DMI-64 MARK II USER'S MANUAL



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Manual Rev. 3.2



INTRODUCTION

The DMI-64 Mark II is a digital synthesizer offering 64 dynamically assigned voices. It is especially suited for reproducing classic keyboard sounds such as those of tone-wheel and combo organs.

NOTE: For the remainder of this manual, the DMI-64 Mark II will be referred to as the DMI-64 II.

The DMI-64 II comes with 99 factory preset programs. A program consists of waveforms, effects selections, MIDI control map, and keyboard split settings. The unit also includes 64 factory programed waveforms. These presets will allow the user to begin playing the DMI-64 II right out of the box, without having to do any programming. If necessary, any or all of the 99 preset programs may be altered by using the built in Edit Mode or the "DMI-64 II Soft Control" software. Eight of the 64 waveforms can be modified by the built in Edit Mode or the "DMI-64 II Soft Control" software.

This manual consists of two sections:

Section 1: Basics of setting up, playing, and caring for your DMI-64 II.

Section 2: Detailed description of DMI-64 II programming.

USING THE DMI-64 MARK II

Unpacking the DMI-64 II

Your DMI-64 II comes with the following items:

- 1. DMI-64 II User's Manual
- 2. External AC adaptor
- 3. MIDI Implementation Chart
- 4. Parameter Chart
- 5. Rubber Feet
- **NOTE:** Save the DMI-64 II's packing carton. For carrying and shipping, it provides the best protection short of a hard case.

USING THE DMI-64 MARK II

Front Panel

On the front of the DMI-64 II you will find the following:

- 1. POWER SWITCH push on/push off
- 2. POWER/COMMUNICATIONS INDICATOR LED This is a multipurpose indicator. The indicator will light a green color when power is applied to the unit, except when the unit is operating in EDIT MODE (refer to section 2 of this manual for a description of EDIT MODE), in which case the indicator will be red. When MIDI information is being transmitted (i.e. when you press or release a key on a keyboard), the indicator will flash from GREEN to RED or from RED to GREEN depending on whether you're in normal play mode or EDIT MODE respectively.
- 3. Increment and Decrement buttons for changing preset or Edit Mode parameter number.
- 4. Four digit LCD display This is a multipurpose display used for the following functions:
 - I Display preset selection for the basic MIDI channel
 - II Display programming parameters in EDIT MODE
- 5. Increment and Decrement buttons used only in Edit Mode to change a parameter's value.



Rear Panel

On the rear panel of the DMI-64 II you will find the following:

- 1. This is your DMI-64 II's serial number.
- 2. 1/4 INCH UNBALANCED AUDIO CONNECTORS These are 1/4 inch phone jacks for connecting the DMI-64 II to an instrument amplifier.
- 3. MIDI IN / OUT / THRU DIN CONNECTORS These are the connectors used for connection to other MIDI devices. The DMI-64 II functions in accordance with the IMA MIDI standard.
- 4. AC CONNECTOR This connector is for supplying power to the DMI-64 II. It mates to a matching connector on the AC adaptor provided with the unit.



USING THE DMI-64 MARK II

Setting Up

Remove the DMI-64 II and the AC adaptor from its carton being careful not to damage the computer floppy disk.

MIDI Interface

The DMI-64 II uses the IMA MIDI protocol to communicate with a MIDI controller. A MIDI controller can be a keyboard (The DMI-64 II has no keyboard of its own), a sequencer or computer capable of sending MIDI information through a MIDI output port.

To connect a MIDI controller to the DMI-64 II follow these three steps:

- Step 1: Using a standard MIDI cable, connect one end of the cable to the MIDI OUT port of your MIDI controller. Connect the other end of the cable to the MIDI IN port of your DMI-64 II.
- (Step 2 is optional)
- Step 2: If you are using the MIDI controller with more than one MIDI instrument, in your MIDI setup, you can use the DMI-64 II's MIDI THRU port to connect to the next MIDI instrument. You can do this by connecting one end of a MIDI cable to the MIDI THRU port on the DMI-64 II. Connect the other end of the cable to the MIDI IN port of the next MIDI instrument.

CAUTION: USE ONLY A DIN CABLE WITH 180° MALE 5-PIN DIN CONNECTORS.

The MIDI OUT port on the DMI-64 II rear panel is used for MIDI system exclusive communication to a computer. This feature may be used with the DMI-64 II Soft Control program installed on a computer with MIDI IN and MIDI OUT ports, or other patch librarians.

1/4-Inch Audio Outputs

The 1/4 inch outputs provide CH1/MIX & CH2 audio outputs to your instrument amplifier(s). Connect one end of a mono 1/4 inch cable to the CH1/MIX audio output of the DMI-64 II. Connect the other end of the cable to the audio input of your instrument amplifier or other audio equipment. Repeat this procedure for the CH2 audio output if desired.

For a mono amplifier setup, use the CH1/MIX output. If no plug is inserted into the CH2 connector, the CH1/MIX output will provide a signal which is the sum of CH1 and CH2.

Several modes of audio assignment are possible with the DMI-64 II. A preset may be setup to play on only Audio Channel 1, Audio Channel 2, on both (Mono), or on both (Stereo). The former modes are useful when using a split program or multitimbral mode. For example, a split program may have the preset active below a certain MIDI note assigned to Audio Channel 1 while the upper preset may be assigned to the other audio channel. The latter mode (Stereo) may be used with the rotating speaker effect to provide a more "spacious" sound.

9-Volt AC Connector

The 9-Volt AC connector is used to provide power to your DMI-64 II.

You will notice two 6 ft. long cables on either side of the AC adaptor provided with the DMI-64 II. One cable has a standard two pronged AC plug. The other cable has a standard 2.5mm power connector which mates to the DMI-64 II AC power jack.

USING THE DMI-64 MARK II

Powering up the DMI-64 II

Before applying power to the DMI-64 II make sure the audio level on your in strument amplifier, mixing console or sound re-enforcement equipment is reduced to a minimum and that all the necessary connections have been properly made as specified in section 2. The LED on the DMI-64 II should be off indicating that power has not been applied. Power up the DMI-64 II by press ing the power switch. The LED should turn GREEN indicating that power has been applied and that you are in normal play mode. You may see a RED flick er on the LED when power is first applied, this is normal. Also, on power up, you will hear a slight "click", this comes from the audio protection relay in the DMI-64 II. The DMI-64 II incorporates an audio protection relay to protect ex ternal audio equipment from surges during power up and power down.

