YAMAHA

mLAN Patchbay Owner's Manual

"mLAN Patchbay" is application software that allows mLAN plugs (virtual input/output jacks) to be connected to or disconnected from the mLAN bus (system), and synchronization settings of each mLAN device to be managed — all under centralized control from your computer. The Macintosh version manages the mLAN devices via IEEE 1394, and the Windows version manages them via the serial interface.

Table of Contents

This owner's manual assumes that you are already familiar with basic Windows/Macintosh operation. If you are not, please refer to the owner's manual which came with your Windows/Mac OS software before using mLAN Patchbay.
For information about hardware requirements, the interconnection of devices and the installation of the mLAN Patchbay software, refer to the separate "Installation Guide" as well as the owner's manual for the respective mLAN device.
This owner's manual is applicable to the mLAN Patchbay for both Windows and Macintosh. The screen illustrations are mainly taken from the mLAN Patchbay for Macintosh.

Starting mLAN Patchbay

After installing mLAN Patchbay and making the necessary connections, start up mLAN Patchbay as follows.

Windows98/95 environment

In Windows 98/95, select "Start" button → "Programs (P)" menu → "mLAN Tools," and choose "mLAN Patchbay."

NOTE If the state of the bus is not read within a certain length of time after the program is started, check to make sure that the Serial Port value matches the COM port on your computer to which the serial cable is connected, and that no other application programs are using the COM port. (Page 8.)

Macintosh environment

Double-click the mLAN Patchbay icon.

Menu bar

File

New

Create a new file. The Audio and MIDI pages will show all mLAN plugs of the current bus (system) as unconnected. The WCLK page will display the current word clock (synchronization) status of the bus. If you wish to view the latest connection status of the bus, select the [Option] menu command [Update].

Open ...

Open an existing file. The previously-saved connection status (Audio/MIDI pages) and synchronization status (WCLK page) will be displayed. Simply opening a file will not cause its settings to be reflected on the bus.
If you wish to apply the settings of all pages, select the [Option] menu command [Apply].

Close

Close the file you are currently editing.

Save

Save the currently-edited file by overwriting it.

Save As...

Save the currently-edited file under another name.

Print... (Windows only)

Print the currently selected page.

Information (Property)

Open the Information (Property) dialog box to view detailed information on the selected mLAN plug or mLAN device.
In the Information (Property) dialog box you can modify the Nickname.

NOTE A Nickname you modify in the Property dialog box will not be applied to the bus until you execute the [Option] menu command [Apply].

Quit

Exit mLAN Patchbay.

Edit

Undo/Redo

Undo returns the previously-edited item to its previous state. After Undo is executed, this command will change to Redo. Redo cancels the effect of Undo, restoring the item to its edited state.

Disconnect

Disconnect the selected mLAN plug and save it in the clipboard. This cannot be used in the WCLK page.

Copy

Copy the selected mLAN plug and save it in the clipboard. This cannot be used in the WCLK page.

Paste

Connect the mLAN plug copied in the clipboard to the selected mLAN plug. This cannot be used in the WCLK page.

Search... (Windows only)

Open the Search Plug dialog box. This cannot be used in the WCLK page.

> **NOTE** Before using this, you must first open either the Audio or the MIDI page depending on the mLAN plug for which you wish to search.

Search Plug dialog box

The Search Plug dialog box lets you find the location of the desired mLAN plugs.

Search
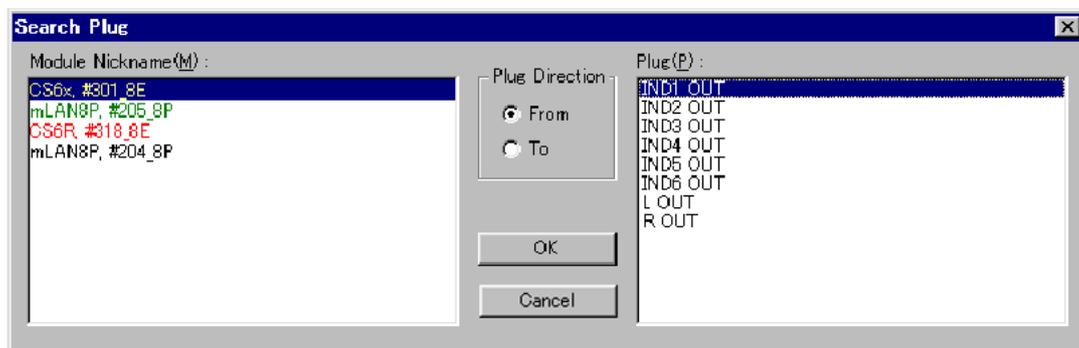
1. In the Module Nickname column, select the mLAN device that contains the mLAN plugs you wish to find.
2. In the Plug Direction column, select either From (output plugs) or To (input plugs).
3. In the Plug column, select the mLAN plug that you wish to find, and then click [OK].

