

# Digital Drum

## Owner's Manual

# INFORMATION FOR YOUR SAFETY!

## 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.

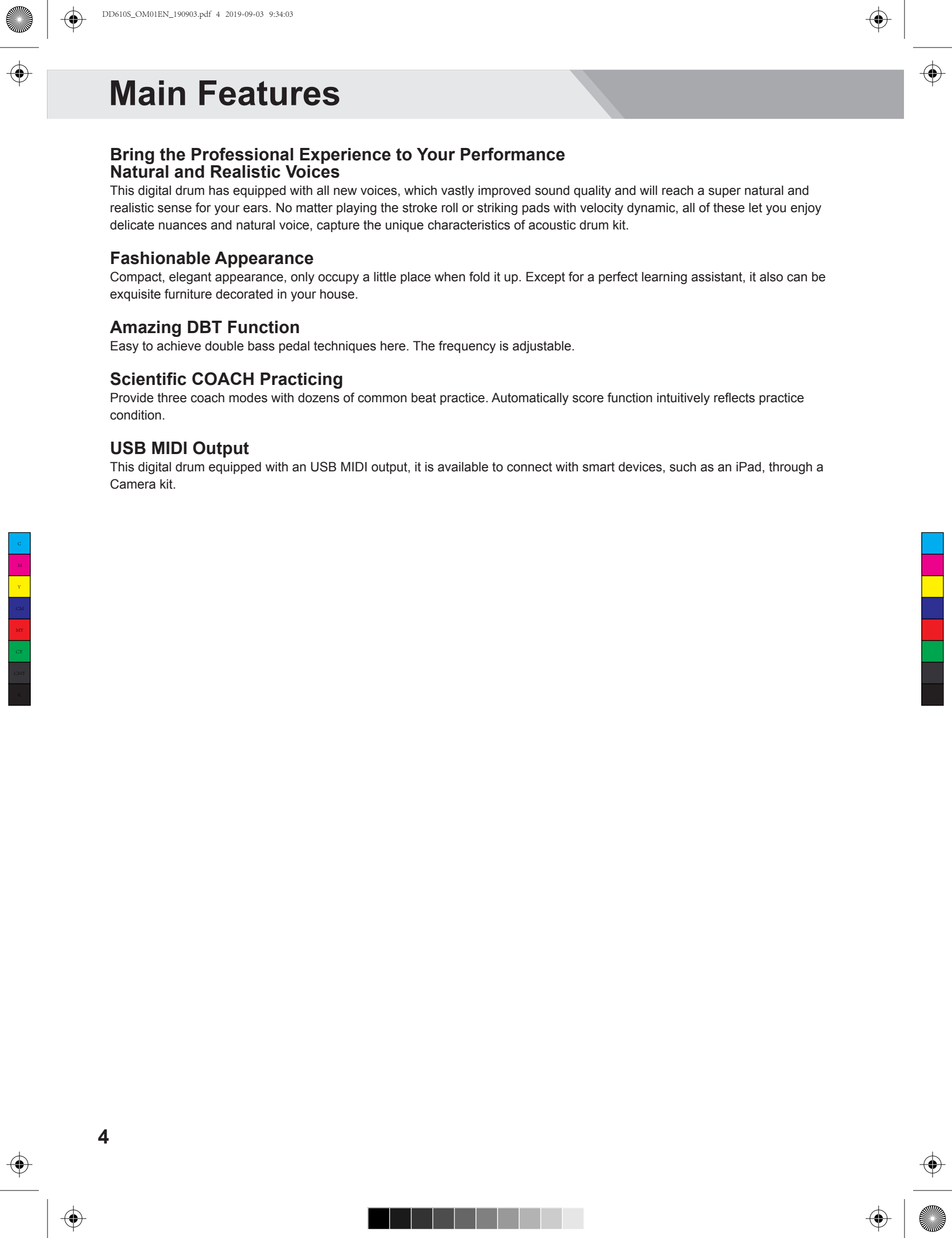
Disconnect all cables before moving the instrument.

## 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.

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# Main Features

## Bring the Professional Experience to Your Performance Natural and Realistic Voices

This digital drum has equipped with all new voices, which vastly improved sound quality and will reach a super natural and realistic sense for your ears. No matter playing the stroke roll or striking pads with velocity dynamic, all of these let you enjoy delicate nuances and natural voice, capture the unique characteristics of acoustic drum kit.

## Fashionable Appearance

Compact, elegant appearance, only occupy a little place when fold it up. Except for a perfect learning assistant, it also can be exquisite furniture decorated in your house.

## Amazing DBT Function

Easy to achieve double bass pedal techniques here. The frequency is adjustable.

## Scientific COACH Practicing

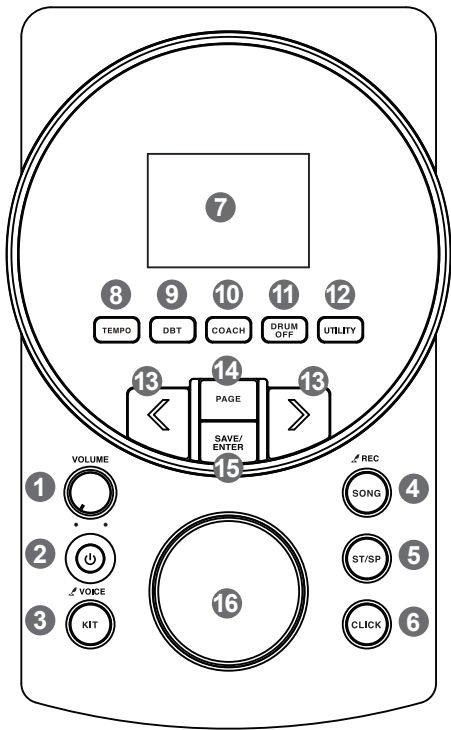
Provide three coach modes with dozens of common beat practice. Automatically score function intuitively reflects practice condition.

## USB MIDI Output

This digital drum equipped with an USB MIDI output, it is available to connect with smart devices, such as an iPad, through a Camera kit.

# Panel Description

## Front Panel



**1. [VOLUME] Knob**

Adjust the phone volume level.

**Note:**

Rotate the [VOLUME] knob anticlockwise to the minimum position before power on.

**2. [POWER] Button**

Press this button to power on/ off the module.

**3. [KIT/VOICE] Button**

Shortly press: enter drum kit mode.  
Press and hold: enter voice mode.

**4. [SONG/REC] Button**

Shortly press: enter the song mode.  
Press and hold: enter the quick record mode.

**5. [START/STOP] Button**

Start / Stop playing songs.

**6. [CLICK] Button**

Start/Stop the metronome; enter the metronome parameter setting mode.

**7. LCD Display**

Shows the name and parameter settings of Kit, Voice, Song and so on.

**8. [TEMPO] Button**

Adjust the tempo value.

**9. [DBT] (DOUBLE BASS TRIGGER) Button**

Turn DBT function on/ off.  
\*Turn DBT function on. It can generate two or three continuous kick sounds when you step on the bass drum only once. Easy to achieve double bass pedal techniques.

**10. [COACH] Button**

Enter learning mode.

**11. [DRUM OFF] Button**

Mute the drum part of the pattern.

**12. [UTILITY] Button**

Enter the utility mode.

**13. [ < ] / [ > ] Button**

Gradually increasing or decreasing the value of settings.

**14. [PAGE] Button**

Switch between the settings of different functions.

**15. [SAVE/ENTER] Button**

Save the drum kit / pad settings.

**16. DATA DIAL**

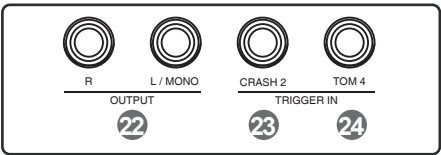
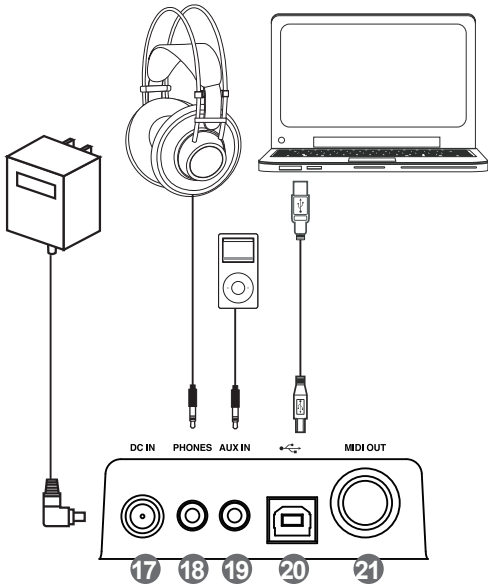
Use this to select drum kits or to quick edit values (increase/decrease values).

# Panel Description

## Side Panel (Connecting)

**Note:**

To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.



**17. DC IN jack**

Connect the AC adaptor here. Plug the AC adaptor cable into the DC IN jack.

**18. PHONES jack (1/8")**

Connect stereo headphones here.

**19. AUX IN jack (1/8")**

For connecting an extra audio player, for example, MP3 and so on via a stereo plug. You can enjoy playing the drum along with your favorite songs.

**20. USB MIDI Terminal**

Connect the PC/USB host with audio devices.

**Note:**

Only transmit MIDI data.

**21. MIDI OUT Terminal**

Use this to connect extra MIDI sequencer. you can send MIDI data to an extra MIDI device or a PC/laptop.