Playing the DMI-64 II

For the following section we'll assume you have read and understood the sections on setting up and applying power to the DMI-64 II. Once the power has been applied, slowly turn up the volume of your system and begin to play notes on the keyboard. Be sure the MIDI controller is set to MIDI channel 1, as the this is the factory default basic channel. As you press the keys on your keyboard you will notice that the LED on the DMI-64 II begins to flash. This means that the DMI-64 II is receiving MIDI information from your keyboard and that you should be hearing audio. Adjust the volume to a comfortable level and begin to play.

You may change the preset the DMI-64 II is sounding by using the leftmost Increment and Decrement buttons when **not** in EDIT MODE. You will notice that the two digits on the display represent the preset number in use on the basic MIDI channel only. If you are using a multitimbral setup, the presets active on other MIDI channels will not be displayed. Refer to section 2 for an explanation of programming the DMI-64 II for multitimbral use. Refer to Appendix A for a listing of the DMI-64 II's factory programed settings. This table lists the various preset settings that come pre-programed in your DMI-64 II.

There are 11 MIDI control changes the DMI-64 II will respond to. A separate controller map exists for each DMI-64 II preset. While most control changes only serve to change the virtual switches supported by the DMI-64 II, a con-tinuous controller may be assigned for channel volume. The following is a list of virtual switch function supported by the DMI-64 II: Vibrato On, Chorus On, Rotating Speaker On, Rate Select, Depth Select, Percussion On/Off, Percussion Waveform Select, Percussion Decay Select, Percussion Volume Select, and Distortion On/Off.

You will need a MIDI implementation chart for your particular MIDI controller. The MIDI implementation chart will aid in interfacing with your MIDI controller to the DMI-64 II.

Taking Care of the DMI-64 II

The DMI-64 II has been designed to meet the special needs of the professional musician. Because of this, every attempt has been made to design a rugged yet compact instrument which will perform reliably for years to come. But, like any other musical instrument, we strongly recommend that you take the proper precautions during normal use. In order to maintain the DMI-64 II in proper working order, keep the following points in mind:

1. The DMI-64 II does not require adjustments of any kind, internal or external. The only time it may be necessary to open up the unit is for replacement of the 3 Volt Lithium Battery used for backing up the non-volatile preset memory. The preset memory holds the DMI-64 II's patch settings and the eight user programmable waveforms. This battery should provide up to 4 years of backup. Should it become necessary to replace the battery, see your dealer or contact Voce Inc. for a replacement battery or for information on where to obtain one.

The following is a list of replacement batteries:

Sanyo 2340 270 mA/Hr

Panasonic BR2330 250 mA/Hr

You may replace the battery by either bringing it to your dealer or you can do it yourself. Replacing the battery is a simple operation requiring a Phillips Head screw driver and about 15 minutes of your time (see Appendix D).

- 2. Keep the DMI-64 II away from direct sunlight or excessive heat or cold. Do not expose to rain.
- 3. Do not throw, kick, drop, crush, or spill liquids on the DMI-64 II. Although we have made every effort to make the DMI-64 II as rugged as possible, it is not indestructible.
- 4. Although the DMI-64 II employs an audio protection relay for the 1/4 Audio Outputs, it is advisable that you always turn down the audio level before powering up or down.

Editing Parameters

Edit Mode is a special programming mode which allows the parameters which make up a preset to be changed. This mode is activated by pressing the two right most Increment and Decrement buttons simultaneously. Upon pressing the buttons you will note that the COM LED changes color (from green to red), indicating that you are in Edit Mode. You will also note that the display will read "0000".

The display will now function in a different manner. Instead of displaying the preset number, the leftmost pair of digits represent the parameter number to be edited. The rightmost digits represent the parameter's value. Using the leftmost Increment and Decrement buttons will select different parameters to edit while using the rightmost buttons will change the parameters value. MIDI Program Changes are inhibited while in Edit Mode to protect the user from accidentally editing the wrong preset.

Most of the parameters in the Edit Mode menu apply only to the preset selected at the time Edit Mode is enabled. Some parameters are global and apply to all the presets or general functions of the instrument. A full parameter explanation will follow later in the manual.

The editable parameters fall into general categories: Waveform Select, Effects, MIDI Controller Map, Pitch and Volume offsets, Audio Channel Assignment, Channel Split, Waveform Generation, MIDI System Exclusive Dumps, and Multitimbral Channel Selects.

There are 64 waveforms available for use in the DMI-64 II. The last 8 of these waveforms (56 - 63) are programmable by the user. The method provided in Edit Mode for creating waveforms is an additive one similar to using harmonic drawbars on an organ. Any of the DMI-64 II waveforms, except the one being edited, may be used as a base waveform of which harmonic copies of itself of varying amplitudes are added together. It is possible to do these harmonic manipulations remotely through the use of MIDI system exclusive data. Refer to Appendix B.

The DMI-64 II may be used multitimbrally. Up to 16 MIDI channels may be used simultaneously with the DMI-64 II. Assuming that each MIDI channel is using a split preset, that translates to a possible 32 different presets with 32 different volumes with 32 different pitch transpositions with various effects. To use the multitimbral mode, set Omni Off, and enable additional MIDI channels by select ing presets for the MIDI Channels Preset #s (parameters 59 - 74).

Parameters 75 and 76 provide the user a method of introducing "flaws" into the organ sound. Electrical key click noise level can be adjusted using parameter 75. A 60Hz hum can be added to a keyed note by adjusting parameter 76.

Editing Parameters (cont.)

Tone wheel organ harmonic foldback may be simulated by assigning various waveforms to the 7 keyboard zones outined in the desciption of parameters 77 - 82. This allows the user to create different timbres for different ranges of notes.

A sustain / hold function is available on the DMI-64 II. This allow the user to hold chords while playing other keyboard. Parameter 83 is used to selected the MIDI control number for this function.

The user may re-initilize the DMI-64 II to the factory presets by using parameter 84. This will return the unit's memory to the state which it was shipped from the factory.

Parameter Information

00 Exit - return to normal play mode, activate by pressing the Value Increment button.

01 Basic Channel - This is the only MIDI channel the instrument will respond to in Omni Off mode. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel.

* Value Range (01 - 16) Actual Value: (1 - 16)

02 Omni Mode - selects one of two MIDI modes OMNI ON (respond to all MIDI channels) or OMNI OFF (respond only to basic channel or selected multitimbral channels).

