

Millenium

MPS-400

e-drum module



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1 General notes

This user manual contains important information on 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 other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user 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.



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

- 307 voices
- 20 pre-installed drum kits, 30 user kits
- 50 pre-installed songs
- Click function
- Flexible assignment of the pad voices
- Programming of various pad parameters like touch velocity, sensitivity etc.
- Reverb effect and voice tuning
- Individual adjustment of accompaniment and drum track
- Headphones, AUX and MIDI connections

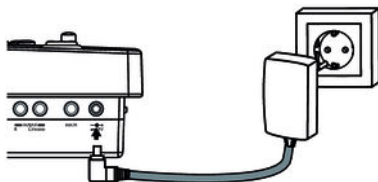
4 Installation

Setup, connecting pads and pedals

Setup and installation of the pads and pedals are described in detail in the included setup guide. Finally, check that all connecting cables between the pads and the drum module are connected correctly.

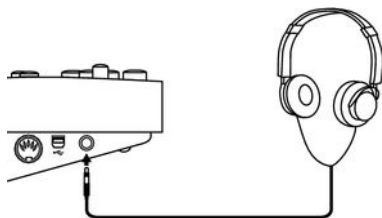
Connecting the power supply

Connect the supplied power adapter to the 9 V input of the device and then insert the mains plug into a mains wall outlet.



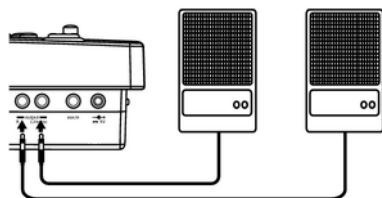
Connecting headphones

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



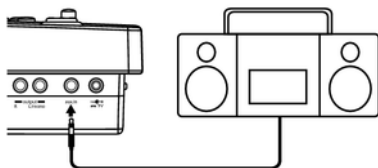
Connecting audio devices

Connect the inputs of your amplifier or powered speaker to the 'OUTPUT' sockets of the drum module. When using a mono amp, connect its input to the 'L/MONO' output socket of the module.



Connecting CD or MP3 player

Connect CD or MP3 player to the 'AUX IN' input of the drum module.



Connecting MIDI devices

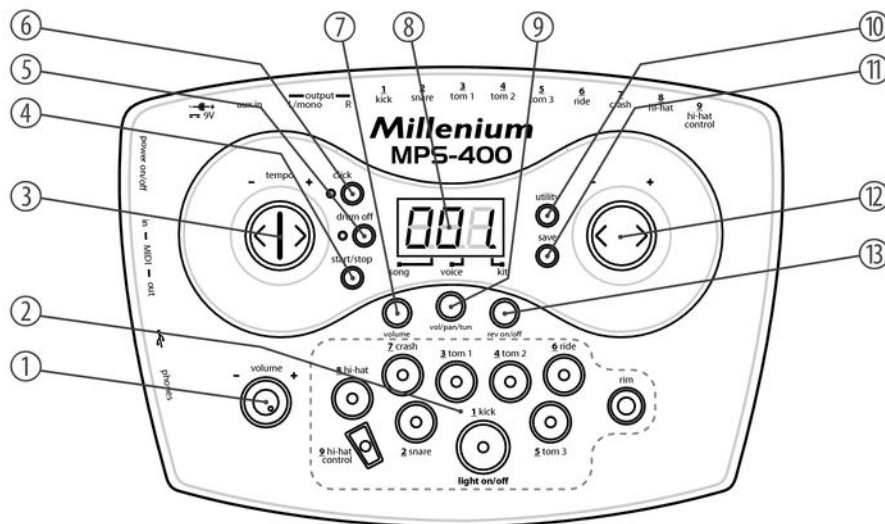
Connect external MIDI devices to the 'MIDI IN/OUT' connections of the drum module.