**22. OUTPUT jack (L/MONO, R) (2 x1/4")**

Connect to your audio system or amplifier. For stereo output use both the L/MONO and R jacks. For monaural output use the L/MONO jack

**23. CRASH 2 jack (1/4")**

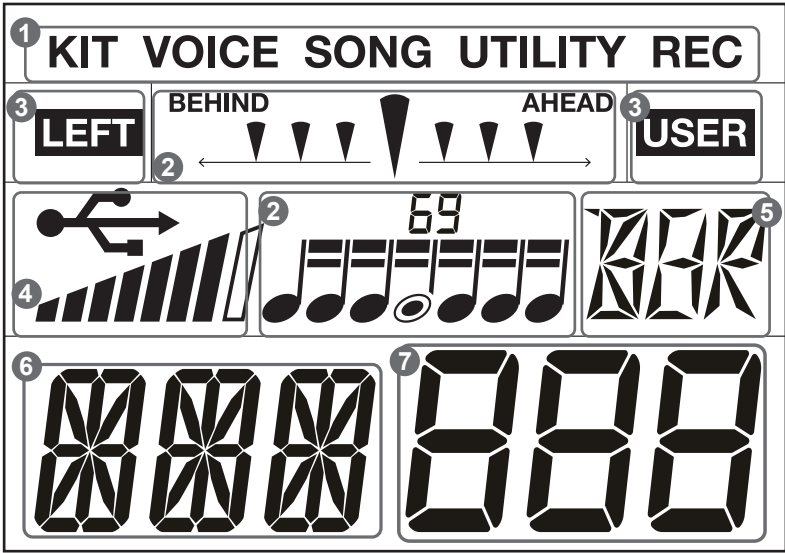
This allows you to connect additional Crash 2.

**24. TOM 4 jack (1/4")**

This allows you to connect additional Tom 4.

Panel Description

LCD Display



1. Mode

Display the current mode, such as KIT, VOICE, SONG, and UTILITY and so on.
2. Coach Mode

Display current beat accuracy and rhythm type.
3. The Second Level Mode

When the mode is turned on, the LCD displays current mode.
4. External Device and Strike Strength

Display the connected external device and current striking strength.
5. Pad Name

Display the current selected pad name.
6. Parameter Type

Display current parameter type, for instance, Volume, Curve and so on.
7. Parameter Value

Display the value which corresponding to the parameter or the number of Song/Kit/Voice.

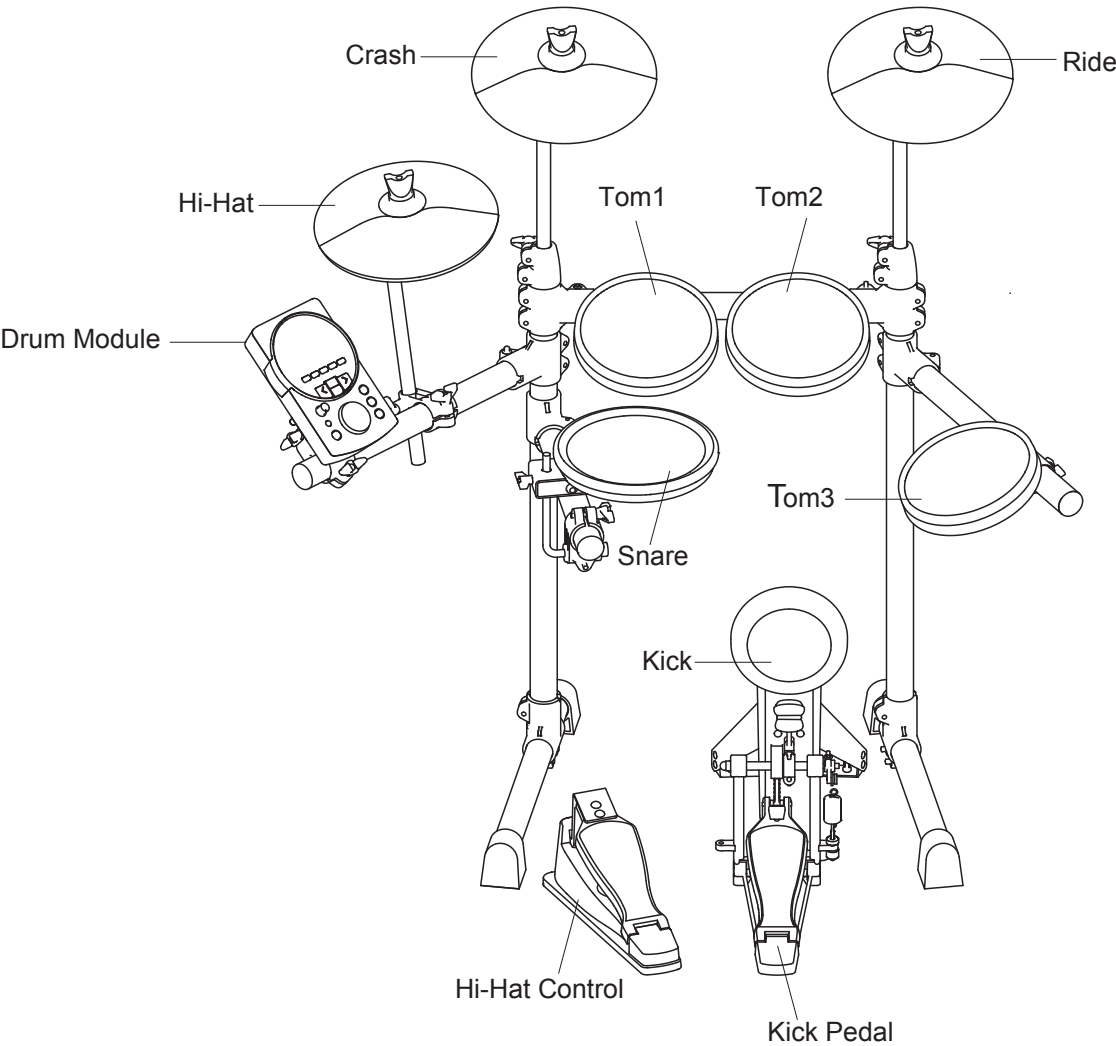
# Setup

## 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 Pads and Pedals

**Standard configuration:** KICK, SNARE(Double trigger), TOM 1~3, CRASH 1 (Choke), RIDE (Choke), HI-HAT, HI-HAT CONTROL PEDAL.



**Note:**

1. Using the cables provided, 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.
2. For details on assembling the drum stand, attaching the digital drum and connecting pads, refer to the **Installation Manual** description.



# Getting Ready to Play

## Setting up the Power Supply

1. Connect the DC plug of the AC power adaptor to the DC IN jack on the side panel.
2. Connect the other end of the power cord to the AC outlet.

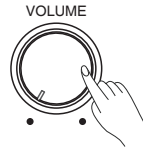
**Note:**

1. Only use the voltage specified as correct for the drum module.
2. Even when the module is turned off, electricity is still flowing to the module at the minimum level. When you are not using the drum module for a long time, make sure to unplug the AC power adaptor from the wall AC outlet.

## Turning the Power On/Off

### Turning the power on

1. Please make sure that the volume has been adjusted minimize.
2. Press the [POWER] button.
3. Listen through the headphone.
4. Striking the pads and adjust the volume by slowly turning the [VOLUME] knob toward the right direction. Keep turning until you get an appropriate value.



**Note:**

1. Make sure that you have made all necessary connections right (trigger, audio and so on), turn down all volume controls of the module and other audio equipments.

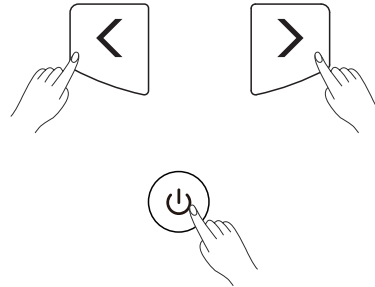
### Turning the power off

1. Minimize the volume of the module and connected audio devices.
2. Turn the connected external audio device off.
3. Press the [POWER] button again.

**Note:**

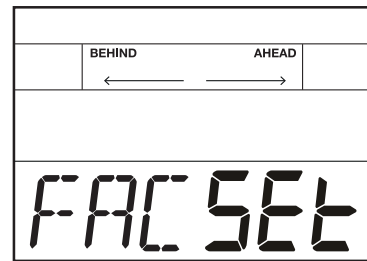
The drum module automatically saves all current settings before it turns off, you can also restore the factory setting by the following steps:

- a) Press the [<] / [>] buttons simultaneously.
- b) Press the [POWER] button.
- c) When the LCD displays "FAC SET", it indicates the factory setting is finished.



### About the Auto Power Off Function

To prevent unnecessary power consumption, this function automatically turns the power off if no buttons or keys are operated for approximately 30 minutes. If desired, you can disable or enable this function. Refer to **Utility Settings**.

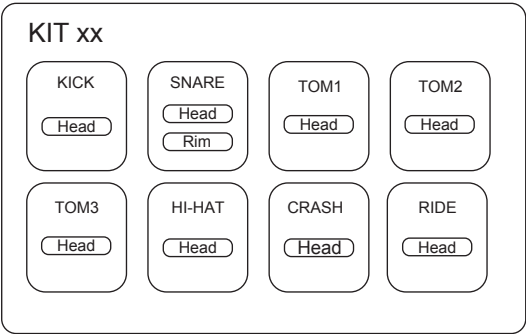


# Quick Play

## Drum Kits and Voices

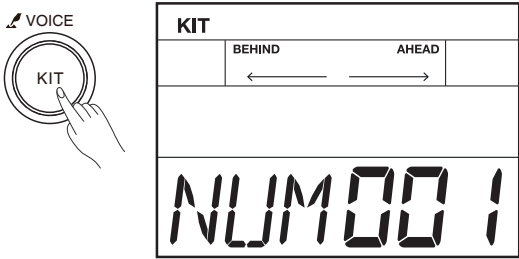
An acoustic drum has only a fixed kit, but the digital has a lot. It is a particular characteristic of digital drum.

The structure of a drum kit is shown on the right:

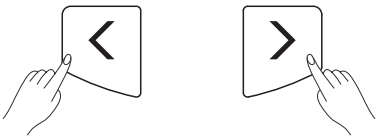


## Drum Kits and Voices

1. Shortly press the [KIT/ VOICE] button, enter the drum kit menu.  
The screen is shown on the right:



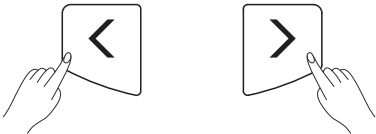
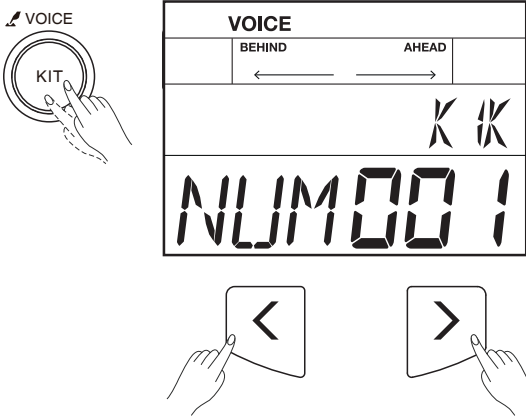
2. Press the [<]/[>] button or turn the [DIAL] to select your desired drum kit. (Refer to **Drum Kit List**)



## Selecting a voice

While striking the pads, you can enjoy the ensemble sound effect. If you are not satisfied with the voice of any pads, change the voice as you want.