* Value Range (00 - 01) Actual Value: 00 = OMNI OFF, 01 = OMNI ON

03 Waveform # (Zone 2) - selects the waveform used by the digital voice os - cillators.

Value Range (00 - 63) Actual Value: (0 - 63)

04 Distortion - activates analog distortion circuitry. This effect is global for the entire audio output of the instrument; it is important to remember this when the effect is used in multitimbral setups or split programs.

* Value Range (00 - 01) Actual Value: 00 = 0 Verdrive Off, 01 = 0 Verdrive On

05 Volume - used to adjust volume of preset excluding percussion effect volume. This is useful in balancing split programs or multitimbral setups.

Value Range (00 - 63) Actual Value: 00 = Softest, 63 = Loudest

06 Semitone Offset - pitch offset for preset in semitones.

Value Range (00 - 64) Actual Value: 00 = -32 Semitones, 32 = 0 Semitones, 64 = +32 Semitones

07 Micro tonal Offset - fractional pitch offset.

Value Range (00 - 64) Actual Value: 00 = -1 Semitone, 32 = 0 Semitone, 64 = +1 Semitone

Parameter Information (cont.)

08 FM Effects Data - selects effects such as Chorus, Vibrato, or Rotating Speaker and their states.

Parameter 8 Value	Effect	Virtual Switch Da	Virtual Switch Data		
00	No frequency mod. effect	Depth Sw. Off	Rate Sw. Off		
01	Rotating Speaker Effect	Depth Sw. Off	Rate Sw. Off		
02	Vibrato Effect	Depth Sw. Off	Rate Sw. Off		
03	Chorus Effect	Depth Sw. Off	Rate Sw. Off		
04	No frequency mod. effect	Depth Sw. On	Rate Sw. Off		
05	Rotating Speaker Effect	Depth Sw. On	Rate Sw. Off		
06	Vibrato Effect	Depth Sw. On	Rate Sw. Off		
07	Chorus Effect	Depth Sw. On	Rate Sw. Off		
08	No frequency mod. effect	Depth Sw. Off	Rate Sw. On		
09	Rotating Speaker Effect	Depth Sw. Off	Rate Sw. On		
10	Vibrato Effect	Depth Sw. Off	Rate Sw. On		
11	Chorus Effect	Depth Sw. Off	Rate Sw. On		
12	No frequency mod. effect	Depth Sw. On	Rate Sw. On		
13	Rotating Speaker Effect	Depth Sw. On	Rate Sw. On		
14	Vibrato Effect	Depth Sw. On	Rate Sw. On		
15	Chorus Effect	Depth Sw. On	Rate Sw. On		

Value Range (00 - 15) Actual Value: See table below

Parameter Information (cont.)

09 Percussion Effects Data - selects percussion effect setup. Value Range (00 - 15) Actual Value: See table below

Parameter 9 Value		Virtual Sw	itch Data
00	Percussion Off-	Perc. Wave Sel Off-	Perc. Vol. Off- Perc. Decay Off
01	Percussion Off-	Perc. Wave Sel Off-	Perc. Vol. Off- Perc. Decay On
02	Percussion Off-	Perc. Wave Sel Off-	Perc. Vol. On- Perc. Decay Off
03	Percussion Off-	Perc. Wave Sel Off-	Perc. Vol. On- Perc. Decay On
04	Percussion Off-	Perc. Wave Sel On-	Perc. Vol. Off- Perc. Decay Off
05	Percussion Off-	Perc. Wave Sel On-	Perc. Vol. Off- Perc. Decay On
06	Percussion Off-	Perc. Wave Sel On-	Perc. Vol. On- Perc. Decay Off
07	Percussion Off-	Perc. Wave Sel On-	Perc. Vol. On- Perc. Decay On
08	Percussion On-	Perc. Wave Sel Off-	Perc. Vol. Off- Perc. Decay Off
09	Percussion On-	Perc. Wave Sel Off-	Perc. Vol. Off- Perc. Decay On
10	Percussion On-	Perc. Wave Sel Off-	Perc. Vol. On- Perc. Decay Off
11	Percussion On-	Perc. Wave Sel Off-	Perc. Vol. On- Perc. Decay On
12	Percussion On-	Perc. Wave Sel On-	Perc. Vol. Off- Perc. Decay Off
13	Percussion On-	Perc. Wave Sel On-	Perc. Vol. Off- Perc. Decay On
14	Percussion On-	Perc. Wave Sel On-	Perc. Vol. On- Perc. Decay Off
15	Percussion On-	Perc. Wave Sel On-	Perc. Vol. On- Perc. Decay On

Parameter Information (cont.)

10 FM Effects Mask - selects which control switch settings (if any) are to be modified by the FM Effects Data upon preset selection.

Value Range (00 - 07) Actual Value: See table below

Parameter 10 Value	Virtual Switch Enables (En =	Enabled, $Ne = N$	ot Enabled)
00	Effect change Not enabled	Depth Sw. Ne	Rate Sw. Ne
01	Effect change Enabled	Depth Sw. Ne	Rate Sw. Ne
02	Effect change Not enabled	Depth Sw. En	Rate Sw. Ne
03	Effect change Enabled	Depth Sw. En	Rate Sw. Ne
04	Effect change Not enabled	Depth Sw. Ne	Rate Sw. En
05	Effect change Enabled	Depth Sw. Ne	Rate Sw. En
06	Effect change Not enabled	Depth Sw. En	Rate Sw. En
07	Effect change Enabled	Depth Sw. En	Rate Sw. En

11 Percussion Effects Mask- selects which control switch settings (if any) are to be modified by the Percussions Effects Data upon preset selection. Value Range (00 - 15) Actual Value: See table below

