YAMAHA DME-N Network Driver Installation Guide for LS9

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When you use the LS9 Editor, be sure to install the DME-N Network Driver of the following version.

For Windows XP: 1.0.1 or later For Windows Vista: 1.2.0 or later For Windows 7: 1.2.1 or later

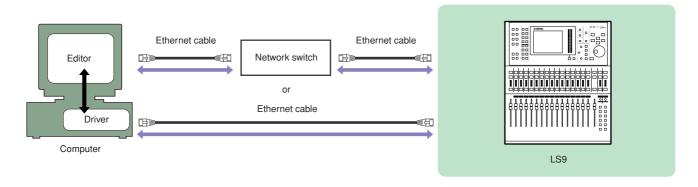
DME-N Network Driver

To operate your Yamaha hardware from your computer via Ethernet, you'll need to install the DME-N Network Driver software.

DME-N Network Driver is software that transfers MIDI data back and forth between your computer and the hardware via Ethernet cable.

Connection of computer and the LS9

Connect the computer to the LS9 by using an Ethernet cable via a network switch. When you connect the computer to the LS9 directly, you can use either a crossover or straight cable.



Minimum System Requirements

DME-N Network Driver applies to the system requirements of LS9 Editor. Refer to the LS9 Editor Installation Guide for details.

Installation

- 1 Log onto Windows with Administrator privileges.
- 2 Extract the data from the downloaded compressed file and open the "DME_Networkdrv_v***" folder.

 "***" represents the version number.
- 3 Double-click on "setup.exe."

When the setup has been initialized, a "Welcome" dialog box appears.

When running under Windows Vista / 7, the "User Account Control" dialog box may appear. Click [Continue].

4 Click [Next]. The DME-N Network Driver will be installed.

When installation is complete, a message appears indicating that setup has been completed.

In order for the newly installed DME-N Network Driver to take effect, select "Yes, I want to restart my computer now," and click [Finish].

The computer will restart.

The DMF-N Network Driver has been installed.

Uninstalling

Windows XP

Select [Start] → [Control Panel] → [Add or Remove Programs].

The "Add or Remove Programs" dialog box appears.

2 Click [Remove] for the DME-N Network Driver.

Follow the onscreen instructions to uninstall the driver.

If you attempt to reinstall the software after uninstalling it without first restarting your computer, the following message will appear and the install process will be aborted.

"Restart your computer, then run the installer."

The installer should run normally after your computer has been restarted.

Windows Vista / 7

1 Select [Start] → [Control Panel] → [Programs and Features] or [Uninstall a program].

The "Uninstall or change a program" dialog box appears.

2 Select "Yamaha DME-N Network Driver" and click [Uninstall].

Follow the onscreen instructions to uninstall the driver.

The "User Account Control" dialog box may appear. Click [Continue].

If you attempt to reinstall the software after uninstalling it without first restarting your computer, the following message will appear and the install process will be aborted.

"Restart your computer, then run the installer."

The installer should run normally after your computer has been restarted.

Setup

1 Log onto Windows with Administrator privileges.

In order to use the DME-N Network Driver, the computer and the LS9 must be properly connected and configured. For details on connections, refer to "Connection of computer and the LS9". For details on configuration, refer to "TCP/IP Settings" and "Troubleshooting (FAQ)".

2 Select [Start] → [Control Panel].

The "Control Panel" will appear.

3 If the control panel appears as category view, switch the view as follows:

For Windows XP

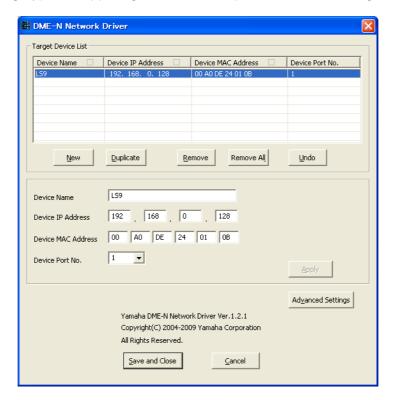
Click [Switch to Classic View] in the upper left of the control panel.