1. Press the [KIT/ VOICE] button for 2 seconds to enter the voice menu.  
The screen displayed is shown on the right:
2. Strike the pad you want.  
The screen will display the name of current pad.
3. While striking the pad, press the [<]/[>] button or turn the[DIAL] until you get an appropriate voice for your pads. (Refer to **Voice List**)



## Playing Techniques

This section introduces various performance functions to make your performance professional. Similar to an acoustic drum kit, the digital drum responds differently to various playing techniques and dynamics. All the pads are velocity sensitive. And some voices change timbre depending on the striking force.

### Pad

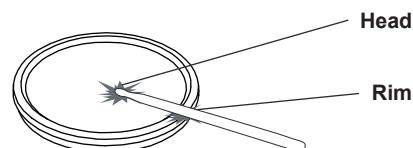
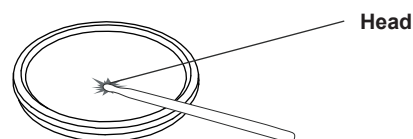
Only the snare drum can detect both head shot and rim shot.

#### Head Shot

Strike only the head of the pad.

#### Rim Shot

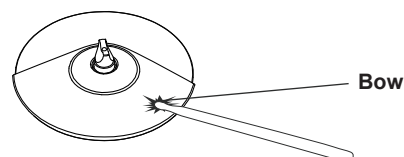
Strike the head and the rim of the pad simultaneously. Or you can only strike the rim of the pad.



## Cymbal

### Cymbal Bow shot

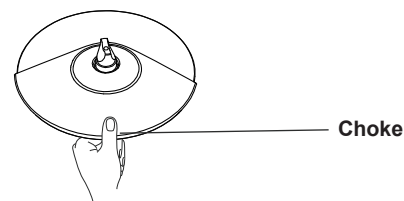
Playing the middle area of the cymbal.



### Choke Play

Both Ride and Crash cymbals have cymbal choke. But hi-hat don't have the cymbal choke.

Choking the crash/ride edge with the hand immediately after hitting the crash/ride mutes the crash/ride sound.



## Hi-Hat

### Hi-Hat Pedal Change

With different positions the pedal pressed down, the voice of pad varied while you are striking the Hi-Hat pad. And this is similar to an acoustic drum.

### Open Hi-Hat

Strike the Hi-Hat pad without pressing the pedal.

### Closed Hi-Hat

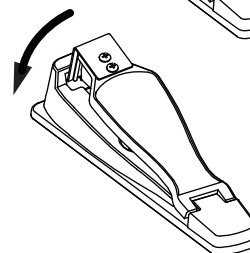
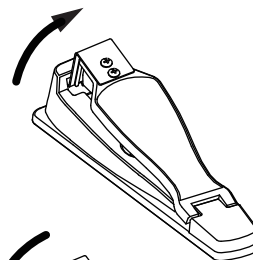
Strike the Hi-Hat pad with the pedal pressed completely down.

### Hi-Hat Pedal

Press down the hi-hat controller's pedal to create a foot-close sound without having to strike the hi-hat pad.

### Splash

Playing the hi-hat with the pedal fully pressed and then instantly opening it.



# Select a Preset Drum Kit and Create a User Drum Kit

## About the Preset and User Drum Kit

The instrument provides preset drum kits (refer to the Drum Kits List) and user drum kits. You can edit a preset drum kit and save it to a user drum kit.

**Note:**

Please save your own parameter or voice after edited, otherwise, all data will be lost.

## Edit the Drum Kit Parameters

Change the drum kit volume, the overall effect of drum kit will be affected. It means if you increase the volume of drum kit, all volume of the pads will be increased.

- 1. Press the [KIT] button, the LCD will display the kit menu.
- 2. Repeatedly press the [PAGE] button to select the item that you want to edit.

Parameter	Value	LCD Display	Description
KIT NAME	Preset: 1~20 User: 21-25	NUM XXX	Drum kit selection.
VOLUME	0~127	VOL XXX	Adjust the volume of drum kit; the volume of each pad will be changed.

- 3. Press the [<]/ [>] button or turn the [DIAL] to adjust parameter value.

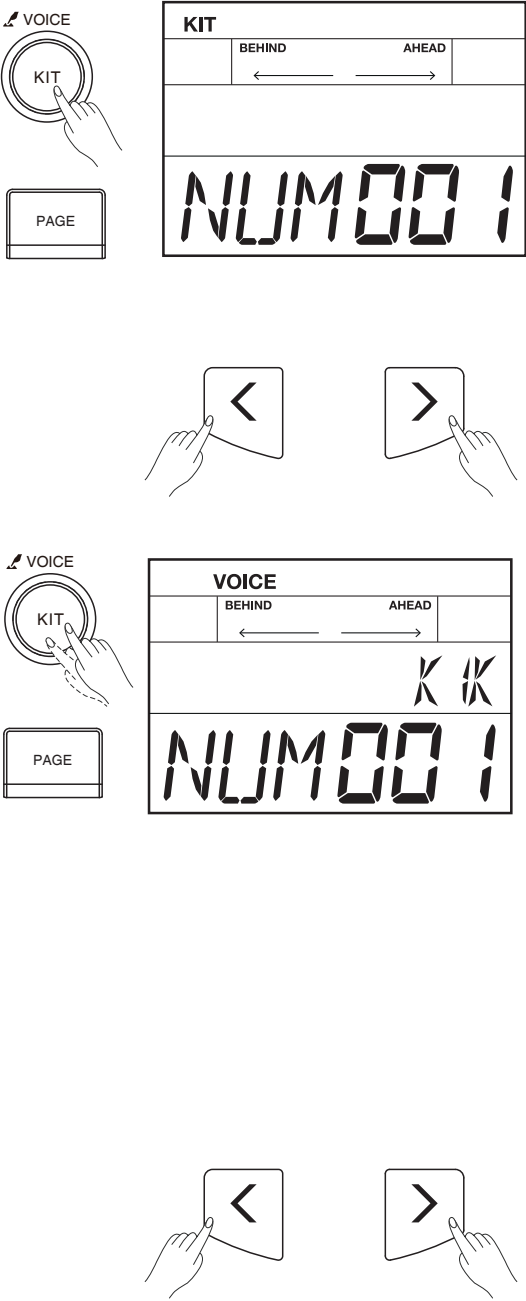
## Edit the Voice Parameters

Edit parameters of one pad will not affect others. For example, if you increased the volume of snare, the other pads wouldn't change.

- 1. Press the [KIT/VOICE] button for 2 seconds and the LCD will display the voice menu.
- 2. Strike the pad that you want to edit.
- 3. Repeatedly press the [PAGE] button to select an item you want.

Parameter	Value	LCD Display	Description	Triggers :
VOICE NAME	1~226	NUM XXX	Select a voice.	KIK (KICK) Sn (Snare) SnR (Snare Rim) T1 (Tom1) T2 (Tom2) T3 (Tom3) T4(Tom4) HH (Hi-hat) C1 (Crash1) C2(Crash2) Rd (Ride) Pd (Hi-hat Pedal) PS (Hi-hat Splash)
VOLUME	0~127	VOL XXX	Adjust the volume of voice.	

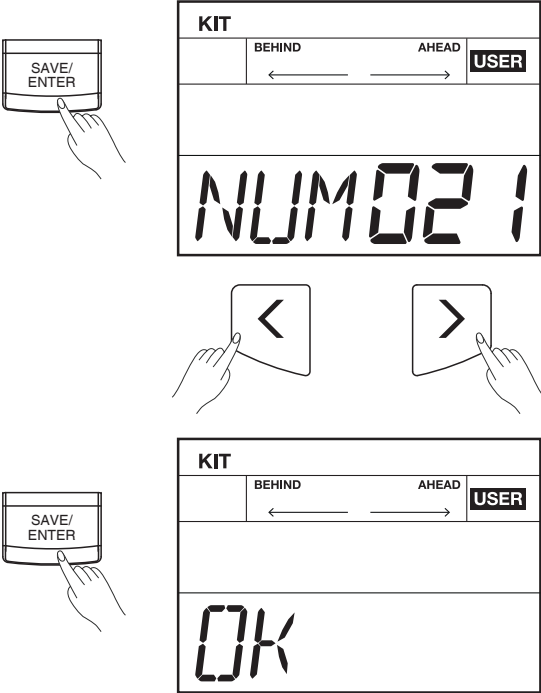
- 4. Press the [<]/ [>] button or turn the [DIAL] to adjust parameter value.



## Select a Preset Drum Kit and Create a User Drum Kit

### Save User Drum Kit

1. While in the drum kit and voice edit menu, press the [SAVE/ ENTER] button to save all changes.
2. Use the [<]/[>] button or turn the [DIAL] to select a user drum kit (From NO.21 to 25).  
The number of kit starts flashing at the same time.
3. Press the [SAVE/ ENTER] button again; the LCD will display “OK”, which indicates all data has been saved successfully.



