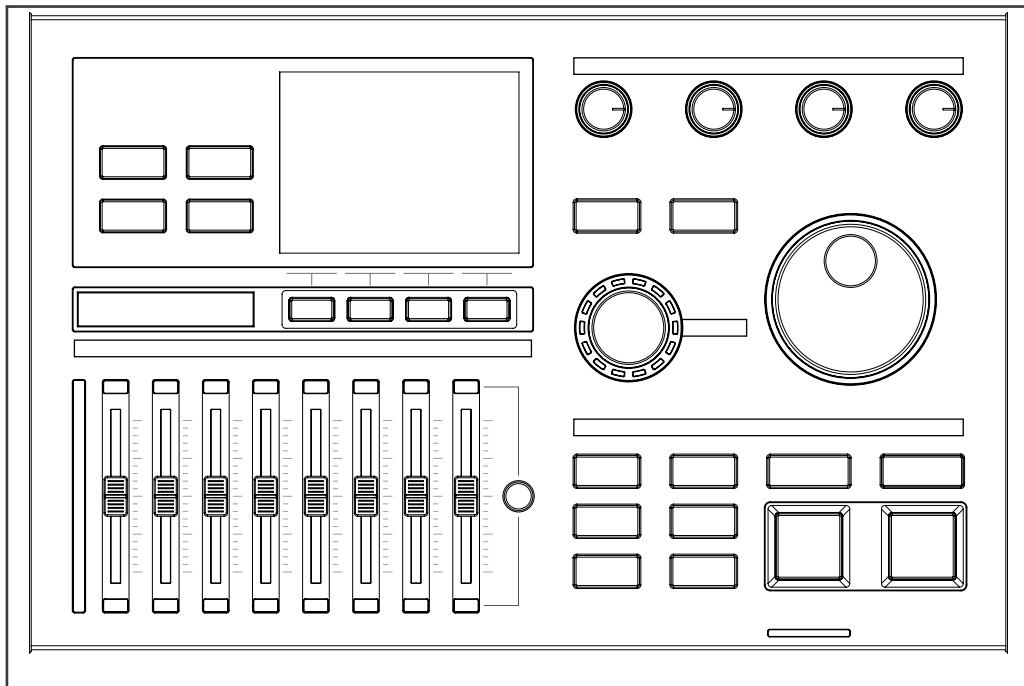


# MEDELI



## MZ928

DIGITAL DRUM  
OWNER'S MANUAL

# INFORMATION FOR YOUR SAFETY!

## THE FCC REGULATION WARNING (for USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

### CAUTION

The normal function of the product may be disturbed by Strong Electro Magnetic Interference. If so, simply reset the product to resume normal operation by following the owner's manual. In case the function could not resume, please use the product in other location.

## PRECAUTIONS

### PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe place for future reference.

#### Power Supply

Please connect the designated AC adaptor to an AC outlet of the correct voltage.

Do not connect it to an AC outlet of voltage other than that for which your instrument is intended.

Unplug the AC power adaptor when not using the instrument, or during electrical storms.

#### Connections

Before connecting the instrument to other devices, turn off the power to all units. This will help prevent malfunction and / or damage to other devices.

#### Location

Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage:

- Direct sunlight
- Extreme temperature or humidity
- Excessive dusty or dirty location
- Strong vibrations or shocks
- Close to magnetic fields

#### Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

#### Cleaning

Clean only with a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

#### Handling

Do not apply excessive force to the switches or controls.

Do not let paper, metallic, or other objects into the instrument. If this happens, remove the electric plug from the outlet. Then have the instrument inspected by qualified service personnel.

Disconnect all cables before moving the instrument.

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# Main Features



## **PURE DRUM Technology**

No matter playing the pads with soft strikes or forceful passion grooves, this new technology can achieve extremely wide range of velocity dynamics in the performance, perfectly reproducing the subtle changes of an acoustic drum. Let's enjoy the real delicate nuances and unique characteristics of acoustic drum from the PURE DRUM technology!

## **Supreme Sound Quality**

The latest PURE DRUM 2.0 technology, equipped with top-quality sound samples, innovative algorithms and powerful computing capability, can precisely capture the striking position, and perfectly simulate various sound effects of an acoustic drum such as adjusting the pad size and snare resonance. Strike the pads and cymbals to enjoy the supreme dynamics and nuances of an acoustic drum.

## **Breathtaking Craftsmanship**

When traditional craftsmanship perfectly merges with the elegant wood shell and solid chrome-plated stand, plus the attractive module design, it brings breathtaking beauty to your visual enjoyment.

## **Authentic Touch and Response**

Equipped with highly-sensitive sensors, precise position-sensing technology and groundbreaking mesh head, it aims to deliver the authentic touch and response of an acoustic drum, to faithfully reproduce in each strike the ex-pression and nuance of different playing techniques such as snappy snare, cross stick and resonance.

## **Limitless Sounds Creation**

It supports loading your favorite wave samples and editing them via the onboard sound parameters, letting you create your own sounds and have unlimited possibilities in your sounds creation.

## **Wireless Connectivity**

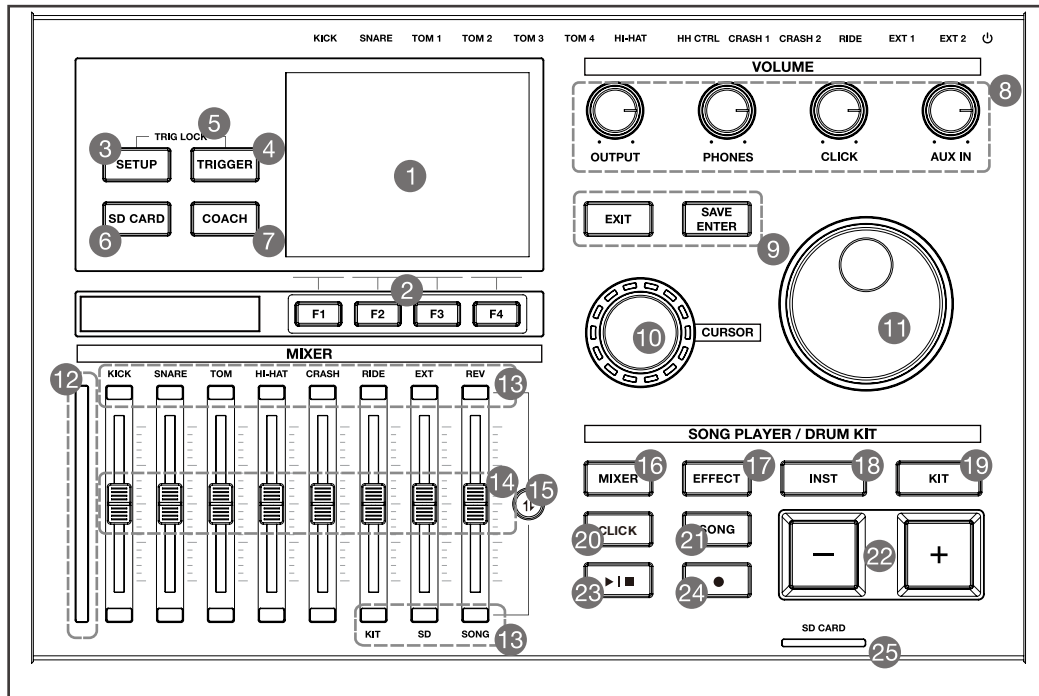
By using the powerful Bluetooth Audio and MIDI function, you can establish wireless connection with your smart devices to expand the potential in your music life.

## **Individual Output and Control**

The 8 individual outputs will satisfy your performance needs on the stage.

# Panel & Display Description

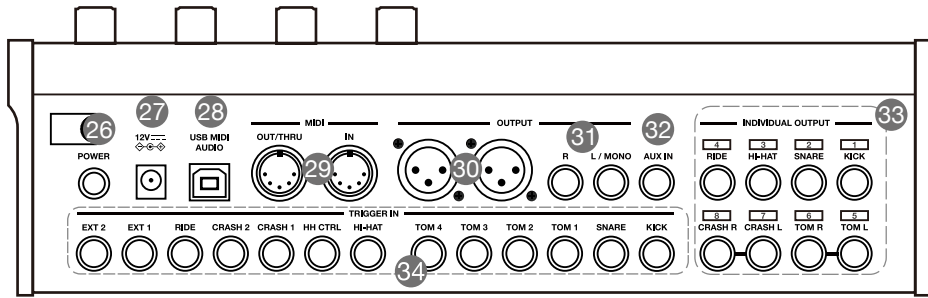
## Front Panel



1. **LCD Display**  
Display images, names and parameters.
2. **[F1] - [F4] Buttons**  
Execute the corresponding on-screen functions.
3. **[SETUP] Button**  
Enter the Setup menu.
4. **[TRIGGER] Button**  
Enter the Trigger menu.
5. **[TRIG LOCK]**  
Press [SETUP] + [TRIGGER] buttons to lock or unlock the current pad.
6. **[SD CARD] Button**  
Enter the SD Card menu.
7. **[COACH] Button**  
Enter the Coach mode.
8. **[VOLUME] Knobs**  
OUTPUT: adjust the output volume.  
PHONES: adjust the headphones volume.  
CLICK: adjust the click volume.  
AUX IN: adjust the Aux input volume.
9. **[EXIT]/[SAVE/ENTER] Buttons**  
EXIT: return to the previous menu.  
SAVE/ENTER: to save or to confirm.
10. **[CURSOR] Dial**  
Move the cursor to select a parameter.
11. **[DATA] Dial**  
Adjust the parameter value.
12. **Level Indicator**  
Indicate the level of striking velocity.
13. **Upper/Lower Indicators**  
Upper indicators: the faders will adjust the upper items.  
Lower indicators: the faders will adjust the lower items.
14. **Volume faders**  
Adjust the volume level of the upper/lower items.
15. **[↕] Button**  
Toggle the faders between the upper and lower items.
16. **[MIXER] Button**  
Enter the Mixer menu.
17. **[EFFECT] Button**  
Enter the Instrument menu.
18. **[INST] Button**  
Enter the Sound menu.
19. **[KIT] Button**  
Enter the Kit menu.
20. **[CLICK] Button**  
Enter the Click menu.
21. **[SONG] Button**  
Enter the Song menu.
22. **[+]/[-] Buttons**  
Increase/decrease the value.
23. **[START/STOP] Button**  
Start or stop song playback.
24. **[RECORD] Button**  
Enter the Record mode.
25. **SD Card Indicator**  
It turns on when an SD card is inserted.

# Panel & Display Description

## Rear Panel



- 26. **[POWER] Button**  
Turn the power on or off.
- 27. **POWER Jack**  
For connecting the specified power adapter.
- 28. **USB MIDI/AUDIO Port**  
For connecting to a computer to transmit/receive MIDI and digital audio data.
- 29. **MIDI Jacks (OUT/THRU, IN)**  
For connecting external MIDI device to transmit/receive MIDI data.
- 30. **OUTPUT Jacks (L, R) (Balanced)**  
For connecting an audio system or amplifier that has balanced jacks.
- 31. **OUTPUT Jacks (L/MONO, R) (2 x 1/4")**  
For connecting an audio system or amplifier. Use both the L/MONO and R jacks for stereo output, or just the L/MONO jack for mono output.
- 32. **AUX IN Jack (1/4")**  
For connecting an external audio player, such as an MP3. Music from the external player will be transmitted to the module, and you can play along.
- 33. **INDIVIDUAL OUTPUT Jacks (8 x 1/4")**  
Connecting these jacks to a mixer. In the SETUP menu, you can specify the jack from which the pad sound is output.
- 34. **TRIGGER IN Jacks**  
For connecting cymbals, kick and other pads.
- 35. **PHONES Jacks (1/8" + 1/4")**  
For connecting headphones to listen to the sound output from the module.
- 36. **SD CARD Port**  
For inserting an SD card. With the SD card function, you can play back or record audio songs, or load wave samples.



## Display



1. **Name of the menu**  
This area displays the current menu, for example, Inst, Kit or Song.
2. **Image**  
This area displays an image related to the current menu.
3. **Parameter**  
This area displays parameters related to the current menu. You can select and edit these parameters.
4. **Important parameter name**  
This area displays the important parameter name, for example, instrument name, kit name, and song name.
5. **[F1] - [F4] functions**  
This area displays the functions of the [F1] - [F4] buttons.

## Caution!

To prevent electric shock and damage to the drum module or other devices, always turn off the power of all devices before making any connection.

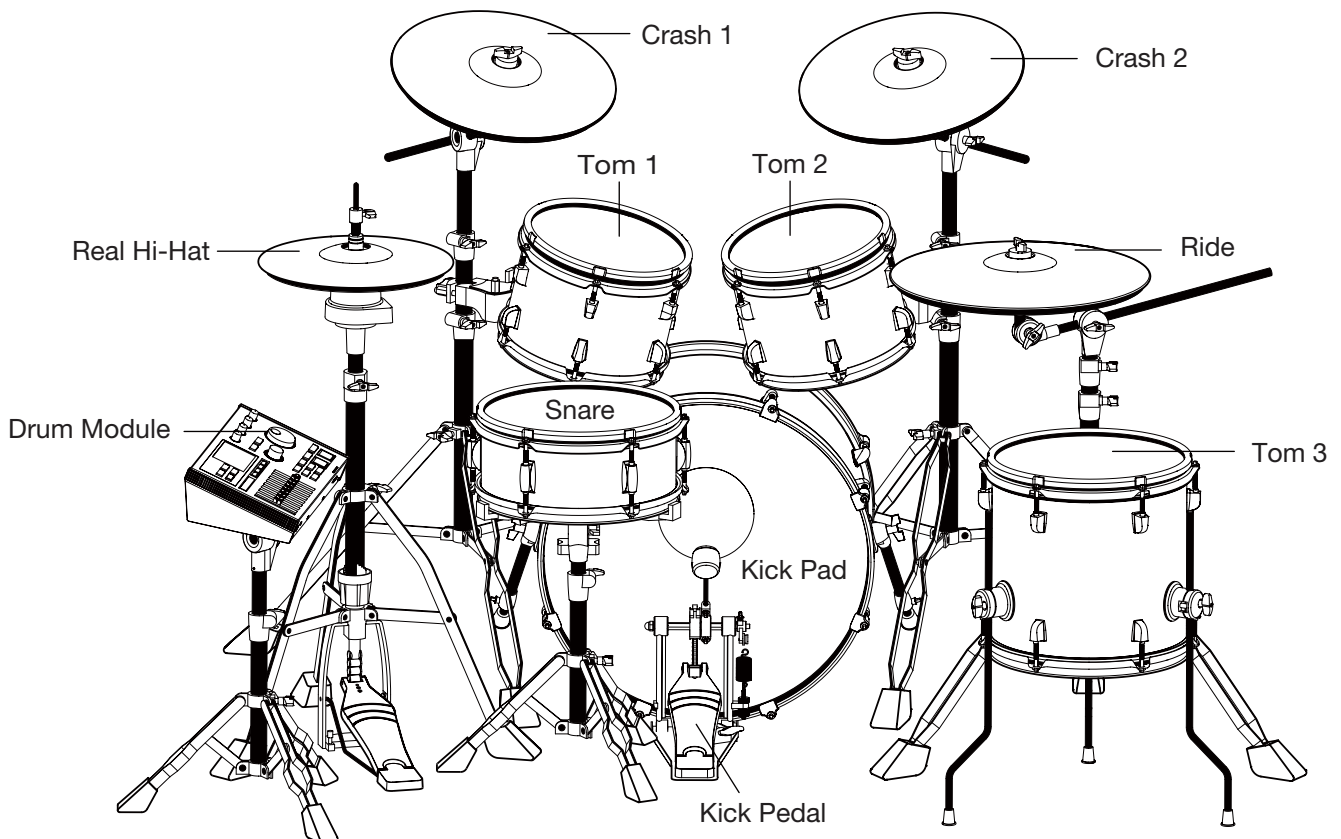
## Connecting the Pads and Pedals

### Standard configuration:

Kick Pad, Kick Pedal, Snare (2-zone), Tom 1~3 (2-zone), Crash 1~2 (2-zone with choke), Ride (3-zone with choke), Real Hi-hat (2-zone with hi-hat stand).

### Notes:

1. Make sure each pad is connected to the corresponding trigger input jack.
2. Refer to the Setup Manual for details on assembling the drum stand, attaching the drum pads and module.



# Getting Ready to Play

## Setting Up Power Supply

1. Connect the AC adapter to the POWER jack on the rear panel.
2. Connect the other end of the power cord to an appropriate AC outlet.

### Notes:

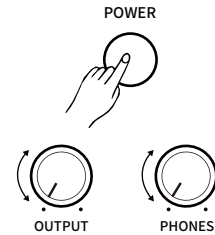
1. Use only the specified AC adapter.
2. Even when the module is turned off, electricity is still flowing to the module at minimum level. Unplug the module when it is not used for a long time.

## Turning the Power On/Off

### Turning On the Power

Before turning on the power, make sure you have completed all necessary connections (pads and audio devices etc.). Make sure the volume levels of all devices are set to minimum.

1. Press the [POWER] button to turn on the module. The display will be lit.
2. Turn on the connected audio devices or use the headphones to listen.
3. Adjust the [OUTPUT] or [PHONES] volume knob while striking the pads until you get an appropriate volume level.



### Turning Off the Power

1. Set the volume level of the module and the connected audio device to minimum.
2. Turn off the connected audio device.
3. Hold the [POWER] button until the module is turned off.

### Auto Power Off

In order to save energy, the module will automatically turn off after 30 minutes if it is not in use (playing, striking, pressing any button, etc.). You can enable or disable this function in Setup -> Option.

## Drum Kits and Instruments

A drum kit is the combination of all pads and cymbals. An acoustic drum has only one fixed kit and it's unchangeable. A digital drum is preset with various Instruments of different styles. You can combine different Instruments and make as many drum kits as you like. Refer to Drum Kit List and Drum Instruments List.

## Selecting a Drum Kit

1. Press the [KIT] button to enter the Kit menu.
2. Use the [+]/[-] button, the [DATA] dial or the [CURSOR] dial to select a drum kit.

## Selecting an Instrument

You can strike the pad to hear the sound. You can change the Instrument of each pad as desired.

1. Press the [INST] button to enter the Inst menu.
2. Strike the pad that you want to edit. The LCD displays the current pad name and the instrument name. You can also use the [CURSOR] dial to move the cursor to the trigger name, then use the [DATA] dial to select a trigger.
3. Use the [CURSOR] dial to move the cursor to the instrument name, then use the [+]/[-] button or [DATA] dial to select an instrument.

## Playing Techniques

This section introduces various drumming techniques. Similar to an acoustic drum kit, the digital drum responds differently to various playing techniques and dynamics. All the pads are velocity-sensitive. The timbre of some sound may change depending on the striking force.

### Pad

The snare and the tom pads can detect head shot and rim shot. The snare also supports position sensing and cross stick.

### Head Shot

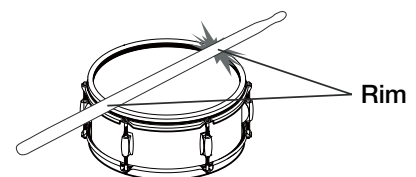
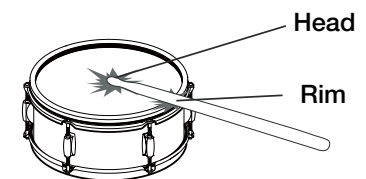
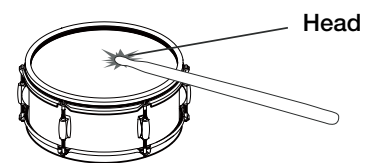
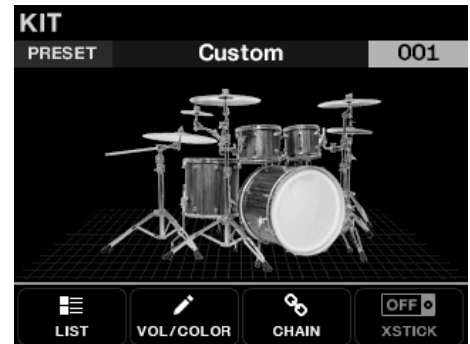
Strike only the head of the pad. When you strike the snare, the sound will change as you move the strike position from the center of the head to the rim.

### Rim Shot

Strike the head and the rim of the pad simultaneously. Or strike only the rim of the pad.

### Cross Stick (X-Stick)

When X-STICK is in use, it will produce a cross stick sound when striking softly the rim of the snare, or it will produce a rim shot sound when striking forcefully the rim of the snare.



# Quick Play

## Cymbal

### Cymbal Bow Shot

Strike the middle area of the cymbal (between the bow and the edge).

### Cymbal Edge Shot

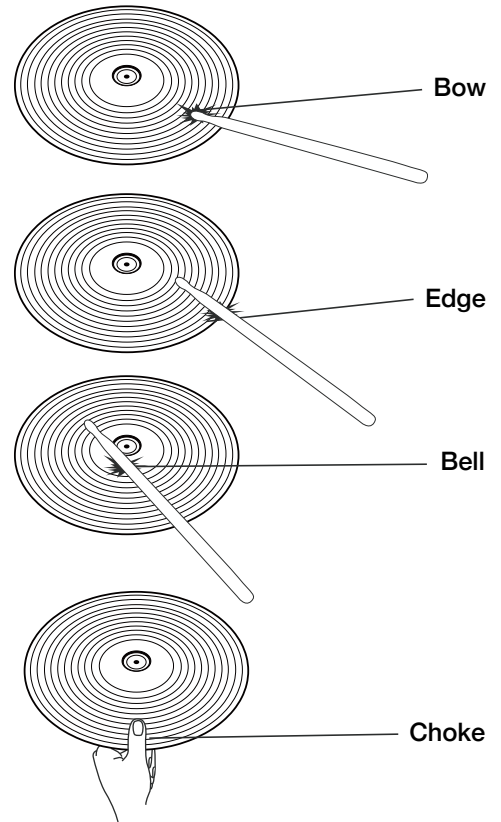
Strike the edge area of the cymbal.

### Cymbal Bell Shot

Strike the bell area of the cymbal.

### Choke Play

The crash and the ride support choke play. Just after hitting the crash/ride, immediately choke the edge with your hand to mute the crash/ride sound.



## Hi-hat

### Hi-hat Pedal Change

Press the pedal down to different positions, the sound of striking the hi-hat cymbal will change. This is similar to an acoustic drum.

### Open Hi-hat

Strike the hi-hat cymbal without pressing the pedal.

### Closed Hi-hat

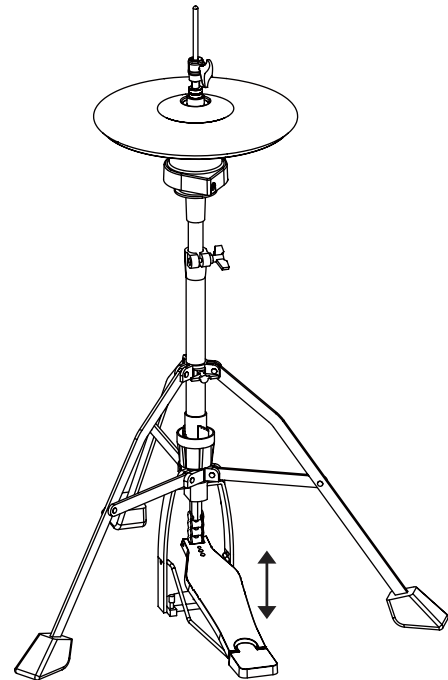
Strike the hi-hat cymbal when the pedal is fully pressed.

