Millenium Drums

MPS-150X

User Manual

E-Drum Module

Table of contents

1   General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under *www.thomann.de*.

1.1 Further information

On our website (*www.thomann.de)* you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

Displays

Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

Example:

1. ▶ Switch on the device.

2. ▶ Press *[Auto]*.

　　　⇨ Automatic operation is started.

3. ▶ Switch off the device.

Cross-references

References to other locations in this manual are identified by an arrow and the specified page number. In the electronic version of the manual, you can click the cross-reference to jump to the specified location.

Example: See .

1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – danger zone.

2   Safety instructions

Intended use

Drum modules are intended to be used for converting digital trigger signals from drum pads to various percussion sounds. Use the unit only as described in this manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

> **DANGER!**
> **Danger for children**
>
> Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!
>
> Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!
>
> Never let children unattended use electrical devices.

CAUTION!

Possible hearing damage

With loudspeakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment.

Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

!

NOTICE!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly the user.

Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

3   Features

- 108 Voices
- 10 preprogrammed drum kits
- 40 preprogrammed songs
- Metronome
- Flexible assignment of pad voices
- Reverb effect, voice tuning
- Individual adjustment of accompaniment and drum track
- Connections for headphones, AUX, USB and MIDI

4   Installation

Setup, connecting pads and pedals

Setup and assembly of the pads and pedals are described in detail in the enclosed assembly guide. Finally check that all cables between the pads and the drum module have been properly connected.

Connecting the power adapter

Connect the included power adapter to the 9V connector of the unit and then plug the power adapter into a wall outlet.
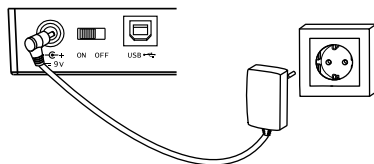
Connecting headphones

Connect your stereo headphones to the PHONES output of the drum module.
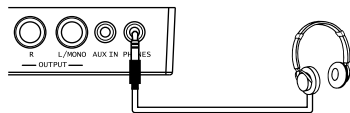
Connecting audio devices

Connect the inputs of your amplifier or active monitors to the OUTPUT sockets of the drum module. If you use a mono amplifier, connect its input to the output L / MONO socket of the module.
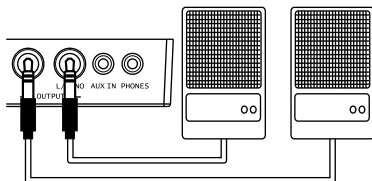
Connecting a CD or MP3 player

Connect your CD or MP3 player to the input socket AUX IN of the drum module.
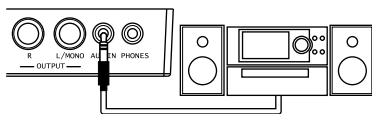
Connecting MIDI devices

Connect external MIDI devices to the MIDI OUT socket of the drum module.

Connecting USB devices

Connect external MIDI devices or your computer to the USB port of the drum module.

5   Connections and operating elements

Front panel
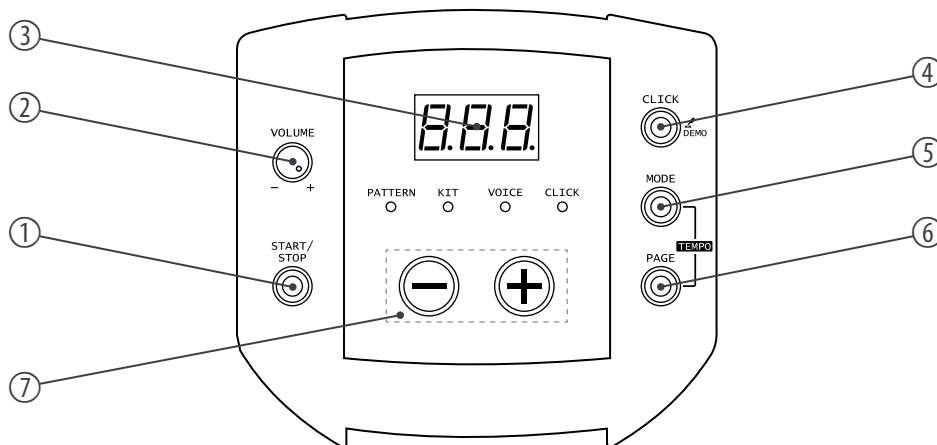
1	*[START / STOP]* Button to start and stop song playback.
2	*[VOLUME]* Volume control for the audio and headphones output of the device.
3	3-digit LED display.
4	*[CLICK]	[DEMO]* Button to turn the metronome on and off and to play the demo song.
5	*[MODE]* Button to open the selection menu.
6	*[PAGE]* Button to scroll through the open menu.
7	*[+] / [−]* Increases or decreases the currently displayed value.