Parameter 7	11 Value Virtua	I Switch Enables (En	= Enabled, Ne = Not Enabled)
00	Percussion Ne-	Perc. Wave Sel Ne-	Perc. Vol. Ne- Perc. Decay Ne
01	Percussion Ne-	Perc. Wave Sel Ne-	Perc. Vol. Ne- Perc. Decay En
02	Percussion Ne-	Perc. Wave Sel Ne-	Perc. Vol. En- Perc. Decay Ne
03	Percussion Ne-	Perc. Wave Sel Ne-	Perc. Vol. En- Perc. Decay En
04	Percussion Ne-	Perc. Wave Sel En-	Perc. Vol. Ne- Perc. Decay Ne
05	Percussion Ne-	Perc. Wave Sel En-	Perc. Vol. Ne- Perc. Decay En
06	Percussion Ne-	Perc. Wave Sel En-	Perc. Vol. En- Perc. Decay Ne
07	Percussion Ne-	Perc. Wave Sel En-	Perc. Vol. En- Perc. Decay En
08	Percussion En-	Perc. Wave Sel Ne-	Perc. Vol. Ne- Perc. Decay Ne
09	Percussion En-	Perc. Wave Sel Ne-	Perc. Vol. Ne- Perc. Decay En
10	Percussion En-	Perc. Wave Sel Ne-	Perc. Vol. En- Perc. Decay Ne
11	Percussion En-	Perc. Wave Sel Ne-	Perc. Vol. En- Perc. Decay En
12	Percussion En-	Perc. Wave Sel En-	Perc. Vol. Ne- Perc. Decay Ne
13	Percussion En-	Perc. Wave Sel En-	Perc. Vol. Ne- Perc. Decay En
14	Percussion En-	Perc. Wave Sel En-	Perc. Vol. En- Perc. Decay Ne
15	Percussion En-	Perc. Wave Sel En-	Perc. Vol. En- Perc. Decay En

Parameter Information (cont.)

12 Rotating Speaker Deceleration - the time it takes for the Rotating Speaker Effect to slow down when the Rate Select control switch has been deactivated.

Value Range (00 - 99) Actual Value: 00 = fastest, 99 = slowest

13 Rotating Speaker Acceleration - the time it takes for the Rotating Speaker Effect to speed up when the Rate Select control switch has been activated.

Value Range (00 - 99) Actual Value: 00 = slowest, 99 = fastest

14 Rotating Speaker Slow Velocity- the rotation rate which occurs at the end of the deceleration time.

Value Range (00 - 20) Actual Value: 00 = slowest, 20 = fastest

15 Rotating Speaker Fast Velocity - the rotation rate which occurs at the end of the acceleration time.

Value Range (00 - 20) Actual Value: 00 = slowest, 20 = fastest

16 Vibrato Depth (control switch off) - amount of vibrato effect produced when the Depth Select control switch is deactivated.

Value Range (00 - 03) Actual Value: 00 = most shallow, 03 = deepest

17 Vibrato Depth (control switch on) - amount of vibrato effect produced when the control switch is activated.

Value Range (00 - 03) Actual Value: 00 = most shallow, 03 = deepest

18 Chorus Depth (control switch off) - amount of chorus effect produced when the Depth Select control switch is deactivated.

Value Range (00 - 03) Actual Value: 00 = most shallow, 03 = deepest

19 Chorus Depth (control switch on) - amount of chorus effect produced when the Depth Select control switch is activated.

Value Range (00 - 03) Actual Value: 00 = most shallow, 03 = deepest

20 Vibrato Rate (control switch off) - vibrato effect speed when the Rate Select control switch is deactivated.

Value Range (00 - 20) Actual Value: 00 = slowest, 20 = fastest

21 Vibrato Rate (control switch on) - vibrato effect speed when the Rate Select control switch is activated.

Value Range (00 - 20) Actual Value: 00 = slowest, 20 = fastest

Parameter Information (cont.)

22 Chorus Rate (control switch off) - chorus effect speed when the Rate Select control switch is deactivated.

Value Range (00 - 20) Actual Value: 00 = slowest, 20 = fastest

23 Chorus Rate (control switch on) - chorus effect speed when the Rate Select control switch is activated.

Value Range (00 - 20) Actual Value: 00 = slowest, 20 = fastest

24 Percussion Waveform (control switch off) - selects the percussion waveform to be used when the Percussion Waveform Select control switch is deactivated.

Value Range (00 - 63) Actual Value: (0 - 63)

25 Percussion Waveform (control switch on) - selects the percussion waveform to be used when the Percussion Waveform Select control switch is activated.

Value Range (00 - 63) Actual Value: (0 - 63)

26 Percussion Volume (control switch off) - selects the percussion volume to be used when the Percussion Volume Select control switch is deactivated.

Value Range (00 - 63) Actual Value: 00 = Softest, 63 = Loudest

27 Percussion Volume (control switch on) - selects the percussion volume to be used when the Percussion Volume Select control switch is deactivated.

Value Range (00 - 63) Actual Value: 00 = Softest, 63 = Loudest

28 Percussion Decay (control switch off) - selects the percussion decay time to be used when the Percussion Decay Select control switch is deactivated.

Value Range (01 - 05) Actual Value: 01 = longest, 05 = shortest

29 Percussion Decay (control switch on) - selects the percussion decay time to be used when the Percussion Decay Select control switch is activated.

Value Range (01 - 05) Actual Value: 01 = longest, 05 = shortest

30 Audio Channel Assignment - selects 1 of 4 possible audio output modes. Value Range (01 - 04) Actual Value: 01 = Audio Ch. 1, 02 = Audio Ch. 2, 03 = Mono, 04 = Stereo

Parameter Information (cont.)

31 Split Note- determines the MIDI note number at which the channel split point will occur, below this note the alternate preset will be active.

Value Range (00 - 99) Actual Value: 00 = no split, (1 - 99) = MIDI note #

32 Alternate Preset - preset to be active simultaneously when channel split mode is in use.

Value Range (01 - 99) Actual Value: (1 - 99)

33 Volume MIDI Control Switch # - MIDI controller assignment for MIDI Volume Control.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

34 Rotating Speaker MIDI Control Switch # - MIDI controller assignment for Rotating Speaker On control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

35 Vibrato MIDI Control Switch #- MIDI controller assignment for Vibrato On control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

36 Chorus MIDI Control Switch #- MIDI controller assignment for Chorus On control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

37 Depth MIDI Control Switch #- MIDI controller assignment for Depth Select control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

38 Rate MIDI Control Switch # - MIDI controller assignment for Rate Select control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

Parameter Information (cont.)

39 Perc. On/Off MIDI Control Switch # - MIDI controller assignment for Percussion On/Off control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

40 Perc. Decay MIDI Control Switch # - MIDI controller assignment for Percussion Decay control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

41 Perc. Volume MIDI Control Switch # - MIDI controller assignment for Percussion Volume Select control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

42 Perc. Waveform MIDI Control Switch # - MIDI controller assignment for Percussion Waveform Select control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

43 Distortion MIDI Control Switch # - MIDI controller assignment for Distortion On/Off control switch.

Value Range (00 - 99) Actual Value: 99 = Channel Pressure, (0 - 98) = MIDI Control #

Parameter Information (cont.)