# Playing Along with a Song

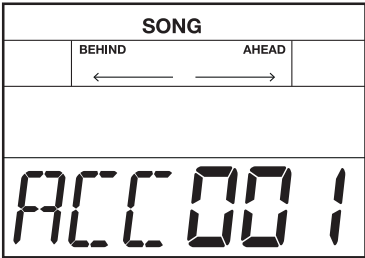
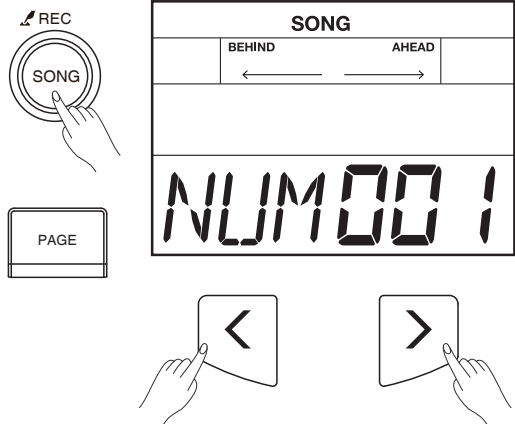
In order to have a better performance experience, a variety of styles can be selected. Each one offers you to practice. (Refer to the **Song List**)  
You can play the drums while listening to one of these songs.  
A song contains Drum part and Accompaniment part. Drum part means the rhythm you played on the pads; the Accompaniment part means percussion and melody. The volume of each part can be adjusted.

## Playing Along with a Song

1. Press the [SONG] button to enter the selection menu.
2. Repeatedly press the [PAGE] button to select the parameter that you want to edit.

Parameter	Value	LCD Display	Description
SONG SELECT	1~60	NUM XXX	Select a song.
ACC VOLUME	0~8	ACC XXX	Adjust the background volume.
DRUM VOLUME	0~8	DRM XXX	Adjust the drum volume.

3. Use the [<]/[>] button or turn the [DIAL] to adjust the parameter value. Press the [<]/[>] buttons simultaneously to mute songs.
4. Press the [START/STOP] button to play/stop songs.



## Muting the Drums in Songs

Press the [DRUM OFF] button to enable and disenable the drum mute function. When DRUM OFF is enabled, the LED will turn on

## Metronome

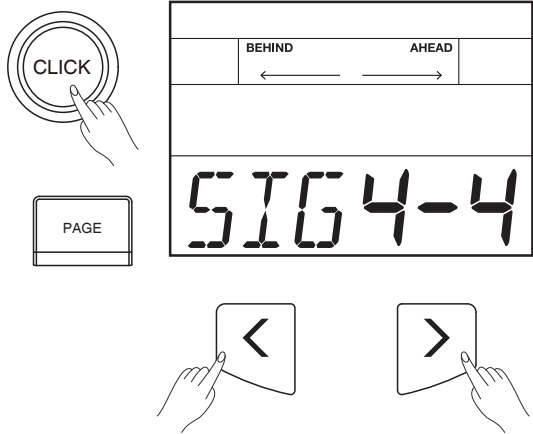
Practicing with the metronome is the best way to follow the beats. Choose a right tempo for your learning/ performance require.

### Starting/ Stopping the Metronome and Its Feature

1. Press the [CLICK] button.  
The metronome will start playing, and the light of the [CLICK] button will blink with the tempo.
2. Repeatedly press the [PAGE] button to select the parameter you want to edit. Adjustable parameters are shown below:

Parameter	Value	LCD Display	Description
TIME	0-9/2, 0-9/4,	SIG XXX	Adjust the time signature.
SIGNATURE	0-9/8, 0-9/16		
INTERVAL	1/2, 3/8, 1/4, 1/8, 1/12, 1/16	INT XXX	Adjust the rhythm interval.
VOLUME	0~5	VOL XXX	Adjust the volume of metronome.
NAME	1~6	NUM XXX	Select the metronome voice.

3. Use the [<]/[>] button or turn the [DIAL] to change the parameter value.
4. Press the [CLICK] button again to stop the metronome, the light will be off.



# Record

This digital drum offers you easily record your own performance. Maximize 2500 notes could be recorded in one user song.

Preparing and starting record, refer to the details bellow:

## Preparing Record

1. Press the [SONG/REC] button for 2 seconds to enter the Record-prepare mode, the light of the [SONG/REC] button start flashing, please select which user song(61) you want to record.
2. Press the [START/STOP] button, the LCD displays “RDY---”. It means the record is standby. If you want to exit the record-prepare mode, press the [SONG]/ [KIT] button.

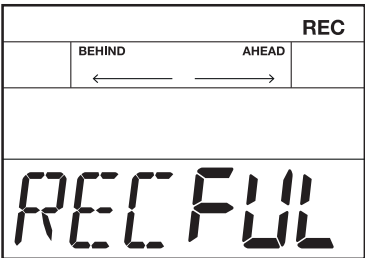
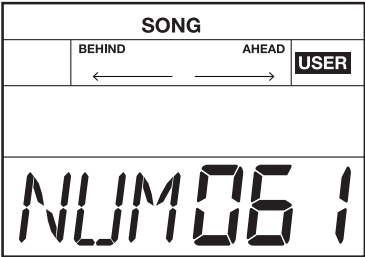
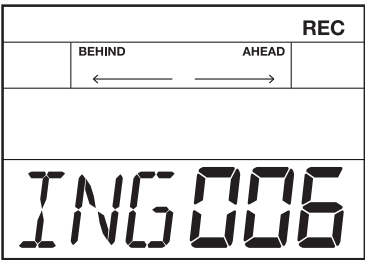
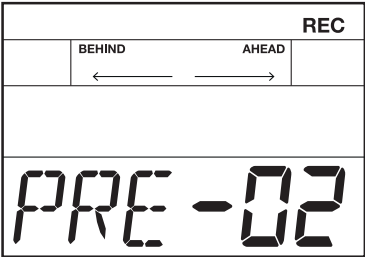
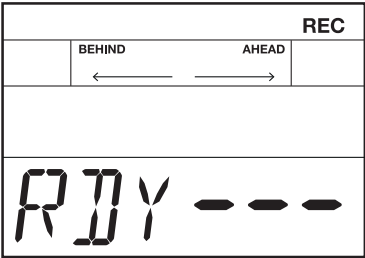
## Start / Stop recording

1. You can start recording in real time while in the preparing record menu, there are two ways to start record:
  - Press the [START/STOP] button.
  - Strike one pad.
2. Recoding begins after 4 beats count-in.
3. While recording, the light of the [SONG/REC] button keeps lighting all the time, and the LCD will display “ING xxx”, the “xxx” means measure number.
4. Press the [START/STOP] button again to stop recording, and the light of the [SONG/REC] button will be off.
5. The system returns to the last option automatically. The LCD will display “NUM 61”. Press the [START/ STOP] button to play back the recorded song.

**Note:**

While the record storage capacity is full, the LCD will temporarily display “REC FUL”, the recording stops automatically.

The UserKitxx shouldn't be changed if you use it to record, otherwise the record playback may not be correct.



# Coach

The Coach mode is a unique set of exercises. Specifically designed for those learners who want to build a better tempo, accuracy and stamina, as well as developing a better drum playing skills.

## About Coach Mode

There are three types of exercises in Coach Mode: Quiet Count, Change Up and Beat Check. Each exercise has its special practicing characteristics. Automatic grading function is available for Change Up and Beat Check types. Try to get a perfect score of 100!

## Coach Mode Control

1. Press the [COACH] button to enter coach mode. Then repeatedly press the [PAGE] button to shift coach type among Quiet Count, Change Up and Beat Check. In the meantime, you can set the accent beat prompt for MEA. According to your present playing skills, select an appropriate coach type to practice.

Coach Type	Display	Description
Quiet Count	QUT CNT	This helps to develop a good sense of time/ tempo. There are 3 types of quiet mode and 5 selectable rhythm types.
Change Up	CHG UP	3 types of rhythm pattern to train your beat accuracy. The rhythm type will change every two measures.
Beat Check	BEA CHE	Only metronome accuracy practice. There are 13 selectable rhythm types.
Measure Hint	MEA	Turn on/off accent hint

2. Press the [SAVE/ ENTER] button to enter the selected coach type.
3. Use the [PAGE] button to select relevant parameters. Throughout the Coach modes, you will discover that some of them have programmable parameters, allowing you to adapt the functions to your specific needs.
4. Press the [TEMPO] button to adjust practice speed at any time.
5. Pay attention to the LCD indicators of hitting accuracy when you are practicing.

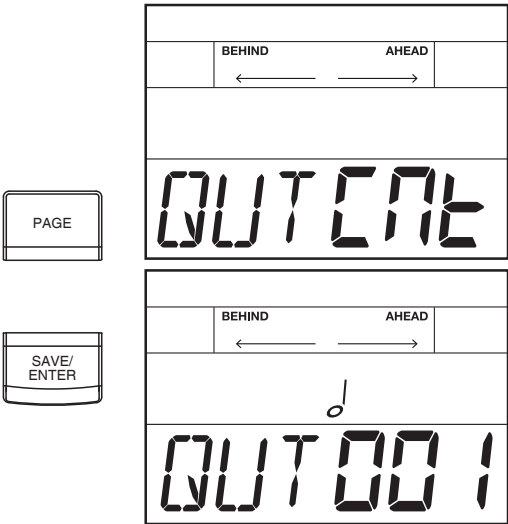
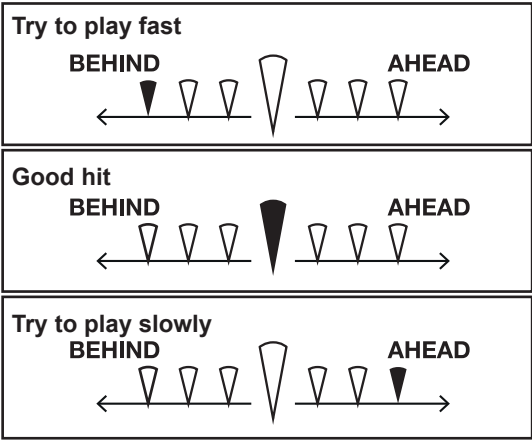
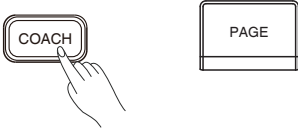
### Note:

- Set the automatic grading function to “ON”, only playing with metronome guidance without bell.
  - Set the automatic grading function to “OFF”, playing with conventional metronome sound with bell.
6. Press the [COACH] button to exit the Coach Mode.