Rear panel
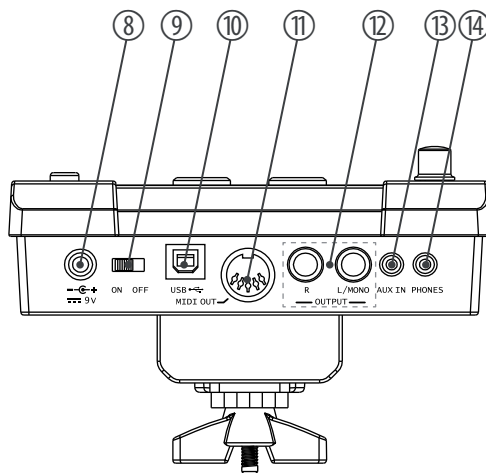
8	*[9 V]*
	Connection socket for the power adapter.
9	*[ON / OFF]*
	Main switch to turn the device on and off.

10	*[USB]*
	Connection socket for USB cable.
11	*[MIDI OUT]*
	Connection socket for an external MIDI device to send MIDI commands.
12	*[OUTPUT – R / L/MONO]*
	Output for external audio devices (mono / stereo).
13	*[AUX IN]*
	Input for external audio devices like MP3 or CD players.
14	*[PHONES]*
	Connection socket for headphones.

Bottom
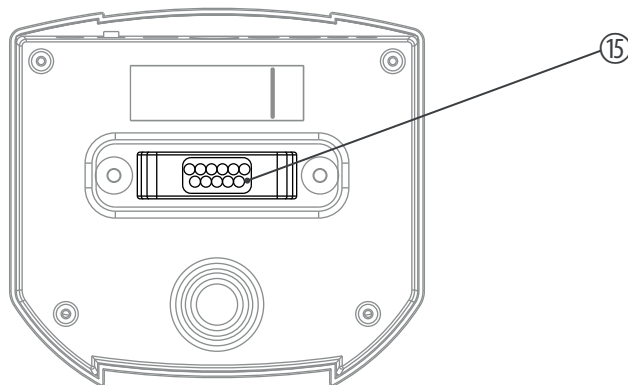
15	Multiple socket for connecting the pads.

6 Operating

6.1 Functions

Switching on

> ⓘ *Check all cable connections for correct fit before turning on*
>
> *Before switching on, turn the [VOLUME] control to minimum.*

Use the *[ON/OFF]* switch on the rear of device to switch on the drum module.

> ⓘ *Automatic shutoff*
>
> – *When the device is not used it automatically shuts off after 30 minutes. To turn it back on set the on / off switch to 'OFF' and then to 'ON' again.*
>
> *Disabling automatic shutoff*
>
> – *To disable the automatic shutoff function, press and hold [START/STOP] while turning the unit on.*
> *The message 'PoF' appears in the display.*

Adjusting the volume

To set the volume, hit a pad while slowly turning the *[VOLUME]* control clockwise.

6.2 Demo song

To play the preprogrammed demo piece, proceed as follows:

1. ▶ Press *[CLICK]* for about two seconds.

⇨   The preprogrammed demo song sounds, *'dE'* appears on the display.

2. ▶ Stop playing with *[START/STOP]*.

6.3 Playing and adjusting patterns

Selecting patterns

Your digital drum set features a total of 40 preprogrammed patterns. Pattern *'001'* is displayed by default when the drum module is turned on.

1. ▶ Press *[MODE]* repeatedly until the *[PATTERN]* LED lights up.

⇨   The display shows the pattern number.

2. ▶ Use *[–]* and *[+]* to select the desired pattern (see).

Playing patterns

1. ▶ Select the desired pattern as described above.

2. ▶ Start and stop playback with *[START/STOP]*.

Adjusting pattern volume

1. ▶ Press *[MODE]* repeatedly until the *[PATTERN]* LED lights up.

   ⇨   The display shows the pattern number.

2. ▶ Press *[PAGE]*.

   ⇨   The pattern volume appears in *'Axx'* format on the display.

3. ▶ Use *[−]* and *[+]* to adjust the volume in a range between 00 and 32.

   The setting is automatically stored.

Adjusting drum volume

1. ▶ Press *[MODE]* repeatedly until the *[PATTERN]* LED lights up.

   ⇨   The display shows the pattern number.

2. ▶ Press *[PAGE]*.

   ⇨   The drum volume appears in *'dxx'* format on the display.

3. ▶ Use *[−]* and *[+]* to adjust the volume in a range between 00 and 32.

   The setting is automatically stored.

Adjusting playback speed

1. ▶ Press *[MODE]* and *[PAGE]* simultaneously.

   ⇨ The display shows the playback speed.

2. ▶ Adjust the playback speed using *[–]* and *[+]* (setting range: 30 to 280 beats per minute).

   The setting is automatically stored.

6.4 Selecting and adjusting drum kits

You can select one of the preprogrammed drum kits. The preprogrammed voices of the drum module can be programmed to any of the connected pads.

Selecting a drum kit

To select a certain drum kit, proceed as follows:

1. ▶ Press *[MODE]* repeatedly until the *[KIT]* LED lights up.

   ⇨ The display shows the kit number.

2. ▶ Use *[–]* and *[+]* to select the desired kit (see).

   The setting is automatically stored.

Adjusting kit volume

1. ▶ Press *[MODE]* repeatedly until the *[KIT]* LED lights up.

   ⇨ The display shows the kit number.

2. ▶ Press *[PAGE]*.

   ⇨ The kit volume appears in *'Lxx'* format on the display.

