

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!

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 roll or striking pads with different velocity, it lets you enjoy the subtle nuances and wide dynamics of an acoustic drum kit.

Playing Along with Song Playback

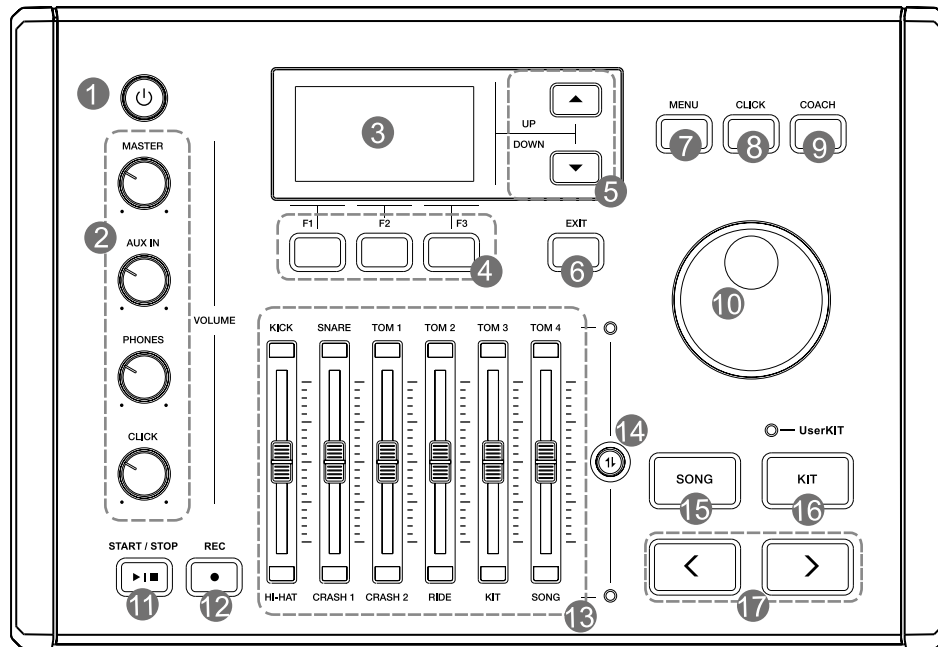
It supports playing the songs (MIDI, WAV, and MP3) from SD card. You can save your favorite songs to the SD card, then play the drums along with the SD card songs, or with the background music from the AUX IN. You can record your performance in real time and save it to the SD card as an audio file.

Loading Your Favorite Sounds to the Module

By using the SD card function, you can download your favorite wave samples (from the internet or sound source software) and load them to the module as user Sounds. Enjoy unlimited possibility in creating your own drum Sounds.

Panel & Display Description

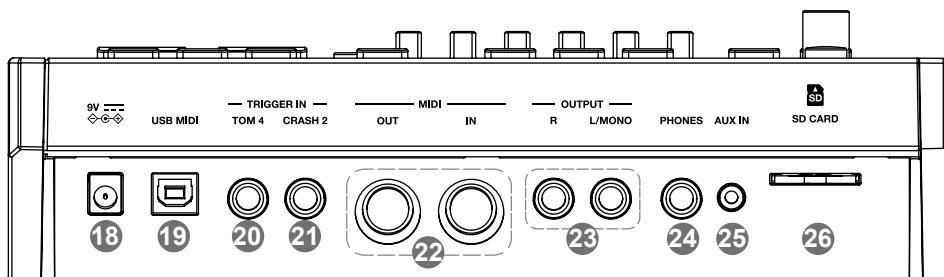
Front Panel



1. **[POWER] Button**
Turn the power on or off.
2. **[MASTER] Knob**
Adjust the output volume.
[AUX IN] Knob
Adjust the audio input volume.
[PHONES] Knob
Adjust the phones volume.
[CLICK] Knob
Adjust the click volume.
3. **LCD Display**
Display the names and parameters of Kits, Sounds and Songs.
4. **[F1] ~ [F3] Buttons**
Execute the corresponding on-screen functions.
5. **[^]/[V] Buttons**
Move the cursor to select a parameter.
6. **[EXIT] Button**
Return to a higher-level menu.
7. **[MENU] Button**
Kit: enter the menu of Kit mode.
Song: enter the menu of Song mode.
8. **[CLICK] Button**
Start/stop the click; edit the click setting.
9. **[COACH] Button**
Enter Coach mode.
10. **Data Dial**
Adjust the parameter setting.
11. **[▶|■] Button**
Start/stop playing a song.
12. **[●] Button**
Enter Record mode.
13. **Volume Faders**
Adjust the volume level of the upper or lower items.
14. **Volume Fader Control Button**
Toggle the faders between the upper and lower items.
15. **[SONG] Button**
Enter Song mode.
16. **[KIT] Button**
Enter Kit mode.
17. **[<]/[>] Buttons**
Select a drum kit or increase/decrease the value.

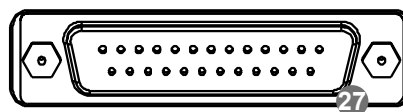
Panel & Display Description

Rear Panel

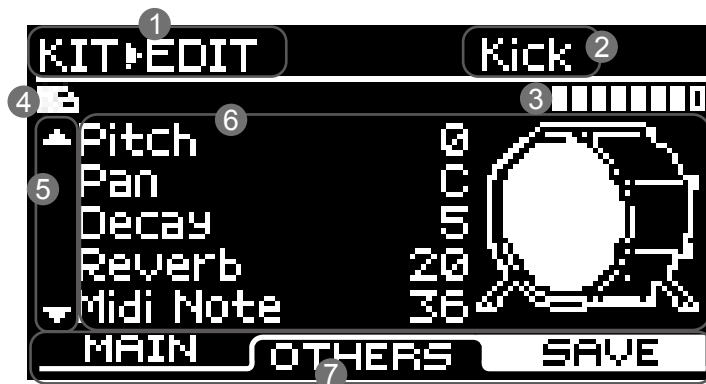


- 18. DC IN jack**
For connecting the specified power adapter.
- 19. USB MIDI jack**
For connecting to a computer to transmit/receive MIDI data.
- 20. TOM 4 jack (1/4")**
For connecting an additional Tom 4.
- 21. CRASH 2 jack (1/4")**
For connecting an additional Crash 2.
- 22. MIDI jacks (OUT, IN)**
For connecting external MIDI device to transmit/receive MIDI data.
- 23. OUTPUT jacks (L/MONO, R)(2 x 1/4")**
For connecting to 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.

- 24. PHONES jack (1/4")**
For connecting headphones to listen to the sound from the module.
- 25. AUX IN jack (1/8")**
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.
- 26. SD CARD slot**
For inserting an SD card to play the songs, or load wave samples.
- 27. Trigger Input jack**
For connecting the specified connection cables.



Display



- 1. Menu**
Display the current menu, such as "KIT", "SONG", "COACH", "CLICK".
- 2. Pad Name**
Display the selected pad name, such as "Kick", "Snare Head", "Snare Rim".
- 3. Strike Strength**
Display the current striking strength.
- 4. External Device Icon**
Indicate SD card connection.
- 5. Prompt to Move Cursor Up/Down**
Prompt to press the [^]/[V] buttons to view more parameters.
- 6. Detailed Parameters**
Display detailed parameter settings.
- 7. [F1]/[F2]/[F3] Indicators**
Display functions of the [F1] ~ [F3] 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.

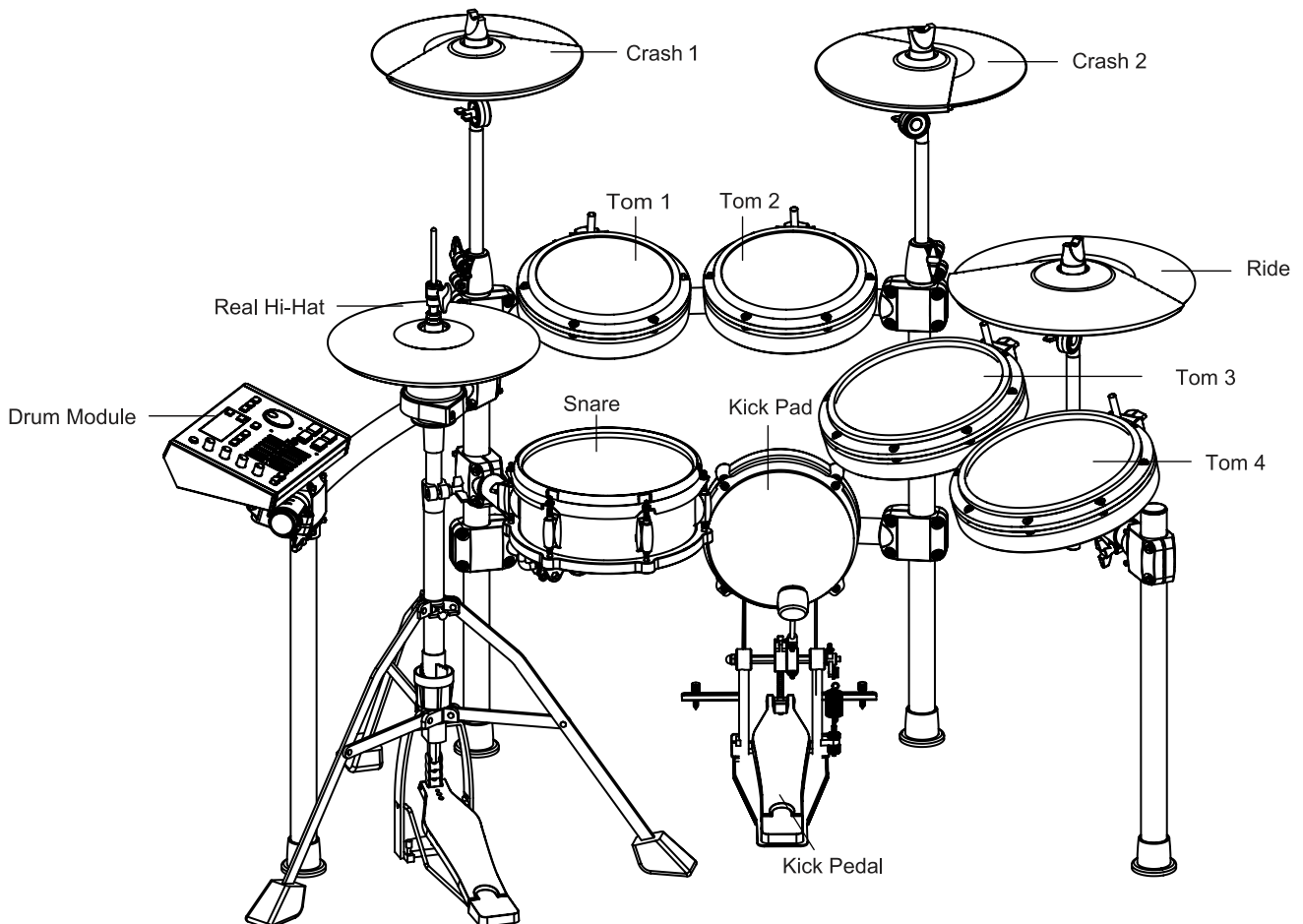
Connecting the Pads and Pedals

Standard configuration:

Kick Pad, Kick Pedal, Snare (2-zone), Tom 1~4 (2-zone), Crash 1~2 (2-zone with choke), Ride (3-zone with choke), Real Hi-hat (with hi-hat stand).