## QUT CNT (QUIET COUNT)

Practice with auto metronome on/ off circularly with several measures to help you develop a good sense of time and tempo.

- Repeatedly press the [PAGE] button to select quiet count mode.
- Press the [SAVE/ ENTER] button to enter quiet count mode.
- Use the [PAGE] button switch between QUT and CNT parameters, press the [<]/[>] button or turn the [DIAL] to select a suitable quiet and count type.





Parameters	Range	Display	Description
QUT	1~5	QUT XXX	 Use the [<]/ [>] button or turn the [DIAL] to select a suitable quiet type.
CNT	1-1/2-2/1-3	CNT XXX	Use the [<]/ [>] button or turn the [DIAL] to select a suitable count type. 1-1: 1 measure counts, 1 measure quiets. 2-2: 2 measure counts, 2 measure quiets. 1-3: 1 measure counts, 3 measure quiets.

4. Press the [START/ STOP] button to start practicing.  
There is a count-in about 1 measure length before starting. Metro nome sound automatically on/ off, you have to catch up with every beat you ought to play, come on!
5. If you want to change another QUT/CNT parameter or just exit coach mode, Firstly, press the [START/ STOP] button again to stop practicing.



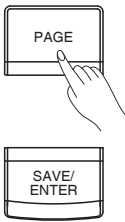
Change Up

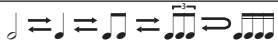


In change up mode, system will automatic change the style every two measures. Starting from half notes, the note values will gradually become shorter, and will then return to half notes; this change in rhythms will be repeated. The icon on the LCD will flash for times when the rhythm type is ready to change.

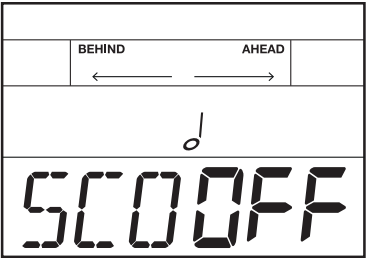
1. Repeatedly press the [PAGE] button to select change up mode.
2. Press the [SAVE/ ENTER] button to enter change up mode.
3. Use the [<]/ [>] button or turn the [DIAL] to select a suitable rhythm pattern.
4. Use the [PAGE] button to switch to score editing, press the [<]/ [>] button or turn the [DIAL] to turn score function on/ off.  
The default score setting is “OFF”.

Chang Up	Range	Display	Description
CHG	1~3	CHG XXX	Use the [<]/ [>] button or turn the [DIAL] to select a suitable rhythm type.
SCO	ON/ OFF	SCO XXX	ON: The score setting is on. OFF: The score setting is off.

5. Press the [START/ STOP] button to start practicing.  
There will play a length of one measure count-in before starting. This system automatic change the style every two measures. In addition to, the next rhythm will flash for times on the LCD when the rhythm type is ready to change.
6. If the score setting is “ON”: Auto stops practicing and displays your score after circularly playing several times. Or, Press the [START/ STOP] button to stop practicing and back to the main page of change up without display your score.  
If the score setting is “OFF”: Press the [START/ STOP] button to stop the practicing mode.



Rhythm Pattern	Display	Description
P-1	CHG 001	
P-2	CHG 002	
P-3	CHG 003	




# Coach

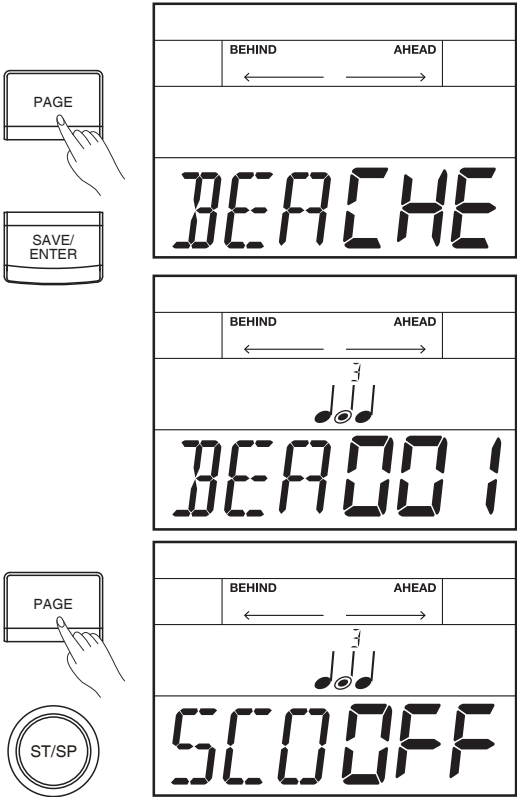
## Beat Check

In order to improve playing accuracy of beat, practice with the metro-  
nome basic beat type. If the score function is on, system will display  
your practicing score after you have finished.

- 1. Repeatedly press the [PAGE] button to select beat check mode.
- 2. Press the [SAVE/ ENTER] button to enter beat check mode.
- 3. Use the [<]/[>] button or turn the [DIAL] to select a beat type to practice. There are 13 beat types to choose from.
- 4. Use the [PAGE] button to switch to score editing, press the [<]/[>] button or turn the [DIAL] to turn score function on/ off. The default score setting is "OFF".

Beat check	Range	Display	Description
BEA	1-13	BEA XXX	 Use the [<]/[>] button or turn the [DIAL] to select a suitable beat type.
SCO	ON, OFF	SCOXXX	ON: The score setting is on. OFF: The score setting is off.

- 5. Press the [START/ STOP] button to start practicing.  
There will play a length of one measure count-in before starting.
- 6. If the score setting is "ON": Auto stops practicing and displays your score after circularly playing several times. Or, Press the [START/ STOP] button to stop practicing and back to the main page of beat check without display your score.  
If the score setting is "OFF": Press the [START/ STOP] button to stop the practicing mode.



# DBT (Double Bass Trigger)

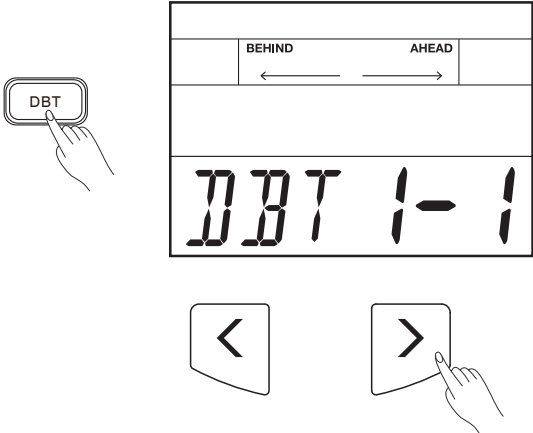
Normally, it is too hard for beginners to play double bass, almost impossible, but we make it possible now. Turn on DBT function on; it can generate two or three continuous kick sounds when you step on the bass drum only once. Easy to achieve double bass pedal techniques.

## Turn the DBT Function On

- 1. Press the [DBT] button to turn DBT function on. The [DBT] button lights up.  
The screen will display “DBT 1-x”.
- 2. Use [<]/[>] or the [DIAL] to adjust the second trigger time. This setting can be remained even turn the module off.

Parameter	Range	Display	Description
BEA	1-1/1-2/ 1-3/1-4	DBT XXX	1. Press the [<]/[>] button or turn the [DIAL] to select a rhythm type. 2. 1=original beat, trigger once. 2=original beat/ 2, trigger once. 3=original beat/ 3, trigger twice. 4=original beat/ 4, trigger three times. 3. Power off protection. This setting can be remained even turn the module off.

- 3. As you play the bass drum, it can produce a double bass technique.
- 4. Press the [DBT] button again, turn DBT function off.

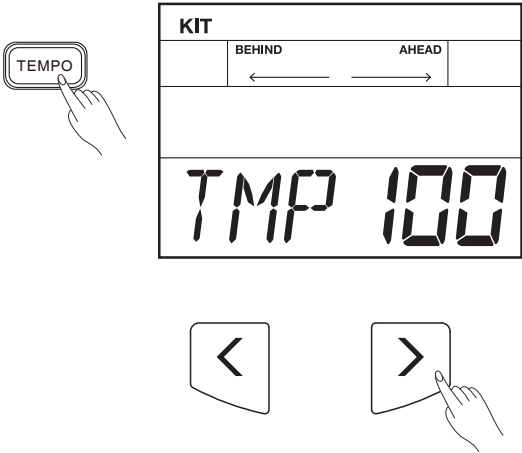


# Tempo

Press the [TEMPO] button to adjust the tempo value of metronome and song playback.

- 1. Press the [TEMPO] button.
- 2. Use the [<]/[>] button or the [DIAL] to adjust tempo value.
- 3. Without any operation within 3 seconds, the system will be back to previous menu automatically.

Parameter	Value	LCD Display	Description
Tempo	30-280	TMP xxx	Both metronome and song playback are based on this tempo value.



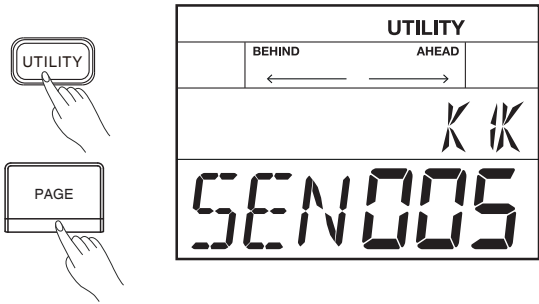
# Utility Mode (UTILITY)

This mode contains two parts: the drum pad trigger settings and drum module settings.

## The Drum Pad Trigger Settings

As a professional drummer, you may be very pleased to set your drum triggers carefully corresponding to your playing habits and feelings, making your performance more interesting and professional. At the meantime, your digital drum will be more operable.

- 1. Press the [UTILITY] button, the LCD will display the UTILITY menu.
- 2. Repeatedly press the [PAGE] button to select the trigger parameters that you want to edit.