### Hi-hat Pedal

Press the hi-hat pedal (without striking the hi-hat cymbal) to create a foot-close sound.

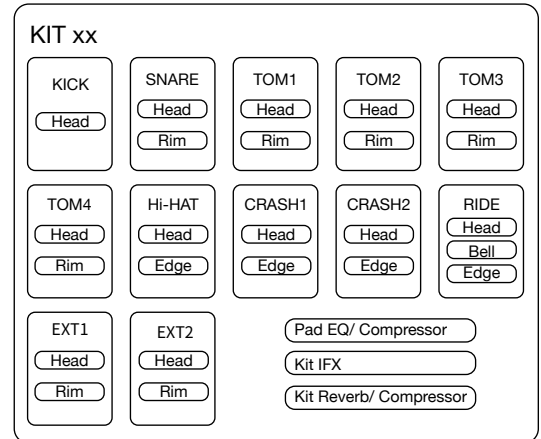
### Splash

Play the hi-hat cymbal with the pedal fully pressed and then instantly releasing it.



## Preset Drum Kit and User Kit

The module provides a variety of preset drum kits and user kits. You can select your favorite drum kit, edit the parameters as desired, then save it to a user kit. Please refer to the Drum Kit List.



## Selecting a Drum Kit

1. Press the [KIT] button to enter the Kit menu.
2. Use the [+]/[-] button, the [DATA] dial or the [CURSOR] dial to select a desired drum kit.

Kit description:

Drum Kit	Kit Number	Description
Preset	1 ~ 55	Preset drum kits.
User	56 ~ 100	User kits. Parameters can be edited and saved.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	List	Enter the Kit List menu to select a kit.
F2	Vol/Color	Set the volume and the color of the kit.
F3	Chain	Enter the Kit Chain menu to select a kit.
F4	XStick	Turn cross stick on or off. When cross stick is ON, strike softly the snare rim to produce cross stick sound. When cross stick is OFF, strike the snare rim to produce rim shot sound.

### Note:

Save your settings to a user kit after editing. Otherwise, all edited data will be lost.

## Fast Selecting a Drum Kit

You can fast selecting a drum kit in the Kit List menu.

1. Press the [KIT] button, then press the [F1] button to enter the Kit List menu.

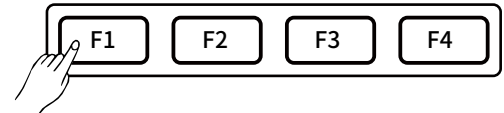
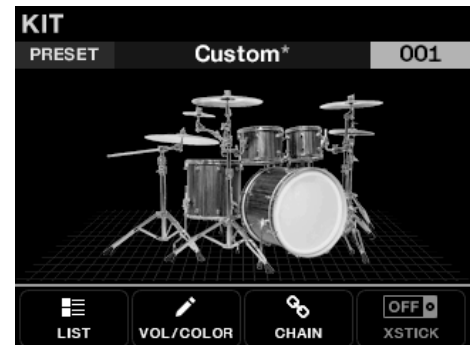
Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Button Name	Function
F1	Exit	Return to the Kit menu.
F2	Page-	Go to the previous page.
F3	Page+	Go to the next page.
F4	Preset / User	Toggle between preset kits and user kits.

2. Use the [+]/[-] button, the [DATA] dial or the [CURSOR] dial to select a kit.

### Note:

When the cursor is on the last kit of the current page, if you continue going forward, it will jump to the first kit in the next page. When the cursor is on the first kit of the current page, going backward will jump to the last kit in the previous page.



# Drum Kit

## Kit Volume and Kit Color

In the kit volume section, you can adjust the kit volume, hi-hat control volume and cross stick volume.

Kit color means the light color round the [DATA] dial and the [CURSOR] dial. When you change a kit, the light color will change along.

1. Press the [KIT] button, then press the [F2] button to enter the Kit Vol / Color menu.
2. Use the [F2]/[F3] button or the [CURSOR] dial to select a parameter, then use the [+]/[-] button or the [DATA] dial to change the volume / color.

Parameter	Range	Description
Kit Volume	0 ~ 127	Adjust the entire drum kit volume.
HH-Ctrl Volume	0 ~ 127	Adjust the hi-hat control volume.
X-Stick Volume	0 ~ 127	Adjust the cross stick volume.
Kit Color	Red, Green, Blue, Pink, Cyan, Yellow, Orange, Violet, Fuchsia, Sky-blue, White	Select the kit color and save it to a user kit.

### Notes:

1. When you edit a kit parameter, the “\*” indicator will appear in the upper menu, prompting you to save the edited data. If there’s user instrument in this kit, the “+” indicator will appear in the upper menu.
2. After editing the kit parameters, press the [F4] button or the [SAVE/ENTER] button to save the edited data. Otherwise, the edited data will be lost when you change the kit.

## Kit Chain

You can arrange your favorite drum kits in the desired order in a kit chain for easy recall. The module provides 8 kit chains. You can have up to 32 drum kits in each kit chain.

1. Press the [KIT] button, then press the [F3] button to enter the Kit Chain menu.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	C-Edit	Edit the kit chain.
F2	Chain-	Go to the previous kit chain.
F3	Chain+	Go to the next kit chain.
F4	XStick	Turn cross stick on or off.

2. Press the [F1] button to enter the Chain Edit menu.

Functions of the [F1] ~ [F4] buttons in this menu:

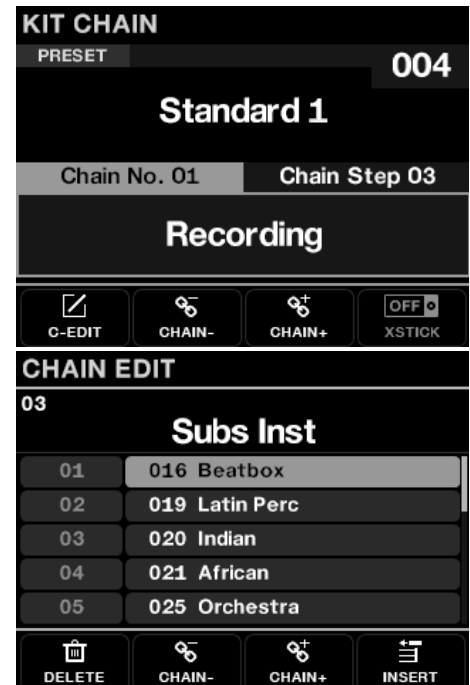
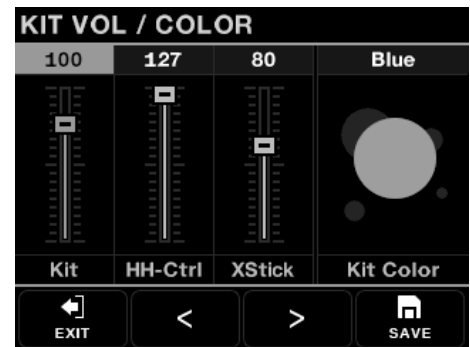
Buttons	Function	Description
F1	Delete	Delete a drum kit from the kit chain.
F2	Chain-	Go to the previous kit chain.
F3	Chain+	Go to the next kit chain.
F4	Insert	Insert a drum kit to the kit chain.

3. After editing a kit chain, press the [SAVE/ENTER] button to save it. Otherwise, the edited data will be lost when you go to other menus. When you edit a parameter in the kit chain, the “\*” indicator will appear in the upper menu, prompting you to save the edited data.

4. When you press the [SAVE/ENTER] button, it will go to the Chain Rename menu. You can edit the chain name. Then press the [SAVE/ENTER] button again to save the kit chain. It will then go back to the Kit Chain menu.

### Note:

In the Chain Rename menu, you can enter a name of up to 12 characters.



Drum Instrument is an essential part of a drum kit. You can edit the Instrument parameters of each pad and save the edited settings to a user kit. Refer to the Drum Instrument List.

## Selecting an Instrument

1. Press the [INST] button to enter the Inst menu.
2. Strike the pad that you want to edit. The LCD displays the current pad name and instrument name.  
You can also use the [CURSOR] dial to move the cursor to the trigger name, then use the [DATA] dial to select a trigger.
3. Use the [CURSOR] dial to move the cursor to the group name, then use the [DATA] dial to select an instrument group. Or use the [CURSOR] dial to move the cursor to the instrument name, then use the [DATA] dial to select an instrument. Press the [F4] button to preview the selected sound.

### Note:

After selecting the instrument, press the [SAVE/ENTER] button to save it to a user kit. Otherwise, the edited data will be lost when you change the kit or turn off the power.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	List	Enter the Instrument List menu to select an instrument.
F2	Edit	Edit instrument parameters.
F3	Sub Inst	Enter the Sub Inst menu.
F4	Preview	Preview the selected instrument.

Instrument menu description:

Parameter	Range	Description
Trigger	KICK, SNARE HEAD, SNARE RIM, TOM1 HEAD, TOM1 RIM, TOM2 HEAD, TOM2 RIM, TOM3 HEAD, TOM3 RIM, TOM4 HEAD, TOM4 RIM, HI-HAT BOW, HI-HAT EDGE, CRASH1 BOW, CRASH1 EDGE, CRASH2 BOW, CRASH2 EDGE, RIDE BOW, RIDE EDGE, RIDE BELL, EXT1 HEAD, EXT1 RIM, EXT2 HEAD, EXT2 RIM	Trigger name
Group	KICK_A, KICK_E, SNARE_A, SNARE_E, TOM_A, TOM_E, RIDE_A, RIDE_E, CRASH_A, CRASH_E, HIHAT_A, HIHAT_E, PERCUSSION, CHINESE, FX, USER	Instrument group name
Instrument No.	1 ~ 999	Instrument number

### Note:

When you change instrument of the Hi-hat bow, the Hi-hat pedal and Foot Splash will change along.

When you change the instrument of the Snare Rim, the snare XStick will change along.

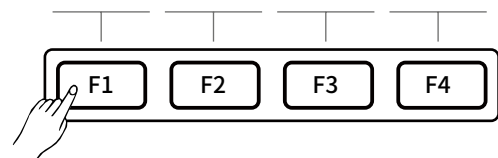
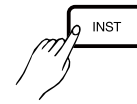
## Fast Selecting an Instrument

You can fast selecting an instrument in the Instrument List menu.

1. Press the [INST] button, then press the [F1] button to enter the Main List menu.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	Exit	Return to the Inst menu.
F2	Group-	Jump to the previous instrument group.
F3	Group+	Jump to the next instrument group.
F4	Preview	Preview the selected instrument.



MAIN LIST*	
029 Electro Kick	036 Junkyrd Kick
030 Dance Kick	037 Custom Sn1
031 Beatbox Kick	038 Custom Sn2
032 FX Mix Kick	039 Custom SnR
033 HipHop Kick	040 Custom XSt
034 Techno Kick	041 Collect Sn1
035 Lo-Fi Kick	042 Collect Sn2
EXIT	GROUP-
GROUP+	PREVIEW

# Instrument

2. Use the [DATA] dial or the [CURSOR] dial to select an instrument.
3. Strike the pad or press the [F4] button to preview the selected instrument.

## Editing an instrument

1. Press the [INST] button, then press the [F2] button to enter the Main Edit menu.
2. Strike the pad that you want to edit. Or use the [CURSOR] dial to move the cursor to the trigger name, then use the [DATA] dial to select a trigger.
3. Use the [CURSOR] dial to select a parameter, then use the [+]/[-] button or the [DATA] dial to change the setting.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	MIDI	Edit the MIDI setting.
F2	Sub Edit	Edit the sub instrument.
F3	Save	Save the edited settings.
F4	Preview	Preview the instrument.

### Note:

The instrument parameters will change when you select a different instrument.

### Instrument parameters description:

#### KICK\_A:

Parameter	Range	Description
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the instrument decay.
Snare Buzz	OFF, 1 ~ 6	Adjust the snare buzz of the kick pad.
Kit Resonance	OFF, 1, 2, 3, 4	Adjust the kit resonance level.
Volume	0 ~ 127	Adjust the volume level.

#### SNARE\_A:

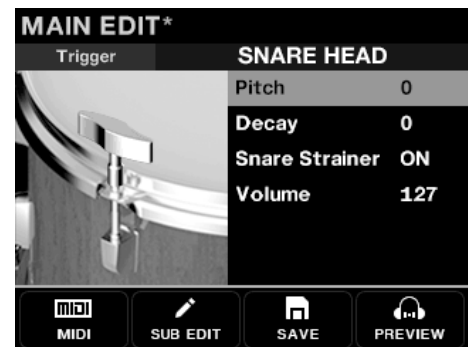
Parameter	Range	Description
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the instrument decay.
Snare Strainer	OFF, ON	Turn snare strainer on or off.
Volume	0 ~ 127	Adjust the volume level.

#### TOM\_A:

Parameter	Range	Description
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the instrument decay.
Snare Buzz	OFF, 1 ~ 6	Adjust the snare buzz of the tom.
Volume	0 ~ 127	Adjust the volume level.

#### HI-HAT / CRASH / RIDE:

Parameter	Range	Description
Size	-24 ~ +24	Adjust the cymbal size.
Sustain	-63 ~ 0	Adjust the cymbal sustain.
Volume	0 ~ 127	Adjust the volume level.



Other instrument:

Parameter	Range	Description
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the instrument decay.
Volume	0 ~ 127	Adjust the volume level.

## Pad MIDI Setting

1. In the Main Edit menu, press the [F1] button to enter the Pad MIDI menu.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	Exit	Return to the instrument menu.
F2	Note	Set the pad note value.
F3	Gate	Set the gate time.
F4	Channel	Set the pad channel.

2. Press the [F2] button to enter the Pad Note menu, use the [CURSOR] dial to select a trigger, then use the [+]/[-] button or the [DATA] dial to change the note value.

Parameter	Range	Description
Trigger	KICK, SNARE HEAD, SNARE RIM, SNARE XSTICK, TOM1 HEAD, TOM1 RIM, TOM2 HEAD, TOM2 RIM, TOM3 HEAD, TOM3 RIM, TOM4 HEAD, TOM4 RIM, HI-HAT OPEN BOW, HI-HAT CLOSE BOW, HI-HAT OPEN EDGE, HI-HAT CLOSE EDGE, HH PEDAL, FOOT SPLASH, CRASH1 BOW, CRASH1 EDGE, CRASH2 BOW, CRASH2 EDGE, RIDE BOW, RIDE EDGE, RIDE BELL, EXT1 HEAD, EXT1 RIM, EXT2 HEAD, EXT2 RIM	Select a trigger.
Note No.	OFF, 0(C -1) ~ 127(G 9)	Set the note value.

3. Press the [F3] button to enter Pad Gate menu, use the [CURSOR] dial to select a trigger, then use the [+]/[-] button or the [DATA] dial to change the gate time. Gate time means the interval between the Note ON and the Note OFF sent from the MIDI jack.

Parameter	Range	Description
Trigger	Same as the "Pad Note" menu.	Select a trigger.
Gate Time	0.1 ~ 4.0 s	Set the gate time.

4. Press the [F4] button to enter the Pad Channel menu, use the [CURSOR] dial to select a trigger, then use the [+]/[-] button or the [DATA] dial to change the channel number. Pad channel means the channel through which the pad sends and receives MIDI messages.

Parameter	Range	Description
Trigger	Same as the "Pad Note" menu.	Select a trigger.
Pad Channel	CH1 ~ 16, Global	Global: the MIDI channel is determined by the channel selected in Set-up. CH1~ 16: set the MIDI channel for each pad.

PAD NOTE*	
KICK	36(C 2)
SNARE HEAD	38(D 2)
SNARE RIM	40(E 2)
SNARE XSTICK	37(C#2)
TOM1 HEAD	48(C 3)
TOM1 RIM	50(D 3)
TOM2 HEAD	45(A 2)
EXIT	NOTE
GATE	CHANNEL

PAD GATE*	
KICK	0.1s
SNARE HEAD	0.1s
SNARE RIM	0.1s
SNARE XSTICK	0.1s
TOM1 HEAD	0.1s
TOM1 RIM	0.1s
TOM2 HEAD	0.1s
EXIT	NOTE
GATE	CHANNEL

PAD CHANNEL*	
KICK	Global
SNARE HEAD	Global
SNARE RIM	Global
SNARE XSTICK	Global
TOM1 HEAD	Global
TOM1 RIM	Global
TOM2 HEAD	Global
EXIT	NOTE
GATE	CHANNEL

## Saving a Drum Kit

When you finish editing the instrument parameters, save it to a user kit. Otherwise, the edited data will be lost when you change the kit or turn off the power.

1. When in the Kit / Inst / Mixer / Effect menu, you can press the [SAVE/ENTER] button to enter the Save menu.
2. Use the [+]/[-] button, the [DATA] dial or the [CURSOR] dial to select a user kit number.
3. You can press the [F2] button to enter the Rename menu. Or you can simply press the [F4] or [SAVE/ENTER] button to save the kit, using the current user kit name.

Renaming a user kit:

In the Rename menu, use the [F1] ~ [F4] buttons to change the user kit name. When you finish entering a name, press the [SAVE/ENTER] to save it.

Buttons	Function	Description
F1	Insert	Insert a space before the cursor location.
F2	Delete	Delete the character at the cursor location.
F3	Space	Replace the selected character with a space.
F4	A-a-0	Change the on-screen keyboard between capital letters, small letters, and digits.

### Notes:

1. In the Rename menu, you can enter a name of up to 12 characters.
2. If there's user sound in the kit, the "+" indicator will appear in the upper menu.

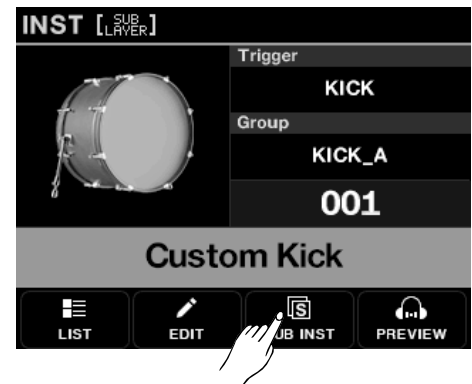
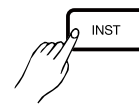
## Sub Instrument

By editing the sub instruments, you can layer the instruments and effects.

1. Press the [INST] button, then press the [F3] button to enter the Sub Inst menu.
2. Strike the pad that you want to edit. Or use the [CURSOR] dial to move the cursor to the trigger name, then use the [DATA] dial to select a trigger.
3. Use the [CURSOR] dial to move the cursor to the group name, then use the [DATA] dial to select an instrument group. Or use the [CURSOR] dial to move the cursor to the instrument name, then use the [DATA] dial to select an instrument.
4. Press the [F4] button to preview the selected instrument.

### Notes:

After selecting the instrument, press the [SAVE/ENTER] button to save it to a user kit. Otherwise, the edited data will be lost when you change the kit or turn off the power.

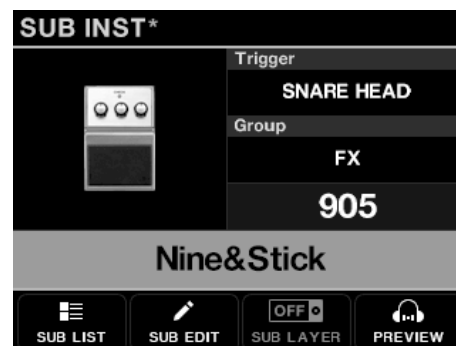


Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	Sub List	Enter the Sub List menu to select a sub instrument.
F2	Sub Edit	Edit the instrument parameters.
F3	Sub Layer	Turn the layer function on or off.
F4	Preview	Preview the selected instrument.

Sub Instrument menu description:

Parameter	Range	Description
Trigger	KICK, SNARE HEAD, SNARE RIM, TOM1 HEAD, TOM1 RIM, TOM2 HEAD, TOM2 RIM, TOM3 HEAD, TOM3 RIM, TOM4 HEAD, TOM4 RIM, HI-HAT BOW, HI-HAT EDGE, CRASH1 BOW, CRASH1 EDGE, CRASH2 BOW, CRASH2 EDGE, RIDE BOW, RIDE EDGE, RIDE BELL, EXT1 HEAD, EXT1 RIM, EXT2 HEAD, EXT2 RIM	Trigger name
Group	KICK_A, KICK_E, SNARE_A, SNARE_E, TOM_A, TOM_E, RIDE_A, RIDE_E, CRASH_A, CRASH_E, HIHAT_A, HIHAT_E, PERCUSSION, CHINESE, FX, USER	Instrument group name
Instrument No.	1 ~ 999	Instrument number



### Notes:

When you change the instrument of Hi-hat bow, the Hi-hat pedal and Foot Splash will change along.

## Fast Selecting a Sub Instrument

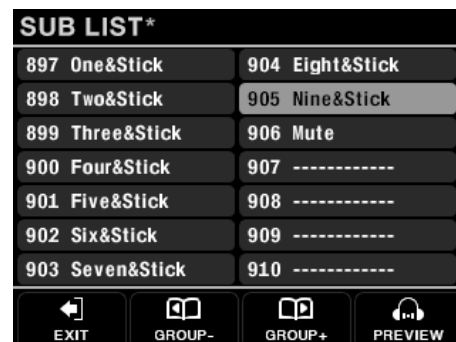
You can fast selecting an instrument in the Sub List menu.

1. In the Sub Inst menu, press the [F1] button to enter the Sub List menu.

Functions of the [F1] ~ [F4] buttons in this menu:

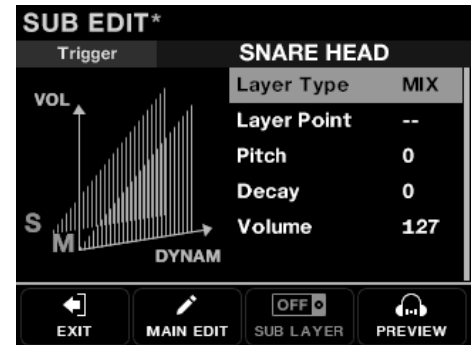
Buttons	Function	Description
F1	Exit	Return to the Sub Inst menu.
F2	Group-	Jump to the previous instrument group.
F3	Group+	Jump to the next instrument group.
F4	Preview	Preview the selected instrument.

2. Use the [DATA] dial or the [CURSOR] dial to select an instrument.
3. Strike the pad or press the [F4] button to preview the selected instrument.



## Editing a Sub Instrument

1. In the Sub Inst menu, press the [F2] button to enter the Sub Edit menu.
2. Strike the pad that you want to edit. Or use the [CURSOR] dial to move the cursor to the trigger name, then use the [DATA] dial to select a trigger.
3. Use the [CURSOR] dial to select a parameter, then use the [+]/[-] button or the [DATA] dial to change the setting.
4. Strike the pad or press the [F4] button to preview the instrument.



Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	Exit	Return to the Sub Inst menu.
F2	Main Edit	Go to the Main Edit menu.
F3	Sub Layer	Turn the layer function on or off.
F4	Preview	Preview the instrument.

