

# KAT *kt4* Drum Module Owner's Manual

# INFORMATION FOR YOUR SAFETY!

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## FCC COMPLIANCE NOTICE

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 used in accordance with the instructions, may cause harmful interference to radio communications and 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 of the receiver. Consult the dealer or an experienced radio/TV technician if help is needed with interference.

NOTE: FMIC will not be responsible for unauthorized equipment modifications that could violate FCC rules, and/ or void product safety certifications.

### 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.

### CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## 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**

Whether you are playing the drum pads and cymbals with force or with a soft touch, our new Pure Drum Technology will adapt to your playing levels fully and with the widest range of dynamics. This allows you to experience the various tonal changes of acoustic drums. Perfectly express the delicate nuances and unique characteristics of an acoustic drum kit!

## **PURE DRUM—Bring natural and realistic drum voices to your performance!**

Pure Drum Technology brings vastly improved digital drum sounds to today's drummer. The realism and natural response our PURE DRUM Technology brings is second to none. Whether you're playing drum rolls or laying down the back beat our quality engineering will create the rewarding experience you are looking for in a digital drum kit.

## **Simulating the Feel and Response of Real Drums and Cymbals**

Our engineering goal is to best simulate the playing experience of a real drum kit. Making pads that feel good to play on and give a natural response is our priority. By developing multiple zone pads and cymbals this brings us closer to achieving the real drum experience. Add in the ability to mute cymbals, play rim shots, and strike multi-zone cymbals and the end result is a superior digital drum kit that will fulfill your drumming needs for years to come.

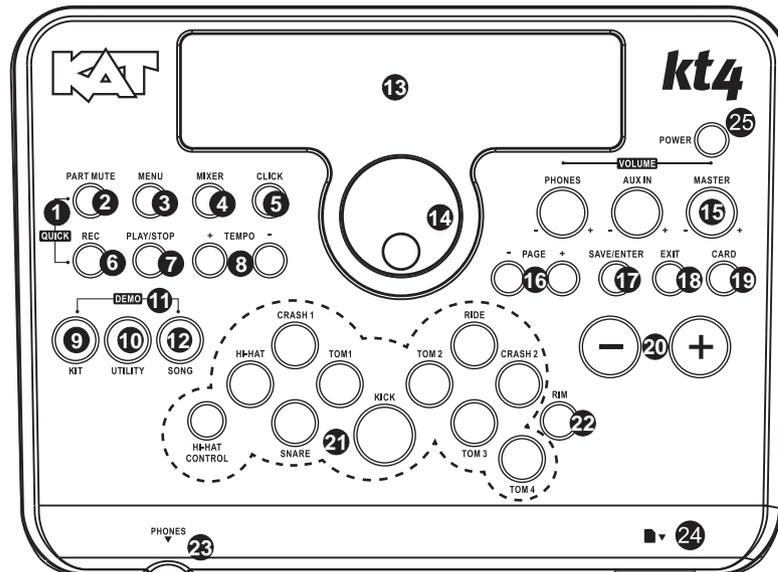
We've also created an equally great all-metal supporting drum rack with a sleek look and feel using electroplated materials and modern curved styling. The notched tubing also makes tear-down and re-assembly easy and consistent.

## **Many Other Advanced Features**

To make the digital drumming experience even better we've included advanced features such as Multi-Track MIDI recording, Built-in sound card Play-Along Tracks, USB connectivity, SD Card load/ save, and 44 User created drum kit locations.

# Panel & Display Description

## Front Panel



### 1. REC+PART MUTE Buttons

Quick record goes directly to recording mode to record your playing.

### 2. PART MUTE Button

Part mute switch.

### 3. MENU Button

Enter current mode's menu to set the parameter; Hold **MENU** button then press **PART MUTE** or **CLICK** buttons, will enter the mute or click settings menu.

### 4. MIXER Button

Enter MIXER menu, adjust master volume including Kit volume, Accompaniment volume, Card midi volume or Click volume.

### 5. CLICK Button

Click switch.

### 6. REC Button

Enter the Record menu.

### 7. PLAY/STOP Button

Control the play of a song or a Card midi song, or start/stop recording.

### 8. TEMPO+/TEMPO- Buttons

Adjust current tempo of Song, Click, etc; Press **TEMPO+** and **TEMPO-** buttons simultaneously to reset to default tempo.

### 9. KIT Button

Enter Kit Mode to select a Kit.

### 10. UTILITY Button

Adjust the parameters of global setup, such as trigger sensitivity, trigger curve, Effect, MIDI setup, etc.

### 11. SONG+KIT Buttons

Enter DEMO mode and start to play demo.

### 12. SONG Button

Enter Song Mode to select a song.

### 13. DISPLAY

### 14. DATA DIAL

### 15. MASTER/AUX IN/PHONES

#### Volume Knob

Control the volume of the OUTPUT, AUX IN and PHONES jack.

### 16. PAGE+/PAGE- Buttons

Page Buttons, Scroll through the menu pages, or move the cursor left/right when naming.

### 17. SAVE/ENTER Button

Enters the Save menu when available; enter the current folder or confirm current operation.

### 18. EXIT Button

Exit from the current sub-menu back to the superior level menu.

### 19. CARD Button

Enter SD card menu, load, delete, play or format the SD card.

### 20. + / - buttons

Increase or decrease the current parameter.

### 21. Pad select buttons and indicators (11)

These buttons can play the pad voices of the current kit. In KIT Menu/Mixer/UTILITY menu, they select the pad to be edited and the indicators show the current selected pad. In SONG/ DEMO mode, the indicators will display which pads are being played by the drum track.

### 22. RIM button

Allows access to the edge voice for dual-zone triggers (Snare, Hi-Hat, Tom, etc.)

### 23. Phones jack

This stereo jack is used to connect headphones.

### 24. SD Card Slot

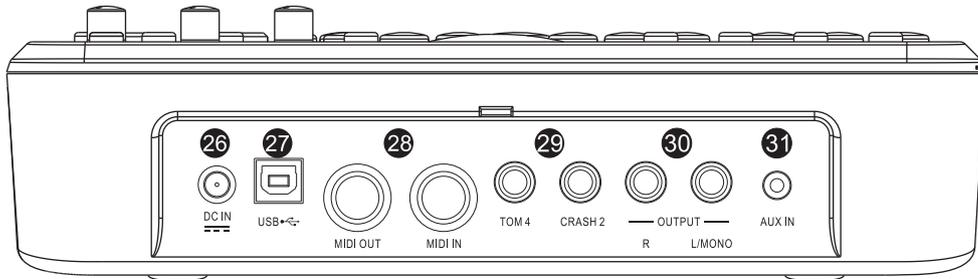
SD card slot located at the front panel.

### 25. POWER Button

This button turns power on and off.

# Panel & Display Description

## Rear Panel & Side Panel



### 26. DC input

Connection for the DC 9V power adaptor.

### 27. USB port

This port is used to connect to a computer or other USB host devices. (MIDI In/Out via USB).

### 28. MIDI IN and MIDI OUT

These ports allow communication with other products equipped with a MIDI interface. Please see the MIDI section of the advanced manual for details.

### 29. CRASH 2 and TOM 4 Jacks

Input connections for Crash 2 and Tom 4.

### 30. OUTPUT jacks

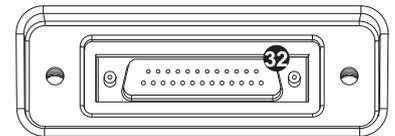
Stereo output connection to an audio system or drum amplifier.

### 31. AUX IN

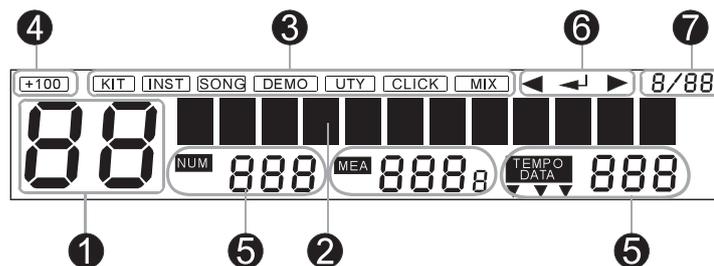
This stereo input jack is for an external sound source such as an MP3 or Audio player.

### 32. PAD Connectors

Input connections for Kick, Snare, Tom1, Tom2, Tom3, Crash1, Ride, Hi-Hat pads and Hi-Hat control pedal.



## LCD Display



### 1/4. Current Kit index

### 2. Main Display

Display the current menu information.

### 3. Mode icon

The top line of the LCD displays current mode icon. ("KIT" icon is always lit)

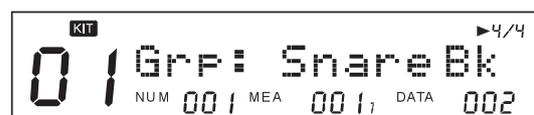
### 5. Number, Measure, beat, Tempo

(In menu pages, when selecting voice or song group, the icon "DATA" is lit, this indicates the current voice or song's index).

### 6. These icons indicate that the [PAGE-] / [SAVE/ENTER] / [PAGE+] is valid.

### 7. The current time signature.

(In menu page, when Voice or Voice Groups is selected, the DATA icon will light up, "TEMPO" icon goes out, and displays current number of Voice and Voice Groups; otherwise, displays the value information of current SONG and TEMPO.)



## Caution!

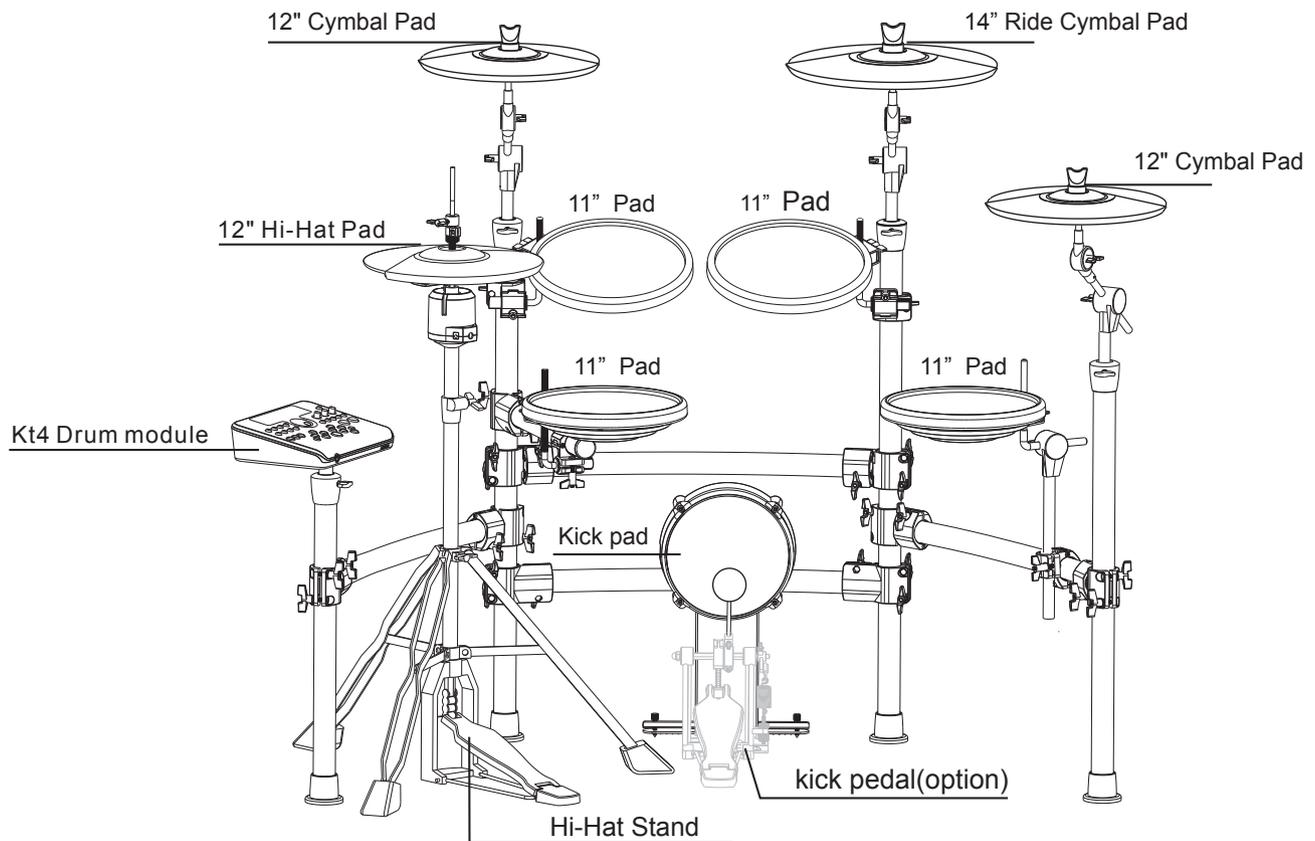
To prevent electric shock and damage to drum module or other devices, always turn off the power of all devices before making any connections.

## Connecting the Pads and Pedals

Using the provided cables, connect each Trigger input jack on the rear panel of the module, and make sure each pad is connected to its corresponding Trigger input jack.

### Note:

Both ends of provided cables are printed corresponding name of connected interfaces of drum module, as long as you connect each pad corresponding to right sign of drum module (Refer to each sign name showed below.), it 's easy to complete all connections.



### Note:

For details on assembling the drum stand, attaching the digital drum and connecting pads, refer to the Installation Manual description.

# Connections

## Connecting the Power Supply

Connect the DC plug of the AC power adaptor to the DC IN jack on the rear panel.

### Note:

1. To protect the speakers, amplifier and the drum module from damage, rotate the volume knob to the minimum volume level before the power is ON.
2. Make sure the power is OFF when connecting drum module with external devices.
3. In order to save energy, we have designed the "AUTO POWER" function to the digital drum. With this function, the digital drum will shutdown automatically when you have left it idle for more than 30(default) minutes (see page 33) for all power save settings.

## Connecting a MIDI Device

### Input MIDI data

Via the MIDI IN Connector. This receives MIDI messages transmitted from an external MIDI device or a computer.

### Output MIDI data

Via the MIDI OUT Connector. Pad performance data is transmitted from this connector to connected computer or MIDI device.

## Connecting a USB Device

Via the USB Connector. This receives and transmits MIDI messages.

## Connecting Audio Equipment

1. When you want to listen to the sound module with an amplifier, connect the amplifier with the Output R and L/MONO jacks on the rear panel. (For monaural playback, use the L/MONO jack; for stereo playback, connect both L/MONO and R jacks.)

2. The volume is adjusted with the MASTER VOLUME knob.

## Connecting an Audio Player, etc. (Aux. In jack)

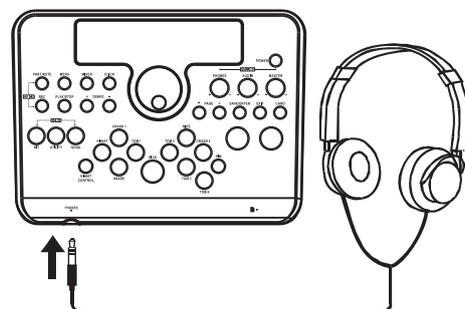
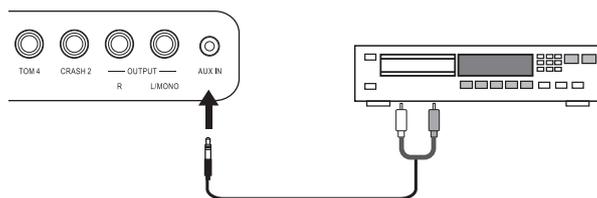
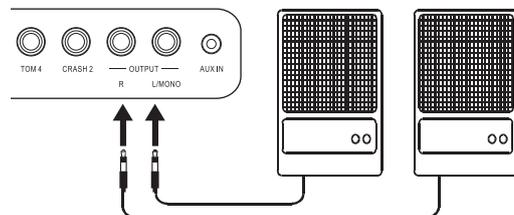
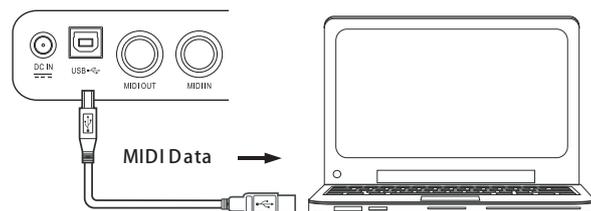
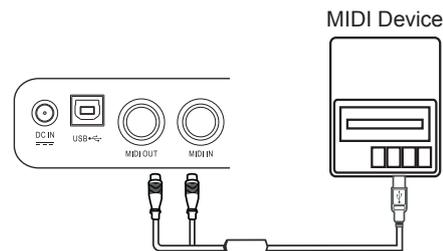
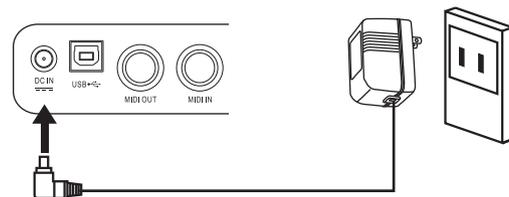
1. To play along to music from an external audio device, use the AUX IN jack on the rear of the sound module using an 1/8" stereo cable.
2. The volume of the external signal is adjusted with the AUX IN volume knob located on the top panel near the Master volume knob.

