HD-100

DIGITAL DRUM SET

Millenium

Thank you for purchasing this digital drum set. It has been developed to act and play like an acoustic drum set but with greater ease. Before you use your new instrument, we recommend you to read through this entire manual, *before* you start to operate it.

Important safety instructions

For your own safety you must read through this chapter at first completely!

⚠ *Risk of electrical shocks!*

- Only connect the device using the mains adaptor supplied to a properly wired and earthed mains power socket providing mains voltage of 230 V ~ /50 Hz.
- Do not operate the device if the power adaptor, its cord or the mains plug is damaged.
- Never submerse the device in water. Wipe it with a slightly moistened cloth only.
- Do not expose the device to rain and never use it in a damp or wet environment. Make sure that the power adaptor or the adaptor cable never becomes wet or moist during use.
- Never subject the device to direct sunlight, excessive high temperatures or dust.
- This instrument contains digital circuitry and may cause interference if placed too close to radio or television receivers. If this occurs, move the instrument further away from the affected equipment.
- Under no circumstances may you open the housing of the device or the adaptor. Should you do so your safety would not be assured and the warranty will become void. There are no operational components whatsoever inside, only really **high voltage** that can give you a **deadly shock!**
- Do not place objects containing fluids, e.g. flower vases or beer bottles, on or near the device.
- Notice regarding disconnection from mains-power:
  To completely disconnect the device from mains power, you must disconnect the adaptor from the power socket. For this reason the device should be placed in a position where unobstructed access to the power socket is assured at all times, so that in an emergency you will be able to immediately pull out the adaptor. To eliminate the risk of fire you should completely disconnect the adaptor from the power socket when the device is not going to be used.
- Always grasp the power adaptor itself. Do not pull on the cord and never touch the power adaptor with wet hands as this could result in a short circuit or an electrical shock. Do not place the device, speakers or anything else on the adaptor cord and make sure that it does not become clamped. Never tie knots in the adaptor cord and do not bind it together with other cables. Lay the adaptor cord so that no one can step on or stumble over it. A damaged power adaptor can cause a fire or an electrical shock. Check the power adaptor and its cord from time to time. Should it become damaged contact our customer service department to have it replaced.
- NEVER use the unit under the following conditions:
  > In places subject to vibrations or bumps.
  > In places with a temperature of over 45 °C/113 °F or less than 2 °C/35.6 °F.
  > In places subject to excessive dryness or humidity (ideal conditions are between 35% and 80%).

⚠ *Risk of fire!*

- Never leave the device unattended during operation.
- Do not place open fire sources, such as candles, on the device.
- Never operate the device in the vicinity of heat sources such as cookers, heating elements or other heat producing installations.
- Before a storm and/or a thunderstorm with a risk of lightning, please disconnect the device from the electrical power source.

⚠ *Risk of personal injury!*

- This appliance is not intended for use by individuals (including children) with restricted physical, physiological or intellectual abilities or deficiencies in experience and/or knowledge unless they are supervised by a person responsible for their safety or receive from this person instruction in how the appliance is to be used. Children should be supervised to ensure that they do not play with the appliance.
- Provide a stable location for the device.
- Do not operate the device if it has sustained a fall or is damaged. Have the device checked or, if necessary, repaired by qualified technicians.

- Important! Never play the drums with high volume level. Listening to music with high sound pressure level, especially when using headphones, may cause permanent damage to your hearing!

Handling the unit

- Never apply excessive force to the controls, connectors or other parts of the instrument.
- Always unplug cables by gripping the plug firmly, but not pulling on the cable.
- Disconnect all cables before moving the instrument.
- To avoid damage to the instrument and other devices to which it is connected, turn the power switches of all related device OFF prior to connecting or disconnecting cables.
- Physical shocks caused by dropping, bumping, or placing heavy objects on the instrument can result in scratches and more serious damage.
- The normal function of the product may be disturbed by strong electromagnetic interference. If so, simply reset the product to resume normal operation by following the instruction manual. In case the function could not be resumed, please use the product in another location.
- ESD, fast transient and surge may cause the unit to temporarily malfunction. Then switch the device off and on again to resume normal operation.

Cleaning the unit

- Clean the unit with a dry soft cloth.
- A slightly damp cloth may be used to remove stubborn grime and dirt.
- Never use cleaners such as alcohol or thinner.
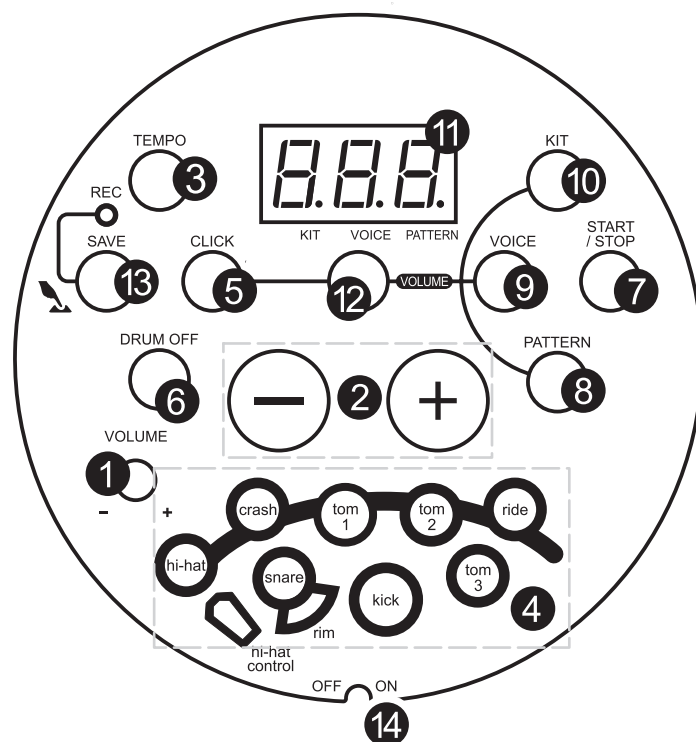- Avoid placing vinyl object on top of the unit (vinyl can stick to and discolour the surface).

Features

▶ **100 drum and percussion sounds with high-grade resolution**

▶ **10 preset and 5 programmable sets**

▶ **30 built-in preset rhythms and one user rhythm**

▶ **Integrated metronome with 4 selectable click sounds**

▶ **Bass pad**

▶ **Including foot pedal, double zone snare pad, 3x tom pads, ride - Crash - hi-hat pad & hi-hat controller**

▶ **Headphones output & mix In sockets**

▶ **USB connection**

Table of contents

The operating elements . . .

❶ **VOLUME:**
Volume control for the headphones output.
Turn it clockwise to increase the volume, turn it anticlockwise to decrease it.

❷ **+/−:**
to adjust the currently selected parameter of the menu (KIT, voice, pattern, click value, tempo value, etc.).

❸ **TEMPO:**
to enter the tempo adjustment mode.

❹ **Pad indicators:**
During playing these indicators show the currently triggered pads.

❺ **CLICK:**
to turn the metronome function on and off.

❻ **DRUM OFF:**
to mute the drum part of a song.

❼ **START/STOP:**
to start / stop the song playback.

❽ **PATTERN:**
to select the pattern and for choosing the midi output format.