### Notes:

Parameter settings will change when you select a different instrument.

Instrument parameters description:

#### KICK\_A

Parameter	Range	Description
Layer Type	MIX, ADD, FADE, SW	Select a layer type.
Layer Point	1~127	Set the layer point.
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the sound decay.
Snare Buzz	OFF, 1~6	Adjust the snare buzz of the kick pad.
Kit Resonance	OFF, 1, 2, 3, 4	Adjust the kit resonance level.
Volume	0~127	Adjust the volume level.

#### TOM\_A

Parameter	Range	Description
Layer Type	MIX, ADD, FADE, SW	Select a layer type.
Layer Point	1~127	Set the layer point.
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the sound decay.
Snare Buzz	OFF, 1~6	Adjust the snare buzz of the tom.
Volume	0~127	Adjust the volume level.

#### SNARE\_A:

Parameter	Range	Description
Layer Type	MIX, ADD, FADE, SW	Select a layer type.
Layer Point	1~127	Set the layer point.
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the sound decay.
Snare Strainer	OFF, ON	Turn snare strainer on or off.
Volume	0~127	Adjust the volume level.

#### HI-HAT / CRASH / RIDE:

Parameter	Range	Description
Layer Type	MIX, ADD, FADE, SW	Select a layer type.
Layer Point	1~127	Set the layer point.
Size	-24 ~ +24	Adjust the cym-bal size.
Sustain	-63 ~ 0	Adjust the cym-bal sustain.
Volume	0~127	Adjust the volume level.

#### Other instruments:

Parameter	Range	Description
Layer Type	MIX, ADD, FADE, SW	Select a layer type.
Layer Point	1~127	Set the layer point.
Pitch	-63 ~ +63	Adjust the pitch.
Decay	-63 ~ 0	Adjust the sound decay.
Volume	0~127	Adjust the volume level.

## Layer Type

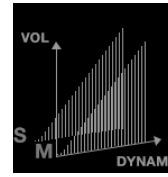
You can set the type on how to layer the main and sub instruments. There are 4 layer types.

1. In the Sub Edit menu, press the [F3] button to turn on the Sub Layer function.
2. Use the [CURSOR] dial to select Layer Type, then use the [+]/[-] button or the [DATA] dial to change the setting.
3. Strike the pad or press the [F4] button to preview the layer effect.

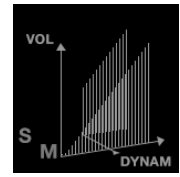
Layer type description:

Parameter	Description
MIX	The main and sub instruments are mixed equally.
ADD	Layer the sub instrument at the specified layer point.
FADE	The sub instrument will fade in at the specified layer point.
SW (Switch)	The main and sub instruments are switched at the specified layer point.

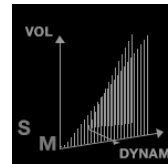
DYNAM = striking velocity  
 VOL = response volume  
 M = main instrument  
 S = sub instrument



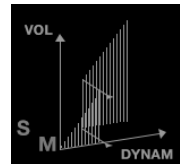
[MIX]



[ADD]



[FADE]



[SWITCH]

# Mixer

In the Mixer menu, you can adjust the volume and the pan of each pad and cymbal. These settings are part of the kit parameters. Don't forget to save the settings after editing.

## Adjusting the Volume of Each Pad

1. Press the [MIXER] button to enter the Mixer menu.

Functions of the [F1] ~ [F4] buttons in this menu:

Function	Range	Description
Volume	0 ~ 127	Adjust the volume of each pad, including the head and rim.
Pan	L15 ~ CTR ~ R15	Adjust the pan (stereo position) of each pad.
Min Vol	0 ~ 15	Set the minimum volume of each pad. For example, if you set the snare to "14" (max. is 15), even the softest hit will produce a relatively big sound. Note: Setting it to a high value will reduce the dynamics of the sound.
Preview	/	Preview the sound volume.

The abbreviation of each pad name:

Abbr.	1	2	3	4	S	K	R
Pad name	Tom1	Tom2	Tom3	Tom4	Snare	Kick	Ride
Abbr.	C	C	H	E	E		
Pad name	Crash1	Crash2	Hi-Hat	Ext1	Ext2		

2. Strike the pad that you want to edit. Or use the [CURSOR] dial to select a pad name.

3. Use the [DATA] dial to adjust the volume level.

### Note:

The volumes in the Mixer menu are separate from the volume faders on the front panel. The sound you hear is the result of the mixer setting multiplying the fader setting.

## Adjusting the Pan of Each Pad

1. Press the [MIXER] button, then press the [F2] button to enter the Pan menu.

2. Strike the pad that you want to edit. Or use the [CURSOR] dial to select a pad name.

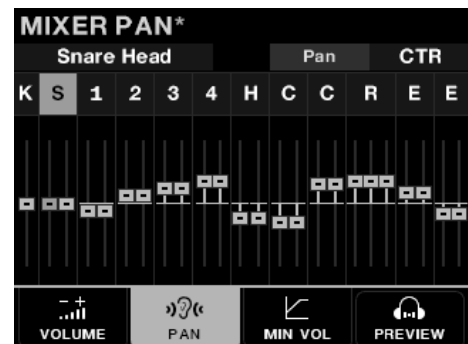
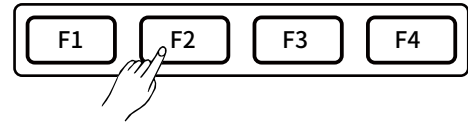
3. Use the [DATA] dial to adjust the pan setting. You can press the [F4] button to preview it.

## Adjusting the Min Volume of Each Pad

1. Press the [MIXER] button, then press the [F3] button to enter the Min Vol menu.

2. Strike the pad that you want to edit. Or use the [CURSOR] dial to select a pad name.

3. Use the [DATA] dial to adjust the volume setting. You can press the [F4] button to preview it.



In the Effect menu, you can adjust these effects: pad compressor, pad EQ, EQ, kit reverb, kit IFX, kit EQ, and kit compressor.

## Selecting an Effect

1. Press the [EFFECT] button to enter the Effect menu.
2. Use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select an effect, then press the [F4] or [SAVE/ENTER] button to enter the sub-menu.

### Note:

When an effect is turned off, the indicator at the left bottom of the effect pane will disappear.

## Pad Compressor

You can use the pad compressor to limit the peak of the sound level so as to make the sound less likely to distort.

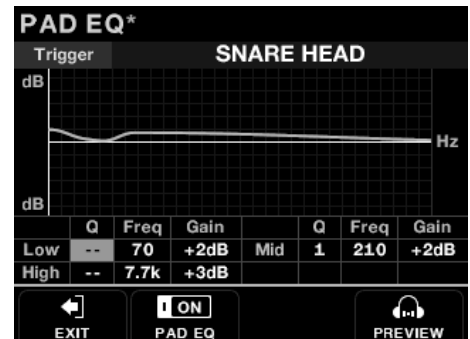
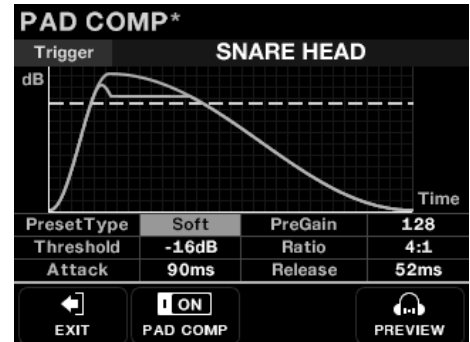
1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select PAD COMP. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. In the Pad Comp menu, press the [F2] button to turn this effect on or off. When Pad Comp is turned off, adjusting the parameters will not apply to the instrument.
3. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting. You can press the [F4] button to preview the effect.

Parameter	Range	Description
Trigger	KICK, SNARE HEAD, SNARE RIM, TOM1, TOM2, TOM3, TOM4, HI-HAT BOW, HI-HAT EDGE, CRASH1, CRASH2, RIDE, RIDE BELL, EXT1, EXT2	Select a pad or cymbal name.
Preset Type	Soft, Medium, Hard, Limiter	Select a preset compressor type.
PreGain	0 ~ 512	Set the pre-gain.
Threshold	-64 ~ 0dB	Set the signal level at which the compressor starts applying.
Ratio	1:1 ~ 20:1	Set the compressor ratio.
Attack	1 ~ 680ms	Set the attack time.
Release	5 ~ 680ms	The release time before the effect completely stops.

## Pad EQ

You can use the 3 bands EQ (Low, Mid, High) to adjust the sound of each pad.

1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select PAD EQ. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. In the Pad EQ menu, press the [F2] button to turn this effect on or off.
3. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting. You can press the [F4] button to preview the effect.



# Effect

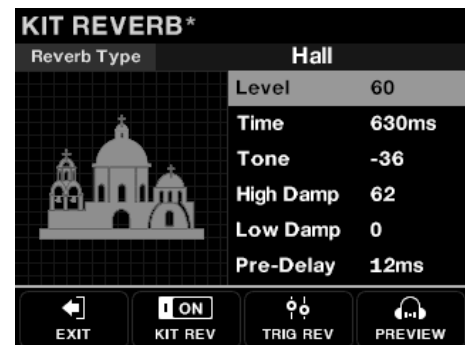
Parameter	Range	Description
Trigger	KICK, SNARE HEAD, SNARE RIM, TOM1, TOM2, TOM3, TOM4, HI-HAT BOW, HI-HAT EDGE, CRASH1, CRASH2, RIDE, RIDE BELL, EXT1, EXT2	Select a pad or cymbal name.
Q	Mid: 0.1 ~ 12	Set the Q value of the Mid range.
Freq	Low: 32 ~ 1.0k Mid: 80 ~ 10.0k High: 1.0k ~ 16.0k	Set the center frequency of the Low, Mid, High range.
Gain	Low: -18 ~ +18 db Mid: -18 ~ +18 db High: -18 ~ +18 db	Set the gain of the of the Low, Mid, High range.

## Kit Reverb

It recreates the reverberation and sound of the place where a drummer performs.

1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select KIT REV. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. In the Kit Rev menu, press the [F2] button to turn this effect on or off.
3. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting. You can press the [F4] button to preview the effect.

Parameter	Range	Description
Reverb Type	Hall, Room, Heaven, Theater, Plate, Cloud	Select the reverb type.
Level	0 ~ 127	Adjust the reverb level.
Time	120ms ~ 90s	Adjust the reverb time.
Tone	-64 ~ +64	Adjust the reverb tone.
High Damp	0 ~ 128	Adjust the high damping.
Low Damp	0 ~ 128	Adjust the low damping.
Pre-Delay	0ms ~ 150ms	Adjust the pre-delay time.

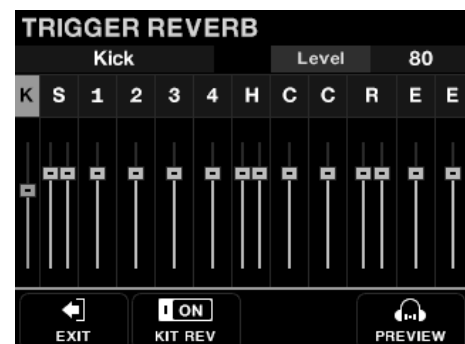


## Trigger Reverb

You can adjust the reverb level of each pad and cymbal. The trigger reverb level is affected by the kit reverb level.

1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select KIT REV. Press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Press the [F3] button to enter the Trigger Reverb menu to adjust the reverb level of each pad and cymbal.

Refer to similar operations on adjusting the parameters in the Mixer chapter.



## Kit IFX

You can set the IFX and adjust the effect parameters for each kit.

1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select KIT IFX. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. In the Kit IFX menu, press the [F2] button to turn this effect on or off.

3. Use the [CURSOR] knob to select a parameter, then use the [DATA] dial to change the setting. You can press the [F4] button to preview the effect.

Parameter	Range	Description
IFX Type	Tempo Delay, Pan Delay, LCR Delay, Chorus, Flange, Phaser, Overdrive, Distortion, Enhance, Auto Wah, Tempo Wah, Pitch Change, Lo-Fi	Select an IFX. There are 13 IFX.

4. In the Kit IFX menu, press the [F3] button to enter the Trigger IFX menu to adjust the IFX level of each pad and cymbal. Refer to similar operations on adjusting the parameters in the Mixer chapter.

#### Kit IFX parameters description:

##### Tempo Delay:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Delay Time	1/64T, 1/64., 1/32, 1/32T, 1/32., 1/16, 1/16T, 1/16., 1/8, 1/8_T, 1/8., 1/4, 1/4_T, 1/4., 1/2, 1/2T, 1/2., 1/4*4, 1/4*5, 1/4*6, 1/4*7, 1/4*8, 1/4*9, 1/4*10, 1/4*11, 1/4*12, 1/4*13, 1/4*14, 1/4*15, 1/4*16	Adjust the delay time.
Feedback	-63 ~ +63	Adjust the feedback level.
Low Gain	-12 ~ +12dB	Adjust the low gain.
High Gain	-12 ~ +12dB	Adjust the high gain.

##### Pan Delay:

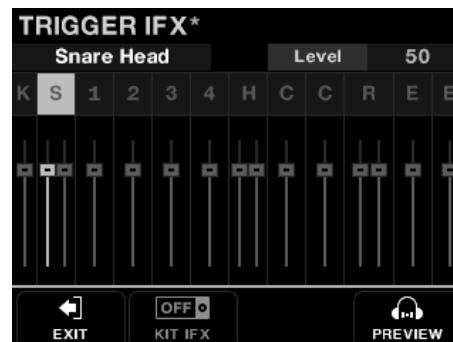
Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Left Delay	0.1ms ~ 1.45s	Adjust the delay of the left channel.
Right Delay	0.1ms ~ 1.45s	Adjust the delay of the right channel.
Feedback	-63 ~ +63	Adjust the feedback level.
Low Gain	-12 ~ +12dB	Adjust the low gain.
High Gain	-12 ~ +12dB	Adjust the high gain.

##### LCR Delay:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Left Delay	0.1ms ~ 1.45s	Adjust the delay of the left channel.
Right Delay	0.1ms ~ 1.45s	Adjust the delay of the right channel.
Center Delay	0.1 ~ 1.45s	Adjust the center delay.
Main Delay	0.1 ~ 1.45s	Adjust the main delay.
Feedback	-63 ~ +63	Adjust the feedback level.
Low Gain	-12 ~ +12dB	Adjust the low gain.
High Gain	-12 ~ +12dB	Adjust the high gain.

##### Chorus:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
LFO Freq	0.1 ~ 12Hz	Adjust the LFO frequency.
LFO Depth	0 ~ 127	Adjust the LFO depth.
Feedback	-63 ~ +63	Adjust the feedback level.
Phase Diff	-180 ~ +180	Adjust the phase difference.



# Effect

## Flange:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
LFO Freq	0.1 ~ 8Hz	Adjust the LFO frequency.
LFO Depth	0 ~ 127	Adjust the LFO depth.
Feedback	-63 ~ +63	Adjust the feedback level.
Phase Diff	-180 ~ +180	Adjust the phase difference.

## Phaser:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
LFO Freq	0.1 ~ 10Hz	Adjust the LFO frequency.
LFO Depth	0 ~ 127	Adjust the LFO depth.
Feedback	-63 ~ +63	Adjust the feedback level.
Phase Diff	-180 ~ +180	Adjust the phase difference.

## Overdrive:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Drive	0 ~ 127	Adjust the drive level.
Low Gain	-12 ~ +12dB	Adjust the low gain.
LPF	1kHz ~ 22kHz	Set the cutoff frequency of the LPF.
Output Level	0 ~ 512	Adjust the output level.

## Distortion:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Speak	BYPASS, FD_112, BM_212, MS_412	Select the speaker type.
Drive	0 ~ 127	Adjust the drive level.
Volume	0 ~ 127	Adjust the volume level.
Low Gain	-12 ~ +12dB	Adjust the low gain.
Mid Gain	-12 ~ +12dB	Adjust the mid-band gain.
High Gain	-12 ~ +12dB	Adjust the high gain.

## Enhance:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
HPF Cutoff	0.5kHz ~ 16kHz	Set the cutoff frequency of the HPF cutoff.
Drive	0 ~ 127	Adjust the drive level.

## Auto Wah:

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
LFO Freq	0.1 ~ 20Hz	Adjust the LFO frequency.
Depth	0 ~ 127	Adjust the depth of modulation.
Cutoff	0 ~ 127	Set the cutoff frequency.
Resonance	1.0 ~ 12.0	Adjust the resonance level.

**Tempo Wah:**

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
LFO Freq	1/64T, 1/64., 1/32, 1/32T, 1/32., 1/16, 1/16T, 1/16., 1/8, 1/8_T, 1/8., 1/4, 1/4_T, 1/4., 1/2, 1/2T, 1/2., 1/4*4, 1/4*5, 1/4*6, 1/4*7, 1/4*8, 1/4*9, 1/4*10, 1/4*11, 1/4*12, 1/4*13, 1/4*14, 1/4*15, 1/4*16	Set the LFO frequency.
Depth	0 ~ 127	Adjust the depth of modulation.
Cutoff	0 ~ 127	Set the cutoff frequency.
Resonance	1.0 ~ 12.0	Adjust the resonance level.

**Pitch Change:**

Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Pitch	-24 ~ +24	Adjust the pitch.
Cent	-100 ~ +100	Adjust the cent.
Output	0 ~ 127	Adjust the output level.
Feedback	-63 ~ +63	Adjust the feedback level.

**Lo-Fi:**

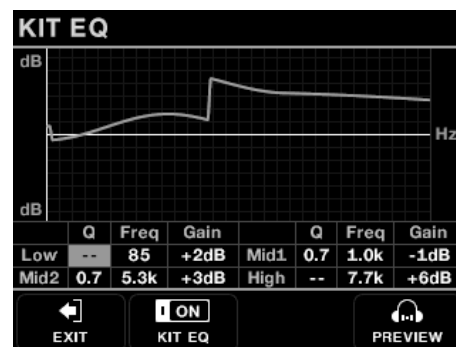
Parameter	Range	Description
Level	0 ~ 127	Adjust the effect level.
Sample Freq	1 ~ 256	Set the sampling frequency.
LPF Cutoff	50Hz ~ 22kHz	Set the LPF cutoff frequency.
Filter Type	THRU, PWBAS, RADIO, TEL, CLEAN, LOW	Select the type of filter.
LPF Resonance	1 ~ 12	Adjust the resonance level of the LPF.

**Kit EQ**

The module provides 4-band EQ for you to adjust the frequency response. Kit EQ applies to the Line Output jacks and the Phones jacks. Individual Output jacks will not be affected by the kit EQ.

1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select KIT EQ. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. In the Kit EQ menu, press the [F2] button to turn this effect on or off.
3. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting. You can press the [F4] button to preview the effect.

Parameter	Range	Description
Q	Mid1: 0.1 ~ 12 Mid2: 0.1 ~ 12	Set the Q value of the two mid-bands.
Freq	Low: 32 ~ 1.0k Mid1: 80 ~ 16.0k Mid2: 80 ~ 16.0k High: 1.0k ~ 18.0k	Set the center frequency of the four bands.
Gain	Low: -12 ~ +12dB Mid1: -12 ~ +12dB Mid2: -12 ~ +12dB High: -12 ~ +12dB	Set the gain value of the four bands.



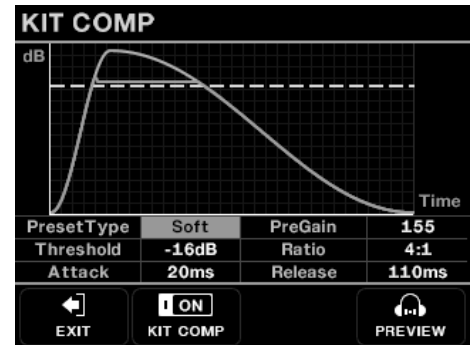
# Effect

## Kit Compressor

The kit compressor helps increase the loudness of the sound and make it less likely to distort.

1. Press the [EFFECT] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] knob to select KIT COMP. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. In the Kit Comp menu, press the [F2] button to turn this effect on or off.
3. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting. You can press the [F4] button to preview the effect.

Parameter	Range	Description
PreGain	0 ~ 512	Set the pre-gain.
Threshold	-64 ~ 0dB	Set the signal level at which the compressor starts applying.
Ratio	1:1 ~ 20:1	Set the compressor ratio.
Attack	1 ~ 400ms	Set the attack time.
Release	5 ~ 680ms	The release time before the compressor completely stops.



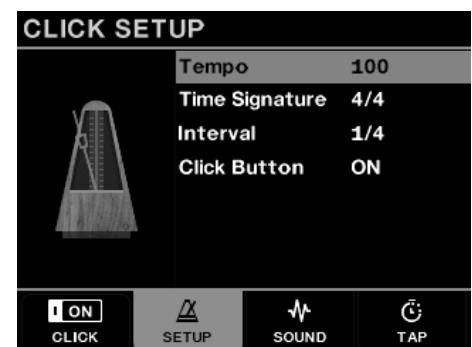
## Click

The click helps you practice at a steady tempo. You can set the click parameters and adjust the tempo.

Press the [CLICK] button to enter the Click menu. Functions of the [F1] ~ [F4] buttons in the menu:

Buttons	Function	Description
F1	Click ON/OFF	Turn the click on or off.
F2	Setup	Adjust the click parameters.
F3	Sound	Enter the Click Sound menu to set the click sound parameters.
F4	Tap	Enter the Tap menu to set the tap parameters.

1. You can turn on the click in two ways:
  - a) Press the [CLICK] button to turn on the click. This operation applies only when Click Button is set to ON.
  - b) Press the [CLICK] button to enter the Click menu, then press the [F1] button to turn on the click.



## 2. Set the click parameters.

Press the [CLICK] button, then press the [F2] button to enter the Click Setup menu. Use the [CURSOR] dial to select a parameter to edit, then use the [DATA] dial to change the setting.

Parameter	Range	Description
Tempo	30 ~ 280	Adjust the click tempo.
Time Signature	1/2 ~ 9/2, 1/4 ~ 9/4, 1/8 ~ 9/8, 1/16 ~ 9/16	Set the time signature of the click.
Interval	1/2, 1/4, 1/8, 1/12, 1/16	Set the rhythm of the click.
Click Button	ON, OFF	ON: pressing the [CLICK] button will enter the Click menu, and turn the click on/off. OFF: pressing the [CLICK] button will only enter the Click menu.

## 3. Set the click sound parameters.

Press the [CLICK] button, then press the [F3] button to enter the Click Sound menu. Use the [CURSOR] dial to select a parameter to edit, then use the [DATA] dial to change the setting.

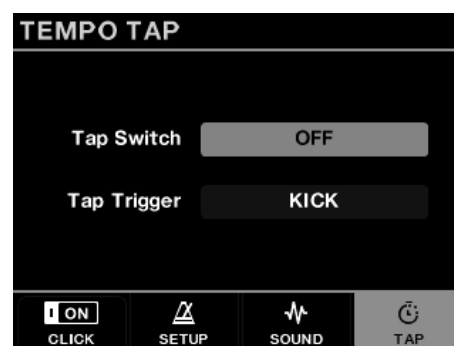
Parameter	Range	Description
Sound	CLICK, CLAVE, STICK, COW BELL, FMCLICK, SHAKER, TAMBOURINE, VOICE1, VOICE2	Set the click sound.
Volume	0 ~ 127	Adjust the click volume.
Sound Output	PHONE, PHONE + OUTPUT	Select the output channel of the click sound.
Light Switch	ON, OFF	Turn the [CLICK] button light on or off.