## Connecting a pair of Headphones

1. An optional set of stereo headphones can be connected to the PHONES jack located on the front side of the drum module.
2. This allows for silent play and practice without disturbing your neighbors or roommates.

### Note:

1. Adjust the volume to a comfortable level.
2. To avoid the risk of hearing loss when using headphones, be careful not to play the digital drum kit at a high volume level for a long time.



## Power On

Connect the DC IN power adaptor to the Drum Module, and then press **POWER** button.

## DEMO

Press **KIT** and **SONG** buttons simultaneously to enter Demo Mode, and the indicators of two buttons light up. There are 2 demo songs in the KT4 module.

Use the **+/-** button or data dial to select a demo song you want to play, press **PLAY/ STOP** button to start or stop a demo song.

If you want to exit the demo mode, press **PLAY/ STOP** button to stop playing the demo song and then press **KIT** or **SONG** button to exit.

## Basic Operation

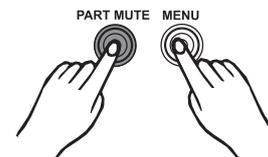
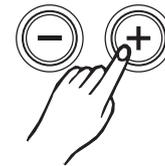
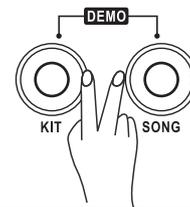
### Enter Menu

- In the KIT or SONG mode, press **MENU** button to enter its particular menu page.  
Use **PAGE +/-PAGE -** button to switch between tabs.  
**For example:** enter menu page from KIT mode, press **PAGE +/-PAGE -** button to select the "PATTERN OFF" function, use **+/-** button or **DATA DIAL** to switch this function on or off.

- Hold down the **MENU** button then press the **PART MUTE** button or the **CLICK** button to enter Mute Menu or Click Setting Menu.  
Hold down the **MENU** button and then press the **PART MUTE** button. The **MENU** button lights up and the **PART MUTE** button starts flashing, it means that you are in the edit mode. Now, press the **PART MUTE** button again, the button will light and the mute function will be available. At the same time, if you press the **PLAY/ STOP** button to start playing a song, the current channel displayed on the menu will be muted.  
Press **+/-** button also can select different parts in real-time.  
Hold down the **MENU** button and then press the **CLICK** button to adjust click volume. (Refer to Click for details.)

### Exit Menu

- Press the **EXIT** button to exit from the current sub-menu back to the previous level menu.
- Or, press the corresponding buttons (such as **KIT** or **SONG**.etc) to immediately enter another mode.



## Quick Start - continued

### Adjust Value

1. Select the parameter: when the LCD displays icon “ ◀ ”, it represents the **PAGE -** is enabled, displays icon “ ▶ ”, it represents the **PAGE +** is enabled, displays icon “ ⏴ ”, it represents the **SAVE/ ENTER** is enabled, press this button you can enter menu item.
2. Use +/- button or DATA DIAL to adjust the parameter value.

### Rename operating guide

		
<b>PAGE+</b>		Move the cursor right.
<b>PAGE-</b>		Move the cursor left.
<b>+</b>		Change the character. (See ASCII List)
<b>-</b>		-----
<b>SAVE/ENTER</b>		Rename successful!

### **Note:**

In the rename menu, the characters displayed are spread equally.

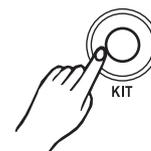
The KT4 drum module features 99 kits (Including 55 preset kits + 44 user kits) for you to select.

## Selecting a Kit

### 1. Enter kit mode.

Press the **KIT** button, and the **KIT** button indicator lights up. Use the **+/-** button to select the next/ previous kit.

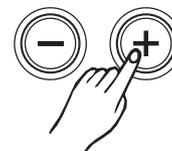
Operating Guide	LCD Display	Description
[KIT]	Hybrid	Enter kit mode.
[PAGE +]	MyKit001=U=	Select a user kit.
[+]	USA Custom	Select the next kit.
[-]	Hybrid	Select the previous kit.



### 2. Selecting a pad.

This KT4 includes 5 pads, 1 pedal controller, 3 cymbals, 1 hi-hat, 1 kick: the corresponding number of pads, name, and default MIDI note are shown below.

Number of Pads	Number	Name	MIDI Note
1	1	KICK	36
2	2	SNARE	38
	3	SNARE RIM	40
3	4	TOM1	48
	5	TOM1 RIM	50
4	6	TOM2	45
	7	TOM2 RIM	47
5	8	TOM3	43
	9	TOM3 RIM	58
6	10	TOM4	41
	11	TOM4 RIM	39
7	12	RIDE BOW	51
	13	RIDE EDGE	59
	14	RIDE BELL	53
8	15	CRASH 1 BOW	49
	16	CRASH 1 EDGE	55
	17	CRASH 1 BELL	82
9	18	CRASH 2 BOW	57
	19	CRASH 2 EDGE	52
	20	CRASH 2 BELL	83
CTRL	21	OPEN HIHAT BOW	46
	22	OPEN HIHAT EDGE	26
	23	OPEN HIHAT BELL	84
	24	CLOSE HIHAT BOW	42
	25	CLOSE HIHAT EDGE	22
	26	CLOSE HIHAT BELL	85
	27	HIHAT FOOT PEDAL	44
	28	FOOT SPLASH	21



**Method 1:** In the kit menu page, striking a pad or rim, selects a corresponding pad and will call up its parameter values.

**Method 2:** In the kit menu page, pressing a button on the panel will call up its parameter values; or you can also press the [RIM] button to select the specified rim (edge) of pad.

### Note:

Some pads cannot be selected from the front panel such as the ride bell, crash 1 bell, crash 2 bell, hihat bell and splash. In this situation, you can select the method 1.

## Kit - continued

### 3. Key to what the blinking LEDs mean on module buttons

Selected Pads	Status of Pad Buttons
RIDE BELL	[RIDE] blinking.
CRASH1 BELL	[CRASH1] blinking.
CRASH2 BELL	[CRASH2] blinking.
HIHAT BELL	[HIHAT] blinking.
SPLASH	[HI-HAT CONTROL] and [RIM] light up.



## Editing a Kit

Operating Guide	LCD Display	Description
[KIT]	Hybrid	Enter kit selection.
[MENU]	VOICE	Enter kit menu.
[PAGE +]	PATTERN:OFF	Pad pattern setting. (Default: OFF)
[PAGE +]	EXCHANGE	Exchange user kit order.
[SAVE/ ENTER]	MyKit001	
[+]	MyKit002	
[-]	MyKit001	
[SAVE/ ENTER]	EXCHANGE OK!	
[PAGE +]	RENAME	Rename a kit.

### Note:

Exchange and rename only functional in user kit, or these parameters won't appear.

### 1. Editing pad voices

In Kit menu. Press **MENU** button to edit Pad Voices of the current kit. All parameters of the Pad, such as voices, volume, pan, decay, pitch .etc can be adjusted.

Operating Guide	LCD Display	Description
[KIT]	Hybrid	Enter Kit mode.
[MENU]	VOICE	Enter Kit menu. Striking Hi-hat trigger or pressing Hi-Hat pad button on module
[SAVE/ ENTER]	Grp: HH_Combi	
[PAGE +]	Voc:HH14Dark	Pad voice parameter setting. See table below.
[PAGE +]	Volume:16	

### Pad Voice Parameter Setting

Parameter	Description	Range	Default Value
Grp*	Pad voice group.	See details below.	According to different Pad triggers.
Voc*	Voice index/HH combination group index.	See details below.	
Volume*	Volume.	0-32	
Pan	Pan.	L8-R8/ Center	
Pitch	Pitch.	-8-+8	
Decay	Decay.	-31-0	
RvbLevel	Reverb Level.	0-32	
MidiNote*	Pad note (MIDI out).	See details below.	
Duration	Pad note length (MIDI out).	0.1s-0.8s	
StartVol	Pad voice start volume.	0-32	



## Explain Details:

### Grp:

1. Pad voice arranged in groups  
8 common Voice groups and a Hi-hat combination group:  
"KickBk", "SnareBk", "TomBk", "RideBk", "CrashBk", "HihatBk",  
"PercuBk", "SFXBk", "HH\_Combi" (stands for Hi-Hat sample  
group all combined).
2. Adjust HH\_Combi group parameter  
Definition: If the currently selected pad is a Hi-hat, then it has a  
special edit mode: Hi-hat combination group, which contains  
Hi-hat and Hi-hat Pedal voice, overall volume, pan and reverb.  
In addition, the Hi-hat Pedal volume (including Hi-hat Pedal and  
Splash) can be individually edited.  
KT4 Drum Module has 18 HH\_Combi groups, see details on  
**Voice List**.

### Note:

In menu "Grp: snareBk" as below, the "DATA: 002" icon indicate  
current Voice group index.  
See picture on the right.

### VOC

The adjustable voice amount is up to 762 voices.  
Use the +/- button or DATA DIAL to select drum voice by groups,  
simultaneously, group number will refresh as current group; in  
HH\_Combi group, you can select voice from 763 to 780. Refer to  
Voice List for details.

### Note:

In the "VOC" menu, the "DATA: 035" icon, on the bottom right  
corner, indicates current Voice index.

### VOLUME

1. When choosing not to use Hi-Hat combi group:  
The volume parameters of Hi-hat Pedal and Hi-hat Splash will  
still have a combination.
2. When selecting the Hi-hat combination group:  
The full Hi-Hat instrument will be volume controlled as a group.

### MIDI Note

Adjust the MIDI note of each pad trigger sent out through the MIDI  
OUT Port. If the current MIDI note parameter has been selected by  
another trigger, the LCD displays"! " allowing you to adjust it.

## 2. Pad Pattern Setting

When the Pad Pattern function is "On", you can play a Song by  
triggering a pad, you can also select how the pad trigger will  
start the pattern.



## Kit -continued

Operating Guide	LCD Display	Description
[KIT]	Hybrid	Enter Kit mode.
[MENU]	VOICE	Enter Kit menu.
[PAGE +]	PATTERN: OFF	Pad Pattern setting.
[+]	PATTERN: ON	Use +/- button to turn function ON/ OFF.
[SAVE/ ENTER]	Grp: DrumLoop	
[PAGE +]	Sng: BluesFk	
[PAGE +]	Retrig: ST/SP	
[+]	Retrig: ReST	

Parameter	Description	Range	Default Value
Pattern	Pad Pattern switch. (The kt4 supports 7 pads used to trigger a sound of TAP or HIT, but the eighth pad is not available.)	OFF/ ON	OFF
Grp*	Corresponding triggered Song groups. (Preset songs are sorted by different types.)	DrumLoop/ PercLoop/ HIT/ TAP/ UserSong	DrumLoop
Sng*	Corresponding Song number.	1-242	1
Retrig*	Retrigger mode. (Only song type is Loop or 1 shot, parameter valid; or invalid, and displays as "--" )	ST/ SP, ReST	ST/ SP
VelCtrl*	Velocity control switch.	OFF/ ON	ON
Volume	Volume level.	0-32	30
RstTime*	Reset time of Songs. (Only the Song type is Tap, parameter valid; or invalid, and displays as "--")	OFF/ 0.1s~4.0s (unit 0.1s)	4.0s
DrumVoc*	When striking pads, whether drum voice will sound or not.	OFF/ ON	ON

### Details explained:

#### Grp- Sng:

When using the DATA DIAL to select a group, the system automatically selects the first Song in this group; similarly, selecting the parameter by group step in "Sng: " item, automatically displays the current group number. The optional Pad Song contains all preset Songs and User Songs, up to 242; use +/- button or DATA DIAL to make a selection.

#### Note:

Setting the Sng parameters, LCD displays current Song number "DATA: " on the bottom right corner.

Setting the Grp parameters, LCD displays current Group number "DATA: " on the bottom right corner.

#### VelCtrl:

Definition: Select whether the velocity function controls the playback volume of Songs or not.

ON: Velocity Control on. Songs are played in a lower volume level when pads are struck with a soft velocity whereas songs are played in a loud volume level when pads are struck with more forceful velocity. At the same time, the next volume value is not effected.

OFF: Velocity Control off. Songs are played with the fixed volume level no matter what degree of strength you strike the pads. You can specify volume level on the next level menu "VOLUME"

### Restrig and RstTime:

When the Song type you have selected is:

Type	Description
Loop	The RstTime is invalid. ("--")
Tap	The Retrigger is invalid. ("--")
Hit	Both RstTime and Retrigger are invalid.

### Drum Voc:

Definition: Whether a drum voice will sound when triggering a Song Pattern when a pad is struck.

ON: Voice sound on. When striking a drum pad, the drum voice will also be heard.

OFF: Voice sound off. Only trigger a Song Pattern without hearing the drum voice.

### Note:

Above parameters only effected when PAD PATTERN function is on. (Set PATTERN: ON.)

## 3. Exchanging the order of user kits

In order to make your performing procedure more convenient and smooth, we have programmed this order exchange function in the kt4. Follow the operations below:

1. Select a user kit.
2. Enter the exchange page.  
Press the **MENU** button, and use **PAGE +/PAGE -** button to enter the "EXCHANGE" page.
3. Press the **SAVE/ ENTER** button to enter exchange order operation and press [+][-] to choose the target kit;
4. Press the **SAVE/ ENTER** button again to confirm the operation, and now press **EXIT** button to go back to the "EXCHANGE" page.

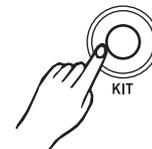
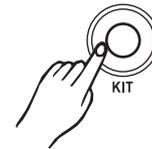
### Note:

The LCD will currently display "EXCHANGE OK!" page for 2 seconds, and then back to the main display automatically, and original Kit is selected. (For example: "MyKit001".)

## 4. Rename a User Kit

Rename a user kit is available, follow the operations below:

1. Select a user kit.
2. Enter the rename page.  
Press the **MENU** button, and use **PAGE +/PAGE -** button to enter the "RENAME" page.
3. Press the **SAVE/ ENTER** button to enter the rename operation. You can refer to "Rename" procedures in the basic operation.



## Kit -continued

### Saving a Kit

The kt4 module allows modifying and saving your user Kits internally or on the SD Card.

**Note:**

To get to the menu, press the **SAVE/ ENTER** button, you can also enter the save page to save the current kit.

### Saving a preset kit to a internal user kit location

Select a preset Kit, edit it as you need, all edited parameters are temporarily stored in real-time, but if you shift to another Kit then all edited data will be lost, so, you must save the changes as a user kit: after you finish editing the kit, press the **SAVE/ ENTER** button, the LCD indicates "Sv MyKit001" for you to select a user kit location to save your edited kit. The default location is MyKit001. Be careful not to overwrite your previously saved user kits.

**Note:**

The LCD displays "DATA" on the bottom right corner, this represents saving current drum kit to a user drum kit number.

Operating Guide	LCD Display	Description
[SAVE/ ENTER]	Sv MyKit001	
[+]	Sv MyKit002	Use +/- button to switch
[-]	Sv MyKit001	target user kit.
[SAVE/ ENTER]	MyKit001	Enter Rename mode.
[SAVE/ ENTER]	SAVE OK!	Save successfully! (Temporarily display.)
Wait a few seconds.	MyKit001 =U=	Goes back to kit mode.

**Note:**

Please remember to save the edited kit before turning power off, or all changes will be lost.

### Saving User Kit

You can edit, save a user kit, even save to the SD card. Select a user kit: for example "MyKit001".

Press the **SAVE/ ENTER** button, prompts user to save the user kit.

Operating Guide	LCD Display	Description
[SAVE/ ENTER]	Sv MyKit001	Save to local.
[+]	Sv MyKit002	Use +/- button to select a user kit.
[PAGE +]	CurKit Card	Save current kit to SD card.
[SAVE/ ENTER]	MyKit001	Rename.
[SAVE/ ENTER]	SAVE OK!	Save successfully! (Temporarily display.)
[PAGE +]	Allkits Card	Save all kits to SD card.
[SAVE/ ENTER]	ALL_KITS	Rename.
[SAVE/ ENTER]	SAVE OK!	Save successfully! (Temporarily display.)

**Note:**

When saving Kits to the SD card, the kt4 module will automatically save it (them) on local at the same time, in case the SD card saving function has failed (for example "No Card!" or "Card error!". etc) .



Kit volume, Accompaniment Volume (Song play volume), Click Volume and Card MIDI Volume can be balanced together in the kt4 module mixer menu.

