

DME Setup Manual

This manual describes the process of setting up a DME system, from making the initial DME unit settings (DME64N / DME24N / DME8i-C / DME8o-C / DME4io-C / DME8i-ES / DME8o-ES / DME4io-ES) to synchronizing with the DME Designer application installed on a computer.

- For more details regarding a specific DME unit, please refer to the manual supplied with the unit in question, and for more details regarding the DME Designer application, please refer to the DME Designer manual (pdf).
- Please note that, within this document, the term “DME” refers to the DME64N and DME24N, while the term “DME Satellite” refers to the DME8i-C, DME8o-C, DME4io-C, DME8i-ES, DME8o-ES, and DME4io-ES

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Troubleshooting & Tips Chart

This chart serves as a quick guide to the steps that should be taken to ensure correct operation of DME units.

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1. Installing the Software

Begin by downloading the DME Designer Combo Installer and the USB-MIDI Driver from the “Downloads” page on the Yamaha Pro Audio website (http://www.yamahaproaudio.com/downloads/firm_soft/index.html).

The following items must be downloaded in order that DME Series devices can be connected to a computer and put to practical use.

■ DME Designer Combo Installer

Note: While it may be downloaded separately, DME-N Network Driver can also be found within the same folder as DME Designer when that application has been downloaded.

1. DME Designer:

This dedicated application is used to make system settings within DME units and to conveniently setup sound-processing configurations.

Note: DME Designer can be freely used on your computer even when no DME units are connected.

2. DME-N Network Driver:

This driver is needed in order for your computer and DME unit(s) to be connected via Ethernet.

■ USB-MIDI Driver:

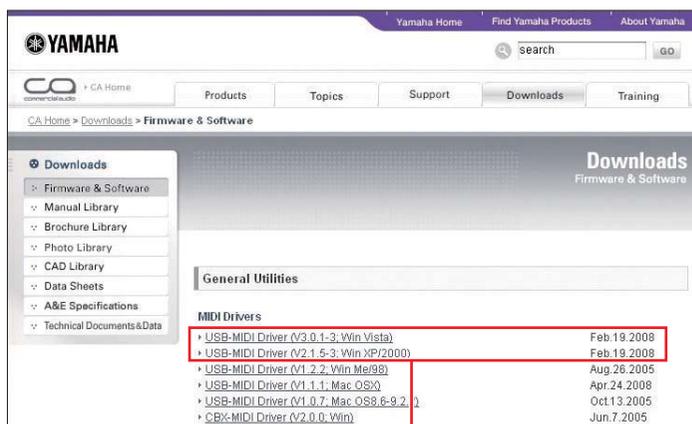
This driver is needed in order for your computer and a DME unit to be connected using a USB cable.

DME Designer Combo Installer
(that contains DME Designer application and DME-N Network Driver)



Use this link to download the required driver.

USB-MIDI Driver



Select the correct driver for your computer's OS.

Note: DME Designer V3 supports Windows 2000, XP, and Vista.

When each has been downloaded, please expand it and place the expanded folder in an easy-to-find location such as your desktop. Then, follow the steps described below in order to install the software.

1-1. Install DME Designer and DME-N Network Driver

Follow the procedure outlined below to install the DME Designer application and the DME-N Network Driver using the DME Designer Combo Installer.

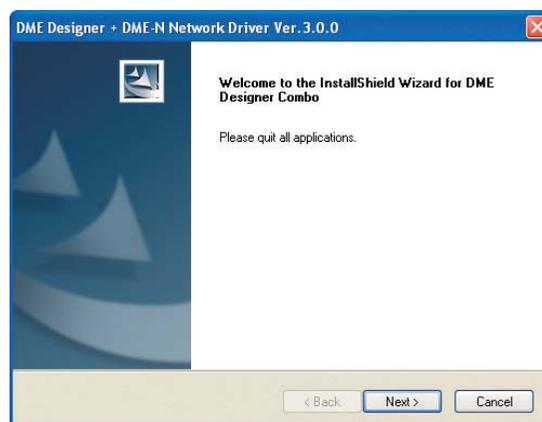
1-1-1. Once downloaded and extracted, open the DME Designer Combo Installer V*.*.*. folder and double-click the “setup.exe” application.

The setup wizard for the DME Designer Combo Installer will be displayed. (Note: V*.*. indicates the version number of the actual file.)

1-1-2. Follow the instructions provided on-screen to install the software.

DME Designer will be installed first of all, followed by the DME-N Network Driver. During this process, the software will be installed inside a folder named “DME Designer” in the Program Files\YAMAHA\OPT Tools directory (default).

Note: If a previous version of either of these exists on your computer, it will be uninstalled before installation of the new version begins. In such a case, you will be asked to restart your computer after the older software has been uninstalled. Whether replacing a previous version or installing for the first time, it will be necessary to restart your computer. Please follow the instructions given at that time.



1-2. Install the USB-MIDI Driver

1-2-1 Turn on the DME unit and connect it to your computer using a USB cable. When the message "Installing device driver software" appears in the taskbar at the bottom right of the screen, install the driver manually.



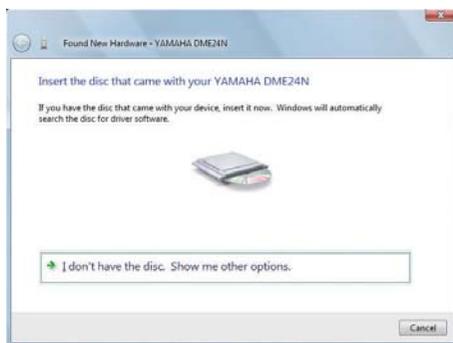
1-2-2

"Found New Hardware" window appears. Select [Locate and install driver software (recommended)].



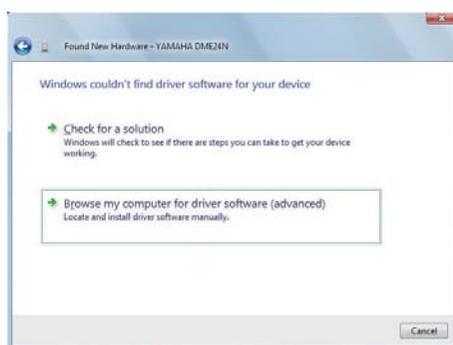
1-2-3

Select [I don't have the disc. Show me other options.].



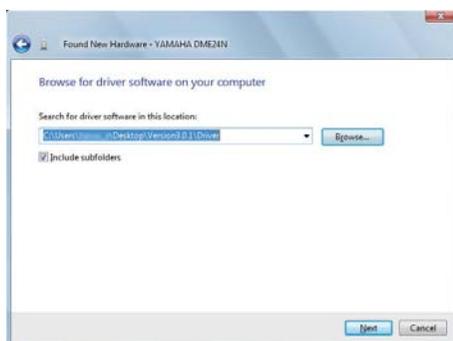
1-2-4

Select [Browse my computer for driver software (advanced)].



1-2-5

Click the [Browse] button. Locate the downloaded and extracted "Driver" folder and click [OK]. Click [Next] to start the installation process.



1-2-6

Click the [Install] button.



1-2-7

Installing driver software.



1-2-8

A message will appear when installation has finished. Click [Close] to complete the driver installation process.



1-2-9



The procedure and screen which were described here are a case of Windows Vista. When Windows 2000 or Windows XP is used, please set up similarly according to directions of a screen.

For the latest information about DME Designer System Requirements, visit the Yamaha Pro Audio website:

<http://www.yamahaproaudio.com/>

Troubleshooting & Tips

Precaution regarding USB ports and driver installation

On computers featuring multiple USB ports, drivers are installed individually for each port. After installation, therefore, if connection is made via a port other than that originally used, it will be necessary to install the driver once again. To avoid this, either set a dedicated port for DME connection in advance or install the driver on all of your computer's ports.