❾ **VOICE:**
to select the voice.

❿ **KIT:**
to select a drum kit.

⓫ **3-digit LED display:**
shows the parameter of the currently selected menu.

⓬ **VOLUME:**
to enter the volume adjustment mode and to separately adjust kit volume, voice volume, click volume and pattern volume.
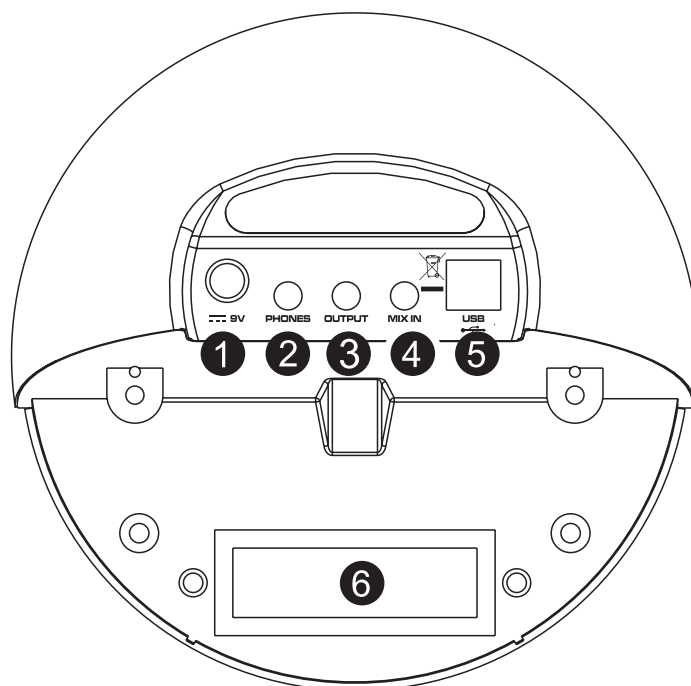
⓭ **SAVE/REC:**
Press this button briefly to store the currently selected kit as user kit. Keep this button pressed, to start the record mode.

⓮ **ON/OFF:**
to turn the unit on and off.

❶ ⎓ **9 V**
Plug in the cable of the mains adaptor here.

❷ **PHONES:**
Here you can connect your headphones (not supplied).

❸ **OUTPUT:**
You can connect an audio system or drum monitor to this stereo output.

❹ **MIX IN:**
Connect external audio devices like MP3 or CD players to this input.

❺ **USB:**
Use this socket to connect the unit to a computer (MIDI in/out via USB).

❻ **Trigger input jacks:**
Connect the individual pads to these terminals.

Setup the drum set

CAUTION!
To prevent electric shock and damage to the device, make sure the power is switched OFF on the drum module and all related device before making any connection.

Connect the pads and the pedal

Connect with kick, snare, tom1~tom3, ride, crash, hi-hat, hi-hat control triggers using the cables provided. The snare drum features a stereo input and supports double triggering (increase edge triggering); cymbal (ride & crash), kick, tom, hi-hat are mono inputs that can't response edge triggering. The Hi-hat pedal also has a stereo input.

Note:
1. The voice of hitting the hi-hat pad is controlled by the hi-hat pedal. Similar to a real drum kit, the hi-hat pad functions as an 'open hi-hat' when the pedal is released. When the pedal is stepped, it functions as a 'closed hi-hat'.
2. The valid striking area of a cymbal pad (ride, crash or hi-hat) is half part of the pad on the player side, which is different from other pads.

Connect the power supply jack

Make sure the power is switched OFF, then connect the power adaptor with the DC jack on the rear panel.

1. To protect the speakers, amplifier and the drum module from damage, rotate the volume knob to the minimum volume level before switching the power ON.

2. Make sure the power is switched OFF when connecting the drum module to external devices.
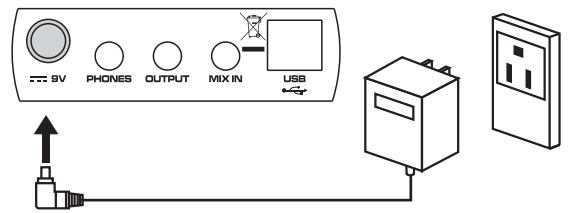
Connect your audio equipment

If you want to listen to the drum voices with an amplifier, connect that amp to the OUTPUT jacks on the rear panel.

Amplifier
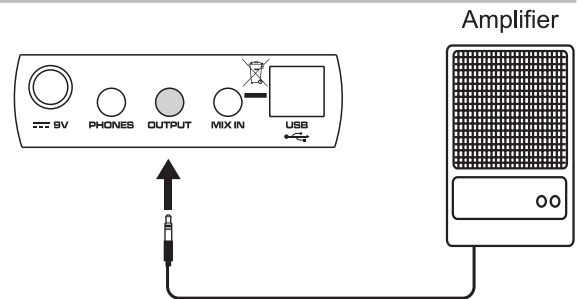
Connect a CD player, etc.

The audio output of a CD player or other audio source can be connected to the MIX IN jack on the rear panel to mix it with the sound of the drum. This function is convenient if you want to play along with a favourite song.

CD player or similar
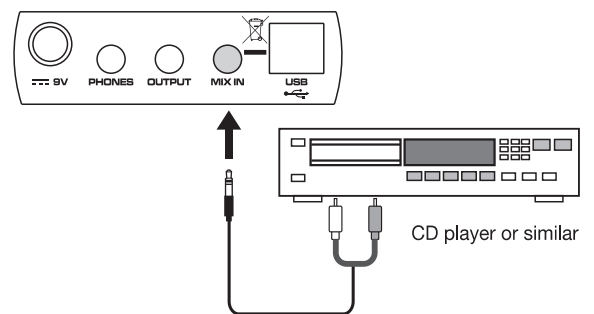
Connect headphones

An optional set of stereo headphones can be connected with the PHONES jack located on the rear of the drum module.

CAUTION! Always adjust the volume to a comfortable level! Listening to music with high sound pressure level may cause permanent damage to your hearing!
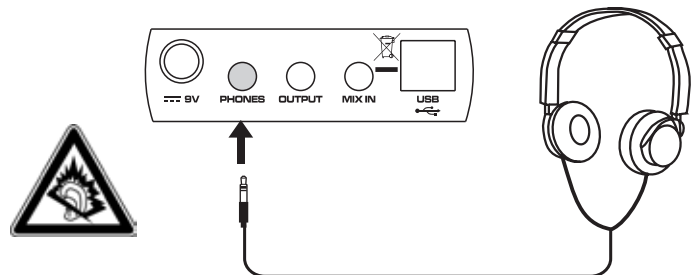
Connect a MIDI and USB device

1. Connect a computer or other USB host devices that supports USB Audio.

2. For devices with USB cable, you can choose "USB Audio Device" in the device menu of the software that transfers the midi data. The USB connection is compatible with current operating systems. A driver is not needed.