Notes:

1. Use the provided cables to connect the pads to the TRIGGER IN jacks on the rear panel of the module. 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 DC IN 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.

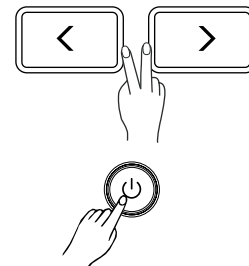
Auto Power Off

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.

Factory Reset

You can follow these procedures to reset the module to factory settings.

1. Hold the [<] and [>] buttons, then press the [POWER] button to turn on the power.
2. The display will show "Factory Resetting...". When factory reset is finished, it will go to the Kit menu.
3. After factory reset, these parameters will be reset to factory settings: Trigger, MIDI Setup, Option, Master Compress, User Kit and User Song.

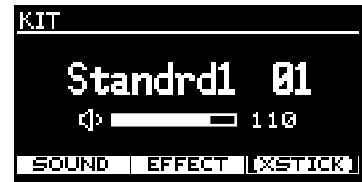
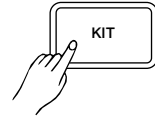


Drum Kits and Sounds

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 pre-set with various sounds of different styles. You can combine different sounds and make as many drum kits as you like. Refer to Drum Kit List and Drum Sound List.

Selecting a Drum Kit

1. Press the [KIT] button to enter the Kit menu.
2. Use the [^]/[V] button to select a parameter, then use the data dial or the [<]/[>] button to select a drum kit or adjust the kit volume.



Selecting a Sound

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

1. Press the [SOUND] button to enter the Sound menu.
2. Strike the pad that you want to edit. The LCD displays the current pad name and the sound 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 sound name, then use the [+]/[-] button or [DATA] dial to select a sound.



Playing Techniques

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

Pad

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

Head Shot

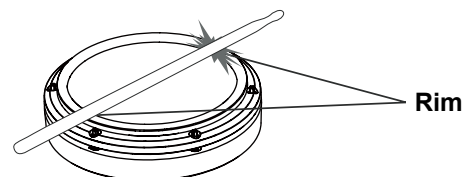
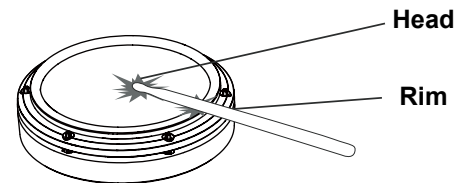
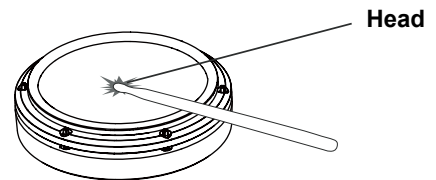
Strike only the head of the pad.

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

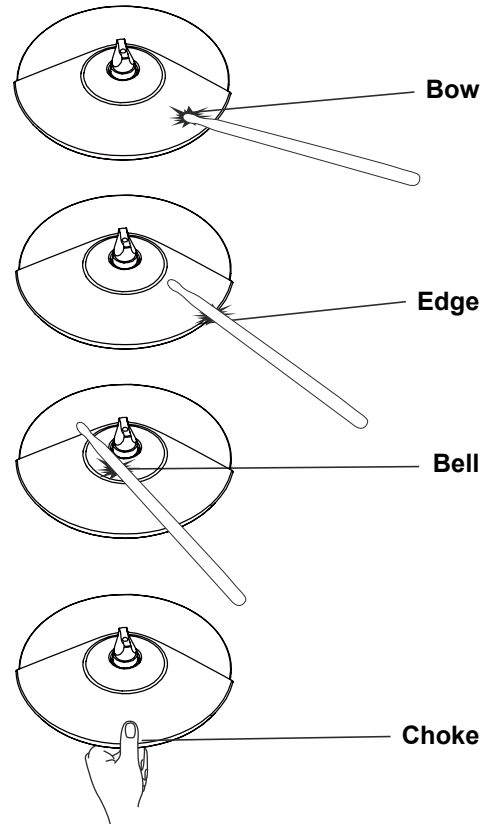
Strike the edge area of the cymbal.

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

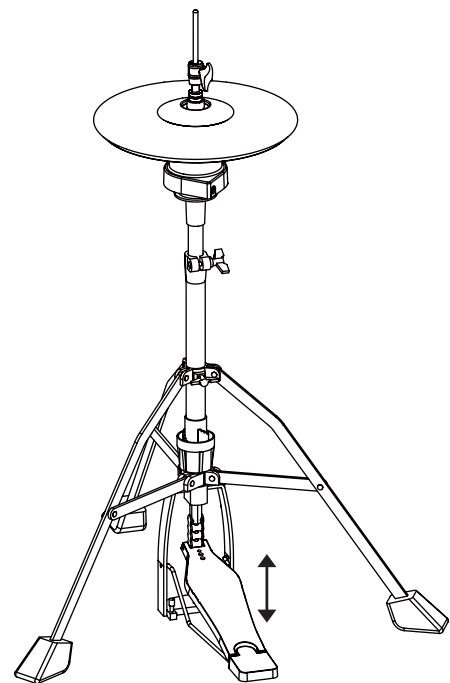
Strike the hi-hat cymbal when the pedal is fully pressed.

Hi-hat Pedal

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

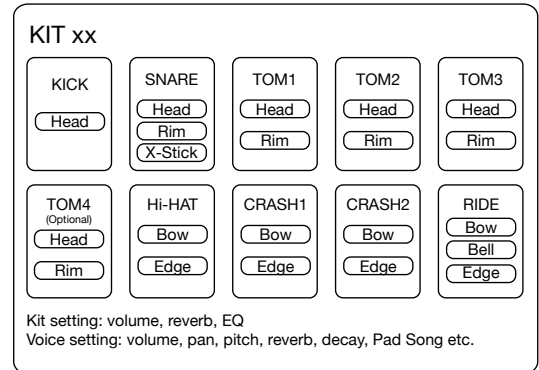
Splash

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. Please refer to the Drum Kit List. You can select your favorite drum kit, edit the parameters, then save it to a user kit.



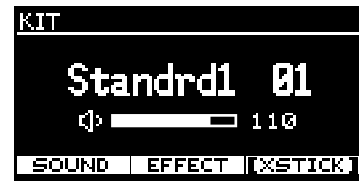
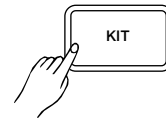
Selecting a Drum Kit

1. Press the [KIT] button to enter the Kit menu. The display shows the current kit number and kit volume. You can press the [KIT] button to toggle between preset kit and user kit.
2. Use the data dial or the [<]/[>] button to select a drum kit.
3. Use the [V] button to select the volume parameter, then use the data dial or the [<]/[>] button to adjust the kit volume.

Function of the [F1] ~ [F3] buttons in the Kit menu:

Button	Function	Description
[F1]	SOUND	Edit sound parameters.
[F2]	EFFECT	Edit kit effect.
[F3]	XSTICK	Turn X-stick on or off.

In the Kit menu, press the [F1] ~ [F3] buttons to enter the related sub-menu. In a sub-menu, use the [^]/[V] button to select a parameter, then use the data dial or the [<]/[>] button to adjust the value.



Editing a Kit

1. Press the [KIT] button then press the [F1 (SOUND)] button to enter the Sound menu.
2. In the Sound menu, you can change the pad sound and adjust sound parameters. Use the [^]/[V] button to select a parameter, then use the data dial or the [<]/[>] button to adjust the value.
3. After editing the parameters, press the [F3 (SAVE)] button to save it to a user kit; otherwise, the edited data will be lost when you change the kit.

Function of the [F1] ~ [F3] buttons in the Sound menu:

Button	Function	Description
[F1]	MAIN	Edit main parameters of sound.
[F2]	OTHERS	Edit other parameters of sound.
[F3]	SAVE	Save the settings to a user kit.

Editing Sound Parameters (Main)

1. Press the [KIT] button then press the [F1 (SOUND)] button to enter the Sound menu. The display shows the main parameters of the Sound menu.
2. Strike the pad that you want to edit. The display shows the current pad name. You can also use the [^]/[V] button to move the cursor to the pad name, then use the data dial or the [<]/[>] button to select a pad.
3. Use the [^]/[V] button to move the cursor to the sound name, then use the data dial or the [<]/[>] button to select a sound.
4. Use the [^]/[V] button to move the cursor to the volume, then use the data dial or the [<]/[>] button to change the volume level.



Main sound parameters and their range:

Parameter	Range	Description
Sound number	1 ~ 699	Select a sound number.
Sound volume	0 ~ 127	Adjust the sound volume.

Notes:

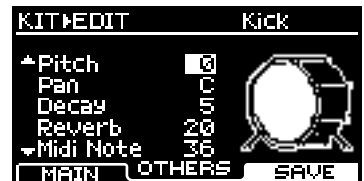
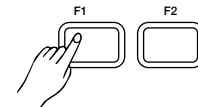
1. For the sound number and name details, refer to the Drum Sound List.
2. The display shows the “^” or “V” icon on the leftmost side, to indicate the [^] or [V] button is available for current operation.

Editing Sound Parameters (Others)

1. Press the [KIT] button then press the [F1 (SOUND)] button, and then press the [F2 (OTHERS)] button to enter the Edit menu. The display shows a list of sound parameters.
2. Strike the pad that you want to edit. The display shows the current pad name. You can also use the [^]/[V] button to move the cursor to the pad name, then use the data dial or the [<]/[>] button to select a pad.
3. Use the [^]/[V] button to select a parameter, then use the data dial or the [<]/[>] button to change the value.