Disconnect All

Disconnect all mLAN plugs connected to the selected mLAN plug. This cannot be used in the WCLK page.

Disconnect Field All

Disconnect all mLAN plugs (output plugs / input plugs) of the specified mLAN device.
If an item in the From field is selected, all mLAN plugs in the To field will be disconnected. If an item in the To field is selected, all mLAN plugs in the From field will be disconnected. This cannot be used in the WCLK page.

Connect All (Windows only)

Connect all mLAN plugs that are copied to the clipboard to all mLAN plugs of the specified mLAN device. Available only on the Audio page.

View

View Toolbar

Switch the tool buttons between visible and hidden.

Status bar (Macintosh only)

Lets you to select visible or hidden for the status indication.

Column Filter

Switch each item in the data list between visible and hidden.
   Vender: Hide/show the Vender item.
   Module: Hide/show the Module item.
   Nickname: Hide/show the Nickname item. This cannot be used in the WCLK page.
   Plug Name: Hide/show the Plug Name item. This cannot be used in the WCLK page.
   Format: Hide/show the Format item. This cannot be used in the WCLK page.

Option

Update

Show the mLAN devices currently on the bus and their settings on the appropriate pages.

Apply

Apply the state specified in all pages to the mLAN devices on the bus.

NOTE After you click the [Apply] button, the status of the application may not match the status of the mLAN device. After clicking the button, click the [Update] button or use the Auto Update function (page xx).

Identify

Issue an Identify to the selected mLAN device. The mLAN connector's LED on the mLAN device that has received an "Identify" will flash for five seconds.

Device Color... (Windows only)

Open the Device Color dialog box.

Device Color dialog box

In the Device Color dialog box you can specify the display color for each mLAN device.
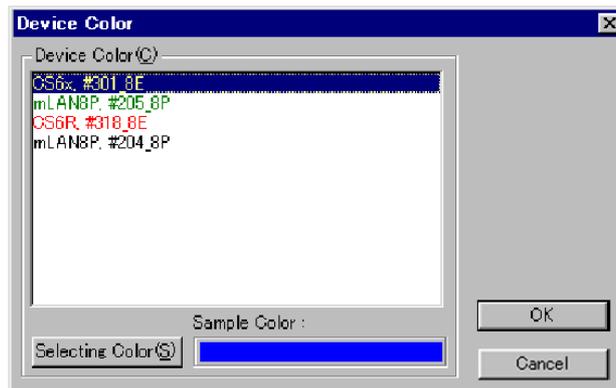
1. Select the mLAN device whose device color you wish to specify.
2. Click [Selecting Color]. The color dialog box will appear.
3. Select the color that you wish to use for the mLAN device.

NOTE If you wish to customize the color, click [Customize Color] and add the desired color.

4. Click [OK]. The selected color will be displayed in Sample Color.
5. Click [OK], and the display color of the mLAN device will be changed. If you decide not to change the color, click [Cancel].

Preference (Windows only)

Open the Preference dialog box. In the Preference dialog box you can make settings for Shortcuts, Color and Other.