3. The drum module sends the MIDI data by hitting pads or stepping pedal through USB port. But the data of the click and song playing is not included. USB port only sends and receives MIDI information.
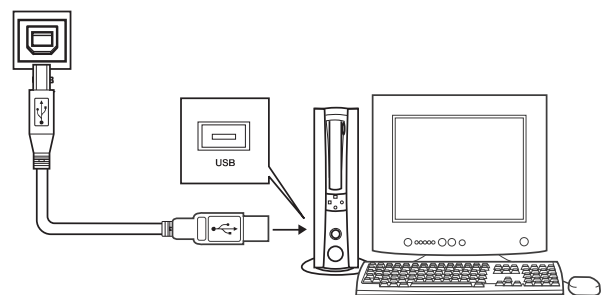
Note:
Channel 11 is set as default percussion channel.

MIDI-Out format

One of the two different MIDI output formats can be selected for the drum module: the internal format (default setting) and the GM format.

The internal format is used when the drum module works as a sound source (drum module must be connected to a computer or other module with USB host device by USB, and send midi data to another drum module. One drum module can't be connected to another drum module by USB).

The GM format is used when some other sound source is applied (drum module to other product which supports GM format), such as a computer.

If you record your own drum play to computer software with internal format, then only the drum module could recognize and playback your own song (recorded midi file) correctly.

Nevertheless, if you would like to playback your recorded midi song in any sound source device which supports GM format, we suggest you to record your own drum performance with GM format output.

In pattern selecting mode, press the PATTERN button to enter MIDI output format choice mode. The LED display shows the current MIDI output format "P-N" (default setting, internal format) or "--N" (GM format). It can be selected by pressing the +/– buttons.

If the internal format (P-N) is selected, "program change" and "note on/off" commands will be transmitted. When the GM format (--N) is selected, only 'note on/off' commands will be transmitted.

Note:
The above setting only affects the primary percussion channel. (MIDI channel 10)
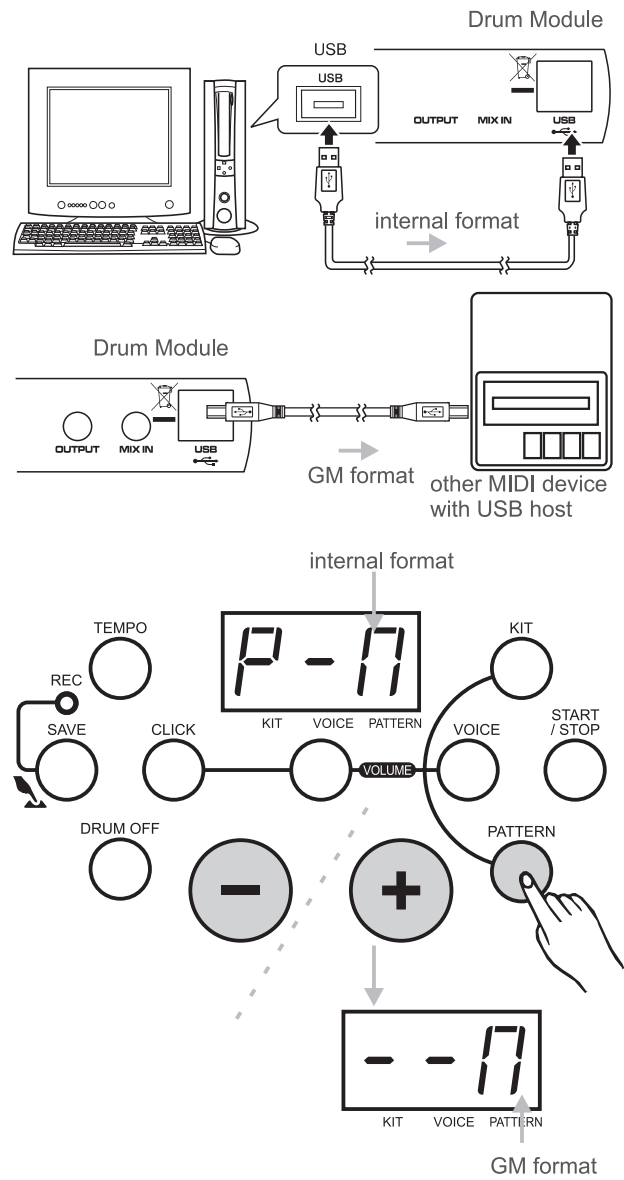
Functions

Switch the power ON

After all connections have been completed, rotate the volume knob to the left (= minimum volume level) before switching the power on.

Set the power switch to "ON" position to switch on the power. The display then shows the kit's number and its indicator lights up.

Kit indicator

Set the main volume

While hitting a pad, gradually rotate the volume knob until a comfortable volume level is reached.
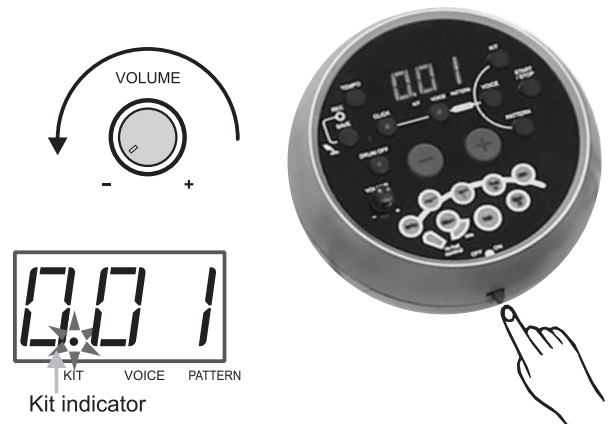
Select a drum kit

The unit comes with 10 (001-010) preset drum kits and 5 user kits (011-015).

Press the KIT button to enter KIT selecting mode, 3-digit LED displays the current KIT number and the KIT indicator lights up.

Kit indicator

In kit selecting mode, press + or – button to choose any KIT (001-015, in cycle) as the current KIT.
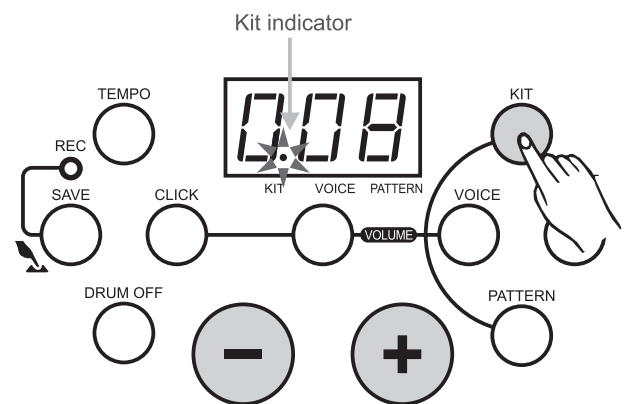
Adjust the kit volume

In KIT selecting mode, press the VOLUME button to enter volume adjusting mode, the volume indicator lights up and the 3-digit LED displays the current kit volume value. Adjust its value by pressing the +/– buttons. (0-16, not in cycle). Then press the KIT button again to enter the KIT selecting mode. The volume indicator goes out.

Kit-Anzeige

Please note that in recording waiting mode, the KIT volume value can be shown on the display but it can not be adjusted.

