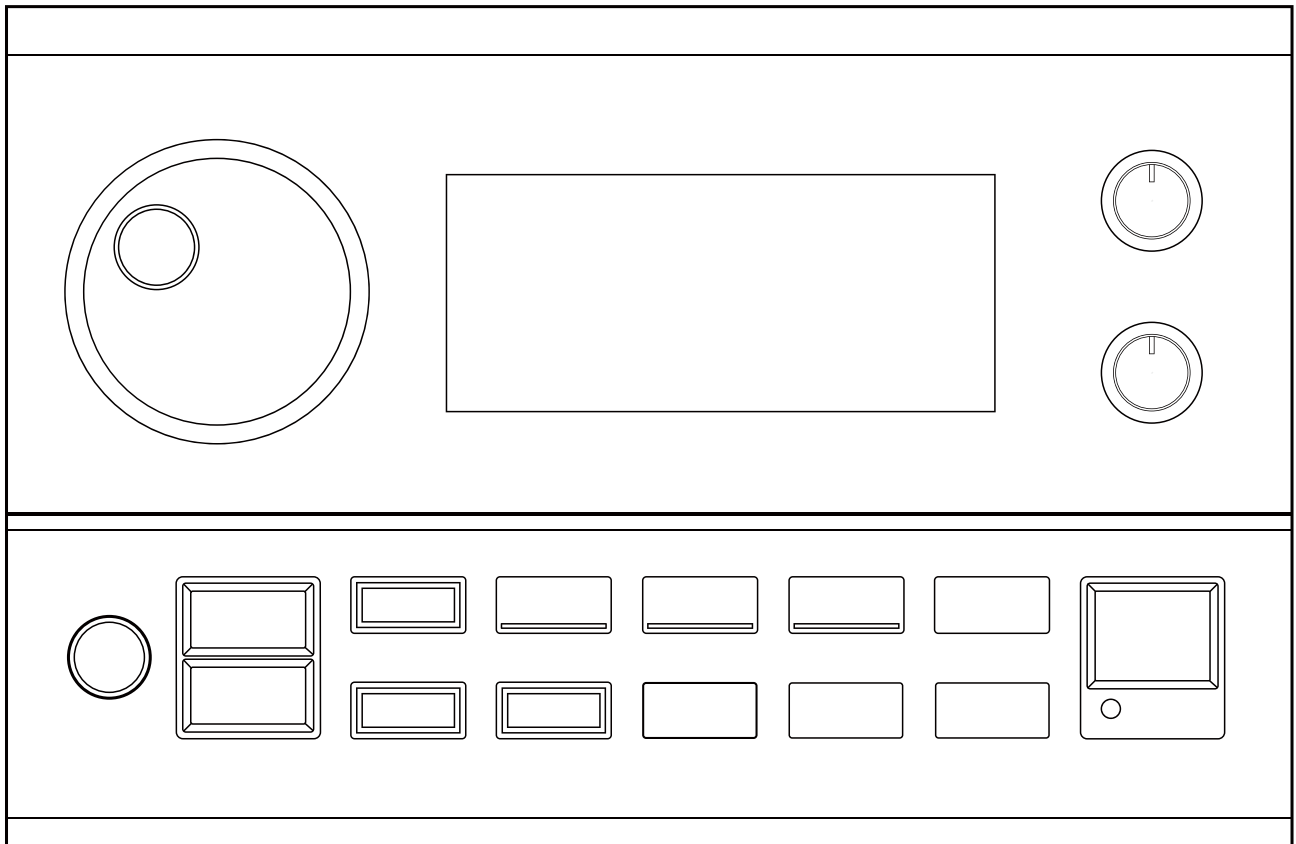


MEDELI



MZ53 SERIES

DIGITAL DRUM
OWNER'S MANUAL

Important Messages

Please read this page carefully before operating and keep this manual properly for convenient reference in the future.

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 this product may be subject to strong electromagnetic interference. Should the circumstances arise, please follow the relevant instructions in this manual to restore the product to its default settings. Otherwise, try moving the product to another location.

Power supply

Please connect the power adapter provided in the package to a power socket with the correct voltage. DO NOT connect to power sources with unmatched voltages. Unplug this device during thunderstorms or when the device is not in active use.

Connections

Power off all devices before making connections. This will effectively prevent potential malfunctioning & damage.

Precautions

To avoid deformation, discoloration or other more serious damages, DO NOT place this instrument in:

- direct sunlight
- extremely hot environments or too close to a heat source (such as a heater)
- severe cold such as snowy and icy outdoors
- dusty environments, or places with high temperatures, high humidity, or unstable locations where strong vibrations or displacements may occur
- proximity of strong electromagnetic fields

Interference

To avoid unwanted interference, please keep this instrument at a proper distance from televisions, radios, and cell phones.

Maintenance

Use only soft, dry cloth for cleaning. DO NOT use thinners, solvents, detergents, or wipes soaked with chemicals. DO NOT apply excessive force when handling switches & knobs.

This instrument is safe for use in tropical climates with a maximum operating temperature of 45°C.

The maximum operating altitude is determined by the selected model of the power adapter.

Handling

Please avoid getting scraps of paper, metal, or other materials inside this instrument. If this happens, unplug this unit and have it checked by a qualified maintenance personnel.

Also, unplug this unit before moving it to another location.

Contents

Main Features	4	Song	19
		Playing Songs	19
Panel & Display Description	5	Selecting a Song	19
Front Panel	5	Editing Song Parameters	19
Rear Panel	6		
Main Display	7	Recording	20
		Recording Preparation	20
Getting Ready to Play	7	Recording without Backing Song	20
Setting Up the Power Supply	7	Recording with Backing Song	21
Turning the Power On/Off	8	Recording Playback	21
Factory Reset	8		
		USB Audio	21
Drum Kit	9		
Preset Drum Kit and User Drum Kit	9	Menu	22
Selecting a Drum Kit	9	Selecting a Menu	22
		Trigger Setting	22
Sound (Instrument)	10	Bluetooth	24
Selecting and Editing Sounds	10	MIDI Note	24
Saving User Kit	10	MIDI Setup	25
		Option	26
Kit Effect	11	Factory Reset	26
Selecting an Effect	11		
Reverb	12	Prompt Messages	27
EQ (Equalizer)	12		
Compressor	13	Specifications	27
Mixer	13	Appendices	
		Drum Kit List	28
Coach Mode	14	Drum Sound List	29
Beat Check	14	Hi-Hat Combination List	33
Quiet Count	15	Song List	34
Speed Challenge	16	GM Drum Kit List	35
Change Up	17	GM Backing Sound List	38
		MIDI Implementation List	39
Using the Click	18		

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!

■ PURE DRUM - Bringing Natural and Realistic Sound!

This unique PURE DRUM technology greatly improves the sound quality of digital drums, bringing a more natural and realistic feel when playing and listening. No matter playing stroke rolls or striking pads with different velocity, it lets you enjoy the subtle nuances and wide dynamics of an acoustic drum kit.

■ USB Audio - Achieving Instant Audio Recording with a DAW

This module can be used as an audio interface with stereo outputs. With just one USB cable, you can connect the module to any DAW on your computer and directly record your performance as audio files.

■ Playing Freely Along with Your Favorite Music

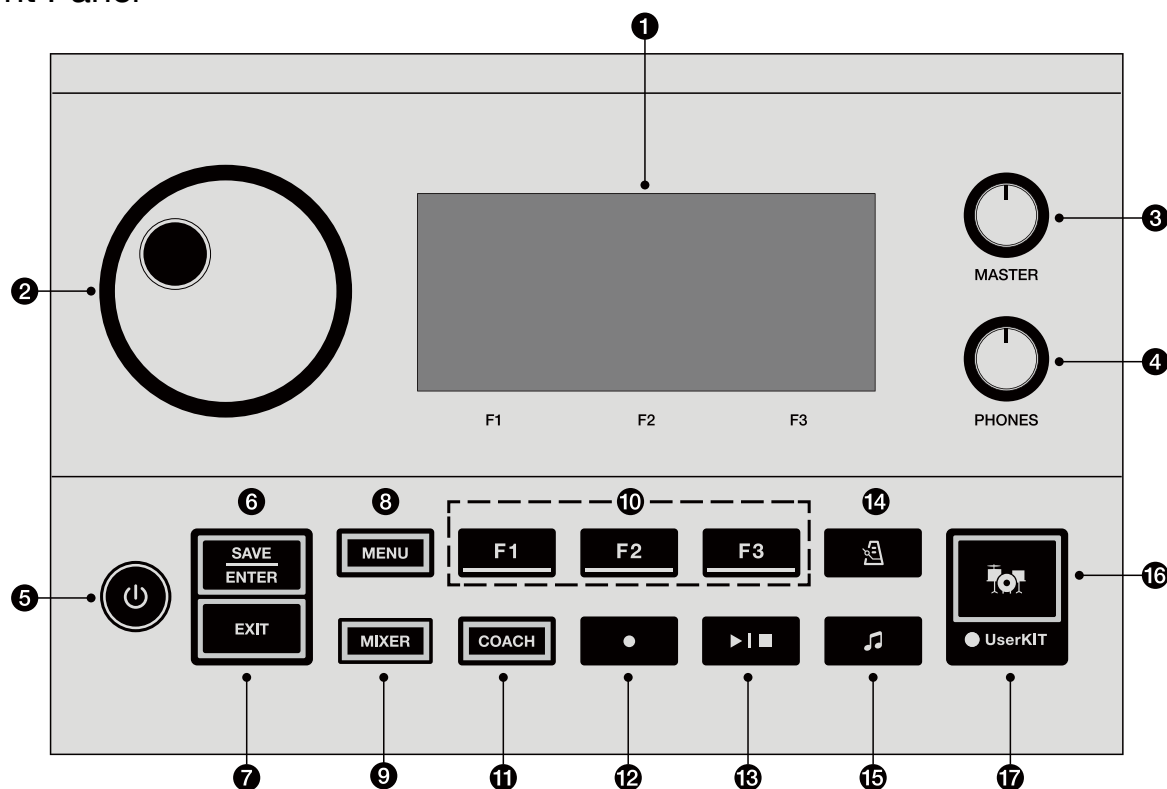
It supports playing songs from USB Audio input, Bluetooth Audio input and Aux input. You can play your favorite music and drum along to improve your performance skills and enjoy the fun of drumming.

