D00992200C



DM-3200 DIGITAL MIXER

RELEASE NOTES

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Firmware Update Notice

If you are updating the firmware in a DM-3200 that is cascaded, always disconnect the cascade cable before

doing the firmware update procedure.

Manual Addendum

The transport keys can be locked to protect from pressing them accidentally by pressing SHIFT + STOP.

New Features

This section describes the new features for each revision of the DM-3200 software.

Version 1.50

User Defined Layer

It is now possible to create a user-defined layer that freely combines the DM-3200's modules. You can control some module parameters such as Fader, Mute, Solo and Ring Encoder levels when assigned to this layer.

Registering a User Defined Layer

A User Defined Layer can be registered in the REMOTE>EXT.CTRL screen.

EXTER	NAL CO	NTRO)L LIST	1	@ [_
STATE DEV	ICE	ID	PORT	CH	SCREEN	
→ 24 U	SER Defined		INT	01-24)	ţ	I

There are no ID, PORT, or CH settings.

User Defined Layer screen

In the EXT.CTRL screen, move the cursor to the SCREEN button and press the ENTER key. Then use the POD4 key to select User Defined Layer. The User Defined Layer screen will appear.

If the OPTION>PREFERENCE screen item SEL Key Follows Fader Layer Status has been checked, pressing the **REMOTE** key of the LAYER STATUS section will display the User Defined Layer.



Figure 1: USER DEFINED LAYER screen

You can monitor the following functionality of the specified module.

- Meter
- · Fader, pan, and mute
- Grouping settings
- Stereo link settings



The metering point selected in the METER/FADER>METER screen is displayed.

You can also move the cursor by using the cursor keys or pressing the SEL key of the desired channel, and use the **POD** knobs to operate the fader or pan.

The grouping settings have the following meaning.

- : Mute group master, grouping on
- : Mute group master, grouping off
- E: Fader group master, grouping on
- F: Fader group master, grouping off
- -: Other than group master

Only master channel is shown; slave is not shown.

The stereo link setting has the following meaning.

- + : Stereo link on
- : Stereo link off

Move the cursor to the module assign section, use the JOG/DATA to select the module that you want to assign, and press the ENTER key to finalize.

You can assign channel 1-48, BUSS 1-16, and AUX1-8 modules. You cannot assign the STEREO module.

MUTE Key Function

You can select whether the **MUTE** keys will be used as controllers for the mixer parameter **MUTE** or as MIDI event trigger keys. If they are used as MIDI event triggers, MIDI control change messages will be transmitted.

If you want to use the **MUTE** keys as MIDI event trigger keys, move the cursor to the MUTE KEY Function section MIDI Event Trigger radio button, and press the **ENTER** key to make your selection.

• MIDI control messages used as MIDI Event Triggers

In the MIDI>CtrlChg EXT screen you can specify the control change messages that will be used when using the **MUTE** keys as MIDI event trigger keys.



Figure 2: MIDI>CtrlChg EXT screen

You can also jump to this screen by moving the cursor to the SETUP button in the **MUTE** key Function section and pressing the **ENTER** key.

When the **MUTE** key is pressed, the control change message data byte 127 (7Fh) is output, and 0 (0h) when released.

• MIDI>SETUP screen filtering

In conjunction with support for MIDI event triggering, a C.Chg EXT filter has been added to the USB MIDI 4: PC/CC port.



Figure 3 MIDI>SETUP screen

Meter display

The meter display of the User Defined Layer is also shown in the User Defined Layer screen, but can be shown in the METER/FADER>METER screen as well.



Figure 4METER/FADER>METER screen

When you use **POD1** to move the cursor to the REMOTE button, and the User Defined Layer meters will appear.

• Display in the meter bridge

The User Defined Layer meter display can also be shown in the separately sold MU-1000 meter unit option.

The MU-1000's metering point section does not have a **REMOTE** point.

When all LEDs in the METER LAYER section are dark, the REMOTE layer meters are shown.

METER LAYER				
•	CH 1-24			
•	CH 25-48			
•	CH 49-64			
	BUSS			
	AUX			

Please select the Remote Layer Meter in the METER/FADER -> METER screen. Also if you check the check box for "SEL key Follows Fader Layer Status" and "Meter Follows SEL key" on the OPTION -> PREFERENCE screen, the meter bridge will follow when you change to the REMOTE Fader Layer.

■ TASCAM FX2.0 support

The TASCAM FX2.0 provided on the DM-4800 can now be used on the DM-3200 as well.

The TASCAM FX2.0 multi-effects provide chorus, flanger, de-esser, delay, distortion, compressor, phaser, and pitch shifter, and numerous presets are provided. For details on each type and on the preset library, refer to the separate EFFECT LIST, which are provided as electronic publications in PDF format.

This can also be downloaded from the TASCAM website http://www.tascam.com

TASCAM FX2.0 recall

TASCAM FX2.0 recall is performed in the LIBRARY>EFFECT screen shown in the right column.

	noRouting RYEFFECTI
CURRENT DATA: R2-0210RacicStopeoDelay	LIBRARY DATA:
rs-ozimbasicstereoberas	
TASCAM FX2.0	TASCAM FX2.0
TYPE:STEREO DELAY FX2.0	TYPE:DISTORTION FX2.0
	1270Space Invader 2 PITCH 0000Plexi 60 DISI
	001BBrit 80 DIST
	003ØCA Combo DIST 004ØCA Recti Stack DIST
	PRESET 1 2 3 POD4 ≠
LIBRARY (STORE AS)	(<u>RECALL</u> (<u>PROPERTY</u>)

Figure 5 LIBRARY>EFFECT1 screen

Presets for the various TASCAM FX 2.0 effects are provided in preset bank 3 of the effect library.

The settings from this preset bank 3 are recalled into the two effect DSP units of the DM3200 for use.

Both of the two units can use TASCAM FX 2.0 effects simultaneously.

■ TASCAM FX Compressor GR meter indication

A gain reduction meter has been added for the established TASCAM FX effects. This meter is displayed in the effects screen when the Guitar Compresser and compresser is loaded.



Figure 6 Example screen for Logic control

When the separately sold IF-FW/DM MKII option card is installed, you can now transfer up to 32 channels of I/O (at 44.1kHz/48kHz/88.2kHz/96kHz) between your computer and the DM-3200.