Preference dialog box

[**Shortcuts**]

Specify (customize) the menu shortcut keys.
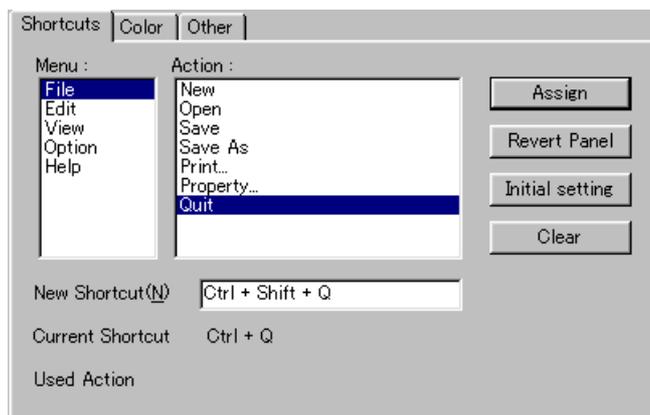
1. Select the menu item for which you wish to specify a shortcut key.
2. Click the New Shortcut field, and then press the key that you wish to specify as the shortcut.
3. Click [Assign] to finalize the setting. If you click [Revert Panel], you will return to the settings of the previous step. If you click [Initial setting], the default settings (Ctrl + first letter of the action) will be applied. To clear the settings, click [Clear].

[**Color**]

You can specify the color and background color in the data list.
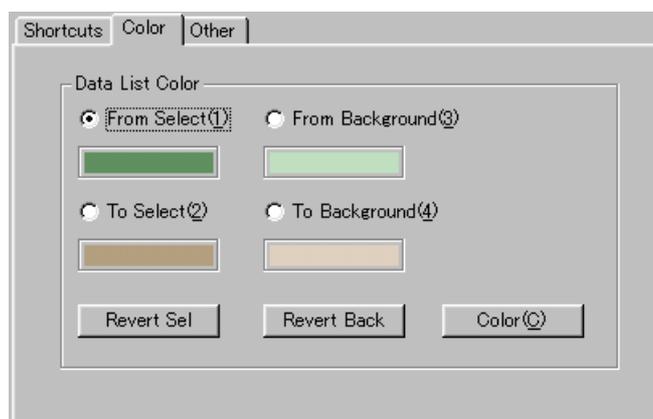
1. Select an item to be edited and click [Color]. The Color dialog opens.
2. Select the desired color.
3. Click [OK]. The selected color appears below the item.
   To reset the color and background color to their initial settings, click [Revert Sel] and [Revert Back] respectively.

[Other]
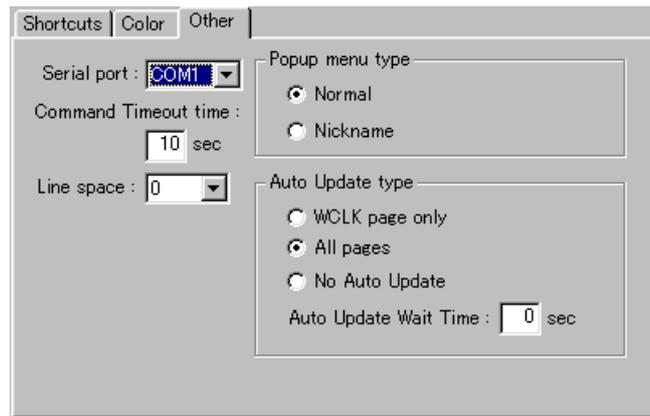
Serial port: Select the COM port that is used to connect the computer and mLAN device.

NOTE If there is a problem such as failure to read data, check whether this value matches the COM port you are actually using.

Command Time out Time: Set the response time that is taken from the issuance of a command to the mLAN device until the receipt of a response from the device. If the system displays "Serial Timeout Error," increase this value.

Line space: Specify the display spacing at which mLAN plugs or mLAN devices are shown on a page.

Popup menu type: Select the display method that will be used for popup menus when you connect a mLAN plug in the Audio or MIDI pages, or when you manually select the Master mLAN device for a Slave mLAN device in the WCLK page.

Popup menu type

For the Audio or MIDI page
If you specify "Normal," popup menus will be displayed as shown below.
The upper line will extend from the module name to the plug name.