For Windows Vista

Click [Classic View] in the upper left of the control panel.

for Windows 7

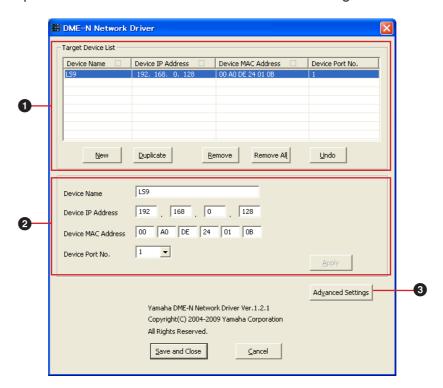
Click [View by: Category] in the upper right of the control panel, and select "Large icons" or "Small icons".



When running under Windows Vista / 7, the "User Account Control" dialog box may appear. Click [Continue].

If an application that uses the DME-N Network Driver is running at this time the "Quit all applications that use the DME-N Network Driver in order to change settings." message will appear. The DME-N Network Driver settings cannot be changed while any application that uses the DME-N Network Driver is running.

4 Set up the driver parameters via the "DME-N Network Driver" dialog box.



1 Target Device List

The name, IP address, MAC address, and MIDI port number of all devices registered to communicate with the DME-N Network Driver are shown in this list. Click the title bars to sort accordingly.

When a device is selected in the list, information related to that device will appear in the device information area (2) below the list.

Device Name

This column lists the names of devices registered to communicate with the DME-N Network driver. When a device is selected in the list it's name also appears in the Device Name field in the device information area (2) below the list.

Device IP Address

The IP address of the corresponding device. When a device is selected in the list it's IP address also appears in the Device IP Address field in the device information area (2) below the list.

Device MAC Address

The MAC address of the corresponding device. When a device is selected in the list it's MAC address also appears in the Device MAC Address field in the device information area (2) below the list.

Device Port No.

The MIDI port number of the corresponding device. When a device is selected in the list it's MIDI port number also appears in the Device Port No. field in the device information area (2) below the list.

[New] Button

Click this button to add a new device to the list. Edit the device's parameters as required via the fields in the device information area (2) below the list, then click the [Apply] button to add the specified device.

[Duplicate] Button

This button adds a device to the list by copying the data from the currently selected device. Edit the new device's parameters as required via the fields in the device information area (2) below the list, then click the [Apply] button to add the specified device.

[Remove] Button

Deletes the selected device from the list. If the removed device is not the lowest device in the list, all devices below the removed device will be shifted upward to maintain the continuity of the list.

[Remove ALL] Button

Deletes all devices from the list.

[Undo] Button

This button provides a one-step undo function that allows you to undo a single operation and revert to the previous state. The [Undo] button will be grayed out and inaccessible immediately after an undo operation or after the control panel is launched.

2 Device Information

When a device that is registered for communication with the DME-N Network Driver is selected in the Target Device List, the communication parameters for that device can be viewed and edited in the Device Information fields.

Device Name

This is the name of the device selected in the Target Device List. The initial default settings are "UNIT1" through "UNIT256," but the name can be edited as required in the Device Name field.

Device IP Address

The IP address of the device selected in the Target Device List can be set via these fields. To communicate with the LS9, enter the IP address set in the MISC SETUP screen of the LS9 console.

The IP address must be set properly or communication with the device will not be possible.

Device MAC Address

The MAC (Media Access Control) address of the device selected in the Target Device List can be set via these fields. The MAC address of each device is permanently assigned when the device is manufactured and cannot be changed. The MAC address parameter is included to prevent data from being sent to the wrong device if the IP address in inadvertently set incorrectly. To communicate with the LS9, you can confirm the MAC address in the MISC SETUP screen of the LS9 console.

The MAC address must be set properly or communication with the device will not be possible.

The MAC address of the connected device cannot be changed.

Device Port No.

The MIDI port number of the device selected in the Target Device List can be set via this menu. The MIDI port number also functions as device ID number. It should be set to "1" for LS9.

The MIDI port number must be set properly or communication with the device will not be possible.

[Apply] Button

Click the [Apply] button after editing the Device Name, Device IP Address, Device MAC Address, or Device Port No. parameters to actually apply the changes. Also, devices added to the Target Device List (1) by pressing the [NEW] or [DUPLICATE] buttons will only actually be registered for communication with the DME-N Network Driver when the [Apply] button is pressed.