For details on the IF-FW MKII, refer to the IF-FW MKII operating manual.

DAW control screen display of channels 1-16

In each DAW control screen, you can now view all sixteen channels in a single screen.

The following illustration is an example screen for Logic control.



Figure 5 Example screen for Logic control

Windows Vista

This version of the DM-3200 is now fully supported by Windows Vista 32 bit and Vista 64 bit.

It is possible to do remote control of DAW Applications that run under Windows Vista and transfer MIDI messages between the DAW software and the mixer.

■ IF-FW MKII support

TDIF Hi-Speed support

When operating at a high sampling rate (88.1k/96kHz), the high speed mode of **TDIF-1** connectors 1-3 and the separately sold IF-TD/DM option card are now supported. Even when operating at a high sampling rate, one **TDIF-1** connector can transfer eight channels of digital audio I/O, and when the IF-TD/DM is used in conjunction with the X-48, a maximum of forty channels of digital audio I/O can be transferred.





Figure 6 DIGITAL>FORMAT screen

In the DIGITAL>FORMAT screen TDIF I/O Tx/Rx MODE section, you can now switch between high speed and dual line for **TDIF-1** connectors 1-3. This selection will switch all three of the **TDIF-1** connectors.

When using high speed operation, the 8 I/O setting will be available for TDIF input/output in the ROUTING screen; when using dual line, only the 4 I/O setting will be available.

• IF-TD/DM



Figure 7 DIGITAL>SLOT screen

An indication of HI-SPEED is shown in the TDIF-1 Card screen of the DIGITAL>SLOT screen.

IF-TD/DM supports only high speed; it does not support dual line.

MIDI

MIDI control change message support for mixer parameters

MIDI control change messages are now supported, allowing mixer parameters (FADER, PAN, and MUTE) to be controlled.

This allows MIDI devices to be controlled in synchronization with operations on the DM-3200 mixer, or conversely for mixer parameters to be controlled from a MIDI device.

In the MIDI>CtrlChg MIX. screen, the CONTROL CHANGE TABLE FOR MIXER allows you to assign control change numbers.



Figure 8 MIDI>CtrlChg MIX screen

By using BATCH SETUP you can make settings for all sixteen channels at once.

MIDI>SETUP screen filtering

In conjunction with MIDI control change support for mixer parameters, filtering has been added to the USB MIDI 4: PC/CC port.



Figure 9 MIDI>SETUP screen

Until now, the input/output on/off setting for USB MIDI port 3 (used for MIDI time code) had been a single setting for input and out put, but these can now be set independently.

• MIDI Device Inquiry message support

When an identity request is received from the following MIDI ports of external device, the following message identify reply is transmitted.

F0 7E 00 06 02 4E 07 01 00 06 v1 v2 pp 00 F7

v1: Major version number of firmware v2: Minor version number of firmware pp: MIDI port ID

00: The DM-3200's MIDI IN/OUT 04: USB MIDI 4: PC/CC port 05: USB MIDI 5: USB REMOTE 1 port 06: USB MIDI 6: USB REMOTE 2 port

Operation

Module parameter copy function

You can now copy module parameters from a module to another module.

• PARAM COPY settings

Access the UTILITY>PARAM.COPY screen. The copy operation is performed in the MODULE TO MODULE section of this screen.



Figure 10 UTILITY>PARAM.COPY screen

- 1. The upper part of the MODULE PARAMETERS section lets you copy from one module to one other module, and the lower part lets you copy from one module to multiple modules. Use the radio buttons to select the desired type of copy operation.
- 2. Use the cursor keys to move the cursor, use the JOG/DATA dial to select the module that you want to copy (left side), and press the ENTER key. Select the copy-destination module (right side) in the same way.
- **3.** Move the cursor to the COPY button and press the ENTER key.

A popup message will ask you for confirmation.

4. Press the ENTER key to execute the copy.

If you decide to cancel, press any cursor key.

• PASTE SAFE

In the PASTE SAFE section you can select the parameters that will be pasted.

Parameters whose square check boxes are selected will not be pasted.

You can copy/paste from a CHANNEL to a master module such as a BUSS or AUX, or the reverse. In this case, parameters existing at the copy-source but not the copydestination will not be copied; they will retain their state from before the paste operation. The same applies to parameters that don't exist in the copy-source but do exist at the copy-destination.

The \bullet symbols at the right indicate parameters that exist in the corresponding modules.

NOTE

Module functions include some parameters not shown in this list, such as DIGITAL TRIM, but parameters not shown in the list will not be copied/pasted.

BUSS pan mode batch setup

In the ASSIGN>BUSS screen, BUSS PAN MODE BATCH SETUP has been added to allow one-step setup of BUSS pan mode.



Figure 11 ASSIGN>BUSS screen

- 1. Move the cursor, use MODULE to select the channel, use TARGET to select the busses whose pan mode you want to change, and use ON/OFF to specify the on/off setting.
- 2. Move the cursor to the SET button and press the ENTER key.

A popup message will ask you for confirmation.

3. Press the ENTER key to execute the copy.

If you decide to cancel, press any cursor key.

Meter over-level settings

In the METER/FADER>METER screen, you can now make fine adjustments to the point at which the over-level indicator will light in order to match other equipment present in your system.



Figure 12 METER/FADER>METER screen

Use the **POD 2** knob to select one of the following as the point at which the over-level indicator will light.

-0.20, -0.17, -0.13, -0.10, -0.06, -0.03

Cursor location when a multi-control screen is displayed

The cursor location will now move to the module selected by the **SEL** key when you display a multi-control screen such as the AUX1-2 screen.

MUTE Clear function has been added

By holding down the **SHIFT** key or **CTRL** key and pressing a **MUTE** key, you can now defeat muting for all channel modules.

SHIFT key + **MUTE** key: Defeat muting for the currently selected channel layer

CTRL key + MUTE key: Defeat muting for all channel layers

This function does not work for master modules such as BUSS, AUX, or STEREO.

NOTE

Solo can be cleared in a similar way.