## 4. Set the tempo tap.

Press the [CLICK] button, then press the [F4] button to enter the Tempo Tap menu. Use the [CURSOR] dial to select a parameter to edit, then use the [DATA] dial to change the setting.

Parameter	Range	Description
Tap Switch	ON, OFF	Turn tempo tap function on or off.
Tap Trigger	KICK, SNARE HEAD, SNARE RIM, TOM1 HEAD, TOM1 RIM, TOM2 HEAD, TOM2 RIM, TOM3 HEAD, TOM3 RIM, TOM4 HEAD, TOM4 RIM, HI-HAT BOW, HI-HAT EDGE, CRASH1 BOW, CRASH1 EDGE, CRASH2 BOW, CRASH2 EDGE, RIDE BOW, RIDE EDGE, RIDE BELL, EXT1 HEAD, EXT1 RIM, EXT2 HEAD, EXT2 RIM	Set the target trigger of tempo tap.



When tempo tap is turned on, you can tap the target drum pad for three or more times to set the tempo in quarter note. The tempo will be set according to the interval of the last two taps. For example,

- Set the Tap Switch to ON to turn on the tempo tap.
- Set the Tap Trigger to TOM3 HEAD. Strike the head of Tom 3 to set the tempo.
- To turn off the tempo tap, set the Tap Switch to OFF.

# Trigger Settings

As a drummer, you may want to set your drum triggers carefully to fit your playing habit and feelings, so as to make the performance more interesting and professional. You may also need to set the trigger parameters after a drum pad is replaced. Save the edited trigger setting, otherwise, the edited data will be lost when you turn off the power.

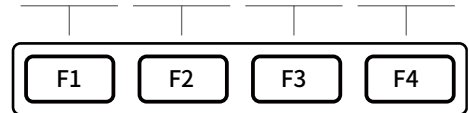
Characteristics of the trigger jacks:

Trigger	Pad Zone	Position Sensing	Cross Stick	Compatibility
KICK	1-zone	x	x	x
SNARE	2-zone	√	√	x
TOM 1 ~ 4	2-zone	x	x	x
HI-HAT	2-zone	x	x	x
CRASH 1 ~ 2	2-zone	x	x	x
RIDE	3-zone	x	x	x
EXT 1 ~ 2	2-zone	x	x	2-zone drum pads or cymbals



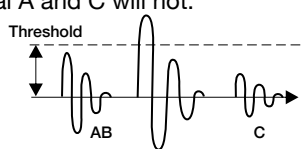
Press the [TRIGGER] button to enter the Trigger menu. Then press the [F1] ~ [F4] buttons to enter the corresponding sub-menu:

Buttons	Function	Description
F1	Common	Include some commonly-used trigger parameters.
F2	Special	Include some special trigger parameters.
F3	Hi-Hat	Set the hi-hat parameters.
F4	Check	Check in real-time the crosstalk, snare position sensing and hi-hat pedal depth.



## Common Trigger Settings

1. Press the [TRIGGER] button, then press the [F1] button to enter the Common Trigger menu.
2. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.

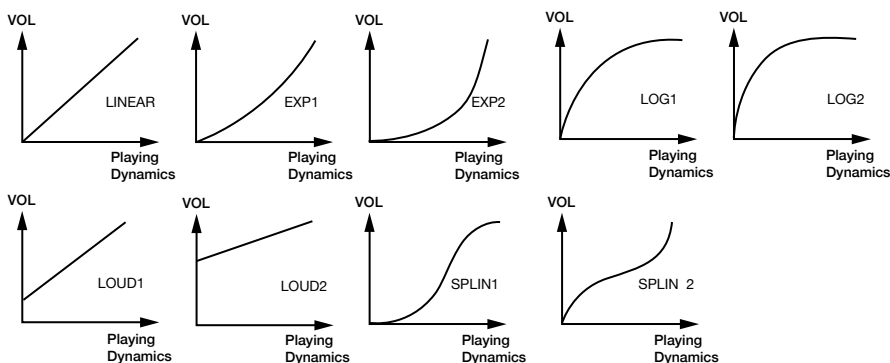
Parameter	Range	Description
HeadSens	1 ~ 32	Adjust the head sensitivity. Higher sensitivity will produce loud sound even when playing softly. Lower sensitivity will produce sound of low volume even when playing forcefully.
RimSens	1 ~ 32	Adjust the rim sensitivity.
Threshold	0 ~ 31	Only the trigger signals that are above the threshold level will produce sound. This setting can prevent unwanted sounding, such as crosstalk from other pads. If you set the value to a high value, it may not produce sound when striking softly. For example, signal B will produce sound but signal A and C will not.  You can adjust the threshold in the following way: a) Set the value to a low level. b) Increase this value gradually, then strike the pad and check. Repeat this process until you get an appropriate level.
H/R Adjust	0 ~ 100	Adjust the response of head shot and rim shot (for snare and tom only). If it produces a rim sound when you strike the head, reduce this value. If it produces a head sound when you strike the rim, increase this value.
Curve	LINEAR, EXP1, EXP2, LOG1, LOG2, LOUD1, LOUD2, SP1, SP2	An velocity curve shows the relation between the striking force and the sound volume. Adjust this setting until the response lets you feel as natural as possible. Refer to the Curve description below.
XStickPoint	1 ~ 120	It sets the cross stick of the snare. A higher value makes it easy to produce cross stick sound. A lower value makes it easy to produce rim shot sound. When the value is set to "1", it produces rim shot sound only. Note: This setting will apply only when X-Stick is turned on in the Kit menu.

## Detailed common trigger settings of each pad:

Pad Name	Trigger Parameters
KICK	Sensitivity, Threshold, Curve
SNARE	HeadSens, RimSens, Threshold, H/R Adjust, Curve, XStickPoint
TOM 1 ~ 4	HeadSens, RimSens, Threshold, H/R Adjust, Curve
HI-HAT	HeadSens, RimSens, Threshold, Curve
CRASH 1 ~ 2	HeadSens, RimSens, Threshold, Curve
RIDE	HeadSens, RimSens, BellSens, Threshold, Curve
EXT1 ~ 2	Type, HeadSens, RimSens, Threshold, H/R Adjust, Curve

## Curve description:

Pad Name	Trigger Parameters
LINEAR	The relation between the striking force and the sound volume is linear.
EXP1, EXP2	Soft strikes produce small volume change. Strong strikes produce big volume change.
LOG1, LOG2	Soft strikes produce big volume change. Strong strikes produce small volume change.
LOUD1, LOUD2	Even soft strikes will produce large sound. It's easy to maintain strong volume levels but has small dynamics.
SPLIN1, SPLIN2	Soft and strong strikes produce big volume change. Medium velocity produces small volume change.



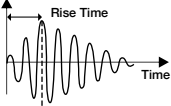
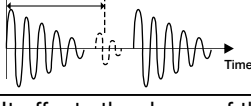
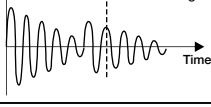
## Special Trigger Settings

1. Press the [TRIGGER] button, then press the [F2] button to enter the Special Trigger menu.
2. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.



Parameter	Range	
XTalk Cancel	0 ~ 100	This setting is to prevent "crosstalk". Crosstalk means when you strike a pad, the adjacent pad also produce sound. For example, when you strike the snare pad, both the snare and tom1 produce sound. In such a case, you can increase the crosstalk value of tom1. Note: If the value is set too high, when the pads are played at the same time, the pad being softly struck may not produce sound, as it may be mistakenly judged as crosstalk.

# Trigger Settings

Scan Time	0.5 ~ 6.0ms	The time it takes for the trigger signal to reach the peak level. If you find the volume level is not consistent when playing the drums at fixed velocity, you may adjust this setting. The setting for different drum pads may vary. 
Mask Time	0 ~ 64ms	This setting is to prevent “re-triggering”. For example, when the beater hits the kick pad, because of the bouncing force of the pad, it’s very easy for the kick to be triggered again. You can increase this value to prevent the occurrence of re-triggering. 
Retrigger Cancel	1 ~ 16	It affects the decay of the trigger signal so as to prevent re-triggering caused by the vibration of the pad. For example, when you strike a pad once, if you hear a small sound coming after the main sound, you may in-crease this value. Note: If the value is set too high, it becomes easy for some sounds to be omitted when playing very fast. 
Position SW	ON, OFF	Turn the position sensing function on or off (for the snare only).

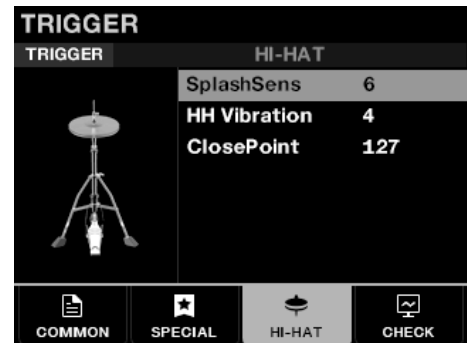
Detailed special trigger settings of each pad:

Pad Name	Trigger Parameters
KICK	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel
SNARE	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel, Position SW
TOM 1 ~ 4	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel
HI-HAT	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel
CRASH 1 ~ 2	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel
RIDE	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel
EXT1 ~ 2	XTalk Cancel, Scan Time, Mask Time, Retrigger Cancel

## Hi-hat Trigger Settings

1. Press the [TRIGGER] button, then press the [F3] button to enter the Hi-hat Trigger menu.
2. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.

Parameter	Range	Description
SplashSens	1 ~ 8	Adjust the hi-hat splash sensitivity. A higher value makes it easy to produce the splash sound.
HH Vibration	0 ~ 7	This setting is to prevent the vibration interference caused by closing the hi-hat pedal. A higher value makes it easy to prevent the interference. Note: If the value is set too high, some sounds may be omitted when playing the hi-hat.
ClosePoint	91, 127	Adjust the close point position.



## Trigger Check

You can check in real-time the XTalk status of the kit, the position sensing of the snare, and the depth of the hi-hat control pedal.

Press the [TRIGGER] button, then press the [F4] button to enter the Check menu.

### XTalk Cancel:

Strike a pad. It will show the XTalk status of the affected pads.

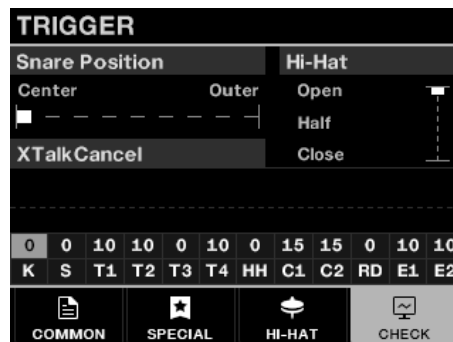
For example, striking Tom 2 very forcefully. Suppose Crash 1 gets affected by the vibration. In such a case, adjust the XTalk Cancel value of Crash 1. Then strike Tom 2 to check again. Repeat this operation until Crash 1 doesn't get affected by the vibration.

### Snare Position:

Strike different areas of the snare pad. The LCD will show the striking position.

### Hi-hat Control:

Press the hi-hat pedal. The LCD will show how far the pedal is being pressed.



# Song

The module can play back three types of songs: preset songs on the module, recorded songs saved on the module, and audio songs from the SD card.

The module will remember the current song number, so when you exit and enter song mode again, it will show the same song number from your last operation.

## Descriptions of the SD card songs:

1. /e-Drum/SONG: the default audio song folder on the SD card. The module can recognize up to 99 audio songs in this folder. Songs of bigger numbers cannot be displayed or played back.
2. /e-Drum/RECORD: the default folder to store the recorded songs. You can save up to 97 audio songs in this folder.
3. The module can recognize these MP3 and WAV files on the SD card.

MP3	Sampling rate	32kHz, 44.1kHz, 48kHz
	Bit rate	32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320kbps
WAV	Format	16/24 bit, ≤48kHz, mono and stereo

4. Other folders: if audio songs are stored in another folder (instead of the SONG folder), make sure to set that folder as the default song folder in the SD Card menu in advance.

Functions of the [F1] ~ [F4] buttons in the Song menu:

Buttons	Function	Description
F1	List	Enter the Song List menu to select a song.
F2	SD Card	Select a song from the SD card.
F3	Preset	Select a preset song.
F4	USER	Select a USER song.

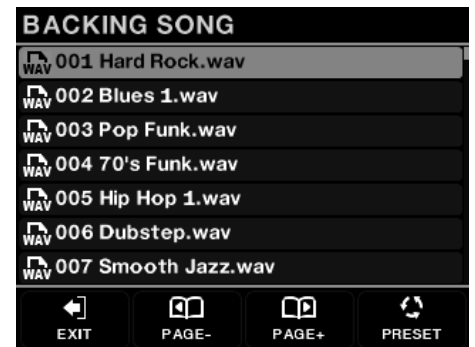
## Fast Selecting a Song

1. Press the [SONG] button, then press the [F1] button to enter the Song List menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a song from the list.
3. Press the [F4] button to circulate among the SD songs, preset songs and user songs categories.

## Playing Songs from SD Card

1. Press the [SONG] button, then press the [F2] button to enter the SD Card Song menu.
2. Use the the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.
3. Press the [START/STOP] button to start or stop playing the song.

Parameter	Range	Description
Song Number	1 ~ 99	Select a song number from the SD card.
Play Mode	ONESHOT, LOOP	One Shot: play the current song once. Loop: loop playing the current song.
Speed	70% ~ 130%	Adjust the playback speed.
Volume	0 ~ 127	Adjust the song volume.



**Notes:**

1. Each audio file on the SD card should not be bigger than 2GB (for both SD card song and recording).
2. The module can recognize an SD card of up to 64GB in the format of FAT32.

**Playing Preset Songs**

1. Press the [SONG] button, then press the [F3] button to enter the Preset Song menu.
2. The operations to play back a preset song is same as Playing Songs from SD Card.

Parameter	Range	Description
Song Number	1 ~ 120	Select a preset song number.
Play Mode	ONESHOT, LOOP	One Shot: play the current song once. Loop: loop playing the current song.
Volume	0 ~ 127	Adjust the song volume.
Speed	70% ~ 130%	Adjust the playback speed.
Click Guide	OFF, ON	Turn the click guide on or off.
Guide Vol	0 ~ 127	Adjust the song volume.

**Notes:**

Preset audio songs (.wav) can only be played at default tempo when being used for audio recording,

**Playing User Songs**

User songs mean the MIDI recording song on the module and the audio recording songs on the SD cards.

The operations to play back a user song is same as Playing Songs from SD Card.

**Notes:**

1. When no SD card is inserted, if you press the [SONG] button, it will enter the Preset Song menu.
2. When no SD card is inserted, if you press the [F2] button, the screen will prompt "No SD card!".
3. In the User Song menu, you can press the [ENTER] button to rename the selected user song.



# Recording

The module provides MIDI recording and audio recording.  
MIDI recording: 2 songs. It records the drum sounds only and saves to the module.

Audio recording: 97 songs. It records drum sounds and song together, and saves to the SD card.

## Note:

The recorded audio songs will be saved to the folder named "RECORD" on the SD card.

Functions of the [F1] ~ [F4] buttons in the Song menu:

Buttons	Function	Description
F1	Count In	Turn count-in on or off.
F2	Overwrite	Turn overwrite on or off.
F3	With Song	Turn the backing song on or off (not available for MIDI recording).
F4	Start/Stop	Start or stop recording.

## Start Recording

1. Press the [RECORD] button to enter Record mode.

## Note:

If this indicator "\*" appears next to the song number, it means this song is blank.

2. When overwrite is ON, the recording will overwrite the previous data in the song. When overwrite is OFF, you will need to select a blank song to start recording.

3. To start recording, press the [F4] or [START/STOP] button, or simply strike a drum pad.

## Stop Recording

During recording, you can press the [F4] or [START/STOP] button to stop recording. The LCD will go back to the User Song menu.



## SD Card Function

You can copy and save drum kit, trigger settings and kit chain data to the SD card, or load these data and user sample from SD card to the module, or even format the SD card.

We recommend formatting the SD card on the module before using.

### Notes:

Do not remove the SD card when it is in use (read/write, delete, format, playback, record).

Sub-menu	Operation	Folder in the SD card
One User Kit	Copy and load one user kit.	e-Drum — KIT — TRIGGER — CHAIN — SAMPLE — SONG — USER SONG
All User Kit	Copy and load all user kits.	
Trigger Setting	Copy and load trigger setting.	
Kit Chain	Copy and load kit chain.	
User Samples	Load user sample.	
Song Folder	Set the default song folder.	
Format	Format the SD card.	

If the SD card doesn't have these folders, when the SD card is inserted, these folders will be created automatically.

## Copy and Load One User Kit

1. Press the [SD CARD] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select One User Kit.
2. Press the [F4] or [SAVE/ENTER] button to enter this menu.

### Copying kit from the module to the SD card:

1. Press the [F2] button to enter the Copy menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a user kit, then press the [F4] or [SAVE/ENTER] button to save it to the SD card.

### Notes:

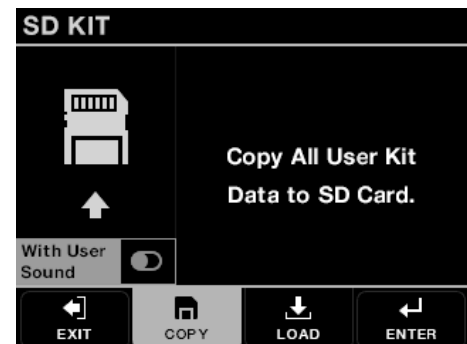
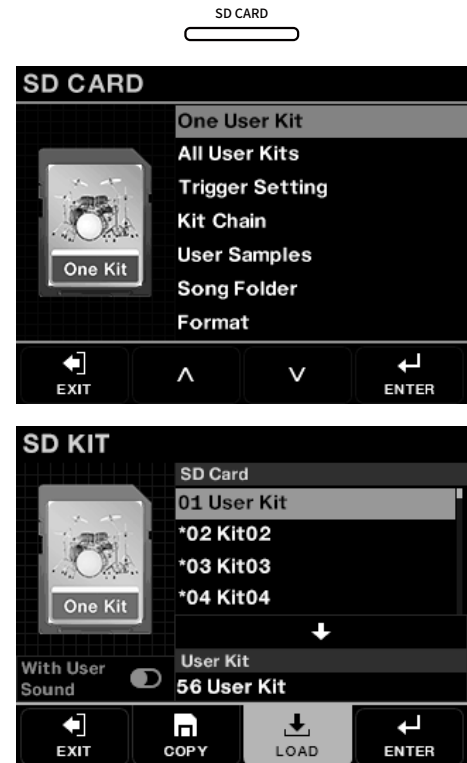
1. Only user kits can be saved to the SD card.
2. If there's user sample in the user kit, you can select whether the user sample should be saved together with the user kit to the SD card.

### Loading kit from the SD card to the module:

1. Press the [F3] button to enter the Load menu.
2. Use the [CURSOR] dial to move the cursor to the SD Card or the User Kit. Then use the [DATA] dial to select a kit number.
3. Press the [F4] or [SAVE/ENTER] button to load the kit to the module.

## Copy and Load All User Kits

1. Press the [SD CARD] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select All User Kits.
2. Press the [F4] or [SAVE/ENTER] button to enter this menu.
3. Press the [F2] button to copy all user kits to the SD card. Or press the [F3] button to load all user kits from the SD card to the module.
4. Press the [F4] or [SAVE/ENTER] button to execute the operation.



## Copy and Load Trigger Setting

1. Press the [SD CARD] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select Trigger Setting.

2. Press the [F4] or [SAVE/ENTER] button to enter this menu.

### Copying trigger settings from the module to the SD card:

1. Press the [F2] button to enter the Copy menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a trigger number. There's only one set of trigger settings on the module, so you only need to select a trigger number on the SD card.

3. Press the [F4] or [SAVE/ENTER] button to save it to the SD card.

### Note:

If this indicator "\*" appears next to the number, it means this item is blank.

### Loading trigger settings from the SD card to the module:

1. Press the [F3] button to enter the Load menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a trigger number. There's only one set of trigger settings on the module, so you only need to select a trigger number on the SD card.
3. Press the [F4] or [SAVE/ENTER] button to load it to the module.

## Copy and Load Kit Chain

1. Press the [SD CARD] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select Kit Chain.

2. Press the [F4] or [SAVE/ENTER] button to enter this menu.

### Copying kit chain from the module to the SD card:

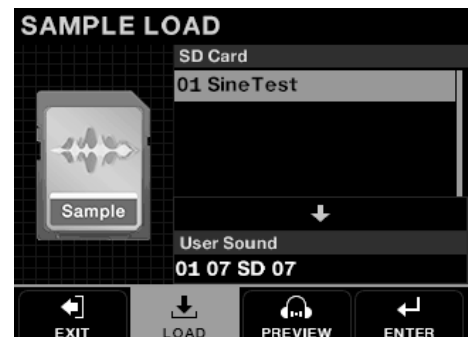
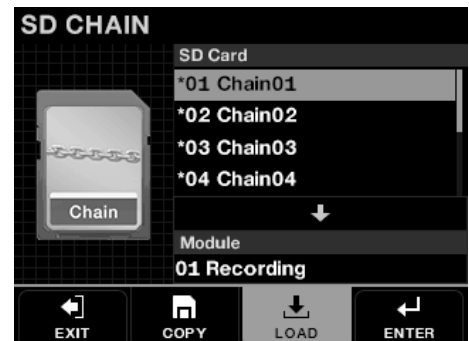
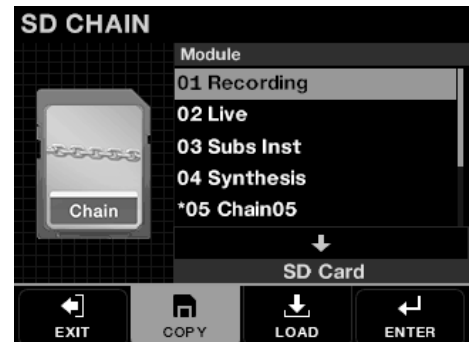
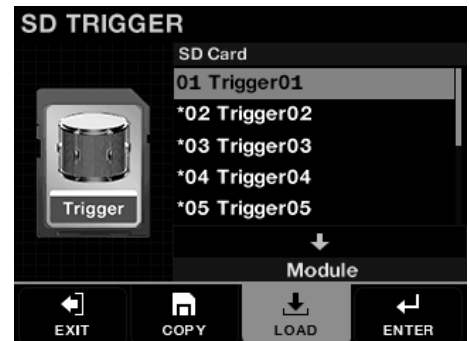
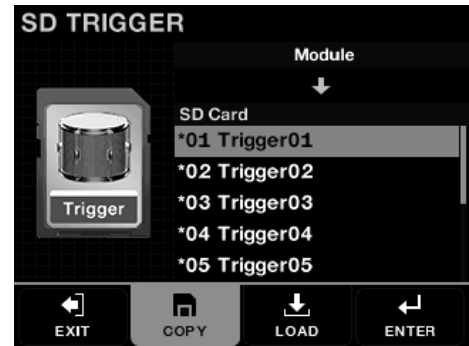
1. Press the [F2] button to enter the Copy menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a kit chain, then press the [F4] or [SAVE/ENTER] button to save it to the SD card.