Connecting USB devices

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

5 Operating elements

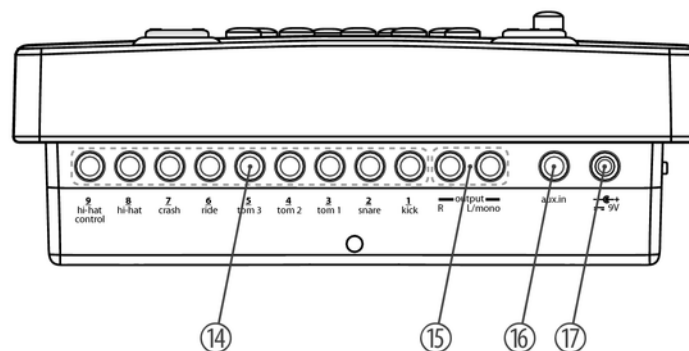
Front panel



1	<i>[volume]</i> Volume control for headphones and line out.
2	Pad selection field Buttons with integrated indicator LED for activating and playing the pads.
3	<i>[tempo -/+]</i> Button for adjusting the metronome and playback tempo. Press the [-] or [+] button briefly to increase or decrease the indicated value by one. Keep the [-] or [+] button pressed to increase or decrease the value quickly.
4	<i>[start/stop]</i> Button for starting and stopping song playback.
5	<i>[drum off]</i> Button for muting the drum part.
6	<i>[click]</i> Button for turning the metronome on or off.

7	<i>[song — volume]</i> Button for opening the Song menu and volume indication.
8	3-digit LED display.
9	<i>[voice — vol/pan/tun]</i> Button for opening the Voice menu and volume indication.
10	<i>[utility]</i> Button for opening the Utility menu.
11	<i>[save]</i> Button for saving settings.
12	<i>[-] / [+]</i> Button for song and kit selection and for adjusting of the various parameters and values. Press the <i>[-]</i> or <i>[+]</i> button briefly to increase or decrease the indicated value by one. Keep the <i>[-]</i> or <i>[+]</i> button pressed to increase or decrease the value quickly.
13	<i>[kit — rev on/off]</i> Button for opening the Kit menu and for turning the reverb effect on or off.

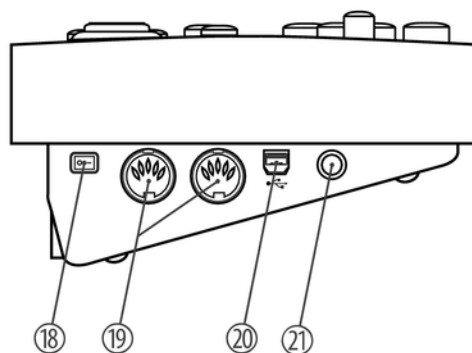
Rear panel



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14	Connection sockets for the pads.
15	– output – R / L/mono Output to connect external audio devices (mono / stereo).
16	aux.in Input for external audio devices like MP3 or CD player.
17	9 V Connection socket for the power supply adapter.

Side view



MPS-400

18	power on/off Main switch to turn the device on or off.
19	in-MIDI-out Connection sockets for an external MIDI device.
20	Connection socket for USB cable.
21	phones Headphones socket.

6 Operation

6.1 Functions

Switching on



*Check for proper connection of all cables before switching the unit on.
Before switching the unit on, turn the [volume] control down to minimum.*



Automatic switchoff

- *When the device is not used, it will switch off automatically after 30 minutes. To switch it on again, switch to the 'OFF' position and then to the 'ON' position.*

Deactivating the automatic switchoff

- *To deactivate the automatic switchoff, press and hold the [START/STOP] button while you switch on the device.*

Use the main switch [power on/off] on the side panel to turn the unit on.

Adjusting the volume

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

Selecting a drum kit

A drum kit is a compilation in which each trigger is assigned to a certain sound and several sound parameters. By selecting a drum kit, you can tailor the sound of your e-drum kit in seconds to the desired style of music. In addition to the 20 preset drum kits, you can create and save 30 user drum kits (see ↗ *Chapter 10.2 'Kit list' on page 51*).