■ Streamlined Panel Layout with Intuitive Control

The streamlined panel design provides intuitive control over the functions, letting you tweak the parameters with ease.

Panel & Display Description

Front Panel



1. LCD Display

Display parameters of the module.

2. Data Dial

Adjust parameter settings.

3. [MASTER] Knob

Adjust the output volume.

4. [PHONES] Knob

Adjust the phones volume.

5. [] Button

Turn the power on or off.

6. [SAVE·ENTER] Button

To save or to confirm.

7. [EXIT] Button

Exit or go back.

8. [MENU] Button

Enter the Menu option list.

9. [MIXER] Button

Enter the Mixer menu.

10. [F1] ~ [F3] Buttons

Execute the corresponding on-screen functions.

11. [COACH] Button

Enter the Coach mode.

12. [] Button

Enter the Record mode.

13. [] Button

Play/stop the song, start/stop the recording, or start/stop the coach mode practice.

14. [] Button

Start/stop the click; edit the click setting.

15. [] Button

Enter the Song menu.

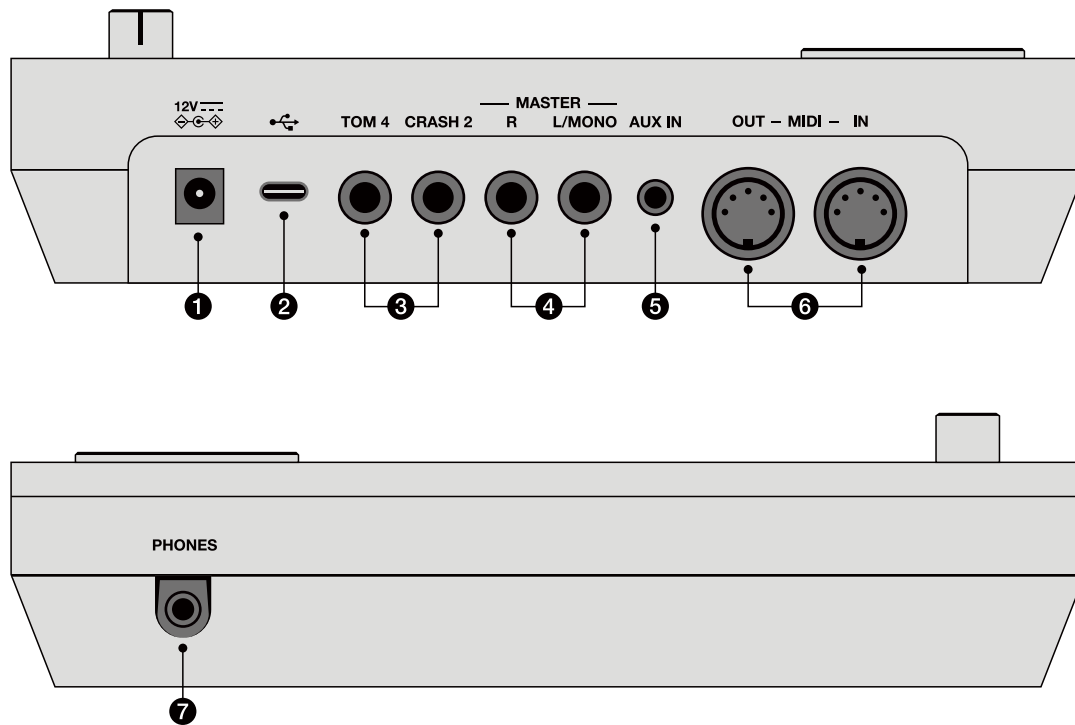
16. [] Button

Enter the Kit menu; switch between Preset kit and User kit.

17. [] Indicator

The indicator turns on when the current kit is a user kit.

Rear Panel



1. DC IN Jack

For connecting the specified power adapter.

2. USB Jack

For connecting to a computer or a mobile device to transmit/receive MIDI and audio data.

Note: The USB-C jack doesn't support power supply or charging.

3. External Trigger Input Jacks (2 x 1/4")

For connecting additional Tom 4 and Crash 2.

4. MASTER 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.

5. AUX IN Jack (1/8")

For connecting an external audio player, such as an MP3 or a mobile phone.

6. MIDI Jacks (OUT, IN)

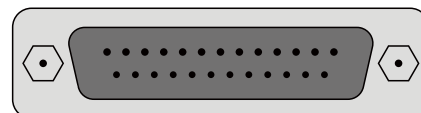
For connecting external MIDI devices to transmit/receive MIDI data.

7. PHONES Jack (1/8")

For connecting a pair of headphones to listen to the sound from the module.

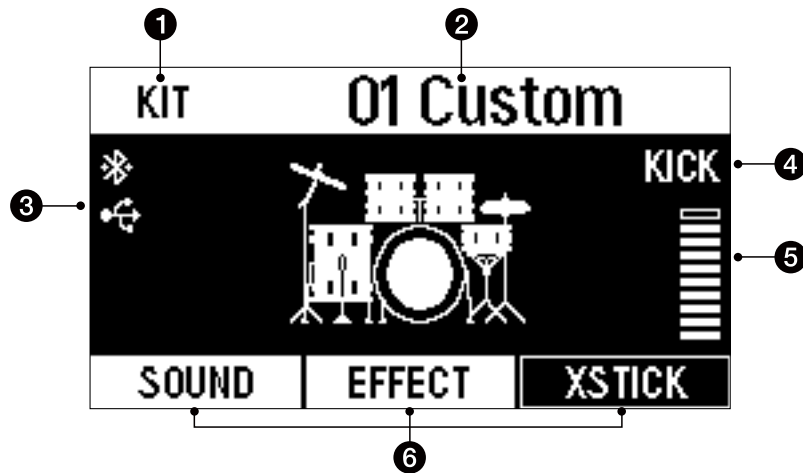
8. Trigger Input Jack

For connecting the dedicated connection cable.



8

Main Display



1. Menu

Display the current menu, such as KIT.

2. Kit Name

Display the current Kit name.

3. Connection Status

Display the Bluetooth icon and USB icon upon connection.

4. Trigger Name

Display the name of the selected trigger.

5. Strike Strength

Display the current striking strength.

6. [F1] ~ [F3] Functions

Display the corresponding functions of the [F1]~[F3] buttons.

Getting Ready to Play

Setting Up the Power Supply

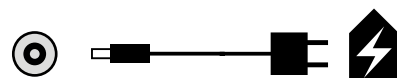
1. Connect the included power adapter to the DC IN jack on the rear panel of the module.

2. Plug the power adapter to an appropriate AC outlet.

Notes:

1. Use only the specified power adapter.

2. Even when the power is turned off, electricity is still flowing to the module at an 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, please ensure you have completed all necessary connections (pads and audio devices, etc.), and set the volume level of all connected devices to minimum.

1. Press the [] button to turn on the module. The display will be lit.
2. Turn on the connected audio devices or use headphones to listen.
3. Adjust the [MASTER] 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 devices to minimum.
2. Turn off the connected audio devices.
3. Hold down the [] button until the module is turned off.

Auto Power Off:

To conserve energy, the module is designed to automatically turn off after 15 minutes if it is not in use (playing, striking, pressing any button, etc.).

You may disable or enable this function in the *Option* menu. Please note that the module may consume more power when this function is disabled.

Power consumption after the module automatically turns off:
< 0.3W (less than 0.3W).

Factory Reset

If you wish to restore factory settings, please use the following procedure:

1. Hold down the [F1] and [F2] buttons, then press the [] button to turn on the power, until the display temporarily shows "Factory Resetting...".
When factory reset is finished, it will go to the the Kit menu (the main display).
2. These parameters will be reset to factory settings: Trigger Setting, MIDI Setup, Option, Effect, Mixer, User Kit, User Song, Click parameters and Coach Mode parameters.



Drum Kit

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

Preset Drum Kit and User Drum Kit

Preset Drum Kits are factory preset and unchangeable. User Drum Kits are fully customizable, whose parameters can be edited and saved.

- You can adjust the sounds and parameters of a preset kit, then save it as a user kit.
- When the module is turned on, it automatically enters the Kit menu (the main display). When in other interfaces, you can press the [] button to go back to the Kit menu.
- The Kit menu includes access to SOUND, EFFECT and XSTICK.

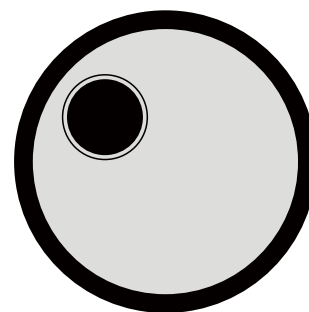
Button	Function	Description
F1	SOUND	Edit the sound parameters.
F2	EFFECT	Edit the effects.
F3	XSTICK	Turn the cross stick of the snare on/off.



Selecting a Drum Kit

1. Press the [] button to enter the Kit menu.
Press this button repeatedly to toggle between preset kits and user kits. When the User Kit indicator turns on, it means the current kit is a user kit.
2. Turn the data dial to select a drum kit.

Drum Kit	Kit Number	Description
Preset kit	1 ~ 31	Preset and unchangeable.
User kit	32~ 39	Parameters can be edited and saved.

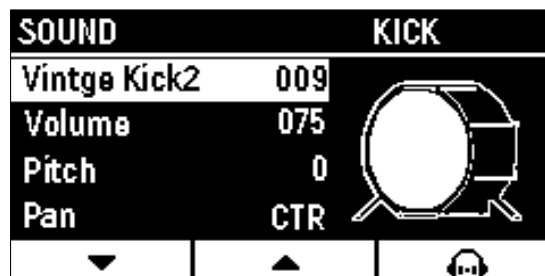
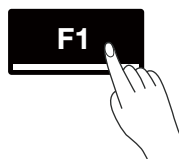


Sound (Instrument)

Selecting and Editing Sounds

You can strike the pads to audition the sound of the entire drum kit. If you wish to edit the sound parameters of each pad, you can do so in the Sound menu.