The following 10 parameters correspond to the additive waveform process. They will only appear in Edit Menu if parameter 3 (Waveform #) is set to a programmable waveform, numbers 56 - 63. If parameter 3 is set to 0 through 55, the Edit Menu will skip from parameter 43 to 54.

44 Waveform Generation Base Waveform - waveform selected to have it's harmonics added to produce a new composite waveform. Resultant waveform resides in the waveform number selected by parameter 3.

* Value Range (00 - 63) Actual Value: (0 - 63)

45 Waveform Generation Harmonic 1 - amplitude value for the 1st harmonic wave. Corresponds to the 1st drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

46 Waveform Generation Harmonic 3 - corresponds to the 2nd drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

47 Waveform Generation Harmonic 2 - corresponds to the 3rd drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

48 Waveform Generation Harmonic 4 - corresponds to the 4th drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

49 Waveform Generation Harmonic 6 - corresponds to the 5th drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

50 Waveform Generation Harmonic 8 - corresponds to the 6th drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

Parameter Information (cont.)

51 Waveform Generation Harmonic 10 - corresponds to the 7th drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

52 Waveform Generation Harmonic 12 - corresponds to the 8th drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

53 Waveform Generation Harmonic 16 - corresponds to the 9th drawbar of a tone-wheel organ.

* Value Range (00 - 08) Actual Value: (0 - 8)

54 Copy From Preset # - used by the copy function to overwrite the current preset with data from the selected preset.

* Value Range (01 - 99) Actual Value: (1 - 99)

55 Copy From Execute - activates the Copy function, overwriting the current preset with data from the selected preset (parameter 54).

* Value Range (00 - 03) 03 = Do Copy Function

56 Send MIDI Patch Dump - dumps MIDI System Exclusive data corresponding to the selected preset through the MIDI OUT port. Parameters 2 through and including 43 or parameters 2 through and including 53 if a programmable waveform (# 56 - 63) is selected are sent.

* Activated by Value Increment button

57 Send MIDI Sample Dump - dumps MIDI Sample Dump data correspond - ing to the selected waveform through the MIDI OUT port.

* Activated by Value Increment button

58 Send MIDI Sample Dump Request - sends a MIDI Sample Dump Request corresponding to the selected waveform through the MIDI OUT port if the selected waveform (parameter 3) is a programmable waveform (# 56 - 63). If parameter 3 is not set to 56 - 63 the dump request is not sent.

* Activated by Value Increment button

Parameter Information (cont.)

59 Channel 1 Preset Number - the preset active for play on MIDI Channel 1. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

60 Channel 2 Preset Number - the preset active for play on MIDI Channel 2. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

61 Channel 3 Preset Number - the preset active for play on MIDI Channel 3. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

62 Channel 4 Preset Number - the preset active for play on MIDI Channel 4. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

63 Channel 5 Preset Number - the preset active for play on MIDI Channel 5. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

64 Channel 6 Preset Number - the preset active for play on MIDI Channel 6. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

Parameter Information (cont.)

65 Channel 7 Preset Number - the preset active for play on MIDI Channel 7. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

66 Channel 8 Preset Number - the preset active for play on MIDI Channel 8. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

67 Channel 9 Preset Number - the preset active for play on MIDI Channel 9. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

68 Channel 10 Preset Number- the preset active for play on MIDI Channel 10. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

69 Channel 11 Preset Number- the preset active for play on MIDI Channel 11. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

70 Channel 12 Preset Number- the preset active for play on MIDI Channel 12. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

Parameter Information (cont.)

71 Channel 13 Preset Number- the preset active for play on MIDI Channel 13. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

72 Channel 14 Preset Number- the preset active for play on MIDI Channel 14. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

73 Channel 15 Preset Number- the preset active for play on MIDI Channel 15. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan - nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

74 Channel 16 Preset Number- the preset active for play on MIDI Channel 16. Changes to this parameter may change the preset you are editing because you are editing the current preset selected for the basic channel. The basic chan nel cannot be turned off.

+ * Value Range (00 - 99) Actual Value: 0 = channel off (1 - 99) are presets 1 - 99.

75 Key Click Volume - Simulated electrical click level produced on the attack of every note.

Value Range (00 - 07) Actual Value: 0 = off, 7 = loudest

76 Hum Volume - Simulated 60Hz hum level produced only when a note or notes are keyed.. Provided for realism.

Value Range (00 - 07) Actual Value: 0 = off, 7 = loudest

* Parameters are global, affecting the entire instrument

+ The channel selected for the Basic Channel cannot be turned off

Parameter Information (cont.)



77 Zone 1 Waveform # - selects the waveform used by the digital voice oscillators for note range shown in the chart above. Useful for simulating the har monic foldback of tone wheel organs in which the timbre changes over the note range.

Value Range (00 - 63) Actual Value: (0 - 63)

78 Zone 3 (see parameter 3 for zone 2) Waveform #- selects the waveform used by the digital voice oscillators for note range shown in the chart above. Useful for simulating the harmonic foldback of tone wheel organs in which the timbre changes over the note range.

Value Range (00 - 63) Actual Value: (0 - 63)

79 Zone 4 Waveform # - selects the waveform used by the digital voice oscillators for note range shown in the chart above. Useful for simulating the har monic foldback of tone wheel organs in which the timbre changes over the note range.

Value Range (00 - 63) Actual Value: (0 - 63)

80 Zone 5 Waveform # - selects the waveform used by the digital voice oscillators for note range shown in the chart above. Useful for simulating the har - monic foldback of tone wheel organs in which the timbre changes over the note range.

Value Range (00 - 63) Actual Value: (0 - 63)

81 Zone 6 Waveform # - selects the waveform used by the digital voice oscillators for note range shown in the chart above. Useful for simulating the har - monic foldback of tone wheel organs in which the timbre changes over the note range.

Value Range (00 - 63) Actual Value: (0 - 63)

82 Zone 7 Waveform # - selects the waveform used by the digital voice oscillators for note range shown in the chart above. Useful for simulating the har - monic foldback of tone wheel organs in which the timbre changes over the note range.

Value Range (00 - 63) Actual Value: (0 - 63)

2-16

Parameter Information (cont.)