- 1.** ➤ Press the *[kit]* button.
⇒ The display shows the current kit number and the KIT LED lights up.
- 2.** ➤ Use the *[-]* and *[+]* buttons to select the desired kit.

Reverb effect

In Kit menu, you can turn the reverb effect for the selected drum set on or off.

- 1.** ➤ Press the *[kit]* button again.
⇒ The display shows the current setting in 'roN' or 'roF' format.
- 2.** ➤ Use the *[-]* and *[+]* buttons to toggle between both options.
- 3.** ➤ Press the *[kit]* button again to return to kit number display.

Click function

1. ➤ Press the *[click]* button to turn the Click function on.
⇒ The indicator LED flashes, the Click comes with click sound by default.
2. ➤ Press the *[click]* button again to change the click sound to 'human voice'.
3. ➤ Press the *[click]* button a third time to turn the Click function off.

After switching on, you can change the click volume in a range of 0 to 16 using the *[-]* and *[+]* buttons. To do so, keep the *[click]* button pressed. The display shows the set value in 'Cxx' format.

Use the *[tempo -/+]* button to change the click tempo in a range of 30 to 280 beats per minute.

Use the *[-/+]* button to set the time signature to 2/4, 3/4, 4/4, 5/4 or 6/8.



*To reset the click tempo to the default value '110' press the middle of the *[tempo -/+]* button.*

The click function can be turned on or off during playback.

Click tempo and time signature are automatically adjusted during song playback.

6.2 Playing, customising and accompanying songs

Selecting a song

Your digital drum set offers 50 pre-installed songs in total. When turning the drum module on, song '001' is shown on the display by default.

1. ➤ Press the *[song — volume]* button.
⇒ The display shows the song number, the Song LED on the 3-digit display lights up.
2. ➤ Use the *[-]* and *[+]* buttons to select the desired song (see 🔗 *Chapter 10.3 'Song list' on page 53*).

Playing a song

1. ➤ Select the desired song as described above.
2. ➤ Start or stop the playback with *[start/stop]*.



During playback, the indicator LEDs of the played pads light up. Press the [kick] button to turn the function on or off.

Adjusting song volume

1. ➤ Press the [song — volume] button.
⇒ The display shows the song volume in 'Axx' format.
2. ➤ Use the [-] and [+] buttons to adjust the volume in a range of 00 to 32.

Adjusting the playback tempo

1. ➤ Press the [song — volume] button repeatedly until the display shows the song number again.
2. ➤ Use the [tempo -/+] button to adjust the playback tempo (setting range: 30 to 280 beats per minute).



To reset the playback speed to the default value (display value '110') press the middle of the [tempo -/+] button.

After two seconds, the display automatically returns to the song number indication.

Muting the drum sound

Any time during song playback, the drum track can be muted.

- 1.** ➤ Press the [drum off] button to mute the drum sound of the song.
⇒ The indicator LED lights up as long as the part is muted.
- 2.** ➤ Press the [drum off] to unmute the drum track.

6.3 Creating drum kits

The 307 pre-installed voices of the drum module can be freely programmed to the connected pads. In other words, you can create your own drum kits and store them in the unit. The following sections describe how to create your own kits.

Assigning a voice

To programme a certain voice to a pad, proceed as follows:

1. ➤ Press the *[voice — vol/pan/tun]* button.
 - ⇒ The display indicates the current voice number, the Voice LED on the 3-digit display lights up.
2. ➤ Press the button of the pad you want to programme a certain voice for. Alternatively, you can directly activate the pad by playing it.
 - ⇒ The display shows the number of the currently assigned voice. The indicator LED of the pad lights up.
3. ➤ Select the desired voice using the *[-]/[+]* button (see ↗ *Chapter 10.1 'Voice list' on page 42*).
4. ➤ Repeat steps 2 to 3 to assign the other pads as desired.