1. In the Kit menu, press the [F1 (SOUND)] button to enter the Sound menu.
2. Strike the pad that you wish to edit. The display shows the current pad name and parameter settings.
Alternatively, you can press the [F1]/[F2] button to move the cursor to select the pad name at the upper right of the screen, then use the data dial to select a pad.
3. Press the [F1]/[F2] button to navigate through the parameters, then use the data dial to change the setting of the selected parameter.
4. Press the [F3] button to preview the sound of the current parameter.
5. After editing the parameters, ensure to press the [SAVE·ENTER] button to save the changes.



Parameter	Range	Description
Sound	1 ~ 459	Preset sound name and number.
Volume	0 ~ 127	Set the volume of the sound.
Pitch	-8 ~ 0 ~ +8	Set the pitch of the sound.
Pan	L8 ~ CTR ~ R8	Set the pan of the sound.
Decay	-5 ~ 0	Set the decay of the sound.

Saving User Kit

Sound is an important parameter of a drum kit. After editing the sound parameters, ensure to save the changes promptly. Otherwise, the edited settings will be lost when you change the drum kit or reboot the module. Preset kits are not changeable. You can save the changes to a user kit of no.32 ~ no.39.

Note:

When you edit the parameters of a drum kit, an “*” will appear on the left of the kit number in the Kit menu, prompting you to save the edited settings.



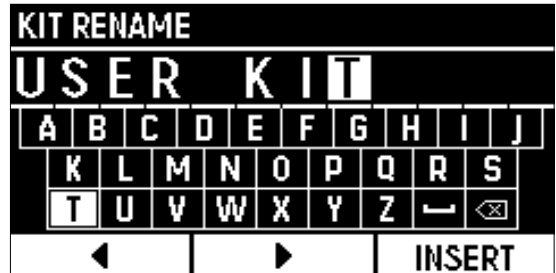
1. After editing the parameters, press the [SAVE·ENTER] button to enter the Kit Save menu.
2. Use the data dial to select a user kit number.
3. Press the [F1 (RENAME)] button to enter the Kit Rename menu. If you don't want to rename the user kit, simply press the [SAVE·ENTER] button to save and name it as "USER KIT".



4. In the Kit Rename menu, you can press the [F1]/[F2] button to move the cursor on the kit name, then use the data dial to select a letter, space or delete from the lower table. To insert a space, press the [F3] button.

Note:

You can enter up to 8 characters for each kit name.



5. After renaming, press the [SAVE·ENTER] button to save it. The display will temporarily show "Succeeded!", then go to the relevant Kit menu.

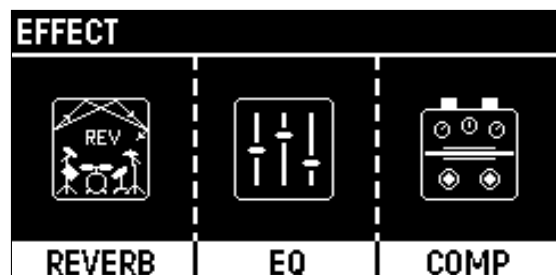


Kit Effect

Selecting an Effect

1. In the Kit menu, press the [F2 (EFFECT)] button to enter the Effect menu.
2. In the Effect menu, press the [F1]/[F2]/[F3] button to enter the relevant effect menu.

F1	F2	F3
REVERB	EQ	COMP

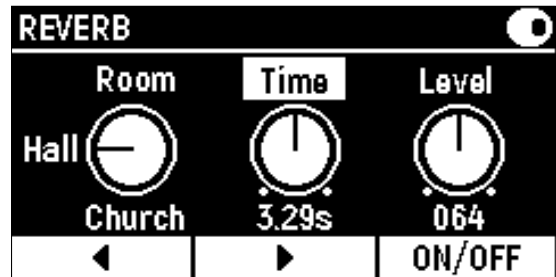


Reverb

1. In the Effect menu, press the [F1 (REVERB)] button to enter the Reverb menu.
2. In the Reverb menu, you can press the [F1]/[F2] button to move the cursor to select a parameter, then use the data dial to adjust the setting. As you make adjustments, the knob indicators on screen will update in real-time to reflect the current setting.
Press the the [F3] button to turn the reverb effect on or off.
3. The Reverb menu includes 3 parameters. While adjusting the parameters, you can audition the effect by striking the drum pads.

Parameter	Range	Description
Type	Room, Hall, Church	Select a reverb type.
Time	0.30s ~ 12.00s	Set the reverb time.
Level	0 ~ 127	Set the reverb send level.

4. After adjusting the effect parameters, press the [SAVE-ENTER] button to save the changes to a user kit. Please refer to the section of *Saving User Kit*.

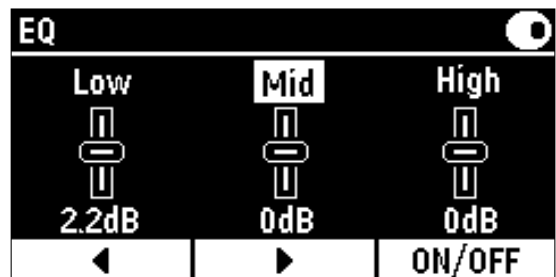


EQ (Equalizer)

1. In the Effect menu, press the [F2 (EQ)] button to enter the EQ menu.
2. In the EQ menu, you can press the [F1]/[F2] button to move the cursor to select a parameter, then use the data dial to adjust the setting. As you make adjustments, the faders on screen will update in real-time to reflect the current setting.
Press the the [F3] button to turn the EQ on or off.
3. The EQ menu includes 3 parameters. While adjusting the parameters, you can audition the effect by striking the drum pads.

Parameter	Range	Description
Low	-12.8dB ~ 12.6dB	Set the gain of the low-range.
Mid	-12.8dB ~ 12.6dB	Set the gain of the mid-range.
High	-12.8dB ~ 12.6dB	Set the gain of the high-range.

4. After adjusting the effect parameters, press the [SAVE-ENTER] button to save the changes to a user kit. Please refer to the section of *Saving User Kit*.

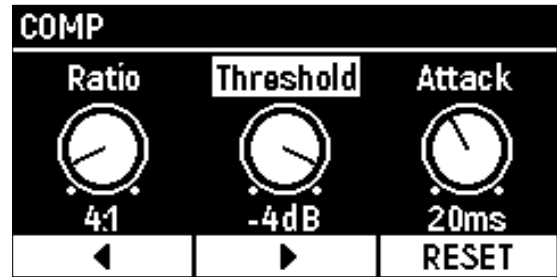


Compressor

1. In the Effect menu, press the [F3 (COMP)] button to enter the Comp menu.
2. In the Comp menu, you can press the [F1]/[F2] button to move the cursor to select a parameter, then use the data dial to adjust the setting. As you make adjustments, the knob indicators on screen will update in real-time to reflect the current setting.
Press the the [F3] button to reset the compressor to factory settings.
3. The Comp menu includes 5 parameters. While adjusting the parameters, you can audition the effect by striking the drum pads.

Parameter	Range	Description
Ratio	1:1 ~ 25:1	Set the compressor ratio.
Threshold	-30dB ~ 0dB	Set the signal level at which the compressor starts applying.
Attack	6ms ~ 50ms	Set the attack time.
Release	6ms ~ 699ms	The release time before the effect completely stops.
Pregain	-60dB ~ 12dB	Set the pre-gain.

Note:
Changes to the compressor settings will be saved automatically.
There's no need to save the changes to a user kit.

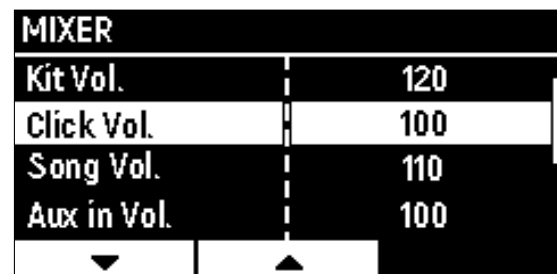


Mixer

The Mixer feature allows you to easily adjust the volume balance between the drum kit and other sounds.

1. Press the [MIXER] button to enter the Mixer menu.
2. In the Mixer menu, press the [F1]/[F2] button to select a channel, then use the data dial to adjust the volume.

Parameter	Range	Description
Kit Vol.	0 ~ 127	Set the drum kit volume.
Click Vol.	0 ~ 127	Set the click volume.
Song Vol.	0 ~ 127	Set the volume of preset songs.
Aux in Vol.	0 ~ 127	Set the volume of external inputs, such as Bluetooth audio, Aux input, and USB audio input.

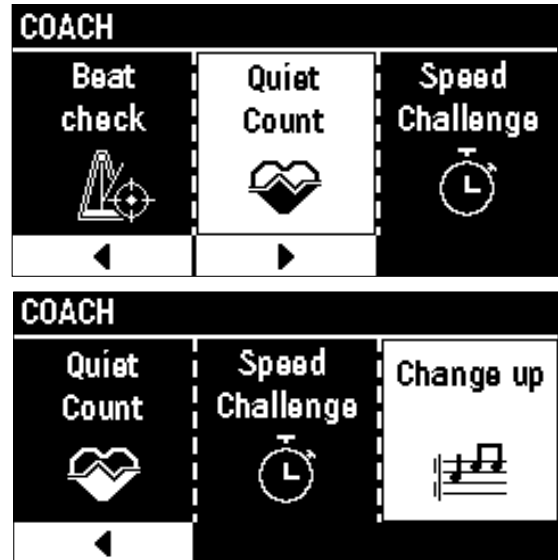


Coach Mode

Coach mode is a practice mode specially designed for drummers to help them improve their playing accuracy, speed and stamina, as well as other skills on the whole. It also provides perfect warm-ups before performance.

1. Press the [Coach] button to enter the Coach menu.
2. In the Coach menu, press the [F1]/[F2] button to select a type of practice, then press the [SAVE-ENTER] button to enter the relevant practice menu.

Coach mode provides 4 types of practice: Beat Check, Quiet Count, Speed Challenge, and Change Up. Each of them provides unique practice. Score function is available in Beat Check and Change Up.



