# Cubase SX3 / DM2000 V2 Setup and Operation

This document describes setup and operation for remote control of Cubase SX from the DM2000 digital mixing console. These instructions apply to DM2000 V2.0 or higher and Cubase SX V3.0.0 or higher.

#### **Driver Installation**

- 1) Connect your PC or Macintosh computer
  The DM2000 should be connected to your computer by connecting the TO HOST
  USB port on the DM2000 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 DM2000 CD-ROM. It is recommended that you install the latest driver which can be downloaded from www.yamahaproaudio.com

## Configuring DM2000 V2

- 1) Press the [SETUP] display access key and select the MIDI/TO HOST screen.
- 2) Set the DAW port assignment to USB 2-5 (this allows USB port 1 to be used for the DM2000 Studio Manager Editor software). Note: you must use USB ports 2-5 for DAW Control and USB port 1 for Studio Manager if you intend to use these two applications simultaneously.
- Press the [REMOTE] display access key and assign CUBASE SX as the Target for one of the Remote layers.

  (See "About Remote Layers" in the DM2000 manual for more information.)
- 4) Press the [LOCATOR] display access key and select DAW Control as the function for the transport and locate keys. This allows the Cubase SX transport to be controlled regardless of whether a Remote or Internal mixing layer is active.
- Press the relevant [REMOTE] LAYER button to select the Cubase SX Remote Control Layer.

  When the Cubase SX Remote Control Layer is selected, the DM2000's control surface controls Cubase SX rather than the internal mixing of the DM2000. In order to control the DM2000, 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 Cubase SX Layer is selected.

## Configuring Cubase SX 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 DM2000 V2'. This will cause Yamaha DM2000 V2 to appear in the Devices column on the left side of this window.
- In the right side of the 'Device Setup' window, assign DM2000 V2 to the correct MIDI Input and Output ports. For example, if you have chosen USB 2-5 on DM2000, 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 5 to be assigned for remote control of Cubase SX from DM2000.
- 4) In the grid below the MIDI port assignments, the functions of various USER DEFINED keys on the DM2000 can be assigned. Some USER DEFINED keys have permanent assignments so they are not available 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 Cubase SX**

# **Input Channel Controls**

Faders 1-24 control the levels of Cubase SX channels 1-24.

(Refer to the User Defined Keys description below for information about accessing Cubase SX channels beyond 1-24.)

The first four characters of the names of the Cubase SX channels appear in the Fluorescent channel strip display. 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. When the encoder is functioning in PAN mode, pushing the encoder will activate the MONITOR switch in Cubase SX.

The DM2000 ON switches control each Cubase SX channel's MUTE, and the SOLO and SEL switches also control Cubase SX's corresponding functions. The AUTO switches on DM2000 control Cubase SX's Automation Read function.

By changing the DM2000's ENCODER MODE to AUX/MTRX, Cubase SX's SENDS can be controlled. Sends 1-8 can be selected with the DM2000's AUX SELECT switches. Then turning the channel rotary encoders will adjust the send level, with the

level shown in the fluorescent display section. In this mode, each send can be switched On/Off by pressing the encoder.

#### **Selected Channel Functions**

Pressing any of the DISPLAY switches in the SELECTED CHANNEL section of DM2000 will cause the VST Audio Channel Settings window to open in Cubase SX.

#### **COPY & PASTE**

The CHANNEL COPY and PASTE switches on DM2000 perform the same functions as COPY and PASTE in Cubase SX's Edit menu.

## EQ

The four bands of EQ GAIN, FREQUENCY and Q on DM2000 control the same functions on the selected Cubase SX channel, and the parameter value is displayed on the console. To switch an EQ band On or Off, hold down the FREQUENCY/Q encoder for one second.

The entire EQ section can be bypassed by pressing the EQ ON key in the SELECTED CHANNEL section of DM2000. (Note: when the EQ ON LED is lit in the DM2000, this indicates EQ Bypass in Cubase SX.)

#### **PANNING**

The PAN encoder and the JOYSTICK on DM2000 control the pan functions of Cubase SX. Even if there is no surround panning enabled, the joystick can be used for Left-Right panning.

#### **AUX SENDS**

The AUX SEND LEVEL encoders and ON switches edit the 8 sends in Cubase SX. So only the first two BANKS on DM2000 are used. By pressing the LEVEL encoders, the send can be switched between Pre and Post Fader.