### Loading kit chain from the SD card to the module:

1. Press the [F3] button to enter the Load menu.
2. Use the [CURSOR] dial to move the cursor to the SD Card or the Module. Then use the [DATA] dial to select a kit chain number.
3. Press the [F4] or [SAVE/ENTER] button to load it to the module.

## User Samples

1. Insert the SD card to your computer. Then put the target user samples to the folder "e-drum\Sample" on the SD card.
2. Insert the SD card to the card slot of the module.
3. Press the [SD CARD] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select User Samples. Press the [F4] or [SAVE/ENTER] button to enter this menu.



4. Use the [DATA] dial or the [CURSOR] dial to select a user sample that you want to load. You can press the [F3] button to preview this user sample.
5. Use the [CURSOR] dial to move cursor then use the [DATA] dial to select a user sound number on the module. Then press the [F4] or [SAVE/ENTER] button to load the user sample to the module.
6. During the loading process, all functions and buttons will become unavailable. The LCD will show the loading progress and this message "Loading..., don't turn off the power!". Do not turn off the power when loading is in progress, otherwise, the user sample may be damaged.

After loading, you can use this user sample with these operations:

- a) Press the [INST] button to enter the instrument menu.
- b) Set the instrument group to USER, then move the cursor to the instrument name, and use the [DATA] dial to select a user sample. Now you can use it (user sample starts from No.907).

### Notes:

1. User samples must be saved to the folder "e-drum\Sample" on the SD card. You can save up to 99 samples in this folder.
2. The module can recognize following user samples on the SD card:

Format	WAV (*.wav)
Sampling rate	48kHz, 44.1kHz, 32kHz, 22.05kHz, 11.025kHz,
Bit rate	16bit
Size in total	128MB user samples in total.

## Setting the Song Folder

You can store audio files in this directory "e-Drum\SONG\MP3 Songs" on the SD card. Then use the following operations to select the folder on the module.

1. Press the [SD CARD] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select Song Folder. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Use the [DATA] dial or the [CURSOR] dial to select this folder "MP3 Songs". Then press the [F4] or [SAVE/ENTER] button to confirm.
3. Press the [SONG] button, then press the [F2] button. Now you can select an audio file to play back.

### Notes:

You may create other folders under the Song directory on computer, then use similar operations to select the desired folder.



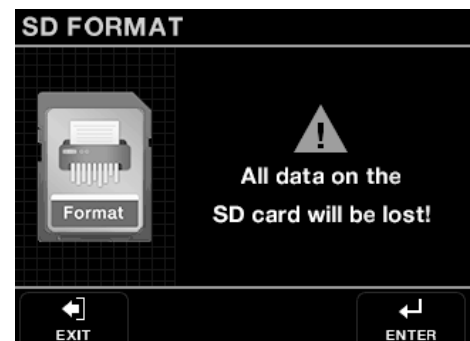
## Formatting the SD Card

### Notes:

If this is the first time to use your SD card on the module, make sure to format it on the module before using.

This operation will delete all data on the SD card. Backup your data before formatting.

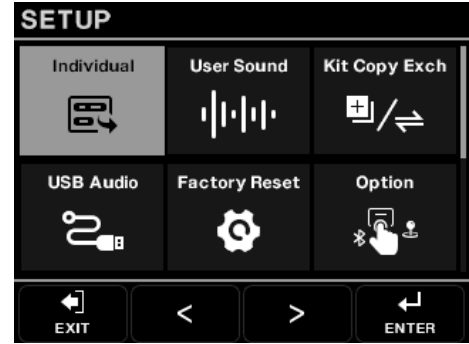
1. Press the [SD CARD] button, then use the [F2]/[F3] button, the data dial or the [CURSOR] dial to select Format. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Press the [F4] or [SAVE/ENTER] button to confirm, or press the [F1] or [EXIT] button to cancel go back to the previous menu.
3. When formatting is in progress, the LCD will show "Waiting...". This message window will disappear when finished.



# Setup

You can configure these settings in the Setup menu: individual output, user sound, USB audio, factory reset, option, and MIDI settings.

1. Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select a sub-menu.
2. Press the [F4] or [SAVE/ENTER] button to enter the sub-menu. Or press [EXIT] to go back to the previous menu.



Page Up  
↑  
Page Down

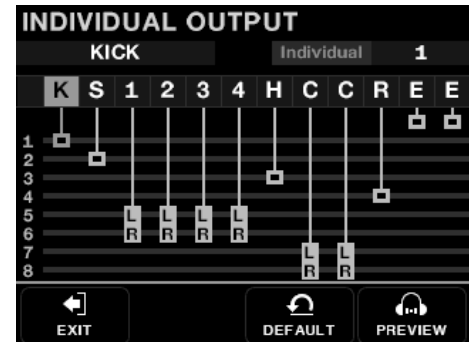


## Individual Output

You can specify the individual output jack for each pad.

1. Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select “Individual”. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Use the [CURSOR] dial to select a pad name. Then use the [DATA] dial to change the setting. Press the [F3] button to reset to the default settings. Press the [F4] button to preview it.

Range	Description
OFF, 1, 2, 1/2, 3, 4, 3/4, 5, 6, 5/6, 7, 8, 7/8	Specify the individual output jack from which the pad sound is output.



## User Sound

In the User Sound menu, you can delete user sounds saved on the module. When a user sound is deleted from the module, you will also need to optimize it so as to free up this space.

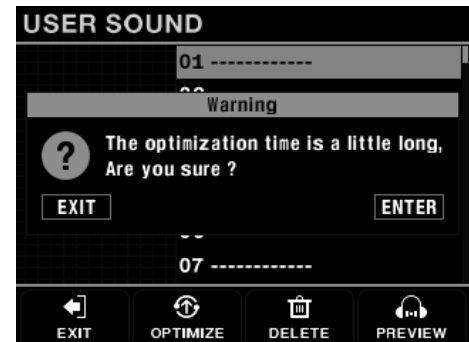
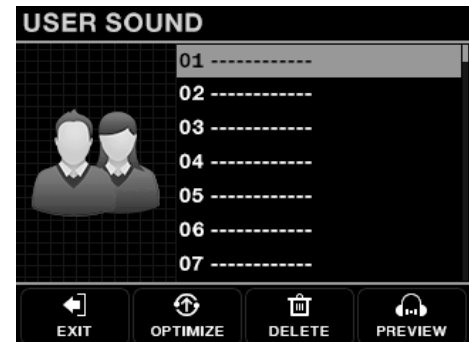
Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select “User Sound”. Then press the [F4] or [SAVE/ENTER] button to enter this menu.

### Deleting a user sound:

1. Use the [CURSOR] dial to select a user sound that you want to delete. Before deleting the user sound, you can press the [F4] button to preview this sound.
2. Press the [F3] button to delete this sound. The LCD will prompt “Delete the sound! Are you sure?”. Press the [SAVE/ENTER] button to confirm it, or press the [EXIT] button to cancel.

### Optimizing a user sound slot:

1. After deleting a user sound, you will need to optimize the slot so as to free up the occupied space. Press the [F2] button to execute the optimization.
2. The optimization process will take some time to finish. During this process, the LCD will show “The optimization time is a little long. Are you sure?”.



**Notes:**

After optimizing a user sound slot, you will need to reboot the module.

**Kit Copy & Exchange**

Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select “Kit Copy Exch”. Then press the [F4] or [SAVE/ENTER] button to enter this menu.

**Kit Copy:**

1. Press the [F2] button to enter the Copy menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a kit to be copied (From Kit). It can be a preset kit or user kit.
3. Use the [CURSOR] dial to move the cursor down (To User), then use the [DATA] dial to select a target user kit.

4. Press the [F4] or [SAVE/ENTER] button to complete the copy process.

**Notes:**

If the target user kit has data, the LCD will pop a warning message before overwriting the data.

**Kit Exchange:**

This function applies to user kits only.

1. Press the [F3] button to enter the Exchange menu.
2. Use the [DATA] dial or the [CURSOR] dial to select a user kit (User Kit A).
3. Use the [CURSOR] dial to move the cursor down (User Kit B), then use the [DATA] dial to select a user kit.
4. Press the [F4] or [SAVE/ENTER] button to exchange these two kits.

**USB Audio**

1. Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select “USB Audio”. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Use the [CURSOR] dial to select a parameter to edit. Then use the [DATA] dial to change the setting.

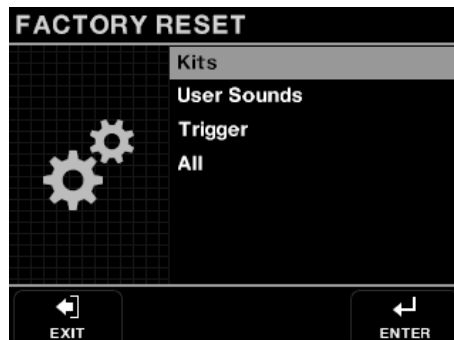
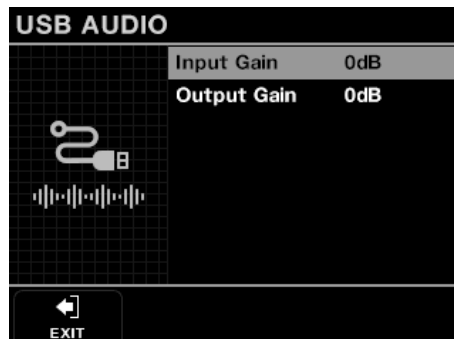
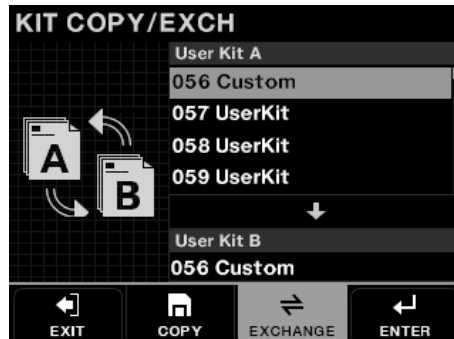
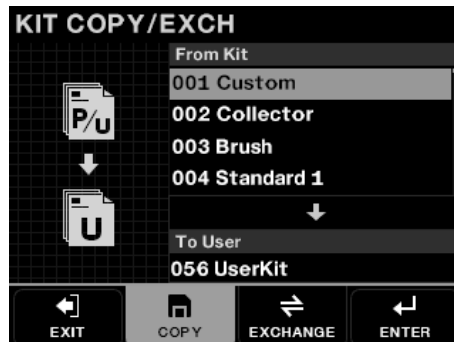
Parameter	Range	Description
Input Gain	-36dB ~ +6dB	Adjust the gain of the input signal.
Output Gain	-36dB ~ +6dB	Adjust the gain of the output signal.

3. Connect the USB audio jack of the module to computer, listen with headphones while adjusting the parameters until you set an appropriate volume level.

**Factory Reset**

In the Factory Reset menu, you can select to reset user drum kits, user sounds, trigger setting separately, or reset all these data.

1. Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select “Factory Reset”. Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Use the [CURSOR] dial or the [DATA] dial to select an item.
3. Press the [F4] or the [SAVE ENTER] button to execute factory reset.



# Setup

Parameter	Description
Kits	Reset user drum kits.
User Sounds	Delete user sounds.
Trigger	Reset the trigger parameters.
All	Reset to factory settings. All user data and settings will be deleted.

## Option

In the Option menu, you can adjust some global parameters, Bluetooth parameters, and settings of the EXT1 ~ 2 jacks.

1. Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select "Option". Then press the [F4] or [SAVE/ENTER] button to enter this menu.

Functions of the [F1] ~ [F4] buttons in this menu:

Buttons	Function	Description
F1	Exit	Return to the Setup menu.
F2	Global	Set the Auto Off time, the LCD brightness.
F3	Bluetooth	Enter the Bluetooth menu.
F4	Control	Set the function of the EXT1 ~ 2 jacks.

2. Use the [CURSOR] knob to select a parameter to edit. Then use the [DATA] dial to change the setting.

### Global menu:

Parameter	Range	Description
Auto Power OFF	OFF, 30 Minutes, 1 Hour, 3 Hours	Set the time period after which the module will shut down of inactivity.
LCD Brightness	1 ~ 32	Adjust the brightness of the LCD.
UI Color	Yellow, Green, Blue, White	...

### Bluetooth menu:

Parameter	Range	Description
BT AUDIO SW	OFF, ON	Turn the Bluetooth audio on or off.
BT MIDI SW	OFF, ON	Turn the Bluetooth MIDI on or off.
BT Name	e-drum AUDIO, e-drum MIDI	The Bluetooth MIDI name and Bluetooth Audio name of the module.
Pairing	...	Enable Bluetooth pairing and connecting.
Reset	...	Disable Bluetooth connection, and delete the pairing information

### Connecting and disconnecting Bluetooth:

1. In the Bluetooth menu, press the [F2] button to start pairing. The LCD will prompt "Pairing...".

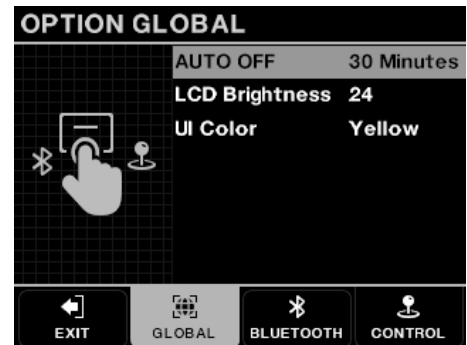
If you press the [F1] button, it will exit from pairing and return to the Bluetooth menu.

2. When pairing is successful, it will return to the Bluetooth menu. The Bluetooth logo will turn on and the LCD shows "Connected (Audio/MIDI)", indicating Bluetooth is being connected.

3. If you want to disable Bluetooth connection, press the [F3] button. The Bluetooth logo will turn off and the LCD will show "Unconnected".

### Notes:

When editing the Bluetooth parameters, Bluetooth transmission may not work normally.



## Control menu:

Parameter	Range	Description
External1 Head	OFF, KIT+, KIT-, CHAIN+, CHAIN-, SONG+,	Set the function of the EXT1 jack.
External1 Rim	SONG-, START/STOP, XSTICK SW	
External2 Head	OFF, KIT+, KIT-, CHAIN+, CHAIN-, SONG+,	Set the function of the EXT2 jack.
External2 Rim	SONG-, START/STOP, XSTICK SW	

## MIDI Settings

1. Press the [SETUP] button, then use the [F2]/[F3] button, the [DATA] dial or the [CURSOR] dial to select "MIDI". Then press the [F4] or [SAVE/ENTER] button to enter this menu.
2. Use the [CURSOR] knob to select a parameter, then use the [DATA] dial to change the setting.

## MIDI Global:

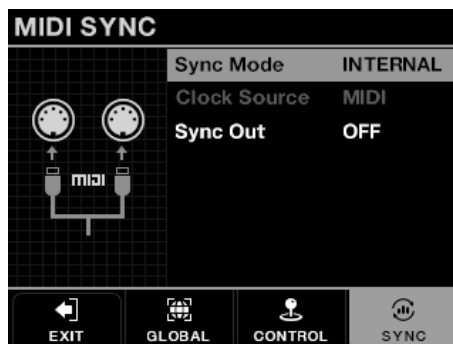
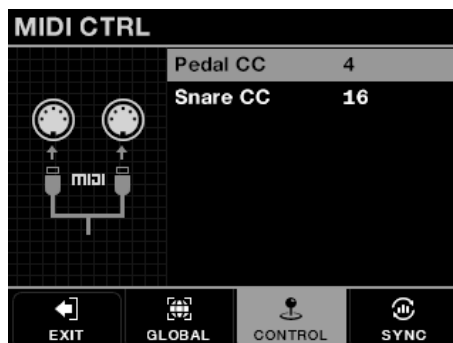
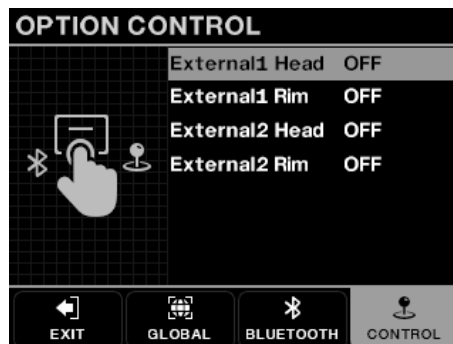
Parameter	Range	Description
GM Mode	ON, OFF	ON: MIDI IN will respond GM drum kit. OFF: MIDI IN will respond local drum kit.
Local Ctrl	ON, OFF	ON: When striking a pad, the module will produce sound and send MIDI data to MIDI output jack. OFF: When striking a pad, the module will be muted but will send MIDI data to MIDI output jack.
Tx/Rx SW	ON, OFF	Turn the MIDI IN / MIDI OUT on or off.
MIDI Channel	CH1 ~ CH16	Set the MIDI channel for transmitting or receiving MIDI data.
PC Chg TX	ON, OFF	Turn the Program Change Transmit on or off.
PC Chg RX	ON, OFF	Turn the Program Change Receive on or off.
Soft Thru MIDI	OFF, ON (MIDI OUT), ON(BT), ON (USB), ON(ALL)	MIDI data received from MIDI IN will be transmitted thru MIDI OUT, USB, Bluetooth, or ALL (MIDI OUT + USB + Bluetooth).
Soft Thru USB	OFF, ON (MIDI OUT), ON(BT), ON (MIDI+BT)	MIDI data received from USB MIDI will be transmitted thru MIDI OUT, Bluetooth, or Both (MIDI OUT + Bluetooth).
Soft Thru BT	OFF, ON(MIDI), ON(USB), ON (MIDI+USB)	MIDI data received from Bluetooth MIDI will be transmitted thru MIDI OUT, USB, or Both (MIDI OUT + USB).

## MIDI Controller:

Parameter	Range	Description
Pedal CC	OFF, 01, 02, 04, 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26	The pedal control message. Default setting is "04".
Snare CC	OFF, 01, 02, 04, 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26	Striking position message of the snare. Default setting is "16".

## MIDI Synchronous:

Parameter	Range	Description
Sync Mode	INTERNAL, EXTERNAL	Internal: Use the module's internal clock. External device will sync to the module's internal clock. External: Use the external clock. The module will sync to the clock of the external device.
Clock Source	MIDI, USB	When Sync Mode is External, the clock source will come from the MIDI jack or the USB MIDI jack.
Sync Out	OFF, ON	When Sync Mode is Internal, the module will or will not send sync message to the external device.



# Coach Mode

Coach mode is a practice mode specially designed for beginners to help them improve their playing accuracy, speed and stamina, as well as other skills on the whole. It consists of three modes: Quiet Count, Beat Check and Change Up. Each of them provides unique practice.

## Quiet Count

Quiet count helps you practice at steady timing and tempo. It first plays a demo, then mute the sound so that you can practice by striking the pads in quiet count.

1. Press the [COACH] button, then press the [F1] button to enter the Quiet Count menu. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.

Parameter	Range	Description
Beat Type		Select a beat type for practice.
Beat Guide	OFF, ON	Turn the beat guide sound on or off.
Score	OFF, ON(8 Meas), ON(16 Meas), ON(32 Meas)	Turn the score function on or off. Select the number of measures for practice.
Click Meas	1 ~ 6	Select the number of click measures.
Quiet Meas	1 ~ 6	Select the number of quiet measures.
Timing Gate	OFF, Easy, Medium, Hard	Turn the timing gate on or off. Select the difficulty level.

2. Press the [F4] or [START/ STOP] button to start the practice. After playing a count-in, the practice starts. It first plays the demo with the click sound. When the demo stops, the click sound will be muted and "HIT!" will appear on the LCD. Now strike the pad in the demonstrated tempo. The LCD will show the accuracy of each strike. During the practice, you can press [F2] button to adjust the tempo.
3. Press the [F4] or [START/ STOP] button again to stop the practice. If you turn on the score function, when you practice for the specified number of measures, it will display the score on LCD.

### Note:

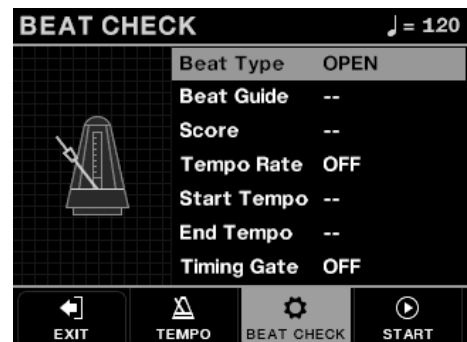
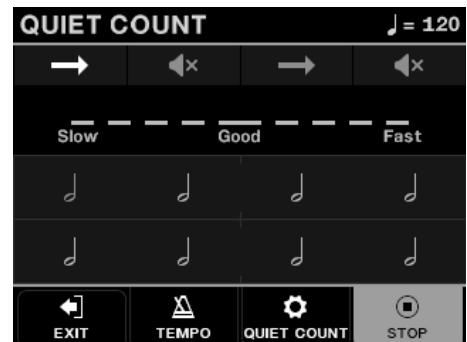
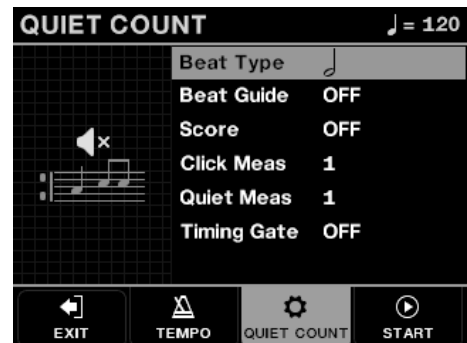
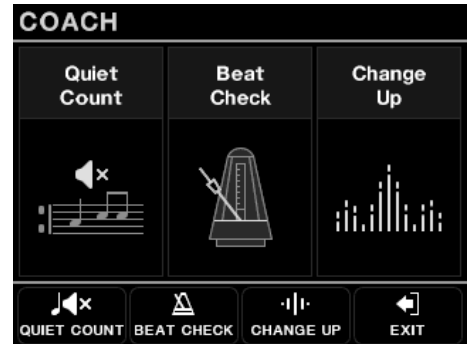
During the practice, you can track the accuracy of each strike on the LCD.

## Beat Check

Beat Check provides up to 15 different beats for practice to improve the playing accuracy. You can practice with the click. Your practice will be scored when the score function is in use.

1. Press the [COACH] button, then press the [F2] button to enter the Beat Check menu. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.

Parameter	Range	Description
Beat Type	OPEN	Select a beat type for practice.
Beat Guide	OFF, ON	Turn the beat guide sound on or off.



Score	OFF, ON(8 Meas), ON(16 Meas), ON(32 Meas)	Turn the score function on or off. Select the number of measures for practice.
Tempo Rate	OFF, 1BPM/2 Beat, 5BPM/4 Meas	1BPM/2 Beat: Tempo increases by 1BPM every 2 beats. 5BPM/4 Meas: Tempo increases by 5BPM every 4 measures.
Start Tempo	30 ~ 280	Set the beginning tempo.
End Tempo	30 ~ 280	Set the ending tempo.
Timing Gate	OFF, Easy, Medium, Hard	Turn the timing gate on or off. Select the difficulty level.

