

## Nuendo 3 / DM1000 V2 Setup and Operation

This document describes setup and operation for remote control of Nuendo from the DM1000 digital mixing console. These instructions apply to DM1000 V2.0 or higher and Nuendo V3.0.0 or higher.

### Driver Installation

- 1) Connect your PC or Macintosh computer  
The DM1000 should be connected to your computer by connecting the TO HOST USB port on the DM1000 to a USB port on your computer.
- 2) Install Driver  
Once your computer is connected, you will need to install the USB-MIDI driver included on the DM1000 CD-ROM. It is recommended that you install the latest driver which can be downloaded from [www.yamahaproaudio.com](http://www.yamahaproaudio.com)

### Configuring DM1000 V2

- 1) Press the [SETUP] display access key and select the MIDI/TO HOST screen.
- 2) Set the DAW port assignment to USB 2-4 (this allows USB port 1 to be used for the DM1000 Studio Manager Editor software). Note: you must use USB ports 2-4 for DAW Control and USB port 1 for Studio Manager if you intend to use these two applications simultaneously.
- 3) Press the [REMOTE] display access key and assign NUENDO as the Target for one of the Remote layers.  
(See “About Remote Function” in the DM1000 manual for more information.)
- 4) Press the relevant [REMOTE] LAYER button to select the Nuendo Remote Control Layer.  
When the Nuendo Remote Control Layer is selected, the DM1000’s control surface controls Nuendo rather than the internal mixing of the DM1000. In order to control the DM1000, you need to select an Input Channel Layer or the Master Layer. Audio mixing on the Input and Master Layers, and Automix continues while the Nuendo Layer is selected.

### Configuring Nuendo V3.0.0 or higher

- 1) Click on the ‘Devices’ menu and select ‘Device Setup’.

- 2) Click on the '+' icon (Add Device), then click on 'Yamaha DM1000v2'. This will cause Yamaha DM1000v2 to appear in the Devices column on the left side of this window.
- 3) In the right side of the 'Device Setup' window, assign DM1000v2 to the correct MIDI Input and Output ports. For example, if you have chosen USB 2-4 on DM1000, choose 'YAMAHA USB 0-2' in Windows XP/2000 systems (choose 'YAMAHA DM1000 Port2' in Mac OS X). Then select the same port number for MIDI Output. This will cause USB ports 2 through 4 to be assigned for remote control of Nuendo from DM1000.
- 4) The grid below the MIDI port assignment, showing various F key commands can be ignored. The function of USER DEFINED keys on DM1000 V2 are assigned from the mixing console and they cannot be edited in this list. These functions are described later in this document.
- 5) After completing these assignments, click 'Apply' towards the bottom of the Device Setup window. Then click 'OK' to exit this window.

## **Controlling Nuendo**

### **Input Channel Controls**

Faders 1-16 control the levels of Nuendo channels 1-16.

(Refer to the User Defined Keys description below for information about accessing Nuendo channels beyond 1-16.)

The first four characters of the names of the Nuendo channels appear in the LCD of DM1000 when the CHANNEL display is selected by the F3 display key. Also PAN position is displayed here and can be adjusted with each channel's rotary encoder. For surround panning, pressing the PAN ENCODER MODE switch alternates the function of the encoder between Left-Right and Front-Back panning. Whenever PAN encoder mode is active, pushing the encoder activates the MONITOR switch in Nuendo.

The DM1000 ON switches control each Nuendo channel's MUTE, and the SOLO and SEL switches also control Nuendo's corresponding functions.

By changing the DM1000's ENCODER MODE to AUX, Nuendo's SENDS can be controlled. Sends 1-8 can be selected with the DM1000's AUX SELECT switches. Then turning the channel rotary encoders will adjust the send level (this can be seen in the CHANNEL LCD display), and the send can be switched ON/OFF by pushing the encoder.

### **Selected Channel Functions**

Pressing the [ROUTING] display access key in the SELECTED CHANNEL section of DM1000 will cause the VST Audio Channel Settings window to open in Nuendo. This window can also be opened by pressing the [PAN/SURROUND] or [INSERT/DELAY] keys in the DISPLAY ACCESS section of DM1000.

#### EQ

The four bands of EQ GAIN, FREQUENCY and Q on DM1000 control the same functions on the selected Nuendo channel. To switch an EQ band On or Off, hold down the LOW/LOW-MID/HIGH-MID/HIGH switch for one second.

The entire EQ section can be bypassed by pressing the [EQ] display access key in the SELECTED CHANNEL section of DM1000 for one second.

#### PAN

The JOYSTICK on DM1000 controls the surround panning of the selected Nuendo channel. Even if there is no surround panning enabled, the joystick can be used for Left-Right panning.

### **FX Sends, Routing and Insert Editing**

Press the F2 key under the LCD to display FX Send, Routing and Plug-in information on the LCD of DM1000.

#### FX SENDS

Move the Cursor in the DM1000 LCD to the box labelled SEND on the left-side of the display, and click ENTER to show FX Send information. The virtual encoders in the screen can be used to edit various functions, by moving the cursor to them and using the DM1000's large PARAMETER WHEEL:

- Encoder 1 edits the send level.
- Encoder 2 edits the send On/Off status (by turning the PARAMETER wheel).
- Encoder 3 edits between Pre and Post Fader (by turning the PARAMETER wheel).
- Pressing ENTER on any of the 4 encoders will bypass all sends.