Lautstärkeanzeige
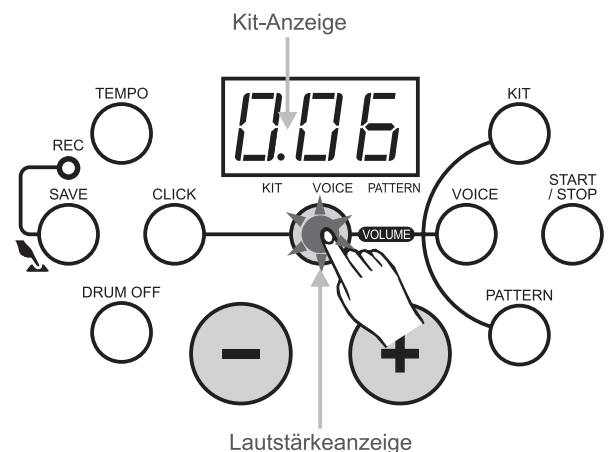
Select a pad voice

The drum module provides 108 built-in drum voices in total to choose from.

Press the VOICE button to enter pad voice selecting mode. The 3-digit LED displays the current pad voice number and the voice indicator lights up.

In the pad voice selecting mode, press +/– buttons to choose the voice of the current pad or cymbal (1-108, in cycle).

Voice-Anzeige
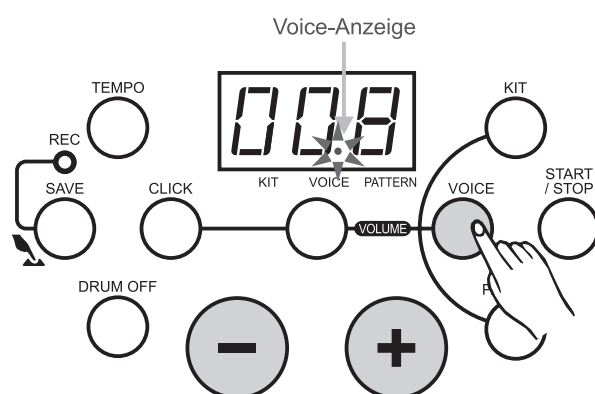
Adjust the pad volume

In voice selecting mode, press the VOLUME button to enter pad volume adjusting mode. Then the volume indicator lights up and the LED displays the current pad volume value.

Press the +/– buttons to adjust its value (0-16, not in cycle).

Press the VOICE button again to enter voice selecting mode.

Voice indicator

Volume indicator lights
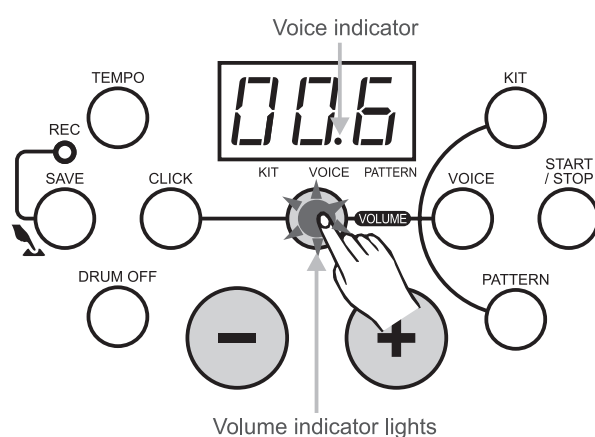
Save kit

Press the SAVE button to enter KIT saving mode. The LED displays the user KIT number to save, the KIT indicator lights up and the user KIT number flashes.

Press +/– buttons to choose the user KIT (11-15, in cycle) to save. During choosing the KIT, the user KIT number will keep flashing.

Press the SAVE button again. The current KIT setting (including all pads voice numbers and volume) is saved into the selected user KIT.

When in recording mode, this function is not available to the user.

flash
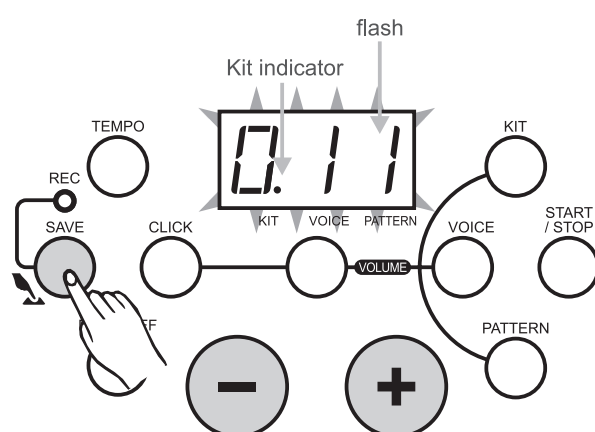
Kit indicator

Select a pattern

The unit offers 41 built-in patterns (40 preset patterns and one user pattern).

Press the PATTERN button to enter pattern choice mode, the 3-digit LED displays the current pattern number and the pattern indicator lights up.

Press the +/– buttons to choose the current pattern number (1-41, in cycle).
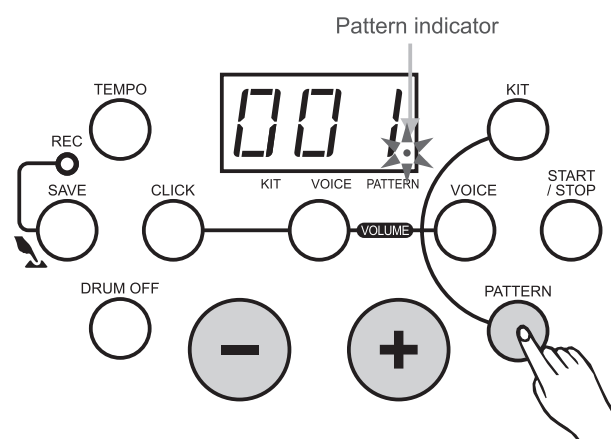
Pattern indicator

Listen to the pattern

Press the START/STOP button to start/stop pattern playing. In process of pattern playing, the click indicator flashes, which shows the beat of the playing pattern. Additionally the pad indicators light up in accompany with the variable trigger sound in process of pattern play, for easy learning and practicing. If another pattern is selected in current song playing, it will start to play at the next measure.

In pattern playing mode, press START/STOP button to stop pattern play.

Note:
The pattern and the MIDI IN use the same 16 midi channels. When you use MIDI IN to play a song, it might affect the built-in pattern playing. So you must reset the drum module.

Pattern indicator

click indicator lights and flash, show pattern is playing
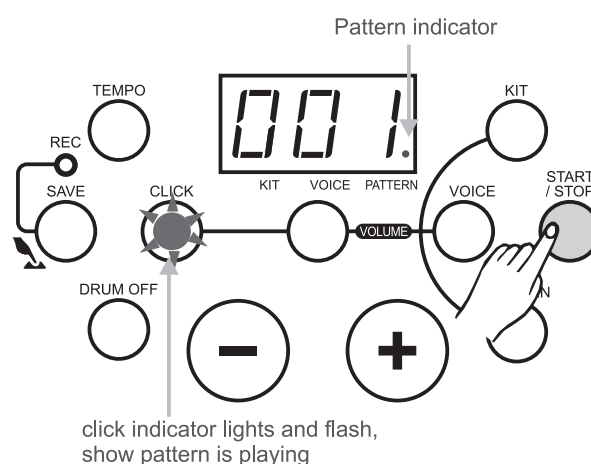
Adjust the pattern volume

In pattern choice mode, press the VOLUME button to enter pattern volume adjusting mode. The 3-digit LED displays the accompaniment volume value of current pattern (please note that the percussion part volume can not be adjusted, it just can be muted on/off by using DRUM OFF button). The volume indicator lights up, press the +/– buttons to adjust the pattern volume value (0-16, not in cycle). Then press the PATTERN button again to enter pattern choice mode.