It is also important to note that USB drivers differ depending on the model of DME used. Although the same driver can be used for multiple DME units of the same model, different models – such as the DME64N and DME24N – require different USB drivers. (To be exact, the USB drivers themselves are identical, but the INF files used upon installation differ.)

Avoid USB hubs

As is often the case with digital mixers, your computer may not recognize the DME unit if connected via a USB hub. In principle, therefore, connection should be made directly to one of your computer's built-in USB ports.

2. Basic Setup

Connecting a single DME unit directly to a computer via USB cable

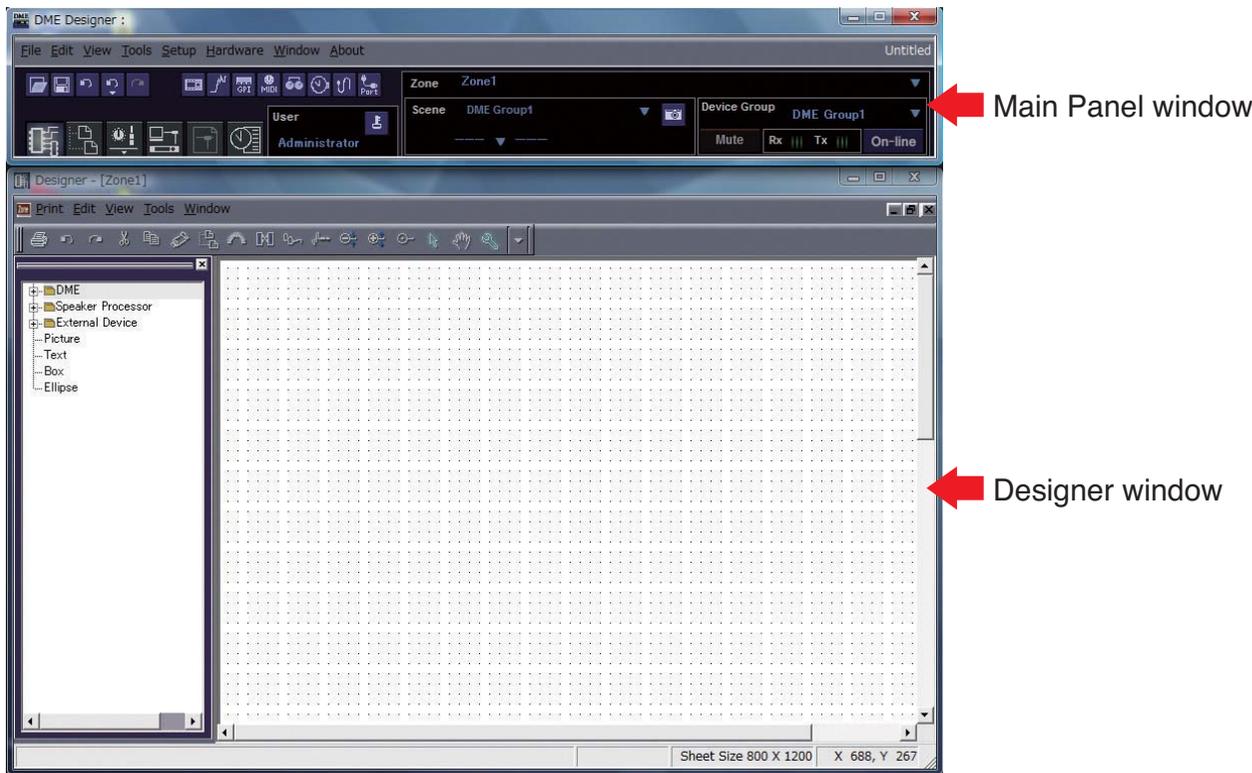
This section covers the most basic configuration – that is, using a single PC to control a single DME unit.



2-1. Preparation

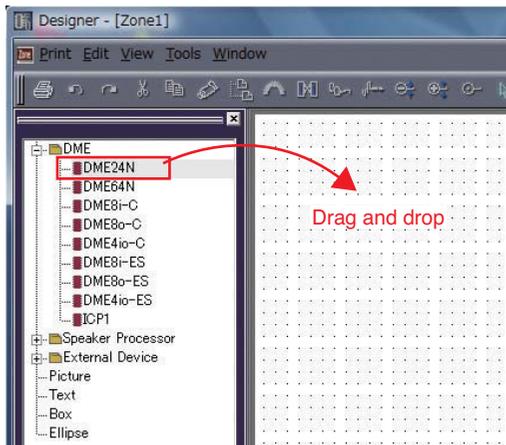
Before launching DME Designer, it is critical that the DME unit is turned on and then connected to the computer using a USB cable. Once the DME unit has been connected, launch DME Designer.

Upon launch, two windows will be displayed.



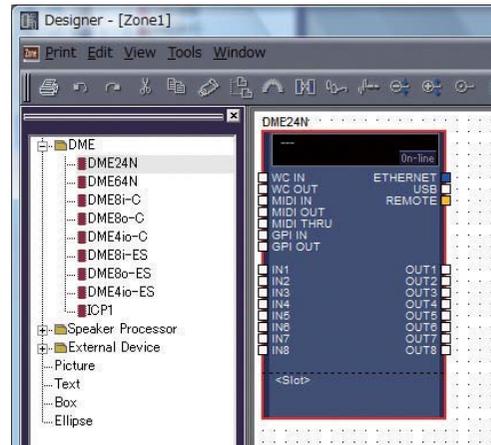
In order to setup the currently-connected DME unit for editing, double-click [DME] at the left of the Designer window.

Next, either double-click the currently connected DME unit (a DME24N in this case) or drag and drop it to the editing area located to the right of the list.



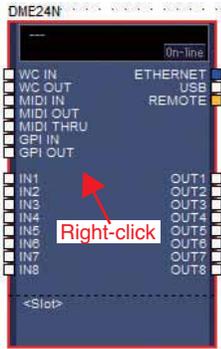
In response to this action, the Device Group and Sampling Frequency Settings window will be displayed. Click the [OK] button to proceed.

* Group settings are not necessary when only one DME unit is connected.
* The sampling rate can be changed later on.



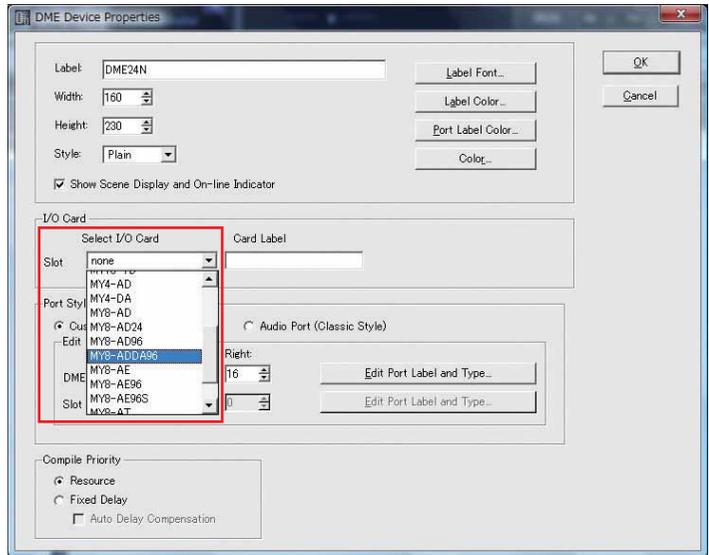
2-2. Setting up DME cards

The following settings are required only when expansion cards will be used with the DME24N, or DME64N. If this is not the case, proceed to Step (2-3) below.