3. ▶ Use *[–]* and *[+]* to adjust the volume in a range between 00 and 32.

   The setting is automatically stored.

Turning Reverb on / off

To turn the Reverb effect on or off, proceed as follows:

1. ▶ Press *[MODE]* repeatedly until the *[KIT]* LED lights up.

   ⇨ The display shows the kit number.

2. ▶ Press *[PAGE]*.

   ⇨ The current Reverb setting appears in the display (*'roN'*: on or *'roF'*: off).

3. ▶ Change the setting using *[–]* and *[+]*.

   The setting is automatically stored.

Assigning a Voice

To programme a certain Voice for a pad, proceed as follows:

1. ▶ Press *[MODE]* repeatedly until the *[VOICE]* LED lights up.

2. ▶ Hit the respective pad to activate it.

    ⇨   The display shows the number of the currently assigned Voice.

3. ▶ Select the desired Voice using *[–]/[+]* (see).

    The setting is automatically stored.

> *Only Voices from group 1 – group 4 can be assigned to a Hi-Hat. The display shows 'H-I'.*

Adjusting Voice volume

You have the option to adjust the volume of each voice independently. To do so proceed as follows:

1. ▶ Press *[MODE]* repeatedly until the *[VOICE]* LED lights up.

2. ▶ Hit the respective pad to activate it.

    ⇨   The Voice volume appears in *'Lxx'* format on the display.

3. ▶ Adjust the volume using *[–]* and *[+]* (setting range: 0 to 32).

    The setting is automatically stored.

Adjusting assigned MIDI note

You have the option to change the MIDI note assigned to a pad. To do so proceed as follows:

1. ▶ Press *[MODE]* repeatedly until the *[VOICE]* LED lights up.

2. ▶ Hit the respective pad to activate it.

⇨ The assigned MIDI note appears in *'Nxx'* format on the display.

3. ▶ Adjust the number using *[–]* and *[+]* (setting range: 0 to 99).

The setting is automatically stored.

The following table shows the MIDI mapping in default setting.

No.	Name	Assigned MIDI note
1	Crash 1	49
2	Tom 1	48
3	Tom 2	45
4	Tom 3	43
5	Ride	51
6	Kick	36
7	Snare	38

No.	Name	Assigned MIDI note
8	Hi-Hat close	42
9	Hi-Hat open	46
10	Hi-Hat pedal	44

6.5 Click (metronome) set up and use

Using Click function

1. ▶ Press *[CLICK]* to enable the Click function.

⇨ The *[CLICK]* LED flashes along to the beat, the Click sounds.

2. ▶ Press *[CLICK]* again to disable the Click function.

Setting the tempo

1. ▶ Press *[MODE]* and *[PAGE]* simultaneously.

⇨ The tempo appears on the display, for example *'103'*.

2. ▶ Select a value between 30 and 280 using *[–]* and *[+]*.

The setting is automatically stored.

Setting the time signature

1. ▶ Press *[MODE]* repeatedly until the *[CLICK]* LED lights up.

2. ▶ Press *[PAGE]*.

⇨ The time signature appears on the display, for example *'4-4'*.

3. ▶ Choose the time signature using *[–]* and *[+]* from a selection of 1/4 to 7/4, 3/8 and 6/8.

The setting is automatically stored.

Click tempo and time signature are automatically adjusted when playing patterns and can not be changed.

Setting Click interval

1. ▶ Press *[MODE]* repeatedly until the *[CLICK]* LED lights up.

2. ▶ Press *[PAGE]*.

⇨ The Click interval appears on the display, for example *'--4'*.

3. ▶ Select the Beat interval using *[–]* and *[+]*. Possible values are: 1/4, 1/8, 1/12, 1/16, 1/24, default value: 1/4.

The setting is automatically stored.

Setting the Click sound

1. ▸ Press *[MODE]* repeatedly until the *[CLICK]* LED lights up.

2. ▸ Press *[PAGE]*.

   ⇨ The set sound, the so-called 'click instrument' is displayed in *'CLx'* format.

3. ▸ Use *[–]* and *[+]* to select the sound. Possible values are: CL1 – CL5, default value: CL1.

   The setting is automatically stored.

Setting the Click volume

1. ▸ Press *[MODE]* repeatedly until the *[CLICK]* LED lights up.

2. ▸ Press *[PAGE]*.

   ⇨ The set volume appears on the display, for example *'L24'*.

3. ▸ Use *[–]* and *[+]* to adjust the volume in a range between 0 and 32.

   The setting is automatically stored.

6.6 Reset to factory defaults

1. ▶ Press and hold *[–]* and *[+]* simultaneously.

2. ▶ Press *[ON/OFF]* to switch on the device.

⇨ The device is reset to factory defaults.