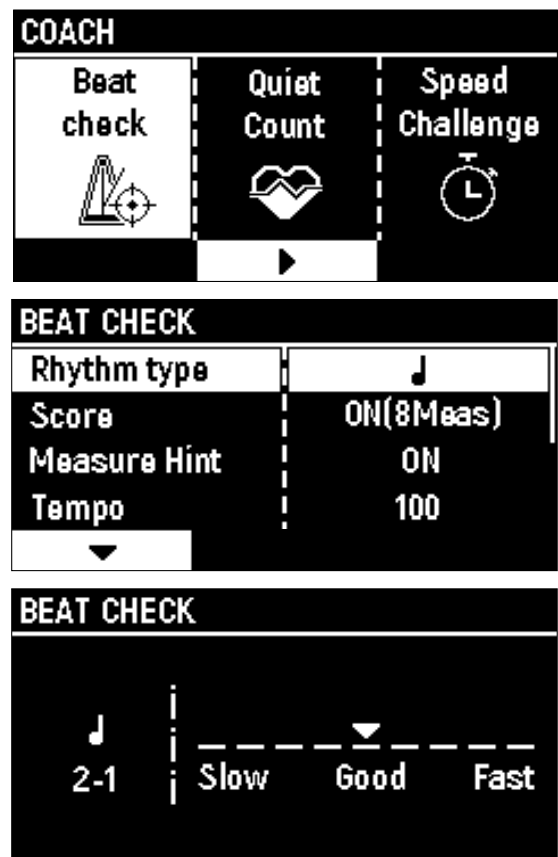
Beat Check

Beat Check will allow you visually see if you are playing in time with the click. Select a rhythm type and play along with the click to check your timing accuracy.

1. In the Coach menu, press the [F1]/[F2] button to select Beat Check, then press the [SAVE-ENTER] button to enter this menu.
2. In the Beat Check menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting.
3. Press the [▶] button to start the practice. The display will show the accuracy of each stroke.

Note:

When the score function is turned on, it will automatically stop and score your practice when it reaches the set number of bars.



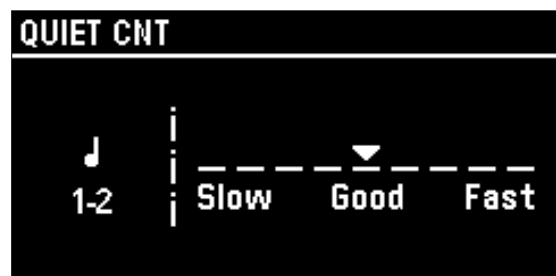
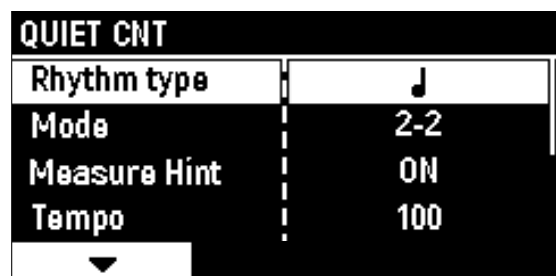
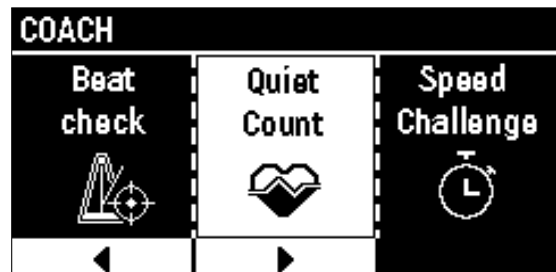
Parameters in the Beat Check menu:

Parameter	Range	Description
Rhythm Type		Select a rhythm type. There are 23 rhythm types.
Score	OFF, ON(8Meas, 16Meas, 32Meas)	Turn the score function on or off, or set the number of bars for practice.
Measure Hint	OFF, ON	Turn the accent sound on or off.
Tempo	30 ~ 320	Adjust the tempo.
Difficulty	OFF, Easy, Medium, Hard	Set the difficulty level. A higher level requires greater timing accuracy. The pad strike will not be heard if it falls out of the accuracy range. When setting to "OFF", all pad strikes will be heard regardless of the striking accuracy.

Quiet Count

Quiet Count is designed to develop your sense of timing. Play a continuous rhythm and try to stay in time as the click goes "quiet" for a set number of bars and see if you are still in time when the click returns.

1. In the Coach menu, press the [F1]/[F2] button to select Quiet Count, then press the [SAVE-ENTER] button to enter this menu.
2. In the Quiet Count menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting.
3. Press the [▶] button to start the practice. The display will show the accuracy of each stroke.



Parameters in the Quiet Count menu:

Parameter	Range	Description
Rhythm Type		Select a rhythm type.
Mode	1-1, 2-2, 1-3	1-1: 1 bar of sound and 1 bar of silence. 2-2: 2 bars of sound and 2 bars of silence. 1-3: 1 bar of sound and 3 bars of silence.
Measure Hint	OFF, ON	Turn the accent sound on or off. ON: the accent plays across all bars, including the silent bars. OFF: the accent plays, but will be muted in the silent bars.
Tempo	30 ~ 320	Adjust the tempo.
Difficulty	OFF, Easy, Medium, Hard	Set the difficulty level. A higher level requires greater timing accuracy. The pad strike will not be heard if it falls out of the accuracy range. When setting to "OFF", all pad strikes will be heard regardless of the striking accuracy.

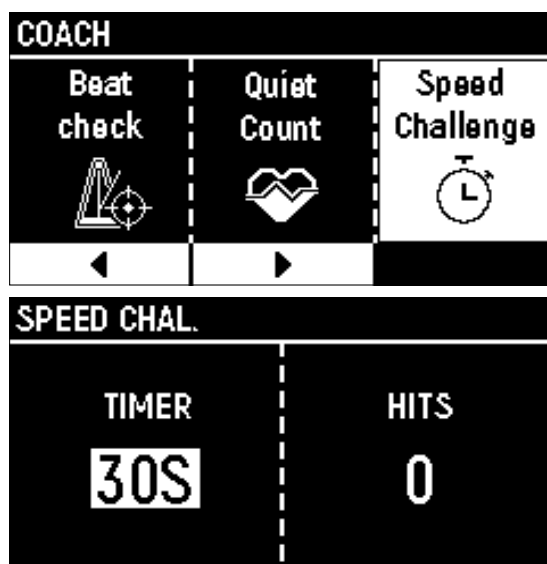
Speed Challenge

Challenge your speed by playing as many pad strikes (such as single-stroke rolls: RLRL...) as you can within a set amount of time.

1. In the Coach menu, press the [F1]/[F2] button to select Speed Challenge, then press the [SAVE·ENTER] button to enter this menu.
2. In the Speed Challenge menu, use the data dial to adjust the Timer.
3. Press the [▶] button to start the challenge. The Timer shows the remaining seconds, while the Hits count displays the total number of strokes.

Parameters in the Speed Challenge menu:

Parameter	Range	Description
Timer	10S, 20S, 30S, 40S, 50S, 60S, 70S, 80S, 90S, 100S, 110S, 120S	Set the duration (in seconds) for the Timer.
Hits	Count the number of strokes.	Total number of strokes, uneditable.



Change Up

Change Up helps improve your skill of playing with changing rhythms at the set tempo. The rhythm changes every two bars, letting you play various beat subdivision rhythms as they cascade from one to another.

1. In the Coach menu, press the [F1]/[F2] button to select Change Up, then press the [SAVE·ENTER] button to enter this menu.

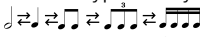
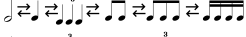
2. In the Change Up menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting.

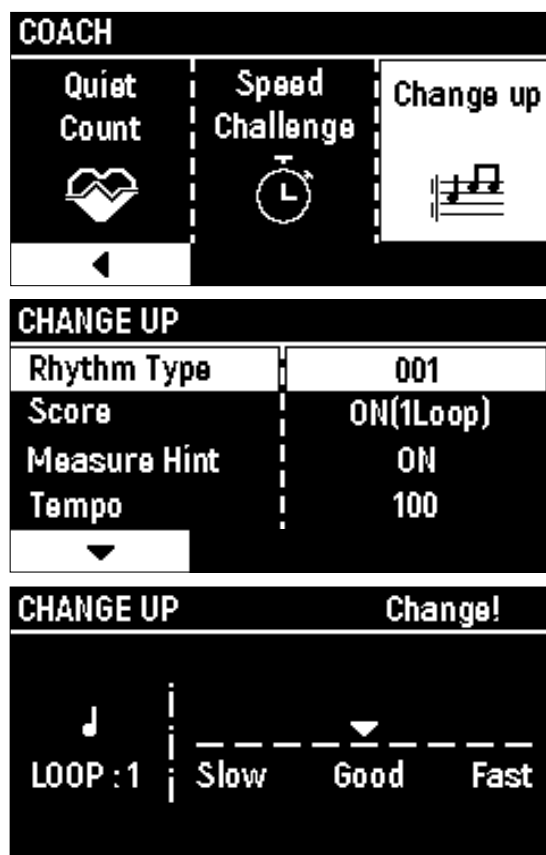
3. Press the [▶|■] button to start the practice. The display shows the current beat type and the accuracy of each stroke. Just one bar before the rhythm changes, it will prompt “Change!” at the upper right of the screen.

Note:

When the score function is turned on, it will automatically stop and score your practice when it reaches the set number of loops.

Parameters in the Change Up menu:

Parameter	Range	Description
Rhythm Type	1 ~ 3	Set the type of rhythm change.   
Score	OFF, ON(1Loop, 2Loop, 3Loop, 4Loop)	Turn the score function on or off, or set the number of loops for practice.
Measure Hint	OFF, ON	Turn the accent sound on or off.
Tempo	30 ~ 320	Adjust the tempo.
Difficulty	OFF, Easy, Medium, Hard	Set the difficulty level. A higher level requires greater timing accuracy. The pad strike will not be heard if it falls out of the accuracy range. When setting to “OFF”, all pad strikes will be heard regardless of the striking accuracy.



Using the Click

The click is a very useful tool. It helps you practice at a steady tempo.

1. Press the [] button to start the click and enter the Click menu. The button indicator blinks in sync with the click sound.

- When the click is turned off, pressing the [] button will start the click and enter the Click menu.
- When in the Click menu, you can press the [] or the [F3] button to turn the Click sound on or off.