3 [Advanced Settings] Button

Opens the "Advanced Settings" dialog box.

This window provides access to advanced settings. For details refer to the "Advanced Setup" section.

4 [Save and Close] Button

Click the [Save and Close] button to close the "DME-N Network Driver" dialog box and save the settings. This button is not accessible while an application that is using the DME-N Network Driver is running.

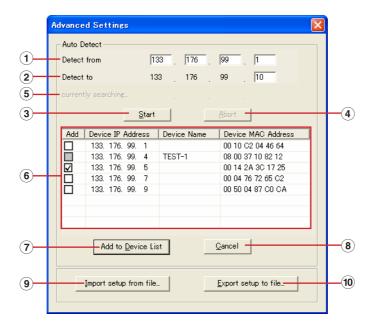
Click the [Cancel] button if you want to close the window without saving any changes.

Advanced Setup

The "Advanced Settings" dialog box can be opened by clicking the [Advanced Settings] button in the "DME-N Network Driver" dialog box.

"Advanced Settings" Dialog Box

The parameters in the "Advanced Settings" dialog box set up the DME-N Network Driver for automatic device detection, and allow saving and loading setup files.



Auto Detect

Allows automatic detection of connected devices. A maximum of 254 addresses (***.***.1 through ***.***.254) can be detected.

Only MAC addresses of devices on the same subnet as the computer can be detected.

Before searching for MAC addresses make sure that the computer is connected to the subnet to be searched, and that an appropriate IP address is assigned.

1 Detect from

Specifies the start IP address for automatic detection.

2 Detect to

Specifies the end IP address for automatic detection.

(3) [Start] Button

Initiates automatic detection, and causes the detected device list (6) to be updated accordingly. This button is grayed out and is not accessible during automatic detection.

4 [Abort] Button

Aborts automatic detection.

This button is grayed out when automatic detection is not in progress.

5 Currently searching

Displays the IP address being checked during automatic detection. No display when automatic detection is not in progress.

(6) Detected Device List

This list shows all detected devices. No devices will be displayed initially.

[Add] Checkbox

Checked devices will be added to the Target Device List when the [Add to Device List] button (below) is clicked. Devices that are already registered cannot be checked.

Device IP Address

The IP address of the corresponding detected device.

Device Name

If a name has been registered for the detected device it will be displayed here, otherwise no name will be displayed.

Device MAC Address

The MAC address of the corresponding detected device.

7 [Add to Device List] Button

Devices with checked [Add] checkboxes will be added to the Target Device List when this button is clicked.

8 [Cancel] Button

Closes the dialog box without making any changes.

9 [Import Setup from File] Button

When working in a different environment it is possible to load a previously saved setup file. Click to open the "Open existing file" dialog box.

Select a setup file and then click the [Open] button to import the corresponding settings.

(10) [Export Setup to File] Button

It is possible to save the setup data to a file that can then be reloaded when working in a different environment. Click to open the "Saves the current file with a new name" dialog box.

Enter a file name and click the [Save] button to save the setup file.

TCP/IP Settings

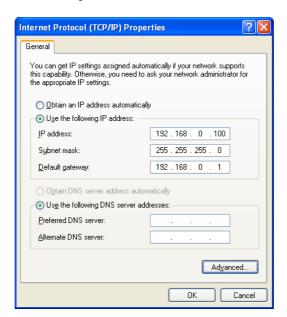
Windows XP

- Select [Start] → [Control Panel].
 The "Control Panel" is displayed.
- 2 If the control panel appears as category view, click [Switch to Classic View].
- 3 Double-click [Network Connections] → [Local Area Connection].

 The "Local Area Connection Status" dialog box will be displayed.

 DINOTE If the "Local Area Connection properties" dialog box appears, skip ahead to step 5.
- 4 Click [Properties].

 The "Local Area Connection Properties" dialog box will be displayed.
- **5** Select [Internet Protocol (TCP/IP)], then click [Properties]. The "Internet Protocol (TCP/IP) Properties" dialog box will be displayed.
- 6 Click [Use the following IP address].
- **7** Enter your computer's IP address into [IP address], the Gateway's IP address into [Default gateway], and "255.255.255.0" into [Subnet mask].