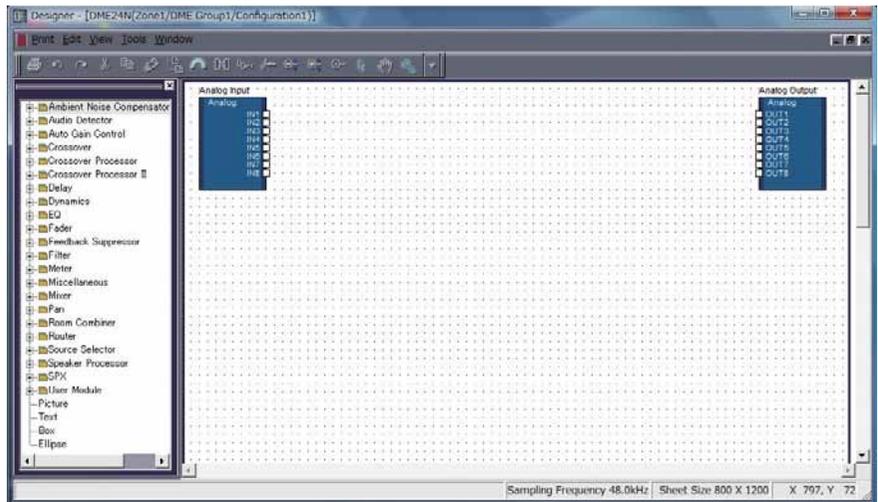
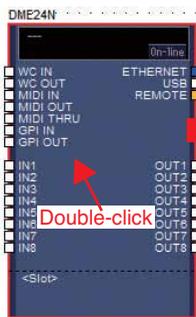
With the expansion card already inserted into the DME unit, right-click on the corresponding DME icon and select [Properties...] from the bottom of the menu displayed.

In the DME Device Properties window that is displayed, select the currently-inserted expansion card as shown below and click the [OK] button.

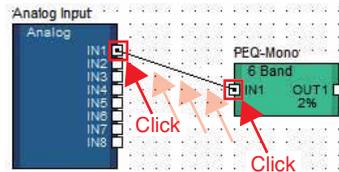
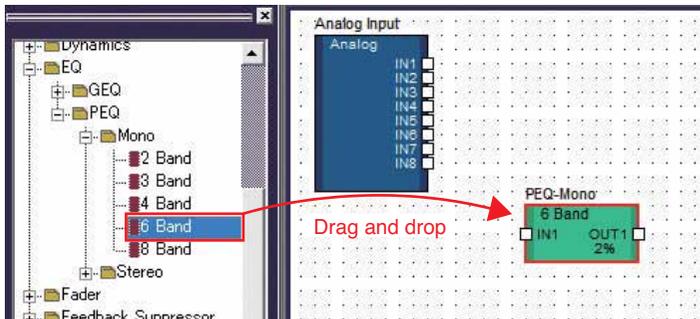


2-3. Configuring components

First of all, double-click the icon for your DME unit to display the Configuration window.



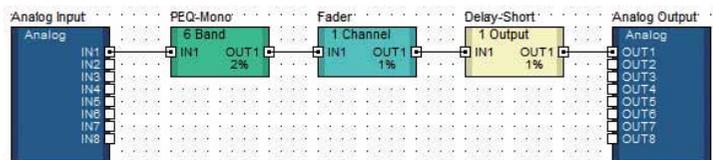
Drag and drop the components that you require into the configuration area from the list on the left-hand side.



To connect components, click the required input or output port and drag the end of the connecting wire to the required destination.

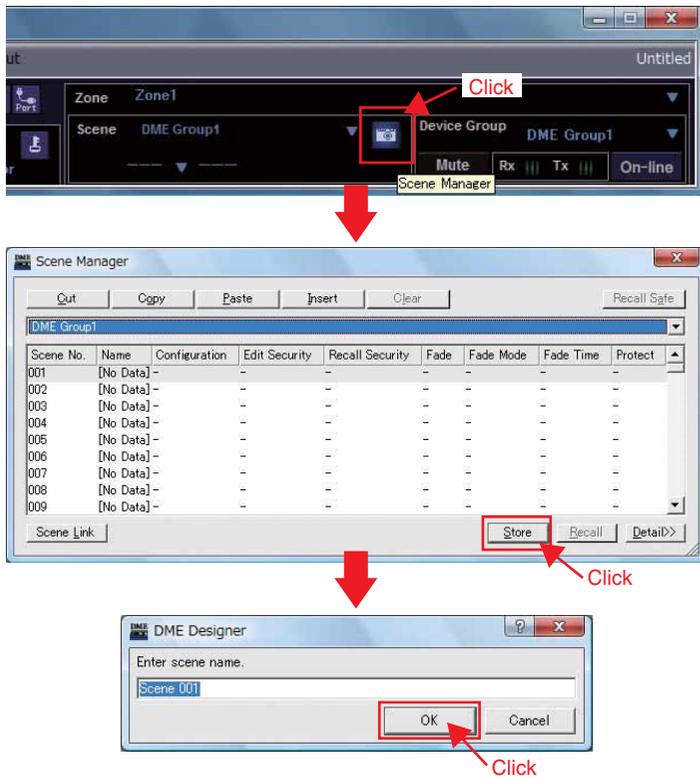
* Components can also be freely dragged around the configuration area using the mouse. To remove a component or an incorrectly connected wire, click the component or wire, confirm that it turns red, and then press the [Delete] button on the computer keyboard.

When you have setup all connections in the same way as shown below, its time to write the configuration to the DME unit.

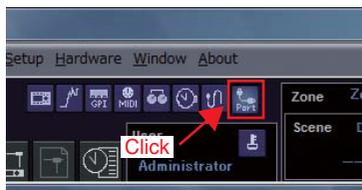


2-4. Creating scenes

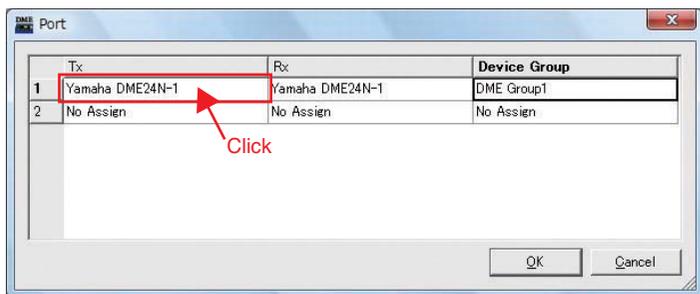
First of all, at least one scene must be setup for the data created thus far. To do so, follow the steps as shown below.



2-5. Going On-Line



When the Port window is displayed, ensure that the Tx, Rx, and Device Group settings are as shown below. If any are blank, click to display a list of options and select accordingly.

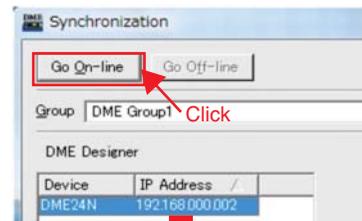
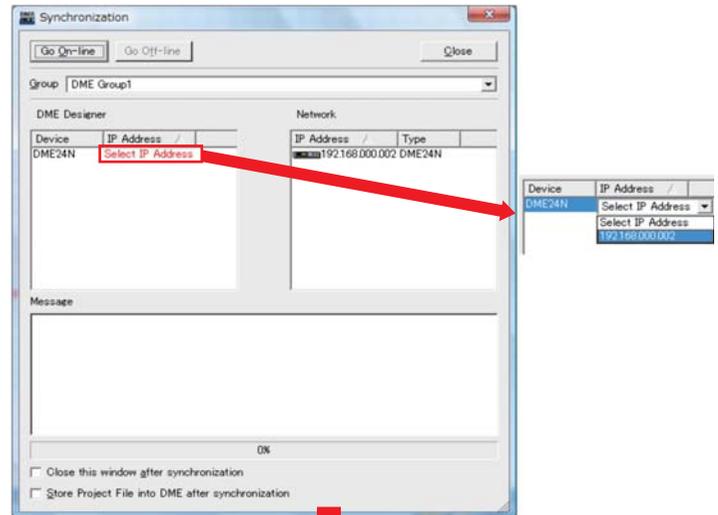


* If the required items are not displayed as a result of clicking, return to Step (2) above and repeat the setting process.

