



## **MusicLab MIDloverLAN CP Driver for Mac OSX 10.3.5+ Version 2.2.1**



# **User's Manual**

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## **Introduction**

This document describes **MusicLab's MIDloverLAN CP Driver**, which allows to perform MIDI communications between several computer over Local Area Network. The driver provides up to **16 network In/Out** devices decorated as **NetPort 1...16**.

**MIDloverLAN CP v2.2.1** is a native CoreMIDI 1.3 driver. It presents new generation of previous **MIDloverLAN CP** products.

**MIDloverLAN CP driver** provides Network MIDI Devices (**NetPorts**) allowing to use several computers connected together via local network. In other words, it can receive/transmit MIDI events from/to remote computers via local network. Using MusicLab MIDloverLAN CP Driver you can easily:

- 1) synchronize sequencers on several computers;
- 2) play music using your sound devices located on different computers in a time (i.e. run GigaStudio on dedicated computer and connect it to your sequencer without annoying necessity of using traditional MIDI interfaces);
- 3) play jam sessions on several computers;
- 4) record music played back on remote computer;

In any case listed above you could setup your studio connections without traditional MIDI cables wherever possible!

Why do you really need MIDloverLAN CP Driver? You need it because MIDloverLAN CP Driver is all-in-one solution for communication between MIDI applications and computers via local network with multi-client device access to its own devices.

MIDloverLAN CP Driver is fully compatible with appropriate **PC WinXP** version (2.x) but **won't properly work** with PC WinXP previous versions (1.0 - 1.03).

Also the driver **won't properly work** simultaneously with previous Mac OSX versions invoked on the same computer.

## **History...**

### **MIDloverLAN CP driver version 2.2.1**

CoreMIDI 1.3 support is added.  
Improved MIDI Monitor visualization.  
Advanced error logging is added.  
Invariable driver's display name bug is fixed.  
OSX Tiger (10.4.1) compatibility.

### **MIDloverLAN CP driver version 2.2**

The driver allows to customize its display name.  
MIDI IN NetPort filter (ignoring ... only from remote port flag) bug is already fixed.  
Separately controlled port IN/OUT midi devices.  
MIDI monitor component is added.

### **MIDloverLAN CP driver version 2.1**

Added "Show Connectors" MolCpCtrlPanel configuration feature.  
Fixed several minor bugs.  
Documentation is updated.

### **MIDloverLAN CP driver version 2.0**

The product is implemented as the native CoreMIDI 1.1 driver.  
Better overall performance.

### **MIDloverLAN CP version 1.0**

Initial release.

## **System requirements**

**MINIMUM** : PowerPC G4 400 MHz, OSX 10.3.5, 128 MB RAM.

TCP/IP protocol installed for LAN devices functionality.

## **Installation**

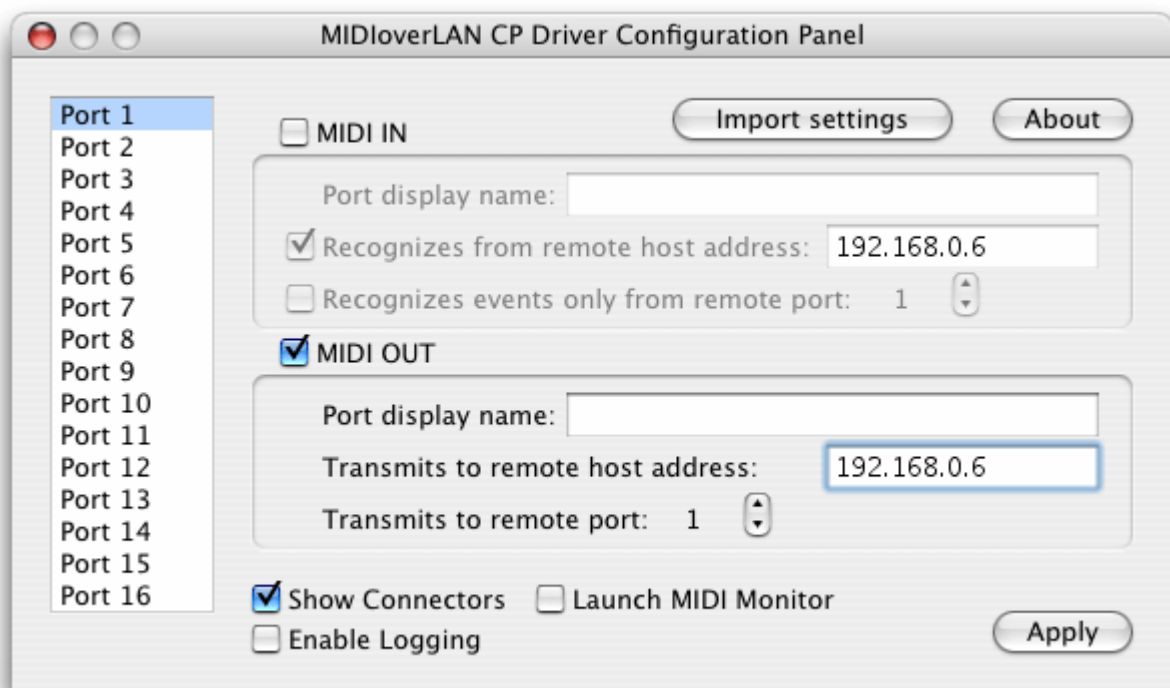
MIDloverLAN CP Driver version 2.2.1 is implemented as a full-featured time-restricted (untill registered) **Standard** edition. Trial period - 14 days.