Audio page

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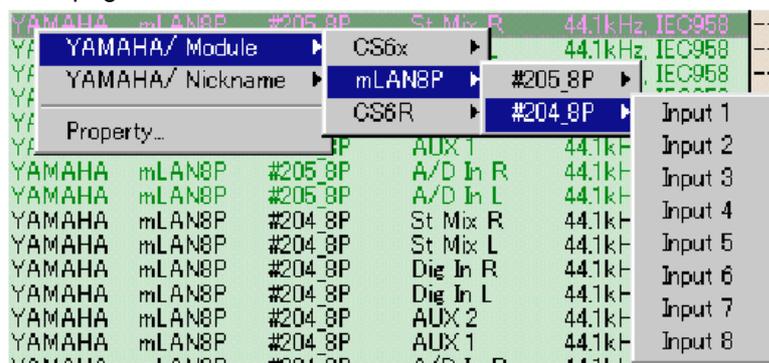
The lower line will skip the module name and extend from the nickname to the plug name.
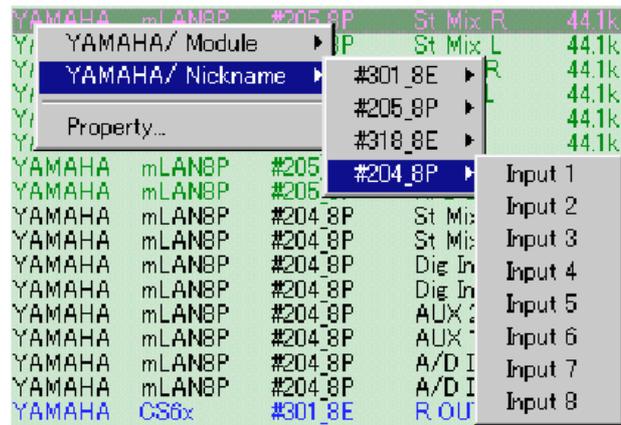
Audio page

```
YAMAHA    mLAN8P    #205_8P     St Mix R    44.1k
Y/   YAMAHA/ Module      ▶ P   St Mix L    44.1k
Y/   YAMAHA/ Nickname    ▶     R           44.1k
Y/                          #301_8E  ▶     44.1k
Y/   Property...            #205_8P  ▶     44.1k
Y/                          #318_8E  ▶     44.1k
YAMAHA    mLAN8P    #205     #204_8P  ▶  Input 1
YAMAHA    mLAN8P    #205                 Input 2
YAMAHA    mLAN8P    #204_8P  St Mi:      Input 3
YAMAHA    mLAN8P    #204_8P  St Mi:      Input 4
YAMAHA    mLAN8P    #204_8P  Dig In      Input 5
YAMAHA    mLAN8P    #204_8P  Dig In      Input 6
YAMAHA    mLAN8P    #204_8P  AUX :       Input 7
YAMAHA    mLAN8P    #204_8P  AUX         Input 8
YAMAHA    mLAN8P    #204_8P  A/D I
YAMAHA    mLAN8P    #204_8P  A/D I
YAMAHA    CS6x      #301_8E  R OU
```

If you specify "Nickname," Vender/Module will be omitted as shown below, and display will begin with the Nickname.

Audio page

```
YAMAHA    mLAN8P        #205_8P
Y/   #301_8E   ▶ P   #205_8P
Y/   #205_8P   ▶ P   #205_8P
Y/   #318_8E   ▶ P   #205_8P
Y/   #204_8P   ▶  Input 1
Y/                  Input 2
Y/   Property...    Input 3
YAMAHA    mLAN    Input 4
YAMAHA    mLAN    Input 5
YAMAHA    mLAN    Input 6
YAMAHA    mLAN    Input 7
YAMAHA    mLAN    Input 8
YAMAHA    mLAN
YAMAHA    mLAN
```
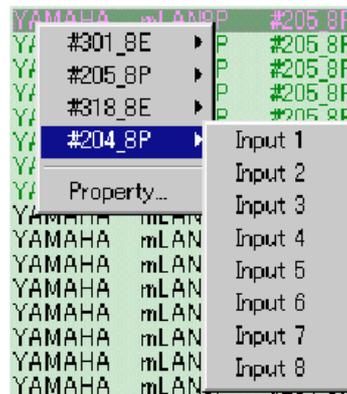
For the WCLK page
If you specify "Normal," popup menus will be displayed as shown below.
The upper line will extend from the module name to the nickname.

```
Vivien        Manual Mode, Others     mLAN8P
|  Set Group Master  ▶ 44.1kHz    CS6R
                                  ---
   Auto
   Manual            ▶   Group1
   Property...           YAMAHA/ Module   ▶  CS6R  ▶  magnolia
                         YAMAHA/ Nickname ▶
```

The lower line will skip the module name and extend to the nickname.

```
Vivien       Manual Mode  Others    mLAN8P
mag   Set Group Master  ▶ |kHz    CS6R
---                               ---
      Auto
      Manual            ▶   Group1
      Property...           YAMAHA/ Module    ▶
                            YAMAHA/ Nickname  ▶  magnolia
```

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If you specify "Nickname," Vender/Module will be omitted as shown below, and display will begin with the Nickname.