## Master Volume

Press the **MIXER** button to enter mixer menu:

Operating Guide	LCD Display	Description
[MIXER]	KitVol:27	Mixer parameter setting.
[SAVE/ ENTER]	TrigVol:27	See table below.
[+]	TrigVol:28	
[PAGE +]	SONGVol:32	
[SAVE/ ENTER]	DrumVol:26	
[PAGE +]	PercVol:26	
[PAGE +]	CardVol:27	
[PAGE +]	ClickVol:22	

### Note:

In the Song interface, the CardVol item does not appear; In SD card MIDI playing back, the SongVol item does not appear.

## Inner Volume

In the "KITVol:" menu, press the **SAVE/ ENTER** button to enter current kit individual pad volume page, showing current pad trigger's volume. You can adjust the value by using **+/-** button or DATA DIAL. The adjustments of the individual trigger volume has the same result as the adjustment in the KIT MENU.

In the "SongVol:" page, press the **SAVE/ ENTER** button to enter Song individual instrument volume page, showing current song parts' volumes. You can adjust the value by using **+/-** button or DATA DIAL. The adjustments of the individual instrument volume is equal to the operation in SONG MENU.



Parameter	Second Level Parameter	Description	Range	Default Value
KITVol		Master kit volume.	0-32	According to different Kits or Songs.
	TrigVol	Current trigger volume.	0-32	
Song Vol		Master accompaniment volume.	0-32	
	DrumVol	Current drum volume of song.	0-32	
	PercVol	Current percussion volume of song.	0-32	
	Part1Vol	Current Part1 volume of song.	0-32	
	Part2Vol	Current Part2 volume of song.	0-32	
	Part3Vol	Current Part3 volume of song.	0-32	
	Part4Vol	Current Part4 volume of song.	0-32	
	Part5Vol	Current Part5 volume of song.	0-32	
CardVol		Card MIDI volume.	0-32	
ClickVol		Click volume.	0-32	

### Note:

The parameters of ClickVol in Mixer and Click menu are the same items.

The second level parameter TrigVol always responds to the current selected trig volume.

The second level parameter DrumVol~Part5Vol always responds to the volume of all current parts.

# Song

The kt4 comes with 242 songs in total. There are preset internal songs: songs 1-142 and user songs: songs 143-242.

The kt4 sequencer organizes music into seven parts. The Drum Kit part is used to record/play back what is played on the pads.

Additionally, Percussion part, Part 1, Part 2, Part 3, Part 4 and Part 5 are the 6 backing instrument parts (backing parts). The collective performance of these 7 parts is called a song.

## Selecting a Song

1. Press the **SONG** button and the **SONG** button will be lit, the SONG screen appears: Song Number, Song Name, Beat, Measure Number-Current Beat, and New User Song ("\*" indicates a new User song).

2. Use +/- button or DATA DIAL to select a song.

3. Press **PAGE +/-** button, to switch songs in groups (DRUM LOOP→PERC LOOP→HIT→TAP→USER SONG).

Operating Guide	LCD Display	Description
[SONG]	BluesFk	Enter song mode.
[PAGE +]	PercLoop	The first song of percloop type.
[PAGE +]	NewAgeT1	The first song of Hit type
[PAGE +]	BassT1	The first song of Tap type
[PAGE +]	MySng001*=U=	The name of the first user song.

## Playing a Song

1. Press the **PLAY/STOP** button, song starts playing, and the **PLAY/STOP** button lights up. (Meanwhile, corresponding pad buttons will light with current drum rhythm.)

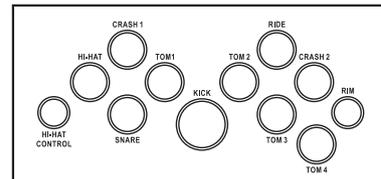
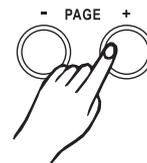
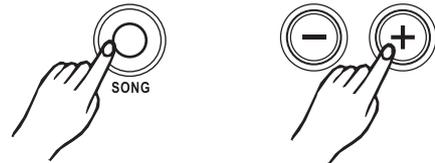
2. While song is playing, press the **PLAY/STOP** button again, song playing stops and resets backs to the initial position of the song.

### Adjusting Song Acmp (accompaniment) Volume

Adjust background volume of the song to balance the Kit volume. (Refer to MIXER section in the manual)

### Adjusting the tempo temporarily

You can temporarily change the tempo of a song while playback is in progress. The song returns to its preset tempo when a different song is selected. (Refer to Editing a Song)



## Editing a Song

1. On song screen, press **MENU** to enter the song editing screen.
2. Press **PAGE +**/**PAGE -**, to switch setting menus.

Operating Guide	LCD Display	Description
[MENU]	SETUP	Global settings of song.
[PAGE +]	PART:DRUM	Drum part settings.
[+]	PART:PERC	
[+]	PART:PART1	
[+]	PART:PART2	
[+]	PART:PART3	
[+]	PART:PART4	
[+]	PART:PART5	
[PAGE +]	ERASE:DRUM	Only user song can use this function.
[+]	ERASE:PERC	
[+]	ERASE:PART1	
[+]	ERASE:PART2	
[+]	ERASE:PART3	
[+]	ERASE:PART4	
[+]	ERASE:PART5	
[+]	ERASE:ALL	

## Global Settings (SETUP)

1. In "SETUP" interface, press the **SAVE/ ENTER** button to enter the global settings section.
2. Use the **PAGE +**/**PAGE -** to shift between setting items.

Operating Guide	LCD Display
[SAVE/ ENTER]	Tempo:100
[PAGE +]	T-Sig:4/4
[PAGE +]	Mode:1 SHOT
[PAGE +]	Pre Count: 0
[PAGE +]	Kit Link: ON
[PAGE +]	Tap Sync: OFF

3. Use **+/-** button or **DATA DIAL** to edit Tempo / Time-Sig / Mode / Pre Count and so on.

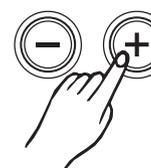
Parameter	Description	Range	Default Value
Tempo*	Song playback rate.	30-280	
T-Sig*	Song beat.	1-9/2,1-9/4, 1-9/8,1-9/16	
Mode*	Song playback mode.	Loop/I Shot/ TAP/HIT	
Pre Count*	Pre-count for leading measures.	0, 1, 2	0
Kit Link*	Song kit synchronizing.	OFF/ON	ON
Tap Sync*	Tap continuous playback. Only appears in song menu of TAP/HIT.	OFF/ON	OFF

### Note:

The parameters of Pre Count, Kit Link, Tap Sync are global settings and cannot be saved to a user song.



SAVE/ENTER



# Song

## Explanation of the Parameters

During playback of a song the edited parameters will be in affect.

### TEMPO

You can temporarily change the tempo of a song while playback is in progress. The song returns to its preset tempo when a different song is selected.

### T-Sig

Only for information reference, it cannot be changed unless copied to a user song location.

### Mode

1. Each Song has its own mode as default.
2. If the current song is a Loop/ 1 Shot type, the parameter can be changed and the change takes affect in real time; if the current song is a Tap/ Hit type, the parameter can't be changed.

### Pre Count

Pre Count allows you to program a count-in to a song.

0: Playback begins without a count-in.

1: Playback begins after a 1-measure count-in.

2: Playback begins after a 2-measure count-in.

### Note:

This feature is not available when in a TAP/ HIT song type.

### Kit Link

ON: This allows you to assign a specific kit to a song.

-During song playback this function will become effective at once when switched from "OFF" to "ON".

-If you want to change to another kit for your performance, you can simply enter Kit mode to select a new kit.

OFF: When selecting songs, the kit selection will not change with the song.

### Note:

This feature is not available when in a TAP/ HIT song type.

### Tap Sync

In Tap and HIT playback, if one sound is set to play before the previous sound has finished playing, this setting allows you to either have the previous sound stop and the subsequent sound start playing or have the two sounds layered.

ON: The previous sound continues to play to the end, while the subsequent sound is layered on it.

OFF: The previous sound stops while in progress, and the subsequent sound starts playing.

### Note:

This feature is not available when in a TAP/ HIT song type.

## Part Settings (Drum/Perc/Part1~Part5)

### Drum/ Perc

1. In PART page, use +/- or DATA DIAL to select the Drum or Percussion part, then press **SAVE/ ENTER** to enter the parts settings screen.

2. Use **PAGE +/PAGE -**, to switch through the settings menu:

Operating Guide	LCD Display	Description
[PAGE +]	PART:DRUM	Part setting
[SAVE/ ENTER]	Kit: GM Std.	
[PAGE +]	Volume:25	
[PAGE +]	Reverb:12	

3. Use +/- button or DATA DIAL to adjust corresponding parameter settings.

Parameter	Description	Range	Default Value
Kit	Kit number applied for drum/ perc part.	1-108 (Including GM kit)	Varies according to the chosen song
Volume	Part volume.	0-32	
Reverb	Part reverb.	0-32	

### Note:

When setting this parameter:

1. Drum part: kit range is: 1-108. (1-99 are preset kits; 100-108 are GM kits.)
2. Perc part: kit range is: 100-108 (GM kits.)

### Part 1~Part 5

1. To page through the song menu, press the **PAGE +** button to "PART: DRUM", use DATA DIAL select a corresponding part (PART: PERC. PART1-PART5), and then press the **SAVE/ ENTER** button to enter the part settings.

2. Use the **PAGE +/PAGE -** button to switch the settings menu.

Operating Guide	LCD Display
[SAVE/ ENTER]	Volume:32
[PAGE +]	Pan: Center
[PAGE +]	Reverb:0

3. Press the +/- button to adjust the parameter value.

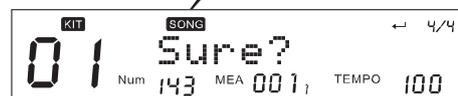
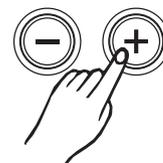
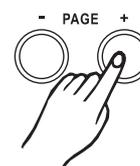
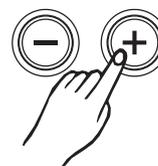
Parameter	Description	Range
Volume	Part volume.	0-32
Pan	Pan.	L8~Center~R8
Reverb	Part reverb.	0-32

## Erase

Attention: This is an auxiliary function, only available when the song category is a User Song.

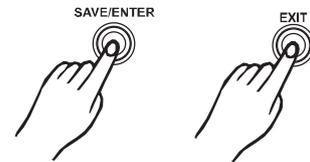
1. Enter Song Menu page, pressing the **PAGE +** directly enters the Erase setting interface.

2. Use the +/- button or DATA DIAL to select the part to be erased, in addition, you can select "ALL" to erase the whole user song. After selecting the part to be erased, press **SAVE/ ENTER**. See the screen display on the right.



# Song

- Pressing the **SAVE/ ENTER** button, the screen will read "Erase OK!" showing that the delete was successful, and then reverts back to "Erase: Drum".
- Press **EXIT** button to cancel the delete operation and revert back to delete part screen.



## Saving a Song

The kt4 allows you to edit a preset song and save it to a user song location. Here you will also have the option to save the song to an SD card.

### Note:

Not only in SONG screen, but also by pressing the **SAVE/ ENTER** button as you move deeper in the song editing menu you'll have the option to save the song.

### Saving Preset Song

When editing a preset song the changes will not be permanent unless you choose to save the song to a USER song location. Select a preset song, press **SAVE/ ENTER**, you can then save the current song to a user song (The kt4 will select the first empty user song as the default user song memory slot, "" appears ahead of the user song's name).

### Note:

See the illustration on the right, the "DATA: 143" which is displayed on LCD right bottom area shows the current song number. (For example, current selected song is the first song of user song category.)



Operating Guide	LCD Display	Description
[SAVE/ ENTER]	Sv x Mysng005	
	Sv x Mysng006	Use [+] / [-] button to shift between user songs.
	Sv x Mysng005	
[SAVE/ ENTER]	Mysng005	Enter rename interface.
[SAVE/ ENTER]	Save OK!	Save successfully!
	MySng005 =U=	Back to main interface, and then select this user song.

### Note:

If you have edited song parameters but did not save them to a USER song, the parameters will be lost.

### Saving a User Song

You can edit user songs and save changes, you can also save to an SD card. Select one user song, press **SAVE/ ENTER**. For example, select first user song "MySng001":

### Saving a Single Song

If you edit a User song, press **SAVE/ ENTER**:

If there is no identified SD card, you can save the song in the module (local), reference operation as follows:

Operating Guide	LCD Display	Description
[SAVE/ ENTER]	Sv x Mysng001	Select a path location to save to.
[+]	Sv x Mysng002	Select a user song.
[-]	Sv x Mysng001	
[SAVE/ ENTER]	Mysng001	Rename. (Refer to "Rename")
[SAVE/ ENTER]	Save OK!	Save successful!
	MySng001 =U=	Back to main interface, and then select this user song.



When an SD card is inserted you can enter the menu to select file type for saving (CurSng/ AllSngs) and saving position (Local/Card):

Operating Guide	LCD Display	Description
[SAVE/ ENTER]	Sv x Mysng001	Select a path location to save to.
[+]	Sv x Mysng002	Select a local user song.
[-]	Sv x Mysng001	
[PAGE +]	CurSng Card	Current user song saved on card.
[SAVE/ ENTER]	Mysng001	Rename. (Refer to "Rename")
[SAVE/ ENTER]	Save OK!	Save successful!
[PAGE+]	Allsngs Card	All user songs saved on card.
[SAVE/ENTER]	ALL_SONG	Rename.
[SAVE/ENTER]	Save OK!	Save successful!
	MySng001 =U=	Exits the save screen and shows the newly saved user song.

**Note:**

Once the song is saved to the SD card it will also be saved to the local module memory as well. If there is not enough available memory on the SD card then the song will only be saved to the local module. If both the local and the SD card do not have available memory space then the screen will display hints and will cancel the operation.

**Saving All User Songs**

First, be sure that you have correctly inserted an SD card in the card slot, and then operate as noted above, select "AllSngs Card", and confirm the save operation.

# Mute

In song mode you can mute any of the individual song tracks while stopped or during playback. You can also mute any of the tracks between channel 1-16 from a Midi file on an SD card.

## MUTE ON:

1. In song mode, press the **PART MUTE** button, mute corresponding parts (Drum, Percussion, and Background part 1-5.)
2. In SD card playback mode, press the **PART MUTE** button, individually mute channels 1-16 on an SD card during playback, and at the same time the PART MUTE button will light up.

## MUTE OFF:

Press the **PART MUTE** button again and that will cancel the mute function, the corresponding **PART MUTE** button turns off.

## Setting MUTE

You can also choose to mute any of the 16 Midi channels during playback (illustration shown at right):

1. In song mode, press the **PLAY/ STOP** button to start the song then press and hold the **MENU** button and **PART MUTE** button. From there you can set the mute on/ off for each channel.
2. Use the **+/-** button to shift through screen settings.

Operating Guide	LCD Display	Description
[MENU] + [PART MUTE]	Mute:SngDrum	Mute drum part (Default setting).
[+]	Mute:Acmp	Mute percussion part and part1~part5.
[+]	Mute:Drm/Prc	Mute drum part and percussion parts.
[+]	Mute:Part1-5	Mute part1~ part5
[+]	Mute:Part1	Mute part1.
[+]	Mute:Part2	Mute part2.
[+]	Mute:Part3	Mute part3.
[+]	Mute:Part4	Mute part4.
[+]	Mute:Part5	Mute part5.

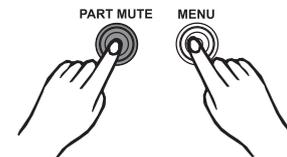
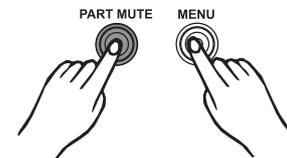
## Mute a Channel of the MIDI Song

1. When browsing the SD card, press and hold **MENU** button, then press **PART MUTE** to select the settings of the mute option. You can select any of the 16 channels to be muted when the part mute function is enabled.
2. You can press **PAGE +/-PAGE** - buttons to select any of the 16 channels, and press **+/-** buttons to mute it when the part mute function is enabled. (Default setting: CH10: Mute; other channels are set to: Play.)

Operating Guide	LCD Display	Description
[MENU] + [PART MUTE]	CH1: Play	Play channel 1.
[PAGE +]	CH2: Play	Play channel 2.
[+]	CH2: Mute	Mute channel 2.
[-]	CH2: Play	Play channel 2.
[PAGE +]	CH3: Play	Play channel 3.
[PAGE +]	CH16: Play	Play channel 16.

## Note:

When setting mute, if indicator of **PART MUTE** button starts flashing that means the mute function has not been turned on, just press the **PART MUTE** to turn it on



100 user songs can be recorded, each song has 7 record tracks (Drum + Percussion + Part1~Part5), in which Part1~Part 5 can only be recorded by MIDI IN. You can directly select a user song that has this "\*" symbol displayed, this is a new and unrecorded user song.