*Press the **[rim]** button in the pad selection field to programme a rim voice to the snare pad or an edge voice to the crash or ride cymbal.*

Adjusting the volume of the pads

You may adjust the volume of the individual pads independently from the others. To do so, proceed as follows:

- 1.** ➤ Press the *[voice — vol/pan/tun]* button repeatedly, until the display shows the volume of the current selection in 'Lxx' format.
- 2.** ➤ Press the button of the pad whose volume you want to change. Alternatively, you can directly activate the pad by playing it.
⇒ The indicator LED of the pad lights up.
- 3.** ➤ Adjust the volume using the *[-]/[+]* button (setting range: 0 to 32).
- 4.** ➤ Repeat steps 2 to 3 to adjust the volume of the other pads as desired.

Adjusting the R/L panorama of the pads

You may adjust each pad within the stereo panorama independently from the others. To do so, proceed as follows:

1. ➤ Press the *[voice — vol/pan/tun]* button repeatedly, until the display shows the setting of the current selection in 'P x' format.
2. ➤ Press the button of the pad whose panorama setting you want to change. Alternatively, you can directly activate the pad by playing it.
⇒ The indicator LED of the pad lights up.
3. ➤ Adjust the panorama setting using the *[-]/[+]* button (setting range: from P-8 = left via 0 = centre to P8 = right).
4. ➤ Repeat steps 2 to 3 to adjust the panorama setting of the other pads as desired.

Adjusting the pitch of the pads

You may adjust the pitch of each pad independently from the others. To do so, proceed as follows:

1. ➤ Press the *[voice — vol/pan/tun]* button repeatedly, until the display shows the setting of the current selection in 't x' format.
2. ➤ Press the button of the pad whose pitch you want to change. Alternatively, you can directly activate the pad by playing it.
⇒ The indicator LED of the pad lights up.
3. ➤ Adjust the pitch using the *[-]/[+]* button (setting range: t -8 to t 8).
4. ➤ Repeat steps 2 to 3 to adjust the pitch setting of the other pads as desired.

Storing settings

After you have assigned all the pads with the desired voices and adjusted the settings for volume, panorama and pitch you can save the settings as a user kit in the unit. To do so, proceed as follows:

1. ➤ Press the *[save]* button.
⇒ The display shows the first unused memory slot ('021').
2. ➤ Select the desired memory slot using the *[-]/[+]* (range: 021 to 050).
3. ➤ Press the *[save]* button again to save your user kit as the desired number.



Any unsaved changes are discarded when you turn the drum module off.

6.4 Adjusting pad settings

You can change various pad and device parameters using the utility menu. Press the *[utility]* button to open the menu and to jump to the following parameter (see table).

Parameter, display	Description	Value range
Gain	Touch sensitivity of the pads	01 ... 16
Rim Sensitivity	Rim sensitivity	1 ... 8
Crosstalk	Crosstalk	01 ... 16

Parameter, display	Description	Value range
Curve	Dynamic range	1 ... 6
Splash Sensitivity	Touch sensitivity of the hi-hat	-4 ... 4
Local	To determine, which MIDI signals are processed (connected pads or external MIDI sequencer)	ON/OFF
MIDI OUT Format	Determines the MIDI output format	intern/GM

Touch sensitivity of the pads

1. ➤ Press the *[utility]* button until the display shows the current touch sensitivity in format 'Exx'.
2. ➤ Press the button of the pad whose touch sensitivity you want to change. Alternatively, you can directly activate the pad by playing it.
3. ➤ Adjust the touch sensitivity using the *[-]/[+]* button.
4. ➤ Repeat steps 2 to 3 to adjust the touch sensitivity of the other pads as desired.
5. ➤ Press *[utility]* to jump to the next parameter.