NOTE By right-clicking while holding down the Ctrl key, you can access the type of popup menu opposite to that which was selected.

Auto Update type: These are options for when executing the Apply command.
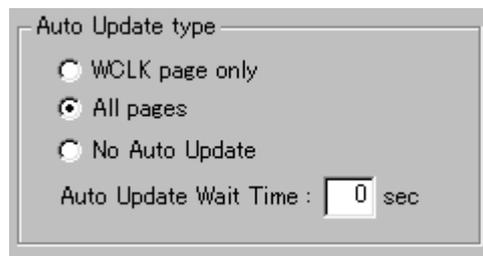
WCLK page only
After Apply has been completed, the WCLK page display will automatically be updated to the current state of the bus. This is convenient when you wish to verify the synchronization data after executing Apply.

All pages
After Apply has been completed, the display of all pages will automatically be updated to the current state of the bus. This is convenient when you wish to verify that all data was correctly applied to the bus after Apply was executed.

No Auto Update
No action will be performed after Apply is completed.

Auto Update Wait Time
Specify the interval time following Apply after which the display will be updated to the current state of the bus. The units are seconds.

NOTE The initial setting is three seconds. If you have connected six or more mLAN devices, set this value higher than three seconds.

Help (Windows only)

About mLAN Patchbay (A)...
Display version information for mLAN Patchbay.

Main window

When you start up mLAN Patchbay, the following window will appear.

Main window
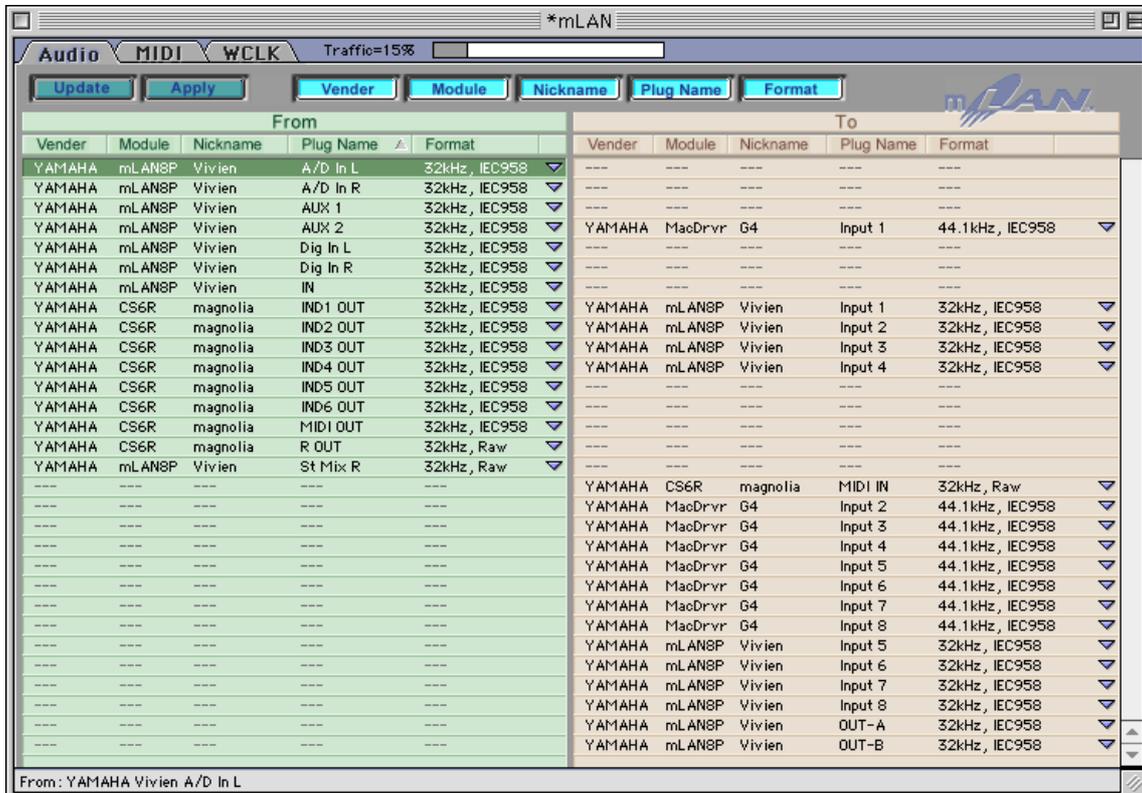
Tabs

By clicking the tabs, you can access the following pages.
Audio: Connections for Audio plugs.
MIDI: Connections for MIDI plugs
WCLK (Word Clock): Synchronization settings such as word clock master and slave