- Press the [F4] or [START/ STOP] button to start the practice. After playing a count-in, the practice starts. Follow the click sound and strike the pad. The LCD will show the beat type and the accuracy of each strike. During the practice, you can press [F2] button to adjust the tempo.

- Press the [F4] or [START/ STOP] button again to stop the practice.

**Note:**


If you turn on the score function, when you practice for the specified number of measures, it will stop automatically and your practice will be scored.

- If you turn on score function and tempo rate, when the practice reaches the specified number of measures, the LCD will display the score, and the practice will continue playing.

## Change Up

Change Up helps to improve the skill to play with changing beats. It changes the beat type every two measures.

- Press the [COACH] button, then press the [F3] button to enter the Change Up menu. Use the [CURSOR] dial to select a parameter, then use the [DATA] dial to change the setting.

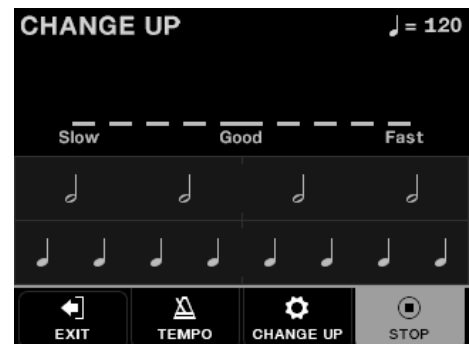
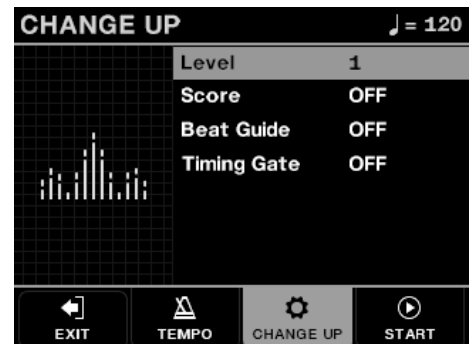
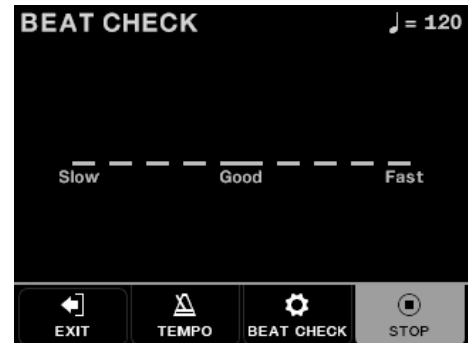
Parameter	Range	Description
Beat Type	1, 2, 3	Select a beat type for practice. 
Score	OFF, ON (1 Loop), ON (2 Loop), ON (3 Loop), ON (4 Loop)	Turn the score function on or off. Select the number of loop(s) for practice.
Beat Guide	OFF, ON	Turn the beat guide sound on or off.
Timing Gate	OFF, Easy, Medium, Hard	Turn the timing gate on or off. Select the difficulty level.

- Press the [F4] or [START/ STOP] button to start the practice. After playing a count-in, the practice starts. The LCD shows the current beat and the accuracy of each strike. During the practice, you can press [F2] button to adjust the tempo.

- Press the [F4] or [START/ STOP] button again to stop the practice.

**Note:**

If you turn on the score function, when you practice for the specified number of loops, it will stop automatically and your practice will be scored.



# Specifications

Drum Kits	55 presets + 45 users
Sounds	906 presets + 93 user samples (max.)
Sequencer	120 presets (20 audio + 100 MIDI) Recording: MIDI recording (2 songs) + Audio recording to SD card (97 songs max.) Tick: 192 ticks per beat SD card playback: WAV and MP3
Tempo	30 ~ 280
External Drive	SD (64GB max., FAT32)
Display	320 x 240 color TFT display
Bluetooth	Bluetooth audio, Bluetooth MIDI
Connectors	PHONES x 2 (1/4", 1/8"), AUX IN (1/4"), USB Audio/MIDI, MIDI IN, MIDI OUT/THRU, OUTPUT (balanced) x 2, OUTPUT x 2 (R, L/MONO, 1/4"), INDIVIDUAL OUTPUT x 8, TRIGGER IN x 13
Control Buttons	Power on/off, Output volume, Phones volume, Aux In volume, Click volume, Kit, INST, Song, Record, Effect, Mixer, Start/Stop, Click, Coach, Setup, Trigger, SD Card, Save/Enter, Exit, Cursor dial, Data dial, F1, F2, F3, F4, Group faders, fader exchange, [+], [-]
Power Supply	DC12V, 2A
Module Dimensions	308(W) x 191(D) x 95(H) mm
Module Weight (kg)	3.3kg

**Note:**

All specifications are subject to change without notice.

# Drum Kit List

No.	Kit Name
1	Custom
2	Collector
3	Heavy Rock
4	Dance Party
5	R&B
6	Dubhead
7	Metal Layers
8	Synth FX
9	Phaser
10	World Perc
11	Funk
12	Classic Rock
13	Fusion
14	Live
15	Acoustic
16	Big Band
17	Brush
18	Old School
19	Metal Head
20	Fast Pop
21	Vintage
22	Country
23	Room
24	Big Pop
25	PiccoloBoom
26	1970's
27	Tight
28	Greasy Blues

No.	Kit Name
29	Drums+Perc
30	Ska
31	Latin Jazz
32	Reggae
33	Gymnasium
34	Delayyy
35	Beatbox
36	Drum+Bass
37	808
38	909
39	EDM
40	Hip Hop
41	Hexatronic
42	House
43	Dizzy Lo-Fi
44	Techno
45	SpaceBubbles
46	Dubstep
47	ElectroPower
48	Noise
49	Chinese
50	BeijingOpera
51	Latin Perc
52	Indian
53	African
54	Orchestra
55	Pitched Perc

# Drum Instrument List

No.	Fullname	Display name	Remarks
<b>KICK</b>			
1	Custom Kick	Custom Kick	
2	Collector Kick	Collect Kick	
3	22" Standard Kick 1	22"Std Kick1	
4	22" Standard Kick 2	22"Std Kick2	
5	Rock Kick	Rock Kick	
6	22" Acoustic Kick	22"Acus Kick	
7	22" Jazz Kick	22"Jazz Kick	
8	Vintage Kick 1	Vintge Kick1	
9	Brush Kick 1	Brush Kick1	
10	Brush Kick 2	Brush Kick2	
11	Funk Kick	Funk Kick	
12	Room Kick 1	Room Kick1	
13	Room Kick 2	Room Kick2	
14	Fusion Kick	Fusion Kick	
15	1970's Kick	1970's Kick	
16	Vintage Kick 2	Vintge Kick2	
17	Reggae Kick	Reggae Kick	
18	Big Band Kick	BigBand Kick	
19	Old School Kick	OldSch Kick	
20	Pop Kick	Pop Kick	
21	Magic Kick	Magic Kick	
22	Noise Kick	Noise Kick	
23	Dubstep Kick	Dubstep Kick	
24	Power Kick	Power Kick	
25	808 Kick	808 Kick	
26	909 Kick	909 Kick	
27	EDM Kick 1	EDM Kick1	
28	EDM Kick 2	EDM Kick2	
29	Electronic Kick	Electro Kick	
30	Dance Kick	Dance Kick	
31	Beatbox Kick	Beatbox Kick	
32	FX Mix Kick	FX Mix Kick	
33	HipHop Kick	HipHop Kick	
34	Techno Kick	Techno Kick	
35	Lo-Fi Kick	Lo-Fi Kick	
36	Junkyard Kick	Junkyrd Kick	
<b>SNARE</b>			
37	Custom Snare 1	Custom Sn1	*P *S
38	Custom Snare 2	Custom Sn2	*P *S
39	Custom Snare Rim	Custom SnR	*P *S
40	Custom XStick	Custom XSt	*P *S
41	Collector Snare 1	Collect Sn1	*P *S
42	Collector Snare 2	Collect Sn2	*P *S
43	Collector Snare Rim	Collect SnR	*P *S
44	Collector XStick	Collect XSt	*P *S
45	14" Standard Snare 1	14"Std Sn1	*P *S
46	14" Standard Snare 1 Rim	14"Std Sn1R	*P *S
47	14" Standard Snare1 XStick	14"Std SnXSt	*P *S
48	14" Rock Snare	14"Rock Sn	*P *S
49	14" Rock Snare Rim	14"Rock SnR	*P *S
50	14" Rock Snare XStick	14"Rock XSt	*P *S
51	14" Acoustic Snare	14"Acus Sn	*P *S
52	14" Acoustic Snare Rim	14"Acus SnR	*P *S
53	14" Acoustic Snare XStick	14"Acus XSt	*P *S
54	Funk Snare 1	Funk Snare1	*P *S
55	Funk Snare 1 Rim	Funk Sn1R	*P *S

56	Funk Snare 1 XStick	Funk Sn1XSt	*P *S
57	Jazz Snare	Jazz Snare	*P *S
58	Jazz Snare Rim	Jazz SnR	*P *S
59	Jazz Snare XStick	Jazz XSt	*P *S
60	Room Snare	Room Snare	*P *S
61	Room Snare Rim	Room SnR	*P *S
62	Room Snare XStick	Room XSt	*P *S
63	Fusion Snare	Fusion Snare	*P *S
64	Fusion Snare Rim	Fusion SnR	*P *S
65	Fusion Snare XStick	Fusion XSt	*P *S
66	Real Brush Snare 1	RelBrsh Sn1	*P
67	Real Brush Snare 2	RelBrsh Sn2	*P
68	Real Brush Snare Rim	RelBrsh SnR	*P
69	Real Brush Snare XStick	RelBrsh XSt	*P
70	Brush Swirl	Brush Swirl	*P
71	14" Standard Snare 2	14"Std Sn2	*P
72	14" Standard Snare 2 Rim	14"Std Sn2R	*P
73	14" Standard Snare 2 XStick	14"StdSn2XSt	*P
74	Funk Snare 2	Funk Snare2	*P
75	Funk Snare 2 Rim	Funk Sn2R	*P
76	Funk Snare 2 XStick	Funk Sn2XSt	*P
77	Vintage Snare	Vintage Sn	*P
78	Vintage Snare Rim	Vintage SnR	*P
79	Vintage Snare XStick	Vintage XSt	*P
80	Live Snare	Live Snare	*P
81	Live Snare Rim	Live SnR	*P
82	Vintage Snare Stick	Vintage XSt	*P
83	Old School Snare	OldSch Sn	*P
84	Old School Snare Rim	OldSch SnR	*P
85	Old School Snare XStick	OldSch XSt	*P
86	Orchestra Snare	Orch Sn	*P
87	Orchestra Snare Rim	Orch SnR	*P
88	Reggae Snare	Reggae Snare	*P
89	Reggae Snare Rim	Reggae SnR	*P
90	Custom Snare Wire Off	Custom SnOf	*P
91	Custom Snare Rim Wire Off	Custom SnROf	*P
92	Custom XStick Wire Off	Custom XStOf	*P
93	Collector Snare Wire Off	Collect SnOf	*P
94	Collector Snare Rim Wire Off	CollectSnROf	*P
95	Collector XStick Wire Off	CollectXStOf	*P
96	Standard Snare Wire Off	Std SnOf	*P
97	Standard Snare Rim Wire Off	Std SnROf	*P
98	Standard XStick Wire Off	Std XStOf	*P
99	Rock Snare Wire Off	Rock SnOf	*P
100	Rock Snare Rim Wire Off	Rock SnROf	*P
101	Rock XStick Wire Off	Rock XStOf	*P
102	Acoustic Snare Wire Off	Acous SnOf	*P
103	Acoustic Snare Rim Wire Off	Acous SnROf	*P
104	Acoustic XStick Wire Off	Acous XStOf	*P
105	Funk Snare Wire Off	Funk SnOf	*P
106	Funk Snare Rim Wire Off	Funk SnROf	*P
107	Funk XStick Wire Off	Funk XStOf	*P
108	Jazz Snare Wire Off	Jazz SnOf	*P
109	Jazz Snare Rim Wire Off	Jazz SnROf	*P

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110	Jazz XStick Wire Off	Jazz XStOf	*P
111	Room Snare Wire Off	Room SnOf	*P
112	Room Snare Rim Wire Off	Room SnROf	*P
113	Room XStick Wire Off	Room XStOf	*P
114	Fusion Snare Wire Off	Fusion SnOf	*P
115	Fusion Snare Rim Wire Off	Fusion SnROf	*P
116	Fusion XStick Wire Off	Fusion XStOf	*P
117	808 Snare	808 Snare	
118	808 Snare Rim	808 SnR	
119	808 Snare Clap	808 SnClap	
120	909 Snare	909 Snare	
121	909 Snare Rim	909 SnR	
122	909 Snare Clap	909 SnClap	
123	EDM Snare 1	EDM Snare1	
124	EDM Snare 2	EDM Snare2	
125	EDM Clap	EDM Clap	
126	Techno Snare	Techno Snare	
127	Techno Clap	Techno Clap	
128	Techno Snare Stick	Techno SnSt	
129	House Snare	House Snare	
130	House Clap	House Clap	
131	House Snare Stick	House SnSt	
132	Junkyard Snare	Junkyard Sn	
133	Junkyard Clap	Junkyard Clp	
134	Junkyard Snare Stick	Junkyrd SnSt	
135	Lo-Fi Snare	Lo-Fi Snare	
136	Lo-Fi Snare Rim	Lo-Fi SnR	
137	Lo-Fi Snare Stick	Lo-Fi SnSt	
138	Noise Snare	Noise Snare	
139	Noise Clap	Noise Clap	
140	Noise Snare Stick	Noise SnSt	
141	Dubstep Snare 1	Dubstep Sn1	
142	Dubstep Snare 1 Rim	Dubstp Sn1R	
143	Magic Snare	Magic Snare	
144	Magic Clap	Magic Clap	
145	R&B Snare	R&B Snare	
146	R&B Clap	R&B Clap	
147	Dance Snare	Dance Snare	
148	Dance Clap	Dance Clap	
149	Electronic Snare	Electro Sn	
150	Electronic Clap	Electro Clap	
151	Dubstep Snare 2	Dubstep Sn2	
152	Beatbox Snare	Beatbox Sn	
153	Beatbox Snare Rim	Beatbox SnR	
154	Beatbox Snare Stick	Beatbox SnSt	
155	HipHop Snare	HipHop Snare	
156	Power Snare	Power Snare	
<b>TOM</b>			
157	Custom Tom 1	Custom Tom1	
158	Custom Tom 1 Rim	Custom Tm1R	
159	Custom Tom 2	Custom Tom2	
160	Custom Tom 2 Rim	Custom Tm2R	
161	Custom Tom 3	Custom Tom3	
162	Custom Tom 3 Rim	Custom Tm3R	
163	Custom Tom 4	Custom Tom4	
164	Custom Tom 4 Rim	Custom Tm4R	
165	Collector Tom 1	Collect Tom1	
166	Collector Tom 1 Rim	Collect Tm1R	
167	Collector Tom 2	Collect Tom2	

168	Collector Tom 2 Rim	Collect Tm2R	
169	Collector Tom 3	Collect Tom3	
170	Collector Tom 3 Rim	Collect Tm3R	
171	Collector Tom 4	Collect Tom4	
172	Collector Tom 4 Rim	Collect Tm4R	
173	Real Brush Tom 1	RelBrsh Tom1	
174	Real Brush Tom 1 Rim	RelBrsh Tm1R	
175	Real Brush Tom 2	RelBrsh Tom2	
176	Real Brush Tom 2 Rim	RelBrsh Tm2R	
177	Real Brush Tom 3	RelBrsh Tom3	
178	Real Brush Tom 3 Rim	RelBrsh Tm3R	
179	Real Brush Tom 4	RelBrsh Tom4	
180	Real Brush Tom 4 Rim	RelBrsh Tm4R	
181	Real Brush Tom 5	RelBrsh Tom5	
182	Real Brush Tom 5 Rim	RelBrsh Tm5R	
183	Real Brush Tom 6	RelBrsh Tom6	
184	Real Brush Tom 6 Rim	RelBrsh Tm6R	
185	Standard Tom 1	Standrd Tom1	
186	Standard Tom 1 Rim	Standrd Tm1R	
187	Standard Tom 2	Standrd Tom2	
188	Standard Tom 2 Rim	Standrd Tm2R	
189	Standard Tom 3	Standrd Tom3	
190	Standard Tom 3 Rim	Standrd Tm3R	
191	Standard Tom 4	Standrd Tom4	
192	Standard Tom 4 Rim	Standrd Tm4R	
193	Standard Tom 5	Standrd Tom5	
194	Standard Tom 5 Rim	Standrd Tm5R	
195	Standard Tom 6	Standrd Tom6	
196	Standard Tom 6 Rim	Standrd Tm6R	
197	Rock Tom 1	Rock Tom1	
198	Rock Tom 1 Rim	Rock Tm1R	
199	Rock Tom 2	Rock Tom2	
200	Rock Tom 2 Rim	Rock Tm2R	
201	Rock Tom 3	Rock Tom3	
202	Rock Tom 3 Rim	Rock Tm3R	
203	Rock Tom 4	Rock Tom4	
204	Rock Tom 4 Rim	Rock Tm4R	
205	Rock Tom 5	Rock Tom5	
206	Rock Tom 5 Rim	Rock Tm5R	
207	Rock Tom 6	Rock Tom6	
208	Rock Tom 6 Rim	Rock Tm6R	
209	Acoustic Tom 1	Acustic Tom1	
210	Acoustic Tom 1 Rim	Acustic Tm1R	
211	Acoustic Tom 2	Acustic Tom2	
212	Acoustic Tom 2 Rim	Acustic Tm2R	
213	Acoustic Tom 3	Acustic Tom3	
214	Acoustic Tom 3 Rim	Acustic Tm3R	
215	Acoustic Tom 4	Acustic Tom4	
216	Acoustic Tom 4 Rim	Acustic Tm4R	
217	Acoustic Tom 5	Acustic Tom5	
218	Acoustic Tom 5 Rim	Acustic Tm5R	
219	Acoustic Tom 6	Acustic Tom6	
220	Acoustic Tom 6 Rim	Acustic Tm6R	
221	Funk Tom 1	Funk Tom1	
222	Funk Tom 1 Rim	Funk Tm1R	
223	Funk Tom 2	Funk Tom2	
224	Funk Tom 2 Rim	Funk Tm2R	
225	Funk Tom 3	Funk Tom3	
226	Funk Tom 3 Rim	Funk Tm3R	

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227	Funk Tom 4	Funk Tom4	
228	Funk Tom 4 R	Funk Tm4R	
229	Funk Tom 5	Funk Tom5	
230	Funk Tom 5 Rim	Funk Tm5R	
231	Funk Tom 6	Funk Tom6	
232	Funk Tom 6 Rim	Funk Tm6R	
233	Vintage Tom 1	Vintage Tom1	
234	Vintage Tom 2	Vintage Tom2	
235	Vintage Tom 3	Vintage Tom3	
236	Vintage Tom 4	Vintage Tom4	
237	Vintage Tom 5	Vintage Tom5	
238	Vintage Tom 6	Vintage Tom6	
239	Fusion Tom 1	Fusion Tom1	
240	Fusion Tom 2	Fusion Tom2	
241	Fusion Tom 3	Fusion Tom3	
242	Fusion Tom 4	Fusion Tom4	
243	Fusion Tom 5	Fusion Tom5	
244	Fusion Tom 6	Fusion Tom6	
245	1970's Tom 1	1970's Tom1	
246	1970's Tom 1 Rim	1970's Tm1R	
247	1970's Tom 2	1970's Tom2	
248	1970's Tom 2 Rim	1970's Tm2R	
249	1970's Tom 3	1970's Tom3	
250	1970's Tom 3 Rim	1970's Tm3R	
251	1970's Tom 4	1970's Tom4	
252	1970's Tom 4 Rim	1970's Tm4R	
253	808 Tom 1	808 Tom1	
254	808 Tom 2	808 Tom2	
255	808 Tom 3	808 Tom3	
256	808 Tom 4	808 Tom4	
257	808 Tom 5	808 Tom5	
258	808 Tom 6	808 Tom6	
259	808 Tom Fx 1	808 Tom Fx1	
260	808 Tom Fx 2	808 Tom Fx2	
261	909 Tom 1	909 Tom1	
262	909 Tom 2	909 Tom2	
263	909 Tom 3	909 Tom3	
264	909 Tom 4	909 Tom4	
265	909 Tom 5	909 Tom5	
266	909 Tom 6	909 Tom6	
267	909 Tom 7	909 Tom7	
268	909 Tom 8	909 Tom8	
269	EDM Tom 1	EDM Tom1	
270	EDM Tom 2	EDM Tom2	
271	EDM Tom 3	EDM Tom3	
272	EDM Tom 4	EDM Tom4	
273	Electronic Tom 1	Electro Tom1	
274	Electronic Tom 2	Electro Tom2	
275	Electronic Tom 3	Electro Tom3	
276	Electronic Tom 4	Electro Tom4	
277	Electronic Tom 5	Electro Tom5	
278	Electronic Tom 6	Electro Tom6	
279	Electronic Tom 7	Electro Tom7	
280	Electronic Tom 8	Electro Tom8	
281	Power Tom 1	Power Tom1	
282	Power Tom 2	Power Tom2	
283	Power Tom 3	Power Tom3	
284	Power Tom 4	Power Tom4	
285	Power Tom 5	Power Tom5	