Next, click the [On-line] button from the Main Panel window.



When the Synchronization window is displayed, the text "Select IP Address" will be displayed in red. Click this message and select the required IP address from the drop-down menu.



When the Sync Direction window is displayed, ensure that [DME Designer -> Device] is selected, and then click the [OK] button.

In response to the prompt, "Synchronizing will cause audio to mute. Is this OK?", click the [Yes] button.

When writing has been completed, the message, "Saving the Designer file after synchronization will enhance the speed of the next synchronization. Do you want to save now?" will be displayed. If you want to save the file, click the [Yes] button.

After returning to the Synchronization window, click the [Close] button.

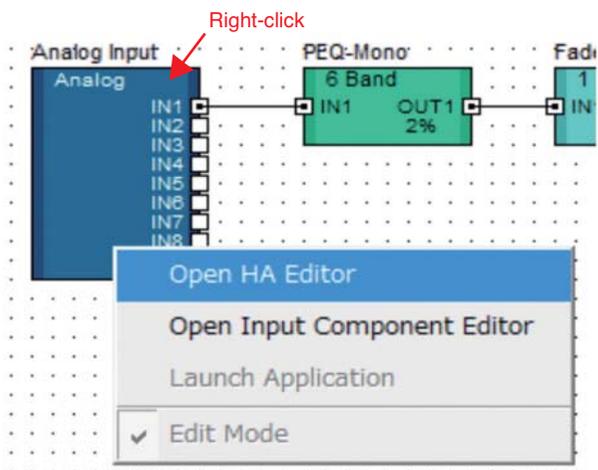
When synchronization has been successfully achieved, the [On-line] button at the bottom right of the Main Panel window will light up.



* To go offline, click the [On-line] button to turn it off.

2-6. Checking sound output

In the case of models with head amps, it will be necessary to configure HA control before sound output from the system can be checked. Right-click the [Analog Input] icon and select [Open HA Editor] from the drop-down menu.



Note

The level displayed by [Gain] is the sensitivity level to be matched. As the sensitivity of most professional audio equipment (using XLR connectors) is +4 dBu, the level shown by [Gain] should be set to "4" in such a case. When using input from microphones or other similar sources, turn the dial clockwise to adjust the input volume to a suitable level. Specifically, it is recommended that the level shown by the input meter be peaking at around -18 dB.

Troubleshooting & Tips

Host setting from the MIDI page on the hardware's Utility Display

The MIDI Setup page from the hardware's Utility Display contains a Host option, and if this is set to "USB-1" or "USB-2", MIDI data will also be exchanged via USB. In certain cases, this can make it impossible to connect successfully with DME Designer using a USB cable; accordingly, these settings should be avoided.

Problem: The DME unit does not operate correctly in response to control from your computer via USB.

Possible cause #1 and corrective action: DME Designer was launched before connecting the USB cable and turning on the DME unit. Ensure that the USB cable is connected and the DME unit is turned on before launching DME Designer.

Possible cause #2 and corrective action: The USB-MIDI Driver Thru ON/OFF parameter is not set to "OFF". Select [Start] → [Control Panel] → [Yamaha USB-MIDI Driver] and ensure that the [Thru ON/OFF] parameter is set to "OFF".

Possible cause #3 and corrective action: The same USB ports have been selected for DME Designer and other MIDI applications. Change port settings so that DME Designer and the other MIDI applications use different ports.

Possible cause #4 and corrective action: The number of registered MIDI devices exceeds the Windows limit. The Windows operating system allows a maximum of 10 MIDI device drivers to be installed and registered. In certain cases, connecting a device to a different USB port can lead to it being recognized as a different device, thereby "artificially" exceeding the limit. If MIDI does not function properly, therefore, try uninstalling and then reinstalling the USB-MIDI driver.

Possible cause #5 and corrective action: Your USB-MIDI driver is not the most up-to-date version supported by DME. Download and install the most up-to-date USB-MIDI driver from the Yamaha website (<http://www.yamahaproaudio.com/>)



By default, the gain is set to +10 dBu (i.e., the lowest possible level). Adjust the sensitivity to the correct level for the connected audio equipment.



3. Advanced Setup

Connecting multiple DME units to a computer via Ethernet cables

When to connect via Ethernet cables:

In the following three cases, a USB cable should not be used to connect your computer and DME units for actual operation; instead, you should make the necessary connections via Ethernet cables.

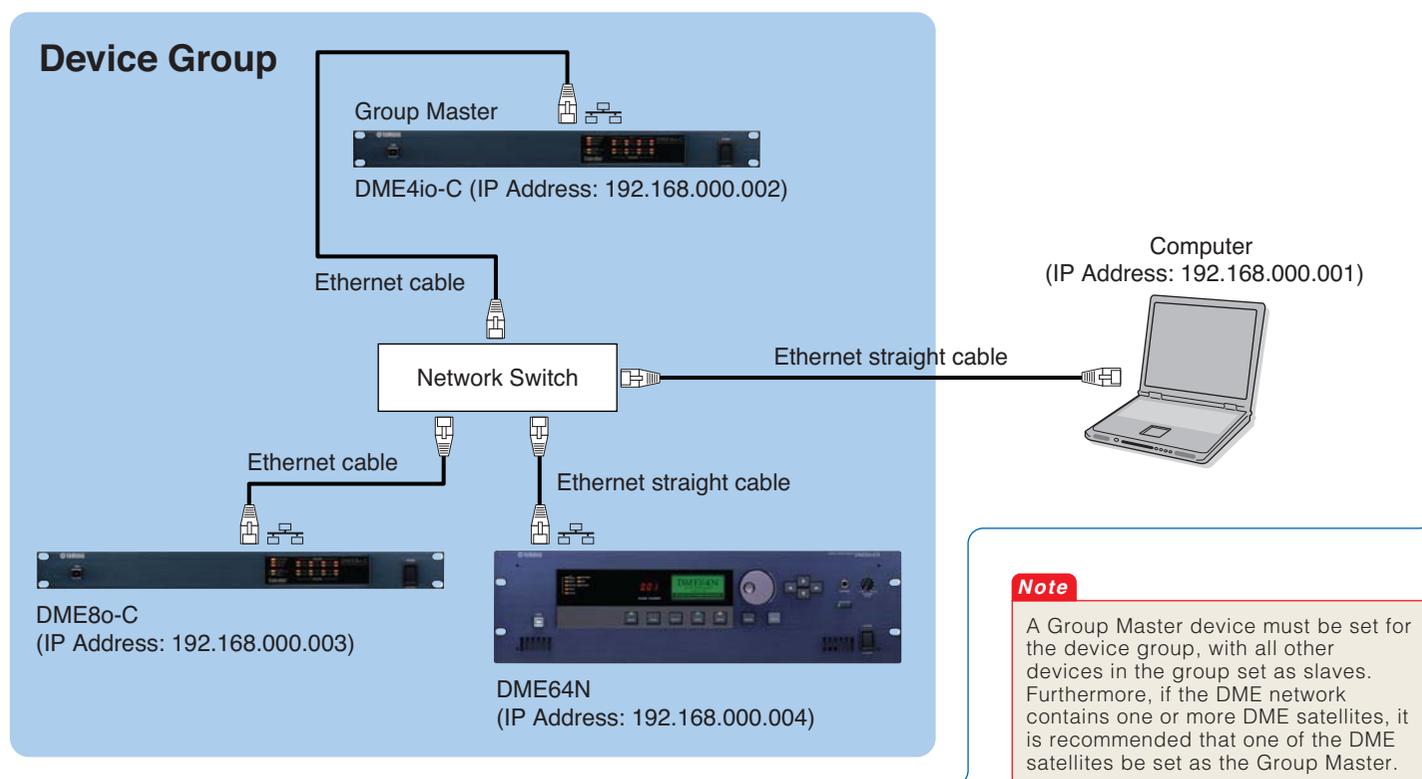
- **Two or more DME units are to be controlled in a single device group (using a Network switch).**
- **Long cables are needed for connection.**
- **The computer and DME unit(s) are to be connected wirelessly.**

Note

If a company or office network is to be used for this purpose, it will be necessary to switch back and forth between the DME network and the regular network. In such a case, we recommend connection via USB or the use of a commercially-available Ethernet/USB interface.