#### PHASE AND INSERT

The PHASE switch on DM2000 switches the phase of the selected Cubase SX channel, and the INSERT ON switch bypasses all Inserts for the selected channel.

# FX Sends, Routing and Insert Editing

#### **FX SENDS**

In the EFFECTS / PLUG-INS section of the DM2000, press the INTERNAL EFFECTS key to access FX Send information on the LCD screen. The encoders below the screen can edit various functions:

- Encoder 1 edits the send level.
- Encoder 2 edits the send On/Off status (by turning the encoder).
- Encoder 3 edits between Pre and Post Fader (by turning the encoder).
- Pressing any of the encoders will switch all sends On/Off.

There are 8 sends spread over 8 pages. To access different sends, use the UP and DOWN cursor buttons to the left of the LCD encoders.

#### ROUTING

Press the PLUG-INS switch to access Routing information in the LCD. There are two pages, accessed by pressing the UP and DOWN cursor buttons to the left of the LCD encoders. 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 or turning the encoder)
- Encoder 3 selects the Input bus
- Encoder 4 edits the Input Gain (the encoder must be pressed down while turning)

#### Page 2

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

## **INSERTS**

When the CHANNEL INSERTS switch is pressed on DM2000, the LCD shows Insert information for the selected channel.

- Encoder 1 selects which insert is to be edited
- Encoder 2 switches the insert On/Off (by turning, not pressing)
- 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 UP and DOWN cursor buttons to the left of the LCD encoders). 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**

Ensure that DAW CONTROL is selected in the LOCATE MEMORY screen of the LOCATOR display menu on DM2000.

## **TRANSPORT CONTROLS**

The following Transport functions can be controlled from DM2000:

- REC
- PLAY
- STOP
- FF
- REW
- SCRUB
- SHUTTLE
- LOOP
- QUICK PUNCH
- ONLINE

## LOCATE FUNCTIONS

The following DM2000 locate functions also control the corresponding Cubase SX functions:

- RTZ
- END
- IN
- OUT
- SET
- LOCATE 1-8

To set a locate point (Marker in Cubase SX), hold the SET switch on DM2000, and press the required LOCATE MEMORY switch at the required time. Note: DM2000 must be in the appropriate Cubase SX Remote Layer in order to set Markers.

#### TRACK-ARMING

The DM2000 TRACK ARMING 1-24 switches control the RECORD ENABLE switches of the corresponding Cubase SX channels.

#### <u>AUTOMATION</u>

The following AUTOMIX switches on DM2000 control automation functions of Cubase SX:

- ENABLE puts all Cubase SX channels into READ mode
- REC puts all Cubase SX channels into WRITE mode.
- The AUTO switch above each DM2000 channel fader switches READ On/Off for each channel individually. However, when AUTO-REC is switched on, the channel AUTO switches function to control WRITE On/Off in Cubase SX.

## **User Defined Keys**

When DM2000 is used to remotely control Cubase SX, the following User Defined Keys have permanently assigned functions:

UDEF 1: Brings the Project window to the front
UDEF 2: Scrolls channels down in banks of 8
UDEF 3: Scrolls channels up in banks of 8
UDEF 9: Open or closes the VST Mixer window
UDEF 10: Scrolls channels down one channel at a time
UDEF 11: Scrolls channels up one channel at a time

Other User Defined Keys (UDEF 4-8 and 12-16) can be programmed by the user to control various Cubase SX functions. These functions can be selected in the DEVICE SETUP of Cubase SX, by selecting "YAMAHA DM2000 V2" and choosing the desired 'Category' and 'Command' from the drop-down list for each button.

#### **Other Functions**

#### **ZOOM & NAVIGATION**

The DM2000 CURSOR keys (next to the Scrub Wheel) have two different functions. Their mode can be changed by pressing the INC key above the cursor keys. The mode is shown on the LCD display.

- ZOOM mode: the cursor keys control the vertical and horizontal zoom of the Project Window.
- NAVIGATION mode: the cursor keys control the selection of channels and objects in the Project Window.

## **TIME COUNTER**

The TIME COUNTER is displayed on the DM2000 LCD screen, with the counter mode (TIME CODE / FEET / BEATS). If "Samples" is selected in Cubase SX, then no selection is displayed in the DM2000 LCD.

#### METER BRIDGE

The DM2000 meter bridge displays Cubase SX's input channel levels when the correct REMOTE layer is selected. The TIME CODE counter is also displayed on the Meter Bridge.