Automation WR-RHS indication has been added

When you write the current channel during an automation write rehearsal, the automation status area in the upper part of the LCD will now indicate [WR-RHS], indicating that rehearsal is occurring

About remote control

Use P2 protocol to remotely control the X-48

You can now use P2 protocol to control the transport of the X-48.

In the supported devices area of the REMOTE>MACHINE

CTRL screen, choose MM/MX-24/X-48.



Figure 13 REMOTE>MACHINE CTRL screen

You can specify 1-48 as the REC Function.

Scrolling indicators for the supported device list in the machine control screen

If the list of supported devices in the right side of the machine control screen does not fit in the screen, arrows will appear at the top and bottom.

MMC command type added

The commands transmitted from the DM-3200 when you perform a JOG operation can now be matched to the device being controlled. You can choose either Search (46h) or Step (48h). For details, refer to the operating manual of the device you are controlling.

This setting is made in the REMOTE>MC SETUP screen's MMC Command Type area.



Figure 14 REMOTE>MC SETUP screen

Transmission of locate commands when editing a locate point

When you use the **EDIT** key located in the MACHINE CONTROL section of the top panel to **ENTER** or edit a locate point, a LOCATE command is now transmitted when you press the **ENTER** key to store the memory.

This allows you to locate a connected device at the same time that you edit the locate point.FireWire card support.

FireWire card support By installing an IF-FW/DM FireWire interface card (sold separately), it is now possible to transfer audio data between your computer and a DM-3200. An IF-FW/DM card can only be installed into **Slot 1**.

Surround monitor card support Integrated surround monitoring can be added to the DM-3200 by installing an IF-SM/DM surround monitor card (sold separately), An IF-FW/DM card can be installed into either **Slot 1** or **Slot 2**.

Naming the mixer DM-3200 V1.20 allows you to set and edit mixer names.

Remote operation through MMC Now you can remotely operate external transports from a DM-3200 using the MMC (MIDI Machine Control) protocol.

MIDI control External MIDI devices can be controlled from the DM-3200 using MIDI Control Change and Program Change Messages using the new external controllers: MIDI fader, MIDI controller, and MIDI mixer.

Assigning parameters to rotary encoders

DM-3200 now allows you to assign which parameters are controlled from the rotary encoders.

Cascade connection A cascade connection can be made between two DM-3200 units.

GPI functionality DM-3200 can now remotely control external devices using a GPI signal output.

Expanded dynamic automation function The dynamic automation function of the DM-3200 can now capture buss assignments, effect parameters, and image parameters.

■ FireWire card support

By installing an IF-FW/DM FireWire interface card (sold separately) into **Slot 1** of the DM-3200 V1.20, you can transfer audio data between your computer and the DM-3200. An IF-FW/DM inserted into **Slot 2** will not function.

Figure 1 is an example of the panel display when an IF-FW/DM card is installed in **Slot 1**.

For more details, please refer to the IF-FW/DM documentation.

Surround monitor card support

By installing an IF-SM/DM surround monitor card (sold separately), you can add integrated surround monitoring to the DM-3200.

Figure 1 shows an example of the screen display when IF-SM/DM card is inserted in **Slot 2**.

For more details, please refer to the owner's manual that comes with the IF-SM/DM card.



Figure 1: SLOT screen when an IF-FW/DM and an IF-SM/DMare installed

Naming the mixer

DM-3200 V1.20 allows you to set and edit mixer names so that you can easily differentiate between multiple mixers with the TASCAM Mixer Companion computer application.

1 On the UTILITY SYSTEM screen, move the cursor to the EDIT button in the MIXER NAME section. Press the ENTER key.

CH1-2	DemoRouting UTILITY::
CF CARD PROPERTY STATUS VOLUME LABEL CAPACITY 25 50 75	INSTALLED DM-3200 USED : 542K FREE : 29M
CF CARD UTILITY	TOTAL: 30M FORMAT FOR DM-3200
DATE UTILITY (NOV) / (11) / (2005) (16) :	(41): (15) MIXER NAME
VERSION INFORMATION Mixer : 1.2061 (62277) Urdater : BL1 (59997)	BATTERY CHECK STATUS: OK
PARAM.COPY EXT.SW	SYSTEM GPI

Figure 2: UTILITY>SYSTEM screen

A pop-up window will appear for editing the mixer name.



Figure 3: Name edit pop-up screen

NOTE

You can cancel the entered name by pressing the POD3 key (CANCEL).

2 ENTER a name you like.

For more information about the method for entering names, please refer to "Naming library entries" on page 32 of the DM-3200 Owner's Manual.

3 Save the name by pressing the POD 2 key (STORE).

The pop-up window will disappear and the name you entered will appear in the MIXER NAME section. Figure 4 shows an example of the screen display when the entered name is "DM-3200."



Figure 4: UTILITY>SYSTEM screen when the mixer is named "DM-3200"

Remote operation through MMC

DM-3200 V1.20 allows you to remotely operate the transport functions of external devices through MMC (MIDI Machine Control). Device control is carried out through the **MIDI IN/OUT** port. The **USB** port cannot be used for this purpose.

Selection of external devices for transport control is done on the REMOTE/MACHINE CTRL screen. For details, please see "Selecting devices for transport control" on page 93 of the DM-3200 Owner's Manual. As a result of this additional function, the following information is added to "Table 8.3: Supported transport machine control devices" on page 93.

Device	Screen display	Control type
MIDI open loop	MMC Open	М
MMC closed loop	MMC Full	М

Figure 5: Supported transport machine control devices added in V 1.20

Some devices, such as the Alesis HD-24, only support a limited range of functions over MMC, and may not support closed loop MMC control.

The MMC ID is set from the ID field on the MACHINE CTRL screen, selectable between 1 and 127 using the **JOG/DATA** dial.

These numbers correspond to 0 through 126 in the MMC

protocol, so the controlled device may require you to set an ID of 0 to match the '1' on the DM-3200, for example. The all-call ID number, 127 in the MMC protocol, is not used by the DM-3200.

MIDI control

External MIDI devices can now be operated from a DM-3200, using MIDI Control Change messages and MIDI Program Change messages using the MIDI controller, MIDI fader, and MIDI Mixer screens.