- When installing on the same subnet as the DME unit(s), set the gateway's host address to 254.
- 8 Click [OK].
- **9** Restart your computer.

Windows Vista / 7

Select [Start] → [Control Panel], then click or double-click [Network and Sharing Center] or [View network status and tasks].

The "Network and Sharing Center" is displayed.

2 Click [Manage network connection] or [Change Adapter settings] from the "Tasks" list located in the left side of "Network and Shareing Center" window, then double-click [Local Area Connection].

The "Local Area Connection Status" dialog box will be displayed.

The "User Account Control" dialog box may appear. Click [Continue].

If the "Local Area Connection properties" dialog box appears, skip ahead to step 4.

3 Click [Properties].

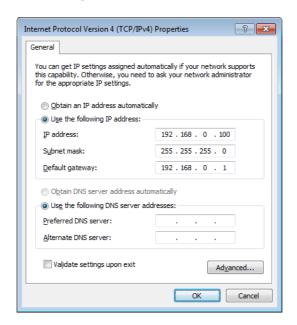
The "Local Area Connection properties" dialog box will be displayed.

The "User Account Control" dialog box may appear. Click [Continue].

4 Select [Internet Protocol Version 4(TCP/IPv4)], then click [Properties].

The "Internet Protocol Version 4(TCP/IPv4) Protocol" dialog box will be displayed.

- **5** Click [Use the following IP address].
- **6** Enter your computer's IP address into [IP address], the Gateway's IP address into [Default gateway], and "255.255.255.0" into [Subnet mask].



When installing on the same subnet as the DME unit(s), set the gateway's host address to 254.

Troubleshooting (FAQ)

When controlling the LS9 from your computer via Ethernet, the LS9 does not operate correctly.

- Is the Ethernet cable connected correctly?
 Refer to the "Connection of computer and the LS9" section.
- Is the DME-N Network Driver set up appropriately? Refer to the "Setup" section.
- Did you enter an appropriate IP address of the LS9?

Set the IP address of the LS9 in the MISC SETUP screen of the LS9.

If you are connecting the LS9 to your computer in a one-to-one connection, we recommend that you make the following initial settings.

IP address	192.168.0.128
Gateway address	192.168.0.1
Subnet mask	255.255.255.0

However, it must not conflict with the IP address of any other device on the network.

For details on settings when connecting to a LAN, refer to the LS9 Editor installation guide.

Is the computer network setup appropriately?

Confirm the network setup by following the procedures in the "TCP/IP Settings" section.

If you are connecting the LS9 to your computer in a one-to-one connection, we recommend that you make the following settings.

IP address	192.168.0.3
Subnet mask	255.255.255.0
Default gateway	192.168.0.1

However, it must not conflict with the IP address of any other device on the network.

For details on settings when connecting to a LAN, refer to the LS9 Editor installation guide.

- Are the settings of the LS9 and peripheral network devices (including switching hubs) appropriate?
 Refer to the relevant owner's manuals for the LS9 and peripheral network devices (including switching hubs) for details.
- Have you selected an appropriate ports in the LS9 Editor and Studio Manager?
 Select the LS9 as the input/output port settings of LS9 Editor and Studio Manager.
- Are you using the latest DME-N Network Driver?

The latest driver can be downloaded from the Yamaha website http://www.yamahaproaudio.com/

Are the settings of your security software appropriate?

If using Windows firewall:

For Windows XP

Click [Start] \rightarrow [Control Panel] \rightarrow [Windows Firewall] \rightarrow [General] tab. Remove the [Don't allow exceptions] checkbox.

For Windows Vista

 $\hbox{Click [Start]} \to \hbox{[Control Panel]} \to \hbox{[Windows Firewall]} \to \hbox{[Change settings]} \to \hbox{[General] tab. Remove the [Block all incoming connections] checkbox. }$

For Windows 7

Click [Start] \rightarrow [Control Panel] \rightarrow [Windows Firewall]. Confirm the communication with the DME-N Network Driver is permitted at [Inbound Rules] and [Monitoring] \rightarrow [Firewall].

If using other security software:

Either set the security software to allow use of TCP port 12300 on the network card being used by the DME-N Network Driver, or disable the security software.