Tool buttons

Update: Make the data section show the state of the devices currently connected to the bus. This is the same function as the [Option] menu command [Update].
Apply: Apply the state shown in the data section to the devices on the bus. This is the same function as the [Option] menu command [Apply].
Vender: Switch the Vender between displayed/hidden. This is the same function as the [View] menu command [Column filter] item [Vender].

Module: Switch the Module column between displayed/hidden. This is the same function as the [View] menu command [Column filter] item [Module].

Nickname: Switch the Nickname between displayed/hidden. This is the same function as the [View] menu command [Column filter] item [Nickname]. If the WCLK page is selected, this has no function.

Plug Name: Switch the Plug Name between displayed/hidden. This is the same function as the [View] menu command [Column filter] item [Plug Name]. If the WCLK page is selected, this has no function.

Format: Switch the Format between displayed/hidden. This is the same function as the [View] menu command [Column filter] item [Format]. If the WCLK page is selected, this has no function.

NOTE For MIDI connections, it is not necessary to take account of differences in Format. In such cases, it is convenient to use the Format tool button to hide Format from being displayed.

Data list

Audio and MIDI pages

From				
Vender ▽	Module	Nickname	Plug Name	Format

To				
Vender	Module	Nickname	Plug Name	Format

Vender: Displays the manufacturer of the mLAN device.
Module: Displays the model name of the mLAN device
Nickname: Displays the nickname of the mLAN device.
Plug Name: Displays the plug name of the mLAN device.
Format: Displays the format of the mLAN device.

WCLK page

Master		
Vender	Module ▽	Nickname

Slave		
Vender	Module	Nickname

WC marker: Displays the common word clock mark.

44 (44.1k), 48 (48k)   Internal

⊠   A word clock is not supplied.

G   Group Master

NOTE   There is no Sort function for WC marker.

Vender: Displays the manufacturer of the mLAN device.
Module: Displays the model name of the mLAN device
Nickname: Displays the nickname of the mLAN device.
Status: Displays the sync mode and word clock frequency of the mLAN device.

NOTE   Displayed/hidden settings for each item in the Audio and MIDI pages are shared. The Sort function is independent for each page.

Sorting data

If you click the title of an item, the list will be sorted with that item as the key. A sort symbol will be displayed at the right of that title. The sort symbol will point upward to indicate ascending order, or downward to indicate descending order. Each time you click the title of an item, sorting for that item will alternate between ascending and descending order.

By dragging the title of an item to left or right, you can change the order of the items.

Sort symbol

From					Vender	Module
Vender	Module	Nickname △	Plug Name	Format		
YAMAHA	mLAN8P	Vivien	A/D In L	32kHz, IEC958 ▽	---	---
YAMAHA	mLAN8P	Vivien	A/D In R	32kHz, IEC958 ▽	---	---

Connection data

Audio and MIDI pages

These pages display the connection status of the mLAN plugs. "From" displays the output plugs, and "To" displays the input plugs. If unconnected, a "---" (hyphen) will be displayed. If connected, the connection destination mLAN plug will be displayed.