83 Sustain / Hold MIDI Control # - MIDI controller assignment for hold function.

Value Range (00 - 98) Actual Value: (0 - 98)

84 Re-initialize to Factory Presets- by incrementing this parameter to 99, The DMI will be restored to the factory state.

Value Range (00 - 99) Actual Value: (0 - 99)

#	Preset Name	Waveform #	and Name	Effect Selected	Split	Output
1.	Slow Jazz	01, Jazz	(888000000)	Rot. Spkr. Slow / Perc 3	N/A	Stereo
2.	Slow Church	03, Church	(808808008)	Rot. Spkr. Slow	N/A	Stereo
3.	Slow Full	07, Full	(888888888)	Rot. Spkr. Slow	N/A	Stereo
4.	Slow Joey 1	14, Joey 1	(888800000)	Rot. Spkr. Slow / Perc 3	N/A	Stereo
5.	Slow Yes	16, Yes	(888473256)	Rot. Spkr. Slow	N/A	Stereo
6.	Slow Rock 1	23, Rock 1	(875323578)	Rot. Spkr. Fast	N/A	Stereo
7.	Slow Brian	30, Brian	(888330000)	Rot. Spkr. Slow / Perc 2	N/A	Stereo
8.	Slow Bass 1	33, Bass 1	(808000000)	Rot. Spkr. Slow	N/A	Stereo
9.	Slow Hollow	35, Hollow	(880080550)	Rot. Spkr. Slow	N/A	Stereo
10.	Slow Cool 1	40, Cool 1	(888008000)	Rot. Spkr. Slow	N/A	Stereo
11.	Slow Cool 2	43, Cool 2	(846040500)	Rot. Spkr. Slow	N/A	Stereo
12.	Slow Cool 3	47, Cool 3	(80080000)	Rot. Spkr. Slow	N/A	Stereo
13.	Slow Vibe	48, Vibe	(80000000)	Rot. Spkr. Slow / Perc 3	N/A	Stereo
14.	Slow Flute	49, Flute	(00080000)	Rot. Spkr. Slow	N/A	Stereo
15.	Fast Voxx	51, Full Voxx		Fast Vibrato	N/A	Stereo
16.	Fast Farf	52, Full Farf		Fast Vibrato	N/A	Stereo
17.	Voxx 16'	53, Voxx 1		No Effect	N/A	Stereo
18.	Farf 16'	54, Farf 1		No Effect	N/A	Stereo
19.	Slow Joey 2	57, Joey 2	(888800008)	Rot. Spkr. Slow	N/A	Stereo
20.	Slow Rock 2	61, Rock 2	(808760040)	Rot. Spkr. Slow	N/A	Stereo
21.	J. Smith	01, Jazz	(888000000)	Fast Chorus / Perc 3	N/A	Mono
22.	Chorus Church	03, Church	(808808008)	Fast Chorus	N/A	Mono
23.	Chorus Full	07, Full	(888888888)	Fast Chorus	N/A	Mono
24.	Chorus Joey 1	14, Joey 1	(888800000)	Fast Chorus / Perc 3	N/A	Mono
25.	Chorus Yes	16, Yes	(888473256)	Fast Chorus	N/A	Mono
26.	Chorus Rock 1	23, Rock 1	(875323578)	Fast Chorus	N/A	Mono
27.	Chorus Brian	30, Brian	(888330000)	Fast Chorus / Perc 2	N/A	Mono
28.	Chorus Bass 1	33, Bass 1	(808000000)	Fast Chorus	N/A	Mono
29.	Chorus Hollow	35, Hollow	(880080550)	Fast Chorus	N/A	Mono
30.	Chorus Cool 1	40, Cool 1	(888008000)	Fast Chorus	N/A	Mono
31.	Chorus Cool 2	43, Cool 2	(846040500)	Fast Chorus	N/A	Mono
32.	Chorus Cool 3	47, Cool 3	(80080000)	Fast Chorus	N/A	Mono

APPENDIX A - Factory Presets Table

Rot. Spkr. = Rotating Speaker, Perc. = Percussion, Dist. = Distortion

APPENDIX A - Factory Presets Table

#	Preset Name	Waveform #	and Name	Effect Selected	Split	Output
33.	Chorus Vibe	48, Vibe	(80000000)	Fast Chorus / Perc 3	N/A	Mono
34.	Chorus Flute	49, Flute	(00080000)	Fast Chorus	N/A	Mono
35.	Chorus Voxx	51, Full Voxx		Fast Chorus	N/A	Mono
36.	Chorus Farf	52, Full Farf		Fast Chorus	N/A	Mono
37.	Chorus Vx 16'	53, Voxx 16'		Fast Chorus	N/A	Mono
38.	Chorus Fr 16'	54, Farf 16'		Fast Chorus	N/A	Mono
39.	Chorus Joey 2	57, Joey 2	(888800008)	Fast Chorus	N/A	Mono
40.	Chorus Rock 2	61, Rock 2	(808760040)	Fast Chorus	N/A	Mono
41.	Dist. Slow Jazz	01, Jazz	(888000000)	Rot. Spkr. Slow / Perc 3	N/A	Stereo/Dist.
42.	Dist. Slow Church	03, Church	(808808008)	Rot. Spkr. Slow	N/A	Stereo/Dist.
43.	Dist. Slow Full	07, Full	(888888888)	Rot. Spkr. Slow	N/A	Stereo/Dist.
44.	Dist. Slow Joey 1	14, Joey 1	(888800000)	Rot. Spkr. Slow / Perc 3	N/A	Stereo/Dist.
45.	Dist. Slow Yes	16, Yes	(888473256)	Rot. Spkr. Slow	N/A	Stereo/Dist.
46.	Dist. Slow Rock 1	23, Rock 1	(875323578)	Rot. Spkr. Fast	N/A	Stereo/Dist.
47.	Dist. Slow Brian	30, Brian	(888330000)	Rot. Spkr. Slow / Perc 2	N/A	Stereo/Dist.
48.	Dist. Slow Bass 1	33, Bass 1	(808000000)	Rot. Spkr. Slow	N/A	Stereo/Dist.
49.	Dist. Slow Hollow	35, Hollow	(880080550)	Rot. Spkr. Slow	N/A	Stereo/Dist.
50.	Dist. Slow Cool 1	40, Cool 1	(888008000)	Rot. Spkr. Slow	N/A	Stereo/Dist.
51.	Dist. Slow Cool 2	43, Cool 2	(846040500)	Rot. Spkr. Slow	N/A	Stereo/Dist.
52.	Dist. Slow Cool 3	47, Cool 3	(80080000)	Rot. Spkr. Slow	N/A	Stereo/Dist.
53.	Dist. Slow Vibe	48, Vibe	(80000000)	Rot. Spkr. Slow / Perc 3	N/A	Stereo/Dist.
54.	Dist. Slow Flute	49, Flute	(00080000)	Rot. Spkr. Slow	N/A	Stereo/Dist.
55.	Dist. Fast Voxx	51, Full Voxx		Fast Vibrato	N/A	Stereo/Dist.
56.	Dist. Fast Farf	52, Full Farf		Fast Vibrato	N/A	Stereo/Dist.
57.	Dist. Voxx 16'	53, Voxx 1		No Effect	N/A	Stereo/Dist.
58.	Dist. Farf 16'	54, Farf 1		No Effect	N/A	Stereo/Dist.
59 .	Dist. Slow Joey 2	57, Joey 2	(888800008)	Rot. Spkr. Slow	N/A	Stereo/Dist.
60.	Dist. Slow Rock 2	61, Rock 2	(808760040)	Rot. Spkr. Slow	N/A	Stereo/Dist.
61.	Split J. Smith	01, Jazz	(888000000)	Fast Chorus / Perc 3	Note 60	Channel 1
62.	Split Chrs Church	03, Church	(808808008)	Fast Chorus	Note 60	Channel 1
63.	Split Chrs Full	07, Full	(888888888)	Fast Chorus	Note 60	Channel 1
64 .	Split Chrs Joey 1	14, Joey 1	(888800000)	Fast Chorus / Perc 3	Note 60	Channel 1