Sound parameters and their range:

Parameter	Range	Description
Pitch	-8 ~ +8	Adjust the pitch.
Pan	L8 ~ C ~ R8	Adjust the sound pan.
Decay	0 ~ 5	Adjust the sound decay.
Reverb	0 ~ 127	Adjust the sound reverb level.
Midi Note	0 ~ 127	The MIDI note to be sent from MIDI OUT.
O Midi Note	0 ~ 127	The open Hi-hat MIDI note to be sent from MIDI OUT.
C Midi Note	0 ~ 127	The closed Hi-hat MIDI note to be sent from MIDI OUT.
Pad Ptn	OFF, 1 ~ 100	Select a song number for pad pattern. When you strike the pad, the selected song will play back.
Min Velocity	1 ~ 127	Set the minimum velocity. When your striking strength is smaller than this value, it will respond the minimum velocity.
Strainer	--, OFF, ON	Turn the strainer effect on or off. Only for snare pad sounds that have strainer effect.



Kit Effect

1. Press the [KIT] button then press the [F2 (EFFECT)] button to enter the Effect menu.
2. In the Effect menu, press the [F1 (REVERB)] or [F2 (EQ)] button to enter the Reverb menu or the EQ menu.

Editing the Reverb Effect

1. Press the [KIT] button then press the [F2 (EFFECT)] button, and then press the [F1 (REVERB)] button to enter the Reverb menu.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then use the data dial or the [<]/[>] button to adjust the setting.

Reverb parameters and their range:

Parameter	Range	Description
Type	Room1, Room2, Room3, Hall1, Hall2, Church, Delay, Pan Delay	Select a reverb effect.
Level	0 ~ 127	Adjust the reverb level.
Time	0.30s ~ 12.00s	Set the reverb time of these effects: Room1, Room2, Room3, Hall1, Hall2, Church
	0 ~ 325ms	Set the reverb time of Delay and Pan Delay.

Editing the EQ Effect

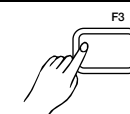
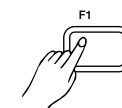
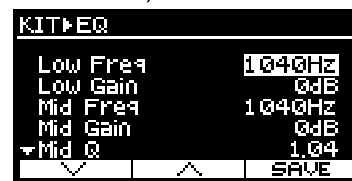
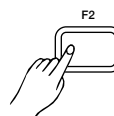
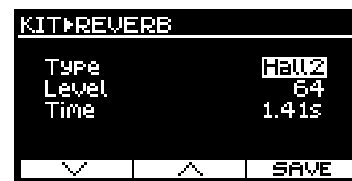
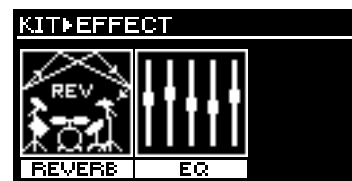
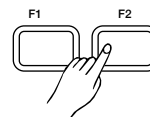
1. Press the [KIT] button then press the [F2 (EFFECT)] button, and then press the [F2 (EQ)] button to enter the EQ menu.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then use the data dial or the [<]/[>] button to adjust the setting.

EQ parameters and their range:

Parameter	Range	Description
Low Freq	50Hz ~ 20000Hz	Set the cutoff frequency of the low-range.
Low Gain	-12dB ~ +12dB	Adjust the gain of the low-range.
Mid Freq	50Hz ~ 20000Hz	Set the center frequency of the mid-range.
Mid Gain	-12dB ~ +12dB	Adjust the gain of the mid-range.
Mid Q	0.00 ~ 12.00	Set the Q value of the mid-range.
High Freq	50Hz ~ 20000Hz	Set the cutoff frequency of the high-range.
High Gain	-12dB ~ +12dB	Adjust the gain of the high-range.

Saving User Kit

1. After editing the sound parameters or the effect parameters, press the [F3 (SAVE)] button to enter the Save menu.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a user kit name.
3. Press the [F3 (ENTER)] button to enter the Rename menu. You can rename the user kit by using these button operations. You can enter up to 12 characters for each name.



Drum Kit

Button	Operation
[^]/[v]	Move the cursor to the left or right.
Data dial or [<]/[>]	Change the character at the cursor location.
[F1]	Insert a space before the cursor location.
[F2]	Delete the character at the cursor location.
[F3]	Confirm and save.
[EXIT]	Return to the previous menu.

- After renaming, press the [F3 (ENTER)] button to save it. The display will temporarily show "Save Ok!", then return to the Kit menu.

Notes:

- In the Save menu, if there's a "*" in the user kit name, it indicate this user kit is blank. If there's no "*" in the user kit name, it means this user kit has data.
- You can edit kit parameters, including the sound and effect parameters, then save the settings to a user kit. The unsaved edited data will be lost when you change the kit or turn off the power.
- After editing kit parameters, if you do not save the edited data but directly enter Record mode, it will use the default kit settings for recording.
- As long as you do not change the kit, the edited sound settings will not be lost even when you go to another menu.



Click

The click helps you practice at a steady tempo.

- Press the [CLICK] button to enter the Click menu and start playing the click. The button indicator blinks in sync with the click sound.
- In Click menu, use the [^]/[v] button to select a parameter, then use the data dial or [<]/[>] buttons to change the setting.

Click parameters and their range:

Parameter	Range	Description
Tempo	30 ~ 280	Adjust the click tempo.
Sound	Click, Clave, Stick, CoClick, FmClick, Voice1, Voice2	Select the click sound.
T-Sign	0/2 ~ 9/2, 0/4 ~ 9/4, 0/8 ~ 9/8, 0/16 ~ 9/16	Set the time signature.
Interval	1/2, 3/8, 1/4, 1/8, 1/12, 1/16	Set the rhythm of the click.
Out	Phone, Main+Phone	Select the output channel of the click sound.

- Press the [CLICK] button again to exit the Click menu and stop the click. The button indicator turns off.

Note:

In the Click menu, if you press the [EXIT] button, it will exit the Click menu, but will not stop the click sound.



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

Playing Preset Songs

1. Press the [SONG] button to enter the Song ► Module menu.
2. Use the [^]/[V] button to move the cursor to the song number or the volume, then use the data dial or the [<]/[>] button to change the song number or song volume.
3. Press the [▶|■] button to start/stop playing the song. During playback, the display shows the measure count.
4. When in the Song►Module menu, you can press the [F1 (LIST)] button to enter the List menu. Then use the [^]/[V] buttons, the data dial or [<]/[>] buttons to select a song from the list.
5. When in the List menu, you can press the [F1 (GROUP)] button to toggle between the preset songs and user songs. After selecting a song from the list, you can press the [SONG] button to go back to the Song menu.
6. When in the Song ► Module menu or the List menu, you can press the [F3 (TEMPO)] button to show the current tempo, then use the data dial or [<]/[>] buttons to adjust the tempo.

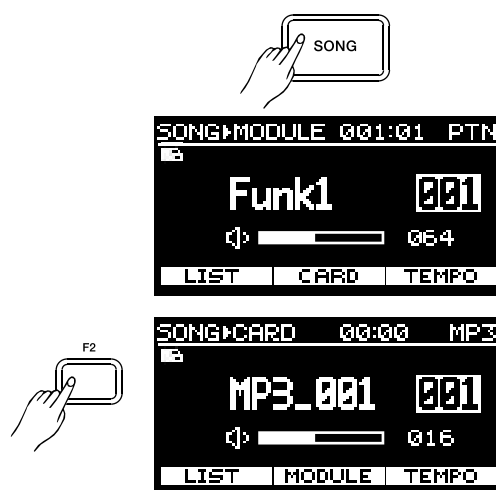
Song groups and their range:

Song	Group	Range	Description
Preset	Ptn	1 ~ 100	Pattern is rhythmic music. When a pattern is finished, it will automatically start again from the beginning until you press the [▶ ■] button.
User	User	101 ~ 110	Recorded songs

Playing Songs from SD Card

The module supports playing MP3, WAV and MIDI files from SD card. The default song folder on the SD card is "/SONG". The module can recognize up to 99 songs in this folder. If you have more than 99 songs, create a different folder for the extra songs. The module supports up to 99 folders under the root directory of the SD card. To play songs from a different folder, you can press the [SONG] button, then press the [MENU] button to select a song folder for playback.

1. Press the [SONG] button to enter the Song menu.
2. Insert an SD card, the display shows the SD card icon. Press the [F2 (CARD)] button to enter the SD Card menu. You can play these songs from the SD card: MP3, WAV and MIDI. When in the SD card menu, you can use the [F2] button to toggle between the SD card songs and preset songs.
3. Press [F1 (LIST)] to enter the List menu. You can select a song to play.



Notes:

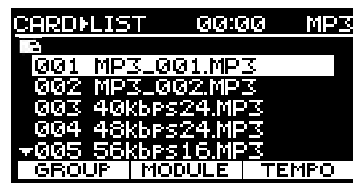
1. Format requirement of SD card songs:

Song	Format requirement
MP3	bit rate≤320kbps, sample rate≤48kHz
WAV	16-bit, sample rate≤48kHz
MIDI	Format0 and Format1, 32 tracks max., PPQN≤480, max capacity of 128kbyte

2. You can adjust the tempo of MIDI songs and the Click, but cannot change the tempo of MP3 and WAV songs.

Playing Along with Song Playback

1. Select a preset song or SD card song, then press the [▶|■] button to start playing the song. Now you can strike the drum pads to play along with the song.
2. If you are playing a preset song or a MIDI song from SD card, you can press the [F3 (TEMPO)] button then use the data dial or the [<|>] button to adjust the tempo.
3. You can press the [CLICK] button to turn the click on or off.



You can record MIDI songs and save them to the module, or record WAV songs and save them to an SD card.

Start Recording

You can enter Record mode in two ways:

- In the Kit menu, press the [●] button to enter Record mode. It will only record your drum performance.
- In the Song menu, press the [●] button to enter Record mode. It will record the your drum performance and the current song.

The operation for MIDI recording and WAV recording is the same. Here it takes MIDI recording as an example. If you want to enable WAV recording, insert an SD card in advance.