6.7 Menu overview

PATTERN	KIT	VOICE	CLICK
Number	Number	Number	Tempo
Acmp Volume	Volume	Volume	Time Signature
Drum Volume	Reverb	MIDI note	Interval
			Click Instrument
			Volume
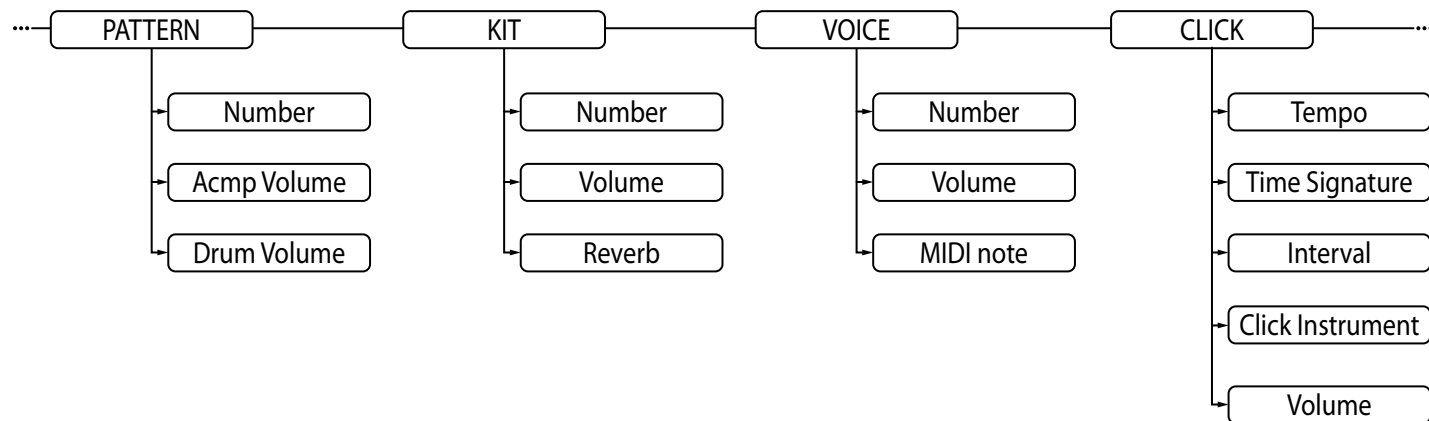
7   Technical specifications

Input connections	Power supply	Socket to connect the plug-in power supply
	USB port	USB
	Combined trigger connection	1 × D-sub connector
	AUX in	1 × 3.5 mm jack socket
Output connections	Headphones	1 × 3.5 mm jack socket
	Mono output	1 × 1/4" jack socket
	Stereo output	1 × 1/4" jack socket
	MIDI out	2× DIN panel socket, 5-pin
Sounds	108	
Effects	Reverb	
Drum kits	10 preset kits	
Demo and practice songs	40 preprogrammed songs	
Power supply	External power adapter, 100 - 240 V ∼ 50/60 Hz	
Operating voltage	9 V ⎓ / 500 mA, centre positive	

Dimensions (W × H × D)	260 mm × 185 mm × 130 mm	
Weight	0.37 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20 %…80 % (non-condensing)

Further information

incl. rack	yes
incl. seat	No
incl. pedal	yes
incl. headphones	No
Mesh Head Pads	No
Stereo pads	No
Number of direct outputs	0

8 Plug and connection assignment

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

1/4" TS phone plug (mono, unbalanced)

1	Signal
2	Ground, shielding

1/4" TRS phone plug (mono, balanced)

1	Signal (in phase, +)
2	Signal (out of phase, –)
3	Ground

9 Cleaning

Device parts

Clean the accessible parts of the device regularly. The frequency of cleaning depends on the operating environment: moist, smoky or particularly dirty environments may cause a higher accumulation of dirt on the components of the device.

- Use a dry soft cloth for cleaning.
- Remove stubborn stains with a slightly damp cloth.
- Never use cleaners containing alcohol or thinner.
- Never put any vinyl items on the device, as vinyl can stick to the surface or lead to its discolouration.

10   Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

11   Appendix

11.1   Voice list

No.	Name	No.	Name	No.	Name
KICK		012	808 Kick	023	Funk Band Snare
001	Standard Kick 1	013	House Kick 1	024	Funk Band Rim
002	Standard Kick 2	014	House Kick 2	025	Camco Snare
003	Room Kick	**SNARE**		026	Camco Snare Rim
004	Rock Kick 1	015	Classic Snare 1	027	Brush Snare
005	Rock Kick 2	016	Classic Snare Rim 1	028	Brush Snare Rim
006	Acoustic Kick	017	Classic Snare 2	029	Electronic Snare 1
007	HipHop Kick	018	Classic Snare Rim 2	030	Electronic Snare 2
008	Funk Kick	019	Room Snare 1	031	808 Snare
009	Jazz Kick 1	020	Room Snare 2	032	House Snare 1
010	Jazz Kick 2	021	Acoustic Snare	033	House Snare 2
011	Electronic Kick	022	Acoustic Snare Rim		