There are 8 sends spread over 8 pages. To access different sends, use the LEFT and RIGHT arrow buttons below the LCD.

## ROUTING

Move the cursor over the ROUT box in the DM1000's LCD, and press ENTER to access Routing information in the LCD. There are two pages, accessed by pressing the LEFT and RIGHT arrow buttons below the LCD. The following functions can be edited:

### Page 1

- Encoder 1 chooses the Output Bus for the selected channel
- Encoder 2 switches the Monitor On/Off (by pressing ENTER or turning the PARAMETER wheel)
- Encoder 3 selects the Input bus
- Encoder 4 shows the Input Gain (this parameter cannot currently be edited by DM1000)

### Page 2

Only Encoder 1 has a function. It is used to switch the Input Phase On/Off (by pressing ENTER or turning the PARAMETER wheel).

## INSERTS

Move the cursor over the PLUGIN box in the DM1000's LCD, and press ENTER to access INSERT information in the LCD.

- Encoder 1 selects which insert is to be edited
- Encoder 2 switches the insert On/Off (by turning the PARAMETER wheel)
- Encoder 3 selects the type of effect to insert

Once an Effect has been selected, all the parameters can be edited by changing the page viewed on the LCD (by pressing the LEFT and RIGHT arrow buttons below the LCD). The number of pages available depends on the number of parameters used by the Effect.

Note: in any of the above modes, the EFFECT DISPLAY switch toggles between showing the parameter names and the parameter values on the LCD.

## **Transport, Automation & User Defined Keys**

By pressing the AUTO switch above the DM1000's STEREO Master Fader, the Channel SEL keys change function to control automation Read and Write modes. See DAW AUTO LATCH in the table below for more details.

With DM1000 V2, the USER DEFINED KEYS can be assigned to DAW control functions, such as various transport and automation functions. To edit the USER DEFINED functions, you must first exit from the REMOTE layer. Then press the [USER DEFINED KEYS] display access key.

USER DEFINED BANKS E and F are preset for the following functions:

<b>Bank</b>	<b>Key</b>	<b>Function Name</b>	<b>Nuendo control</b>
E	1	UDEF KEYS BANK F	- (Changes the User Defined Keys to Bank F)
	2	DAW WIN MIX/EDIT	Opens/Closes the Mixer Window
	3	DAW BANK -	Moves the Fader Bank down by 8 channels, to edit lower numbered channels
	4	DAW BANK +	Moves the Fader Bank up by 8 channels, to edit higher numbered channels
	5	DAW Channel -	Moves the Fader Bank down by one channel.
	6	DAW Channel +	Moves the Fader Bank up by one channel.
	7	DAW SHUTTLE	Transport Control: Shuttle (in conjunction with turning the PARAMETER wheel)
	8	DAW SCRUB	Transport Control: Scrub (in conjunction with turning the PARAMETER wheel)
	9	DAW STOP	Transport Control: Stop
	10	DAW PLAY	Transport Control: Play
	11	DAW SHIFT/ADD	-
	12	DAW OPTION/ALL	-
F	1	UDEF KEYS BANK E	- (Changes to Bank E)
	2	DAW AUTO STATUS	-
	3	DAW BANK -	Moves the Fader Bank down by 8 channels, to edit lower numbered channels
	4	DAW BANK +	Moves the Fader Bank up by 8 channels, to edit higher numbered channels
	5	DAW AUTO READ	-
	6	DAW AUTO TOUCH	-
	7	DAW AUTO LATCH	Changes the AUTOMIX On/Off mode for the channel SEL keys between READ and WRITE.
	8	DAW AUTO WRITE	Sets all channels to automation WRITE
	9	DAW AUTO TRIM	-
	10	DAW AUTO OFF	-
	11	DAW AUTO SUSPEND	Sets all channels to automation READ
	12	DAW OPTION/ALL	-

### Other User Defined Key functions

The USER DEFINED keys on DM1000 can be programmed for a variety of other DAW control functions. Not all of the DM1000 DAW functions work with Nuendo, but the table below lists those which do. These functions can only be assigned to USER DEFINED KEYS when the console is not in a REMOTE layer, but they will work even when the REMOTE layer is not selected:

<i>DM1000 Function</i>	<i>Nuendo function</i>
DAW REC	Transport Control: Record
DAW FF	Transport Control: Fast Forward
DAW REW	Transport control: Rewind
DAW IN	Locate to Left Marker
DAW OUT	Locate to Right Marker
DAW RTZ	Locate to Zero
DAW END	Locate to End of Project
DAW ONLINE	Switch SYNC online/offline
DAW LOOP	Transport Control: Loop playback
DAW QUICKPUNCH	Switch Punch In on/off.
DAW WIN TRANSPORT	Brings Project Window to the front
DAW WIN MEM-LOC	Show/hide Transport Window
DAW WIN STATUS	Show/hide Performance Window
DAW UNDO	Undo last edit
DAW SAVE	Save Project
DAW REC/RDY X	Record Enable for the chosen track number

### Meters & Time Counter

By pressing the F4 key below the LCD of DM1000, the level meters and names for the channels being controlled by the faders are shown. The meters can also be shown on the MB1000 Meter Bridge.

In the upper part of the LCD, the Time Counter is shown, with an indication of the scale (Time Code, Feet + Frames, Bars + Beats). If Samples is chosen as the scale, then no indication of scale is shown.

Also in the upper part of the display is an indication of whether the Parameter Wheel of DM1000 is being used for SCRUB or for normal parameter adjustment.