Audio page

From					To				
Vender ▽	Module	Nickname	Plug Name	Format	Vender	Module	Nickname	Plug Name	Format
YAMAHA	mLAN8P	#205_8P	St Mix R	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	L IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	St Mix L	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	R IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	Dig In R	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	IND1 IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	Dig In L	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	IND2 IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	AUX 2	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	IND3 IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	AUX 1	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	IND4 IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	A/D In R	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	IND5 IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	A/D In L	44.1kHz, IEC958	YAMAHA	CS6R	#318_8E	IND6 IN	44.1kHz, IEC958
YAMAHA	mLAN8P	#204_8P	St Mix R	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	St Mix L	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	Dig In R	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	Dig In L	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	AUX 2	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	AUX 1	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	A/D In R	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#204_8P	A/D In L	44.1kHz, IEC958	---	---	---	---	---

MIDI page

From					To				
Vender	Module ▽	Nickname	Plug Name	Format	Vender	Module	Nickname	Plug Name	Format
YAMAHA	mLAN8P	#205_8P	MIDI Out1	44.1kHz, MIDI	YAMAHA	CS6R	#318_8E	MIDI IN	44.1kHz, MIDI
YAMAHA	mLAN8P	#204_8P	MIDI Out1	44.1kHz, MIDI	YAMAHA	CS6x	#301_8E	MIDI IN	44.1kHz, MIDI
YAMAHA	CS6x	#301_8E	MIDI OUT	44.1kHz, MIDI	---	---	---	---	---
YAMAHA	CS6R	#318_8E	MIDI OUT	44.1kHz, MIDI	YAMAHA	mLAN8P	#204_8P	MIDI In1	44.1kHz, MIDI

WCLK page

This page displays the synchronization status of the mLAN devices, such as the Master and Slave relationships. If there is no master/slave relationship, a "---" (hyphen) will be displayed. If there is a master/slave relationship, the corresponding mLAN device will be displayed.

For an mLAN device that is set to the Group Master, the frequency symbol G will be displayed at the WC marker.

Master				Slave			
	Vender	Module	Nickname	Vender	Module	Nickname	
	---	---	---	YAMAHA	CS6R	magnolia	Auto: ▽
	---	---	---	YAMAHA	mLAN8P	Vivien	Internal: ▽
G	YAMAHA	MacDrvr	MacDrvr ▽	---	---	---	---

Operation

Making a connection

When you click on the ▼ mark (Macintosh) or right-click in the "From" (or "TO") field (Windows), the mLAN plugs available for connection will be shown in a popup menu. By traversing the sub-menus that appear, select the desired mLAN plug, and then click it to establish the connection. However, mLAN plugs that are grayed-out cannot be selected. Clicking (Macintosh) or right-clicking (Windows) an area that is displayed as "---" has no effect.

In the "From" field, specify the "To" mLAN plug

If you click (Macintosh) or right-click (Windows) while holding down the Ctrl key, you can select from the Nicknames as shown below. When the mLAN plugs are displayed in the popup menu, mLAN plugs that are temporarily unavailable for connection (e.g., if you attempt to connect an already-connected "To" mLAN plug to another "From" mLAN plug) will be displayed, but cannot be selected.

Click (Macintosh) or right-click (Windows) while holding down the Ctrl key

NOTE Selecting a plug while holding down the Shift key works in the same way as [Connect All] in the Edit menu. (Windows)

NOTE The popup menu will also appear when you press the Space key. This can also be used in conjunction with the Ctrl key.

You can delete the popup menu by pressing the Alt key.

NOTE A connection can also be made by dragging a mLAN plug and releasing it on the mLAN plug to which you wish to connect it. However, only one mLAN plug can be selected and dragged.

NOTE Releasing the plug while holding down the Shift key works in the same way as [Connect All] in the Edit menu. (Windows)

Connect by dragging and releasing an mLAN plug

(Macintosh)   (Windows)

Depending on the sorting, there may be cases as shown below in which a single "From" mLAN plug is connected to multiple "To" mLAN plugs. Spaces (blanks) will be displayed for the "From" mLAN plugs to indicate that the mLAN plug is identical.

If such cases are excepted, normal connections will show a single "From" mLAN plug for each "To" mLAN plug.

Data section after editing

From					To				
Vender ▽	Module	Nickname	Plug Name	Format	Vender	Module	Nickname	Plug Name	Format
YAMAHA	mLAN8P	#205_8P	St Mix R	44.1kHz, IEC958	YAMAHA	mLAN8P	#204_8P	Input 1	44.1kHz, IEC958
					YAMAHA	mLAN8P	#204_8P	Input 2	44.1kHz, IEC958
YAMAHA	mLAN8P	#205_8P	St Mix L	44.1kHz, IEC958	---	---	---	---	---
YAMAHA	mLAN8P	#205_8P	Dig In R	44.1kHz, IEC958	YAMAHA	mLAN8P	#204_8P	Input 4	44.1kHz, IEC958

Breaking a connection

When you click on the ▽ mark (Macintosh) or right-click (Windows) a connected mLAN plug, a Disconnect command will be added to the menu as shown below, and you can break the connection by selecting this command. If you select Disconnect All, all connections of the "module" you clicked will be disconnected.