No.	Name	No.	Name	No.	Name
TOM		049	808 Tom 4	061	808 Ride
034	Classic Tom 1	050	808 Tom 5	**CRASH**	
035	Classic Tom 2	051	808 Tom 6	062	Standard Crash 1
036	Classic Tom 3	052	Electronic Tom 1	063	Standard Crash 2
037	Classic Tom 4	053	Electronic Tom 2	064	Rock Crash
038	Classic Tom 5	054	Electronic Tom 3	065	Splash 1
039	Classic Tom 6	055	Electronic Tom 4	066	Splash 2
040	Camco Tom 1	056	Electronic Tom 5	067	Brush Crash
041	Camco Tom 2	057	Electronic Tom 6	068	808 Crash
042	Camco Tom 3	055	Electronic Tom 4	**HI-HAT**	
043	Camco Tom 4	056	Electronic Tom 5	069	Standard Hi-hat Open
044	Camco Tom 5	057	Electronic Tom 6	070	Jazz Hi-hat Open
045	Camco Tom 6	**RIDE**		071	Electronic Hi-hat Open
046	808 Tom 1	058	Classic Ride	072	808 Hi-hat Open
047	808 Tom 2	059	Classic Ride Bell	073	Standard Hi-hat Close
048	808 Tom 3	060	Rock Ride	074	Jazz Hi-hat Close

No.	Name	No.	Name	No.	Name
075	Electronic Hi-hat Close	086	Timbale High	098	Wood Block Low
076	808 Hi-hat Close	087	Timbale Low	099	Mute Cuica
077	Standard Hi-hat Pad	088	Agogo High	100	Open Cuica
078	Jazz Hi-hat Pad	089	Agogo Low	101	Mute Triangle
079	Electronic Hi-hat Pad	090	Cabasa	102	Open Triangle
080	808 Hi-hat Pad	091	Maracas	103	Shaker
PERCUSSION		092	Short Whistle	104	Jingle Bell
081	Bongo High	093	Long Whistle	105	Belltree
082	Bongo Low	094	Short Guiro	106	Castanets
083	Mute Conga Hi-hat	095	Long Guiro	107	Mute Surdo
084	Open Conga Hi-hat	096	Claves	108	Open Surdo
085	Conga Low	097	Wood Block High		

11.2   Kit list

No.	Name
001	Acoustic
002	Standard 1
003	Rock
004	Standard 2
005	Funk
006	Jazz
007	Brush
008	Electronic
009	808
010	House

11.3 Pattern list

No.	Name	Tempo	Kit	No.	Name	Tempo	Kit
001	Fusion 1	103	1	015	R&B	86	9
002	Electronic & Funk	116	9	016	Drum & Bass 1	168	9
003	Modern Pop	136	1	017	Break Beat	108	5
004	HipHop	110	9	018	Dance	130	9
005	Latin Jazz 1	130	7	019	Drum & Bass 2	170	1
006	Funk 1	120	5	020	Latin Dance	126	5
007	Big Band 1	170	6	021	Swing	172	6
008	Funk 2	112	1	022	Latin Jazz 2	126	7
009	Pop Funk 1	112	1	023	Big Band 2	152	6
010	Fusion 2	112	1	024	3/4 Jazz	120	7
011	Funk 3	120	5	025	Jazz	150	7
012	Fusion 3	108	1	026	6/8 Ballad	96	3
013	Fusion 4	116	1	027	Pop Ballad	80	3
014	Pop Funk 2	106	5	028	Pop Bossa	120	2

No.	Name	Tempo	Kit	No.	Name	Tempo	Kit
029	16Beat Pop	120	5	036	Country Blues	128	3
030	Pop Shuffle	86	5	037	Rock	100	1
031	Samba	236	1	038	Reggae	78	1
032	Mambo	126	5	039	60's Rock	120	2
033	Latin Rock	136	1	040	Blues	96	2
034	Latin Pop	126	5	Demo	Funk	100	1
035	Guitar Bossa	84	5				

11.4   MIDI implementation

Function		Transmitted	Recognized	Remarks
Basic channel	Default	Ch 10	1-16	
	Changed	No	No	
Mode	Default	No	No	
	Messages	No	No	
	Altered	********	********	
Note number		0…127	0…127	
	True voice	********	0…127	
Velocity	Note ON	Yes (99H, V=1…127)	0…127	
	Note OFF	Yes (99H, V=0)	0…127	
Aftertouch	Keys	No	No	
	Channels	No	No	
Pitch bender		No	Yes	
Control change	0	No	Yes	Bank select
	1	No	Yes	Modulation

Function		Transmitted	Recognized	Remarks
	5	No	Yes	Portamento time
	6	No	Yes	Data entry
	7	No	Yes	Volume
	10	No	Yes	Pan
	11	No	Yes	Expression
	64	No	Yes	Sustain pedal
	65	No	Yes	Portamento ON/OFF
	66	No	Yes	Sostenuto pedal
	67	No	Yes	Soft pedal
	80	No	Yes	Reverb program
	81	No	Yes	Chorus program
	91	No	Yes	Reverb level
	93	No	Yes	Chorus level
	120	No	Yes	All Sound Off
	121	No	Yes	Reset All Controllers
	123	No	Yes	All Notes Off

Function		Transmitted	Recognized	Remarks
Program change		Yes	Yes	
System exclusive		No	Yes	
System common	Song Position	No	No	
	Song Select	No	No	
	Tune	No	No	
System real time	Clock	Yes	No	START and STOP only
	Command	Yes	No	
Aux messages	Local ON/OFF	No	No	
	All Notes OFF	No	No	
	Active Sense	Yes	No	
	System reset	No	No	