Rim sensitivity

1. ➤ Press the *[utility]* button until the display shows the current touch sensitivity of the Rim triggers in format 'rEx'.
2. ➤ Activate the crash or ride cymbal, or the snare by keystroke or direct playing.
3. ➤ Adjust the Rim sensitivity using the *[-]/[+]* button.
4. ➤ Repeat steps 2 to 3 to adjust all rim triggers as desired.
5. ➤ Press *[utility]* to jump to the next parameter.



If you select a pad without rim trigger the display shows the value 'rE-' and you can't make any changes.

Crosstalk

When several pads are mounted on the same rack, vibrations may be transferred to other pads and, thus, unwanted sounds are triggered when striking a pad. This crosstalk can be prevented by the temporary suppression of the trigger signal.

1. ➤ Press the *[utility]* button until the display shows the current signal suppression time in '0xx' format.
2. ➤ Press the button of the pad whose signal suppression time you want to change. Alternatively, you can directly activate the pad by playing it.
3. ➤ Adjust the signal suppression time using the *[-]/[+]* button.
4. ➤ Repeat steps 2 to 3 to adjust the signal suppression time of the other pads as desired.
5. ➤ Press *[utility]* to jump to the next parameter.



The signal suppression time should be set as short as possible.

Dynamic range

Via the drum module, you can adjust the dynamic range, i.e. the signal-to-noise ratio of each pad.

1. ➤ Press the *[utility]* button until the display shows the current dynamic setting in 'CUX' format .
2. ➤ Press the button of the pad whose dynamic range you want to change. Alternatively, you can directly activate the pad by playing it.
3. ➤ Adjust the dynamic using the *[-]/[+]* button.
4. ➤ Repeat steps 2 to 3 to adjust the dynamic of the other pads as desired.
5. ➤ Press *[utility]* to jump to the next parameter.

Touch sensitivity of the hi-hat

1. ➤ Press the *[utility]* button until the display shows the current touch sensitivity of the hi-hat in 'Fxx' format.
2. ➤ Adjust the touch sensitivity using the *[-]/[+]* button.
3. ➤ Press *[utility]* to jump to the next parameter.

MIDI processing

You can use the 'Local' setting to determine whether the drum module processes the MIDI signals of the connected pads (default setting 'Lon') or the signals of an external MIDI sequencer ('Lof').

1. ➤ Press the [utility] button until the display shows the current setting 'Lon' or 'LoF'.
2. ➤ Use the [-]/[+] button to toggle between 'Lon' and 'LoF'.
3. ➤ Press [utility] to jump to the next parameter.

MIDI output format

Use the 'MIDI output' setting to determine whether the drum module outputs MIDI signals in its own format (default setting 'P-n') or in GM format ('-n'). Choose its own proprietary MIDI format if you want to use the drum module as a sound module. If you connect an external MIDI device, choose the GM format.

1. ➤ Press the [utility] button until the display shows the current setting 'P-n' or '-n'.
2. ➤ Use the [-]/[+] button to toggle between 'P-n' and '-n'.

Saving settings

Save your settings with [save].



Any unsaved changes are discarded when you turn the drum module off.

Resetting to factory defaults

To reset the unit to factory defaults proceed as follows:


1. ➤ Switch the device off.
2. ➤ Keep the [tempo -/+] button pressed while switching the unit on.



When resetting the unit to factory defaults all user settings and adjustments are irretrievably deleted.

7 Technical specifications

Number of voices	307
Drum kits	20 preset kits 30 user kits
Songs	50 preset songs

Connections	<p>Headphones (1/4" phone socket)</p> <p>AUX in (1/4" phone socket)</p> <p>Mono/stereo outlet (1/4" phone socket)</p> <p>1 × Kick pad</p> <p>1 × Snare pad</p> <p>3 × Tom pads</p> <p>1 × Crash pad</p> <p>1 × Ride pad</p> <p>1 × Hi-hat</p> <p>1 × Hi-hat control</p> <p>MIDI in/out</p>
Operating voltage supply	Power adapter (DC 9 V )

8 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.