1. Press the [●] button to enter Record mode. By default it enables MIDI recording. The click automatically turns on. You can press the [CLICK] button to mute the click sound, but the click indicator will keep flashing.
2. In Record mode, you can use these buttons to adjust the settings for recording.
 - Use the data dial or [<]/[>] button to select a user song slot for saving the recording.
 - Press the [F1 (P-CNT)] button to turn the count-in function on or off.
 - Press the [F3 (TEMPO)] button to display the tempo value temporarily. Use the data dial or [<]/[>] button to adjust the tempo for recording.
 - Press the [F2 (CARD)] button to enter the WAV recording menu.
3. Press the [] button or strike a pad to start recording. In MIDI recording, the click sound will not be recorded.

Note:

During recording, only these buttons are available: [F3 (STOP)], [CLICK], [EXIT], and [▶|■].

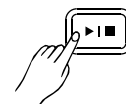
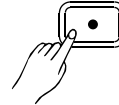
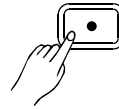
Stop and Save Recording

1. During recording, you can press the [F3 (STOP)], [▶|■] or [EXIT] button to stop recording. It will enter the Rename menu.
2. Use these buttons to rename the user song.

Button	Operation
[^]/[v]	Move the cursor to the left or right.
Data dial or [<]/[>]	Change the character at the cursor location.
[F1]	Insert a space before the cursor location.
[F2]	Delete the character at the cursor location.
[F3]	Confirm and save.
[EXIT]	Exit the Rename menu and save the user song with the default name "U_Song_xx".

Notes:

1. It doesn't support renaming a user song in WAV recording. When you stop, the recording will be saved using the name "SONG_xxx". You can record up to 30 minutes in each WAV recording.
2. In the Rename menu, you can enter up to 12 characters for each name.
3. When a user kit is used for MIDI recording, if you change the user kit setting, when you play back this user song, it will sound different from recording.
4. If you set the click output channel to "Main+Phone", when in WAV recording, the click sound will also be recorded.



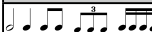
Coach Mode

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. Score function is available in Beat Check and Change Up.

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 (QUIET)] button to enter the Quiet Count menu.

Parameter	Range	Description
 001 ~ 005		Select a beat type for practice.
Mode	1-1, 2-2, 1-3	1-1: one measure of demo and one measure in quiet count. 2-2: two measures of demo and two measures in quiet count. 1-3: one measure of demo and three measures in quiet count.
Measure Hint	ON, OFF	Turn the accent hint on or off.
Tempo	30 ~ 280	Adjust the tempo.

2. Press the [▶|■] button to start the practice. It first plays a count-in, then 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 display. Now strike the pad in the demonstrated tempo. The display will show the accuracy of each strike. During the practice, you can press the [F3 (TEMPO)] button to adjust the tempo.

3. press the [▶|■] button again to stop the practice.


Note:

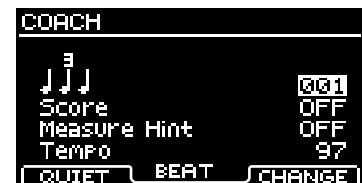
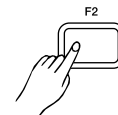
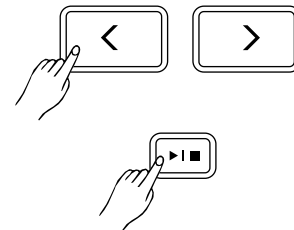
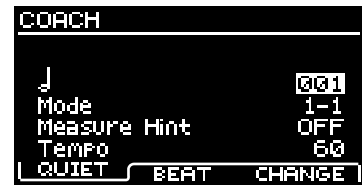
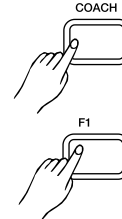
During the practice, you can track the accuracy of each strike on the display.

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 (BEAT)] button to enter the Beat Check menu.

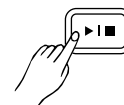
Parameter	Range	Description
	001 ~ 015	Select a beat type for practice.
Score	OFF, ON(8Meas), ON(16Meas), ON(32Meas)	Turn the score function on or off. Select the number of measures for practice.
Measure Hint	ON, OFF	Turn the accent hint on or off.
Tempo	30 ~ 280	Adjust the tempo.



- Press the [▶|■] button to start the practice. It first plays a count-in, then the practice starts. Follow the click sound and strike the pad. The display will show the accuracy of each strike. During the practice, you can press the [F3 (TEMPO)] button to adjust the tempo.
- Press the [▶|■] button again to stop the practice.

Note:

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

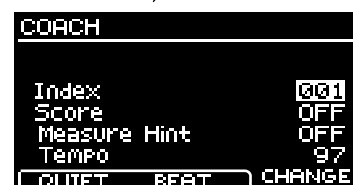
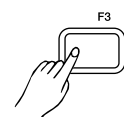


Change Up

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 (CHANGE)] button to enter the Change Up menu.

Parameter	Range	Description
	001 ~ 003	Select a beat type for practice.
Score	OFF, ON (2 Loop), ON (4 Loop)	Turn the score function on or off. Select the number of loops for practice.
Measure Hint	ON, OFF	Turn the accent hint on or off.
Tempo	30 ~ 280	Adjust the tempo.



- Press the [▶|■] button to start the practice. It first plays a count-in, then the practice starts. The display shows the accuracy of each strike. Just before the beat changes, the note icon will blink on the display to indicate the beat will change in the next measure. During the practice, you can press [F3 (TEMPO)] button to adjust the tempo.
- Press the [▶|■] button again to stop the practice.

Note:

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



SD Card Function

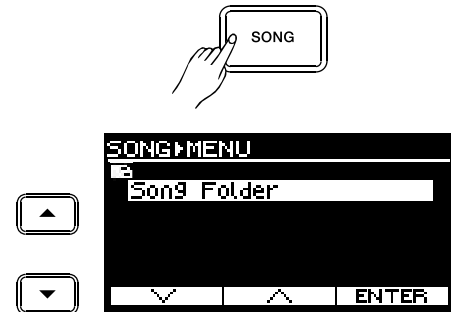
When an SD card is inserted, the display shows the SD card connection icon. The module supports SD card of 4G~64G in FAT32 format. We recommend formatting the SD card on the module if this is the first time to use it on the module.

Selecting a Song Folder for Playback

The module can recognize up to 99 songs in a folder. The default song folder on the SD card is "/SONG". If you have more than 99 songs, create a different folder for the extra songs. To play songs from a different folder instead of the default SONG folder, you will need to select this folder in advance.

Note: The module doesn't support displaying Chinese characters.

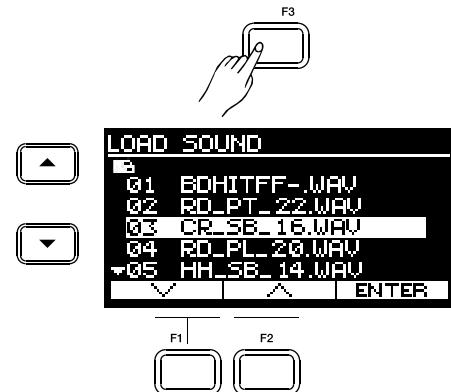
1. Press the [SONG] button, then press the [MENU] button to enter SONG→MENU of the SD card.
2. By default it selects the "Song Folder", press the [F3 (ENTER)] button to enter. The display shows the folder names. Use the [^]/[V] button to select a folder for playback, then press the [F3 (ENTER)] button.



Loading User Sound to the Module

You can load your favorite sound from the SD card to the module as a user sound.

1. Press the [KIT] button, then the [MENU] button. Use the [^]/[V] button to select "SD Card", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button to select "Load Sound", then press the [F3 (ENTER)] button to enter. The display shows the WAV files in the "/SOUND" folder on SD card.
3. Use the [^]/[V] button or the [F1]/[F2] button to select a WAV file, then press the [F3 (ENTER)] button to confirm. The display shows "Waiting..." to indicate the WAV file is being loaded to the module. The loading process may take a few minutes.



Notes:

1. WAV file description:
Format: 16 bit, sampling rate of 48k/44.1k/32k/22.05k/11.025k.
It supports up to 99 WAV files in the "/SOUND" folder on SD card.
The total size of the loaded WAV files should be less than 15M Byte.
2. When the display shows "Unsupported file", it indicates the WAV file format is not correct. Please modify it according to the WAV file format described above.
3. It doesn't support deleting or editing a single user sound. When the user sound memory is used up, you can delete all user sounds by using the factory reset function.
4. When you execute factory reset to delete user sounds, if a user kit includes a deleted user sound, the user sound in this user kit will become muted.
5. The imported user sounds will be placed between the preset sounds and Hi-hat combination sounds, using the sound number of "Uxx".

Loading User Kit to the Module

You can load a ".KIT" file from SD card to the module a user kit.

1. Press the [KIT] button, then the [MENU] button. Use the [^]/[V] button to select "SD Card", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button to select "Load Kit", then press the [F3 (ENTER)] button to enter. The display shows the kit files on the SD card.
3. Use the [^]/[V] button or the [F1]/[F2] button to select a kit name, then press the [F3 (ENTER)] button to enter the Kit Load menu.
4. Use the [^]/[V] button or the [F1]/[F2] button to select a user kit slot on the module. Then press the [F3 (ENTER)] button to confirm and load. The display shows "Waiting..." to indicate the kit file is being loaded to the module. The loading process may take a few minutes.

Note:

If the size of the user sound included in the selected user kit is larger than the user sound memory on the module, the display will prompt "User sound memory full!". In such a case, you can use these button operations:

- [F1 (MUTE)]: mute the over-sized user sound and load the selected user kit to the module.
- [F2 (FORMAT)]: format the user sound memory on the module, then load the user kit and user sound to the module.
- [F3 (EXIT)]: cancel this operation and return to the Load Kit menu.

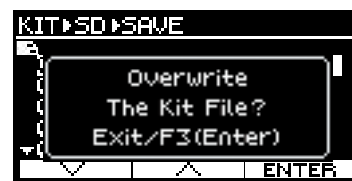
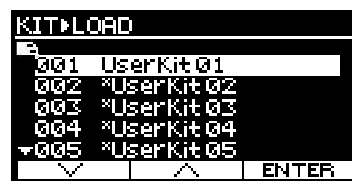
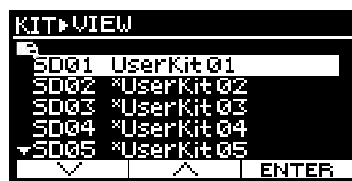
Saving User Kit to the SD card

You can save the current kit to the SD card as a ".KIT" file.