Using the popup menu to disconnect
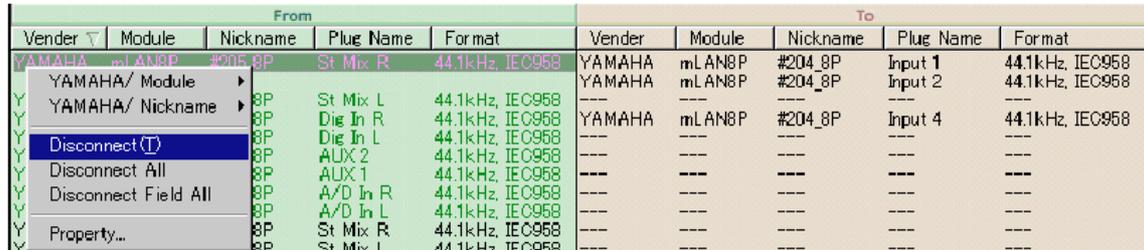
Master and slave settings

When you click on the ▽ mark (Macintosh) or right-click (Windows) an mLAN device in the Slave area, the mLAN devices that can be selected as the master will be displayed. Traverse the submenus of the popup menu to select the mLAN device that you wish to select as the master, and click (Macintosh) or left-click (Windows) it to connect that slave mLAN device to the specified master mLAN device.

Selecting the master from the popup menu

If there is a Group Master on the bus, by selecting the submenu of Group 1 of the Manual mode, as shown below, the mLAN devices lock to the Group Master. If the Group Master does not exist, set the Status to "Manual: Group 1" so that the devices will be ready for syncing to the Group Master.

Specifying the common word clock master from the popup menu
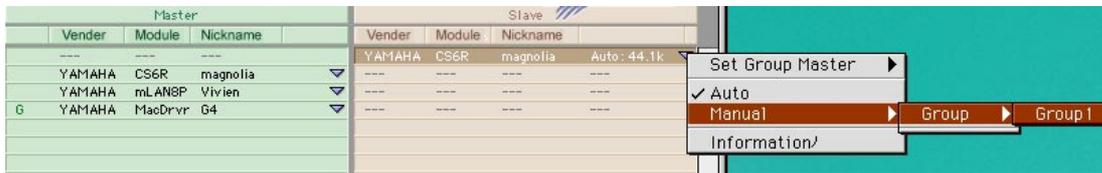
If a Slave mLAN device is in Manual mode, you can drag that item and release it on the mLAN device that you want to specify as the master to specify the master/slave relationship.

Drag and release the Slave mLAN device to specify the Master

Master and Slave mode settings

By clicking (Macintosh) or right-clicking (Windows) a Slave mLAN device, you can use the capabilities of the mLAN device to specify the Slave mode.

Mode settings for a Slave mLAN device
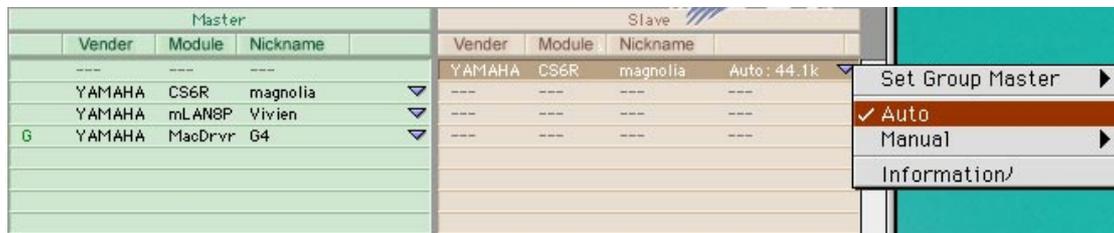
By clicking (Macintosh) or right-clicking (Windows) a Master mLAN device, you can use the capabilities of the mLAN device to set/cancel the Group Master. However, this setting is not possible for an mLAN device that does not have Group Master functionality.

Common word clock setting for a Master mLAN device