Installation of **MIDloverLAN CP driver** for **Mac OSX** is easy:

- 1) Unstuff **molcp\_v22.sitx** file you've downloaded.
- 2) Put **MolCpCtrlPanel** bundle and **MolCP22.pdf** file (user's manual) to any folder you like.
- 3) Open **MolCpCtrlPanel** and click "**About**" button. Make sure your current (trial) license is valid. Register the driver if you've purchased permanent license. Close **MolCpCtrlPanel**.
- 4) Put both **MolCpMIDIDriver.plugin** and **MolCpMonitor** bundles to «<OSX Volume> / Library / Audio / MIDI Drivers» folder (**if that folder does not exist, just create it**).
- 5) After that the MIDloverLAN CP Driver is almost ready to work; You just need to configure it.

## Configuration

Doubleclick on **MolCpCtrlPanel** bundle.



**Figure 1**

To Enable / Disable port MIDI device (either IN or OUT separately) just check / uncheck appropriate <MIDI IN> / <MIDI OUT> check box..

### **MIDI IN device network configuration**

<Port display name> field is intended for customizing MIDI IN port name. You could assign any name you like for the port you currently configure. Leaving this field empty you let the driver use default port name (NetPort N).

- 1) when check boxes of the "MIDI IN" rectangle are both disabled (unchecked) the Port IN device will receive MIDI events from ANY hosts (IP addresses) and from ANY OUT Port numbers.
- 2) when check box <Recognizes from remote host address> is enabled (checked) you must specify this IP address on the right (assume 192.168.0.6). Now the Port IN device will receive MIDI events only from host 192.168.0.6 and from ANY its OUT Port numbers.
- 3) when check boxes are both enabled (checked) you must also specify remote Port number (assume 1). So the Port IN device will now receive MIDI events only from host 192.168.0.6 from its OUT Port 1.

You can use any variations of the settings described above.

## MIDI OUT device network configuration

The <Port display name> field is intended for customizing MIDI OUT port name. You could assign any name you like for the port you currently configure. Leaving this field empty you let the driver use default port name (NetPort N).

- 1) In the <Transmits to remote host address> edit box you must specify IP address of the host-recipient (suppose 192.168.0.6).
- 2) In the <Transmits to remote port> up-down box you must also specify remote port number you want to transmit MIDI events for (assume 1). So any events you send via OUT Port 1 will be recognized at host 192.168.0.6, IN Port 1 (just if the appropriate port is configured to recognize events from our host).
- 3) To transmit events for any hosts in range of 192.168.0.1 ... 192.168.0.254 just specify broadcast address 192.168.0.255.

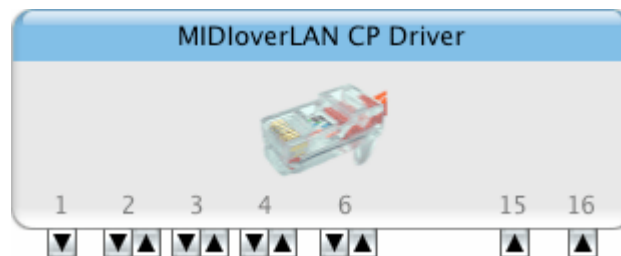
Note that OUT Port CANNOT be configured to transmit to ANY remote Port number.