11.5   General MIDI Backing Instrument List

No.	Name
Piano	
1	Acoustic Grand Piano
2	Bright Acoustic Piano
3	Electric Grand Piano
4	Honky-Tonk Piano
5	Electric Piano 1
6	Electric Piano 2
7	Harpsichord
8	Clavi
Mallet	
9	Celesta
10	Glockenspiel
11	Music Box
12	Vibraphone

No.	Name
13	Marimba
14	Xylophone
15	Tubular Bells
16	Dulcimer
Organ	
17	Drawbar Organ
18	Percussive Organ
19	Rock Organ
20	Church Organ
21	Reed Organ
22	Accordion
23	Harmonica
24	Tango Accordion

No.	Name
Guitar	
25	Nylon Guitar
26	Steel Guitar
27	Jazz Guitar
28	Clean Guitar
29	Muted Guitar
30	Overdriven Guitar
31	Distortion Guitar
32	Guitar Harmonics
Bass	
33	Acoustic Bass
34	Finger Bass
35	Pick Bass
36	Fretless Bass

No.	Name		No.	Name		No.	Name
37	Slap Bass 1		51	Synth Strings 1		**Reed**	
38	Slap Bass 2		52	Synth Strings 2		65	Soprano Sax
39	Synth Bass 1		53	Choir Aahs		66	Alto Sax
40	Synth Bass 2		54	Voice Oohs		67	Tenor Sax
Strings			55	Synth Voice		68	Baritone Sax
41	Violin		56	Orchestra Hit		69	Oboe
42	Viola		**Brass**			70	English Horn
43	Cello		57	Trumpet		71	Bassoon
44	Contrabass		58	Trombone		72	Clarinet
45	Tremolo Strings		59	Tuba		**Brass**	
46	Pizzicato Strings		60	Muted Trumpet		57	Trumpet
47	Orchestral Harp		61	French Horn		58	Trombone
48	Timpani		62	Brass Section		59	Tuba
Strings Ensemble			63	Synth Brass 1		60	Muted Trumpet
49	String Ensembles 1		64	Synth Brass 2		61	French Horn
50	String Ensembles 2					62	Brass Section

No.	Name	No.	Name	No.	Name
63	Synth Brass 1	77	Blown Bottle	91	Pad 3 (polysynth)
64	Synth Brass 2	78	Shakuhachi	92	Pad 4 (choir)
Reed		79	Whistle	93	Pad 5 (bowed)
65	Soprano Sax	80	Ocarina	94	Pad 6 (metallic)
66	Alto Sax	**Synth Lead**		95	Pad 7 (halo)
67	Tenor Sax	81	Lead 1 (square)	96	Pad 8 (sweep
68	Baritone Sax	82	Lead 2 (sawtooth)	**Effects**	
69	Oboe	83	Lead 3 (calliope)	97	FX 1 (rain)
70	English Horn	84	Lead 4 (chiff)	98	FX 2 (soundtrack)
71	Bassoon	85	Lead 5 (charang)	99	FX 3 (crystal)
72	Clarinet	86	Lead 6 (voice)	100	FX 4 (atmosphere)
Pipe		87	Lead 7 (fifths)	101	FX 5 (brightness)
73	Piccolo	88	Lead 8 (bass + lead)	102	FX 6 (goblins)
74	Flute	**Pad**		103	FX 7 (echoes)
75	Recorder	89	Pad 1 (new age)	104	FX 8 (sci-fi)
76	Pan Flute	90	Pad 2 (warm)		

No.	Name	No.	Name	No.	Name
Ethnic		**Percussive**		**Sound Effects**	
105	Sitar	113	Tinkle Bell	121	Guitar Fret Noise
106	Banjo	114	Agogo	122	Breath Noise
107	Shamisen	115	Steel Drums	123	Seashore
108	Koto	116	Wood Block	124	Bird Tweet
109	Kalimba	117	Taiko Drum	125	Telephone Ring
110	Bagpipe	118	Melodic Tom	126	Helicopter
111	Fiddle	119	Synth Drum	127	Applause
112	Shanai	120	Reverse Cymbal	128	Gunshot

11.6   General MIDI Drum Kit List

Note	Standard 1 (bank 0)	Standard 2 (bank 4)	Room (bank 8)	Rock (bank 16)	Funk (bank 17)
27 – D#1	High Q	<-	<-	<-	<-
28 – E1	Slap	<-	<-	<-	<-
29 – F1	Scratch Push	<-	<-	<-	<-
30 – F#1	Scratch Pull	<-	<-	<-	<-
31 – G1	Sticks	<-	<-	<-	<-
32 – G#1	Square Click	<-	<-	<-	<-
33 – A1	Metronome Click	<-	<-	<-	<-
34 – A#1	Metronome Bell	<-	<-	<-	<-
35 – B1	Acoustic Bass Drum	<-	Room Bass Drum 1	Rock Bass Drum 1	Funk Bass Drum 1
36 – C2	Standard 1 Bass Drum	Standard 2 Bass Drum	Room Bass Drum 2	Rock Bass Drum 2	Funk Bass Drum 2
37 – C#2	Side Stick	<-	<-	<-	<-
38 – D2	Standard 1 Snare	Standard 2 Snare	Room Snare	Rock Snare	Funk Snare
39 – D#2	Hand Clap	<-	<-	<-	<-