Please note that in recording waiting mode, the pattern volume value could be shown on the display but it could not be adjusted.

Note:
Pattern volume only controls the accompaniment part volume of the pattern.

Pattern-Anzeige

Lautstärkeanzeige
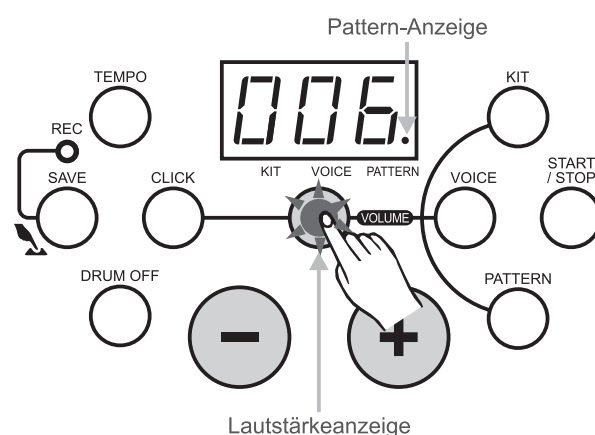
Recording

Enter the recording waiting mode

Press and hold the SAVE button for about 2 seconds, to enter user pattern recording waiting mode. The 3-digit LED displays the KIT number and the REC indicator flashes. In recording waiting mode the correspondent parameter can be adjusted.

- Adjust pattern number as accompaniment.
- Adjust tempo value.
- Adjust KIT number.
- Switch drum off status.
- Turn on/off click.

light and flash

press and hold more than 2 seconds

In the Recording Waiting Mode, press the PATTERN button to show the pattern (---/001~040) as accompaniment for recording. Use the +/– buttons to select the accompaniment. If "---" is selected, that means the user would like to record a solo drum part.

Note:
VOICE selecting function is not available for the user in recording waiting mode and time signature.

Pattern indicator

Enter recording mode

Press the START/STOP button or hit the pads to enter recording mode. Then the REC indicator lights all along and the 3-digit LED displays recording measures.

- During recording, the original data will be replaced with the newly recorded user pattern.
- One measure introductory beat (such as 4/4,display: -4, -3, -2, -1).
- No parameters can be adjusted during recording. Only „START/STOP" and „CLICK" buttons function during recording.
- The click sound will not be recorded.

light all along

Stop recording

When the recording memory is full, the recording automatically stops and the REC indicator goes out. The 3-digit LED displays 'ful', then press the START/STOP button to return to NO.41 PATTERN display.

If you press the START/STOP button during recording, the recording will stop and the REC indicator goes out. The unit then returns to NO.41 PATTERN display.

Goes out
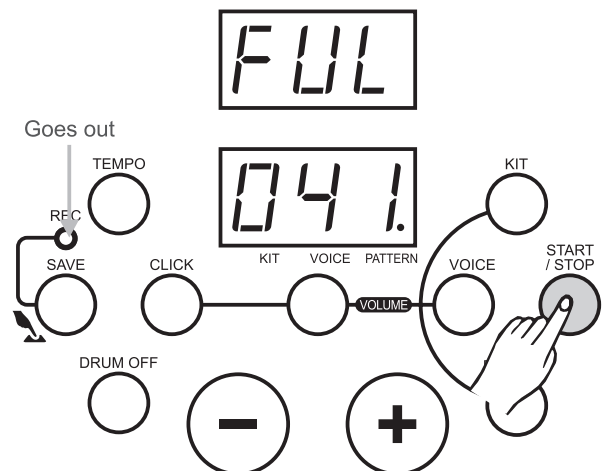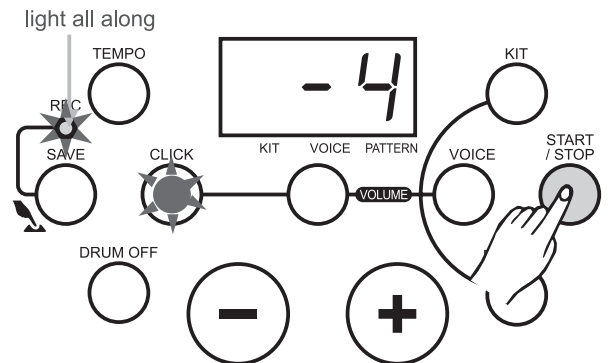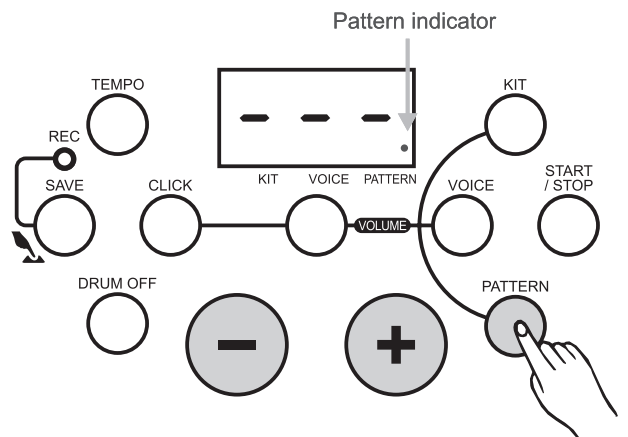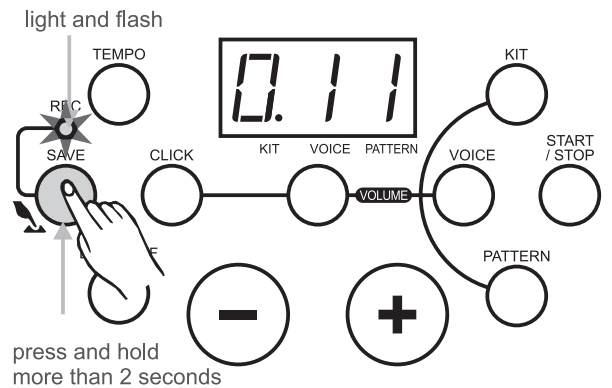
Playback User Pattern

Choose the pattern number 41, then press the START/STOP button to play user pattern.

- If there is no recording data, 3-digit LED displays "N-P".
- The user is allowed to change pattern volume and tempo value when playing user pattern.
- No measures displayed on LED.
- The unit does not play the user pattern in cycle.
- When using the DRUM OFF button, it just mutes the drum part of the accompaniment and will not mute the recorded part.
- Pattern volume and Kit volume only control the corresponding part of the accompaniment.
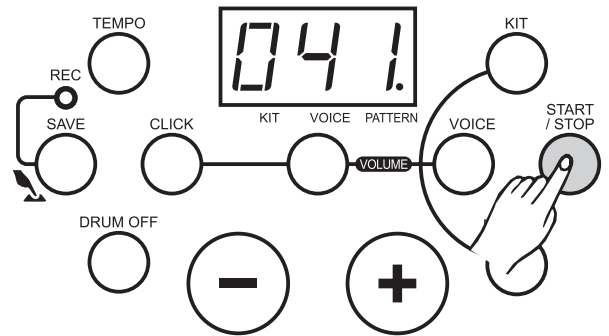
Note:

If the user selects another kit when playing back the user pattern, the recorded kit data will also be changed to the currently selected kit.