1. Press the [KIT] button, then use the data dial or the [<]/[>] button to select a kit, and then press the [MENU] button. Use the [^]/[V] button to select "SD Card", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button to select "Save Kit", then press the [F3 (ENTER)] button to enter. The display shows the user kit slots on the SD card.
3. Use the [^]/[V] button or the [F1]/[F2] button to select a user kit slot, then press the [F3 (ENTER)] button to enter the Rename menu. Now you can rename this user kit.
4. Press the [F3 (ENTER)] button to confirm and save the kit to SD card. The display shows "Waiting!". Or you can press the [EXIT] button to cancel this operation and go back to the previous menu.

Notes:

1. When selecting a user kit slot from SD card, if there's an "*" icon in the kit name, indicating this user kit is blank. If there's no "*" icon in the kit name, it indicates this user kit has data.
2. When you select a user kit slot that has data, the display will prompt "Overwrite The Kit File?", indicating the saving process will overwrite existing data in the selected user kit. You can press the [F3 (ENTER)] to confirm saving or the [EXIT] button to cancel.
3. If there's user sound in the user kit, the saving process will take a few minutes to finish.

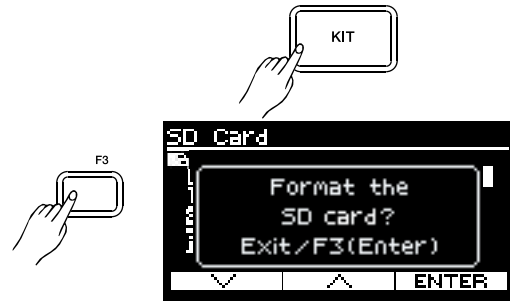


SD Card Function

Formatting the SD Card

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

1. Press the [KIT] button, then the [MENU] button. Use the [^]/[V] button to select "SD Card", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button to select "Format SD Card", then press the [F3 (ENTER)] button to enter. The display prompts "Format the SD card? Exit/F3(Enter)".
3. Press the [F3 (ENTER)] button to confirm. The display shows "Waiting!".
Or you can press the [EXIT] button to cancel go back to the previous menu.



Volume Faders

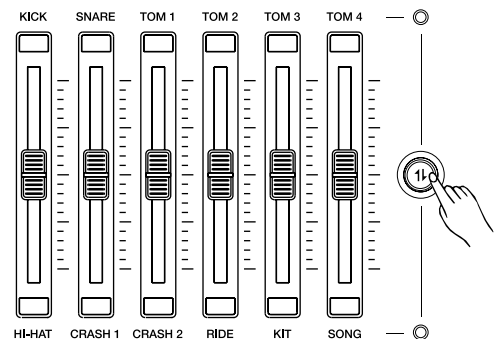
You can use the volume faders to adjust the volume level of the related item.

1. Press the [1/2] button to toggle the faders between the upper and lower items. The upper or lower indicator will turn on.
2. Push the faders to adjust the volume of the related upper/lower items separately.

For example, to adjust the volume of the snare:
Press the [1/2] button to switch the faders to the upper items. The upper item indicator turns on. Now push the [SNARE] fader to adjust the volume of the snare.

Note:

Pressing the [1/2] button will not result in volume change. Push the faders to adjust the volume of the related items



Trigger Setting

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

1. Press the [KIT] button, then press the [MENU] button.
2. Use the [^]/[V] button or the [F1]/[F2] button to select "Trigger", then press the [F3 (ENTER)] button to enter.
3. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then use the data dial or [<]/[>] button to change the setting. After editing, press the [F3 (SAVE)] button to save the setting, otherwise, the edited data will be lost after power off.



Trigger parameters and their range:

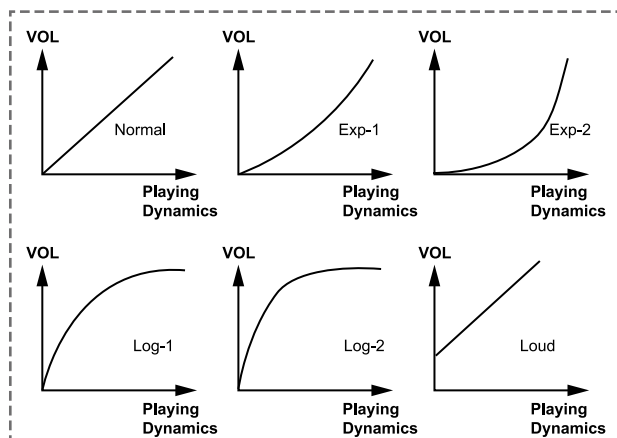
Parameter	Range	Description
Head(Bow) Sensi	0 ~ 15	Adjusts the pad sensitivity. A high value will let the pad produce a loud volume even when playing softly. A low value will let the pad produce a low volume even when playing forcefully.
Rim(Edge) Sensi	0 ~ 15	Adjusts the rim sensitivity.
Threshold	0 ~ 15	<p>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.</p> <p>You can adjust the threshold in the following way: Set the value to a low level.</p> <p>Increase this value gradually, then strike the pad and check. Repeat this process until you get an appropriate level.</p>
Head/Rim Adj	0 ~ 15	Adjust the response of head shot and rim shot (for snare and tom only).
XStick Point	--, 0 ~ 8	It sets the cross stick of the snare. A higher value makes it easy to produce cross stick sound. When the value is set to "0", it produces rim shot sound only. Note: This setting will apply only when X-Stick is turned on in the Kit menu.
XTalk Cancel	0 ~ 15	This setting avoids "crosstalk". Crosstalk means when you strike a pad, the adjacent pad 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 that is struck less forcefully may not produce sound. Set this parameter to a proper value required to prevent crosstalk.
VibrateCancel	0 ~ 7	This setting is to prevent the vibration interference caused by closing the hi-hat pedal. A higher value makes it easier to prevent the interference. Note: Setting this value too high, some sounds may be omitted when playing the hi-hat.
Curve	Normal, EXP-1, EXP-2, LOG-1, LOG-2, Loud	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.

Setup

RetrigCancel	0 ~ 15	This setting prevents “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 (roll etc.).
Close Point	0 ~ 2	Adjust the close point position. “0” means the close point means the end position. “1” means the middle position. “2” means the upper position.
Pedal Sensi	0 ~ 15	Adjusts the sensitivity of the Hi-hat pedal.
Splash Sensi	0 ~ 5	Adjust the splash sensitivity. The higher value, the easier to achieve splash.
Bell Sensi	0 ~ 15	Adjust the sensitivity of cymbal bell.

Curve description:

Curve	Description
Normal	The relation between the striking force and the sound volume is linear.
EXP1, EXP2	Soft strikes produce small change in volume. Strong strikes produce big change in volume.
LOG1, LOG2	Soft strikes produce big change in volume change. Strong strikes produce small change in volume.
Loud	Even soft strikes will produce large sound. It's easy to maintain large volume level but has small dynamics.



Default MIDI note:

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

Hi-hat Type

1. Make sure the real hi-hat is assembled as instructed.
2. Connect the module's hi-hat cable to the hi-hat.
3. Connect the module's hi-hat control cable to the hi-hat control.
4. Turn on the module, then use these procedures to set the hi-hat type.
 - Press the [KIT] button, then press then [MENU] button.
 - Use the [^]/[V] button or the [F1]/[F2] button to select "Hihat Type", then press the [F3 (ENTER)] button to enter the setting menu.
 - The module will select the current hi-hat type by default. Use the data dial or [<]/[>] button to select the hi-hat type.
 - Press the [F3 (ENTER)] button to save the edited setting. It will use this setting the next time when the module is turned on.

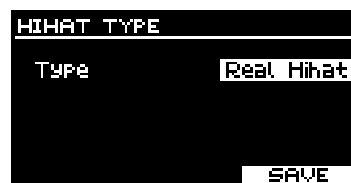
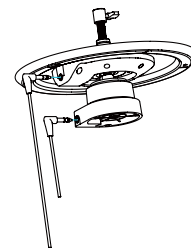
Setting description:

Real Hi-hat: the hi-hat is mounted on a hi-hat stand.

Hi-hat pedal: the hi-hat is controlled by a separate hi-hat control pedal.

Note:

If you want to set parameters of the real hi-hat, refer to the owner's manual for your drum module and set the parameters in the trigger menu.



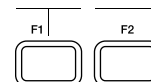
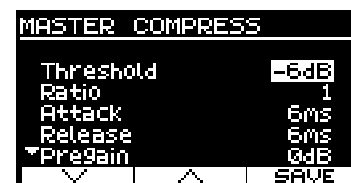
Master Compress

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

1. Press the [KIT] button, then press the [MENU] button. Use the [^]/[V] button or the [F1]/[F2] button to select "Master Compress", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then use the data dial or [<]/[>] button to change the setting. After editing, press the [F3 (SAVE)] button to save the setting, otherwise, the edited data will be lost after power off.

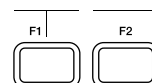
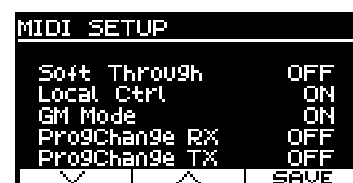
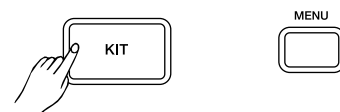
Master compress parameters and their range:

Parameter	Range	Description
Threshold	-30dB ~ 0dB	Set the signal level at which the compressor starts applying.
Ratio	1 ~ 25	Set the compressor ratio.
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.



MIDI Setup

1. Press the [KIT] button, then press the [MENU] button. Use the [^]/[V] button or the [F1]/[F2] button to select "MIDI Setup", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then use the data dial or [<]/[>] button to change the setting. After editing, press the [F3 (SAVE)] button to save the setting, otherwise, the edited data will be lost after power off.



Setup

MIDI Setup parameters and their range:

Parameter	Range	Description
Soft Through	ON, OFF	MIDI data received from MIDI IN will be transmitted thru MIDI OUT.
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.
ProgChange RX	ON, OFF	ON: Receive Program Change MIDI data from channel10. OFF: Ignore Program Change MIDI data from channel10.
ProgChange TX	ON, OFF	ON: Sent 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:

When setting GM Mode to OFF, and setting the ProgChange RX / ProgChange TX to ON, it will receive / send program change MIDI data of the local drum kit.