Note	Standard 1 (bank 0)	Standard 2 (bank 4)	Room (bank 8)	Rock (bank 16)	Funk (bank 17)
40 – E2	Standard 1 Snare Rim	Standard 2 Snare Rim	Room Snare Rim	Rock Snare Rim	Funk Snare Rim
41 – F2	Standard 1 Tom 6	Standard 2 Tom 6	Room Tom 6	Rock Tom 6	Funk Tom 6
42 – F#2	Standard 1 Hi-hat Close	Standard 2 Hi-hat Close	Room Hi-hat Close	Rock Hi-hat Close	Funk Hi-hat Close
43 – G2	Standard 1 Tom 5	Standard 2 Tom 5	Room Tom 5	Rock Tom 5	Funk Tom 5
44 – G#2	Standard 1 Hi-hat Pedal	Standard 2 Hi-hat Pedal	Room Hi-hat Pedal	Rock Hi-hat Pedal	Funk Hi-hat Pedal
45 – A2	Standard 1 Tom 4	Standard 2 Tom 4	Room Tom 4	Rock Tom 4	Funk Tom 4
46 – A#2	Standard 1 Hi-hat Open	Standard 2 Hi-hat Open	Room Hi-hat Open	Rock Hi-hat Open	Funk Hi-hat Open
47 – B2	Standard 1 Tom 3	Standard 2 Tom 3	Room Tom 3	Rock Tom 3	Funk Tom 3
48 – C3	Standard 1 Tom 2	Standard 2 Tom 2	Room Tom 2	Rock Tom 2	Funk Tom 2
49 – C#3	Standard 1 Crash 1	Standard 2 Crash 1	Room Crash 1	Rock Crash 1	Funk Crash 1
50 – D3	Standard 1 Tom 1	Standard 2 Tom 1	Room Tom 1	Rock Tom 1	Funk Tom 1
51 – D#3	Standard 1 Ride	Standard 2 Ride	Room Ride	Rock Ride	Funk Ride
52 – E3	Chinese Cymbal 1	<-	<-	<-	<-
53 – F3	Ride Bell	<-	Room Ride Bell	Rock Ride Bell	<-

Note	Standard 1 (bank 0)	Standard 2 (bank 4)	Room (bank 8)	Rock (bank 16)	Funk (bank 17)
54 – F#3	Tambourine	<-	<-	<-	<-
55 – G3	Splash Cymbal	<-	Room Splash Cymbal	Rock Splash Cymbal	<-
56 – G#3	Standard 1 Cowbell	Standard 2 Cowbell	Room Cowbell	Rock Cowbell	<-
57 – A3	Standard 1 Crash 2	Standard 2 Crash 2	Room Crash 2	Rock Crash 2	Funk Crash 2
58 – A#3	Vibra-slap	<-	<-	<-	<-
59 – B3	Ride Cymbal	<-	<-	<-	<-
60 – C4	Hi Bongo	<-	<-	<-	<-
61 – C#4	Low Bongo	<-	<-	<-	<-
62 – D4	Mute Hi Conga	<-	<-	<-	<-
63 – D#4	Open Hi Conga	<-	<-	<-	<-
64 – E4	Low Conga	<-	<-	<-	<-
65 – F4	High Timbale	<-	<-	<-	<-
66 – F#4	Low Timbale	<-	<-	<-	<-
67 – G4	High Agogo	<-	<-	<-	<-
68 – G#4	Low Agogo	<-	<-	<-	<-
69 – A4	Cabasa	<-	<-	<-	<-

Note	Standard 1 (bank 0)	Standard 2 (bank 4)	Room (bank 8)	Rock (bank 16)	Funk (bank 17)
70 – A#4	Maracas	<-	<-	<-	<-
71 – B4	Short Whistle	<-	<-	<-	<-
72 – C5	Long Whistle	<-	<-	<-	<-
73 – C#5	Short Guiro	<-	<-	<-	<-
74 – D5	Long Guiro	<-	<-	<-	<-
75 – D#5	Claves	<-	<-	<-	<-
76 – E5	Hi Wood Block	<-	<-	<-	<-
77 – F5	Low Wood Block	<-	<-	<-	<-
78 – F#5	Mute Cuica	<-	<-	<-	<-
79 – G5	Open Cuica	<-	<-	<-	<-
80 – G#5	Mute Triangle	<-	<-	<-	<-
81 – A5	Open Triangle	<-	<-	<-	<-
82 – A#5	Shaker	<-	<-	<-	<-
83 – B5	Jingle Bell	<-	<-	<-	<-
84 – C6	Bell Tree	<-	<-	<-	<-
85 – C#6	Castanets	<-	<-	<-	<-

Note	Standard 1 (bank 0)	Standard 2 (bank 4)	Room (bank 8)	Rock (bank 16)	Funk (bank 17)
86 – D6	Mute Surdo	<-	<-	<-	<-
87 – D#6	Open Surdo	<-	<-	<-	<-