286	Power Tom 6	Power Tom6	
287	Power Tom 7	Power Tom7	
288	Power Tom 8	Power Tom8	
289	Voice Tom 1	Voice Tom1	
290	Voice Tom 2	Voice Tom2	
291	Voice Tom 3	Voice Tom3	
292	Voice Tom 4	Voice Tom4	
293	Beatbox Tom 1	Beatbox Tom1	
294	Beatbox Tom 2	Beatbox Tom2	
295	Beatbox Tom 3	Beatbox Tom3	
296	Beatbox Tom 4	Beatbox Tom4	
297	Lo-Fi Tom 1	Lo-Fi Tom1	
298	Lo-Fi Tom 1 Rim	Lo-Fi Tm1R	
299	Lo-Fi Tom 2	Lo-Fi Tom 2	
300	Lo-Fi Tom 2 Rim	Lo-Fi Tm2R	
301	Lo-Fi Tom 3	Lo-Fi Tom 3	
302	Lo-Fi Tom 3 Rim	Lo-Fi Tm3R	
303	Lo-Fi Tom 4	Lo-Fi Tom 4	
304	Lo-Fi Tom 4 Rim	Lo-Fi Tm4R	
305	Lo-Fi Tom 5	Lo-Fi Tom 5	
306	Lo-Fi Tom 5 Rim	Lo-Fi Tm5R	
307	Lo-Fi Tom 6	Lo-Fi Tom 6	
308	Lo-Fi Tom 6 Rim	Lo-Fi Tm6R	
309	Junkyard Tom 1	Junkyrd Tom1	
310	Junkyard Tom 1 Rim	Junkyrd Tm1R	
311	Junkyard Tom 2	Junkyrd Tom2	
312	Junkyard Tom 2 Rim	Junkyrd Tm2R	
313	Junkyard Tom 3	Junkyrd Tom3	
314	Junkyard Tom 3 Rim	Junkyrd Tm3R	
315	Junkyard Tom 4	Junkyrd Tom4	
316	Junkyard Tom 4 Rim	Junkyrd Tm4R	
317	Junkyard Tom 5	Junkyrd Tom5	
318	Junkyard Tom 5 Rim	Junkyrd Tm5R	
319	Junkyard Tom 6	Junkyrd Tom6	
320	Junkyard Tom 6 Rim	Junkyrd Tm6R	
321	Techno Tom 1	Techno Tom1	
322	Techno Tom 1 Rim	Techno Tm1R	
323	Techkno Tom 2	Techno Tom2	
324	Techno Tom 2 Rim	Techno Tm2R	
325	Techno Tom 3	Techno Tom3	
326	Techno Tom 3 Rim	Techno Tm3R	
327	Techno Tom 4	Techno Tom4	
328	Techno Tom 4 Rim	Techno Tm4R	
329	Techno Tom 5	Techno Tom5	
330	Techno Tom 5 Rim	Techno Tm5R	
331	Techno Tom 6	Techno Tom6	
332	Techno Tom 6 Rim	Techno Tm6R	
333	Dubstep 1 Tom 1	Dubstp1 Tom1	
334	Dubstep 1 Tom 1 Rim	Dubstp1 Tm1R	
335	Dubstep 1 Tom 2	Dubstp1 Tom2	
336	Dubstep 1 Tom 2 Rim	Dubstp1 Tm2R	
337	Dubstep 1 Tom 3	Dubstp1 Tom3	
338	Dubstep 1 Tom 3 Rim	Dubstp1 Tm3R	
339	Dubstep 1 Tom 4	Dubstp1 Tom4	
340	Dubstep 1 Tom 4 Rim	Dubstp1 Tm4R	
341	Dubstep 2 Tom 1	Dubstp2 Tom1	
342	Dubstep 2 Tom 1 Rim	Dubstp2 Tm1R	
343	Dubstep 2 Tom 2	Dubstp2 Tom2	
344	Dubstep 2 Tom 2 Rim	Dubstp2 Tm2R	

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345	Dubstep 2 Tom 3	Dubstp2 Tom3	
346	Dubstep 2 Tom 3 Rim	Dubstp2 Tm3R	
347	Dubstep 2 Tom 4	Dubstp2 Tom4	
348	Dubstep 2 Tom 4 Rim	Dubstp2 Tm4R	
RIDE			
349	20" Custom Ride	20"Cust Ride	
350	20" Custom Ride Edge	20"Cust RdEg	
351	20" Custom Ride Bell	20"Cust RdBl	
352	20" Classic Ride	20"Clas Ride	
353	20" Classic Ride Edge	20"Clas RdEg	
354	20" Classic Ride Bell	20"Clas RdBl	
355	Brush Ride	Brush Ride	
356	Brush Ride Edge	Brush RdEg	
357	Brush Ride Bell	Brush RdBl	
358	20" Standard Ride	20"Std Ride	
359	20" Standard Ride Edge	20"Std RdEg	
360	20" Standard Ride Bell	20"Std RdBl	
361	20" Rock Ride	20"Rock Ride	
362	20" Rock Ride Edge	20"Rock RdEg	
363	20" Rock Ride Bell	20"Rock RdBl	
364	22" Acoustic Ride	22"Acus Ride	
365	22" Acoustic Ride Edge	22"Acus RdEg	
366	22" Acoustic Ride Bell	22"Acus RdBl	
367	20" Funk Ride	20"Funk Ride	
368	20" Funk Ride Edge	20"Funk RdEg	
369	20" Funk Ride Bell	20"Funk RdBl	
370	22" Funk Ride	22"Funk Ride	
371	22" Funk Ride Edge	22"Funk RdEg	
372	22" Funk Ride Bell	22"Funk RdBl	
373	20" Room Ride	20"Room Ride	
374	20" Room Ride Edge	20"Room RdEg	
375	20" Room Ride Bell	20"Room RdBl	
376	20" Metal Ride	20"Metl Ride	
377	20" Metal Ride Edge	20"Metl RdEg	
378	20" Metal Ride Bell	20"Metl RdBl	
379	Vintage Ride	Vintage Ride	
380	Vintage Ride Edge	Vintage RdEg	
381	Vintage Ride Bell	Vintage RdBl	
382	22" Big Band Ride	22"BgBd Ride	
383	22" Big Band Ride Edge	22"BgBd RdEg	
384	22" Big Band Ride Bell	22"BgBd RdBl	
385	Old School Ride	OldSch Ride	
386	Old School Ride Edge	OldSch RdEg	
387	Old School Ride Bell	OldSch RdBl	
388	808 Ride	808 Ride	
389	909 Ride	909 Ride	
390	Electronic Ride	Electro Ride	
391	Electronic Ride Edge	Electro RdEg	
392	Electronic Ride Bell	Electro RdBl	
393	Dance Ride	Dance Ride	
394	Dance Ride Edge	Dance RdEg	
395	Dance Ride Bell	Dance RdBl	
396	Lo-Fi Ride	Lo-Fi Ride	
397	Lo-Fi Ride Edge	Lo-Fi RdEg	
398	Lo-Fi Ride Bell	Lo-Fi RdBl	
399	Dubstep Ride 1	Dubstep Rd1	
400	Dubstep Ride 2	Dubstep Rd2	
401	Noise Ride	Noise Ride	
402	Noise Ride Edge	Noise RdEg	

403	Noise Ride Bell	Noise RdBl	
404	Techno Ride	Techno Ride	
405	Techno Ride Edge	Techno RdEg	
406	Techno Ride Bell	Techno RdBl	
CRASH			
407	16" Custom Crash	16"Custom Cr	
408	16" Custom Crash Edge	16"Custom CrEg	
409	18" Custom Crash	18"Custom Cr	
410	18" Custom Crash Edge	18"Custom CrEg	
411	16" Classic Crash	16"Clasic Cr	
412	16" Classic Crash Edge	16"Clas CrEg	
413	18" Classic Crash	18"Clasic Cr	
414	18" Classic Crash Edge	18"Clas CrEg	
415	Brush Crash 1	Brush Crash1	
416	Brush Crash Edge 1	Brush CrEg1	
417	Brush Crash 2	Brush Crash2	
418	Brush Crash Edge 2	Brush CrEg2	
419	16" Standard Crash 1	16"Std Cr1	*P
420	16" Standard Crash 1 Edge	16"Std Cr1Eg	*P
421	Rock Crash	Rock Crash	*P
422	Rock Crash Edge	Rock CrEg	*P
423	16" Acoustic Crash 1	16"Acus Cr1	*P
424	16" Acoustic Crash 1 Edge	16"Acs Cr1Eg	*P
425	18" Jazz Crash 1	18"Jazz Cr1	*P
426	18" Jazz Crash 1 Edge	18"Jaz Cr1Eg	*P
427	18" Jazz Crash 2	18"Jazz Cr2	*P
428	18" Jazz Crash 2 Edge	18"Jaz Cr2Eg	*P
429	16" Standard Crash 2	16"Std Cr2	*P
430	16" Standard Crash 2 Edge	16"Std Cr2Eg	*P
431	Funk Crash 1	Funk Crash 1	
432	Funk Crash 1 Edge	Funk Cr1Eg	
433	Funk Crash 2	Funk Crash 2	
434	Funk Crash 2 Edge	Funk Cr2Eg	
435	16" Acoustic Crash 2	16"Acus Cr2	*P
436	16" Acoustic Crash 2 Edge	16"Acs Cr2Eg	*P
437	Orchestra Crash 1	Orch Crash1	*P
438	Orchestra Crash 2	Orch Crash2	*P
439	Orchestra Crash 3	Orch Crash3	
440	Room Crash 1	Room Crash1	
441	Room Crash Edge 1	Room CrEg1	
442	Room Crash 2	Room Crash2	
443	Room Crash Edge 2	Room CrEg2	
444	1970's Crash	1970's Crash	*P
445	1970's Crash Edge	1970's CrEg	*P
446	Old School Crash	OldSch Crash	*P
447	Old School Crash Edge	OldSch CrEg	*P
448	Vintage Crash 1	Vintage Cr1	*P
449	Vintage Crash 1 Edge	Vintge Cr1Eg	*P
450	Vintage Crash 2	Vintage Cr2	*P
451	Vintage Crash 2 Edge	Vintge Cr2Eg	*P
452	Latin Crash 1	Latin Crash1	*P
453	Latin Crash 1 Edge	Latin Cr1Eg	*P
454	Latin Crash 2	Latin Crash2	*P
455	Latin Crash 2 Edge	Latin Cr2Eg	*P
456	China 1	China1	

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457	China 1 Edge	China1 Edge	
458	China 2	China2	
459	China 2 Edge	China2 Edge	
460	Splash 1	Splash1	
461	Splash 1 Edge	Splash1 Edge	
462	Splash 2	Splash2	
463	Splash 2 Edge	Splash2 Edge	
464	Splash 3	Splash 3	
465	Splash 3 Edge	Splash3 Edge	
466	808 Crash	808 Crash	
467	909 Crash	909 Crash	
468	EDM Crash 1	EDM Crash1	
469	EDM Crash 2	EDM Crash2	
470	FX Crash 1	FX Crash1	
471	FX Crash 2	FX Crash2	
472	FX Crash 3	FX Crash3	
473	HipHop Crash	HipHop Crash	
474	Electronic Crash 1	Electro Cr1	
475	Electronic Crash 2	Electro Cr2	
476	Dance Crash 1	Dance Crash1	
477	Dance Crash 2	Dance Crash2	
478	Lo-Fi Crash 1	Lo-Fi Crash1	
479	Lo-Fi Crash 1 Edge	Lo-Fi Cr2Eg	
480	Lo-Fi Crash 2	Lo-Fi Crash2	
481	Lo-Fi Crash 2 Edge	Lo-Fi Cr2Eg	
482	Techno Crash 1	Techno Cr1	
483	Techno Crash 1 Edge	Techno Cr1Eg	
484	Techno Crash 2	Techno Cr2	
485	Techno Crash 2 Edge	Techno Cr2Eg	
486	Dubstep Crash 1	Dubstep Cr1	
487	Dubstep Crash 2	Dubstep Cr2	
488	Beatbox Crash	Beatbox Cr	
489	Voice Crash 1	Voice Crash1	
490	Voice Crash 2	Voice Crash2	
491	Noise Crash 1	Noise Crash1	
492	Noise Crash 2	Noise Crash2	
<b>HIHAT</b>			
493	14" Custom Hi-hat	14"Custom HH	
494	14" Custom Hi-hat Edge	14"Cust HHEg	
495	14" Custom Hi-hat Pedal	14"Cust HHPd	
496	14" Custom Hi-hat Splash	14"Cust HHSp	
497	14" Classic Hi-hat	14"Clasic HH	
498	14" Classic Hi-hat Edge	14"Clas HHEg	
499	14" Classic Hi-hat Pedal	14"Clas HHPd	
500	14" Classic Hi-hat Splash	14"Clas HHSp	
501	Brush Hi-hat	Brush Hi-hat	
502	Brush Hi-hat Edge	Brush HHEg	
503	Brush Hi-hat Pedal	Brush HHPd	
504	Brush Hi-hat Splash	Brush HHSp	
505	14" Standard Hi-hat	14"Std HH	
506	14" Standard Hi-hat Edge	14"Std HHEg	
507	14" Standard Hi-hat Pedal	14"Std HHPd	
508	14" Standard Hi-hat Splash	14"Std HHSp	
509	14" Rock Hi-hat	14"Rock HH	
510	14" Rock Hi-hat Edge	14"Rock HHEg	
511	14" Rock Hi-hat Pedal	14"Rock HHPd	
512	14" Rock Hi-hat Splash	14"Rock HHSp	
513	14" Acoustic Hi-hat	14"Acous HH	

514	14" Acoustic Hi-hat Edge	14"Acus HHEg	
515	14" Acoustic Hi-hat Pedal	14"Acus HHPd	
516	14" Acoustic Hi-hat Splash	14"Acus HHSp	
517	14" Funk Hi-hat	14"Funk HH	
518	14" Funk Hi-hat Edge	14"Funk HHEg	
519	14" Funk Hi-hat Pedal	14"Funk HHPd	
520	14" Funk Hi-hat Splash	14"Funk HHSp	
521	14" Jazz Hi-hat	14"Jazz HH	
522	14" Jazz Hi-hat Edge	14"Jazz HHEg	
523	14" Jazz Hi-hat Pedal	14"Jazz HHPd	
524	14" Jazz Hi-hat Splash	14"Jazz HHSp	
525	808 Hi-hat	808 Hi-hat	
526	808 Hi-hat Pedal	808 HHPd	
527	808 Hi-hat Splash	808 HHSp	
528	909 Hi-hat	909 Hi-hat	
529	909 Hi-hat Pedal	909 HHPd	
530	909 Hi-hat Splash	909 HHSp	
531	EDM Hi-hat	EDM HH	
532	EDM Hi-hat Pedal	EDM HHPd	
533	Dance Hi-hat	Dance HH	
534	Dance Hi-hat Pedal	Dance HHPd	
535	Dance Hi-hat Splash	Dance HHSp	
536	Dubstep Hi-hat	Dubstep HH	
537	Dubstep Hi-hat Pedal	Dubstep HHPd	
538	Beatbox Hi-hat	Beatbox HH	
539	Beatbox Hi-hat Pedal	Beatbox HHPd	
540	Lo-Fi Hi-hat	Lo-Fi HH	
541	Lo-Fi Hi-hat Edge	Lo-Fi HHEg	
542	Lo-Fi Hi-hat Pedal	Lo-Fi HHPd	
543	Lo-Fi Hi-hat Splash	Lo-Fi HHSp	
<b>PERCUSSION</b>			
544	808 Claves	808 Claves	
545	808 CowBell	808 CowBell	
546	808 HiConga	808 HiConga	
547	808 MidConga	808 MidConga	
548	808 LowConga	808 LowConga	
549	808 Maracas	808 Maracas	
550	Taiko Drum	Taiko Drum	
551	Maracas	Maracas	
552	Sticks	Sticks	
553	Metronome Bell	MetroBell	
554	Vibra-slap 1	Vibra-slap 1	
555	Vibra-slap 2	Vibra-slap 2	
556	Vibra-slap 3	Vibra-slap 3	
557	Synthesis Percussion 1	SynPercus 1	
558	Synthesis Percussion 2	SynPercus 2	
559	High Q 1	High Q 1	
560	High Q 2	High Q 2	
561	Low Q 1	Low Q 1	
562	Low Q 2	Low Q 2	
563	Mute Hi Conga 1	MuteHiConga1	
564	Mute Hi Conga 2	MuteHiConga2	
565	Open Hi Conga 1	OpenHiConga1	
566	Open Hi Conga 2	OpenHiConga2	
567	Low Conga	Low Conga	
568	High Bongo	High Bongo	
569	Low Bongo	Low Bongo	
570	High Timbale 1	Hi Timbale1	

# Drum Instrument List

571	High Timbale 2	Hi Timbale2	
572	High Timbale 2 Rim	Hi Timbale2R	
573	High Timbale 3	Hi Timbale3	
574	High Timbale 3 Rim	Hi Timbale3R	
575	Low Timbale 1	Low Timbale1	
576	Low Timbale 2	Low Timbale2	
577	Low Timbale 2 Rim	Lo Timbale2R	
578	Low Timbale 3	Low Timbale3	
579	Low Timbale 4	Low Timbale4	
580	High Agogo	High Agogo	
581	Low Agogo	Low Agogo	
582	Claves 1	Claves 1	
583	Claves 2	Claves 2	
584	Jingle Bell 1	JingleBell 1	
585	Jingle Bell 2	JingleBell 2	
586	Cowbell	Cowbell	
587	Bell Tree 1	Bell Tree 1	
588	Bell Tree 2	Bell Tree 2	
589	Tambourine 1	Tambourine 1	
590	Tambourine 2	Tambourine 2	
591	Cabasa	Cabasa	
592	Long Guiro	Long Guiro	
593	Short Guiro	Short Guiro	
594	High Wood Block	Hi WoodBlock	
595	Low Wood Block	Lo WoodBlock	
596	Mute Cuica	Mute Cuica	
597	Open Cuica	Open Cuica	
598	Mute Triangle	MuteTriangle	
599	Open Triangle	OpenTriangle	
600	Click Bell	Click Bell	
601	Click	Click	
602	High Tabla 1	High Tabla 1	
603	Low Tabla	Low Tabla	
604	Mute High Tabla	MuteHiTabla	
605	Mute Low Tabla	MuteLowTabla	
606	High Tabla 2	High Tabla 2	
607	High Tabla 3	High Tabla 3	
608	Mute Bayao 1	Mute Bayao 1	
609	Mute Bayao 2	Mute Bayao 2	
610	Bayao 1	Bayao 1	
611	Bayao 2	Bayao 2	
612	Bayao 3	Bayao 3	
613	Bayao 4	Bayao 4	
614	Trigo 1	Trigo 1	
615	Trigo 2	Trigo 2	
616	Trigo 3	Trigo 3	
617	Trigo 4	Trigo 4	
618	Trigo 5	Trigo 5	
619	Taiko	Taiko	
620	High Timbale	Hi Timbale	
621	Timbale Stick	Timbal Stick	
622	Mute High Timbale	MtHiTimbale	
623	High Timbale 1 Rim	HiTimbal1R	
624	High Timbale 2 Rim	HiTimbal2R	
625	Mute High Timbale 1 Rim	MtHiTimbal1R	
626	Mute High Timbale 2 Rim	MtHiTimbal2R	
627	Low Timbale 1	Low Timbal 1	
628	Low Timbale 2	Low Timbal 2	
629	Mute Low Timbale 1	MtLoTimbal 1	

630	Mute Low Timbale 2	MtLoTimbal 2	
631	Balafon 1	Balafon 1	
632	Balafon 2	Balafon 2	
633	Balafon 3	Balafon 3	
634	Shaker 1	Shaker 1	
635	Shaker 2	Shaker 2	
636	Orchestra Timpani C2	OrTimpaniC2	
637	Orchestra Timpani Db2	OrTimpaniDb2	
638	Orchestra Timpani D2	OrTimpaniD2	
639	Orchestra Timpani Eb2	OrTimpaniEb2	
640	Orchestra Timpani E2	OrTimpaniE2	
641	Orchestra Timpani F2	OrTimpaniF2	
642	Orchestra Timpani Gb2	OrTimpaniGb2	
643	Orchestra Timpani G2	OrTimpaniG2	
644	Orchestra Timpani Ab2	OrTimpaniAb2	
645	Orchestra Timpani A2	OrTimpaniA2	
646	Orchestra Timpani Bb2	OrTimpaniBb2	
647	Orchestra Timpani B2	OrTimpaniB2	
648	Orchestra Timpani C3	OrTimpaniC3	
649	Orchestra Timpani Db3	OrTimpaniDb3	
650	Orchestra Timpani D3	OrTimpaniD3	
651	Orchestra Timpani Eb3	OrTimpaniEb3	
652	Orchestra Timpani E3	OrTimpaniE3	
653	Orchestra Timpani F3	OrTimpaniF3	
654	Orchestra Timpani Gb3	OrTimpaniGb3	
655	Orchestra Timpani G3	OrTimpaniG3	
656	Orchestra Timpani Ab3	OrTimpaniAb3	
657	Orchestra Timpani A3	OrTimpaniA3	
658	Orchestra Timpani Bb3	OrTimpaniBb3	
659	Orchestra Timpani B3	OrTimpaniB3	
660	Orchestra Timpani C4	OrTimpaniC4	
661	Marimba C3	Marimba C3	
662	Marimba Db3	Marimba Db3	
663	Marimba D3	Marimba D3	
664	Marimba Eb3	Marimba Eb3	
665	Marimba E3	Marimba E3	
666	Marimba F3	Marimba F3	
667	Marimba Gb3	Marimba Gb3	
668	Marimba G3	Marimba G3	
669	Marimba Ab3	Marimba Ab3	
670	Marimba A3	Marimba A3	
671	Marimba Bb3	Marimba Bb3	
672	Marimba B3	Marimba B3	
673	Marimba C4	Marimba C4	
674	Marimba Db4	Marimba Db4	
675	Marimba D4	Marimba D4	
676	Marimba Eb4	Marimba Eb4	
677	Marimba E4	Marimba E4	
678	Marimba F4	Marimba F4	
679	Marimba Gb4	Marimba Gb4	
680	Marimba G4	Marimba G4	
681	Marimba Ab4	Marimba Ab4	
682	Marimba A4	Marimba A4	
683	Marimba Bb4	Marimba Bb4	
684	Marimba B4	Marimba B4	
685	Marimba C5	Marimba C5	
686	Marimba Db5	Marimba Db5	
687	Marimba D5	Marimba D5	
688	Marimba Eb5	Marimba Eb5	

# Drum Instrument List

689	Marimba E5	Marimba E5	
690	Marimba F5	Marimba F5	
691	Marimba Gb5	Marimba Gb5	
692	Marimba G5	Marimba G5	
693	Marimba Ab5	Marimba Ab5	
694	Marimba A5	Marimba A5	
695	Marimba Bb5	Marimba Bb5	
696	Marimba B5	Marimba B5	
697	Marimba C6	Marimba C6	
698	Vibraphone C3	VibraphoneC3	
699	Vibraphone Db3	VibraphonDb3	
700	Vibraphone D3	VibraphoneD3	
701	Vibraphone Eb3	VibraphonEb3	
702	Vibraphone E3	VibraphoneE3	
703	Vibraphone F3	VibraphoneF3	
704	Vibraphone Gb3	VibraphonGb3	
705	Vibraphone G3	VibraphoneG3	
706	Vibraphone Ab3	VibraphonAb3	
707	Vibraphone A3	VibraphoneA3	
708	Vibraphone Bb3	VibraphonBb3	
709	Vibraphone B3	VibraphoneB3	
710	Vibraphone C4	VibraphoneC4	
711	Vibraphone Db4	VibraphonDb4	
712	Vibraphone D4	VibraphoneD4	
713	Vibraphone Eb4	VibraphonEb4	
714	Vibraphone E4	VibraphoneE4	
715	Vibraphone F4	VibraphoneF4	
716	Vibraphone Gb4	VibraphonGb4	
717	Vibraphone G4	VibraphoneG4	
718	Vibraphone Ab4	VibraphonAb4	
719	Vibraphone A4	VibraphoneA4	
720	Vibraphone Bb4	VibraphonBb4	
721	Vibraphone B4	VibraphoneB4	
722	Vibraphone C5	VibraphoneC5	
723	Vibraphone Db5	VibraphonDb5	
724	Vibraphone D5	VibraphoneD5	
725	Vibraphone Eb5	VibraphonEb5	
726	Vibraphone E5	VibraphoneE5	
727	Vibraphone F5	VibraphoneF5	
728	Vibraphone Gb5	VibraphonGb5	
729	Vibraphone G5	VibraphoneG5	
730	Vibraphone Ab5	VibraphonAb5	
731	Vibraphone A5	VibraphoneA5	
732	Vibraphone Bb5	VibraphonBb5	
733	Vibraphone B5	VibraphoneB5	
734	Vibraphone C6	VibraphoneC6	
735	Celesta C3	Celesta C3	
736	Celesta Db3	Celesta Db3	
737	Celesta D3	Celesta D3	
738	Celesta Eb3	Celesta Eb3	
739	Celesta E3	Celesta E3	
740	Celesta F3	Celesta F3	
741	Celesta Gb3	Celesta Gb3	
742	Celesta G3	Celesta G3	
743	Celesta Ab3	Celesta Ab3	
744	Celesta A3	Celesta A3	
745	Celesta Bb3	Celesta Bb3	
746	Celesta B3	Celesta B3	
747	Celesta C4	Celesta C4	