2. In the Click menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting.

3. Press the [EXIT] button to exit and go back to the previous menu, but the click on/off status will be maintained.

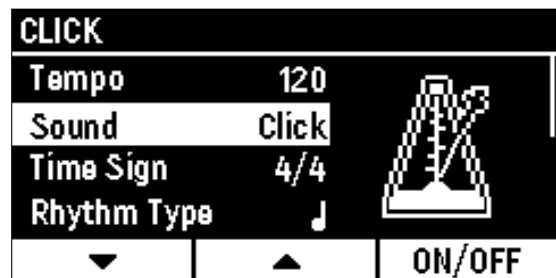
- When the click is playing, pressing the [EXIT] button will exit the Click menu but will not stop the click sound. Press the [] button to stop the click sound.

Note:

When the click is playing, pressing the [] button will stop the click, but will not enter the Click menu.

Parameters in the Click menu and their ranges:

Parameter	Range	Description
Tempo	30 ~ 320	Adjust the click tempo.
Sound	Click, Clave, Stick, Cowbell, FMClick, Voice1, Voice2	Set the click sound.
Time Sign	2/4, 3/4, 4/4, 5/4, 7/4, 6/8, 7/8, 9/8, 11/8, 12/8, 13/8, 15/8, 17/8	Set the time signature.
Rhythm Type	    	Select a rhythm type.
Accent	OFF, ON	Turn the accent sound on or off.

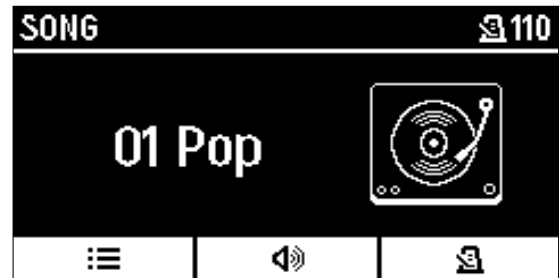
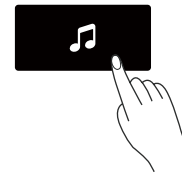


Song

The module provides a variety of songs. Please refer to Song List. Try selecting your favorite songs and play along with them.

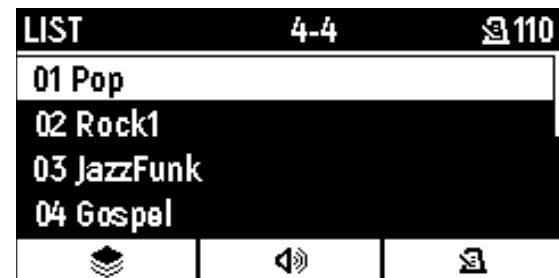
Playing Songs

- Press the [] button to enter the Song menu, then press the [] button to play the current song.
- Alternatively, press the [] button to directly play the song selected in your last operation.



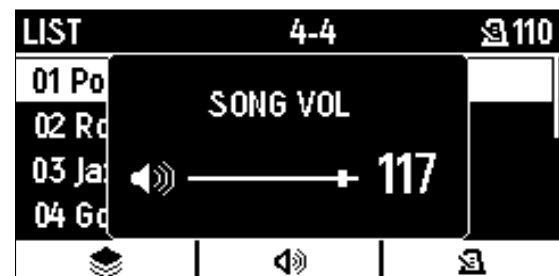
Selecting a Song

- In the Song menu, use the data dial to select a song.
- Alternatively, press the [F1] button to enter the Song List menu, then use the data dial to select a song from the list.
- In the Song List menu, press the [F1] button to toggle between the preset song list and the user song list. For example, if it's in the user song list, pressing this button will jump to the preset song list and select the same song as your last operation.



Editing Song Parameters

- Adjusting the song volume:
In the Song menu, press the [F2] button to temporarily prompt the song volume screen. Use the data dial to adjust the song volume.
- Adjusting the song tempo:
In the Song menu, press the [F3] button to temporarily prompt the tempo screen. Use the data dial to adjust the tempo. The tempo of the preset song will change along.



Recording

With the recording feature, you can record your performance and track your progress in drum practice. You can record up to 5 songs on the module.

Recording Preparation

1. Press the [] button to enter the Recording menu.
2. In the Recording menu, press the [F1] ~ [F3] buttons to edit the relevant settings.

Button	Function	Description
F1	Count-in	Turn the count-in function on or off.
F2	Backing Song	Enter the backing song menu to select a song for playback.
F3	Tempo	Prompt the tempo screen to set the tempo for recording.

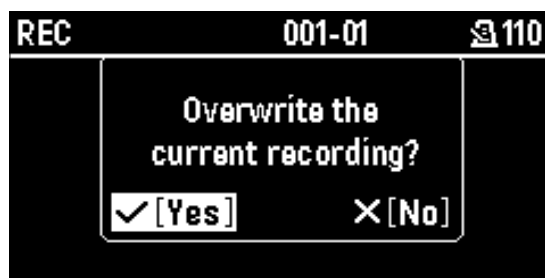
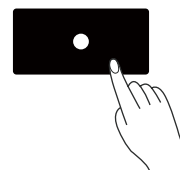
3. In the Recording menu, the number of the current recording slot will be highlighted on screen. You can use the data dial to select a desired recording slot (01 ~ 05).

Notes:

1. An indicator “*” will appear next to the recording slot to indicate this slot is blank, for example, “*Recording 01”.
2. If a recording slot doesn’t have the “*” indicator, it means this slot has recorded data. If you continue to record to this slot, the display will prompt that the existing data in this slot will be overwritten.

Recording without Backing Song

1. In the Recording menu, follow the on-screen message and press the [] button to start. Recording will actually start after the count-in, or immediately start when count-in is turned off.
2. During recording, you can press the [] button to stop recording. The recording will be saved automatically.



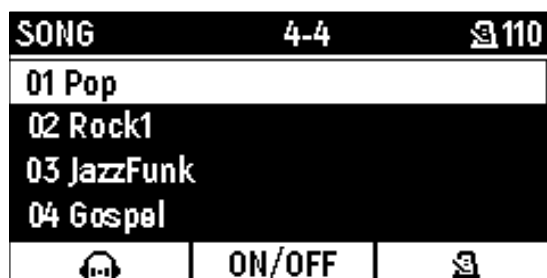
Recording with Backing Song

1. In the Recording menu, press the [F2] button to enter the Backing Song menu.
2. In the Backing Song menu, press the [F2] button to turn on the backing song function. Use the data dial to select a desired song. Press the [F1] button to preview the song.
3. After selecting the backing song, press the [▶|■] button to start recording.

Functions of the [F1] ~ [F3] buttons in the Backing Song menu:

Button	Function	Description
F1	Preview	Preview the selected song.
F2	ON/OFF	Turn the backing song function on or off.
F3	Tempo	Prompt the tempo screen to adjust the click tempo (the song tempo will also be adjusted).

4. During recording, you can press the [▶|■] button to stop recording. The recording will be saved automatically.



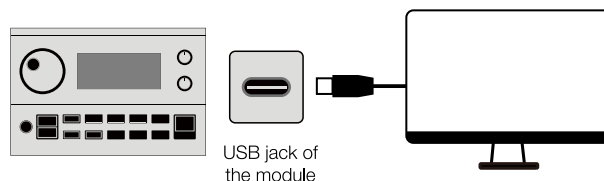
Recording Playback

- When recording is saved, it will automatically go to the Song menu and select the recorded song. Press the [▶|■] button to play back the recording.
- Alternatively, you can go to the end of the Song List menu, then find the recorded song with the name "Recording 01 ~ 05". Press the [▶|■] button to play back the song.



USB Audio

The module can be used as a sound card equipped with stereo outputs. Just by connecting the USB jack of the module to your computer with an USB-C cable, you can directly record your performance as audio in a DAW on computer.



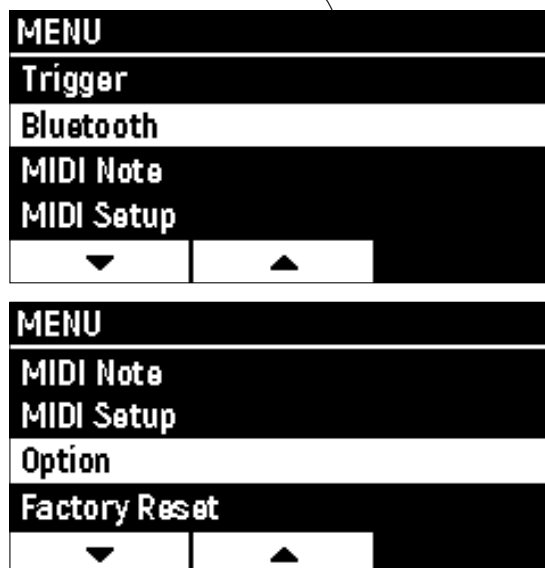
Menu

The Menu function provides direct access to various menus for more advanced adjustments.



Selecting a Menu

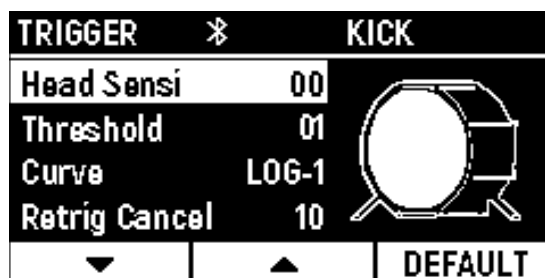
1. Press the [] button to display the Menu option list.
2. Press the [F1]/[F2] button to select an option, then press the [SAVE-ENTER] button to enter the relevant menu.



Trigger Setting

As a drummer, you may want to set the drum triggers to accommodate your playing habit and feelings, and make your performance more interesting and professional.

1. In the Menu option list, press the [F1]/[F2] button to select Trigger, then press the [SAVE-ENTER] button to enter this menu.
2. In the Trigger menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting. Hold down the [F3 (DEFAULT)] button to display the default setting of the selected parameter. Release the [F3] button, the setting will go back to the set value.



Note:

The parameter options will vary depending on the selected trigger.