For the purpose of explanation, we will make the following settings.

This section will demonstrate how to make settings for the following sample configuration. It is important to remember, however, that devices should never be connected until the required settings have been made.



Note

A Group Master device must be set for the device group, with all other devices in the group set as slaves. Furthermore, if the DME network contains one or more DME satellites, it is recommended that one of the DME satellites be set as the Group Master.

3-1. DME setup

Assign an IP address to the DME unit using DME Designer connected via USB.

* By default, all DME units are assigned the IP address 192.168.000.002.

Please ensure that the USB-MIDI driver has been installed before proceeding.

* The same USB-MIDI driver can be used with DME satellites.

Note

Each DME unit to be networked must be assigned an IP address, and this is done either by connecting a PC via USB to one device at a time (described here). If using a DME64N or DME24N, setting can be performed directly via the front display (see page 13).

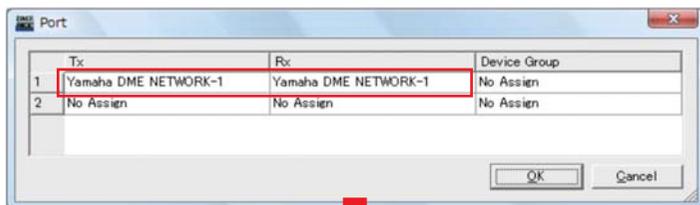


Do not connect the devices in a network until the IP addresses have been set. To set the IP addresses, connect PC to each device in turn, using a USB cable.

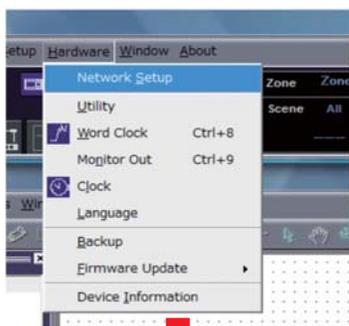
Note

The computer can be connected to the device group master using a USB cable. It is also possible to connect the computer to a Slave DME using a USB cable if a DME Satellite is assigned as the device group master.

Setup ports as shown below.



Select [Network Setup] from the [Hardware] menu on the Main Panel window

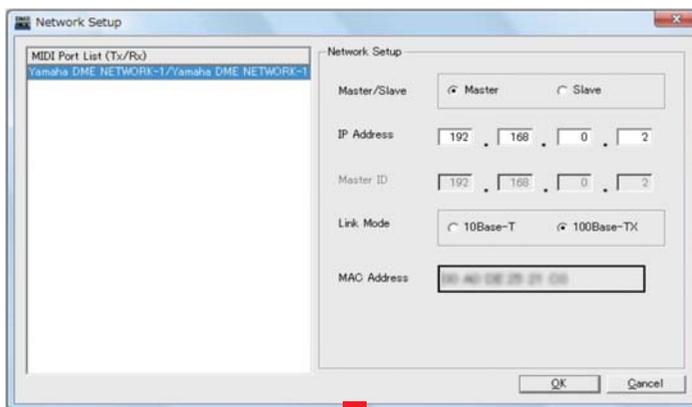


Click [Utility] to display the Utility window and then click the [Network] tab

* For now, the default settings for the DME4io-C can be used as is.

Click the [OK] button to proceed.

DME4io-C Settings



The next step is to make slave settings. In the same way as described above in (1) DME setup, display the Network Setup window.

DME8o-C



Select [Slave] in the Master/Slave area of the Network Setup window for both the DME8o-C and the DME64N.

DME64N



Select [100Base-TX] in the Link Mode area of the Network Setup window for both the DME8o-C and the DME64N.

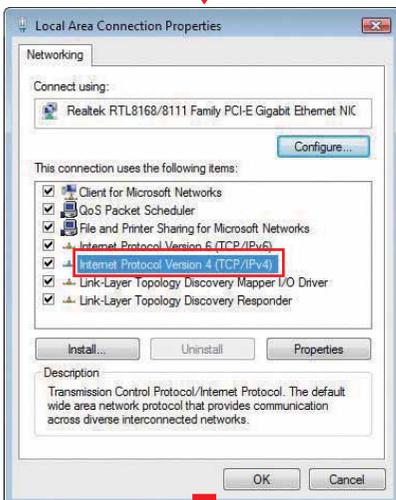
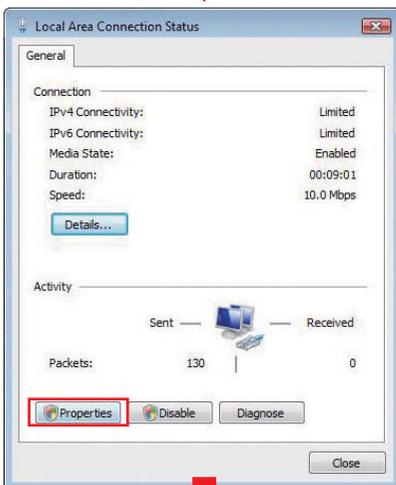
* Although an error will be displayed on DME units at this time, it can be ignored. (This message is output due to group settings not yet having been made.)

Note

1. Ensure that the switch is capable of 100Base-TX operation.
2. Cables used to connect DME units to a network switch can be up to 100 meters in length. Correct operation at this upper-limit length cannot, however, be guaranteed and will depend on the quality of the hub and cables used.
3. Be sure to use Cat 5 shielded twisted-pair cables in order to maximize resistance to electromagnetic interference.

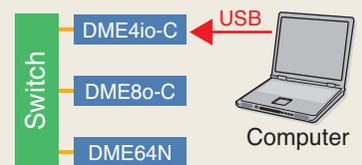
3-2. Changing the computer's IP address settings

Open the Control Panel, and then select "View network status and tasks".



Note

If your computer is being used within, for example, an office and already has an IP address, either the current setting can be transcribed or you can connect it to the Group Master using a USB cable in order to perform setting.



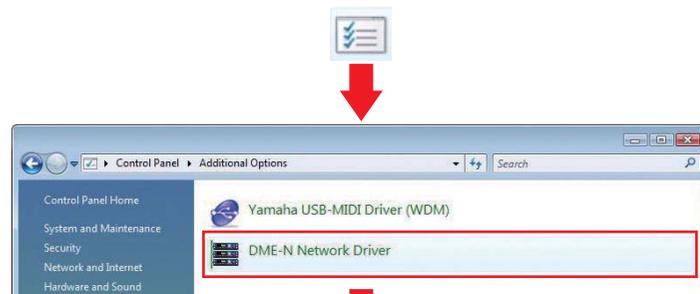
3-3. Connecting DME units to the network switch

When the required settings have been made, connect all DME units and the computer to the switch using Ethernet cables.

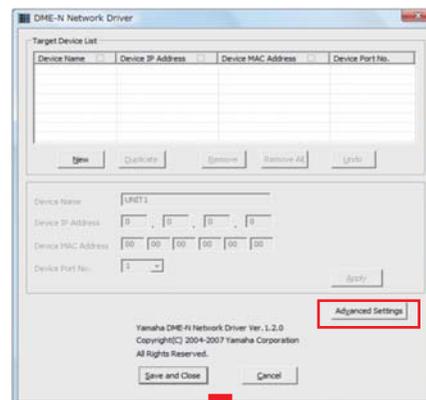
At this point, the network should be setup in the same way as shown in the Device Group diagram on page 08.