Connection

Connect the **MIDI IN** and **MIDI OUT** ports of a DM-3200 and the MIDI device bi-directionally. You may also use these controllers as "send only" as well by just connecting the **MIDI OUT** port of the DM-3200 to the MIDI device.

Setting devices for MIDI control

Setting of the MIDI control setup is carried out on the **REMOTE**>EXT.CTRL screen.

• Selecting devices for MIDI control

The EXTERNAL CONTROL LIST on the left of the screen is initially blank. To add external devices from the list use the following procedure:

- 1 Turn the POD 4 knob or the JOG/DATA dial to choose an item from the device list (SUPPORTED DEVICES). In the case of MIDI control, highlight either MIDI Ctrlrs, MIDI FADERS, or MIDI Mixer.
- 2 When the device to be controlled by the DM-3200 is highlighted on the list, move the cursor to the ADD button, and press the ENTER key. The device will be added to the EXTERNAL CONTROL LIST on the left of the screen.



Figure 6: REMOTE>EXT.CTRL screen

NOTE

To obtain more information regarding a particular item in the list of devices that may be controlled by the DM-3200, highlight the item, move the cursor to the INFO button, and press the ENTER key. A pop-up screen provides information regarding the selected item.

• Selecting control types for the devices

Each of the columns on the EXTERNAL CONTROL LIST will display the following when an MIDI device is added to the list.

STATE: A one-way arrow \Rightarrow is displayed, representing an open-loop device.

DEVICE: The name of the device is displayed together with the number of channels available for transmitting control signals. MIDI control has 16 channels.

ID: If the device is a MIDI controller, ID indicates the MIDI channel of the device being controlled by the DM-3200. If the device is a MIDI fader, ID displays the number of the MIDI Control Change message (0 - 119). Nothing will be displayed in this column if the device is a MIDI mixer.

PORT: This displays the output port. For MIDI controls, "MIDI" will automatically display.

CH: This displays the channel number used in the fader layer. It will display "--" for an MIDI controller, "1-16" for MIDI faders and MIDI mixers.

• Setting up individual devices

To access the set-up screen of the individual devices listed in the EXTERNAL CONTROL LIST, move the cursor to the

(Jump to SCREEN) button and press the **ENTER** key.

NOTE

You can also go to the set-up screen of the individual devices by using the CONTROL button at the bottom right on the screen and use the following procedure:

1 Press the POD 4 key. A pull-up menu will display the list of devices.



Figure 7: Pull-up screen for switching devices

- 2 Use the POD 4 knob to highlight the device you want to set.
- 3 Press the POD 4 key to select the device.

MIDI controllers

You can send MIDI Control Change messages using the **POD** knobs of DM-3200.

PAN STEREO	50P10005	DemoRouting REMOTE	
	MIDI	ONTROLLERS	ID: 01
	D D D	F001	
Program Chng Off 0	CH. VOL		PAN
EFF CTRL1	EFF CTRL2		SOFT D
GPC1	GPC2	GPC3	GPC4
PORTA TIME		NON REG	REG
MC SETUP	MACHINE CT	RL) EXT.CTRL	- CONTROL

Figure 8: MIDI CONTROLLERS screen

The MIDI CONTROLLERS screen comes with standard controllers. Use the **cursor** key to move the bordered frame indicating the control messages you want to use, and use the **POD** knobs to send MIDI Control Change messages. This can be done whenever the MIDI CONTROLLERS screen is displayed regardless of the setting of the Layer Status.

When a Control Change message is received from an external MIDI device, the value will be reflected on the DM-3200's MIDI CONTROLLERS screen.

MIDI fader

Using the DM-3200 faders, you can send MIDI Control Change messages to all 16 MIDI channels of an external MIDI device.

PAN STEREO CH1	EDP1000EDemoRouting REMOTE	PAGE1/2
	WIDI FADERS	ID:07
	Control Chan9e No Function <u>Channel</u>). 7 Volume
MIDI contr	oller no. 7	
Function =	Channel Volu	me
·		
MC SETUP	HINECTRL EXT.CT	RL A CONTROL
MIDI contr Function =	HINE CTRL (EXT. C1	ne IRL A CONTROL

Figure 9: MIDI FADERS screen

As shown in figure 9, you can select and set the MIDI Control Change number on this screen.

MIDI Volume (Control Change 7) is frequently used. This allows the DM-3200 to remotely control the sound volume of up to 16 external MIDI devices. This is only possible when Layer Status is set to **REMOTE** and the MIDI FADERS screen is currently showing or was the last EXT.CTRL screen displayed.

When a Control Change message is received from an external MIDI device, the value will be reflected in the fader of DM-3200.

MIDI mixer

You can send MIDI Control Change messages to external MIDI devices using the **POD** knobs, **FADER** and the **MUTE** key of the DM-3200. In the default setting, they control **PAN**, **FADER**, and **MUTE** respectively.



Figure 10: MIDI MIXER screen

This operation is possible only when the Layer Status is set to **REMOTE** and the MIDI MIXER screen is currently showing or was the last EXT.CTRL screen displayed. The screen will show "REM PAN" for the encoder mode, and the encoders will control the pan data.

When ON/OFF status is set to ON, a check mark appears in the check box. When it is OFF, the box is blank. In the figure 11, all the channels are set to ON.

You cannot operate the MIDI control of the channel pan when the surround mode is not set to STEREO.

NOTE

When the Layer Status is set to REMOTE the pan value is displayed on, and can be controlled with the rotary encoders.

Changing the assignment

You can change the MIDI channel, Control Change number, and ON/OFF status that are assigned to each of the **POD** knobs, **FADER**, and the **MUTE** key. Changes are made on the MIDI>CTRL.CHANGE screen.



Figure 11: MIDI>CTRL.CHANGE screen

To display this screen, either press the **MIDI** key followed by the **POD 3** key (or keep pressing the **MIDI** key), or move the cursor to the (Jump to SCREEN) button at the top right on the MIDI MIXER screen, and press the **ENTER** key.

Use the **POD 4** knob to select the key whose assigned function is to be changed (FADER, PAN or MUTE) in the TARGET section on the right of the screen.

You will see a chart showing MIDI channel, Control Change number, and ON/OFF status of the selected key (channel 1-16) on the left of the screen.