The drum pad trigger settings are shown below:

Parameter	Value	LCD Display	Description
SENSITIVITY	1~16	SEN XXX	You can adjust the sensitivity of the pads to accommodate your personal playing habit. Higher sensitivity allows the pad to produce a loud volume even when played softly. Lower sensitivity will keep the pad to producing a low volume even when played forcefully.
XTALK	1~8	XTK XXX	This setting avoids “crosstalk”, which means that when you play one pad you can hear a sound coming from another pad. This can happen when two pads are installed on the same stand. In some cases you can prevent crosstalk by increasing the distance between the two mounted pads. For example: If you hit the snare pad and the tom 1 also sounds. While striking the snare pad, gradually increase the “XTALK” value for the tom 1 pad until the tom 1 pad no longer sounds when you hit the snare pad. If you raise the “XTALK” higher, the tom 1 pad will be less prone to receive crosstalk from other pads. Note: If the value is set too high, and two pads are played simultaneously, the one that is struck less forcefully may not sound. Be careful and set this parameter to the minimum value required to prevent crosstalk.
CURVE	1~6	CUR XXX	This setting allows you to control the relation between playing velocity (striking force) and changes in volume. Adjust this curve until the response feels as natural as possible. Refer to the CURVE description.
RETRIG CANCEL	1~16	RTG XXX	This setting avoids “re-triggering”, which means that when you strike a pad once, maybe you can hear two hits coming from one strike. This can happen as the pad oscillate. While repeatedly striking the pad, raise the “Retrig Cancel” value until re-triggering no longer occurs. Although setting this to a high value prevents re-triggering, it then becomes easy for sounds to be omitted when the drums played fast (roll etc.). Set this to the lowest value possible while still ensuring that there is no re-triggering.
MIDI NOTE	0~127	MID XXX	MIDI output key mapping

- 3. Striking the specified pad, select the pad that you want to edit.
- 4. Use the [<]/[>] button or the [DIAL] to adjust the parameter value.



## Utility Mode (UTILITY)

### Note:

The Curve descriptions are shown below:

**Curve 1:** The standard setting. This produces the most natural correspondence between playing dynamics and volume change.

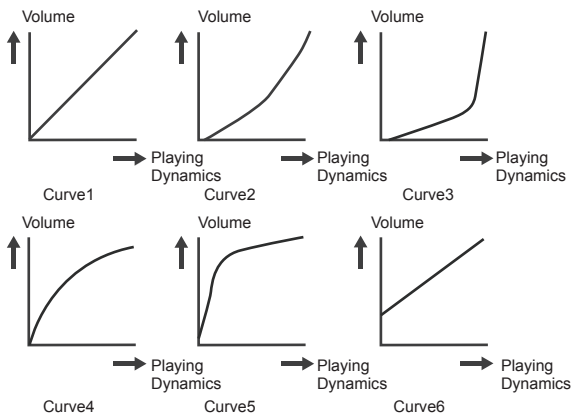
**Curve 2, 3:** Compared to Curve 1, strong dynamics produce a greater change.

**Curve 4, 5:** Compared to Curve 1, a soft playing produces a greater change.

**Curve 6:** Very little dynamic response, making it easy to maintain strong volume levels. If you are using a drum trigger as an external pad, these settings will produce reliable triggering.

Default Midi Note:

Trigger	MIDI	Trigger	MIDI
Kick	36	Ride Bow	51
Snare Head	38	Crash1 Bow	49
Snare Rim	40	Crash2 Bow	57
Tom1 Head	48	Open Hihat	46
Tom2 Head	45	Close Hihat	42
Tom3 Head	43	Pedal	44
Tom4 Head	41	Hihat Splash	21



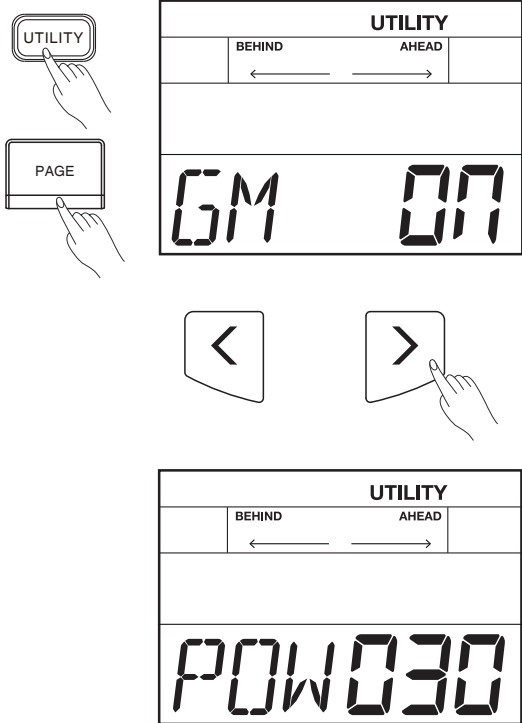
## The Drum Module Settings

You can go further set the drum module function, do as the procedures shown below:

1. Press the [UTILITY] button, the LCD will display the UTILITY menu.
2. You can repeatedly press the [PAGE] button to select the function menu and use the [<]/[>] button or the [DIAL] to adjust the parameter value.

The setting values of drum module are shown below:

Parameter	Range	LCD Display	Description
GM MODE	ON/OFF	GM XXX	ON: The channel 10 will respond GM drum kit. OFF: The channel 10 will respond local drum kit.
AUTO POWER	30, 60 ,OFF	POW XXX	Factory settings, approximately 30 minutes. 30: Automatically turns the power off if no buttons or functions are operated for approximately 30 minutes. 60: Automatically turns the power off if no buttons or functions are operated for approximately 60 minutes. OFF: The power will not power off automatically.



# Troubleshooting

Problem	Possible Cause and Solution
No sound	1. Rotate the [VOLUME] knob to be sure that the volume isn't down. 2. To be sure that Local Mode should be set to "ON"
No sound from Pads	1. To be sure that the pad is connected correctly. 2. To be sure not set the volume of the pad to 0.
No click sound	1. To be sure the metronome is turned on. 2. To be sure not set the volume of the click to 0.
The Pad volume doesn't match the Song playback volume.	1. Adjust the song playback volume to match the pad volume.
Cannot connect to the computer	1. Make sure the USB has correctly connected. 2. Do the connect operation again (Keep the computer on, and then turn the module on, connect the USB cable).

# Prompt Messages

Message	Meaning
REC FUL	The record data memory is full.
FAC SEt	The factory reset of module is complete.
EMP	The user song is empty.
OK	The drum kit and utility settings are saved.
WAT	The data is loading from flash ROM now, please wait.

# Specifications

**Maximum Polyphony**  
64

**Drum kits**  
Kit: 25 (20 Presets + 5 Users)  
GM Drum Kit: 5 GM Drum Kits

**Instruments**  
Instrument: 226+9 Hi-hat Combination

**Sequencer**  
Preset Pattern: 60  
User Song: 1  
Tick: 192 ticks per beat  
Record: Real-time Record  
Data Capacity: About 2500 notes

**Tempo**  
30~280

**Display**  
Backlit LCD

**Connectors**  
TRIGGER INPUT Connector(DB25), PHONES, LINE OUT (R, L/MONO), TOM4, CRASH2, MIDI OUT, AUX IN, USB-MIDI

**Control Buttons**  
Power on/off, Master Volume, Click, Kit/ Voice, Save/ Enter, Drum Off, DBT, Coach, Song/ Rec, Start/Stop, Utility, Tempo, [<], [>], Page, Dial.

**Power Supply**  
DC 9V, 500mA

**Dimensions**  
125(W) X 187.5 (L) X 95 (H) mm

**Module Weight**  
0.5 kg

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

# Drum Kit List

No.	PRESET KIT
1	Acoustic 1
2	Funk Band 1
3	Jazz Brush 1
4	Rock 1
5	808
6	909
7	Indian 1
8	Percussion 1
9	Acoustic 2
10	Funk Band 2

No.	PRESET KIT
11	Jazz
12	Rock 2
13	Timbales
14	Electro
15	Indian 2
16	Percussion 2
17	Marimba
18	FX Mix 1
19	Stardust
20	FX Mix 2



# Drum Voice List



No.	NAME
KICK	
1	22" Acoustic Kick 1
2	22" Acoustic Kick 2
3	Brush Kick 1
4	Brush Kick 2
5	22" Rock Kick 1
6	22" Rock Kick 2
7	Room Kick 1
8	Room Kick 2
9	Funk Kick
10	Vintage Kick
11	Reggae Kick
12	Fusion Kick
13	1970's Kick
14	Vintage Kick
15	Old School Kick
16	808 Kick
17	909 Kick
18	HipHop Kick
19	Dance Kick
20	Techno Kick
21	Magic Kick
22	FX Mix Kick
SNARE	
23	14" Acoustic Snare 1
24	14" Acoustic Snare Rim 1
25	14" Funk Snare 1
26	14" Funk Snare R 1
27	14" Funk Snare 2
28	14" Funk Snare Rim 2
29	Brush Snare 1
30	Brush Snare Rim 1
31	Brush Snare 2
32	Brush Snare Rim 2
33	Orchestra Snare
34	Orchestra Snare Rim
35	14" Jazz Snare
36	14" Jazz Snare Rim
37	14" Rock Snare
38	14" Rock Snare Rim
39	Room Snare
40	Fusion Snare
41	Big Band Snare
42	Vintage Snare
43	Live Snare
44	Reggae Snare
45	R&B Snare 1
46	Old School Snare
47	Magic Snare
48	808 Snare
49	808 Snare Rim
50	909 Snare
51	909 Snare Rim

52	Electronic Snare
53	Electronic Snare Stick
TOM	
54	Acoustic Tom 1
55	Acoustic Tom 2
56	Acoustic Tom 3
57	Acoustic Tom 4
58	Acoustic Tom 5
59	Acoustic Tom 6
60	Brush Tom 1
61	Brush Tom 2
62	Brush Tom 3
63	Brush Tom 4
64	Brush Tom 5
65	Brush Tom 6
66	Funk Tom 1
67	Funk Tom 2
68	Funk Tom 3
69	Funk Tom 4
70	Funk Tom 5
71	Funk Tom 6
72	Rock Tom 1
73	Rock Tom 2
74	Rock Tom 3
75	Rock Tom 4
76	Rock Tom 5
77	Rock Tom 6
78	808 Tom 1
79	808 Tom 2
80	808 Tom 3
81	808 Tom 4
82	808 Tom 5
83	808 Tom 6
84	909 Tom 1
85	909 Tom 2
86	909 Tom 3
87	909 Tom 4
88	909 Tom 5
89	909 Tom 6
90	909 Tom 7
91	909 Tom 8
92	Electronic Tom 1
93	Electronic Tom 2
94	Electronic Tom 3
95	Electronic Tom 4
96	Electronic Tom 5
97	Electronic Tom 6
98	Electronic Tom 7
99	Electronic Tom 8
RIDE	
100	21" Acoustic Ride
101	21" Acoustic Ride 1 Bell
102	Brush Ride 1
103	Brush Ride 1 Bell