3-4. Setting the DME-N Network Driver

Select "Additional Options" from the Control Panel.



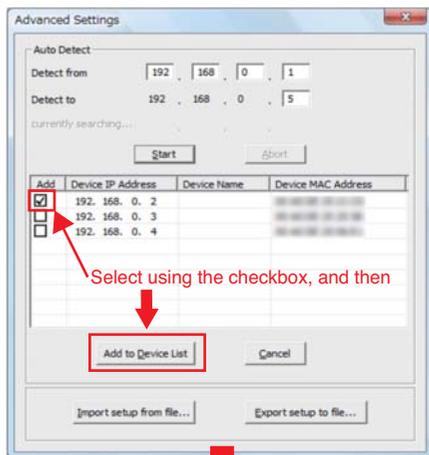
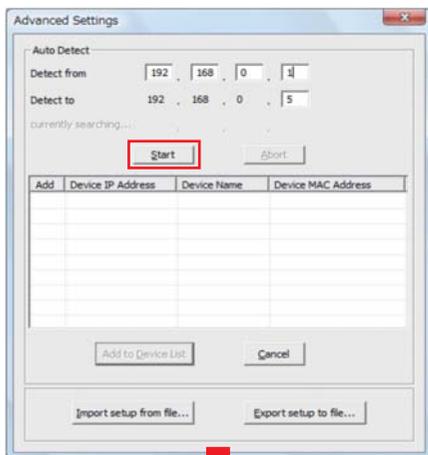
Select "Advanced Settings".



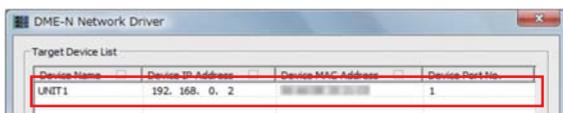
Note

In our example, the IP addresses of the first, second, and third devices are 192.168.0.2, 192.168.0.3, and 192.168.0.4, respectively. Accordingly, the last digit from [Detect from] should be set to 2 or lower, and the last digit from [Detect to] should be set to 4 or higher. (Please note that sorting may take a certain amount of time to complete if the search range is too large.)

Set the range of IP addresses to be sorted. Although the range in this case is 192.168.0.2 to 192.168.0.4, we can select with the default settings.



When all devices have been detected as shown below, select [Save and Close] to complete the procedure. Although the IP addresses for all connected DME units will be shown, a checkmark should only be placed next to that for the master device. When this IP address has been selected, click [Add to Device List].



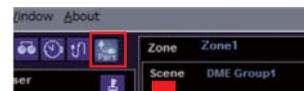
* You can change the device name by, for example, entering "DME4io-C" into the [UNIT1] field and then clicking the [Apply] button.

3-5. Connecting with DME Designer

Launch DME Designer and place each of the currently connected devices in the configuration.

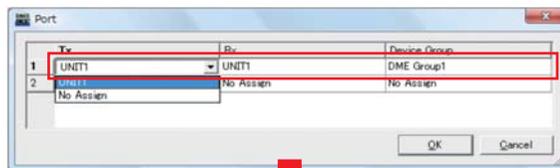


Once a configuration has been setup, create at least one scene.



Click the [Port] button.

In the Port dialog box, ensure that settings are as shown below and then click the [OK] button.

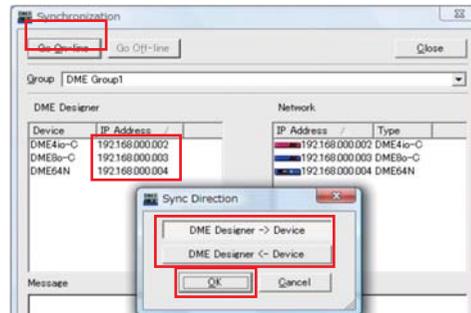


Next, click the [On-line] button from the Main Panel window



Click "Select IP Address", ensure that the IP addresses for all devices are displayed, and then click the [Go On-Line] button.

When the Sync Direction window is displayed, ensure that [DME Designer -> Device] is selected, and then click the [OK] button.



NOTE: If multiple device groups have been set up, use the [Device Group] drop-down menu to select the one to be synchronized.

Troubleshooting & Tips**Over-the-counter security software**

If antivirus, anti-spyware, or any other type of Internet security application is installed on your computer, its firewall may block the DME-N Network Driver, making connection and remote operation of the DME unit impossible. Care should also be taken with regard to compatibility with peer-to-peer applications and other communication software remaining constantly on in the background.

PC power-saving options

With laptops, certain power saving options can result in network communication being automatically turned off, which would lead to disconnection of the DME unit if online at the time. Should you become aware of this type of behavior, please check your power saving options.

Cables for computer connection (one-to-one)

The DME64N and DME24N can be connected using a crossover cable or a switch. DME Satellite units can be connected using a straight-through cable, a crossover cable, or a switch.

Wireless network

Over-the-counter wireless network access points can be used to establish connections with laptops featuring wireless functionality. A good understanding of network will be required in order to do so, and the access point's user manual should be referenced for setting-related details.

Word-clock settings

When a new file is created using DME Designer, the word clock is set to "INT48k" by default. In systems where the DME unit operates as a word-clock slave, it will be necessary to change this word-clock setting before going online. If the DME unit were to be brought online with the default setting unchanged, it would not be word-clock locked with the other units in the system, resulting in audible clicking and possibly damage to the other units. Whenever possible, it is recommended that clock settings be made using DME Designer.

DME initialization

In certain cases, DME initialization can prove effective in resolving problems. In particular, this approach is useful if a DME device freezes upon scene recall (either during startup or when connected online).

***: Take care to avoid selecting option 02 (Delete All Data), as this will result in the DME device's firmware also being deleted. It will not then be possible to use the device until the firmware is reinstalled.**

For details regarding initialization, please refer to the Owner's Manual that came with your DME device(s). Specifically, this information can be found in the section "Initializing the DME64N/DME24N" of the DME64N/DME24N manual, or in the section "Initializing the DME Satellite" of manuals for DME satellites.

Using the Analyze function

After a configuration has been created using DME Designer, we recommend that the Analyze function be used to check it. Please note that this function is the only way to fully determine the viability of a design – that is to say, operation cannot be guaranteed using the Resource Meter alone. It is important, therefore, that the Analyze function always be used to perform a final check.

Automatic backup function and going online

If the [Store Project File into DME after synchronization] option at the bottom left of the Synchronization window is not cleared when going online and synchronizing with DME Designer version 3 or later, DME Designer will create a backup of the computer's current data (.daf) within the DME unit's memory after going online. Please note that if Wave files are being used, synchronization can take at least twice as long as usual.

Furthermore, if your original project file is accidentally deleted or lost, synchronization with DME devices will no longer be possible. For safety's sake, therefore, it is advisable that a backup be made and that the [Store Project File into DME after synchronization] item from the Synchronization window or the DME File Storage item from the [File] menu be used to store a copy of this file also on the DME device(s).

Problem: A compile error occurs during synchronization.

Possible cause #1 and corrective action: DSP total resource consumption has exceeded the upper limit. Delete unneeded components. In addition, it may be possible to ensure that compilation will be completed normally even when total DSP resource consumption increases by replacing some components with others using fewer resources or by dividing the processing load between such components.

Possible cause #2 and corrective action: Wiring between components is connected from multiple output terminals to a single input. Change the wiring configuration so that each output is connected to a single input terminal. If necessary, a matrix mixer or similar component can be used to combine multiple outputs into one signal.

Problem: A component or wiring cannot be added.

Possible cause #1 and corrective action: DME Designer is online. Go offline by clicking [Go Off-line] in the Synchronization window.