Use the **cursor** key to select the item to be set, select the value using the **JOG/DATA** dial, then press the **ENTER** key to set the value. When you are changing the ON/OFF status, press the **ENTER** key.

NOTE

If there is more than one key that is assigned to the same MIDI channel, you cannot assign the same Control Change number to both of them. A Control Change number can be selected from the following: 1-5, 7-31, 64-95.

When ON/OFF status is set to ON, a check mark appears in the check box. When it is OFF, the box is blank. In the figure 11, all the channels are set to ON. You cannot operate the MIDI control of the channel pan when the surround mode is not set to STEREO.

Assigning parameters to rotary encoders

You can assign parameters to the rotary encoders using the four encoder mode keys (please refer to the "Encoders" section on page 20 in the Owner's Manual).

In the previous versions of DM-3200, parameters were pre-assigned as indicated next to each of the encoder mode keys. In Version 1.20 you can select which parameter is to be controlled by which of the encoder mode keys.



Figure 12: OPTION>ENCODER MODE scree

Parameters are assigned on the ENCODER MODE screen, which is a sub-screen newly added to the OPTION screen.

1 Press the OPTION key to display the OPTION screen, then use the POD 4 knob (or press the OPTION key again) to display the ENCODER MODE sub-screen.

2 Use the CURSOR key to select the encoder mode key to assign a parameter from the list in the EDIT TARGET SELECT section.

Starting at the top, row numbers 1-4 represent the numbers of the encoder mode keys.

"NONE" means that the encoder key is pressed by itself, "SHIFT+" means that the **encoder** key and the **SHIFT** key are pressed simultaneously, and "CTRL+" means that the **encoder** key is pressed together with the **CTRL** key.

For example, if you want to assign a parameter to "the topmost encoder mode key when it is pressed with the **SHIFT** key," select the field where row "1" and "SHIFT+" cross.

The encoder mode which is currently assigned to the selected encoder mode key will be highlighted in the ENCODER MODE SELECT section at the bottom of the screen.

3 Using the JOG/DATA dial, select the encoder mode to be assigned to the highlighted encoder mode key, from the ENCODER MODE SELECT section.

NOTE

Depending on whether the surround mode is set to STEREO or not, the options given in the ENCODER MODE SELECT section differ.

4 Press the ENTER key.

Assignment of the parameter is now complete and will be displayed in the EDIT TARGET SELECT section.

NOTE

You need to perform the corresponding encoder mode key operation in order to assign the set parameter to a rotary encoder.

Cascade connection

DM-3200 V1.20 allows you to make a cascade connection between two DM-3200 units.

Cascade connection overview

Two DM-3200 units that are connected by a cascade connection can be operated as though they are one mixer.

- STEREO buss, BUSS 1-16, AUX buss 1-8, and SOLO buss can be shared when the sharing function is set to ON in the CASCADE screen.
- The audio clock is shared by the two units.
- Timecode is shared to synchronize the two units.
- Various settings and operations can be interlocked between the two units. Please refer to the "Settings and Operations that can be interlocked" section on page 9 of this supplement.

Master/slave setting

You need to set one DM-3200 to be the cascade master and the other to be the cascade slave. Any set-up that affects the operation of the system as a whole will be performed on the cascade master.

- An audio clock source is selected from the clocks fed to the cascade master. You cannot select the audio clock source on the cascade slave.
- Timecode fed to the cascade slave cannot be used as the synchronization source.
- The cascade connection can be turned ON and OFF only on the cascade master.
- When the cascade connection is ON, the parameter set-ups on the cascade master (parameters to be inter-locked) are reflected on the cascade slave.

Making a cascade connection

This section explains how to make a cascade connection between two DM-3200s that are running Version 1.20.

1 Using the TASCAM cascade cable (PW-1000CS – sold separately), connect the CASCADE ports of the two DM-3200.

WARNING

Only use the special TASCAM cascade cable. Use of any other type of cable may result in damage to the equipment.

2 Set one of the DM-3200 units to be the cascade master, and the other the cascade slave.

To set the master and slave, display the DIGITAL screen using the **DIGITAL** key in the SCREEN MODE/NUMERIC ENTRY section, and use the **POD 3** key (or continue pressing the **DIGITAL** key) to display the CASCADE sub-screen. Set the ID of one of the units to MASTER, and the other to SLAVE.

P	AN (STEREO CH1		<u>50</u> P1	100E	DemoRo DIGI	out ΓΑ	in9 L		_	-:-	 	_	тс
ľ	-	CASCA	DE											
	ON,	OFF	(OFI											
	ID		8	MASTE	R									
	ENP	IBLE												
******	NNNNN	BUSS1 BUSS2 BUSS3 BUSS4 BUSS5 BUSS5	NNNNNN	BUSS9 BUSS10 BUSS11 BUSS12 BUSS13 BUSS14	NNNNNN	AUX1 AUX2 AUX3 AUX4 AUX5 AUX5								
	N	BUSS7 BUSS8	N	BUSS15 BUSS16	N	AUX7 AUX8								
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	N	STEREO SOLO												
	I	FORMAT		SL0	Т		CA	SCADI	E					

Figure 13: DIGITAL>CASCADE screen

#### NOTE

Set the unit ID while the ON/OFF set-up is OFF. You cannot change the ID set-up while it is ON.

**3** Turn the ON/OFF setting on the CASCADE subscreen of the cascade master to ON.

Move the cursor to the ON/OFF button and press the **ENTER** key. A confirmation screen will come up. Check the setting and press the **ENTER** key again to confirm.

#### NOTE

*ON/OFF* status cannot be changed while the timecode is running.

4 When a cascade connection is established, a popup message "Cascade connection established" will be displayed. Press the ENTER key.

#### NOTE

If a cascade connection was not properly established, a pop-up message "Cascade Slave not found. Cascade connection not established" will be displayed.

### Settings and Operations that can be interlocked

#### • Settings that can be interlocked

The following settings are interlocked between the two DM-3200 units while there is a cascade connection between them. The initial settings on the cascade master will be reflected on the cascade slave immediately after a cascade connection is established.