9 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). 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.

10 Appendix

10.1 Voice list

No.	Name	No.	Name	No.	Name
KICK		009	Jazz Kick 2	018	1969s Kick
001	Standard Kick 1	010	Jazz Kick 3	019	1971s Kick
002	Standard Kick 2	011	Bigband Kick	020	1976s Kick
003	Rock Kick 1	012	Funk Kick	021	Pwrbd Kick
004	Rock Kick 2	013	Fusion Kick	022	R&B Kick
005	Rock Kick 3	014	Hiphop Kick 1	023	House Kick 1
006	Room Kick 1	015	Hiphop Kick 2	024	House Kick 2
007	Room Kick 2	016	Hiphop Kick 3	025	House Kick 3
008	Jazz Kick 1	017	Hiphop Kick 4	026	Drumbass Kick

No.	Name	No.	Name	No.	Name
027	808 Kick	SNARE		051	Jazz Snare 1
028	909 Kick	039	Star Snare 1	052	Jazz Snare 1 Rim
029	Electronic Kick	040	Star Snare Rim	053	Jazz Snare 2
030	Step Kick	041	Standard Snare 1	054	Jazz Snare 2 Rim
031	Teckno Kick	042	Standard Snare Rim	055	Jazzlatin Snare
032	Voic Kick	043	Standard Snare 2	056	Bush Snare
033	Lowfi Kick	044	Rock Snare 1	057	Bigband Snare
034	Junkyard Kick	045	Rock Snare Slick	058	Funk Snare 1
035	Disco Kick	046	Rock Snare 2	059	Funk Snare Stick
036	Industry Kick	047	Rock Snare 3	060	Funk Snare 2
037	Noise Kick	048	Room Snare 1	061	Fusion Snare
038	Cartoon Kick	049	Room Snare Rim	062	Fusion Snare Stick
		050	Room Snare 2	063	Pwrbd Snare

No.	Name	No.	Name	No.	Name
064	Hiphop Snare 1	077	1971s Snare Stick	090	808 Snare
065	Hiphop Snare 2	078	1976s Snare	091	909 Snare
066	Ringo Snare	079	1976s Snare Stick	092	Electronic Snare
067	Ringo Snare Rim	080	R&B Snare	093	Junkyard Snare
068	Lowfi Snare	081	R&B Snare Stick	094	Junkyard Snare Stick
069	Lowfi Snare Stick	082	House Snare 1	095	Noise Snare
070	506 Snare	083	House Snare Rim	096	Industry Snare
071	506 Snare Rim	084	House Snare 2	097	Industry Snare Stick
072	506 Low Snare	085	Step Snare	098	Voice Snare
073	506 Low Snare Rim	086	Step Snare Stick	099	Voice Snare Stick
074	1969s Snare	087	Teckno Snare 1	100	Cartoon Snare
075	1969s Snare Stick	088	Teckno Snare 2		
076	1971s Snare	089	Drumbass Snare		

No.	Name	No.	Name	No.	Name
TOM		113	Room Tom 1	126	Brush Tom 2
101	Standard Tom 1	114	Room Tom 2	127	Brush Tom 3
102	Standard Tom 2	115	Room Tom 3	128	Brush Tom 4
103	Standard Tom 3	116	Room Tom 4	129	Brush Tom 5
104	Standard Tom 4	117	Room Tom 5	130	Brush Tom 6
105	Standard Tom 5	118	Room Tom 6	131	Funk Tom 1
106	Standard Tom 6	119	Jazz Tom 1	132	Funk Tom 2
107	Rock Tom 1	120	Jazz Tom 2	133	Funk Tom 3
108	Rock Tom 2	121	Jazz Tom 3	134	Fusion Tom 1
109	Rock Tom 3	122	Jazz Tom 4	135	Fusion Tom 2
110	Rock Tom 4	123	Jazz Tom 5	136	Fusion Tom 3
111	Rock Tom 5	124	Jazz Tom 6	137	1969s Tom 1
112	Rock Tom 6	125	Brush Tom 1	138	1969s Tom 2