Rot. Spkr. = Rotating Speaker, Perc. = Percussion, Dist. = Distortion

APPENDIX A - Factory Presets Table

#	Preset Name	Waveform #	and Name	Effect Selected	Split	Output
65.	Split Chrs Yes	16, Yes	(888473256)	Fast Chorus	Note 60	Channel 1
66.	Split Chrs Rock 1	23, Rock 1	(875323578)	Fast Chorus	Note 60	Channel 1
67.	Split Chrs Brian	30, Brian	(888330000)	Fast Chorus / Perc 2	Note 60	Channel 1
68.	Split Chrs Bass 1	33, Bass 1	(80800000)	Fast Chorus	Note 60	Channel 1
69.	Split Chrs Hollow	35, Hollow	(880080550)	Fast Chorus	Note 60	Channel 1
70.	Split Chrs Cool 1	40, Cool 1	(888008000)	Fast Chorus	Note 60	Channel 1
71.	Split Chrs Cool 2	43, Cool 2	(846040500)	Fast Chorus	Note 60	Channel 1
72.	Split Chrs Cool 3	47, Cool 3	(80080000)	Fast Chorus	Note 60	Channel 1
73.	Split Chrs Vibe	48, Vibe	(80000000)	Fast Chorus / Perc 3	Note 60	Channel 1
74.	Split Chrs Flute	49, Flute	(00080000)	Fast Chorus	Note 60	Channel 1
75.	Split Chrs Voxx	51, Full Voxx		Fast Chorus	Note 60	Channel 1
76.	Split Chrs Farf	52, Full Farf		Fast Chorus	Note 60	Channel 1
77.	Split Chrs Vx 16'	53, Voxx 16'		Fast Chorus	Note 60	Channel 1
78.	Split Chrs Fr 16'	54, Farf 16'		Fast Chorus	Note 60	Channel 1
79.	Split Chrs Joey 2	57, Joey 2	(888800008)	Fast Chorus	Note 60	Channel 1
80.	Split Chrs Rock 2	61, Rock 2	(808760040)	Fast Chorus	Note 60	Channel 1
81.	Dist. J. Smith	01, Jazz	(888000000)	Fast Chorus / Perc 3	N/A	Mono/Dist.
82.	Dist. Chrs Church	03, Church	(808808008)	Fast Chorus	N/A	Mono/Dist.
83.	Dist. Chrs Full	07, Full	(888888888)	Fast Chorus	N/A	Mono/Dist.
84.	Dist. Chrs Joey 1	14, Joey 1	(888800000)	Fast Chorus / Perc 3	N/A	Mono/Dist.
85.	Dist. Chrs Yes	16, Yes	(888473256)	Fast Chorus	N/A	Mono/Dist.
86.	Dist. Chrs Rock 1	23, Rock 1	(875323578)	Fast Chorus	N/A	Mono/Dist.
87.	Dist. Chrs Brian	30, Brian	(888330000)	Fast Chorus / Perc 2	N/A	Mono/Dist.
88.	Dist. Chrs Bass 1	33, Bass 1	(80800000)	Fast Chorus	N/A	Mono/Dist.
89.	Dist. Chrs Hollow	35, Hollow	(880080550)	Fast Chorus	N/A	Mono/Dist.
90.	Dist. Chrs Cool 1	40, Cool 1	(888008000)	Fast Chorus	N/A	Mono/Dist.
91.	Dist. Chrs Cool 2	43, Cool 2	(846040500)	Fast Chorus	N/A	Mono/Dist.
92.	Dist. Chrs Cool 3	47, Cool 3	(80080000)	Fast Chorus	N/A	Mono/Dist.
93.	Dist. Chrs Vibe	48, Vibe	(80000000)	Fast Chorus	N/A	Mono/Dist.
94.	Dist. Chrs Flute	49, Flute	(00080000)	Fast Chorus	N/A	Mono/Dist.
9 5.	Dist. Chrs Voxx	51, Full Voxx		Fast Chorus	N/A	Mono/Dist.
96.	Dist. Chrs Farf	52, Full Farf		Fast Chorus	N/A	Mono/Dist.
97 .	Dist. Chrs Vx 16'	53, Voxx 16'		Fast Chorus	N/A	Mono/Dist.
98 .	Dist. Chrs Fr 16'	54, Farf 16'		Fast Chorus	N/A	Mono/Dist.
99 .	Dist. Chrs Joey 2	57, Joey 2	(888800008)	Fast Chorus	N/A	Mono/Dist.