Possible cause #2 and corrective action: The Designer Window is not in Edit Mode. Place a checkmark next to [Edit] on the [Tool] menu.

Possible cause #3 and corrective action: The current user is restricted from editing. Logoff and then logon again as a new user or as the Administrator. (If edit restrictions must be applied to a user, set the option [Edit] in the Security window.)

Problem: A user module is no longer displayed on the list.

Possible cause and corrective action: The contents folder ([File] menu → [Preference] → [ContentsFolder]) has been changed, or the "User Module" folder has been moved. Ensure that the user module files (.umf) are in the "ContentsFolder" and "User Module" folders.

Problem: Configurations cannot be switched in the Navigator window.

Possible cause and corrective action: While online, it is not possible to switch to a configuration that does not match the current scene. Switch to a scene corresponding to the required configuration.

Problem: A User Module window does not open when the user module is double-clicked.

Possible cause and corrective action: The user module in question has been saved with [Open User Module Design Window] selected. Open the save dialog, select [Open User Module Editor], and resave the user module.

Problem: An editor is not displayed when a slot-in component is right-clicked and [Open] is selected from its context menu.

Possible cause and corrective action: The slot-in component in question does not have an editor. No corrective action is required.

Problem: The message "Reset Config..." is displayed for a long time in the message area of the Synchronization window.

Possible cause and corrective action: Processing may take time when many scenes have been setup, and therefore, this display is not indicative of a problem. Allow processing to finish normally.

Problem: The monitor output cannot be set. (Applies to the DME64N and DME24N only.)

Possible cause and corrective action: Channels connected by wiring cannot be used for monitor output. Select a channel not connected in this way.

4. In-depth Information on DME Units

Connecting to External Devices

Optional Extras

ICP1, CP4SF, CP1SF, and CP4SW controllers are available as optional extras for remote external control of the DME units. For details regarding installation of a control panel and connection to the DME unit, please refer to the owner's manual that came with the control panel.

• Connection via Ethernet

Intelligent Control Panel ICP1

• Connection via General Purpose Interface (GPI)

Control Panel CP4SF, Control Panel CP1SF, or Control Panel CP4SW



ICP1



CP4SF



CP1SF



CP4SW

Tips

Whenever making GPI settings, check for responses using the GPI Setup page.

The GPI Setup page from the DME unit's Utility Display can be used to monitor in real time the signals being input via the GPI IN terminal. This can prove extremely useful in identifying the cause of GPI control problems after configuration as being within the GPI device, within the connections, or within the DME configuration. If the DME unit fails to operate as required even though a signal is returned to the GPI IN terminal, the prob-

lem probably lies in the configuration data, or although unlikely, in the DME unit itself. As this page can be used to check for GPI responses when making GPI settings, it can be employed to great effect.

Maximum length of GPI cables

CPEV cables with a core diameter of 0.65 mm or more can be used over distances of up to 100 m.

Setting up DME64N/24N Networks via Panel Operations

Device group and IP address settings for DME64N and DME24N units can be made directly via their front panels as follows.

1. Turn on the DME64N/24N.

2. Press the [HOME] key to display the main screen.

3. Press and hold the [UTILITY] key for at least 2 seconds to display the Utility screen.

4. Press the [UTILITY] key several times until the Net page appears.

5. Use the [▲] and [▼] keys to move the cursor to the parameters listed below and press the [ENTER] key.

The corresponding editing dialog will appear. Set each of the following parameters as described and press the [ENTER] key each time to confirm and enter the settings.

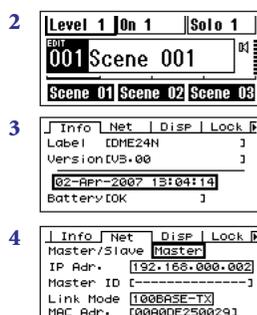
• Master/Slave

This parameter sets device-group master or slave status.

Master: One DME unit must be assigned as the master in each device group.

Slave: All other DME units in the group should be set to slave.

Note: When DME64N/24N and DME Satellite units are combined in a device group, be sure to assign a DME Satellite unit as the group master.



• IP Address

This parameter sets the IP address of the DME unit in question. All DME units in the same device group must share the same network address.

- Notes:**
1. When only one DME unit (Master) is used, the IP address should be set to "192.168.0.2".
 2. The subnet mask is fixed at "255.255.255.0".
 3. The host address can be set between 2 and 253 for the master device, and between 3 and 253 for slaves.
 4. Unless it is absolutely necessary to use a global IP address, you should always use a private address (that is, 192.168.0.2 through 192.168.255.253). Consult with your network administrator if a global address must be used.

• Master ID

When a device is assigned as a slave using Master/Slave above, this parameter sets the host address for the corresponding master. Setting of this parameter is not possible when the DME unit in question is assigned as the master.

• Link Mode

Ensure that "100Base-TX" is selected for this parameter.

6. Press the [HOME] key to return and save your changes.



Related web site on DME Units and peripherals

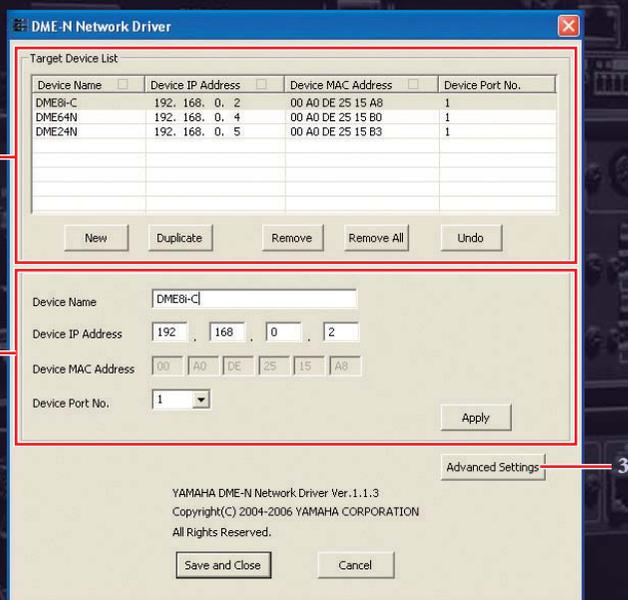
- The latest information about DME units and applications can be downloaded from the Yamaha Pro Audio website.
<http://www.yamahaproaudio.com>
- The latest version of the DME unit firmware can be downloaded from the Yamaha ProAudio website.
http://www.yamahaproaudio.com/downloads/firm_soft/index.html

- Library data for DMEseries Speaker Processor Components is available from the "Downloads" page of the Yamaha Pro Audio website:
<http://www.yamahaproaudio.com/downloads/documents/index.html>
- For information on touch panel controllers, visit:
AMX's web site: <http://www.amx.com/>
CRESTRON's web site: <http://www.crestron.com/>

Appendix: Detailed DME-N Network Driver Settings

DME-N Network Driver Window

Select [Start] → [Control Panel] → [DME-N Network Driver] to display the DME-N Network Driver window. The parameters contained in this window are used to specify device information for communication with the DME-N Network Driver



1. Target Device List

The Target Device List displays the name, IP address, MAC address, and MIDI port number of all units registered for communication with the DME-N Network Driver, and these can be sorted by clicking the corresponding title bar. When a unit is selected within this list, its communication parameters can be viewed and edited in the Device information (2) area below.

- **Device Name**
- **Device IP Address**
- **Device MAC Address**
- **Device Port No.**

These fields display the name, IP address, MAC address, and MIDI port number of the corresponding unit. Refer to the Device information (2) area for more details.

[New] button

Click [New] to add a new unit to the list. You can then edit the unit's parameters as required using the fields in the Device information (2) area below and click [APPLY] to confirm your changes.

[Duplicate] button

Click [Duplicate] to add a unit to the list by copying the data for the currently selected unit. You can then edit the unit's parameters as required using the fields in the Device information (2) area below and click [APPLY] to confirm your changes.