No.	Name	No.	Name	No.	Name
139	1969s Tom 3	152	Hiphop Tom 4	165	Electronic Tom 5
140	1971s Tom 1	153	Hiphop Tom 5	166	Electronic Tom 6
141	1971s Tom 2	154	Hiphop Tom 6	167	Step Tom 1
142	1971s Tom 3	155	808 Tom 1	168	Step Tom 2
143	1976s Tom 1	156	808 Tom 2	169	Step Tom 3
144	1976s Tom 2	157	808 Tom 3	170	909 Tom 1
145	1976s Tom 3	158	808 Tom 4	171	909 Tom 2
146	Old Tom 1	159	808 Tom 5	172	909 Tom 3
147	Old Tom 2	160	808 Tom 6	173	Cartoon Tom 1
148	Old Tom 3	161	Electronic Tom 1	174	Cartoon Tom 2
149	Hiphop Tom 1	162	Electronic Tom 2	175	Cartoon Tom 3
150	Hiphop Tom 2	163	Electronic Tom 3	176	Junkyard Tom 1
151	Hiphop Tom 3	164	Electronic Tom 4	177	Junkyard Tom 2

No.	Name	No.	Name	No.	Name
178	Junkyard Tom 3	190	Standard Ride 21"	203	Orchestra Ride
179	Noise Tom 1	191	Standard Ride 21" Bell	204	Teckno Ride 1
180	Noise Tom 2	192	Rock Ride 21"	205	Teckno Ride 2
181	Noise Tom 3	193	Rock Ride 21" Bell	206	Junkyard Ride 1
182	Voices Tom 1	194	Bigband Ride	207	Junkyard Ride 2
183	Voices Tom 2	195	Bigband Ride Bell	208	Cartoon Ride
184	Voices Tom 3	196	Jazz Ride Bell	209	Voices Ride
185	Industry Tom 1	197	Slap Ride	210	Standard Ride 21" Rim
186	Industry Tom 2	198	Slap Ride Bell	211	Rock Ride 21" Rim
187	Industry Tom 3	199	1969s Ride	212	1969s Ride Rim
188	Timpani	200	1969s Ride Bell	213	Pop Ride Rim
RIDE		201	Pop Ride	214	Ska Ride Rim
189	Standard Ride 20"	202	Ska Ride		

No.	Name	No.	Name	No.	Name
CRASH		227	Hiphop Crash	240	909 Crash 2
215	Standard Crash 1	228	Hiphop Crash Bell	241	Junkyard Crash 1
216	Standard Crash 2	229	China Crash	242	Junkyard Crash 2
217	Standard Crash 3	230	China Crash Bell	243	Noise Crash 1
218	Standard Crash 1 Bell	231	Orchestra Crash 1	244	Noise Crash 2
219	Standard Crash 2 Bell	232	Orchestra Crash 2	245	SFX Crash 1
220	Standard Crash China	233	Orchestra Crash Bell	246	SFX Crash 2
221	Standard Splash 8"	234	Mute Crash Bell	247	Industry Crash
222	Standard Splash 8" Bell	235	Drumbass Crash 1	248	Industry Crash Bell
223	Rock Crash 20"	236	Drumbass Crash 2	249	Standard Crash 4
224	Rock Splash 8"	237	808 Crash 1	250	Standard Crash 5
225	Jazz Splash 10 "	238	808 Crash 2		
226	Jazz Splash 10 " Bell	239	909 Crash 1		