Rot. Spkr. = Rotating Speaker, Perc. = Percussion, Dist. = Distortion

Appendix B - MIDI System Exclusive Formats

DMI-64 MARK II MIDI SYSTEM EXCLUSIVE PRESET DUMP FORMAT

SINGLE PARAMETER DUMP FORMAT

(all values shown in hexadecimal)

MMA SYSX ID FOR VOCE SEE TABLE



ww = 00 for dump request, 64 for data dump xx = preset number-1 yy = parameter number-1 (0-82, 127) (see note 1) zz = data (not present for dump request) (see note 2)

note 1: A bulk dump may be preformed if the parameter number (yy) is set to 127 (7Fh). data parameter (zz) will be replaced by 60 data bytes corresponding to parameters 3 - 53 and 75 - 83 consecutively. Values for parameters 44 - 53 will be accepted only if a programmable waveform (# 56 - 63) is used by the preset.

note 2: Data values are the same as those displayed on the front panel LCD display.

MIDI SAMPLE DUMP INFORMATION

1. The DMI-64 Mark II will transmit any or its internal waveforms, but will only accept samples for waveform numbers 56 though 63.

2. Sample number must be set to the desired waveform number. Channel number must be set to the Basic Channel number - 1.

3. The sample loop start point must be set to the beginning of a 256 point loop.



APPENDIX C - DMI-64 Mark II Specifications

Hardware

- FRONT PANEL: Power switch, Tri-color mode / communications LED, 4 push button control switches (Parameter / Preset, Mode / Value, Increment, Decrement), 4 digit LCD display.
- AUDIO OUTPUTS: Two independent channels providing unbalanced 1/4" instrument level outputs.
- MIDI I/O: In, Out, and Thru.
- DIGITAL AUDIO: Output rate fixed at 48KHz. Data format resolution equivalent to 22 bit linear coding. 512 point digital oscillator waveform loop length.
- NOISE FLOOR: Greater than 70 dB below maximum signal output level due to analog electronics (all voices assigned).
- DATA STORAGE: Internal battery backed non-volatile RAM.
- DIMENSIONS: 19"(W) x 10"(D) x 1.75"(H), standard single-height rack mount unit.
- WEIGHT: 9 pounds.
- POWER: 120 VAC 50/60Hz 20W External transformer.
- BATTERY TYPE: User-replaceable 3 volt lithium. Typical life 4 years.

Built-in Software Features

- VOICES: 64, assigned dynamically.
- WAVEFORMS: 64 factory waveforms, 8 of which are reprogrammable.
- PROGRAMS: 99 user reprogrammable presets.
- TUNING: 3.125 cents resolution.
- EFFECTS: Rotating speaker, vibrato, chorus, tone wheel organ percussion, distortion, key click, and hum.
- CONTROL FUNCTIONS: Effect rate fast/slow, effect depth low/high, tone wheel organ percussion volume decay and waveform, rotating speaker select, vibrato select, chorus select, tone wheel organ percussion select, simulated tube distortion select, key click and hum level, harmonic foldback control, and channel volume. Each program may have a MIDI control assignment map.
- SPLITS: An arbitrary split may be selected for each program allowing different waveform, tuning, effects, and MIDI control assignment map to be active simultaneously above and below the chosen split note.
- EDIT MODE: Programming may be accomplished interactively through the front panel controls or with an external computer via system exclusive MIDI communication.
- OUTPUT ASSIGNMENT: Audio outputs may be assigned for each program as independent (Ch.1 or Ch.2), mono, or stereo.



APPENDIX D - Replacing the Battery

To replace the battery yourself, obtain a Phillips Head screwdriver and do the following:

CAUTION: The DMI-64 II contains static sensitive components which are susceptible to damage from static discharge. We recommend that you take all the necessary precautions concerning work on static sensitive components, if you ever need to change the battery. If you are unsure about these precautions, please contact your dealer or Voce Inc.

- Step 1: Disconnect all cables from the DMI-64 II, including the power.
- Step 2: Place the DMI-64 II on a flat firm surface. Using a Phillips head screw driver, unscrew the top panel fastening screws (the 3 screws on either side of the box and the three top screws).
- Step 3: Once you have removed the top panel fastening screws, remove the top panel to reveal the DMI-64 II's interior. Assuming the DMI-64 II's front panel is facing you, you will notice the battery holder, containing a "coin" type Lithium battery, on the front left hand corner of the DMI-64 II's printed circuit board. Remove the battery by lifting one end of the battery retaining clip with one hand while at the same time sliding it out of the holder with the other hand.
- Step 4: Insert the new battery in the reverse order of Step 3 making sure that the positive side of the battery is up.
- Step 5: Replace top panel and refasten the screws. Reconnect the DMI-64 II for normal use as described in Section 1.

The preset memory backup battery should far outlast the DMI-64 II's warranty period. Should it become necessary to replace the battery before the warranty period expires, see your authorized Voce dealer or contact Voce Inc. Opening the DMI-64 II yourself will void the warranty.

Be aware that once the battery is replaced, any programs or waveforms you may have created will be lost. When you first power up, after replacing the battery, the DMI-64 II will automatically reload the factory default settings.

Any static induced damage to the DMI-64 II caused by anyone servicing the unit, other than an authorized Voce dealer or representative, will void the warranty.



LIMITED WARRANTY

Voce Inc. warrants this product to be free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY AND WHO IS PROTECTED

Labor (except removal and installation charges) and parts are warranted for one year. This warranty may be enforced only by the first consumer purchaser.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as specified below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

- 1. Any product which is not registered via a product registration card.
- 2. Any product on which the serial number has been defaced, modified or removed.
- 3. Damage, deterioration, or malfunction resulting from:
 - a. Accident, misuse, abuse, neglect, fire, water (or other liquids), static electricity, lightning, or other acts of nature, or failure to follow instructions supplied with the product.

 - b. Repair or attempted repair by anyone not authorized by Voce Inc.c. Any shipment of the product (claims must be presented to the carrier).
 - d. Any cause which does not relate to a product defect.

LIMITATION OF IMPLIED WARRANTIES

ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

EXCLUSION OF DAMAGES

VOCE'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT AT OUR OPTION. VOCE SHALL NOT BE LIABLE FOR:

- DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THIS PRODUCT, DAMAGES 1. BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, COMMERCIAL LOSS, OR,
- 2. ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL, OR OTHERWISE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU.

HOW STATE LAW RELATES TO THE WARRANTY

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

HOW YOU CAN GET WARRANTY SERVICE

To obtain warranty service on this product:

- 1. Take or ship the product to an authorized dealer or Voce Inc.
- Do not ship the product to Voce Inc. without authorization obtained via a phone call or letter.
- A dated sales receipt must be included as proof of warranty coverage.