Recording notes

The recording capacity is about 5000 notes.

Quick recording

After choosing a favourite KIT and adjusting the parameter well, (includes tempo, click etc.), the user can easily press and hold the SAVE button to enter recording waiting mode, then hit the pads or press the START/STOP button to start recording.

light and flash

press and hold
more than 2 seconds
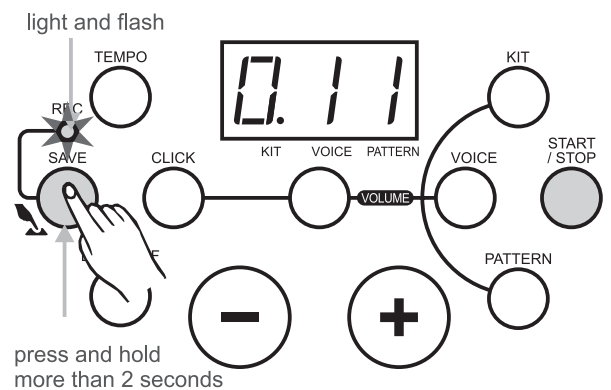
Drum off

Press the DRUM OFF button to mute on/off the drum part. If "drum off" is activated, the drum sound of the currently playing pattern will be muted and the "drum off" indicator lights up. This function is convenient for user practise.

drum off
indicator lights
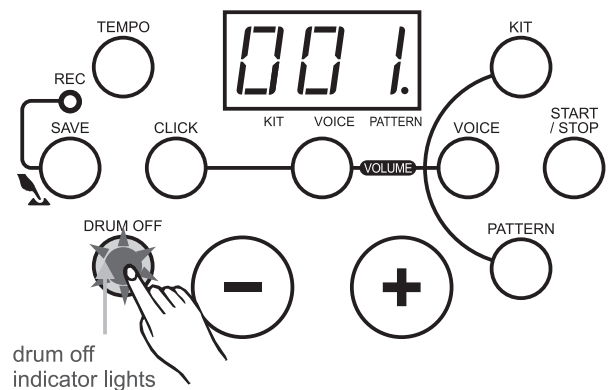
Adjust the pattern tempo

Press the TEMPO button to enter tempo adjustment mode. The 3-digit LED then temporarily displays TEMPO value.

Press the +/– buttons to change the tempo of click and pattern playing (30-280, not in cycle).

Press + and – button at the same time, to reset to the default value (the current pattern default tempo).
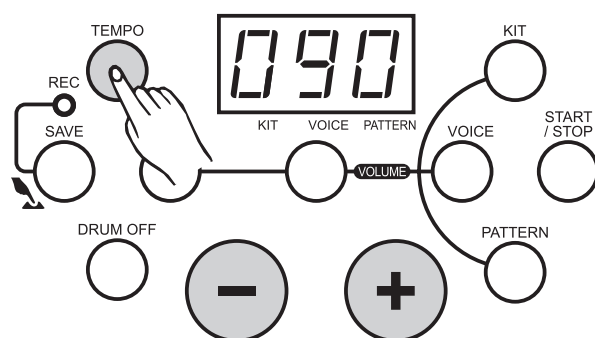
Click

Press the CLICK button to turn on/off the click function. The 3-digit LED displays the current time signature, and the click indicator lights and flash. Press the +/– buttons to change the current time signature. Press the CLICK button again to turn off the click function.

9 kinds of time signatures can be chosen (1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8).

As a pattern is playing, the click indicator automatically flashes according to the pattern beat, but the click sound will not be turned on automatically.

click indicator lights
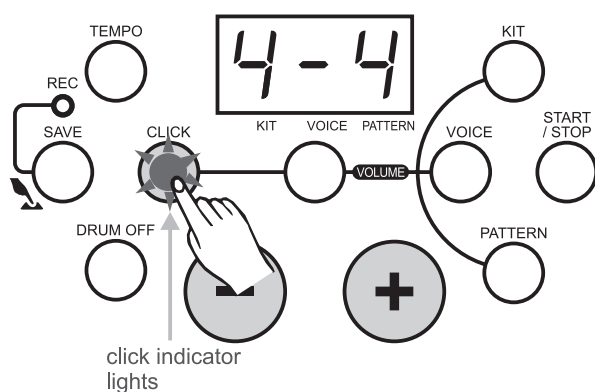
Select a click sound

Press and hold the CLICK button, then press the +/– buttons to adjust the click sound. The 3-digit LED temporarily displays the current click sound 'CLX'.

The drum module supports 4 click sounds: metronome, beep, cowbell and voice. When turning on the click, the default sound is "metronome".

press at the same time
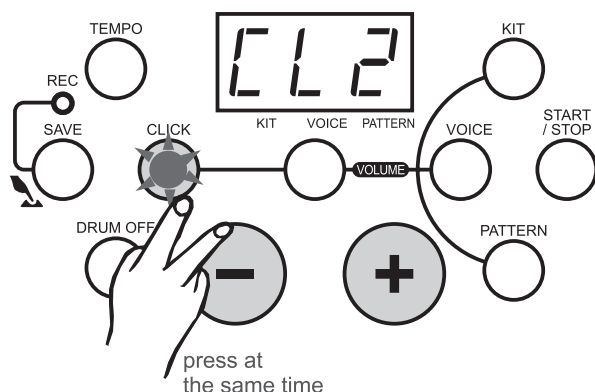
Adjust the click volume

In click time signature choice mode, press the VOLUME button to enter click volume adjusting mode. The volume indicator lights up and the 3-digit LED displays the current click volume value. Its volume value can be adjusted by pressing the +/– buttons (0-16 not in cycle).

Return to click time signature choice mode
In click volume adjusting mode, press the CLICK button to exit the volume adjusting mode and to return to the click time signature choice mode.

volume indicator lights
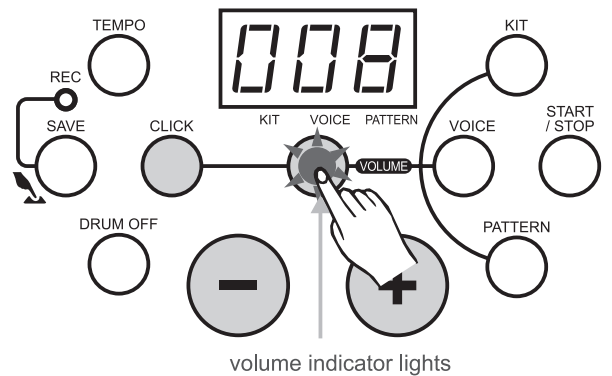
Factory reset

If you keep both + and – buttons pressed at the same time when turning on the drum module, it will be reset to the factory default settings. The following data will be replaced by the factory data:

- All users kits (include voice, volume setting).
- All recorded data.