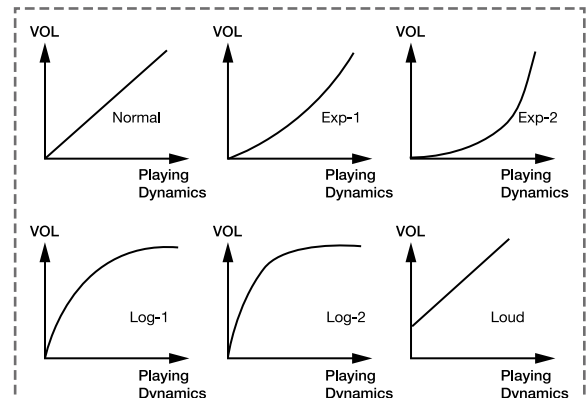
Parameters in the Trigger menu and their ranges:

Parameter	Range	Description
Head Sensi	0 ~ 15	Adjusts the pad sensitivity. A high value will let the pad produce a loud sound even when playing softly. A low value will let the pad produce a low-volume sound even when playing forcefully.
Rim Sensi	0 ~ 15	Adjust the rim sensitivity.
Bow Sensi	0 ~ 15	Adjust the bow sensitivity.
Edge Sensi	0 ~ 15	Adjust the edge sensitivity.
Bell Sensi	0 ~ 15	Adjust the bell sensitivity.
Pedal Sensi	0 ~ 15	Adjusts the sensitivity of the hi-hat pedal.

Splash Sensi	0 ~ 5	Adjust the splash sensitivity. A higher value makes it easy to produce the splash sound.
Threshold	0 ~ 15	This setting can prevent unwanted sounding, such as crosstalk from other pads. Only the trigger signals that are above the threshold level will produce sound. 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 this way: Set the value to a low level. Increase this value gradually, then strike the pad and check. Repeat this process until you get an appropriate level.
Head/RimAdj	0 ~ 15	Adjust the response of head shot and rim shot.
Xstick Level	---, 0 ~ 8	It sets the cross stick of the snare. A high value will make it easy to produce cross stick sound. When the value is set to "0", it produces rim shot only. Note: This setting is editable only when X-Stick is turned on in the Kit menu.
Curve	NORMAL, EXP-1, EXP-2, LOG-1, LOG-2, LOUD	A 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. Please refer to the Curve description below.
Xtalk Cancel	0 ~ 15	This setting can prevent "crosstalk". Crosstalk means when you strike a pad, the adjacent pads also produce sound. For example: when you hit the snare, tom 1 also produces sound. In this case, you can slightly increase the "X-Talk" value of tom 1. Note: If the value is set too high, when two pads are played simultaneously, the one struck less forcefully may not produce sound. Set this parameter to a proper value required to prevent crosstalk.
Retrig Cancel	0 ~ 15	This setting can prevent "re-triggering". Re-triggering means when you strike a pad once, you hear two hits coming from one strike. If re-trigger happens, you can increase this value while repeatedly striking the pad, until re-trigger no longer occurs. Note: Setting this to a high value may make it easy for sounds to be omitted when playing drums fast (such as drum roll).
Close Point	0 ~ 2	Adjust the close point position. "0" means the close point is at the end/bottom position, "1" at the middle position, and "2" at the upper position.
Vibrate Cancel	---, 0 ~ 7	This setting is to prevent the vibration interference caused by closing the INDEPENDENT Hi-hat pedal. A high value will make it easy to prevent the interference. Note: This parameter is available only when using an independent hi-hat. If the value is set too high, some sounds may be omitted when playing the hi-hat.

Curve description:

Parameter	Description
NORMAL	The relation between the striking force and the sound volume is linear.
EXP-1, EXP-2	Soft strikes produce small change in volume. Strong strikes produce big change in volume.
LOG-1, LOG-2	Soft strikes produce big change in volume. Strong strikes produce small change in volume.
LOUD	Soft strikes produce a loud sound. It's easy to maintain high volume but has small dynamics.



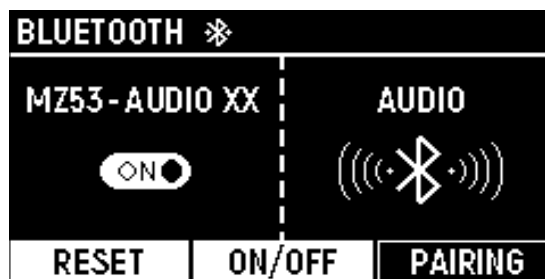
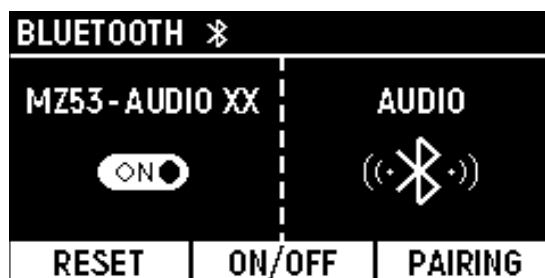
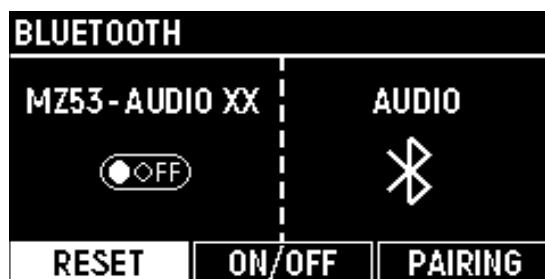
Bluetooth

This module allows for audio transmission via Bluetooth. It can pair with external Bluetooth-equipped devices, such as a smartphone, tablet or computer to play back music from the external device.

1. In the Menu option list, press the [F1]/[F2] button to select Bluetooth, then press the [SAVE·ENTER] button to enter this menu.
2. In the Bluetooth menu, press the [F2] button to turn the Bluetooth function on or off.
3. Press the [F3] button to enable Bluetooth pairing mode. Now, you can search for the module's Bluetooth ID on your smart device. When paired up, the module can play back the sounds of the smart device.
When paired up, press the [F3] button again to disconnect the currently-connected device and enable the Bluetooth pairing mode.
4. When paired up and connected successfully, the on-screen signal pattern around the Bluetooth icon will change.
5. Press the [F1] button to reset the Bluetooth function. It will clear the pairing history and disconnect the currently-connected Bluetooth device.

Notes:

1. When Bluetooth function is turned on, the Bluetooth icon will appear on screen.
2. When Bluetooth pairing mode is disabled, the module can only connect with previously-paired devices. Other Bluetooth devices will not be able to search for and connect to this module.
3. When the Bluetooth function is turned off, pressing the [F3] button will enable both the Bluetooth function and Bluetooth pairing mode.

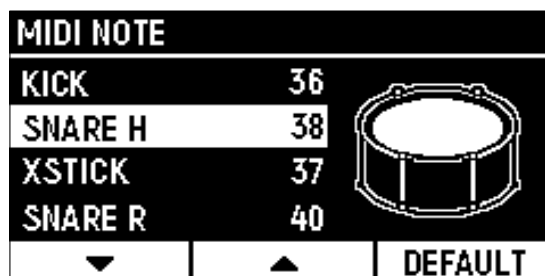


MIDI Note

1. In the Menu option list, press the [F1]/[F2] button to select MIDI Note, then press the [SAVE·ENTER] button to enter this menu.
2. In the MIDI Note menu, press the F1]/[F2] button to select a trigger that you wish to edit. Then use the data dial to adjust the MIDI note value.
Hold down the [F3 (DEFAULT)] button to display the default setting of the selected trigger.

Parameters in the MIDI Note menu:

Parameter	Range	Description
Triggers (Kick, Snare Head, Snare Rim, etc.)	0 ~ 127	Adjust the MIDI note value of the selected trigger.



Default MIDI note:

Trigger	MIDI	Trigger	MIDI	Trigger	MIDI	Trigger	MIDI	Trigger	MIDI
Kick	36	Tom1 Rim	50	Tom4 Head	41	Crash1 Bow	49	Close Hi-hat	42
Snare Head	38	Tom2 Head	45	Tom4 Rim	39	Crash1 Edge	55	Open Hi-hat Edge	26
Snare Stick	37	Tom2 Rim	47	Ride Bow	51	Crash2 Bow	57	Close Hi-hat Edge	22
Snare Rim	40	Tom3 Head	43	Ride Edge	59	Crash2 Edge	52	Pedal	44
Tom1 Head	48	Tom3 Rim	58	Ride Bell	53	Open Hi-hat	46	Hi-hat Splash	21

Note:

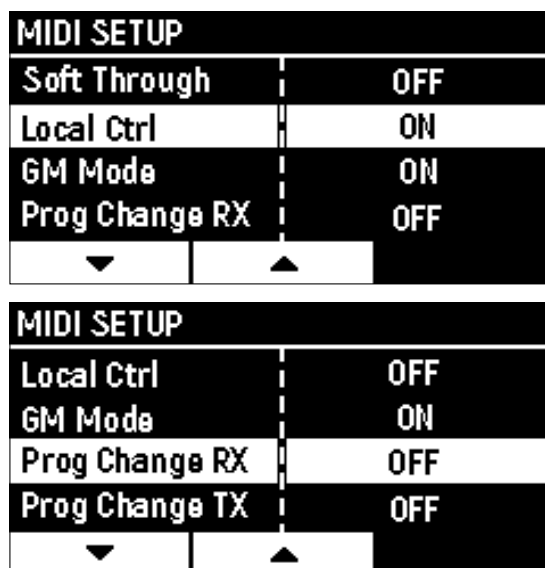
When editing the MIDI note, if this indicator “**” appears, it means this note value is already used by another trigger. An available MIDI note will not have this indicator “**”.

Note:

Changes to all the trigger parameters will be saved automatically. If you wish to reset the parameters to factory default settings, please refer to the section **Factory Reset**.

MIDI Setup

1. In the Menu option list, press the [F1]/[F2] button to select MIDI Setup, then press the [SAVE-ENTER] button to enter this menu.
2. In the MIDI Setup menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting.