- Layer status
- Flip mode
- Encoder mode
- Surround mode
- Surround 5.1 rear MONO
- DIGITAL>CASCADE screen setup (except for ID setting)
- OPTION>SETUP screen setup (except for FADER SENSITIVITY)
- OPTION>PREFERENCE screen setup
- OPTION>SOLO screen setup (except for INPLACE SOLO DEFEAT setup)
- OPTION>ENCODER MODE screen setup
- METER/FADER>METER screen setup
- SNAPSHOT RECALL SAFE setup on the LIBRARY SNAPSHOT screen
- AUTO SETUP screen setup
- Key setup in the AUTOMATION section (WRITE, TRIM, ALL SAFE, REHEARSE, INITIAL EDIT)

After the cascade connection has been made, whenever a setting is changed either on the cascade master or the cascade slave, the changed setting will be reflected on the setting of the other unit. However, the ON/OFF setting of the cascade connection can only be changed on the cascade master.

#### • Operations that can be interlocked

The following operations are interlocked while there is an established cascade connection between two DM-3200 units. Whenever any of the below operations is executed either on the cascade master or the cascade slave, the other will follow with the exact same operation.

Snapshot related operations:

Recall

- Store
- Delete

Automation key operations:

TOUCH key KEEP key REVERT key INITIAL EDIT DISCARD key AUTO FADE key

# GPI functionality

DM-3200 V1.20 supports GPI functionality. This allows you to send 8 output signals from the **GPI** port (D sub 9-pin connector) on the rear panel, and control external devices from the DM-3200.

The DM-3200 allows you to give different trigger settings to each of the **GPI** ports for GPI signal output. You can choose the trigger source from a **FADER**, **MUTE** key control, transport control, machine control key status and its operation, or a timecode value.

#### **Making connections**

The arrangement of the serial port pins of the **GPI** ports on the rear panel is as follows:

Pin number	Function
#1	GPI output port
#2	GPI output port 2
#3	GPI output port 3
#4	GPI output port 4
#5	GND
#6	GPI output port 5
#7	GPI output port 6
#8	GPI output port 7
#9	GPI output port 8

Output level: 5V

### Setting the GPI

GPI is set using the GPI sub-screen, which is a new addition to the UTILITY screen.



Figure 14: UTILITY>GPI screen

The GPI CONFIG section on the left of the screen allows you to set the item and the type of the GPI output trigger for each of the ports and the ON/OFF status of the GPI function.

The TIME EVENT screen allows you to set which event is to happen when the GPI is controlled by the timecode.

#### **GPI CONFIG section**

Columns on the SETUP list are selected using the cursor key.

#### • Selecting the item

You can set the item that controls each of the **GPI** ports in the ITEM column of the SETUP list.

1 Pre-select the item type from the ITEM SELECT section at the bottom left of the screen, using the POD 1 knob.

TIME EVENT: The GPI port will be controlled by the designated timecode value.

KEY EVENT: The status of the transport key, F1-F12 key, and the status of the MUTE key will control the GPI port.

FADER EVENT: The GPI port will be controlled by the status of the fader.

2 Using the cursor key, highlight a cell in the ITEM column that you wish to set, and select the item using the JOG/DATA dial.

Depending on which item type is selected in step 1 above, the options given vary as follows:

- TIME EVENT: TIME EVENT or no assignment (-----)
- KEY EVENT: REW, FF, STOP, PLAY, REC, F1-F1, MUTE (CH1-48, BUSS1-16, AUX1-8), or no assignment (-----)
- FADER EVENT: FADER (CH1-48, BUSS1-16, AUX1-8, STEREO) or no assignment (-----)

#### **3** Press the ENTER key to confirm the setting.

#### • Selecting the type

The Waveform to be output from each of the ports can be set in the TYPE column in the SETUP list.

Use the cursor key to highlight a cell in the TYPE column that you want to edit, and select the item using the **JOG/DATA** dial.

Depending on the type of the item you selected, the options given vary as follows:

TIME EVENT: TYPE column will show "-----" and the setting of the type is done in the GPI EVENT LIST on the right of the screen.FADER EVENT

- till: output low pulse when the fader starts
- **t** : output high pulse when the fader starts
- Line : output low pulse when the fader stops
- Land : output high pulse when the fader stops
- time: output low pulse when the fader starts or stops
- $t \leq t \leq t \leq t \leq t$  : output high pulse when the fader starts or stops
- **t** i i contput changes to high level when the fader starts, and to low level when the fader stops

#### NOTE

"When the fader starts" means when the fader level is brought up from the lowest level.

"When the fader stops" means when the fader level is brought down to the lowest level.

The Output pulse range is approximately 150ms.

#### • KEY EVENT

- : output low pulse when the key status changes
- _____: output high pulse when the key status changes
- : change to low level when the key status is turned on, and to high level when the key status is turned off
- __<del>_</del>_
  - : change to high level when the key status is turned on, and to low level when the key status is turned off

#### NOTE

*The output pulse range is approximately 150ms. Options for F5-F8 are either low pulse output or high pulse output.* 

#### • ON/OFF setting

Set this to ON when you want to activate each of the GPI ports.

When the TYPE is set to TIME EVENT, it will always display OFF and the ON/OFF setting will be governed by the setting in the GPI EVENT LIST on the right of the screen.

#### **TIME EVENT section**

You can set up to 16 time events in the GPI EVENT LIST.

#### • How to control the GPI EVENT LIST

- To move the cursor vertically within the list, use either the up and down cursor key or the **POD 4** knob.
- To move the cursor horizontally (across the columns), use either the right and left cursor key.
- Arrows at the top and the bottom of the right-hand side of the list mean that there are more time events outside of the screen. To scroll the list vertically, use the POD 4 knob. You cannot use the up and down cursor key to scroll the list.

#### • Selecting the port

**GPI** ports can be selected in the PORT column on the GPI EVENT LIST. You can only select a port whose item has been set to be a TIME EVENT in the GPI CONFIG section. Use either the cursor key or the **POD 4** knob to highlight a cell in the PORT column that you want to edit, use the **JOG/DATA** dial to select the port, then press the **ENTER** key to confirm the selection. You can select the same port for more than one time event.

#### • Setting the time

You can set the time when an event is to be executed. Use either the **cursor** key or the **POD 4** knob to highlight a cell in the TIME column that you wish to set, use the **JOG/DATA** dial to set the time, then press the **ENTER** key to confirm.