Gleichzeitig
drücken
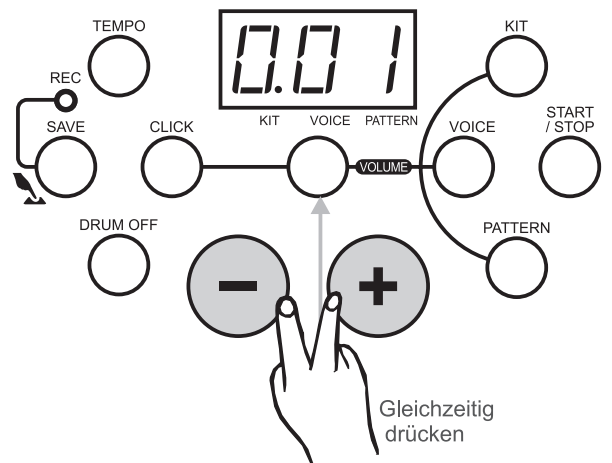
Hi-Hat control

- Open hi-hat: Strike the hi-hat without stepping the pedal.
- Closed hi-hat: Strike the hi-hat with the pedal stepped.
- Foot closed: Completely step down the pedal.
- Splash: play the hi-hat with the pedal fully stepped and then instantly releasing it.

Specifications

Drum Pads:	3 tom pads 2 cymbal pads 1 snare pad (dual trigger) 1 hi-hat control pedal 1 hi-hat 1 kick
Voices:	108 voices
Drum kits:	10 preset kits 5 user kits
Patterns:	40 preset songs and 1 user pattern
Display:	LED display
Connections:	PHONES USB OUTPUT MIX IN DC POWER Hi-hat control Hi-hat Crash Ride Snare Tom 1 Tom 2 Tom 3 Kick
Power Supply:	AC mains adaptor (DC 9V⎓)

Voice list

No.	NAME	No.	NAME	No.	NAME
KICK		036	Rock Tom 4	**Percussions**	
001	Standard Kick 1	037	Rock Tom 5	070	Tabla 001
002	Standard Kick 2	038	Rock Tom 6	071	Tabla 002
003	Classic Kick 1	039	Brush Tom 1	072	Tabla 003
004	Classic Kick 2	040	Brush Tom 2	073	Tabla 004
005	Rock Kick	041	Brush Tom 3	074	Tabla 005
006	Camco Kick 1	042	Brush Tom 4	075	Tabla 006
007	Camco Kick 2	043	Brush Tom 5	076	Bongo High
008	Acoustic Kick 1	044	Brush Tom 6	077	Bongo Low
009	Acoustic Kick 2	045	Camco Tom 1	078	Conga 1
010	Acoustic Kick 3	046	Camco Tom 2	079	Conga 2
011	Acoustic Kick 4	047	Camco Tom 3	080	Conga 3
012	TR606 Kick	048	Camco Tom 4	081	Timbale High
		049	Camco Tom 5	082	Timbale Low
SNARE		050	Camco Tom 6	083	Agogo High
013	Standard Snare	051	TR606 Tom 1	084	Agogo Low
014	Standard Snare Rim	052	TR606 Tom 2	085	Cowbell 1
015	Funk Snare	053	TR606 Tom 3	086	Cowbell 2
016	Funk Snare Rim	054	TR606 Tom 4	087	Cowbell 3
017	Funk Stick	055	TR606 Tom 5	088	Cowbell 4
018	Classic Snare	056	TR606 Tom 6	089	Cowbell 5
019	Classic Snare Rim			090	Cowbell 6
020	Rock Snare	**RIDE**		091	Cowbell 7
021	Rock Snare Rim	057	Classic Ride	092	Cowbell 8
022	Brush Snare	058	Rock Ride	093	Cowbell 9
023	Brush Snare Rim	059	Brush Ride	094	Cowbell 10
024	Camco Snare	060	TR606 Ride	095	Hi Hat 001
025	Camco Snare Rim			096	Hi Hat 002
026	TR606 Snare	**CRASH**		097	Hi Hat 003
		061	Classic Crash	098	Hi Hat 004
TOM		062	Rock Crash 1	099	Hi Hat 005
027	Classic Tom 1	063	Rock Crash 2	100	Hi Hat 006
028	Classic Tom 2	064	Brush Crash	101	Hi Hat 007
029	Classic Tom 3	065	China Crash	102	Hi Hat 008
030	Classic Tom 4	066	TR606 Crash	103	Hi Hat 009
031	Classic Tom 5			104	Dj001
032	Classic Tom 6	**HI HAT**		105	Dj002
033	Rock Tom 1	067	Classic Open Hi Hat	106	Dj003
034	Rock Tom 2	068	Rock Open Hi Hat	107	Dj004
035	Rock Tom 3	069	TR606 Open Hi Hat	108	Dj005

Preset kits and default user kits

No.	NAME	No.	NAME
001	Standard	009	TR606
002	Rock	010	DJ
003	Pop	011	User kit1 (Standard)
004	Funk	012	User kit2 (Rock)
005	Brush	013	User kit3 (Pop)
006	Jazz	014	User kit4 (Funk)
007	Table	015	User kit5 (Brush)
008	Latin		

Note:
Number 001~010 are preset kits, number 011~015 are users kits.

Pattern list

No.	PATTERN	No.	PATTERN
001	Fusion1	022	Fusion2
002	Latin Jazz1	023	Jazz1
003	Funk1	024	Guitar Bossa
004	Latin Pop1	025	Break Beat
005	60's Rock	026	World1
006	Big Band1	027	Funk3
007	Drum N'Bass	028	Latin Jazz3
008	Ballad	029	Latin Pop2
009	Swing	030	Reggae1
010	Pop1	031	World2
011	Funk2	032	Latin
012	Latin Jazz2	033	Bossa
013	Pop Funk1	034	Samba2
014	Latin Rock1	035	3/4Pop
015	Big Band2	036	Pop2
016	Pop Ballad	037	Jazz2
017	Pop Funk2	038	Reggae2
018	3/4Jazz	039	Reggae3
019	Pop Bossa	040	Latin Rock2
020	Samba1	041	User Pattern
021	6/8Ballad		