No.	Name	No.	Name	No.	Name
HI-HAT		263	Junkyard Hi-hat	274	Standard Clap
251	Standard Hi-hat 1	264	Noise Hi-hat	275	Tambourine
252	Standard Hi-hat 2	265	Industry Hi-hat	276	Standard Cow Bell
253	Rock Hi-hat	PERCUSSION		277	Mute Cow Bell
254	Pop Hi-hat			278	Rock Cow Bell
255	Brush Hi-hat	266	High Q	279	Vibraslap
256	1969s Hi-hat	267	Slap	280	Hi Bongo
257	Ska Hi-hat	268	Scratch Push	281	Low Bongo
258	House Hi-hat	269	DJ SFX	282	Mute Hi Conga
259	808 Hi-hat	270	Sticks	283	Open Hi Conga
260	909 Hi-hat	271	Square Click	284	Low Conga
261	Cartoon Hi-hat	272	Metro Click	285	High Timbale
262	Voices Hi-hat	273	Metro Bell	286	Low Timbale

No.	Name	No.	Name	No.	Name
287	High Agogo	294	Long Guiro	301	Open Triangle
288	Low Agogo	295	Claves	302	Shaker
289	Cabasa	296	Hi Wood Block	303	Jingle Bell
290	Maracas	297	Low Wood Block	304	Belltree
291	Short Whistle	298	Mute Cuica	305	Castanets
292	Long Whistle	299	Open Cuica	306	Mute Surdo
293	Short Guiro	300	Mute Triangle	307	Open Surdo

10.2 Kit list

No.	Name	No.	Name	No.	Name
Pre-installed kits		011	1969songo	User kits	
001	Fusion	012	1971s	021	M-box
002	Standard	013	1976disco	022	Step
003	Room	014	909	023	Industry
004	Rock	015	Drumbass	024	Lowfi
005	Hiphop	016	Funk	025	Metal
006	Electronic	017	Hiphop-3	026	Pop-rock
007	Cartoon	018	House-2	027	Fusion
008	House	019	Vintage	028	Standard
009	Jazz	020	Junkyard	029	Room
010	Brush			030	Rock

No.	Name	No.	Name	No.	Name
031	Hiphop	038	1971s	045	Vintage
032	Electronic	039	1976disco	046	Junkyard
033	Cartoon	040	909	047	M-box
034	House	041	Drumbass	048	Step
035	Jazz	042	Funk	049	Industry
036	Brush	043	Hiphop-3	050	Lowfi
037	1969songo	044	House-2		

10.3 Song list

No.	Name	No.	Name	No.	Name
001	Funk 1	012	Bluegrass	023	Ballad 1
002	Fusion 1	013	Mambo	024	Boogie
003	Latin Jazz	014	Beguine	025	Punk
004	Dance	015	Drum´n Bass	026	Rock´n Roll 2
005	Big Band	016	Jazz	027	Metal
006	Slow Fusion	017	Bossa	028	16 Beat
007	Samba	018	Pop	029	Rumba
008	Modern Jazz	019	Rock´n Roll 1	030	Shuffle
009	Country	020	House	031	Swing
010	Reggae	021	Hip Hop	032	Blues 1
011	Salsa	022	6/8 Ballad	033	Blues 2

No.	Name	No.	Name	No.	Name
034	Fusion 2	040	Disco	046	6/8 R&B
035	Funk 2	041	8 Beat	047	Pop Rock
036	Acid Fusion	042	Funk 3	048	Hard Rock
037	Folk Pop	043	Slow Rock	049	Pop Ballad
038	Latin	044	R&B 1	050	New Age
039	Ballad 2	045	R&B 2		

10.4 MIDI implementation

Function		Transmitted	Recognized	Remarks
Basic channel	Default	Ch 10	1-16	
	Changed	No	No	

Function		Transmitted	Recognized	Remarks
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
	5	No	Yes	Portamento time

Function		Transmitted	Recognized	Remarks
	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

Function		Transmitted	Recognized	Remarks
	121	No	Yes	Reset All Controllers
	123	No	Yes	All Notes Off
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	