## Note:

- REC** button indicators:  
Record standby state: indicator of **REC** button keeps flashing;  
recording state: indicator of **REC** button stays lit;  
rehearsal: indicator of **REC** button keeps flashing;  
end: indicator of **REC** button turns off.
- PLAY/STOP** button indicators:  
Record standby with "SYNC ON": indicator of **PLAY/STOP** button keeps flashing;  
record standby with "SYNC OFF": indicator of **PLAY/STOP** button turns off;  
but while recording in rehearsal mode: indicator of **PLAY/STOP** button stays lit;  
end: indicator of **PLAY/STOP** button turns off.

## Record a New Song

- Select a new user song, press the **REC** button to enter record menu (Record standby state: indicator of **REC** button keeps flashing. If the "SYNC ON" is enabled, the indicator of the **PLAY/STOP** button keeps flashing; If the "SYNC OFF" is set, the indicator of the **PLAY/STOP** button turns off.) Metronome automatically turns on.

### Note:

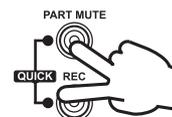
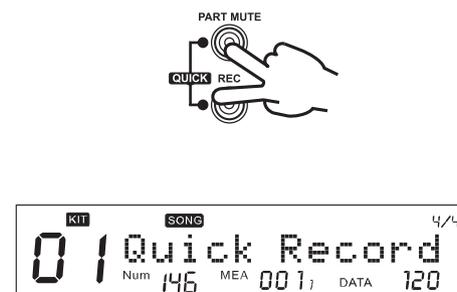
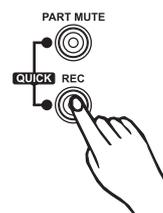
If the currently selected song is a preset song, you can press the **REC** button and the system will automatically select an empty user song or you can choose which previously saved user song to overwrite.

- You can also select the "QUICK RECORD", which allows you to immediately start recording.
- After you finished all settings, start recording.

## Quick Record

If you want to record your playing quickly without any setup you can use QUICK RECORD. In Quick Record, what you record is what you hear (minus the click sound), it can't be quantized or altered.

- Press **REC** and **PART MUTE** simultaneously to enter quick recording mode.
  - If you select a new user song, you can start recording the drum part.
  - If you select a preset song, the system will automatically assign a new user song for recording your drum part.
  - If all user song memory is full then the system will choose the first user song and overwrite the previous data in that user song.
- Starts recording while you strike a pad, or manually press the **PLAY/STOP** button to start recording. (While recording, the indicator button of **REC** and **PLAY/STOP** remain lit, and the LCD displays "Recording...")
- In recording mode, press the **REC** button, enter the rehearsal mode (The **REC** keeps flashing and the **PLAY/STOP** stays lit, the LCD displays "-Rehearsal"), you can only hear what you are playing, pressing the **REC** button again starts recording.
- Press the **PLAY/STOP** button to stop recording.



## Record

### Start Recording

#### Recording Drum/ Percussion Parts

**Method 1:** In the recording standby mode, pressing the PLAY/ STOP button starts recording after a pre-count. The LCD displays the corresponding measure number, and the pre-count sound cannot be recorded (Set pre-count parameter in the record menu.).

**Method 2:** In the recording standby mode (The [REC] button keeps flashing and the [PLAY/ STOP] keeps flashing, the LCD displays record menu.), if you choose the “Sync/ST: ON”, striking a pad will start the recording.

#### Note:

Click track sound cannot be recorded.

While recording, the tempo value cannot be changed in real time.

While recording, press [REC] button to enter rehearsing mode, you can only hear what you are playing (In the rehearsal mode, the [REC] keeps flashing and the [PLAY/ STOP] stays lit, the LCD displays “-Rehearsal”), press the [REC] button again back to enter recording mode.

#### Recording Part1~Part5

1. Link MIDI keyboard (or other MIDI equipment such as computer) to the MIDI IN port of the kt4 module.
2. Press [PLAY/STOP] button to start recording after leading measure. The LCD displays the corresponding measure number, and the pre-count click sound will not be recorded.

#### Note:

1. We recommend you place the setting to “SYNC=ON” (Refer to Record setting.).
2. If you use Note On event of MIDI IN to sync start recording, then only initial settings of PAN, VOL, PITCH, and REVERB LEVEL information can be recorded.
3. Also only 1 drum or percussion part can be recorded at one time, other parts (part1~part5) can be recorded simultaneously.

### Stop Recording

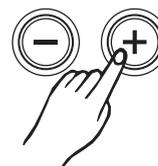
During recording, press the **PLAY/ STOP** button to stop recording, the indicator button of [REC] and **PLAY/ STOP** will turn off.

### Play Back Recordings

After recording stops, the system reverts to SONG Mode automatically; press the **PLAY/ STOP** button to playback the song you just recorded.

### Recording Based on Preset Song

1. Select a preset song (for example 012), press [REC] button, you must copy this preset song to a user song since the preset songs cannot be overwritten, the system will automatically select a empty user song (or select the first user song if all the user memory is full.).
2. Use +/- button to select an available song.
3. Press the **SAVE/ ENTER** button to confirm your selection.
4. The system temporarily displays rename interface, the LCD displays “Save Ok!” after the song has been saved successfully.



5. Now enter the record standby mode; LCD displays record setting mode, the indicator of **REC** button keeps flashing (For example, select "Mysng003", the NUM displays 145).

6. You can also select the "QUICK RECORD" mode, without any additional steps, you can immediately start recording.

7. After you finished adjusting your desired settings, start recording.

## Setting Record

Press **REC** button to enter record setting mode, setting channel, time signature, tempo and record parameters.

Operating Guide	LCD Display
[REC]	Part: Drum
[PAGE +]	TimeSig:4/4
[+]	TimeSig:5/4
[-]	TimeSig:4/4
[PAGE +]	Tempo:120

Parameter	Description	Range	Default
Part*	Select record part.	Drum/Perc	Drum
TimeSig	Time signature for recording.	1-9/2, 1-9/4, 1-9/8, 1-9/16	4/4
Tempo		30-280	120
Mode*	Tempo value.	New/Overdub	Overdub
Loop*	Record mode.	OFF/ALL/I -99	OFF
Qntize*	Loop length. Quantize resolution.	OFF/8/8T/16/16T/32/32T/64	(192 resolution when OFF)
Sync-ST*	Strike pad to start.	OFF/ON	OFF
Precount*	Leading measure.	0-2	0

### Details explained:

#### Part

Select the drum or percussion part channel you want to record. (Part1-Part5 can also be recorded if ch12~ch16 of MIDI IN have notes)

#### Note:

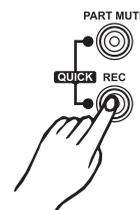
When select the part Perc whose original voice is GM KIT, you are just allowed to record in New mode. The MODE menu will select the parameter "New" automatically, and you can't change the parameter.

#### Mode

- Refer to Drum/Percussion parts:
  - Overdub: record while keeping the original part.
  - New: delete the original part and record a new one.
- Refer to Part1~Part5:
  - Always record while hearing the original Parts.

#### Loop

OFF: 1 shot.  
 1~99: loop 1 ~ 99 measures.  
 All: Loop all measures (this appears only when current song is not a new one).  
 If you record a song over the top of an existing song, select 1 Shot (OFF) mode to record, the length of recording will capture your full recorded length; or you can also select ALL mode to record, the length of recording equals to the existed song and loop recording. You can also assign a measure length (<99 measures) to loop recording, and the assignable length must be larger than original song length in default.



# Record

For example, if you select an existing song that is 8 measures then the specified measure length should be 9-99.

## Quantize

1. You can quantize all the parts which are being recorded, including drum, percussion, part1 ~part5;
2. Referring to note on: Will quantize the note starting position but not note length;
3. Referring to Midi controllers: will NOT quantize the Midi controller.

## Sync-ST

Strike a pad or send a MIDI IN note to sync start recording.

## Precount

1. When set "Sync-ST: ON", strike a pad to trigger recording, playing the specified leading measure, all strikes during the precount won't be recorded.
2. Select loop recording, precount won't be played after recording starts.

Prompt message while recording

LCD Display	Description
Too Large	Exceed limitation of single song. (About 2.5K notes)
Space Full	User song memory is full. (800k)

## Note:

What the song size will actually be is an estimate when real time recording. You may be able to record several more notes even if the above prompt message occurs.

## Click ON/ OFF

You can switch the click sound on and off by pressing **CLICK**. **CLICK** lights while the click sound is set to be played.

**Note:**

In DEMO, **CLICK** is invalid.

## Click Settings

1. Holding down **MENU** and pressing **CLICK** enters the click setting screen.

**Note:**

During click playing, entering the menu of click settings will not interrupt playback of the click.

2. Press **PAGE +**/**PAGE -** to switch menu of click settings.

Operating Guide	LCD Display
[MENU]+[CLICK]	ClickVol:22
[PAGE +]	TimeSig:4/4
[PAGE +]	Inter: 1/4
[PAGE +]	Voc: Sticks

3. Use **+/-** button or DATA DIAL to adjust parameters.

Parameter	Description	Range	Default
ClickVol	Click global volume.	0-32	22
TimeSig*	Click time signature.	0-9/2, 0-9/4, 0-9/8, 0-9/16	4/4
Interval	Click playback Interval.	1/2,3/8,1/4,1/8,1/12, 1/16	1/4
Voc	Click voice.	Voice/Metro/Claves/ Sticks/ Cowbell/Click	Sticks

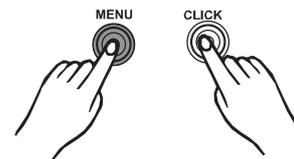
**Parameters Explanation:**

TimeSig:

Specify the time signature of the click sound. When the beat per measure is set to "0," for example 0/2, 0/4, 0/8, 0/16, no accent is added to the first beat.

**Note:**

During playback of a song, time signature cannot be edited.



# Save

The kt4 module supports User Drum Kits, User Songs, and Global Setup (including Click, Trigger, Mixer, Precount, Kit Link and Tap Sync setting .etc) saving on to an SD Card. See the default saving path “MY\_EDRUM”:

File Type	Format	Saving Path
User Kit	*.KIT	..Root\MY_EDRUM\
All User Kit	*.KIT	..Root\MY_EDRUM\
User Song	*.MID	..Root\MY_EDRUM\
All Use Song	*.SNG	..Root\MY_EDRUM\
Global Setup	*.SET	..Root\MY_EDRUM\

## Saving User Kit

Refer to “Saving User Kit”.

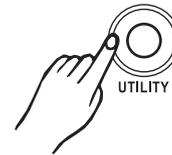
## Saving User Song

Refer to “Saving User Song”.

## Saving Global Setup

Be sure that your SD Card is inserted and properly formatted.  
Press the **UTILITY** button to enter the Global Setup saving page.

Operating Guide	LCD Display	Description
[UTILITY]	TRIGGER	Enter UTILITY menu.
[PAGE +]	EFFECT	
[PAGE +]	MIDI SET	
[PAGE +]	SAVEGLOBAL	
[SAVE/ ENTER]	My_Setup	Rename (Refer to “Rename” for details.)
[SAVE/ ENTER]	Save OK!	Save successfully. (Temporally displayed)



The trigger setup parameters, reverb effect, EQ, MIDI set up, and reset to factory default can be set in the **UTILITY** menu. Press the **UTILITY** button to enter the utility menu. The **UTILITY** button will light up.

Operating Guide	LCD Display	Description
[UTILITY]	TRIGGER	Trigger setup parameters.
[SAVE/ ENTER]	Sensitive:1	Trigger sensitivity.
[+]	Sensitive:2	Change value.
[PAGE +]	EFFECT	Reverb and EQ.
[PAGE +]	MIDI SET	MIDI set up.
[PAGE +]	SAVEGLOBAL	Save global settings to SD card.
[PAGE +]	RESET	Set global settings to factory default.
[PAGE +]	AUTOPOWER	Auto power off settings.

## Trigger

You can set the parameters of each drum pad and cymbals in the Trigger menu. During the setting, you can select each trigger by hitting the corresponding trigger pad or use the Pad select buttons on the panel. The corresponding panel button of selected pad will light up. Press the **UTILITY** button, select "TRIGGER" page, and then press the **SAVE/ ENTER** button to enter the parameter page of the current pad.

Here are the parameters for triggers:

Parameter	Description	Range	Default
Sensitive*	Sensitivity.	1-32	-
Thresh*	Threshold.	0-31	-
Curve*	Trigger curve.	Normal/Exp1/Exp2/Log1/Log2/Loud	Normal
Retrig-C*	Retrigger cancel.	1-16	-
X-Talk*	Cross talk.	0-16	-
Rim-Adj*	Rim sensitivity.	0-16	-
Splash-S	Splash sensitivity.	1-8	5

### Details Explained:

#### Sensitivity

Adjust the sensitivity of the pad to regulate the pad response. Higher settings result in higher sensitivity, so that the pad will produce a loud volume even when struck softly. Lower sensitivity will keep the pad producing a low volume even when played forcefully. You can also adjust the sensitivity of the Hi-Hat splash in Splash Sensitivity.

#### Threshold

This setting allows a trigger signal to be received only when the pad is struck harder than a specified force. This can be used to prevent a pad from sounding in response to extraneous vibrations from another pad.

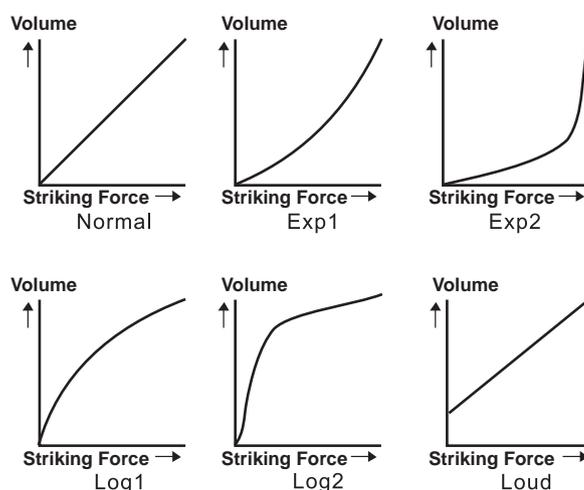
#### Curve (Trigger curve)

This setting allows you to control the relation between the velocity (striking force) and changes in volume (the dynamic curve.) Adjust this curve until the response feels as natural as possible.

**Normal:** The standard setting. This produces the most natural correspondence between playing dynamics and volume change.

**Exp 1/ 2:** Compared to Curve Normal, strong dynamics produce a greater change.

**Log 1/ 2:** Compared to Curve Normal, a soft playing touch produces a greater change.



# Utility

**Loud:** Very little dynamic response, making it easy to maintain strong volume levels.

## Retrig-C (Retrigger cancel)

Playing snare drum pads and other devices with commercially available acoustic drum triggers attached may result in altered waveforms, which may also cause inadvertent sounds. This occurs in particular at the decaying edge of the waveform. Retrigger Cancel detects such distortion and prevents retriggering from occurring. Although setting this to a high value prevents retriggering, it then becomes easy for sounds to be omitted when the drums are played fast (drum roll etc.). Set this to the lowest value possible while still ensuring that there is no retriggering.

## X- Talk (Cross talk)

When two pads are mounted on the same stand, the vibration produced by hitting one pad may trigger the sound from another pad unintentionally (This is called crosstalk.) You can avoid this problem by adjusting Crosstalk on the pad that is sounding inadvertently. If the value is set too high, then when two pads are played simultaneously, the one that is struck less forcefully will not sound. So be careful and set this parameter to the minimum value required to prevent such crosstalk. With a setting of "0", crosstalk prevention does not function.

## Rim\_Adj

When you select Snare/ Tom1~Tom4 or the trigger rims, the parameter displays the rim sensitivity; if not, it displays "---".

## Splash\_S

When you select HIHAT PEDAL or Splash, the parameter displays the splash sensitivity; if an invalid trigger is selected, it displays "---".

## Effect

You can set the Reverb effect and the 4 band EQ parameters in the "Effect" menu.

Parameter	Description	Range	Default
Reverb	Master reverb switch.	OFF/ON	According to current KIT.
RvbTp	Reverb type.	Plate/SRoom/MRoom/LRoom/Hall1/Hall2/Delay/P.Dely	
EQSwitch	4 band EQ master switch.	OFF/ON	
EQLow	EQ low band.	-12dB~12dB	
EQL.Mid	EQ low middle band.	-12dB~12dB	
EQH.Mid	EQ high middle band.	-12dB~12dB	
EQHigh	EQ high band.	-12dB~12dB	

### Note:

1. Reverb and EQ effects are available to all channels.
2. All modified effect parameters are in effect on the current kit and also can be saved in current kit.

## MIDI Settings

You can connect the digital drum to other MIDI device thru standard MIDI cable.