Parameters in the MIDI Setup menu and their ranges:

Parameter	Range	Description
Soft Through	ON, OFF	MIDI data received from MIDI IN will be transmitted through MIDI OUT and the USB jack.
Local Ctrl	ON, OFF	ON: When striking a pad, the module will produce sound and send MIDI data to MIDI OUT. OFF: When striking a pad, the module will be muted but will send MIDI data to MIDI OUT.
GM Mode	ON, OFF	ON: MIDI IN will respond GM drum kit. OFF: MIDI IN will respond local drum kit.
Prog Change RX	ON, OFF	ON: Receive Program Change MIDI data from channel10. OFF: Ignore Program Change MIDI data from channel10.
Prog Change TX	ON, OFF	ON: Send Program Change MIDI data of channel 10 when changing the kit. OFF: Do not send Program Change MIDI data of channel 10 when changing the kit.

Note:

It will receive / send Program Change MIDI data of the local drum kit only when GM Mode is set to OFF, Prog Change RX and Prog Change TX are set to ON.

Option

1. In the Menu option list, press the [F1]/[F2] button to select Option, then press the [SAVE-ENTER] button to enter this menu.
2. In the Option menu, press the [F1]/[F2] button to select a parameter, then use the data dial to adjust the setting.

Parameters in the Option menu and their ranges:

OPTION	
HiHat Type	HIHAT+PEDAL
Auto Power Off	15MIN
Display CR	3
Language	English
▼	▲

Parameter	Range	Description
HiHat Type	HIHAT+PEDAL, INDEPENDENT HIHAT	Set this according to the type of hi-hat you are using.
Auto Power Off	OFF, 15MIN, 60MIN	The module will automatically shut down after a specified period of inactivity. You can set the time or disable this function by selecting "OFF".
Display CR	1 ~ 5	Adjust the screen contrast.
Language	中文, English	Set the screen language.

Factory Reset

1. In the Menu option list, press the [F1]/[F2] button to select Factory Reset, then press the [SAVE-ENTER] button to enter this menu.
2. In the Factory Reset menu, press the [F1]/[F2] button to select an option that you wish to reset, then press the [SAVE-ENTER] button. The display will prompt you to confirm.
3. If you wish to reset the selected user data, use the data dial to select "Yes", then press the [SAVE-ENTER] to execute factory reset. Or you can press [EXIT] to cancel the reset procedure.

Options in the Factory Reset menu:

Option	Description
User Kit Reset	Restore user drum kits to factory settings.
Trigger Reset	Restore trigger setting to factory settings.
Reset All	Restore all user data to factory settings.

FACTORY RESET	
User Kit Reset	
Trigger Reset	
Reset All	
▼	▲



Prompt Messages

No.	On-screen Message	Description
1	√ Succeeded!	Saving is successful.
2	Saving...	Saving in progress. Please wait.
3	Save the current changes?	Ask if you wish to save the changes?
4	Overwrite the current recording?	Ask if you wish to overwrite the current recording slot?
5	Reset User Kit Data / User Trigger Data / All User Data ?	Ask if you wish to reset the selected data?
6	Waiting...	Factory reset is in progress. Please wait.
7	√ Reset Done!	Factory reset is successful.

Specifications

Drum Kits	31 presets + 8 users
Sound	459 presets + 16 hi-hat combinations
Sequencer	50 preset songs + 5 user songs Maximum storage: approx. 2000 notes per recording
Tempo	30 ~ 320
Display	4.1" (240 x 128) LCD with backlight
Connectors	Trigger input (DB25), Trigger input x 2 (TOM4, CRASH2, 1/4"), PHONES output (1/8"), AUX input (1/8"), USB-C (MIDI & Audio), Master output x 2 (R, L/Mono, 1/4"), MIDI input, MIDI output
Power Supply	12V 1000mA
Module Dimension	220(W) x 145(D) x 45(H) mm
Module Weight	0.66 kg

* All specifications and appearances are subject to change without notice.

Drum Kit List

No.	Kit Name
1	Custom
2	Rock
3	Collector
4	Funk
5	Heavy
6	Fusion
7	Metal
8	Tight
9	Pop
10	Vintage
11	Piccolo
12	Blues
13	Live
14	Fat
15	R&B
16	Reggae
17	Drum&Bass
18	808
19	EDM
20	Hip Hop
21	909
22	Beatbox
23	House
24	Electr Power
25	Dance Party
26	World Perc
27	Chinese
28	Latin
29	Indian
30	African
31	Orchestra

Drum Sound List

No.	Sound Name
KICK	
1	Custom Kick
2	Collector Kick
3	22" Standard Kick 1
4	22" Standard Kick 2
5	Vintage Kick 1
6	Brush Kick 1
7	Brush Kick 2
8	Fusion Kick
9	Vintage Kick 2
10	Big Band Kick
11	Pop Kick
12	Power Kick
13	Metal Head Kick
14	Piccolo Boom Kick
15	Drum n Bass Kick
16	808 Kick
17	909 Kick
18	EDM Kick
19	Dance Kick
20	Beatbox Kick
21	HipHop Kick
SNARE	
22	Custom Snare
23	Custom Snare Rim
24	Custom XStick
25	Collector Snare 1
26	Collector Snare 2
27	Collector Snare Rim
28	Collector XStick
29	14" Standard Snare
30	14" Standard Snare Rim
31	14" Standard Snare XStick
32	14" Rock Snare
33	14" Rock Snare Rim
34	14" Rock Snare XStick
35	Funk Snare 1
36	Funk Snare 1 Rim
37	Funk Snare 1 XStick
38	Jazz Snare
39	Jazz Snare Rim
40	Jazz Snare XStick
41	Room Snare
42	Room Snare Rim
43	Room Snare XStick
44	Fusion Snare
45	Fusion Snare Rim
46	Fusion Snare XStick
47	Funk Snare 2
48	Funk Snare 2 Rim
49	Funk Snare 2 XStick

No.	Sound Name
50	Vintage Snare
51	Vintage Snare Rim
52	Vintage Snare XStick
53	Live Snare
54	Live Snare Rim
55	Live Snare Stick
56	Old School Snare
57	Old School Snare Rim
58	Old School Snare XStick
59	Orchestra Snare
60	Orchestra Snare Rim
61	Reggae Snare
62	Reggae Snare Rim
63	Fusion Snare Wire Off
64	Fusion Snare Rim Wire Off
65	Fusion XStick Wire Off
66	Metal Head Snare
67	Metal Head Snare Rim
68	Metal Head Snare Xstick
69	Piccolo Boom Snare
70	Piccolo Boom Snare Rim
71	Piccolo Boom Snare Xstick
72	Drum n Bass Snare
73	Drum n Bass Snare Rim
74	R&B Snare
75	R&B Snare Rim
76	808 Snare
77	808 Snare Rim
78	808 Snare Clap
79	909 Snare
80	909 Snare Rim
81	909 Snare Clap
82	EDM Snare 1
83	EDM Snare 2
84	Techno Snare
85	House Snare
86	House Clap
87	House Snare Stick
88	R&B Clap
89	Dance Snare
90	Dance Clap
91	Beatbox Snare
92	Beatbox Snare Rim
93	Beatbox Snare Stick
94	HipHop Snare
95	Power Snare
TOM	
96	Custom Tom 1
97	Custom Tom 1 Rim
98	Custom Tom 2
99	Custom Tom 2 Rim

No.	Sound Name
100	Custom Tom 3
101	Custom Tom 3 Rim
102	Custom Tom 4
103	Custom Tom 4 Rim
104	Collector Tom 1
105	Collector Tom 1 Rim
106	Collector Tom 2
107	Collector Tom 2 Rim
108	Collector Tom 3
109	Collector Tom 3 Rim
110	Collector Tom 4
111	Collector Tom 4 Rim
112	Rock Tom 1
113	Rock Tom 1 Rim
114	Rock Tom 2
115	Rock Tom 2 Rim
116	Rock Tom 3
117	Rock Tom 3 Rim
118	Rock Tom 4
119	Rock Tom 4 Rim
120	Rock Tom 5
121	Rock Tom 5 Rim
122	Rock Tom 6
123	Rock Tom 6 Rim
124	Acoustic Tom 1
125	Acoustic Tom 1 Rim
126	Acoustic Tom 2
127	Acoustic Tom 2 Rim
128	Acoustic Tom 3
129	Acoustic Tom 3 Rim
130	Acoustic Tom 4
131	Acoustic Tom 4 Rim
132	Acoustic Tom 5
133	Acoustic Tom 5 Rim
134	Acoustic Tom 6
135	Acoustic Tom 6 Rim
136	Vintage Tom 1
137	Vintage Tom 2
138	Vintage Tom 3
139	Vintage Tom 4
140	Vintage Tom 5
141	Vintage Tom 6
142	Fusion Tom 1
143	Fusion Tom 2
144	Fusion Tom 3
145	Fusion Tom 4
146	Fusion Tom 5
147	Fusion Tom 6
148	1970's Tom
149	Metal Head Tom 1
150	Metal Head Tom 2
151	Metal Head Tom 3

No.	Sound Name
152	Drum n Bass Tom 1
153	Drum n Bass Tom 2
154	Drum n Bass Tom 3
155	Drum n Bass Tom 4
156	808 Tom 1
157	808 Tom 2
158	808 Tom 3
159	808 Tom 4
160	808 Tom 5
161	808 Tom 6
162	909 Tom 1
163	909 Tom 2
164	909 Tom 3
165	909 Tom 4
166	909 Tom 5
167	909 Tom 6
168	909 Tom 7
169	909 Tom 8
170	EDM Tom 1
171	EDM Tom 2
172	EDM Tom 3
173	EDM Tom 4
174	Electronic Tom 1
175	Electronic Tom 2
176	Electronic Tom 3
177	Electronic Tom 4
178	Electronic Tom 5
179	Electronic Tom 6
180	Electronic Tom 7
181	Electronic Tom 8
182	Power Tom 1
183	Power Tom 2
184	Power Tom 3
185	Power Tom 4
186	Power Tom 5
187	Power Tom 6
188	Power Tom 7
189	Power Tom 8
190	Voice Tom 1
191	Voice Tom 2
192	Voice Tom 3
193	Voice Tom 4
194	Beatbox Tom 1
195	Beatbox Tom 2
196	Beatbox Tom 3
197	Beatbox Tom 4
RIDE	
198	20" Custom Ride
199	20" Custom Ride Edge
200	20" Custom Ride Bell
201	20" Classic Ride
202	20" Classic Ride Edge