104	Brush Ride 2
105	Brush Ride 21 Bell
106	20" Rock Ride
107	Electronic Ride
CRASH	
108	16" Acoustic Crash 1
109	16" Acoustic Crash 2
110	Brush Crash 1
111	Brush Crash 2
112	Rock Crash 1
113	Rock Crash 2
114	Splash
HIHAT	
115	14" Acoustic HiHat
116	14" Acoustic HiHat Edge
117	14" Acoustic HiHat Pedal
118	14" Standard HiHat
119	14" Standard HiHat Edge
120	14" Standard HiHat Pedal
121	Brush HiHat
122	Brush HiHat Pedal
123	Brush HiHat Splash
124	14" Rock HiHat
125	14" Rock HiHat Edge
126	14" Rock HiHat Pedal
127	14" Rock HiHat Splash
128	808 HiHat
129	808 HiHat Pedal
130	808 HiHat Splash
131	909 HiHat
132	909 HiHat Pedal
133	909 HiHat Splash
134	Dance HiHat
135	Dance HiHat Pedal
136	Dance HiHat Splash
137	Lo-Fi HiHat
138	Lo-Fi HiHat Edge
139	Lo-Fi HiHat Pedal
PERCUSSION	
140	Maracas
141	Metronome Bell
142	Mute Hi Conga 1
143	Mute Hi Conga 2
144	Open Hi Conga 1
145	Open Hi Conga 2
146	Low Conga
147	High Timbale 1
148	High Timbale 2
149	High Timbale 3
150	Low Timbale 1
151	Low Timbale 2
152	Low Timbale 3
153	Low Timbale 4
154	High Agogo

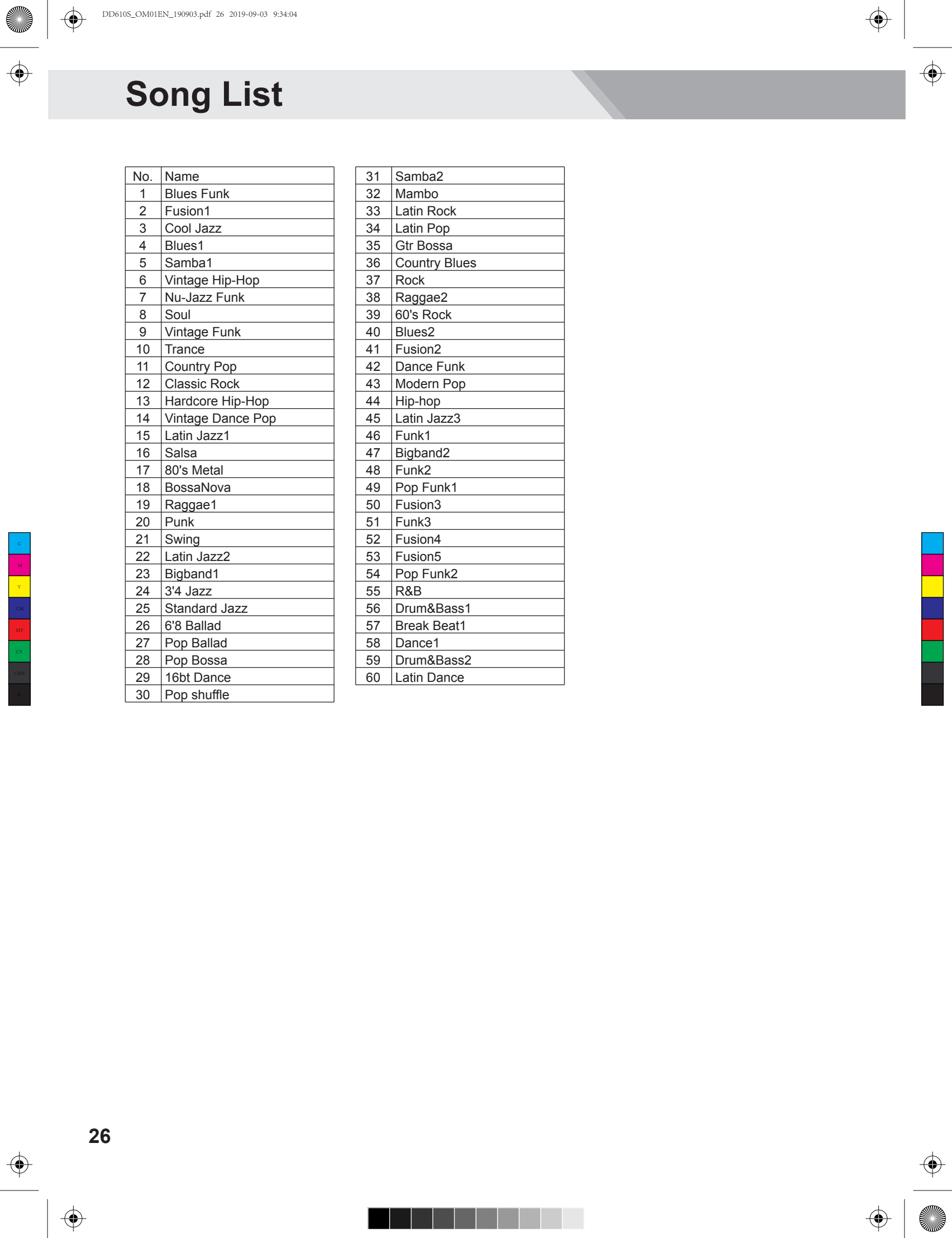




# Drum Voice List

155	Low Agogo
156	Claves
157	Jingle Bell
158	Tambourine 1
159	Indian 1
160	Indian 2
161	Indian 3
162	Indian 4
163	Indian 5
164	Indian 6
165	Indian 7
166	Indian 8
167	Indian 9
168	Indian 10
169	Indian 11
170	Indian 12
171	African
172	Marimba C3
173	Marimba A3
174	Marimba C4
175	Marimba Db4
176	Marimba D4
177	Marimba Eb4
178	Marimba E4
179	Marimba F4
180	Marimba Gb4
181	Marimba G4
182	Marimba Ab4
183	Marimba A4
184	Marimba Bb4
185	Marimba B5
186	Marimba C5
187	Marimba Db5
188	Marimba D5
189	Marimba Eb5
190	Marimba E5
191	Marimba F5
192	Marimba Gb5
193	Marimba G5
194	Marimba Ab5
195	Marimba A5
196	Marimba Bb5
197	Marimba B5
198	Marimba C6
199	Cowball
200	Tambourine 2
CRASH	
201	FX 1
202	FX 2
203	FX 3
204	FX 4
205	FX 5
206	FX 6
207	FX 7

208	FX 8
209	FX 9
210	FX 10
211	FX 11
212	One
213	Two
214	Three
215	Four
216	Five
217	Six
218	Seven
219	Eight
220	Nine
221	Ti
222	Ta
223	Ei
224	An
225	E
226	Mute
HIHAT COMBINATION	
227	Acoustic
228	Jazz Brush
229	Rock
230	808
231	909
232	Dance
233	Marimba
234	Indian
235	African



# Song List

No.	Name
1	Blues Funk
2	Fusion1
3	Cool Jazz
4	Blues1
5	Samba1
6	Vintage Hip-Hop
7	Nu-Jazz Funk
8	Soul
9	Vintage Funk
10	Trance
11	Country Pop
12	Classic Rock
13	Hardcore Hip-Hop
14	Vintage Dance Pop
15	Latin Jazz1
16	Salsa
17	80's Metal
18	BossaNova
19	Raggae1
20	Punk
21	Swing
22	Latin Jazz2
23	Bigband1
24	3'4 Jazz
25	Standard Jazz
26	6'8 Ballad
27	Pop Ballad
28	Pop Bossa
29	16bt Dance
30	Pop shuffle

31	Samba2
32	Mambo
33	Latin Rock
34	Latin Pop
35	Gtr Bossa
36	Country Blues
37	Rock
38	Raggae2
39	60's Rock
40	Blues2
41	Fusion2
42	Dance Funk
43	Modern Pop
44	Hip-hop
45	Latin Jazz3
46	Funk1
47	Bigband2
48	Funk2
49	Pop Funk1
50	Fusion3
51	Funk3
52	Fusion4
53	Fusion5
54	Pop Funk2
55	R&B
56	Drum&Bass1
57	Break Beat1
58	Dance1
59	Drum&Bass2
60	Latin Dance

# GM Drum Kit List

Note No.	Standard (bank 00)	Funk (bank 08)	Rock (bank 16)	Electric (bank 24)	Brush (bank 40)
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]	Standard Bass Drum	Funk Bass Drum	Rock Kick Drum	Electric Bass Drum	Brush Bass Drum
C#2[37]	Side Stick				
D 2[38]	Standard Snare	Funk Snare	Rock Snare Drum1	Electric Snare	Brush Snare
Eb2[39]	Hand Clap				
E 2[40]	Standard Snare Rim	Funk Snare Rim	Rock Snare Drum2	Electric Snare Rim	Brush Snare Rim
F 2[41]	Standard Tom 6	Funk Tom 6	Rock LowTom2	Electric Tom 6	Brush Tom 6
F#2[42]	Standard Hi-hat Close				
G 2[43]	Standard Tom 5	Funk Tom 5	Rock LowTom1	Electric Tom 5	Brush Tom 5
G#2[44]	Standard Hi-hat Pedal				
A 2[45]	Standard Tom 4	Funk Tom 4	Rock MidTom2	Electric Tom 4	Brush Tom 4
Bb2[46]	Standard Hi-hat Open				
B 2[47]	Standard Tom 3	Funk Tom 3	Rock MidTom1	Electric Tom 3	Brush Tom 3
C 3[48]	Standard Tom 2	FunkTom 2	Rock HiTom2	ElectricTom 2	BrushTom 2
C#3[49]	Standard Crash 1				
D 3[50]	Standard Tom 1	Funk Tom 1	Rock HiTom1	ElectricTom 1	Brush Tom 1
Eb3[51]	Standard Ride				
E 3[52]	Chinese Cymbal 1				
F 3[53]	Ride Bell				
F#3[54]	Tambourine				
G 3[55]	Splash Cymbal				
G#3[56]	Standard Cowbell				
A 3[57]	Standard Crash 2				
Bb3[58]	Vibra-slap				
B 3[59]	Ride Cymbal				
C 4[60]	Hi 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]	Low Wood 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				