#### • Setting the type

You can set the output waveform type for each of the **GPI** ports.

Use either the cursor key or the **POD 4** knob to highlight a cell in the TYPE column that you want to edit, then use the **JOG/DATA** dial to select the type.

: output low pulse at the designated time
: output high pulse at the designated time
: change to low level at the designated time
: change to high level at the designated time

#### • ON/OFF setting

Set this to ON when you want to activate the settings of individual **GPI** ports.

#### **Editing the GPI EVENT LIST**

You can edit the GPI EVENT LIST by highlighting the button at the bottom right on the screen and then by pressing the ENTER key.

SORT PORT: This sorts the GPI EVENT LIST by port numbers.

SORT TIME: This sorts the GPI EVENT LIST by time.

CAPTURE TC: This sets the TIME of the highlighted time event to the current timecode value.

DELETE: This deletes the highlighted time event.

#### NOTE

You can scroll within the GPI EVENT LIST while the cursor is pointing at CAPTURE TC or DELETE using the JOG/DATA dial. The JOG/DATA dial icon at the upper right corner of the list will become black.

#### **Expanded dynamic automation function**

#### Additional dynamic automation parameters

The following parameters can now be captured and re-played by the dynamic automation function of DM-3200 (please see "Automated Controls" on the page 4 of the DM-3200 Automation Guide).

#### • Image

Image parameter of the linked channel (please see "Pan and balance settings" on page 71 of the DM-3200 Owner's Manual).

#### • Effect

Common effect parameters (TYPE, INPUT, MIX, BYPASS, OUTPUT) and TASCAM effect parameters (please see "Setting up the effects" on page 82 of DM-3200 Owner's Manual).

#### • Assignments

This includes, in addition to the buss assignment and stereo buss assignment, the AUX 1-2 assignment from the BUSS and STEREO BUSS, surround assignment and ON/OFF setting of CSP/LFE speakers (please see "Channel-to-buss assignment" on page 51 and "Assigning channels to surround busses" on page 75 of the DM-3200 Owner's Manual).

#### NOTE

When any of the above mentioned parameters is a continuous variable, the Revert function is applied to it. On the AUTO CONFIG screen, each of these addi-

tional parameters is related to an item as shown below (please see "AUTO CONGIG" on page 14 of the DM-3200 Automation Guide).

Parameter	Item
IMAGE	PAN/BAL
Assign Swtch	<b>BUSS ASSIGN</b>
Effect 1 parameters	EFFECT 1
Effect 2 parameters	EFFECT2

# Additional parameters that are re-played as Initial Status

The following parameters are now captured and re-played as the Initial Status of the automation (please see "Initial Status" on page 32 of DM-3200 Automation Guide).

- Trigger source of the compressor
- Trigger source of the gate
- ROUTING>INPUT screen setting
- ROUTING>OUTPUT screen setting
- ROUTING>INSERT screen setting
- Pan mode setting
- Surround pan mode setting
- Direct assignments setting
- Pan gang button setting
- Digital trim value setting
- Phase setting
- Mono switch setting
- Channel delay value setting
- Pre/post setting of the channel delay
- Level setting of BUSS/AUX signal to stereo buss
- Pan setting of BUSS/AUX signal to stereo buss

With these additions, all of the parameters that can be stored as snapshots are now captured and re-played as the Initial Status.

#### Settings prohibited to change during automation re-play

The following mixer settings cannot be changed while automation data is being re-played.

- Surround mode
- Grouping setting
- Channel link setting
- Pan switch setting [Set by SHIFT + OUTPUT ASSIGN]

If you try to change the above settings, a pop-up message "cannot do this while automation is running" will appear and the operation will be denied.

- V 1.10 of the DM-3200 Operating system provides DAW remote control functionality using the **REMOTE** Fader Layer. Support has been added for DigiDesign Pro Tools, Cakewalk SONAR, MOTU Digital Performer, Steinberg's Nuendo & Cubase and Apple Logic Pro. Each of these has a dedicated manual in PDF format. Please refer to the PDF specific to your DAW application for details.
- It is now possible to execute a project store directly from the front panel. Press Control + Library Store together to operate this shortcut.

# **Maintenance Items**

This section describes the Maintenance items for each revision of the DM-3200 software.

# Version 1.60

### Option Slot Cards

- At 88.2 kHz or 96 kHz sampling rates, some master clock settings would result in audio transferred from an IF-TD/DM option card to have reversed Odd and Even channels. This problem has been fixed.
- With an IF-FW/DM MKII card in slot 1 and an IF-SM/ DM card in Slot 3, the mixer would not be able to boot correctly. This problem has been fixed.
- With an IF-SM/DM installed, pressing the **MONITOR SEL** key produced a click noise in the output. This has been fixed.
- With the IF-SM/DM, and Bass Management set to ON, changing the LPF setting of the Bass Management Section would result in noise in the SubWoofer output channel. This problem has been fixed.
- Noise resulting from changing the Monitor level of the IF-SM/DM has been removed.
- With an IF-SM/DM installed, the front panel **MONO** key normally toggles the IF-SM/DM Downmix function On or Off. A problem where this function did not occur correctly has been fixed.
- When the output gain of the IF-SM/DM was set to a large value, activating a Buss Mute resulted in the Mute occurring as a fade over a noticeable amount of time. This problem has been fixed.

# Remote Control

- If the Internal Timecode Generator (MTC Generate) was started and then deleted from the Control List, the MTC Timecode would not stop. This problem has been fixed.
- The mixer is now better able to lock to incoming MTC Timecode that has Jitter.
- At the 30NDF frame rate, the MTC output could occasionally produce incorrect Timecode values. This has been fixed.
- The operation of the Shuttle and **JOG** controls using the MMC protocol has been improved.

- It is now possible to change all the Program Change Library Number assignments to "--" using the MIDI Program Change Batch Setup.
- When using the internal MTC Generator, pressing **STOP+REW** on the front panel will jump to the start Time.
- On the Meter/Fader screen, **POD 1** now controls the Meter layer for easy access.

• A problem where Timecode Locations were incorrectly stored has been fixed.