748	Celesta Db4	Celesta Db4	
749	Celesta D4	Celesta D4	
750	Celesta Eb4	Celesta Eb4	
751	Celesta E4	Celesta E4	
752	Celesta F4	Celesta F4	
753	Celesta Gb4	Celesta Gb4	
754	Celesta G4	Celesta G4	
755	Celesta Ab4	Celesta Ab4	
756	Celesta A4	Celesta A4	
757	Celesta Bb4	Celesta Bb4	
758	Celesta B4	Celesta B4	
759	Celesta C5	Celesta C5	
760	Celesta Db5	Celesta Db5	
761	Celesta D5	Celesta D5	
762	Celesta Eb5	Celesta Eb5	
763	Celesta E5	Celesta E5	
764	Celesta F5	Celesta F5	
765	Celesta Gb5	Celesta Gb5	
766	Celesta G5	Celesta G5	
767	Celesta Ab5	Celesta Ab5	
768	Celesta A5	Celesta A5	
769	Celesta Bb5	Celesta Bb5	
770	Celesta B5	Celesta B5	
771	Celesta C6	Celesta C6	
<b>CHINESE</b>			
772	Dagu 1	Dagu 1	
773	Dagu Rim 1	Dagu Rim 1	
774	Dagu Stick 1	Dagu Stick 1	
775	Dagu Roll 1	Dagu Roll 1	
776	Dagu 2	Dagu 2	
777	Dagu Rim 2	Dagu Rim 2	
778	Dagu Stick 2	Dagu Stick 2	
779	Dagu Roll 2	Dagu Roll 2	
780	Dagu 3	Dagu 3	
781	Dagu Rim 3	Dagu Rim 3	
782	Dagu Stick 3	Dagu Stick 3	
783	Dagu Roll 3	Dagu Roll 3	
784	Ban	Ban	
785	Bangu	Bangu	
786	Nan Bang	Nan Bang	
787	Xiangjiaogu	Xiangjiaogu	
788	Damuyu 1	Damuyu 1	
789	Damuyu 2	Damuyu 2	
790	Damuyu 3	Damuyu 3	
791	Damuyu 4	Damuyu 4	
792	Xiaomuyu 1	Xiaomuyu 1	
793	Xiaomuyu 2	Xiaomuyu 2	
794	Xiaomuyu 3	Xiaomuyu 3	
795	Xiaomuyu 4	Xiaomuyu 4	
796	Paigu 1	Paigu 1	
797	Paigu 2	Paigu 2	
798	Paigu 3	Paigu 3	
799	Paigu 4	Paigu 4	
800	Mangluo	Mangluo	
801	Maluo	Maluo	
802	Suluo	Suluo	
803	Daluo 1	Daluo 1	
804	Daluo 2	Daluo 2	
805	Dabo 1	Dabo 1	

# Drum Instrument List

806	Dabo 2	Dabo 2	
807	Xiaobo	Xiaobo	
808	Xiaoluo	Xiaoluo	
809	Penglin 1	Penglin 1	
810	Penglin 2	Penglin 2	
811	Sanmaluo	Sanmaluo	
812	Gou Luo	Gou Luo	
FX			
813	FX 1	FX 1	
814	FX 2	FX 2	
815	FX 3	FX 3	
816	FX 4	FX 4	
817	FX 5	FX 5	
818	FX 6	FX 6	
819	FX 7	FX 7	
820	FX 8	FX 8	
821	FX 9	FX 9	
822	FX 10	FX 10	
823	FX 11	FX 11	
824	FX 12	FX 12	
825	FX 13	FX 13	
826	FX 14	FX 14	
827	FX 15	FX 15	
828	FX 16	FX 16	
829	FX 17	FX 17	
830	FX 18	FX 18	
831	FX 19	FX 19	
832	FX 20	FX 20	
833	FX 21	FX 21	
834	FX 22	FX 22	
835	FX 23	FX 23	
836	FX 24	FX 24	
837	FX 25	FX 25	
838	FX 26	FX 26	
839	FX 27	FX 27	
840	FX 28	FX 28	
841	FX 29	FX 29	
842	FX 30	FX 30	
843	FX 31	FX 31	
844	EDM FX 1	EDM FX 1	
845	EDM FX 2	EDM FX 2	
846	EDM FX 3	EDM FX 3	
847	EDM FX 4	EDM FX 4	
848	EDM FX Stick	EDM FX Stick	
849	Beatbox FX 1	Beatbox FX1	
850	Beatbox FX 2	Beatbox FX2	
851	Beatbox FX 3	Beatbox FX3	
852	Beatbox FX 4	Beatbox FX4	
853	Beatbox FX 5	Beatbox FX5	
854	Beatbox FX 6	Beatbox FX6	
855	FX Q	FX Q	
856	Slap	Slap	
857	Scratch Push	Scratch Push	
858	Scratch Pull	Scratch Pull	
859	Click Noise	Click Noise	
860	Guitar Fret Noise	Fret Noise	
861	Breath Noise	Breath Noise	
862	Seashore	Seashore	
863	Bird Tweet	Bird Tweet	

864	Telephone Ring	Telephone	
865	Helicopter	Helicopter	
866	Applause	Applause	
867	Gunshot	Gunshot	
868	Reverse Cymbal	RevCymbal	
869	Reverse Bass Drum 1	Reverse BD1	
870	Reverse Bass Drum 2	Reverse BD2	
871	Bass Drop 1	Bass Drop1	
872	Bass Drop 2	Bass Drop2	
873	One	One	
874	Two	Two	
875	Three	Three	
876	Four	Four	
877	Five	Five	
878	Six	Six	
879	Seven	Seven	
880	Eight	Eight	
881	Nine	Nine	
882	Ti	Ti	
883	Ta	Ta	
884	Ei	Ei	
885	An	An	
886	E	E	
887	Click 1	Click 1	
888	Click 2	Click 2	
889	Click 3	Click 3	
890	Click 4	Click 4	
891	Click 5	Click 5	
892	Click 6	Click 6	
893	Click 7	Click 7	
894	Click 8	Click 8	
895	Click 9	Click 9	
896	Click 10	Click 10	
897	One & Stick	One&Stick	
898	Two & Stick	Two&Stick	
899	Three & Stick	Three&Stick	
900	Four & Stick	Four&Stick	
901	Five & Stick	Five&Stick	
902	Six & Stick	Six&Stick	
903	Seven & Stick	Seven&Stick	
904	Eight & Stick	Eight&Stick	
905	Nine & Stick	Nine&Stick	
906	Mute	Mute	

# Song List

No.	LCD Name
Wav	
1	Hard Rock
2	Blues 1
3	Pop Funk
4	70's Funk
5	Hip Hop 1
6	Dubstep
7	Smooth Jazz
8	Big Band 1
9	Trance
10	House
11	Reggae 1
12	Pop Rock
13	Jazz Fusion
14	Samba 1
15	Latin Pop
16	Metal
17	Neo Soul
18	Jazz Funk 1
19	Bossa Nova 1
20	Synth Funk
New Pattern	
21	Folk
22	Funk Shuffle
23	Eletro Pop 1
24	Pop 1
25	Bossa Nova 2
26	Samba 2
27	Fusion 1
28	Eletro Pop 2
29	Pop Shuffle
30	Rock 1
31	Latin 1
32	Latin 2
33	Salsa 1
34	Smooove
35	Upbeat Funk
36	70's Funk
37	Jazz 1
38	6/8 Soul 1
39	Fusion 2
40	Dance Funk
41	Dance 1
42	DJ. House
43	Eletronic Pop 3
44	Hip Hop 2
45	Pop 2
46	Pop 3
47	R&B 1
48	Reggae 2
49	Rock 2
50	Rock 3
Pattern Loop	
51	Blues Funk
52	Fusion 3
53	Cool Jazz
54	Ballad

55	Samba 3
56	Vintg HipHop
57	Nu Jazz Funk
58	Soul
59	R&B 2
60	Big Band 2
61	Ska
62	Classic Rock
63	Hard HipHop
64	Vintg DncPop
65	Nu Metal
66	Salsa 2
67	Eu Hip Hop
68	Bossa Nova 3
69	Fusion 4
70	8 Beat Pop
71	Jazz Funk 2
72	Swing Big Band
73	Raggae 1
74	60's Pop
75	Vintage Funk
76	Trance
77	Heavy Rock
78	Swing
79	Punk
80	8 Beat
81	Disco House
82	3/4 Folk
83	Samba 4
84	Latin Rock 1
85	Reggae 3
86	Dance 2
87	Country Pop
88	Country
89	Rock Ballad
90	Dance Pop
91	Bebop
92	Rock N'Roll
93	Band Jazz
94	Blues 2
95	3/4 Jazz
96	80's Metal
97	Drum & Bass
98	6/8 Soul 2
99	Latin Swing
100	Funk
101	Break Beat
102	Latin Jazz
103	Trip Hop
104	Bright Pop
105	Neo Thrash
106	Big Band 3
107	Mambo
108	Shuffle
109	Guitar Bossa
110	Latin Dance
Perc Loop	
111	Indonesia

112	Latin 3
113	Bossa 3
114	Samba 5
115	3/4 Pop
116	Pop 4
117	Jazz 2
118	Reggae 4
119	Reggae 5
120	Latin Rock 2

# GM Drum Kit List

No.	GM Percussion Kit	Rock Set(BANK0)	Standard Set(BANK8)	Funk Set(BANK16)	808 Set(BANK24)
Eb1[27]	High Q				
E 1[28]	Slap				
F 1[29]	Scratch Push				
F#1[30]	Scratch Pull				
G 1[31]	Sticks				
G#1[32]	Square Click				
A 1[33]	Metronome Click				
Bb1[34]	Metronome Bell				
B 1[35]	Acoustic Bass Drum				
C 2[36]	Bass Drum 1	Rock Kick	Standard Kick	Funk Kick	808 Kick
C#2[37]	Side Stick				
D 2[38]	Acoustic Snare	Rock Snare 1	Standard Snare 1	Funk Snare 1	808 Snare 1
Eb2[39]	Hand Clap				
E 2[40]	Electric Snare	Rock Snare 2	Standard Snare 2	Funk Snare 2	808 Snare 2
F 2[41]	Low Floor Tom	Rock Tom 4	Standard Tom 4	Funk Tom 4	808 Tom 4
F#2[42]	Closed Hi-hat	Rock Closed Hi-hat	Standard Closed Hi-hat	Funk Closed Hi-hat	808 Closed Hi-hat
G 2[43]	High Floor Tom	Rock Tom 3	Standard Tom 3	Funk Tom 3	808 Tom 3
G#2[44]	Pedal Hi-hat	Rock Pedal Hi-hat	Standard Pedal Hi-hat	Funk Pedal Hi-hat	808 Pedal Hi-hat
A 2[45]	Low Tom	Rock Tom 2	Standard Tom 2	Funk Tom 2	808 Tom 2
Bb2[46]	Open Hi-hat	Rock Open Hi-hat	Standard Open Hi-hat	Funk Open Hi-hat	808 Open Hi-hat
B 2[47]	Low-Mid Tom				
C 3[48]	High Mid Tom	Rock Tom 1	Standard Tom 1	Funk Tom 1	808 Tom 1
C#3[49]	Crash Cymbal 1	Rock Crash 1	Standard Crash 1	Funk Crash 1	808 Crash 1
D 3[50]	High Tom 1				
Eb3[51]	Ride Cymbal 1	Rock Ride	Standard Ride	Funk Ride	808 Ride
E 3[52]	China Cymbal				
F 3[53]	Ride Bell	Rock Ride Bell	Standard Ride Bell	Funk Ride Bell	808 Ride Bell
F#3[54]	Tambourine				
G 3[55]	Splash Cymbal				
G#3[56]	Cowbell				
A 3[57]	Crash Cymbal 2	Rock Crash 2	Standard Crash 2	Funk Crash 2	808 Crash 2
Bb3[58]	Vibra-slap				
B 3[59]	Ride Cymbal 2				
C 4[60]	High Bongo				
C#4[61]	Low Bongo				
D 4[62]	Mute Hi Conga				
Eb4[63]	Open Hi Conga				
E 4[64]	Low Conga				
F 4[65]	High Timbale				
F#4[66]	Low Timbale				
G 4[67]	High Agogo				
G#4[68]	Low Agogo				
A 4[69]	Cabasa				
Bb4[70]	Maracas				
B 4[71]	Short Whistle				
C 5[72]	Long Whistle				
C#5[73]	Short Guiro				
D 5[74]	Long Guiro				
Eb5[75]	Claves				
E 5[76]	Hi Wood Block				
F 5[77]	LowWood Block				
F#5[78]	Mute Cuica				
G 5[79]	Open Cuica				
G#5[80]	Mute Triangle				
A 5[81]	Open Triangle				
Bb5[82]	Shaker				
B 5[83]	Jingle Bell				
C 6[84]	Bell Tree				
C#6[85]	Castanets				
D 6[86]	Mute Surdo				
Eb6[87]	Open Surdo				

# GM Drum Kit List

No.	909 Set(BANK25)	Acoustic Set(BANK32)	Brush Set(BANK40)	Dupstep1 Set(BANK48)	Dupstep2 Set(BANK56)
Eb1[27]					
E 1[28]					
F 1[29]					
F#1[30]					
G 1[31]					
G#1[32]					
A 1[33]					
Bb1[34]					
B 1[35]					
C 2[36]	909 Kick	Acoustic Kick	Brush Kick	Dupstep1 Kick	Dupstep2 Kick
C#2[37]					
D 2[38]	909 Snare 1	Acoustic Snare 1	Brush Snare 1	Dupstep1 Snare 1	Dupstep2 Snare 1
Eb2[39]					
E 2[40]	909 Snare 2	Acoustic Snare 2	Brush Snare 2	Dupstep1 Snare 2	Dupstep2 Snare 2
F 2[41]	909 Tom 4	Acoustic Tom 4	Brush Tom 4	Dupstep1 Tom 4	Dupstep2 Tom 4
F#2[42]	909 Closed Hi-hat	Acoustic Closed Hi-hat	Brush Closed Hi-hat	Dupstep1 Closed Hi-hat	Dupstep2 Closed Hi-hat
G 2[43]	909 Tom 3	Acoustic Tom 3	Brush Tom 3	Dupstep1 Tom 3	Dupstep2 Tom 3
G#2[44]	909 Pedal Hi-hat	Acoustic Pedal Hi-hat	Brush Pedal Hi-hat	Dupstep1 Pedal Hi-hat	Dupstep2 Pedal Hi-hat
A 2[45]	909 Tom 2	Acoustic Tom 2	Brush Tom 2	Dupstep1 Tom 2	Dupstep2 Tom 2
Bb2[46]	909 Open Hi-hat	Acoustic Open Hi-hat	Brush Open Hi-hat	Dupstep1 Open Hi-hat	Dupstep2 Open Hi-hat
B 2[47]					
C 3[48]	909 Tom 1	Acoustic Tom 1	Brush Tom 1	Dupstep1 Tom 1	Dupstep2 Tom 1
C#3[49]	909 Crash 1	Acoustic Crash 1	Brush Crash 1	Dupstep1 Crash 1	Dupstep2 Crash 1
D 3[50]					
Eb3[51]	909 Ride	Acoustic Ride	Brush Ride	Dupstep1 Ride	Dupstep2 Ride
E 3[52]					
F 3[53]	909 Ride Bell	Acoustic Ride Bell	Brush Ride Bell	Dupstep1 Ride Bell	Dupstep2 Ride Bell
F#3[54]					
G 3[55]					
G#3[56]					
A 3[57]	909 Crash 2	Acoustic Crash 2	Brush Crash 2	Dupstep1 Crash 2	Dupstep2 Crash 2
Bb3[58]					
B 3[59]					
C 4[60]					
C#4[61]					
D 4[62]					
Eb4[63]					
E 4[64]					
F 4[65]					
F#4[66]					
G 4[67]					
G#4[68]					
A 4[69]					
Bb4[70]					
B 4[71]					
C 5[72]					
C#5[73]					
D 5[74]					
Eb5[75]					
E 5[76]					
F 5[77]					
F#5[78]					
G 5[79]					
G#5[80]					
A 5[81]					
Bb5[82]					
B 5[83]					
C 6[84]					
C#6[85]					
D 6[86]					
Eb6[87]					

# GM Backing Sound List

PIANO		BASS		BRASS		PAD	
1	Acoustic Grand Piano	33	Acoustic Bass	57	Trumpet	89	Pad1 (newage)
2	Bright Acoustic Piano	34	Finger Bass	58	Trombone	90	Pad2 (warm)
3	Electric Grand Piano	35	Pick Bass	59	Tuba	91	Pad3 (polysynth)
4	Honky-Tonk Piano	36	Fretless Bass	60	Muted Trumpet	92	Pad4 (choir)
5	E.Piano 1	37	Slap Bass 1	61	French Horn	93	Pad5 (bowed)
6	E.Piano 2	38	Slap Bass 2	62	Brass Section	94	Pad6 (metallic)
7	Harpsichord	39	Synth Bass 1	63	Synth Brass 1	95	Pad7 (halo)
8	Clavi	40	Synth Bass 2	64	Synth Brass 2	96	Pad8 (sweep)
MALLET		SOUNDEFFECTS		REED		EFFECTS	
9	Celesta	121	Guitar Fret Noise	65	Soprano Sax	97	FX1 (rain)
10	Glockenspiel	122	Breath Noise	66	Alto Sax	98	FX2 (soundtrack)
11	Music Box	123	Seashore	67	Tenor Sax	99	FX3 (crystal)
12	Vibraphone	124	Bird Tweet	68	Baritone Sax	100	FX4 (atmosphere)
13	Marimba	125	Telephone Ring	69	Oboe	101	FX5 (brightness)
14	Xylophone	126	Helicopter	70	English Horn	102	FX6 (goblins)
15	Tubular Bells	127	Applause	71	Bassoon	103	FX7 (echoes)
16	Dulcimer	128	Gunshot	72	Clarinet	104	FX8 (sci-fi)
ORGAN		STRINGS		PIPE		ETHNIC	
17	Drawbar Organ	41	Violin	73	Piccolo	105	Sitar
18	Percussive Organ	42	Viola	74	Flute	106	Banjo
19	Rock Organ	43	Cello	75	Recorder	107	Shamisen
20	Church Organ	44	Contrabass	76	Pan Flute	108	Koto
21	Reed Organ	45	Tremolo Strings	77	Blown Bottle	109	Kalimba
22	Accordion	46	Pizzicato Strings	78	Shakuhachi	110	Bagpipe
23	Harmonica	47	Orchestral Harp	79	Whistle	111	Fiddle
24	Tango Accordion	48	Timpani	80	Ocarina	112	Shanai
GUITAR		STRINGSENSEMBLE		LEAD		PERCUSSIVE	
25	Nylon Guitar	49	Strings Ensemble 1	81	Lead1 (square)	113	Tinkle Bell
26	Steel Guitar	50	Strings Ensemble 2	82	Lead2 (sawtooth)	114	Agogo
27	Jazz Guitar	51	Synth Strings 1	83	Lead3 (calliope)	115	Steel Drums
28	Clean Guitar	52	Synth Strings 2	84	Lead4 (cliff)	116	Wood Block
29	Muted Guitar	53	Choir Aahs	85	Lead5 (charang)	117	Taiko Drum
30	Overdriven Guitar	54	Voice Oohs	86	Lead6 (voice)	118	Melodic Tom
31	Distortion Guitar	55	Synth Voice	87	Lead7 (fifths)	119	Synth Drum
32	Guitar Harmonics	56	Orchestra Hit	88	Lead8 (bass & lead)	120	Reverse Cymbal

# MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1-16, OFF 1-16, OFF	1-16, OFF 1-16, OFF	Memorized
Mode	Default Messages Altered	x x *****	x x *****	
Note Number :	True Voice	0-127 *****	0-127 0-127	Memorized
Velocity	Note On Note Off	o 9nH, v = 1-127 o 9nH, v = 0	o x	
After Key's Touch Channel's		o x	o x	
Pitch Bend		x	x	
Control Change	0	x	o	Bank Select
	1	x	o	Modulation
	4	o (Pedal)	o	Foot Controller
	5	x	o	Snare Position
	6	x	o	Portamento Time
	7	x	o	Data Entry
	10	x	o	Volume
	11	x	o	Expression
	16	o (Snare)	o	Snare Position
	64	x	o	Sustain Pedal
	65	x	o	Portamento On/Off
	66	x	o	Sostenuto Pedal
	67	x	o	Soft Pedal
	80	x	o	Reverb Program
81	x	o	Chorus Program	
91	x	o	Reverb Level	
93	x	o	Chorus Level	
120	x	o	All Sound Off	
121	x	o	Reset All Controllers	
123	x	o	All Notes Off	
Program Change	: True Number	o *****	o 0-127	
System Exclusive		x	o	
System Common	:Song Position :Song Select :Tune Request	x x x	x x x	
System RealTime	:Clock :Commands	o o	o x	Start/Stop only
Aux Messages	: Local On/Off : All Notes Off : Acting Sensing : Reset	x x x x	x x o x	

X : NO O : YES

# Prompt Messages

Index	LCD display	Description
1	Succeeded!	The operation succeeds, for example, load or save data.
2	Save failed!	Data saving failed.
3	Load failed!	Data loading failed.
4	Copy failed!	Data copying failed.
5	SD Card error!	SD card has problem.
6	Delete failed!	Failed to delete file.
7	Too many files in the folder	There are too many files in the specified folder on SD card.
8	Recording has reached the maximum time!	The recording memory on SD card is full.
9	SD card is locked!	Writing data on SD card is protected.
10	No file!	There is no corresponding file in the specified directory on SD card.
11	Unsupported format!	SD card or the file format on SD is not supported.
12	No SD card!	No SD card is inserted.
13	Reading SD card.	Reading data from the SD card.
14	The file can't be overwritten!	The file cannot be overwritten.
15	No enough user memory!	Insufficient memory space when loading user sounds.
16	Waiting.....!	Please wait.
17	The data of user kit will be lost! Are you sure?	Tips before resetting user kits to factory settings.
18	The data of user sound will be lost! Are you sure?	Tips before deleting user sounds.
19	The data of trigger will be lost! Are you sure?	Tips before resetting trigger parameters to factory settings.
20	All user data will be lost! Are you sure?	Tips before restoring factory settings.
21	Please don't turn off the power!	Prompt not to turn off the power when optimizing the user sound memory.