[Remove] button

Click [Remove] to delete the selected unit from the list. If the unit in question is not the lowest in the list, all those below it will be shifted upwards to maintain continuity.

[Remove ALL] button

Click [Remove ALL] to delete all units from the list.

[Undo] button

Click [Undo] to cancel a single operation and revert to the previous state. This button will be grayed out and inactive immediately after an undo operation or after the window is displayed.

2. Device Information Area

When a unit registered for communication with the DME-N Network Driver is selected in the Target Device List (1), its communication parameters can be viewed and edited in the Device information area.

[Device Name]

This field displays the name of the unit currently selected in the Target Device List. The names "UNIT1" through "UNIT256" are applied by default but can be freely edited using this field.

[Device IP Address]

The IP address of the unit currently selected in the Target Device List can be confirmed and set using these four fields. Refer to page 7 for details regarding the confirmation and setting of IP addresses.

Note: Communication with DME units is only possible if the corresponding IP addresses have been correctly setup.

[Device MAC Address]

These fields display the MAC (Media Access Control) address of the unit currently selected in the Target Device List. MAC addresses are permanently assigned when DME units are manufactured and they cannot be changed. They are included here to prevent data from being sent to the wrong unit if an incorrect IP address is set inadvertently. Refer to page 7 for details regarding the confirmation of MAC addresses.

Notes: 1. Communication with DME units is only possible if the corresponding MAC addresses have been correctly setup.
2. The MAC address of a connected unit cannot be changed.

[Device Port No.]

The MIDI port number of the unit currently selected in the Target Device List can be set using this field. Please note that the MIDI port number also functions as a device ID number. It should be set to "1" for DME Satellite units and to either "1" or "2" for DME64N/24N units.

Note: Communication with DME units is only possible if the corresponding MIDI port numbers have been correctly setup.

[Apply] button

Click [Apply] after editing the Device Name, Device IP Address, Device MAC Address, or Device Port No. parameters to confirm your changes. In addition, units added to the Target Device List (1) by clicking [New] or [Duplicate] will not be registered for communication with the DME-N Network Driver until [Apply] is clicked.

3. [Advanced Settings] Button

Click [Advanced Settings] to display the Advanced Settings window. For more details regarding the advanced settings that can be made using this window, please refer to the following Advanced Settings Window section.

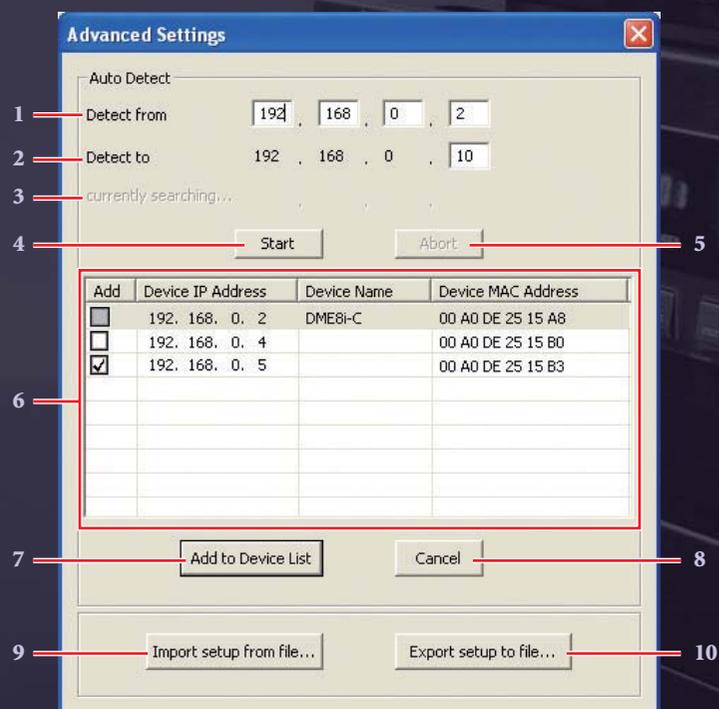
Advanced Settings Window

Click [Advanced Settings] in the DME-N Network Driver window to display the Advanced Settings window. The parameters presented in this window are used to setup automatic detection by the DME-N Network Driver; furthermore, setup files can also be imported and exported here.

Auto Detect area

The Auto Detect area is used to setup automatic detection of units that are connected and capable of communication with the DME-N Network Driver. In specific terms, a maximum of 254 addresses (***.***.***.1 through***.***.***.254) can be detected.

Note: Only the MAC addresses of units on the same subnet as the computer can be detected. Before searching for MAC addresses, therefore, ensure that the computer is connected to the subnet to be searched and that an appropriate IP address has been assigned.

**1. Detect from**

These fields are used to specify the start IP address for automatic detection.

2. Detect to

This field is used to specify the end IP address for automatic detection.

3. Currently searching

This area displays the IP address being checked during automatic detection and is blank otherwise.

4. [Start] button

Click [Start] to initiate automatic detection and populate the Detected Device List (6). Note that this button is grayed out and inactive during automatic detection.

5. [Abort] button

Click [Abort] to abort automatic detection. Note that this button is grayed out and inactive when automatic detection is not in progress.

6. Detected Device List

The Detected Device List displays all detected units that are connected and capable of communication with the DME-N Network Driver. No units will be displayed initially.

[Add] Checkbox

Set the [Add] checkbox for those units to be added to the Target Device List, and then click [Add to Device List] (below) to register the units in the list. It is not possible to set the checkboxes of units that have already been registered.

[Device IP Address]

This column displays the IP address of the detected unit in question.

[Device Name]

This column displays the name that has been registered for the detected unit in question. If no name has been registered, the corresponding cell will be blank.

[Device MAC Address]

This column displays the MAC address of the detected unit in question.

7. [Add to Device List] button

Click [Add to Device List] to register those detected units with set [Add] checkboxes in the Target Device List.

8. [Cancel] button

Click [Cancel] to close the window without making any changes.

9. [Import Setup from File] button

When working in a different environment, you can import a previously saved setup file. To do so, click [Import Setup from File] to display the Open window. Then, select a setup file and click [Open] to import the corresponding settings.

10. [Export Setup to File] button

You can export setup data to a file for importing when working in a different environment. To do so, click [Export Setup to File] to display the Save As window. Then, enter a file name and click [Save] to save the setup file.

Troubleshooting and Tips Chart at a Glance

This chart serves as a quick guide to the steps that should be taken to ensure correct operation of DME units.

Operation Category	Subject or Problem	Possible Causes & Corrective Actions
Installing the Software	Precaution regarding USB ports and driver installation	→ page03
	Avoid USB hubs	
Connecting Computer and DME unit (via USB cable)	Host setting from the MIDI page on the hardware's Utility Display	→ page07
	Problem: The DME unit does not operate correctly in response to control from your computer via USB.	
Connecting Computer and DME unit (via Ethernet cables)	Over-the-counter security software	→ page12
	PC power-saving options	
	Cables for computer connection (one-to-one)	
	Wireless network	
	Online connection: Word-clock settings	
	DME initialization	
	Using the Analyze function	
	Automatic backup function and going online	
	Problem: A compile error occurs during synchronization.	
	Problem: A component or wiring cannot be added.	
	Problem: A user module is no longer displayed on the list.	
	Problem: Configurations cannot be switched in the Navigator window.	
	Problem: A User Module window does not open when the user module is double-clicked.	
Problem: An editor is not displayed when a card component is right-clicked and [Open] is selected from its context menu.		
Problem: The message "Reset Config..." is displayed for a long time in the message area of the "Synchronization" dialog box.		
Problem: The monitor output cannot be set. (Applies to the DME64N and DME24N only.)		
In-depth information on DME Units	Function tip: Whenever making GPI settings, check for responses using the GPI Setup page.	→ page13
	Maximum length of GPI cables	

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