### When connected to TMCompanion

• With the TMCompanion Meter screen open, rebooting the computer would result in the DM-4800 becoming unresponsive. This problem has been fixed.

### Monitor Section

- Feedback noise that was created when the **TO SLATE** key was pressed has been fixed.
- Click noise that occurred when the TO SLATE or MONITOR SEL keys were pressed has been fixed.

### Project

- When a project is loaded, the front panel Encoder Mode LED would not reflect the setting from the saved project. This problem has been fixed.
- When Shutting Down the mixer, even if the Current Project was not Protected, the following popup message would sometimes be displayed.

"Current Project is protected." "Can't STORE current project."

This problem has been fixed.

# Operation

When changing between an FS of 48kHz and 96kHz, the EQ settings were not correctly restored. This problem has been fixed.

# ■ Factory Default Settings.

The Factory Default Setting for FADER SENSITIVITY has been changed from 3.3kHz to 2.0kHz.

#### Version 1.50 Remote control

Previously, the LCD would unexpectedly switch focus when both MIDI Faders and the DAW Control Surface

# Version 1.30

# ■ Change in the date information for Project Property

The PROJECT Property shows date information, but in previous versions this was the date of creation. This has been fixed so that the most recently edited date and time are shown.

## CF cards

A problem has been fixed that had caused the capacity to be shown incorrectly for CF cards larger than 1G byte.

A problem has been fixed that had caused the status of a CF card to be sometimes detected incorrectly when the CF was formatted at start-up.

A problem has been fixed that had caused the status of a CF card formatted on Windows XP or Mac OS 10.4.3 to be detected incorrectly

# Project

#### **Create project**

A problem has been fixed which had sometimes made it impossible to create a new project after the current project name was edited.

#### Load project

A problem has been fixed in which the LED indicating the selected control room source was displayed incorrectly when a project was loaded.

A problem has been fixed in which the cascade connection status sometimes became invalid when loading a project that changed the cascade master/slave relationship.

### Version 1.30 Remote control

#### Ch 9-16 screen text display when using Sonar4

A problem has been fixed in which the text display for each module was not shown in the channel 9-16 screen when using Sonar 4 in the Mackie Control mode.

# Stereo fader operation using Mackie protocol and another external controller

When the Mackie Control External Controller was used in conjunction with another External Controller that used the remote fader bank, moving the master fader would operate the Mackie Control master fader function even when the fader bank was currently assigned to the other controller.

This has been fixed.

feature was being used and the master fader touched.

This has been fixed.

#### **MMC CHASE command**

The MMC machine control CHASE command is now supported.

In setups in which P2 protocol is used to control a VTR or other device, and the recorder is the time-code slave, the recorder can be set to MMC control to allow recording on the recorder.

MACHINE CONTROL LIST								۲	
STATE DEVICE					ID	CHASE	TRA	REC	
+	4	VTR	2Trk	REC			$\odot$	0	
+	М	MMC	Full		01	<b>⊡</b>	Ο	( <b>1-B</b> )	

Fig 20: machine_P2mmc.png

#### **DTRS REC function setting in P2**

A problem has been fixed in which it had been impossible to set the REC function for track 9 or higher when using P2 to control DTRS.

#### MX-2424 REC function setting via MMC

A problem has been fixed in which the REC function could not be set correctly when controlling the MX-2424 via MMC.

# Switching of BUSS PAN Follows ST PAN during automation is now disabled

Switching the BUSS PAN Follows ST PAN on/off while automation is operating has now been disabled. If you attempt to switch this while automation is operating, a popup message will appear, and the change will not be accepted.

Popup message:

Cannot do this while automatio is running.

# Slave Lock processing when cascade connection is cancelled

A UI improvement has been made so that when you cancel the cascade connection, the clock master of the slave device is set to Internal. When you attempt to cancel the cascade connection, the following popup message will appear.

Popup message:

# CASCADE Connection ended.

Please choose new clock master.

Set Internal Clock?

Press ENTER to confirm,

or cursor key to cancel.

When you press the **ENTER** key, the clock master will be set to Internal.

# Version 1.20

- Rare instances of routing crosstalk have been addressed
- Automation data file handling has been improved
- Where the CF card is close to full
- When creating a new project
- When using the Keep function

# **Known Issues**

This section describes the Known Issues for the latest DM-3200 software

# Version 1.60

#### ■ DTRS REC FUNCTION setting when controlling via P2

When making REC function settings with multiple DTRS devices connected, and the REC function of track 9 or later is operated from the DTRS unit, that status is not reflected in the mixer.

# Auto detection of MMC control target

When loading a project that includes MMC Full (closedloop) control, be sure to connect and power on the MMC device first. Also, power on the MMC device before starting the mixer, otherwise the MMC device may not be correctly identified or controlled.

### USB Connection notes

#### Mac OS X:

If TMC or your DAW software fails to find your mixer after putting your computer into Sleep mode, please remove the USB cable and re-connect it before re-launching TMC or your DAW software.

#### Windows XP:

If TMC or your DAW software fails to find your mixer after putting your computer into Standby mode or Hibernation mode, please re-launch TMC or your DAW software.

#### Windows Vista:

If TMC or your DAW software fails to find your mixer after putting your computer into Standby mode, Sleep

# ■ STORE button in the library/automation LCD screen

When you press the STORE button in the various screens, the resulting operation had been the same as when pressing the STORE AS button. This has been changed so that the operation is the same as when you press the top panel **STORE** key.

The file name used when you store by pressing the STORE button in the AUTOMATION>FILES screen is now the same as when you store by pressing the **KEEP** key.

- Pink noise generated by the oscillator is now more accurate
- Rare instances of not being able to exit Initial Edit after writing automation have been addressed
- Rare instances of CTRL+STORE over-writing protected data have been addressed

mode or Hibernation mode, please re-launch TMC or your DAW software again.

To prevent this problem re-occuring, please set your computer to not automatically go into Standby or Hibernation modes.

### ■ Multiple IF-AE/DM cards and clock master.

If one of the IF-AE/DM cards is selected as the clock master, attempting to switch the master clock to another IF-AE/DM card will result in noise in the mixer. To avoid this, do not change the clock source.



# **DM-3200**