Parameter	Description	Default
local*	ON: Output both local sound and MIDI data. OFF: Mute the local sound output, only output MIDI data.	ON
SoftThru	ON: Forward all input MIDI data to MIDI out. OFF: MIDI output only local MIDI data.	OFF
GM Mode	ON: The input program change of MIDI channel 10 is processed as GM kit selection. OFF: The input program change of MIDI channel 10 is processed as local kit selection.	ON

### Local

OFF: Striking pad triggers no sound, but by pressing pad button on the module panel still creates sounds.

## Reset

You can choose to reset only the global menu parameter settings of the kt4 to factory default, or choose to reset all user songs and user kits.

Parameter	Description
Reset Para	Reset only global menu parameter settings (MIXER, UTILITY trigger settings, CLICK, Song setup, etc.).
ResetAll	Reset the global menu parameters and all user songs, user kits. After choosing this operation, the kt4 will go back to the main screen.

## About the Auto Power off Function

In order to save energy, we have included a "AUTO POWER" function in the kt4 module. With this function, the sound module will shutdown automatically when you have left it idle for more than 30(default) minutes.

Parameter	Description	Default
Powoff	Use [+] / [-] button or DATA DIAL to set auto power off time. Three options: 30 minutes, 60 minutes or OFF. The LCD will display the time you have set.	30MIN

# SD Card

## Browsing Files in a SD Card

1. Press the **CARD** button, the button will light, and the root folder of the card will be opened. You'll see the folders and the supported files on the screen.
2. Use the **+/-** button or DATA DIAL to browse through the files in a folder. The files are sorted according to their types and their names.
3. If the current page displays a folder, press the **SAVE/ ENTER** button to enter this folder.
4. By pressing the **PAGE +/-PAGE -** button, you can jump to the previous file or the next file type.

### Note:

1. If there's no folder or supported file in the current directory, "No File!" will be displayed and you can use the [EXIT] button to exit to the last directory you were browsing.
2. Currently supported files or folders that contain more than 128 choices; the LCD will display "TooManyFiles!".
3. The kt4 supports an SD card size from 16M to 32G, it supports FAT16 and FAT32. The module does not support a SD card which contains more than 1 partition, in this case we strongly recommend that you use an SD card formatted by the kt4 module.
4. Press the **KIT, SONG, KIT + UTILITY** button to exit the SD card mode.

## Play Back MIDI songs from a SD card

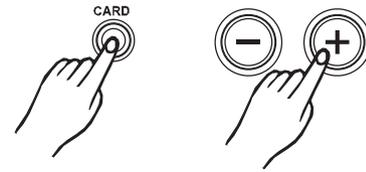
1. When a MIDI song is selected, press the **PLAY/ STOP** button, the playback starts.  
The indicator button **PLAY/ STOP** button will light up.
2. At the same time, the time signature and tempo value will update to the current song information.
3. During the playback, pressing the **PLAY/ STOP** button again will stop the playback.

### Note:

1. Details about playing MIDI songs from an SD card- please refer to "Playing a Song" chapter of this manual. To learn about the playing settings of MIDI songs from an SD card please refer to "LOOP", introduced in this chapter.
2. Supports playing format0/ format 1 MIDI file from an SD card.
3. The kt4 can support SMF 0 & 1 file formats; the memory amount of a track should be less than 32k. The maximum file size is 542 Kbytes.

## Mute a Channel of a MIDI Song

No matter which MIDI song from the SD card you select, you can mute in real-time any channel you like from CH1-CH16. Press the **CARD** button to enter the card interface, then press the combination buttons **MENU + PART MUTE** to select the settings of the mute option.



Operating Guide	LCD Display	Description
[CARD]	MYSNG001.MID	
[MENU] + [PART MUTE]	CH1:Mute	Shift between MIDI channels.
[+]	CH1:Play	Set mute parameters.
[PAGE +]	CH2:Play	
[PAGE +]	CH3:Play	
[PAGE +]	CH16:Play	

## File Operations

1. Press **MENU** button, enter SD card operation menu.
2. Use **PAGE +/PAGE -** button to shift parameter settings.

Parameter	Description	Range	Default
LOAD*	Load current file.	--	--
DELETE*	Delete current file.	--	--
LOOP	Select loop mode of the playback.	folder / 1	
PRECOUNT	Set the pre-count of playback.	0, 1, 2	0
FORMAT	Format the card.	--	--

### LOAD, DELETE

"Load" and "Delete" are shown only when the current selected item is a file (not folder).

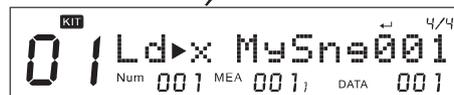
### Load

You can load a MIDI song to be a user song, or load back the setting of the KITs (\*.KIT), all user songs (\*.SNG), or your global setting (\*.SET). For instance if you wanted to load a MIDI song to be a user song, after you've selected "Load" in the card menu:

1. Press **SAVE/ ENTER** button, you'll be asked to select the type of the user song after the MIDI song is loaded. Use **+/-** button or **DATA DIAL** to select among 1 Shot, Loop, Tap and Hit:
2. Press **SAVE/ ENTER** to confirm your selection, you will be asked to select the user song memory slot which will be used to save the new song. If there's a "\*" before the name of the selection, it means it's empty and it's safe to save the new song into it without worrying about losing your previous data.
3. Press **SAVE/ ENTER** button to confirm your selection. If you have selected a user song memory slot which is not empty, the system asks you to confirm the overwrite operation. You can use the **SAVE/ ENTER** to confirm or press the **EXIT** to go back to the last step and change your selection.
4. If you confirm the selection, the MIDI song will be loaded to the selected user song memory slot, and you will see "Song Loaded!"

### Note:

Only MIDI songs smaller than 32 Kbytes can be loaded. The load user song function supports the SMF 1 file type only, and up to 7 channels of the MIDI song can be used in the 1 shot or loop type user song. For tap or hit type, only 1 channel can be used.



# SD Card

Here's the table for the available channel:

## 1 Shot / Loop:

MIDI Channel	Part	Description
10	Drum	Set control change instruction - BN 00 0x7F to use internal KIT, otherwise GM kit would be used.
11	Percussion	
12	Part 1	
13	Part 2	
14	Part 3	
15	Part 4	
16	Part 5	

## Tap / Hit:

Only the first of channel 12~16 in the MIDI song would be used.

## Error Message

LCD Display	Explain
NoUsableData	There's no usable note in the MIDI song.
FileError	File error.
FileToo Big	The MIDI song is larger than 32 Kbytes.
No Space	The user data space is full

(Note: If you load the MIDI song to a user song which is not empty, the original User Song would be deleted even when the display says "No Space".)

File error may be caused by some situations:

1. The MIDI song is not a FORMAT 1 MIDI song, the amount of track is more than 32k memory size.
2. PPQN > 1024.
3. More than 9 beats in a measure, or each beat is shorter than sixteenth note.

## Delete

Can only delete file, that is to say, when you select a file but not folder, this option appears.

1. Press **SAVE/ ENTER** button, LCD displays as the picture on the right.
2. If you press **SAVE/ ENTER** button this time, confirm delete operation, the LCD displays the next file when deleted successfully, or displays "No File!" when the deleted file is the last one. Press **EXIT** button to cancel this delete operation, and back to "DELETE" menu.

## Loop

The playback would loop through all the MIDI songs in the current folder.

- : The playback will loop through all MIDI songs in the current folder.
- 1: The playback will loop the current MIDI song only.

## Format

1. Enter format menu, press **SAVE/ ENTER** button, the LCD will display the following message:
2. Press **SAVE/ ENTER** button at this time to confirm format operation, once the formatting is successful the display will read - "Format Ok!". Press the **EXIT** button to cancel this format operation, and revert back to "FORMAT" menu.



**Note:**

1. After formatting, all previous data in the card will be erased. Please make sure that you have backed up any important information in your SD card.
2. The kt4 supports FAT16 and FAT32 only, some SD cards with a small capacity (under 32M) may be using FAT12, in this case, the card would be formatted into FAT16.

## Error Messages during a Card Operation

You may see some error information displayed during a card operation. They are caused by the hardware or file system error on the SD card.

LCD Display	Description
No Card!	The card is not properly inserted into the card slot.
Card Locked!	The card is found protected/locked during save/delete or format.*
Card Error!	A fatal error occurred during reading or writing the card.**
FS Error!	The file system of the card is not supported.***

\* Please take out the card, unlock the card and try again.

\*\* The fatal error can be caused by a damaged card, poor contact, etc. Please clean the metal connection part of the card and try again.

\*\*\* The kt4 module can support only FAT16 and FAT32.

# Making the Settings for MIDI

## About MIDI

MIDI (Musical Instrument Digital Interface) is a standard that allows performance data and other information to be exchanged among electronic musical instruments and computers. With a MIDI cable connecting MIDI connectors equipped on a device, you can play multiple instruments with a single keyboard, have multiple instruments perform in ensemble, program the settings to change kits automatically to match the performance as the song progresses, and more.

### MIDI Connection

**MIDI IN:** This terminal receives MIDI data from an external MIDI device.

**MIDI OUT:** This terminal transmits data from the drum module to other MIDI devices.

### USB Connection

The USB connector allows you to connect the kt4 module directly to your computer. It can be connected without installing a driver in Windows XP/Vista/Win7 or MAC OSX environments.

The kt4 module will be recognized as a "USB Audio device" to receive and transmit MIDI messages through a single USB cable. The USB port is used only for MIDI messages (MIDI via USB)

**Note:**

When the USB port is connected to a computer, all MIDI messages will be received and transmitted via USB.

# Making the Settings for MIDI

## Connecting to an External Sound Device

The kt4 drum module transmission channel for the drum kit is fixed to Channel 10. It will output MIDI data generated by the triggers when hitting the pads or stepping on the Hi-Hat control pedal (Note ON/OFF, and Foot messages). Song playback data and metronome notes are not transmitted.

### Recording Your Performance to an External Sequencer

1. Connect the MIDI OUT of the digital drum to the MIDI IN of your sequencer, and the MIDI OUT of your sequencer to the MIDI IN of the kt4 module. If you are using a software sequencer on a computer, you can simply connect the USB port of the kt4 module to a USB port of your computer using a single USB A-B cable.
2. Setup the active track of your sequencer on Channel 10. Activate RECORD on your sequencer.
3. Play the pads of your kt4 kit.
4. Stop recording. Reset your sequencer to the start of your recording.
5. Playback the recorded sequencer.

## Using the kt4 module as a Sound Module

Connecting an external keyboard or sequencer to the MIDI Input allows you to use the kt4 module as a multi-part, polyphonic sound module to play various instrument parts in addition to your drums (for instance, Piano on Channel 1, Bass on Channel 2, Strings on Channel 3, etc). The voices on each MIDI channel are selected using MIDI Program Change messages (refer to GM Backing Instrument List ).

The MIDI system in the kt4 module has 16 reception channels numbered from 1-16. Each of the channels is responsible for a voice. When the instrument receives MIDI information from an external device, the active channel is determined by the control message. Channel 10 is reserved for Drums. The kt4 module has two options for Channel 10: GM ON or OFF, as selected in UTILITY MIDI menu.

When GM Mode is ON, Channel 10 will play the GM percussion kits.

When GM Mode is OFF, Channel 10 will play the kt4 module internal kits.

### **Note:**

For more information on received MIDI messages, refer to MIDI implementation chart.

# Troubleshooting

Problem	Possible Cause and Solution
No sound	<ol style="list-style-type: none"><li>1. Rotate the [VOLUME] knob to be sure that the volume isn't down.</li><li>2. Check that the Local Mode is set to "ON"</li></ol>
No sound from Pads	<ol style="list-style-type: none"><li>1. To be sure that the pad is connected correctly.</li><li>2. Be sure that the volume of the pad is not set to "0".</li></ol>
No click sound	<ol style="list-style-type: none"><li>1. Be sure that the metronome is turned on.</li><li>2. Be sure that the click volume is not set to "0".</li></ol>
The Pad volume doesn't match the Song playback volume	<ol style="list-style-type: none"><li>1. Adjust the song playback volume to match the pad volume.</li></ol>
Cannot connect to the computer	<ol style="list-style-type: none"><li>1. Make sure the USB has been correctly connected.</li><li>2. Do the connect operation again (Keep the computer on, and then turn the module on, connect the USB cable).</li><li>3. The kt4 module can connect to a computer without loading a driver.</li></ol>

# Specifications

## Maximum Polyphony

64

## Drum kits

Kit: 99 (55 Presets + 44 Users)

GM Drum Kit: 9 GM Drum Kits

## Instruments

Instrument: 762 (Drum Voice, Percussion Voice, Effect Voice)

18 Hi-hat Combination Group

## Effect

Reverb with 8 Variations , 4-band EQ

## Sequencer

Preset Pattern: 142

User Song: 100

Tick: 192 ticks per beat

Record: Real-time Record

## Tempo

30~280

## Display

Backlit with segment code LCD

## Connectors

9 TRIGGER INPUT JACK, 2 EXTER TRIGGER INPUT JACK (TOM4, CRASH2), PHONES, AUX IN, OUTPUT ( R, L/MONO), USB-MIDI, MIDI IN/ OUT

## SD Card

Save/Load kit, song and user setting

Play back MIDI song (maximum 16 tracks)

## Power Supply

DC 9V, 500mA

## Dimensions

300 (W) × 330 (H) × 160 (D) mm

## Module Weight

0.5 kg

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

# Kit List

No.	Kit Full Name (NULL)	Kit Name
1	Hybrid	Hybrid
2	USA Cust	USA Cust
3	DW TruSD	DW TruSD
4	Brooklyn	Brooklyn
5	DW Redge	DW Redge
6	New Classic	Nclassic
7	DW Solid	DW Solid
8	Studio 1	Studio 1
9	DW Edge	DW Edge
10	Metal 1	Metal 1
11	Stage 1	Stage 1
12	Studio 2	Studio 2
13	Funk 2	Funk 2
14	Stage 2	Stage 2
15	Rosa	Rosa
16	Magic!	Magic!
17	Club Kit	Club Kit
18	LatinPrc	LatinPrc
19	SnareOff	SnareOff
20	808.1	808.1
21	Metal 2	Metal 2
22	SpecilFX	SpecilFX
23	EDM Funk	EDM Funk
24	909.1	909.1
25	Songo	Songo
26	Zep Kit	Zep Kit
27	Indian	Indian
28	HipHop	HipHop
29	House	House
30	ClosetKt	ClosetKt

No.	Kit Full Name (NULL)	Kit Name
31	Orkestra	Orkestra
32	Marimba	Marimba
33	Vibes	Vibes
34	1970'S	1970'S
35	Hi Crack	Hi Crack
36	Rock 2	Rock 2
37	TightFit	TightFit
38	Dance	Dance
39	Lo-Fi	Lo-Fi
40	DrumNbaS	DrumNbaS
41	Jazzy	Jazzy
42	Percussn	Percussn
43	Techno	Techno
44	Tight RM	Tight RM
45	Electric	Electric
46	Rush-it	Rush-it
47	JunkYard	JunkYard
48	Brushes	Brushes
49	Steely	Steely
50	Pocket	Pocket
51	Clean	Clean
52	Noise	Noise
53	ZZ Rock	ZZ Rock
54	Ska	Ska
55	BossaNva	BossaNva