Auto Power Off

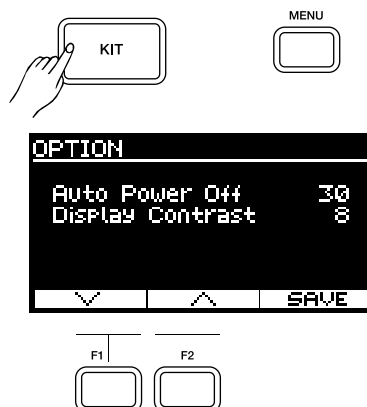
The module will automatically turn off after a period of time if it is not in use.

Note: If you're playing music, recording, receiving message from MIDI IN, it will not turn off the power after the specified period of time.

1. Press the [KIT] button, then press the [MENU] button. Use the [^]/[V] button or the [F1]/[F2] button to select "Option", then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then use the data dial or [<]/[>] button to change the setting. After editing, press the [F3 (SAVE)] button to save the setting, otherwise, the edited data will be lost after power off.

Parameters in the Option menu:

Parameter	Range	Description
Auto Power Off	OFF, 30, 60	OFF: turn off this function. 30, 60: set the time period after which the module will turn off if it's not in use.
Display Contrast	1 ~ 16	Adjust the display contrast.



Reset User Data

You can reset user kit, user song, user trigger setting, and user sound respectively.

1. Press the [KIT] button, then press the [MENU] button. Use the [^]/[V] button or the [F1]/[F2] button to select “Factory Reset”, then press the [F3 (ENTER)] button to enter.
2. Use the [^]/[V] button or the [F1]/[F2] button to select a parameter, then press the [F3(ENTER)] button to execute factory reset.

Parameters in the Factory Reset menu:

Parameter	Description
Kit Reset	Reset all user drum kits.
Song Reset	Reset all user songs.
Trigger Reset	Reset all user trigger settings.
sound Reset	Reset all user sounds.
All Reset	Reset all user kits, user songs, user trigger settings, user sounds, MIDI settings, Option settings and Master Compress settings.

Note:

Do not turn off the power when factory reset is in progress. If the power is turned off during factory reset, execute factory reset again, otherwise, it may affect the normal functions.



Specifications

Drum Kits	54 presets + 45 users
Sound	699 presets + 19 hi-hat combinations
Sequencer	100 presets song + 10 user songs SD card playback: WAV, MP3, MIDI. Up to 99 songs in each folder. Tick: 192 ticks per beat. Recording: real-time, approx. 2000 notes per user song.
Tempo	30 ~ 280
External Drive	SD (64GB max., FAT32)
Display	64 x 128 dots matrix LCD with backlight
Connectors	Trigger Input jack, TRIGGER IN x 2 (1/4", TOM4, CRASH2), PHONES (1/4"), AUX IN (1/8"), USB MIDI, SD CARD slot, MIDI IN, MIDI OUT, OUTPUT x 2 (R, L/MONO, 1/4")
Control Buttons	Power on/off, Master volume, Aux in volume, Phones volume, Click volume, Kit, Song, Record, Start/Stop, Menu, Click, Coach, ^/∇, Exit, F1, F2, F3, Data Dial, Volume faders, fader control button, </>
Power Supply	DC9V, 500mA
Module Dimensions	265(W) x 181(D) x 74(H)mm
Module Weight	0.98kg

Drum Kit List

No.	Kit Name
1	Standard 1
2	Acoustic 1
3	Funk
4	Rock
5	Brush 1
6	Latin
7	Funk Band
8	Dubstep
9	Beatbox 1
10	808
11	909
12	HipHop 1
13	EDM
14	HipHop 2
15	Reggae
16	Jazz
17	Percussion 1
18	Indian
19	African
20	Room
21	Brush 2
22	Fusion
23	Vintage
24	Orchestra
25	Percussion 2
26	Marimba
27	Vibraphone

No.	Kit Name
28	Beatbox 2
29	Power
30	Teckno
31	Dance
32	Metal
33	Pop
34	World
35	Ska
36	Lo-Fi
37	R&B
38	Electronic
39	Magic
40	House
41	FX Mix
42	Big Band
43	Live
44	Old School
45	1970's
46	Jazz Latin
47	Junkyard
48	Noise
49	Acoustic 2
50	Standard 2
51	Studio 1
52	Studio 2
53	Chinese 1
54	Chinese 2

Drum Sound List

No.	Full Name
KICK	
1	22"Standard Kick 1
2	22"Standard Kick 2
3	Rock Kick
4	22"Acoustic Kick
5	22"Jazz Kick
6	Vintage Kick 1
7	Brush Kick
8	Funk Kick
9	Room Kick 1
10	Room Kick 2
11	Fusion Kick
12	1970's Kick
13	Vintage Kick 2
14	Reggae Kick
15	Big Band Kick
16	Old School Kick
17	Pop Kick
18	Magic Kick
19	Noise Kick
20	Beatbox Kick 1
21	Power Kick
22	808 Kick
23	909 Kick
24	Electronic Kick
25	Dance Kick
26	Beatbox Kick 2
27	FX Mix Kick
28	HipHop Kick 1
29	HipHop Kick 2
30	HipHop Kick 3
31	EDM Kick
32	Techno Kick
33	Lo-Fi Kick
34	Lo-Fi Kick 2
35	Junkyard Kick
SNARE	
36	14"Standard Snare 1
37	14"Standard Snare Rim 1
38	14"Rock Snare
39	14"Rock Snare Rim
40	14"Acoustic Snare
41	14"Acoustic Snare Rim
42	14"Funk Snare 1
43	14"Funk Snare Rim 1
44	14"Jazz Snare
45	14"Jazz Snare Rim
46	Room Snare
47	Room Snare Rim
48	Fusion Snare
49	Fusion Snare Rim
50	14"Standard Snare 2
51	14"Standard Snare Rim 2
52	14"Funk Snare 2
53	14" ' Funk Snare Rim 2
54	Vintage Snare
55	Vintage Snare Rim
56	Brush Snare 1

57	Brush Snare Rim 1
58	Brush Snare 2
59	Brush Snare Rim 2
60	Live Snare
61	Live Snare Rim
62	Orchestra Snare
63	Orchestra Snare Rim
64	Reggae Snare
65	Reggae Snare Rim
66	Old School Snare
67	Old School Snare Rim
68	R&B Snare
69	R&B Snare Rim
70	Dubstep Snare
71	Beatbox Snare 1
72	Beatbox Snare Rim 1
73	HipHop Snare
74	HipHop Snare 2
75	HipHop Snare 3
76	HipHop Snare Stick
77	EDM Snare 1
78	EDM Snare 2
79	EDM Snare Stick
80	808 Snare
81	808 Snare Rim
82	909 Snare
83	909 Snare Rim
84	Electronic Snare
85	Power Snare
86	Dance Snare
87	Dance Snare Rim
88	House Snare
89	House Snare Rim
90	Lo-Fi Snare
91	Lo-Fi Snare Rim
92	Junkyard Snare
93	Junkyard Snare Rim
94	Noise Snare
95	Noise Snare Rim
96	Beatbox Snare 2
97	Beatbox Snare Rim 2
98	Techno Snare
99	Techno Snare Rim
100	Magic Snare
101	Magic Snare Rim
102	Standard Snare Stick 1
103	Rock Snare Stick
104	Acoustic Snare Stick
105	Funk Snare Stick 1
106	Jazz Snare Stick
107	Room Snare Stick
108	Fusion Snare Stick
109	Standard Snare Stick 2
110	Funk Snare Stick 2
111	Brush Snare Stick
112	Brush Snare Stick 2
113	Vintage Snare Stick
114	Live Snare Stick
115	Beatbox Snare Stick 1

116	Beatbox Snare Stick 2
117	808 Snare Stick
118	909 Snare Stick
119	Electronic Snare Stick
120	Old School Snare Stick
121	House Snare Stick
122	Lo-Fi Snare Stick
123	Junkyard Snare Stick
124	Noise Snare Stick
125	Techno Snare Stick
126	Brush Swirl
TOM	
127	Standard Tom 1
128	Standard Tom 1 Rim
129	Standard Tom 2
130	Standard Tom 2 Rim
131	Standard Tom 3
132	Standard Tom 3 Rim
133	Standard Tom 4
134	Standard Tom 4 Rim
135	Standard Tom 5
136	Standard Tom 5 Rim
137	Standard Tom 6
138	Standard Tom 6 Rim
139	Rock Tom 1
140	Rock Tom 1 Rim
141	Rock Tom 2
142	Rock Tom 2 Rim
143	Rock Tom 3
144	Rock Tom 3 Rim
145	Rock Tom 4
146	Rock Tom 4 Rim
147	Rock Tom 5
148	Rock Tom 5 Rim
149	Rock Tom 6
150	Rock Tom 6 Rim
151	Acoustic Tom 1
152	Acoustic Tom 1 Rim
153	Acoustic Tom 2
154	Acoustic Tom 2 Rim
155	Acoustic Tom 3
156	Acoustic Tom 3 Rim
157	Acoustic Tom 4
158	Acoustic Tom 4 Rim
159	Acoustic Tom 5
160	Acoustic Tom 5 Rim
161	Acoustic Tom 6
162	Acoustic Tom 6 Rim
163	Brush Tom 1
164	Brush Tom 1 Rim
165	Brush Tom 2
166	Brush Tom 2 Rim
167	Brush Tom 3
168	Brush Tom 3 Rim
169	Brush Tom 4
170	Brush Tom 4 Rim
171	Brush Tom 5
172	Brush Tom 5 Rim
173	Brush Tom 6

174	Brush Tom 6 Rim
175	Funk Tom 1
176	Funk Tom 1 Rim
177	Funk Tom 2
178	Funk Tom 2 Rim
179	Funk Tom 3
180	Funk Tom 3 Rim
181	Funk Tom 4
182	Funk Tom 4 Rim
183	Funk Tom 5
184	Funk Tom 5 Rim
185	Funk Tom 6
186	Funk Tom 6 Rim
187	Vintage Tom 1
188	Vintage Tom 2
189	Vintage Tom 3
190	Vintage Tom 4
191	Vintage Tom 5
192	Vintage Tom 6
193	Fusion Tom 1
194	Fusion Tom 2
195	Fusion Tom 3
196	Fusion Tom 4
197	Fusion Tom 5
198	Fusion Tom 6
199	1970's Tom 1
200	1970's Tom 1 Rim
201	1970's Tom 2
202	1970's Tom 2 Rim
203	1970's Tom 3
204	1970's Tom 3 Rim
205	1970's Tom 4
206	1970's Tom 4 Rim
207	808 Tom 1
208	808 Tom 2
209	808 Tom 3
210	808 Tom 4
211	808 Tom 5
212	808 Tom 6
213	808 Tom Fx 1
214	808 Tom Fx 2
215	909 Tom 1
216	909 Tom 2
217	909 Tom 3
218	909 Tom 4
219	909 Tom 5
220	909 Tom 6
221	909 Tom 7
222	909 Tom 8
223	Electronic Tom 1
224	Electronic Tom 2
225	Electronic Tom 3
226	Electronic Tom 4
227	Electronic Tom 5
228	Electronic Tom 6
229	Electronic Tom 7
230	Electronic Tom 8
231	Power Tom 1
232	Power Tom 2