## Driver and Audio MIDI Setup utility

Usually it is not necessary to show ports connectors in Audio MIDI Setup system utility window and therefore the “Show connectors” check box can stay disabled (unchecked) unless you need MIDI instrument paths and making virtual connections. In this mode the driver icon appears enough small and does not occupy extra place:



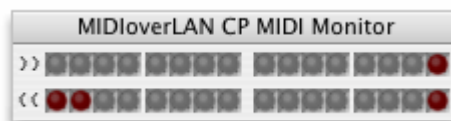
However if you really going to make virtual connections you should check “Show connectors” checkbox. Thus Audio MIDI Setup will show all the driver’s connectors for all netports enabled:



Checking “Enable logging” box you can turn on extended logging. See also [Troubleshooting](#).

## Using MIDI monitor

Unlike previous version (2.1) this one provides MIDI monitor component which works with the driver and allows to visualize MIDI events activity at the driver level.



The upper row of leds presents input NetPorts (1...16 left to right) and lower row – output NetPorts in the same order. Grey leds reflect disabled NetPorts whereas dark red – enabled ones. Whenever some MIDI event is being transferred through the driver and reaches MIDI input, appropriate led will blink with light red:



However MIDI monitor can reflect incoming MIDI events even for **disabled** input NetPorts. In this case appropriate led will blink with light grey. It is useful in configuring the driver:



Often you can see that MIDI monitor's input leds blinks but there's no input events from appropriate MIDI input in a MIDI sequencer. In most cases it means that incoming events are being filtered and lost because of improper NetPort "MIDI IN" settings. In this case appropriate input led will blink as follows:



Whenever the driver becomes active MIDI monitor will appear on the screen as top most window. None of other windows can hide MIDI monitor window except context menus. However if MIDI monitor window will hinder you can just exit MIDI monitor either by doc icon or menu bar. Moreover, to prevent launching MIDI monitor every time the driver becomes active just uncheck (disable) "Launch MIDI Monitor" box on the driver Control Panel window (by default it stays checked (enabled)).

**Note you may not try to launch MIDI monitor manually when the driver is already active, it will work incorrectly.**

## Applying new settings

Since you have finished driver's Ports configuration you should apply new settings clicking the <Apply> button. If the button is greyed you didn't change (or returned to current) settings. New settings will be applied by driver during the next MIDIServer session. In other words you should close all MIDI application to reload all CoreMIDI drivers.

## Importing current settings

If you have previously used MIDloverLAN CP application to simplify new driver configuration process you can import current settings from configuration file of previous versions (midioverlan\_cp.config.txt). Just click the <Import settings> button and choose old configuration file.

## Product registration

Using <About> button you can register the product and thus remove trial time limitation.



## **Troubleshooting**

**If you have firewall installed on your computer, to get MIDloverLAN CP working it is not necessary to turn firewall off. Instead you just have to configure it to pass network packets through UDP port 11000.**

If you suspect the driver works incorrectly, reveals its malfunction, open driver's Control Panel and enable logging checking appropriate box ("Enable logging"). Since it's done, all the driver components will record any error messages to the appropriate .log files. These files will be created in the same folder. Any information written to these .log files will help to troubleshoot the driver.

If you use **Digital Performer 4.5**, you cannot access driver ports while "Show connectors" option is enabled. Just disable the option and DP will allow to access MolCp ports.

Also, to be allowed to select certain MolCp port as MIDI track input you should enable multi record mode using menu item **"Studio->Multi Record"**.

## **Uninstallation**

To uninstall the driver you should remove two bundles:

<OSX Volume> / Library / Audio / MIDI Drivers / **MolCpMIDIDriver.plugin**

<OSX Volume> / Library / Audio / MIDI Drivers / **MolCpMonitor.plugin**

<The folder you chose while installing> / **MolCpCtrlPanel**

<The folder you chose while installing> / **MolCP22.pdf**

To completely clear driver settings you also should remove the following files

<OSX Volume> / Library / Preferences / **com.musiclab.MIDloverLAN CP.2.license.plist**

<OSX Volume> / Library / Preferences / **com.musiclab.MolCpDrv.2.plist**