# Voice List

No.	English Name	LCD Name		
<b>KICK</b>			49	Hand Hammered Brass Snare Drum 5.5x14 Rimshot
1	New Classic 16x18 Kick Drum	NC1618BD	50	Drum Workshop Steel 6x14 Snare Drum
2	Drum Workshop 16x22 Kick Drum	DWC1622B	51	Drum Workshop Steel 6x14 Rimshot
3	USA Custom 18x22 Kick Drum	US1822BD	52	Hand Hammered Brass Snare 8x14
4	USA Brooklyn 18x22 Kick Drum	BR1822BD	53	Hand Hammered Brass Snare 8x14
5	Drum Workshop 16x22 Jazz Kick Dampened	DW1622JZ	54	Drum Workshop Edge 5x14 Snare Drum
6	Zep Style 14x26 Kick Drum	LZ1426BD	55	Drum Workshop Edge 5x14 Rimshot
7	New Classic 18x22 Kick Drum	NC1822BD	56	Drum Workshop Solid Alum 5.5x14 Snare Drum
8	22" Acoustic Kick 1	22AcK1	57	Drum Workshop Solid Alum 5.5x14 Rimshot
9	22" Acoustic Kick 2	22AcK2	58	Funk Snare
10	24" Standard Kick	24StdK	59	Funk Snare Rim
11	Brush Kick 1	BrushK1	60	Zep Chrome Snare Drum 6.5x14
12	Brush Kick 2	BrushK2	61	Zep Chrome Snare Drum 6.5x14 Rimshot
13	24" Jazz Kick	24JazzK	62	Studio Snare
14	22" Rock Kick	22RockK	63	Studio Snare Rim
15	Room Kick	RoomK	64	14" Acoustic Snare
16	Fusion Kick	FusionK	65	14" Acoustic Snare Rim
17	1970's Kick	1970'sK	66	14" Standard Snare
18	Vintage Kick	VintageK	67	14" Standard Snare Rim
19	HipHop Kick	HipHopK	68	14" Funk Snare 1
20	Reggae Kick	ReggaeK	69	14" Funk Snare Rim 1
21	Big Band Kick	BigBandK	70	14" Funk Snare 2
22	Old School Kick	OSK	71	14" Funk Snare Rim 2
23	Lo-Fi Kick	LoFiK	72	Brush Snare 1
24	Junkyard Kick	JkydK	73	Brush Snare Rim 1
25	Noise Kick	NoiseK	74	Brush Snare 2
26	Drum & Bass Kick	D&BK	75	Brush Snare Rim 2
27	808 Kick	808K	76	14" Jazz Snare
28	909 Kick	909K	77	14" Jazz Snare Rim
29	Electronic Kick	ElecK	78	14" Rock Snare
30	Power Kick	PowerK	79	14" Rock Snare Rim
31	Dance Kick	DanceK	80	13" Damped Snare 1
32	FX Mix Kick	FXMixK	81	13" Damped Snare 2
33	Techno Kick	TechnoK	82	13" Damped Snare 3
34	Magic Kick	MagickK	83	Orchestra Snare
<b>SNARE</b>			84	Orchestra Snare Rim
35	Classic Black Brass 5x14 Snare Drum	LDBB0514	85	Room Snare
36	Classic Black Brass 5x14 Rimshot	LDBB14RS	86	Room Snare Rim
37	USA Brooklyn Wood Snares-off 6.5x14	BR6514SO	87	Fusion Snare
38	USA Brooklyn Wood Snare Drum Snares-off Rimshot	BR6514RS	88	Fusion Snare Rim
39	USA Brooklyn Wood Snare Drum 6.5x14	BR6514SD	89	Big Band Snare
40	USA Custom Wood Snare Drum 6.5x14	US6514SD	90	Big Band Snare Rim
41	USA Custom Wood Snare Drum 6.5x14 Rimshot	US6514RS	91	Vintage Snare
42	USA Custom Snare Drum 6.5x14 Cross Stick	US6514CS	92	Vintage Snare Rim
43	Drum Workshop Collector's 5x14 Snare Drum	DWC514SD	93	Live Snare
44	Drum Workshop Collector's 5x14 Rimshot	DWC514RS	94	Live Snare Rim
45	USA Brooklyn Wood Snare Drum Rimshot	BR6514RS	95	Reggae Snare
46	Drum Workshop Reverse Edge Snare Drum 6.5x14	DWRE6514	96	Reggae Snare Rim
47	Drum Workshop Reverse Edge 6.5x14 Rimshot	DWRE14RS	97	R&B Snare
48	Hand Hammered Brass Snare Drum 5.5x14	HH5514SD	98	R&B Snare Rim
			99	808 Snare

# Voice List

100	808 Snare Rim	808SnR
101	909 Snare	909Sn
102	909 Snare Rim	909SnR
103	Electronic Snare	ElecSn
104	Power Snare	PowerSn
105	Dance Snare	DanceSn
106	Dance Snare Rim	DanceSnR
107	Old School Snare	OSSn
108	Old School Snare Rim	OSSnR
109	House Snare	HouseSn
110	House Snare Rim	HouseSnR
111	Lo-Fi Snare	LoFiSn
112	Lo-Fi Snare Rim	LoFiSnR
113	Junkyard Snare	JkydSn
114	Junkyard Snare Rim	JkydSnR
115	Noise Snare	NoiseSn
116	Noise Snare Rim	NoiseSnR
117	Drum & Bass Snare	D&BSn
118	Drum & Bass Snare Rim	D&BSnR
119	Techno Snare	TechnoSn
120	Techno Snare Rim	TekSnR
121	Magic Snare	MagicSn
122	Magic Snare Rim	MagicSnR
123	Acoustic Snare Stick	AcSnSt1
124	Standard Snare Stick 1	StdSnSt1
125	Brush Snare Stick	BrshSnSt
126	Standard Snare Stick 2	StdSnSt2
127	Rock Snare Stick 1	RkSnSt1
128	Rock Snare Stick 2	RkSnSt2
129	Live Snare Stick	LiveSnSt
130	Room Snare Stick	RoomSnSt
131	Fusion Snare Stick	FusSnSt
132	808 Snare Stick	808SnSt
133	909 Snare Stick	909SnSt
134	Electronic Snare Stick	ElecSnSt
135	Old School Snare Stick	OSSnSt
136	House Snare Stick	HsSnSt
137	Lo-Fi Snare Stick	LoFiSnSt
138	Junkyard Snare Stick	JkydSnSt
139	Noise Snare Stick	NoisSnSt
140	Techno Snare Stick	TekSnSt
141	Brush Swirl	BrushSw
<b>TOM</b>		
142	New Classic Tom 10"	NCT102
143	New Classic Tom 10"RimShot	NCT101r
144	New Classic Tom 12"	NCT122
145	New Classic Tom 12"RimShot	NCT122r
146	New Classic 14x14 Floor Tom	NCF142
147	New Classic Floor 14"RimShot	NCF142r
148	New Classic Floor 16"	NCF162
149	New Classic Floor 16"RimShot	NCF162r

150	Brooklyn Tom 10"	BRT101
151	Brooklyn Tom 10"RimShot	BRT101r
152	Brooklyn Tom 12"	BRT121
153	Brooklyn Tom 12"RimShot	BRT121r
154	Brooklyn Floor 14"	BRF141
155	Brooklyn Floor 14"RimShot	BRF141r
156	Brooklyn Floor 16"	BRF161
157	Brooklyn Floor 16"RimShot	BRF161r
158	USA Custom Tom 08"	UST082
159	USA Custom Tom 08"RimShot	UT08R2
160	USA Custom Tom 10"	UST102
161	USA Custom Tom 10"RimShot	UT10R2
162	USA Custon tom 12"	UST122
163	USA Custom Tom 12"RimShot	UST12R2
164	USA Custon Floor Tom 14"	USF142
165	USA Custom Floor Tom 14"RimShot	USF14R2
166	USA Custon Floor Tom 16"	USF162
167	USA Custom Floor Tom 14"RimShot	USF16R2
168	Funk Tom 1	PLMS10T
169	Drum Workshop Tom 12" Rimshot	DW12TTRS
170	Funk Tom 2	PLMS12T
171	Drum Workshop Floor Tom 16" Rimshot	DW16TTRS
172	Drum Workshop Tom 12"	DWC0912T
173	Drum Workshop Floor Tom 14"	DWC1414F
174	Drum Workshop Floor Tom 16"	DWC1616F
175	Drum Workshop Floor Tom 18"	DWC1618T
176	Acoustic Tom 1	AcTm1
177	Acoustic Tom 1 Rim	AcTm1R
178	Acoustic Tom 2	AcTm2
179	Acoustic Tom 2 Rim	AcTm2R
180	Acoustic Tom 3	AcTm3
181	Acoustic Tom 3 Rim	AcTm3R
182	Acoustic Tom 4	AcTm4
183	Acoustic Tom 4 Rim	AcTm4R
184	Acoustic Tom 5	AcTm5
185	Acoustic Tom 5 Rim	AcTm5R
186	Acoustic Tom 6	AcTm6
187	Acoustic Tom 6 Rim	AcTm6R
188	Standard Tom 1	StdTm1
189	Standard Tom 1 Rim	StdTm1R
190	Standard Tom 2	StdTm2
191	Standard Tom 2 Rim	StdTm2R
192	Standard Tom 3	StdTm3
193	Standard Tom 3 Rim	StdTm3R
194	Standard Tom 4	StdTm4
195	Standard Tom 4 Rim	StdTm4R
196	Standard Tom 5	StdTm5
197	Standard Tom 5 Rim	StdTm5R
198	Standard Tom 6	StdTm6
199	Standard Tom 6 Rim	StdTm6R
200	Brush Tom 1	BrushTm1

201	Brush Tom 1 Rim	BrshTm1R
202	Brush Tom 2	BrushTm2
203	Brush Tom 2 Rim	BrshTm2R
204	Brush Tom 3	BrushTm3
205	Brush Tom 3 Rim	BrshTm3R
206	Brush Tom 4	BrushTm4
207	Brush Tom 4 Rim	BrshTm4R
208	Brush Tom 5	BrushTm5
209	Brush Tom 5 Rim	BrshTm5R
210	Brush Tom 6	BrushTm6
211	Brush Tom 6 Rim	BrshTm6R
212	Funk Tom 1	FunkTm1
213	Funk Tom 1 Rim	FunkTm1R
214	Funk Tom 2	FunkTm2
215	Funk Tom 2 Rim	FunkTm2R
216	Funk Tom 3	FunkTm3
217	Funk Tom 3 Rim	FunkTm3R
218	Funk Tom 4	FunkTm4
219	Funk Tom 4 R	FunkTm4R
220	Funk Tom 5	FunkTm5
221	Funk Tom 5 Rim	FunkTm5R
222	Funk Tom 6	FunkTm6
223	Funk Tom 6 Rim	FunkTm6R
224	Jazz Tom 1	JazzTm1
225	Jazz Tom 1 Rim	JazzTm1R
226	Jazz Tom 2	JazzTm2
227	Jazz Tom 2 Rim	JazzTm2R
228	Jazz Tom 3	JazzTm3
229	Jazz Tom 3 Rim	JazzTm3R
230	Jazz Tom 4	JazzTm4
231	Jazz Tom 4 Rim	JazzTm4R
232	Jazz Tom 5	JazzTm5
233	Jazz Tom 5 Rim	JazzTm5R
234	Jazz Tom 6	JazzTm6
235	Jazz Tom 6 Rim	JazzTm6R
236	Rock Tom 1	RockTm1
237	Rock Tom 1 Rim	RockTm1R
238	Rock Tom 2	RockTm2
239	Rock Tom 2 Rim	RockTm2R
240	Rock Tom 3	RockTm3
241	Rock Tom 3 Rim	RockTm3R
242	Rock Tom 4	RockTm4
243	Rock Tom 4 Rim	RockTm4R
244	Rock Tom 5	RockTm5
245	Rock Tom 5 Rim	RockTm5R
246	Rock Tom 6	RockTm6
247	Rock Tom 6 Rim	RockTm6R
248	Fusion Tom 1	FusTm1
249	Fusion Tom 2	FusTm2
250	Fusion Tom 3	FusTm3
251	Fusion Tom 4	FusTm4

252	1970's Tom 1	70'Tm1
253	1970's Tom 2	70'Tm2
254	1970's Tom 3	70'Tm3
255	1970's Tom 4	70'Tm4
256	Vintage Tom 1	VtgTm1
257	Vintage Tom 2	VtgTm2
258	Vintage Tom 3	VtgTm3
259	Vintage Tom 4	VtgTm4
260	Vintage Tom 5	VtgTm5
261	Vintage Tom 6	VtgTm6
262	808 Tom 1	808Tm1
263	808 Tom 2	808Tm2
264	808 Tom 3	808Tm3
265	808 Tom 4	808Tm4
266	808 Tom 5	808Tm5
267	808 Tom 6	808Tm6
268	808 Tom Fx 1	808TmFx1
269	808 Tom Fx 2	808TmFx2
270	909 Tom 1	909Tm1
271	909 Tom 2	909Tm2
272	909 Tom 3	909Tm3
273	909 Tom 4	909Tm4
274	909 Tom 5	909Tm5
275	909 Tom 6	909Tm6
276	909 Tom 7	909Tm7
277	909 Tom 8	909Tm8
278	Electronic Tom 1	ElecTm1
279	Electronic Tom 2	ElecTm2
280	Electronic Tom 3	ElecTm3
281	Electronic Tom 4	ElecTm4
282	Electronic Tom 5	ElecTm5
283	Electronic Tom 6	ElecTm6
284	Electronic Tom 7	ElecTm7
285	Electronic Tom 8	ElecTm8
286	Power Tom 1	PowerTm1
287	Power Tom 2	PowerTm2
288	Power Tom 3	PowerTm3
289	Power Tom 4	PowerTm4
290	Power Tom 5	PowerTm5
291	Power Tom 6	PowerTm6
292	90's Power Tom 1	90'PwTm1
293	90's Power Tom 2	90'PwTm2
294	90's Power Tom 3	90'PwTm3
295	90's Power Tom 4	90'PwTm4
296	90's Power Tom 5	90'PwTm5
297	90's Power Tom 6	90'PwTm6
298	Lo-Fi Tom 1	LoFiTm1
299	Lo-Fi Tom 1 Rim	LoFiTm1R
300	Lo-Fi Tom 2	LoFiTm2
301	Lo-Fi Tom 2 Rim	LoFiTm2R
302	Lo-Fi Tom 3	LoFiTm3

# Voice List

303	Lo-Fi Tom 3 Rim	LoFiTm3R
304	Lo-Fi Tom 4	LoFiTm4
305	Lo-Fi Tom 4 Rim	LoFiTm4R
306	Lo-Fi Tom 5	LoFiTm5
307	Lo-Fi Tom 5 Rim	LoFiTm5R
308	Lo-Fi Tom 6	LoFiTm6
309	Lo-Fi Tom 6 Rim	LoFiTm6R
310	Junkyard Tom 1	JkydTm1
311	Junkyard Tom 1 Rim	JkydTm1R
312	Junkyard Tom 2	JkydTm2
313	Junkyard Tom 2 Rim	JkydTm2R
314	Junkyard Tom 3	JkydTm3
315	Junkyard Tom 3 Rim	JkydTm3R
316	Junkyard Tom 4	JkydTm4
317	Junkyard Tom 4 Rim	JkydTm4R
318	Junkyard Tom 5	JkydTm5
319	Junkyard Tom 5 Rim	JkydTm5R
320	Junkyard Tom 6	JkydTm6
321	Junkyard Tom 6 Rim	JkydTm6R
322	Noise Tom 1	NoiseTm1
323	Noise Tom 1 Rim	NoisTm1R
324	Noise Tom 2	NoiseTm2
325	Noise Tom 2 Rim	NoisTm2R
326	Noise Tom 3	NoiseTm3
327	Noise Tom 3 Rim	NoisTm3R
328	Noise Tom 4	NoiseTm4
329	Noise Tom 4 Rim	NoisTm4R
330	Noise Tom 5	NoiseTm5
331	Noise Tom 5 Rim	NoisTm5R
332	Noise Tom 6	NoiseTm6
333	Noise Tom 6 Rim	NoisTm6R
334	Techno Tom 1	TekTm1
335	Techno Tom 1 Rim	TekTm1R
336	Techno Tom 2	TekTm2
337	Techno Tom 2 Rim	TekTm2R
338	Techno Tom 3	TekTm3
339	Techno Tom 3 Rim	TekTm3R
340	Techno Tom 4	TekTm4
341	Techno Tom 4 Rim	TekTm4R
342	Techno Tom 5	TekTm5
343	Techno Tom 5 Rim	TekTm5R
344	Techno Tom 6	TekTm6
345	Techno Tom 6 Rim	TekTm6R
346	Magic Tom 1	MagicTm1
347	Magic Tom 1 Rim	MgTm1R
348	Magic Tom 2	MagicTm2
349	Magic Tom 2 Rim	MgTm2R
350	Magic Tom 3	MagicTm3
351	Magic Tom 3 Rim	MgTm3R
352	Magic Tom 4	MagicTm4
353	Magic Tom 4 Rim	MgTm4R

RIDE		
354	Hand Hammered Med Ride 20" Bow	HH20BW
355	Hand Hammered Med Ride 20" Bell	HH20BEL
356	Hand Hammered Med Ride 20" Edge	HH20EDG
357	Manhattan Jazz Ride 22" Bow	MJ22BW
358	Manhattan Jazz Ride 22" Bell	MJ22BEL
359	Manhattan Jazz Ride 22" Edge	MJ22EDG
360	Hand Hammered Ride 21" Bow	HH21BW
361	Hand Hammered Ride 21" Bell	HH21BEL
362	Hand Hammered Ride 21" Edge	HH21EDG
363	Ride Bell	RideBl
364	Ride Bow	RideBw
365	21" Acoustic Ride	21AcRd
366	21" Acoustic Ride Edge	21AcRdEg
367	21" Acoustic Ride Bell	21AcRdBl
368	22" Standard Ride	22StdRd
369	22" Standard Ride Edge	22StdRdEg
370	22" Standard Ride Bell	22StdRdBl
371	Brush Ride 1	BrushRd
372	Brush Ride 2	BrushRd2
373	20" Funk Ride	20FunkRd
374	20" Funk Ride Edge	20FunkRdEg
375	20" Funk Ride Bell	20FunkRdBl
376	22" Jazz Ride	22JazzRd
377	22" Jazz Ride Edge	22JzRdEg
378	22" Jazz Ride Bell	22JzRdBl
379	20" Rock Ride	20RockRd
380	20" Rock Ride Edge	20RkRdEg
381	20" Rock Ride Bell	20RkRdBl
382	808 Ride	808Rd
383	Electronic Ride	ElecRd
384	Electronic Ride Edge	ElecRdEg
385	Electronic Ride Bell	ElecRdBl
386	20" Room Ride	20RoomRd
387	20" Room Ride Edge	20RmRdEg
388	20" Room Ride Bell	20RmRdBl
389	HipHop Ride	HipHopRd
390	20" Metal Ride	20MtRd
391	20" Metal Ride Edge	20MtRdEg
392	20" Metal Ride Bell	20MtRdBl
393	Old School Ride	OSRd
394	Old School Ride Edge	OSRdEg
395	Old School Ride Bell	OSRdBl
396	House Ride	HouseRd
397	House Ride Edge	HsRdEg
398	House Ride Bell	HsRdBl
399	Vintage Ride	VtgRd
400	Vintage Ride Edge	VtgRdEg
401	Vintage Ride Bell	VtgRdBl
402	Lo-Fi Ride	LoFiRd
403	Lo-Fi Ride Edge	LoFiRdEg