Drum Sound List

233	Power Tom 3
234	Power Tom 4
235	Power Tom 5
236	Power Tom 6
237	Power Tom 7
238	Power Tom 8
239	HipHop Tom 1
240	HipHop Tom 2
241	HipHop Tom 3
242	HipHop Tom 4
243	EDM Tom 1
244	EDM Tom 2
245	EDM Tom 3
246	EDM Tom 4
247	Beatbox Tom 1
248	Beatbox Tom 2
249	Beatbox Tom 3
250	Beatbox Tom 4
251	Lo-Fi Tom 1
252	Lo-Fi Tom 1 Rim
253	Lo-Fi Tom 2
254	Lo-Fi Tom 2 Rim
255	Lo-Fi Tom 3
256	Lo-Fi Tom 3 Rim
257	Lo-Fi Tom 4
258	Lo-Fi Tom 4 Rim
259	Lo-Fi Tom 5
260	Lo-Fi Tom 5 Rim
261	Lo-Fi Tom 6
262	Lo-Fi Tom 6 Rim
263	Junkyard Tom 1
264	Junkyard Tom 1 Rim
265	Junkyard Tom 2
266	Junkyard Tom 2 Rim
267	Junkyard Tom 3
268	Junkyard Tom 3 Rim
269	Junkyard Tom 4
270	Junkyard Tom 4 Rim
271	Junkyard Tom 5
272	Junkyard Tom 5 Rim
273	Junkyard Tom 6
274	Junkyard Tom 6 Rim
275	Techno Tom 1
276	Techno Tom 1 Rim
277	Techno Tom 2
278	Techno Tom 2 Rim
279	Techno Tom 3
280	Techno Tom 3 Rim
281	Techno Tom 4
282	Techno Tom 4 Rim
283	Techno Tom 5
284	Techno Tom 5 Rim
285	Techno Tom 6
286	Techno Tom 6 Rim
287	Dubstep Tom 1
288	Dubstep Tom 1 Rim
289	Dubstep Tom 2
290	Dubstep Tom 2 Rim
291	Dubstep Tom 3

292	Dubstep Tom 3 Rim
293	Dubstep Tom 4
294	Dubstep Tom 4 Rim
RIDE	
295	20" Standard Ride
296	20" Standard Ride Edge
297	20" Standard Ride Bell
298	20" Rock Ride
299	20" Rock Ride Edge
300	20" Rock Ride Bell
301	22" Acoustic Ride
302	22" Acoustic Ride Edge
303	22" Acoustic Ride Bell
304	20" Funk Ride
305	20" Funk Ride Edge
306	20" Funk Ride Bell
307	22" Funk Ride
308	22" Funk Ride Edge
309	22" Funk Ride Bell
310	Brush Ride 1
311	Brush Ride 2
312	20" Room Ride
313	20" Room Ride Edge
314	20" Room Ride Bell
315	20" Metal Ride
316	20" Metal Ride Edge
317	20" Metal Ride Bell
318	Vintage Ride
319	Vintage Ride Edge
320	Vintage Ride Bell
321	22" Big Band Ride
322	22" Big Band Ride Edge
323	22" Big Band Ride Bell
324	Old School Ride
325	Old School Ride Edge
326	Old School Ride Bell
327	808 Ride
328	Electronic Ride
329	Electronic Ride Edge
330	Electronic Ride Bell
331	Dance Ride
332	Dance Ride Edge
333	Dance Ride Bell
334	Lo-Fi Ride
335	Lo-Fi Ride Edge
336	Lo-Fi Ride Bell
337	Dubstep Ride
338	Noise Ride
339	Noise Ride Edge
340	Noise Ride Bell
341	Techno Ride
342	Techno Ride Edge
343	Techno Ride Bell
CRASH	
344	16" Standard Crash 1
345	16" Standard Crash 1 Edge
346	Rock Crash
347	Rock Crash Edge
348	16" Acoustic Crash 1

349	16" Acoustic Crash 1 Edge
350	18" Jazz Crash 1
351	18" Jazz Crash 1 Edge
352	18" Jazz Crash 2
353	18" Jazz Crash 2 Edge
354	16" Standard Crash 2
355	16" Standard Crash 2 Edge
356	Brush Crash 1
357	Brush Crash 2
358	Funk Crash 1
359	Funk Crash 1 Edge
360	Funk Crash 2
361	Funk Crash 2 Edge
362	16" Acoustic Crash 2
363	16" Acoustic Crash 2 Edge
364	Orchestra Crash 1
365	Orchestra Crash 2
366	Orchestra Crash 3
367	Room Crash
368	Room Crash Edge
369	1970's Crash
370	1970's Crash Edge
371	Old School Crash 1
372	Old School Crash 1 Edge
373	Vintage Crash 1
374	Vintage Crash 1 Edge
375	Vintage Crash 2
376	Vintage Crash 2 Edge
377	Latin Crash 1
378	Latin Crash 1 Edge
379	Latin Crash 2
380	Latin Crash 2 Edge
381	China 1
382	China 1 Edge
383	China 2
384	China 2 Edge
385	Splash
386	Splash Edge
387	808Crash
388	909Crash 1
389	909Crash 2
390	HipHop Crash
391	Electronic Crash 1
392	Electronic Crash 2
393	Dance Crash 1
394	Dance Crash 2
395	Lo-Fi Crash 1
396	Lo-Fi Crash 1 Edge
397	Lo-Fi Crash 2
398	Lo-Fi Crash 2 Edge
399	Techno Crash 1
400	Techno Crash 1 Edge
401	Techno Crash 2
402	Techno Crash 2 Edge
403	Beatbox Crash
404	Noise Crash 1
405	Noise Crash 2
HIHAT	
406	14" Standard Hi-hat

407	14" Standard Hi-hat Edge
408	14" Standard Hi-hat Pedal
409	14" Standard Hi-hat Splash
410	14" Rock Hi-hat
411	14" Rock Hi-hat Edge
412	14" Rock Hi-hat Pedal
413	14" Rock Hi-hat Splash
414	14" Acoustic Hi-hat
415	14" Acoustic Hi-hat Edge
416	14" Acoustic Hi-hat Pedal
417	14" Acoustic Hi-hat Splash
418	14" Funk Hi-hat
419	14" Funk Hi-hat Edge
420	14" Funk Hi-hat Pedal
421	14" Funk Hi-hat Splash
422	Brush Hi-hat
423	Brush Hi-hat Pedal
424	Brush Hi-hat Splash
425	14" Jazz Hi-hat
426	14" Jazz Hi-hat Edge
427	14" Jazz Hi-hat Pedal
428	14" Jazz Hi-hat Splash
429	808 Hi-hat
430	808 Hi-hat Pedal
431	808 Hi-hat Splash
432	909 Hi-hat
433	909 Hi-hat Pedal
434	909 Hi-hat Splash
435	Dance Hi-hat
436	Dance Hi-hat Pedal
437	Dance Hi-hat Splash
438	Dubstep Hi-hat
439	Dubstep Hi-hat Pedal
440	Beatbox Hi-hat 1
441	Beatbox Hi-hat Pedal 1
442	Beatbox Hi-hat 2
443	Beatbox Hi-hat Pedal 2
444	Lo-Fi Hi-hat
445	Lo-Fi Hi-hat Edge
446	Lo-Fi Hi-hat Pedal
447	Lo-Fi Hi-hat Splash
PERCUSSION	
448	Maracas
449	Sticks
450	Metronome Bell
451	Vibra-slap 1
452	Vibra-slap 2
453	Vibra-slap 3
454	Synthesis Percussion 1
455	Synthesis Percussion 2
456	High Q 1
457	High Q 2
458	Low Q 1
459	Low Q 2
460	Mute Hi Conga 1
461	Mute Hi Conga 2
462	Open Hi Conga 1
463	Open Hi Conga 2
464	Low Conga

Drum Sound List

465	High Bongo
466	Low Bongo
467	High Timbale 1
468	High Timbale 2
469	High Timbale 3
470	High Timbale 4
471	High Timbale 5
472	Low Timbale 1
473	Low Timbale 2
474	Low Timbale 2 Rim
475	Low Timbale 3
476	Low Timbale 4
477	High Agogo
478	Low Agogo
479	Claves 1
480	Claves 2
481	Jingle Bell 1
482	Jingle Bell 2
483	Cowbell
484	Bell Tree 1
485	Bell Tree 2
486	Tambourine 1
487	Tambourine 2
488	Cabasa
489	Long Guiro
490	Short Guiro
491	Click Bell
492	Click
493	Indian 1
494	Indian 2
495	Indian 3
496	Indian 4
497	Indian 5
498	Indian 6
499	Indian 7
500	Indian 8
501	Indian 9
502	Indian 10
503	Indian 11
504	Indian 12
505	Indian 13
506	Indian 14
507	Indian 15
508	Indian 16
509	Indian 17
510	African 1
511	African 2
512	African 3
513	African 4
514	African 5
515	African 6
516	African 7
517	African 8
518	African 9
519	African 10
520	African 11
521	African 12
522	African 13
523	African 14

524	African 15
525	African 16
526	African 17
527	Marimba C3
528	Marimba Db3
529	Marimba D3
530	Marimba Eb3
531	Marimba E3
532	Marimba F3
533	Marimba Gb3
534	Marimba G3
535	Marimba Ab3
536	Marimba A3
537	Marimba Bb3
538	Marimba B3
539	Marimba C4
540	Marimba Db4
541	Marimba D4
542	Marimba Eb4
543	Marimba E4
544	Marimba F4
545	Marimba Gb4
546	Marimba G4
547	Marimba Ab4
548	Marimba A4
549	Marimba Bb4
550	Marimba B4
551	Marimba C5
552	Marimba Db5
553	Marimba D5
554	Marimba Eb5
555	Marimba E5
556	Marimba F5
557	Marimba Gb5
558	Marimba G5
559	Marimba Ab5
560	Marimba A5
561	Marimba Bb5
562	Marimba B5
563	Marimba C6
564	Vibraphone C3
565	Vibraphone Db3
566	Vibraphone D3
567	Vibraphone Eb3
568	Vibraphone E3
569	Vibraphone F3
570	Vibraphone Gb3
571	Vibraphone G3
572	Vibraphone Ab3
573	Vibraphone A3
574	Vibraphone Bb3
575	Vibraphone B3
576	Vibraphone C4
577	Vibraphone Db4
578	Vibraphone D4
579	Vibraphone Eb4
580	Vibraphone E4
581	Vibraphone F4
582	Vibraphone Gb4