Percussion set list

Standard (PC0)	Rock (PC1)	Pop (PC2)	Funk (PC3)	Brush (PC4)	Jazz (PC5)	606 (PC6)	DJ (PC7)
27 High Q	<–	<–	<–	<–	<–	<–	<–
28 Slap	<–	<–	<–	<–	<–	<–	<–
29 Scratch Push	<–	<–	<–	<–	<–	<–	<–
30 Scratch Pull	<–	<–	<–	<–	<–	<–	<–
31 Sticks	<–	<–	<–	<–	<–	<–	<–
32 Square Click	<–	<–	<–	<–	<–	<–	<–
33 Metronome Click	<–	<–	<–	<–	<–	<–	<–
34 Metronome Bell	<–	<–	<–	<–	<–	<–	<–
35 STD Kick 2	<–	<–	<–	<–	<–	<–	<–
36 STD Kick 2	Rock Kick	Pop Kick	Funk Kick	Brush Kick	Jazz Kick	TR606 Kick	<–
37 Side Stick	<–	<–	<–	<–	<–	<–	<–
38 STD Snare	Rock Snare	Pop Snare Drum	Funk Snare	Brush Snare	Jazz Snare	TR606 Snare	<–
39 Hand Clap	<–	<–	<–	<–	<–	<–	<–
40 STD Snare Rim	Rock Snare Rim	Pop Snare Rim	Funk Snare Rim	Brush Snare Rim	Jazz Snare Rim	TR606 Snare Rim	<–
41 STD Low Tom 2	Rock Low Tom 2	Pop Low Tom 2	Funk Low Tom 2	Brush Low Tom 2	Jazz Low Tom 2	TR606 Low Tom 2	<–
42 Closed Hi-Hat	<–	<–	<–	<–	<–	TR606 Closed Hi-Hat	<–
43 STD Low Tom 1	Rock Low Tom 1	Pop Low Tom 1	Funk Low Tom 1	Brush Low Tom 1	Jazz Low Tom 1	TR606 Low Tom 1	<–
44 Pedal Hi-Hat	<–	<–	<–	<–	<–	TR606 Pedal Hi-Hat	<–
45 STD Mid Tom 2	Rock Mid Tom 2	Pop Mid Tom 2	Funk Mid Tom 2	Brush Mid Tom 2	Jazz Mid Tom 2	TR606 Mid Tom 2	Dj Mix 5
46 Open Hi-Hat	<–	<–	<–	<–	<–	TR606 Open Hi-Hat	<–
47 STD Mid Tom 1	Rock Mid Tom 1	Pop Mid Tom 1	Funk Mid Tom 1	Brush Mid Tom 1	Jazz Mid Tom 1	TR606 Mid Tom 1	Dj Mix 4
48 STD Hi Tom 2	Rock Hi Tom 2	Pop Hi Tom 2	Funk Hi Tom 2	Brush Hi Tom 2	Jazz Hi Tom 2	TR606 Hi Tom 2	Dj Mix 3
49 Crash Cymbal 1	<–	<–	<–	<–	<–	TR606 Crash Cymbal1	Dj Mix 2
50 STD Hi Tom 1	Rock Hi Tom 1	Pop Hi Tom 1	Funk Hi Tom 1	Brush Hi Tom 1	Jazz Hi Tom 1	TR606 Hi Tom 1	<–
51 Standard Ride	Rock Ride	<–	<–	Brush Ride	<–	<–	Dj Mix 1
52 Chinese Cymbal	<–	<–	<–	<–	<–	<–	<–
53 Ride Bell	<–	<–	<–	<–	<–	<–	<–
54 Tambourine	<–	<–	<–	<–	<–	<–	<–
55 Splash Cymbal	<–	<–	<–	<–	<–	<–	<–
56 Cowbell	<–	<–	<–	<–	<–	<–	<–
57 Crash Cymbal 2	<–	<–	<–	<–	<–	<–	<–
58 Vibraslap	<–	<–	<–	<–	<–	<–	<–
59 Ride Cambal 2	<–	<–	<–	<–	<–	<–	<–
60 Hi Bongo	<–	<–	<–	<–	<–	<–	<–
61 Low Bongo	<–	<–	<–	<–	<–	<–	<–
62 Mute Hi Conga	<–	<–	<–	<–	<–	<–	<–
63 Open Hi Conga	<–	<–	<–	<–	<–	<–	<–
64 Low Conga	<–	<–	<–	<–	<–	<–	<–
65 High Timbale	<–	<–	<–	<–	<–	<–	<–
66 Low Timbale	<–	<–	<–	<–	<–	<–	<–
67 High Agogo	<–	<–	<–	<–	<–	<–	<–
68 Low Agogo	<–	<–	<–	<–	<–	<–	<–
69 Cabasa	<–	<–	<–	<–	<–	<–	<–
70 Maracas	<–	<–	<–	<–	<–	<–	<–
71 Short Whistle	<–	<–	<–	<–	<–	<–	<–
72 Long Whistle	<–	<–	<–	<–	<–	<–	<–
73 Short Guiro	<–	<–	<–	<–	<–	<–	<–
74 Long Guiro	<–	<–	<–	<–	<–	<–	<–
75 Claves	<–	<–	<–	<–	<–	<–	<–
76 Hi Wood Block	<–	<–	<–	<–	<–	<–	<–
77 Low Wood Block	<–	<–	<–	<–	<–	<–	<–
78 Mute Cuica	<–	<–	<–	<–	<–	<–	<–
79 Open Cuica	<–	<–	<–	<–	<–	<–	<–
80 Mute Triangle	<–	<–	<–	<–	<–	<–	<–
81 Open Triangle	<–	<–	<–	<–	<–	<–	<–
82 Shaker	<–	<–	<–	<–	<–	<–	<–
83 Jingle Bell	<–	<–	<–	<–	<–	<–	<–
84 Belltree	<–	<–	<–	<–	<–	<–	<–
85 Castanets	<–	<–	<–	<–	<–	<–	<–
86 Mute Surdo	<–	<–	<–	<–	<–	<–	<–
87 Open Surdo	<–	<–	<–	<–	<–	<–	<–

<–:Same as the left one.

MIDI implementation chart

Function		Transmitted	Recognised	Remarks
Basic Channel	Default Changed	10 ch X	1 - 16 X	
Mode	Default Messages Altered	X X ***********	X X **********	
Note Number:	 True voice	0 - 127 ***********	0 - 127 0 - 127	
Velocity	Note on Note off	O 99H, V=1-127 O　　(99H, V=0)	O O	
After Touch	Key's Channel's	X X	X X	
Pitch Bend		X	O	
Control Change	0 1 5 6 7 10 11 64 65 66 67 80 81 91 93 120 121 123	X X X X X X X X X X X X X X X X X X	O O O O O O O O O O O O O O O O O O	Bank Select Modulation Portamento Time Data Entry Volume Pan Expression Sustain Pedal Portamento ON/OFF Sostenuto Pedal Soft Pedal Reverb Program Chorus Program Reverb Level Chorus Level All Sound Off Reset All Controllers All Notes Off
Program Change		O	O	
System Exclusive		X	O	
System Common	Song Position Song Select Tune	X X X	X X X	
System Real Time	Clock Commands	X X	X X	
AUX Messages	Local ON/OFF All Notes OFF Active Sense Reset	X X O X	X O X X	

Note 1: Reverb program vv = 00H to 07H (default 04H)　　**Note2:** Chorus program vv = 00H to 07H (default 02H)

00H : Room1	01H : Room2	00H : Chorus1	01H : Chorus2
02H : Room3	03H : Hall1	02H : Chorus3	03H : Chorus4
04H : Hall2	05H : Plate	04H : Feedback	05H : Flanger
06H : Delay	07H : Pan delay	06H : Short delay	07H : FB delay

Note3: Just respond 3 type of RPN 000~002.

O : YES   X : NO

Disposal

Never throw the device into the regular household waste at the end of its useful life. This product is subject to the European Directive 2002/96/EC.

- Dispose of the device through an approved disposal centre or at your community waste facility.
- Observe the current existing regulations. In case of doubt contact your disposal facility.
- The packaging is certified via a dual system. Take all packaging materials to an environmentally friendly disposal facility in compliance with the local regulations.

Millenium