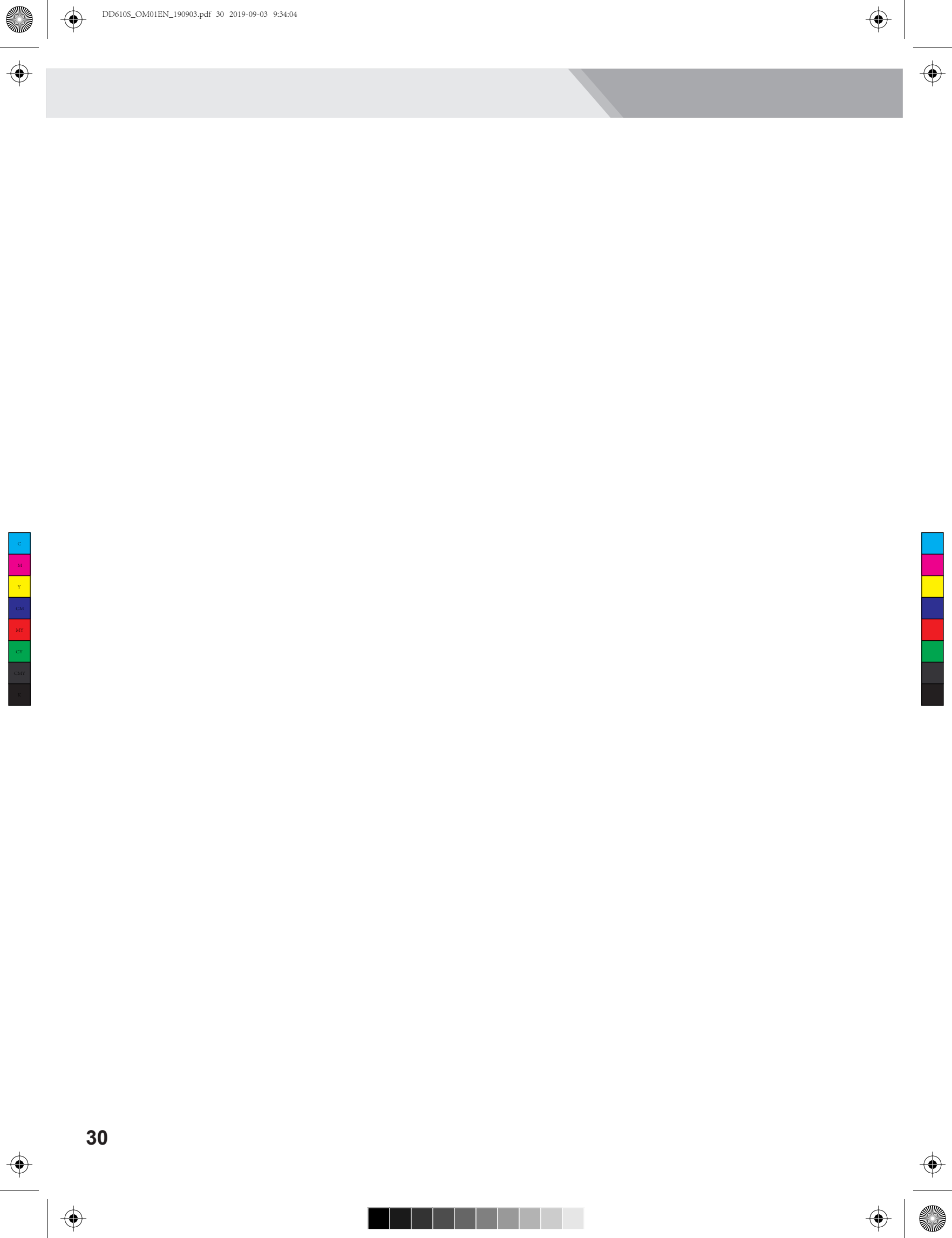
# GM Backing Instrument List

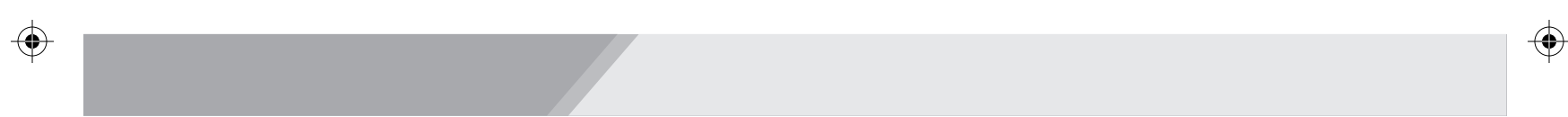
PIANO	STRINGS	LEAD
1 Acoustic Grand Piano	41 Violin	81 Lead1 (square)
2 Bright Acoustic Piano	42 Viola	82 Lead2 (sawtooth)
3 Electric Grand Piano	43 Cello	83 Lead3 (calliope)
4 Honky-Tonk Piano	44 Contrabass	84 Lead4 (cliff)
5 E.Piano 1	45 Tremolo Strings	85 Lead5 (charang)
6 E.Piano 2	46 Pizzicato Strings	86 Lead6 (voice)
7 Harpsichord	47 Orchestral Harp	87 Lead7 (fifths)
8 Clavi	48 Timpani	88 Lead8 (bass & lead)
MALLET	STRINGSENSEMBLE	PAD
9 Celesta	49 Strings Ensemble 1	89 Pad1 (newage)
10 Glockenspiel	50 Strings Ensemble 2	90 Pad2 (warm)
11 Music Box	51 Synth Strings 1	91 Pad3 (polysynth)
12 Vibraphone	52 Synth Strings 2	92 Pad4 (choir)
13 Marimba	53 Choir Aahs	93 Pad5 (bowed)
14 Xylophone	54 Voice Oohs	94 Pad6 (metallic)
15 Tubular Bells	55 Synth Voice	95 Pad7 (halo)
16 Dulcimer	56 Orchestra Hit	96 Pad8 (sweep)
ORGAN	BRASS	EFFECTS
17 Drawbar Organ	57 Trumpet	97 FX1 (rain)
18 Percussive Organ	58 Trombone	98 FX2 (soundtrack)
19 Rock Organ	59 Tuba	99 FX3 (crystal)
20 Church Organ	60 Muted Trumpet	100 FX4 (atmosphere)
21 Reed Organ	61 French Horn	101 FX5 (brightness)
22 Accordion	62 Brass Section	102 FX6 (goblins)
23 Harmonica	63 Synth Brass 1	103 FX7 (echoes)
24 Tango Accordion	64 Synth Brass 2	104 FX8 (sci-fi)
GUITAR	REED	ETHNIC
25 Nylon Guitar	65 Soprano Sax	105 Sitar
26 Steel Guitar	66 Alto Sax	106 Banjo
27 Jazz Guitar	67 Tenor Sax	107 Shamisen
28 Clean Guitar	68 Baritone Sax	108 Koto
29 Muted Guitar	69 Oboe	109 Kalimba
30 Overdriven Guitar	70 English Horn	110 Bagpipe
31 Distortion Guitar	71 Bassoon	111 Fiddle
32 Guitar Harmonics	72 Clarinet	112 Shanai
BASS	PIPE	PERCUSSIVE
33 Acoustic Bass	73 Piccolo	113 Tinkle Bell
34 Finger Bass	74 Flute	114 Agogo
35 Pick Bass	75 Recorder	115 Steel Drums
36 Fretless Bass	76 Pan Flute	116 Wood Block
37 Slap Bass 1	77 Blown Bottle	117 Taiko Drum
38 Slap Bass 2	78 Shakuhachi	118 Melodic Tom
39 Synth Bass 1	79 Whistle	119 Synth Drum
40 Synth Bass 2	80 Ocarina	120 Reverse Cymbal
SOUNDEFFECTS		
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 Channel	Default	10ch	1—16	
	Changed	×	×	
Mode	Default	×	×	
	Messages	×	×	
	Altered	*****	*****	
Note Number		0—127	0—127	
	: True Voice	*****	0—127	
Velocity	Note On	○ 99H,V=1-127	○	
	Note Off	○ (99H,V=0)	○	
after Touch	Key's	×	○	
	Ch's	×	×	
Pitch Bend		×	○	
Control Change	0	×	○	Bank Select
	1	×	○	Modulation
	5	×	○	Portamento Time
	6	×	○	Data Entry
	7	×	○	Volume
	10	×	○	Pan
	11	×	○	Expression
	64	×	○	Sustain Pedal
	65	×	○	Portamento On/Off
	66	×	○	Sostenuto Pedal
	67	×	○	Soft Pedal
	80	×	○	Reverb Program
	81	×	○	Chorus Program
	91	×	○	Reverb Level
	93	×	○	Chorus Level
	120	×	○	All Sound Off
	121	×	○	Reset All Controllers
	123	×	○	All Notes Off
Program Change : True Number		×	○	
System Exclusive		×	○	
System Common	: Song Position	×	×	
	: Song Select	×	×	
	: Tune	×	×	
System Real Time	: Clock	○	×	
	: Commands	○	×	Start And Stop Only
Aux Messages	: Local On/off	×	×	
	: All Notes Off	×	×	
	: Active Sensing	×	×	
	: Reset	×	×	

○: YES    ×: NO







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