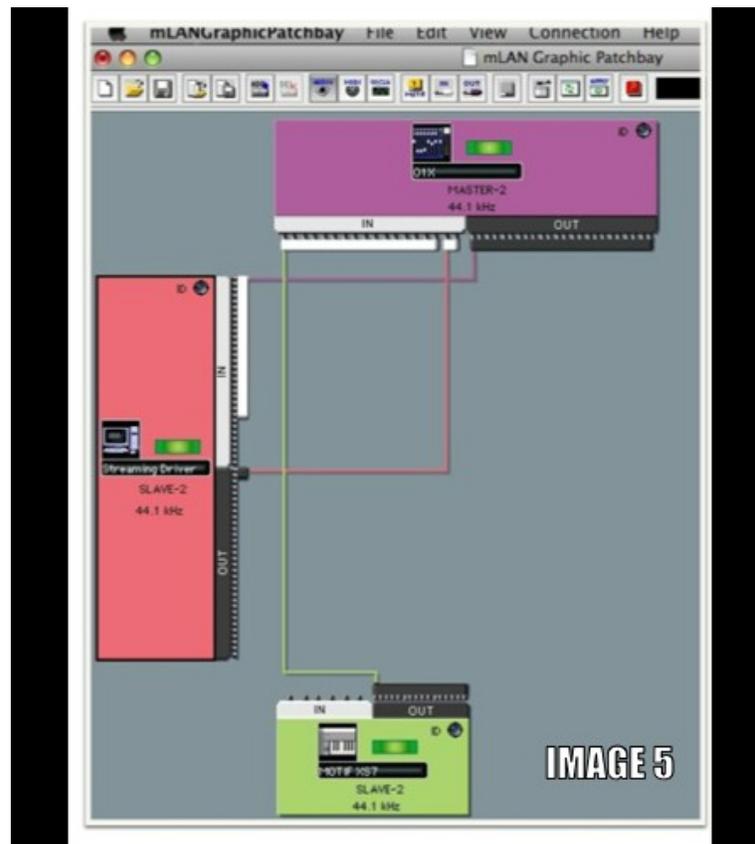
How To Mac (continued)

These 24 OUTPUTS from the 01X represent the 8 analog channels and the 16 mLAN channels!

Ready to Go
Now that you have created a Graphic Patch that networks your Motif XS, your computer and the 01X:

Click APPLY

The Graphic Patchbay will negotiate with the nodes and establish this setup. This setup will remain so once you power down and power up again - the last configuration will be recalled, so you only have to do this once. However, as you will discover you can save this setup (and others that you might create) on your computer. There is no one setup for everything. So you will be creating different patches for different situations

Go to FILE > SAVE
Give the Setup a name - it will be given the extension ".mlc" (mLAN Connection)
You will only need to recall it if you change something.

Explanation of the MIDI PORT connections:
The 01X communicates with the computer on 5 different Ports as follows:

Port 1 - this port is reserved to control your DAW software
On the 01X Press [UTILITY]
Press [KNOB 1] REMOTE
Press [KNOB 1] - [KNOB 5] to select your DAW REMOTE target
The 01X acts as a REMOTE CONTROL surface - allowing you to control, edit and manipulate the most popular DAWs and gives you motorized faders for an unlimited number of audio and MIDI tracks (in banks of 8).

Port 2 - this is the MIDI A IN/OUT jacks on the back panel of the 01X.
Any MIDI module or additional device you want to connect to the network can be plugged in here with a standard pair of 5-pin MIDI cables.

Port 3 - this is the MIDI B IN/OUT jacks on the back panel of the 01X.
Any MIDI module or additional device you want to connect to the network can be plugged in here with a standard pair of 5-pin MIDI cables.

Port 4 - this is reserved for the STUDIO MANAGER 01X Editor that allows you to remote control and edit your 01X from your computer.

Port 5 - this is reserved as the GENERAL REMOTE control which can be used to control a MIDI module (say you had a Motif-Rack unit and wanted to select sounds or control your Motif XS from the screen of the 01X) or it can be used to control SCENE recalls from your keyboard if you are on stage and want to operate the mixer from an external device like a sequencer.
The Motif XS communicates with your computer on 3 separate PORTS, as follows:

Port 6 going into and back out of the computer - is seen as the Motif XS's first port (PORT 1) - this is used for music performance communication

Port 7 going into and back out of the computer - is seen as the Motif XS's second port (PORT 2) - this is used for when you want to REMOTE Control your DAW from the front panel of the Motif XS

Port 8 going into and back out of the computer - is seen as the Motif XS's third port (PORT 3) - this is used when you want to connect an external MIDI device to you DAW simply using the 5-pin jacks on the back panel of the XS to deliver MIDI signal into your DAW and items routed on this port from the DAW will simply go OUT via the 5-pin MIDI OUT jack on the back panel.

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Explanation of the AUDIO connections:

The Motif XS has 16 audio bus outputs. When you are routing signal from the Motif XS you can do so on a per PART basis, using the OUTPUT SELECT parameters. The AUDIO patchbay is a creative tool. Learn to operate it as such. There is no one setup that will work in all situation. Indeed, you may at times only need a stereo Left/Right output from the Motif XS. At times you may want to route individual audio tracks from your DAW through the 01X in order to use its excellent EQ, Effects, or compressors

You may find yourself developing different setups for Tracking, and others for Mixing down… it is as flexible as the most professional systems and will serve you well.

Good Luck!