404	Lo-Fi Ride Bell	LoFiRdBI
405	Junkyard Ride	JkydRd
406	Junkyard Ride Edge	JkydRdEg
407	Junkyard Ride Bell	JkydRdBI
408	Noise Ride	NoiseRd
409	Noise Ride Edge	NoisRdEg
410	Noise Ride Bell	NoisRdBI
411	22" Big Band Ride	22BBRd
412	22" Big Band Ride Edge	22BBRdEg
413	22" Big Band Ride Bell	22BBRdBI
414	Techno Ride	TekRd
415	Techno Ride Edge	TekRdEg
416	Techno Ride Bell	TekRdBI
<b>CRASH</b>		
417	Explosion Fast Crash 17" Bow	AXP17BOW
418	Explosion Fast Crash 17" Edge	AXP17EDG
419	Artisan Crash 16" Edge	ARC16EDG
420	Artisan Crash 17" Bow	ARC17BOW
421	Artisan Crash 17" Edge	AR17EDG
422	Artisan Crash 17" Bell	AR17BEL
423	Artisan Crash 18" Bow	ARC18BOW
424	Artisan Crash 18" Edge	ARC18EDG
425	Artisan Crash 18" Bell	ARC18BEL
426	AA-SC Crash 16" Bow	AAC16BOW
427	AA-SC Crash 16" Edge	AAC16EDG
428	AA-SC Crash 16" Bell	AAC16BEL
429	Explosion Fast Crash 17" Bow	AXC17BOW
430	Explosion Fast Crash 17" Edge	AXC17EDG
431	Explosion Fast Crash 17" Bell	AXC17BEL
432	EFX 12" Crasher	ZLDEFX12
433	AA-ES Crash 18" Edge	EL18EDG
434	VF Crash 17" Bow	VFC17BOW
435	VF Crash 17" Edge	VFC17EDG
436	VF Crash 17" Bell	VFC17BEL
437	AAX Chinese 18" Edge	CH18EDG
438	AA Splash 12" Edge	AA12EDG
439	AA Splash 12" Bell	AA12BEL
440	HHX Splash 10" Edge	HHX10EDG
441	HHX Splash 10" Bell	HHX10BEL
442	China 2	China2
443	16" Acoustic Crash 1	AcCr1
444	16" Acoustic Crash 1 Edge	AcCr1Eg
445	16" Acoustic Crash 2	AcCr2
446	16" Acoustic Crash 2 Edge	AcCr2Eg
447	16" Standard Crash 1	StdCr1
448	16" Standard Crash 1 Edge	StdCr1Eg
449	16" Standard Crash 2	StdCr2
450	16" Standard Crash 2 Edge	StdCr2Eg
451	Brush Crash 1	BrushCr1
452	Brush Crash 2	BrushCr2
453	Brush Crash 3	BrushCr3

454	Brush Crash 4	BrushCr4
455	Funk Crash 1	FunkCr1
456	Funk Crash 1 Edge	FkCr1Eg
457	Funk Crash 2	FunkCr2
458	Funk Crash 2 Edge	FkCr2Eg
459	19" Jazz Crash 1	JazzCr1
460	19" Jazz Crash 1 Edge	JzCr1Eg
461	19" Jazz Crash 2	JazzCr2
462	19" Jazz Crash 2 Edge	JzCr2Eg
463	Rock Crash 1	RockCr1
464	Rock Crash 1 Edge	RkCr1Eg
465	Rock Crash 2	RockCr2
466	Rock Crash 2 Edge	RkCr2Eg
467	808Crash	808Cr
468	909Crash 1	909Cr1
469	909Crash 2	909Cr2
470	Electronic Crash 1	ElecCr1
471	Electronic Crash 2	ElecCr2
472	Orchestra Crash 1	OrchCr1
473	Orchestra Crash 2	OrchCr2
474	Orchestra Crash 3	OrchCr3
475	Room Crash	RoomCr
476	Room Crash Edge	RoomCrEg
477	1970's Crash 1	70'Cr1
478	1970's Crash 2	70'Cr2
479	Old School Crash 1	OSCr1
480	Old School Crash 1 Edge	OSCr1Eg
481	Old School Crash 2	OSCr2
482	Old School Crash 2 Edge	OSCr2Eg
483	Vintage Crash 1	VtgCr1
484	Vintage Crash 1 Edge	VtgCr1Eg
485	Vintage Crash 2	VtgCr2
486	Vintage Crash 2 Edge	VtgC2Eg
487	Lo-Fi Crash 1	LoFiCr1
488	Lo-Fi Crash 1 Edge	LFcr1Eg
489	Lo-Fi Crash 2	LoFiCr2
490	Lo-Fi Crash 2 Edge	LFcr2Eg
491	Junkyard Crash 1	JkydCr1
492	Junkyard Crash 1 Edge	JkCr1Eg
493	Junkyard Crash 2	JkydCr2
494	Junkyard Crash 2 Edge	JkCr2Eg
495	Noise Crash 1	NoiseCr1
496	Noise Crash 1 Edge	NsCr1Eg
497	Noise Crash 2	NoiseCr2
498	Noise Crash 1 Edge	NsCr2Eg
499	Big Band Crash 1	BBCr1
500	Big Band Crash 1 Edge	BBCr1Eg
501	Big Band Crash 2	BBCr2
502	Big Band Crash 2 Edge	BBCr2Eg
503	Techno Crash 1	TekCr1
504	Techno Crash 1 Edge	TekCr1Eg

# Voice List

505	Techno Crash 2	TekCr2
506	Techno Crash 2 Edge	TekCr2Eg
507	Latin Crash 1	LatinCr1
508	Latin Crash 1 Edge	LatCr1Eg
509	Latin Crash 2	LatinCr2
510	Latin Crash 2 Edge	LatCr2Eg
511	China 1	China1
512	China 1 Edge	China1Eg
513	Splash	Splash
514	Splash Edge	SplashEg
<b>HIHAT</b>		
515	AAX 14" Studio HiHats 14"Tip	HHAXTP
516	AAX 14" Studio HiHats 14"Edge	HHAXED
517	AAX 14" Studio HiHats 14"Bell	HHAXBL
518	AAX 14" Studio HiHats 14"Pedal	HHAXFC
519	AAX 14" Studio HiHats 14"Splash	HHAXFS
520	Artisan HiHats 14"Tip	AR14HHTP
521	Artisan HiHats 14"Edge	AR14HHED
522	Artisan HiHats 14"Bell	AR14HHBL
523	Artisan HiHats 14"Pedal	AR14HHFC
524	Artisan HiHats 14"Splash	AR14HHFS
525	HH Dark HiHats 14"Tip	HHDKTP
526	HH Dark HiHats 14"Edge	HHDKED
527	HH Dark HiHats 14"Bell	HHDKBL
528	HH Dark HiHats 14"Pedal	HHDKFC
529	HH Dark HiHats 14" Splash	HHDKFS
530	Hi-hat	HH
531	Hi-hat Pedal	HPedal
532	Hi-hat Splash	HHSplash
533	14" Acoustic Hi-hat	14AcHH
534	14" Acoustic Hi-hat Edge	14AcHHEg
535	14" Acoustic Hi-hat Pedal	14AcHHPd
536	14" Acoustic Hi-hat Splash	14AcHHSp
537	14" Standard Hi-hat	14StdHH
538	14" Standard Hi-hat Edge	14StHHEg
539	14" Standard Hi-hat Pedal	14StHHPd
540	14" Standard Hi-hat Splash	14StHHSp
541	Brush Hi-hat	BrushHH
542	Brush Hi-hat Pedal	BrshHHPd
543	Brush Hi-hat Splash	BrshHHSp
544	14" Rock Hi-hat	14RockHH
545	14" Rock Hi-hat Edge	14RkHHEg
546	14" Rock Hi-hat Pedal	14RkHHPd
547	14" Rock Hi-hat Splash	14RkHHSp
548	14" Jazz Hi-hat	14JazzHH
549	14" Jazz Hi-hat Edge	14JzHHEg
550	14" Jazz Hi-hat Pedal	14JzHHPd
551	14" Jazz Hi-hat Splash	14JzHHSp
552	14" Rock Hi-hat	14RockHH
553	14" Rock Hi-hat Edge	14RkHHE
554	14" Rock Hi-hat Pedal	14RkHHPd

555	14" Rock Hi-hat Splash	14RkHHSp
556	808 Hi-hat	808HH
557	808 Hi-hat Pedal	808HHPd
558	808 Hi-hat Splash	808HHSp
559	909 Hi-hat	909HH
560	909 Hi-hat Pedal	909HHPd
561	909 Hi-hat Splash	909HHSp
562	Dance Hi-hat	DanceHH
563	Dance Hi-hat Pedal	DancHHPd
564	Dance Hi-hat Splash	DancHHSp
565	Lo-Fi Hi-hat	LoFiHH
566	Lo-Fi Hi-hat Edge	LoFiHHEg
567	Lo-Fi Hi-hat Pedal	LoFiHHPd
568	Lo-Fi Hi-hat Splash	LoFiHHSp
<b>PERCUSSION</b>		
569	LP Timbales 14"	TMB14O
570	LP Timbales 14" RimShot	TB14RO
571	LP Timbales 14" Side Shell	TMB14SH
572	LP Timbales 15"	TMB15O
573	LP Timbales 15" RimShot	TB15RO
574	LP Salsa CowBell Stick Tip Open	LPCBTPO
575	LP Salsa CowBell Stick Shaft Open	LPCBSHO
576	LP Salsa CowBell Stick Tip Dampened	LPCBTDP
577	LP Salsa CowBell Stick Shaft Dampened	LPCBSHD
578	Maracas	Maracas
579	Metronome Bell	MetroBl
580	Vibra-slap 1	VibrSlp1
581	Vibra-slap 2	VibrSlp2
582	Vibra-slap 3	VibrSlp3
583	Synthesis Percussion 1	SynPerc1
584	Synthesis Percussion 2	SynPerc2
585	High Q 1	HighQ1
586	High Q 2	HighQ2
587	Low Q 1	LowQ1
588	Low Q 2	LowQ2
589	Mute Hi Conga 1	MtHCnga1
590	Mute Hi Conga 2	MtHCnga2
591	Open Hi Conga 1	OpHCnga1
592	Open Hi Conga 2	OpHCnga2
593	Low Conga	LowConga
594	High Bongo	HiBongo
595	Low Bongo	LowBongo
596	High Timbale 1	HiTimb1
597	High Timbale 2	HiTimb2
598	High Timbale 2 Rim	HiTimb2R
599	High Timbale 3	HiTimb3
600	High Timbale 3 Rim	HiTimb3R
601	Low Timbale 1	LowTimb1
602	Low Timbale 2	LowTimb2
603	Low Timbale 2 Rim	LowTmb2R
604	Low Timbale 3	LowTimb3

605	Low Timbale 4	LowTimb4
606	High Agogo	HiAgogo
607	Low Agogo	LowAgogo
608	Claves	Claves
609	Jingle Bell	JingleBl
610	Cowbell	Cowbell
611	Bell Tree 1	BITree1
612	Bell Tree 2	BITree2
613	Tambourine	Tambrine
614	Cabasa	Cabasa
615	Long Guiro	LGuiro
616	Short Guiro	SGuiro
617	Indian 1	Indian1
618	Indian 2	Indian2
619	Indian 3	Indian3
620	Indian 4	Indian4
621	Indian 5	Indian5
622	Indian 6	Indian6
623	Indian 7	Indian7
624	Indian 8	Indian8
625	Indian 9	Indian9
626	Indian 10	Indian10
627	Indian 11	Indian11
628	Indian 12	Indian12
629	Indian 13	Indian13
630	Indian 14	Indian14
631	Indian 15	Indian15
632	Indian 16	Indian16
633	Indian 17	Indian17
634	African 1	Africa1
635	African 2	Africa2
636	African 3	Africa3
637	African 4	Africa4
638	African 5	Africa5
639	African 6	Africa6
640	African 7	Africa7
641	African 8	Africa8
642	African 9	Africa9
643	African 10	Africa10
644	African 11	Africa11
645	African 12	Africa12
646	African 13	Africa13
647	African 14	Africa14
648	African 15	Africa15
649	African 16	Africa16
650	Marimba C3	MarmbC3
651	Marimba A3	MarmbA3
652	Marimba C4	MarmbC4
653	Marimba Db4	MarmbDb4
654	Marimba D4	MarmbD4
655	Marimba Eb4	MarmbEb4

656	Marimba E4	MarmbE4
657	Marimba F4	MarmbF4
658	Marimba Gb4	MarmbGb4
659	Marimba G4	MarmbG4
660	Marimba Ab4	MarmbAb4
661	Marimba A4	MarmbA4
662	Marimba Bb4	MarmbBb4
663	Marimba B4	MarmbB4
664	Marimba C5	MarmbC5
665	Marimba Db5	MarmbDb5
666	Marimba D5	MarmbD5
667	Marimba Eb5	MarmbEb5
668	Marimba E5	MarmbE5
669	Marimba F5	MarmbF5
670	Marimba Gb5	MarmbGb5
671	Marimba G5	MarmbG5
672	Marimba Ab5	MarmbAb5
673	Marimba A5	MarmbA5
674	Marimba Bb5	MarmbBb5
675	Marimba B5	MarmbB5
676	Marimba C6	MarmbC6
677	Vibraphone G3	VibraG3
678	Vibraphone C4	VibraC4
679	Vibraphone Db4	VibraDb4
680	Vibraphone D4	VibraD4
681	Vibraphone Eb4	VibraEb4
682	Vibraphone E4	VibraE4
683	Vibraphone F4	VibraF4
684	Vibraphone Gb4	VibraGb4
685	Vibraphone G4	VibraG4
686	Vibraphone Ab4	VibraAb4
687	Vibraphone A4	VibraA4
688	Vibraphone Bb4	VibraBb4
689	Vibraphone B4	VibraB4
690	Vibraphone C5	VibraC5
691	Vibraphone Db5	VibraDb5
692	Vibraphone D5	VibraD5
693	Vibraphone Eb5	VibraEb5
694	Vibraphone E5	VibraE5
695	Vibraphone F5	VibraF5
696	Vibraphone Gb5	VibraGb5
697	Vibraphone G5	VibraG5
698	Vibraphone Ab5	VibraAb5
699	Vibraphone A5	VibraA5
700	Vibraphone Bb5	VibraBb5
701	Vibraphone B5	VibraB5
702	Vibraphone C6	VibraC6
703	Orchestra Timpani C2	OrchTC2
704	Orchestra Timpani Db2	OrchTDb2
705	Orchestra Timpani D2	OrchTD2
706	Orchestra Timpani Eb2	OrchTEb2

# Voice List

707	Orchestra Timpani E2	OrchTE2
708	Orchestra Timpani F2	OrchTF2
709	Orchestra Timpani Gb2	OrchTGb2
710	Orchestra Timpani G2	OrchTG2
711	Orchestra Timpani Ab2	OrchTAb2
712	Orchestra Timpani A2	OrchTA2
713	Orchestra Timpani Bb2	OrchTBb2
714	Orchestra Timpani B2	OrchTB2
715	Orchestra Timpani C3	OrchTC3
716	Orchestra Timpani Db3	OrchTDb3
717	Orchestra Timpani D3	OrchTD3
718	Orchestra Timpani Eb3	OrchTEb3
719	Orchestra Timpani E3	OrchTE3
720	Orchestra Timpani F3	OrchTF3
721	Orchestra Timpani Gb3	OrchTGb3
722	Orchestra Timpani G3	OrchTG3
723	Orchestra Timpani Ab3	OrchTAb3
724	Orchestra Timpani A3	OrchTA3
725	Orchestra Timpani Bb3	OrchTBb3
726	Orchestra Timpani B3	OrchTB3
727	Orchestra Timpani C4	OrchTC4
<b>FX</b>		
728	FX 1	FX1
729	FX 2	FX2
730	FX 3	FX3
731	FX 4	FX4
732	FX 5	FX5
733	FX 6	FX6
734	FX 7	FX7
735	FX 8	FX8
736	FX 9	FX9
737	FX 10	FX10
738	FX 11	FX11
739	FX 12	FX12
740	FX 13	FX13
741	FX 14	FX14
742	FX 15	FX15
743	FX 16	FX16
744	FX 17	FX17
745	FX 18	FX18
746	FX 19	FX19
747	FX 20	FX20
748	One	One
749	Two	Two
750	Three	Three
751	Four	Four
752	Five	Five
753	Six	Six
754	Seven	Seven
755	Eight	Eight
756	Nine	Nine