Note	Electronic (bank 24)	808 (bank 25)	House (bank 28)	Jazz (bank 32)	Brush (bank 40)
27 – D#1	<-	<-	<-	<-	<-
28 – E1	<-	<-	<-	<-	<-
29 – F1	<-	<-	<-	<-	<-
30 – F#1	<-	<-	<-	<-	<-
31 – G1	<-	<-	<-	<-	<-
32 – G#1	<-	<-	<-	<-	<-
33 – A1	<-	<-	<-	<-	<-
34 – A#1	<-	<-	<-	<-	<-
35 – B1	Electronic Bass Drum 1	808 Bass Drum 1	House Bass Drum 1	Jazz Bass Drum 1	Brush Bass Drum 1
36 – C2	Electronic Bass Drum 2	808 Bass Drum 2	House Bass Drum 2	Jazz Bass Drum 2	Brush Bass Drum 2

Note	Electronic (bank 24)	808 (bank 25)	House (bank 28)	Jazz (bank 32)	Brush (bank 40)
37 – C#2	<-	<-	<-	<-	<-
38 – D2	Electronic Snare	808 Snare	House Snare	Jazz Snare	Brush Snare
39 – D#2	<-	<-	House Hand Clap	<-	<-
40 – E2	Electronic Snare Rim	808 Snare Rim	House Snare Rim	Jazz Snare Rim	Brush Snare Rim
41 – F2	Electronic Tom 6	808 Tom 6	House Tom 6	Jazz Tom 6	Brush Tom 6
42 – F#2	Electronic Hi-hat Close	808 Hi-hat Close	House Hi-hat Close	Jazz Hi-hat Close	<-
43 – G2	Electronic Tom 5	808 Tom 5	House Tom 5	Jazz Tom 5	Brush Tom 5
44 – G#2	Electronic Hi-hat Pedal	808 Hi-hat Pedal	House Hi-hat Pedal	Jazz Hi-hat Pedal	<-
45 – A2	Electronic Tom 4	808 Tom 4	House Tom 4	Jazz Tom 4	Brush Tom 4
46 – A#2	Electronic Hi-hat Open	808 Hi-hat Open	House Hi-hat Open	Jazz Hi-hat Open	<-
47 – B2	Electronic Tom 3	808 Tom 3	House Tom 3	Jazz Tom 3	Brush Tom 3
48 – C3	Electronic Tom 2	808 Tom 2	House Tom 2	Jazz Tom 2	Brush Tom 2
49 – C#3	<-	808 Crash 1	<-	<-	Brush Crash 1
50 – D3	Electronic Tom 1	808 Tom 1	House Tom 1	Jazz Tom 1	Brush Tom 1

Note	Electronic (bank 24)	808 (bank 25)	House (bank 28)	Jazz (bank 32)	Brush (bank 40)
51 – D#3	<-	<-	<-	Jazz Ride	Brush Ride
52 – E3	<-	<-	<-	<-	<-
53 – F3	<-	<-	<-	<-	<-
54 – F#3	<-	<-	<-	<-	<-
55 – G3	<-	<-	<-	<-	<-
56 – G#3	<-	<-	<-	<-	<-
57 – A3	<-	808 Crash 2	<-	ChineseCymbal 2	Brush Crash 2
58 – A#3	<-	<-	<-	<-	<-
59 – B3	<-	<-	<-	<-	<-
60 – C4	<-	<-	<-	<-	<-
61 – C#4	<-	<-	<-	<-	<-
62 – D4	<-	808 Mute Hi Conga	<-	<-	<-
63 – D#4	<-	808 Open Hi Conga	<-	<-	<-
64 – E4	<-	808 Low Conga	<-	<-	<-
65 – F4	<-	<-	<-	<-	<-
66 – F#4	<-	<-	<-	<-	<-

Note	Electronic (bank 24)	808 (bank 25)	House (bank 28)	Jazz (bank 32)	Brush (bank 40)
67 – G4	<-	<-	<-	<-	<-
68 – G#4	<-	<-	<-	<-	<-
69 – A4	<-	<-	<-	<-	<-
70 – A#4	<-	808 Maracas	<-	<-	<-
71 – B4	<-	<-	<-	<-	<-
72 – C5	<-	<-	<-	<-	<-
73 – C#5	<-	<-	<-	<-	<-
74 – D5	<-	<-	<-	<-	<-
75 – D#5	<-	808 Claves	<-	<-	<-
76 – E5	<-	<-	<-	<-	<-
77 – F5	<-	<-	<-	<-	<-
78 – F#5	<-	<-	<-	<-	<-
79 – G5	<-	<-	<-	<-	<-
80 – G#5	<-	<-	<-	<-	<-
81 – A5	<-	<-	<-	<-	<-
82 – A#5	<-	<-	<-	<-	<-

Note	Electronic (bank 24)	808 (bank 25)	House (bank 28)	Jazz (bank 32)	Brush (bank 40)
83 – B5	<-	<-	<-	<-	<-
84 – C6	<-	<-	<-	<-	<-
85 – C#6	<-	<-	<-	<-	<-
86 – D6	<-	<-	<-	<-	<-
87 – D#6	<-	<-	<-	<-	<-

Notes