583	Vibraphone G4
584	Vibraphone Ab4
585	Vibraphone A4
586	Vibraphone Bb4
587	Vibraphone B4
588	Vibraphone C5
589	Vibraphone Db5
590	Vibraphone D5
591	Vibraphone Eb5
592	Vibraphone E5
593	Vibraphone F5
594	Vibraphone Gb5
595	Vibraphone G5
596	Vibraphone Ab5
597	Vibraphone A5
598	Vibraphone Bb5
599	Vibraphone B5
600	Vibraphone C6
601	Orchestra Timpani C2
602	Orchestra Timpani Db2
603	Orchestra Timpani D2
604	Orchestra Timpani Eb2
605	Orchestra Timpani E2
606	Orchestra Timpani F2
607	Orchestra Timpani Gb2
608	Orchestra Timpani G2
609	Orchestra Timpani Ab2
610	Orchestra Timpani A2
611	Orchestra Timpani Bb2
612	Orchestra Timpani B2
613	Orchestra Timpani C3
614	Orchestra Timpani Db3
615	Orchestra Timpani D3
616	Orchestra Timpani E3
617	Orchestra Timpani F3
618	Orchestra Timpani G3
619	Orchestra Timpani A3
620	Orchestra Timpani B3
621	Orchestra Timpani C4
CHINESE	
622	Dagu 1
623	Dagu 2
624	Ban
625	Bangu
626	Nan Bang
627	Xiangjiaogu
628	Damuyu 1
629	Damuyu 2
630	Damuyu 3
631	Damuyu 4
632	Xiaomuyu 1
633	Xiaomuyu 2
634	Xiaomuyu 3
635	Xiaomuyu 4
636	Paigu 1
637	Paigu 2
638	Paigu 3
639	Paigu 4
640	Mangluo

641	Maluo
642	Suluo
643	Daluo 1
644	Daluo 2
645	Dabo 1
646	Dabo 2
647	Xiaobo
648	Xiaoluo
649	Penglin 1
650	Penglin 2
651	Sanmaluo
652	Gou Luo
FX	
653	FX 1
654	FX 2
655	FX 3
656	FX 4
657	FX 5
658	FX 6
659	FX 7
660	FX 8
661	FX 9
662	FX 10
663	FX 11
664	FX 12
665	FX 13
666	FX 14
667	FX 15
668	FX 16
669	FX 17
670	FX 18
671	FX 19
672	FX 20
673	FX 21
674	FX 22
675	FX 23
676	FX 24
677	FX 25
678	FX 26
679	FX 27
680	FX 28
681	FX 29
682	FX 30
683	FX 31
684	FX 32
685	FX 33
686	FX 34
687	FX 35
688	FX 36
689	FX 37
690	One & Stick
691	Two & Stick
692	Three & Stick
693	Four & Stick
694	Five & Stick
695	Six & Stick
696	Seven & Stick
697	Eight & Stick
698	Nine & Stick
699	Mute

DRUM	
HH01	Standard
HH02	Rock
HH03	Acoustic
HH04	Funk
HH05	Brush
HH06	Jazz
HH07	808
HH08	909
HH09	Dance
HH10	Dubstep
HH11	Beatbox1
HH12	Beatbox2
HH13	Lo-Fi
HH14	Marimba
HH15	Vibra
HH16	Indian
HH17	African
HH18	Chinese
HH19	Percussion

Song List

No.	Song Name	LCD Name
1	Funk1	Funk1
2	Rock N'Roll1	R'N'R1
3	Dance1	Dance1
4	Pop1	Pop1
5	Fusion1	Fusion1
6	R&B1	R&B1
7	Dubstep1	Dubstep1
8	R&B2	R&B2
9	Dubstep2	Dubstep2
10	Rock Ballad	RkBallad
11	Folk	Folk
12	Funk Shuffle	FunkShuf
13	Ele Pop1	ElePop1
14	Pop2	Pop2
15	Bossa Nova1	Bossa1
16	Samba1	Samba1
17	Fusion2	Fusion2
18	Ele Pop2	ElePop2
19	Pop Shuffle	PopShuff
20	Rock1	Rock1
21	Latin1	Latin1
22	Latin2	Latin2
23	Salsa1	Salsa1
24	Smooove	Smooove
25	Steve Vai Funk	SteveVFk
26	70's Funk	70'sFunk
27	Jazz1	Jazz1
28	6/8Soul1	6/8Soul1
29	Fusion3	Fusion3
30	Dance funk	Dancfunk
31	Dance2	Dance2
32	DJ.House	DJ.House
33	Ele Pop3	ElePop3
34	Hip Hop	HipHop
35	Pop3	Pop3
36	Pop4	Pop4
37	R&B3	R&B3
38	Reggae1	Reggae1
39	Rock2	Rock2
40	Rock3	Rock3
41	Blues Funk	BluesFnk
42	Fusion4	Fusion4
43	Cool Jazz	CoolJazz
44	Ballad	Ballad
45	Samba2	Samba2
46	Vintage Hip-Hop	VtHipHop
47	Nu Jazz Funk	NuJazzFk
48	Soul	Soul
49	R&B4	R&B4
50	Big Band 1	BigBand1
51	Ska	Ska
52	Classic Rock	ClassRk
53	Hardcore Hip-Hop	HcHipHop
54	Vintage Dance Pop	VtDcPop
55	Nu-Metal	Nu-Metal
56	Salsa2	Salsa2
57	Eu Hip-Hop	EuHipHop

58	Bossa Nova2	Bossa2
59	Fusion 5	Fusion5
60	8Beat Pop	8BeatPop
61	Jazzy Funk	JazzyFnk
62	Swing Big Band	SwBgBand
63	Raggae 2	Raggae2
64	60's Pop	60'sPop
65	Vintage Funk	VtgFunk
66	Trance	Trance
67	Heavy Rock	HeavyRk
68	Swing	Swing
69	Punk	Punk
70	8Beat	8Beat
71	Disco House	DiscoHs
72	3/4 Folk	3/4Folk
73	Samba3	Samba3
74	Latin Rock	LatinRk
75	Reggae 3	Reggae3
76	Dance3	Dance3
77	Country Pop	CtryPop
78	Country	Country
79	PopRock	PopRock
80	DancePop	DancePop
81	Bebop	Bebop
82	Rock N'Roll2	R'N'R2
83	Band Jazz	BandJazz
84	Blues	Blues
85	3/4 Jazz	3/4Jazz
86	80's Metal	80sMetal
87	Drum N'Bass	D'N'B
88	6/8Soul2	6/8Soul2
89	Latin Swing	LtnSwing
90	Funk2	Funk2
91	Break Beat	BrkBeat
92	Latin Jazz	LtnJazz
93	TripHop	TripHop
94	Brit Pop	Britpop
95	Neo-Thrash	Neo-Thra
96	BigBand 2	BigBand2
97	Mambo	Mambo
98	Shuffle	Shuffle
99	GtrBossa	GtrBossa
100	Latin Dance	LtnDance

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		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 1	95	Pad7 (halo)	127	Applause
32	Guitar Harmonics	64	Synth Brass 2	96	Pad8 (sweep)	128	Gunshot

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	10ch	1-16	Memorized
	Changed	x	x	
Mode	Default	x	x	
	Messages	x	x	
	Altered	*****	*****	
Note Number :	True Voice	0-127	0-127	Memorized
		*****	0-127	
Velocity	Note On	o 9nH, v = 1-127	o	
	Note Off	o 9nH, v = 0	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
	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 0-127	
System Exclusive		x	o	
System Common	:Song Position	x	x	
	:Song Select	x	x	
	:Tune Request	x	x	
System RealTime	:Clock	o	x	Start/Stop only
	:Commands	o	x	
Aux Messages	: Local On/Off	x	x	
	: All Notes Off	x	x	
	: Acting Sensing	x	x	
	: Reset	x	x	

X : NO O : YES

Prompt Messages

LCD Message	Meaning
Name invalid!	(Rename) This name is not valid.
Characters too long!	(Rename) You are entering more character than the module support.
The 1st character can't be a SPACE!	(Rename) The first character should not be blank.
Duplicate name!	(Rename) This name already exists. Use a different name.
Save ok!	Saving is successful.
Save failed!	Saving operation fails.
Load ok!	Loading user sound / user kit is successful.
Load failed!	Loading user sample / user kit fails.
Reset ok!	Factory reset is successful.
Format ok!	SD card formatting is successful.
Waiting	The operation is in progress. Wait until the process finishes.
Processing	The SD card is being processed.
No file!	No usable files in the current folder.
Unsupported file!	This file is not supported by the module.
Unsupported SD!	This SD card is not supported by the module.
SD ERROR!	Error in the SD card operation.
Record number exceeds the limit!	The number of WAV recording exceeds the limit.
Record time's up!	The time of WAV recording is used up.
SD card is full!	The SD card memory is used up.
Record memory full!	The MIDI recording memory is used up.
User sound memory full!	The user sound memory is used up.
User sound num reached the limit!	The number of user sound reaches the top limit.
SD card write protected!	The SD card is read-only.
Prompt for confirmation	Meaning
Reset user kit data?	Ask to confirm if you want to reset the user kits?
Reset user song data?	Ask to confirm if you want to reset the user songs?
Reset user sound data?	Ask to confirm if you want to reset the user sounds?
Reset user trigger data?	Ask to confirm if you want to reset the trigger settings?
Reset all user data?	Ask to confirm if you want to reset all user data and settings?
Load to user sound?	Ask to confirm if you want to load the selected sample as a user sound?
Format the SD card?	Ask to confirm if you want to format the SD card?
Overwrite the KIT File?	Ask to confirm if you want to overwrite the select kit?
Load KIT File?	Ask to confirm if you want to load the selected kit?