757	Ti	Ti
758	Ta	Ta
759	Ei	Ei
760	An	An
761	E	E
762	Mute	Mute
<b>HIHAT COMBINATION</b>		
763	AAX 14" Studio	AAX14
764	Artisan 14"	ART14HH
765	HH Dark	HH14Dark
766	Hi-hat	Hi-hat
767	Acoustic	Acoustic
768	Funk Band	FunkBand
769	Standard	Standard
770	Jazz	Jazz
771	Jazz Brush	JazBrush
772	Rock	Rock
773	808	808
774	909	909
775	Dance	Dance
776	Marimba	Marimba
777	Vibraphone	Vibra
778	Indian	Indian
779	African	African
780	Lo-Fi	Lo-Fi

# Song List

No	Name	LCD Name
<b>Pattern LOOP</b>		
1	Blues Funk	BluesFk
2	EzFusion	EzFusion
3	Pocket	Pocket
4	Nu Jazz Funk	NuJazzFk
5	Groover	Groover
6	Slow Jam	Slow Jam
7	Ska	Ska 1
8	Reggae Shuffle	ReggaeSf
9	Vintage Dance Pop	DancePop
10	Classic Rock	ClassicR
11	Nu-Metal	Nu-Metal
12	Heavy Rock	HeavyRk
13	Punk	Punk
14	Latin Rock	LatinRk
15	Latin Seven	Latin 7
16	7/8 Vamp	7/8 Vamp
17	Basic Rock	BasicRok
18	BassFunk	BassFunk
19	GtrBallad	GtBallad
20	GtrPop	GtrPop
21	Salsa	Salsa
22	Trance 1	Trance 1
23	Latin Jazz	LtnJazz
24	Mambo	Mambo
25	Medium Mambo	MedMambo
26	Naningo	Naningo
27	Calm Tumbao	Tumbao
28	Up Tempo Swing	Swingin'
29	Samba 1	Samba 1
30	Bossa Nova	Bossa
31	Samba 2	Samba 2
32	Gtr Bossa	GtrBossa
33	Latin Dance	LtnDance
34	Tropical	Tropical
35	Ranchero Style	Ranchero
36	Cumbia	Cumbia
37	Gospel	Gospel
38	FunkyJam	FunkyJam
39	Lounge	Lounge
40	JB Funk	JB Funk
41	Smooth Rock	SmoothRk
42	Reggae 2	Reggae 2
43	ClapBeat	ClapBeat
44	EZ 2n4	EZ 2n4
45	Swingtwn	Swingtwn
46	Reggae 1	Reggae 1
47	Trance	Trance 2
48	Ska Groove	Ska 2
49	Rocker	Rocker

50	DiscoVmp	DiscoVmp
51	Dance	Dance
52	Country Pop	CntryPop
53	Country	Country
54	Rock Ballad	RkBallad
55	Bebop	Bebop
56	Rock N'Roll	R'N'R'
57	Triplet Rock	TripRock
58	Blues	Blues
59	3/4 Jazz	3/4Jazz
60	80's Metal	80sMetal
61	Drum N'Bass	DrumNbas
62	6/8 Soul	6/8Soul
63	Latin Swing	Swingin'
64	Funk	Funk
65	TripHop	TripHop
66	Brit Pop	Britpop
67	Neo-Thrash	Thrasher
68	Shuffle	Shuffle
69	Late 80's Rock	80'sRk1
70	70's Groove	70'sGruv
71	80's Rock	80'sRk2
72	Driving Rock	DrivRock
73	Trance Groove	TranceGr
74	House Party	HousePar
75	SpaceMan	SpaceMan
76	House Dance	HouseDnc
77	Smooth Jazz Groove	SmoothJz
78	Dance Party	DancePar
79	Half Time Shuffle	Shuffle2
80	5/4 Shuffle	5/4Shufl
81	Slow Modulation	SlowModu
<b>PERC LOOP</b>		
82	Perc Loop	PercLoop
83	Indonesia	Ina
84	Latin	Latin
85	Bossa	Bossa
86	Samba	Samba
87	3/4 Pop	3/4Pop
88	Pop	Pop
89	Jazz	Jazz
90	Reggae 1	Reggae1
91	Reggae 2	Reggae2
92	Latin Rock	LtnRock
<b>HIT</b>		
93	New Age Tap 1	NewAgeT1
94	New Age Tap 2	NewAgeT2
95	Atmosphere Tap 3	AtmospT3
96	Atmosphere Of Celiet Tap 4	AtmCelT4
97	Polysynth Tap 5	PolysT5
98	Brass Tap 6	BrassT6

# Song List

99	Pad(warm)Tap 7	WmPadT7
100	Fx Tap 8	FxT8
101	Sweep Tap 9	SweepT9
102	Rock Organ Tap 10	RkOrgT10
<b>TAP</b>		
103	Bass Tap 1	BassT1
104	Synth Bass Tap 2	SynBasT2
105	Bass Tap 3	BassT3
106	Bass Tap 4	BassT4
107	Bass Tap 5	BassT5
108	Swing Bass Tap 6	SwBassT6
109	Bass Funk Tap 7	BassFkT7
110	Bass Tap 8	BassT8
111	Bass Tap 9	BassT9
112	Bass Tap 10	BassT10
113	Crystal Tap 1	CrystlT1
114	Brightness Tap 2	BrightT2
115	Vibraphone Tap 3	VibraT3
116	Brightness Tap 4	BrightT4
117	Sawtooth Tap 5	SawT5
118	Funk Guitar Slide Tap 6	FkGtrsT6
119	Slap Bass Tap 7	SlapBsT7
120	Chorused Piano 1 Tap 8	ChrPn1T8
121	Fifth Tap 9	FifthT9
122	Melody Tap 10	MeloyT10
123	Brightness Tap 1	BrightT1
124	Rain Tap 2	RainT2
125	Lead Tap 3	LeadT3
126	Sci-fi Tap 4	Sci-fiT4
127	Soundtrack Tap 5	SndtrkT5
128	Funk Guitar Note Tap 6	FkGtrnT6
129	Slap Bass Tap 7	SlapBsT7
130	Chorused Piano 2 Tap 8	ChrPn2T8
131	Chorused Piano Tap 9	ChrPnoT9
132	Tenor Sax Tap 10	TeSaxT10
133	Pad Tap 1	PadT1
134	Sci-fi Tap 2	Sci-fiT2
135	Square Tap 3	SqureT3
136	FX8 Tap 4	FX8T4
137	Rain Tap 5	RainT5
138	Funk Guitar Cut Tap 6	FkGtcuT6
139	Bass Fx Tap 7	BassFxT7
140	Chorused Piano 3 Tap 8	ChrPn3T8
141	Orchestra Hit Tap 9	OrchHtT9
142	Brass Section Tap 10	BrassT10

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7	8	9	A	B	C	D	E	F	G
H	I	J	K	L	M	N	O	P	Q
R	S	T	U	V	W	X	Y	Z	a
b	c	d	e	f	g	h	i	j	k
l	m	n	o	p	q	r	s	t	u
v	w	x	y	z					

# GM Drum Kit List

Note#	Standard Set(BANK0)	Funk Set(BANK8)	Rock Set(BANK16)	Electric Set(BANK24)	Analog Set(BANK25)
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	Funk Kick	Rock Kick Drum	Electric Bass Drum	Analog Bass Drum
C#2[37]	Side Stick				Analog Rim Shot
D 2[38]	Acoustic Snare	Funk Snare 1	Rock Snare Drum1	Electric Snare 1	Analog Snare 1
Eb2[39]	Hand Clap				Analog Clap
E 2[40]	Electric Snare	Funk Snare 2	Rock Snare Drum2	Electric Snare 2	Analog Snare 2
F 2[41]	Low Floor Tom	Funk LowTom2	Rock LowTom2	Electric Low Tom 2	Analog Low Tom2
F#2[42]	Closed Hi-hat				Analog Closed Hi-hat
G 2[43]	High Floor Tom	Funk LowTom1	Rock LowTom1	Electric Low Tom 1	Analog Low Tom1
G#2[44]	Pedal Hi-hat				Analog Pedal Hi-hat
A 2[45]	Low Tom	Funk MidTom2	Rock MidTom2	Electric Mid Tom 2	Analog Mid Tom2
Bb2[46]	Open Hi-hat				Analog Open Hi-hat
B 2[47]	Low-Mid Tom	Funk MidTom1	Rock MidTom1	Electric Mid Tom 1	Analog Mid Tom1
C 3[48]	High Mid Tom	Funk Hi Tom2	Rock HiTom2	Electric Hi Tom 2	Analog Hi Tom2
C#3[49]	Crash Cymbal 1				Analog Cymbal
D 3[50]	High Tom 1	Funk Hi Tom1	Rock HiTom1		Analog Hi Tom1
Eb3[51]	Ride Cymbal 1				
E 3[52]	China Cymbal				
F 3[53]	Ride Bell				
F#3[54]	Tambourine				
G 3[55]	Splash Cymbal				
G#3[56]	Cowbell				
A 3[57]	Crash Cymbal 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

Note#	Jazz Set(BANK32)	Brush Set(BANK40)	Orchestra Set(BANK48)	Dance Set(BANK56)
Eb1[27]			Closed Hi-hat 2	
E 1[28]			Pedal Hi-hat	
F 1[29]			Open Hi-hat 2	
F#1[30]			Ride Cymbal 1	
G 1[31]				
G#1[32]				
A 1[33]				
Bb1[34]				
B 1[35]			Concert BD 2	
C 2[36]	Jazz Kick 1	Brush Kick 1	Concert BD 1	Dance Bass Drum
C#2[37]				
D 2[38]	Jazz Snare 1	Brush Tap	Concert SD	Dance Snare 1
Eb2[39]			Castanets	
E 2[40]	Jazz Snare 2	Brush Slap	Concert SD	Dance Snare 2
F 2[41]		Brush Low Tom2	TM_OrchTimp_C2.a2i	Dance Low Tom2
F#2[42]			TM_OrchTimp_Db2.a2i	Dance Closed Hi-hat
G 2[43]		Brush Low Tom1	TM_OrchTimp_D2.a2i	Dance Low Tom1
G#2[44]			TM_OrchTimp_Eb2.a2i	Dance Pedal Hi-hat
A 2[45]		Brush Mid Tom2	TM_OrchTimp_E2.a2i	Dance Mid Tom2
Bb2[46]			TM_OrchTimp_F2.a2i	Dance Open Hi-hat
B 2[47]		Brush Mid Tom1	TM_OrchTimp_Gb2.a2i	Dance Mid Tom1
C 3[48]		Brush Hi Tom2	TM_OrchTimp_G2.a2i	Dance Hi Tom2
C#3[49]			TM_OrchTimp_Ab2.a2i	Dance Cymbal
D 3[50]		Brush Hi Tom1	TM_OrchTimp_A2.a2i	Dance Hi Tom1
Eb3[51]			TM_OrchTimp_Bb2.a2i	
E 3[52]			TM_OrchTimp_B2.a2i	
F 3[53]			TM_OrchTimp_C3.a2i	
F#3[54]				
G 3[55]				
G#3[56]				
A 3[57]				
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 Instrument List

PIANO	
1	Acoustic Grand Piano
2	Bright Acoustic Piano
3	Electric Grand Piano
4	Honky-Tonk Piano
5	E.Piano 1
6	E.Piano 2
7	Harpsichord
8	Clavi
MALLETS	
9	Celesta
10	Glockenspiel
11	Music Box
12	Vibraphone
13	Marimba
14	Xylophone
15	Tubular Bells
16	Dulcimer
ORGAN	
17	Drawbar Organ
18	Percussive Organ
19	Rock Organ
20	Church Organ
21	Reed Organ
22	Accordion
23	Harmonica
24	Tango Accordion
GUITAR	
25	Nylon Guitar
26	Steel Guitar
27	Jazz Guitar
28	Clean Guitar
29	Muted Guitar
30	Overdriven Guitar
31	Distortion Guitar
32	Guitar Harmonics
BASS	
33	Acoustic Bass
34	Finger Bass
35	Pick Bass
36	Fretless Bass
37	Slap Bass 1
38	Slap Bass 2
39	Synth Bass 1
40	Synth Bass 2
STRINGS	
41	Violin
42	Viola
43	Cello
44	Contrabass
45	Tremolo Strings
46	Pizzicato Strings
47	Orchestral Harp
48	Timpani

STRINGS ENSEMBLE	
49	Strings Ensemble 1
50	Strings Ensemble 2
51	Synth Strings 1
52	Synth Strings 2
53	Choir Aahs
54	Voice Oohs
55	Synth Voice
56	Orchestra Hit
BRASS	
57	Trumpet
58	Trombone
59	Tuba
60	Muted Trumpet
61	French Horn
62	Brass Section
63	Synth Brass 1
64	Synth Brass 2
REED	
65	Soprano Sax
66	Alto Sax
67	Tenor Sax
68	Baritone Sax
69	Oboe
70	English Horn
71	Bassoon
72	Clarinet
PIPE	
73	Piccolo
74	Flute
75	Recorder
76	Pan Flute
77	Blown Bottle
78	Shakuhachi
79	Whistle
80	Ocarina
LEAD	
81	Lead1 (Square)
82	Lead2 (Sawtooth)
83	Lead3 (Calliope)
84	Lead4 (Chiff)
85	Lead5 (Charang)
86	Lead6 (Voice)
87	Lead7 (Fifths)
88	Lead8 (Bass & Lead)
PAD	
89	Pad1 (Newage)
90	Pad2 (Warm)
91	Pad3 (Polysynth)
92	Pad4 (Choir)
93	Pad5 (Bowed)
94	Pad6 (Metallic)
95	Pad7 (Halo)
96	Pad8 (Sweep)

EFFECTS	
97	FX1 (Rain)
98	FX2 (Soundtrack)
99	FX3 (Crystal)
100	FX4 (Atmosphere)
101	FX5 (Brightness)
102	FX6 (Goblins)
103	FX7 (Echoes)
104	FX8 (Sci-fi)
ETHNIC	
105	Sitar
106	Banjo
107	Shamisen
108	Koto
109	Kalimba
110	Bagpipe
111	Fiddle
112	Shanai
PERCUSSIVE	
113	Tinkle Bell
114	Agogo
115	Steel Drums
116	Wood Block
117	Taiko Drum
118	Melodic Tom
119	Synth Drum
120	Reverse Cymbal
SOUND EFFECTS	
121	Guitar Fret Noise
122	Breath Noise
123	Seashore
124	Bird Tweet
125	Telephone Ring
126	Helicopter
127	Applause
128	Gunshot

# MIDI Implementation Chart

Function	Transmitted	Recognized	Remarks
Basic Default	10ch	1-16ch	
Channel Changed	X	X	
Default	X	X	
Mode Messages	X	X	
Alterde	*****	*****	
Note	0-127	0-127	
Number: True voice	*****	0-127	
Velocity: Note on	○	○	
Note off	○	○	
After key's	○	○(10ch)	
Touch Ch's	X	X	
Pitch Bend	X	○	
Control			
0	X	○	Bank select
1	X	○	Modulation
5	X	○	Portamento time
7	X	○	Volume
10	X	○	Pan
11	X	○	Expression
64	X	○	Sustain Pedal
65	X	○	Portamento on/off
66	X	○	Sostenuto Pedal
67	X	○	Soft Pedal
80	X	○	Reverb Program
81	X	○	Chorus Program
91	X	○	Reverb level
93	X	○	Chorus level
120	X	○	All Sound Off
121	X	○	Reset all controllers
123	X	○	All notes off
Program Change	○	○	
System Exclusive	○	○	GM ON/OFF
System :Song Position	X	X	
Common :Song Select	X	X	
:Tune	X	X	
System : Clock	○	X	
Real Time :Commands	○	X	Start, Stop
Aux : LOCAL ON/OFF	X	X	
: All Notes Off	X	X	
Messages : Active sense	○	X	
: Reset	X	X	

○:YES  
X:NO

valid RPN:0,1,2