No.	Sound Name
203	20" Classic Ride Bell
204	20" Standard Ride
205	20" Standard Ride Edge
206	20" Standard Ride Bell
207	20" Funk Ride
208	20" Funk Ride Edge
209	20" Funk Ride Bell
210	22" Funk Ride
211	22" Funk Ride Edge
212	22" Funk Ride Bell
213	20" Room Ride
214	20" Room Ride Edge
215	20" Room Ride Bell
216	Vintage Ride
217	Vintage Ride Edge
218	Vintage Ride Bell
219	22" Big Band Ride
220	22" Big Band Ride Edge
221	22" Big Band Ride Bell
222	Old School Ride
223	Old School Ride Edge
224	Old School Ride Bell
225	808 Ride
226	909 Ride
227	Dance Ride
228	Dance Ride Edge
229	Dance Ride Bell
CRASH	
230	16" Custom Crash
231	16" Custom Crash Edge
232	18" Custom Crash
233	18" Custom Crash Edge
234	18" Classic Crash
235	18" Classic Crash Edge
236	16" Standard Crash
237	16" Standard Crash Edge
238	18" Jazz Crash
239	18" Jazz Crash Edge
240	Funk Crash 1
241	Funk Crash 1 Edge
242	Funk Crash 2
243	Funk Crash 2 Edge
244	16" Acoustic Crash Edge
245	Orchestra Crash
246	Room Crash
247	Room Crash Edge
248	Vintage Crash
249	Vintage Crash Edge
250	Latin Crash 1
251	Latin Crash 1 Edge
252	Latin Crash 2
253	Latin Crash 2 Edge

No.	Sound Name
254	China
255	China Edge
256	808 Crash
257	909 Crash
258	EDM Crash 1
259	EDM Crash 2
260	HipHop Crash
261	Dance Crash 1
262	Dance Crash 2
263	Beatbox Crash
HI-HAT	
264	14" Custom Hi-hat
265	14" Custom Hi-hat Edge
266	14" Custom Hi-hat Pedal
267	14" Custom Hi-hat Splash
268	14" Classic Hi-hat
269	14" Classic Hi-hat Edge
270	14" Classic Hi-hat Pedal
271	14" Classic Hi-hat Splash
272	14" Standard Hi-hat
273	14" Standard Hi-hat Edge
274	14" Standard Hi-hat Pedal
275	14" Standard Hi-hat Splash
276	14" Rock Hi-hat
277	14" Rock Hi-hat Edge
278	14" Rock Hi-hat Pedal
279	14" Rock Hi-hat Splash
280	14" Acoustic Hi-hat
281	14" Acoustic Hi-hat Edge
282	14" Acoustic Hi-hat Pedal
283	14" Acoustic Hi-hat Splash
284	14" Funk Hi-hat
285	14" Funk Hi-hat Edge
286	14" Funk Hi-hat Pedal
287	14" Funk Hi-hat Splash
288	14" Jazz Hi-hat
289	14" Jazz Hi-hat Edge
290	14" Jazz Hi-hat Pedal
291	14" Jazz Hi-hat Splash
292	808 Hi-hat
293	808 Hi-hat Pedal
294	808 Hi-hat Splash
295	909 Hi-hat
296	909 Hi-hat Pedal
297	909 Hi-hat Splash
298	EDM Hi-hat
299	EDM Hi-hat Pedal
300	Dance Hi-hat
301	Dance Hi-hat Pedal
302	Dance Hi-hat Splash
303	Beatbox Hi-hat
304	Beatbox Hi-hat Pedal

No.	Sound Name
PERCUSSION	
305	808 Claves
306	808 CowBell
307	808 HiConga
308	808 MidConga
309	808 LowConga
310	808 Maracas
311	Taiko Drum 1
312	Taiko Drum 2
313	Maracas 1
314	Maracas 2
315	Metronome Bell
316	Vibra-slap 1
317	Vibra-slap 2
318	Vibra-slap 3
319	High Q 1
320	High Q 2
321	Low Q 1
322	Low Q 2
323	Mute Hi Conga 1
324	Mute Hi Conga 2
325	Mute Hi Conga 3
326	Open Hi Conga 1
327	Open Hi Conga 2
328	Open Hi Conga 3
329	Low Conga
330	High Bongo
331	Low Bongo
332	High Timbale 1
333	High Timbale 2
334	High Timbale 1 Rim
335	High Timbale 2 Rim
336	Low Timbale
337	Claves 1
338	Claves 2
339	Jingle Bell 1
340	Jingle Bell 2
341	Cowbell
342	Bell Tree
343	World Perc Cymbal
344	Tambourine 1
345	Tambourine 2
346	Cabasa
347	High Wood Block
348	Low Wood Block
349	Mixed Wood Block
350	Mute Triangle
351	Open Triangle
352	Mixed Triangle
353	High Tabla 1
354	High Tabla 2
355	High Tabla 3

No.	Sound Name
356	Low Tabla
357	Mute High Tabla
358	Mute Low Tabla
359	Mute Bayao 1
360	Mute Bayao 2
361	Mute Bayao 3
362	Bayao 1
363	Bayao 2
364	Trigo 1
365	Trigo 2
366	Trigo 3
367	Trigo 4
368	Trigo 5
369	High Timbale
370	Timbale Stick
371	Mute High Timbale
372	High Timbale 1 Rim
373	High Timbale 2 Rim
374	Mute High Timbale 1 Rim
375	Mute High Timbale 2 Rim
376	Low Timbale 1
377	Low Timbale 2
378	Mute Low Timbale
379	Shaker
380	Orchestra Timpani F2
381	Orchestra Timpani G2
382	Orchestra Timpani A2
383	Orchestra Timpani B2
384	Marimba A3
385	Marimba C4
386	Marimba D4
387	Marimba E4
388	Marimba Chord
CHINESE	
389	Dagu 1
390	Dagu 2
391	Dagu 3
392	Dagu Rim
393	Dagu Roll
394	Ban
395	Bangu
396	Xiaomuyu 1
397	Xiaomuyu 2
398	Xiaomuyu 3
399	Paigu 1
400	Paigu 2
401	Paigu 3
402	Mangluo
403	Maluo
404	Suluo
405	Dabo
406	Xiaobo

No.	Sound Name
407	Xiaoluo
FX	
408	FX 1
409	FX 2
410	FX 3
411	FX 4
412	FX 5
413	EDM FX 1
414	EDM FX 2
415	EDM FX 3
416	EDM FX Stick
417	Beatbox FX 1
418	Beatbox FX 2
419	Beatbox FX 3
420	Beatbox FX 4
421	FX Q
422	Scratch Push
423	Scratch Pull
424	Reverse Cymbal
425	Bass Drop
426	One
427	Two
428	Three
429	Four
430	Five
431	Six
432	Seven
433	Eight
434	Nine
435	Ti
436	Ta
437	Ei
438	An
439	E
440	Click 1
441	Click 2
442	Click 3
443	Click 4
444	Click 5
445	Click 6
446	Click 7
447	Click 8
448	Click 9
449	Click 10
450	One & Stick
451	Two & Stick
452	Three & Stick
453	Four & Stick
454	Five & Stick
455	Six & Stick
456	Seven & Stick
457	Eight & Stick

No.	Sound Name
458	Nine & Stick
459	Mute

Hi-Hat Combination List

No.	Hi-Hat Combination
1	Custom
2	Collector
3	Standard
4	Heavy
5	Vintage
6	Chinese
7	African
8	Indian
9	Latin
10	Orchestra
11	World
12	808
13	909
14	Dance
15	EDM
16	Beatbox

Song List

No.	Song Name	Display Name
1	K-pop	Pop
2	Rock 1	Rock1
3	Jazz Funk	JazzFunk
4	Contemporary Gospel	Gospel
5	Funk	Funk
6	Fusion 1	Fusion1
7	Reggaeton	Reggaton
8	Slow R&B	SlowR&B
9	Prog Metalcore	Metelcore
10	6/8 Soul	6/8 Soul
11	Hip Hop	HipHop
12	Upbeat Funk	UpbtFunk
13	Rock 2	Rock2
14	Nu Jazz Funk	NuJazzFk
15	Retro Funk	RetrFunk
16	Rockabilly	Rockably
17	Progressive Metal	ProgRock
18	Synth Pop	SynthPop
19	Folk	Folk
20	Latin	Latin
21	Samba	Samba
22	Dance Funk	DancFunk
23	Blues Funk	BluesFnk
24	Dance	Dance
25	Reggae	Reggae
26	Soul	Soul
27	R&B	R&B
28	Ska	Ska
29	Classic Rock	ClassRk
30	Vintage Dance Pop	VtDcPop
31	Nu-Metal	Nu-Metal
32	Fusion 2	Fusion2
33	8Beat Pop	8BeatPop
34	Jazzy Funk	JazzyFnk
35	Trance	Trance
36	Heavy Rock	HeavyRock
37	Punk	Punk
38	3/4 Folk	3/4 Folk
39	Latin Rock	LatinRk
40	Blues	Blues
41	Drum N'Bass	D'N'B
42	Break Beat	BrkBeat
43	Mambo	Mambo
44	Shuffle	Shuffle
45	Fusion Bass	FusionBs
46	Salsa Bass	SalsaBs
47	Blues Bass	BluesBs
48	Indonesian Perc	IndnPerc
49	Samba Perc	SambPerc
50	Reggae Perc	RegPerc

GM Drum Kit List

Note#	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				

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

MIDI Implementation List

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	10ch x	1-16 x	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 o	
After Key's		x	o	
Touch Channel's		x	x	
Pitch Bend		x	o	
Control Change	0	x	o	Bank Select
	1	x	o	Modulation
	4	o (Pedal)	o	Foot Controller
	5	x	o	Portamento Time
	6	x	o	Data Entry
	7	x	o	Volume
	10	x	o	Pan
	11	x	o	Expression
	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 0-38	
System Exclusive		x	o	
System Common	: Song Position : Song Select : Tune Request	x x x	x x x	
System RealTime	: Clock : Commands	o o	x x	Start/Stop only
Aux Messages	: Local On/Off : All Notes Off : Acting Sensing : Reset	x x x x	x x x x	

X : NO O : YES

