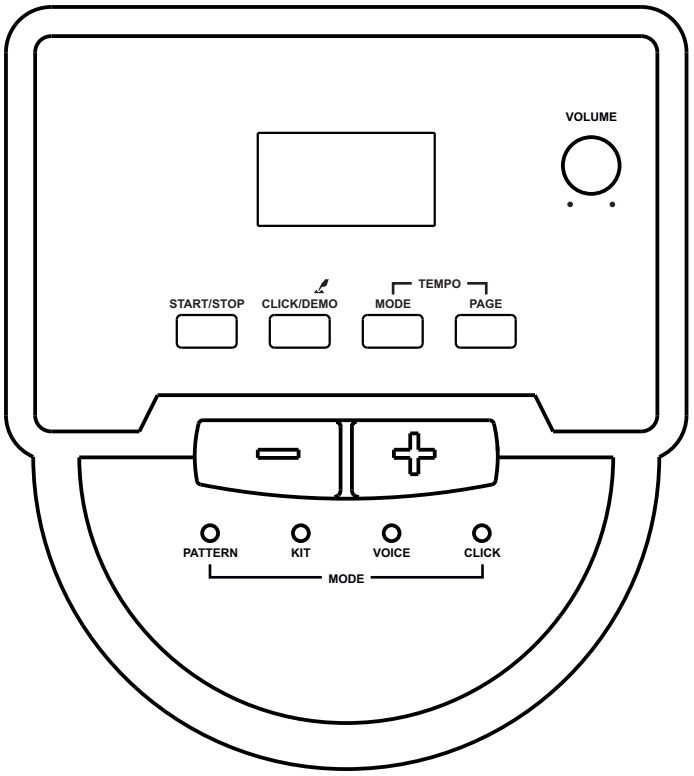
DIGITAL DRUM

Owner's Manual



GENERAL MIDI

INFORMATION FOR YOUR SAFETY!

THE FCC REGULATION WARNING (for USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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

CAUTION

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

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, unplug the AC adaptor from the wall 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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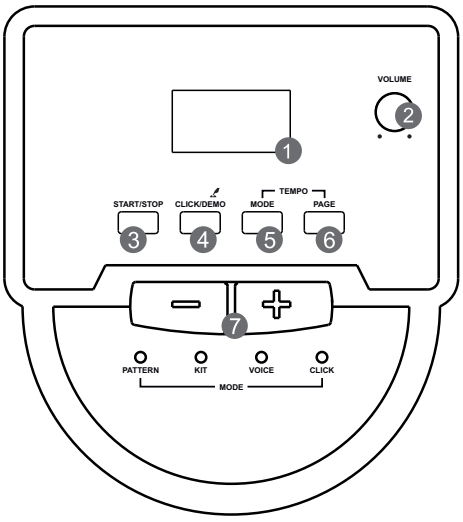
Panel Description

Front Panel



1 3-DIGIT LED DISPLAY
3-digit LED and LED indicators

2 MASTER VOLUME KNOB
Control the volume of phone and line out.
Turn it clockwise to increase the volume
and anticlockwise to decrease the volume.

3 [START/STOP] BUTTON
Start or stop Pattern playing.

4 [CLICK] BUTTON
Press [click] button to start/stop the click.
Hold on the [click] button 2 seconds to enter the demo mode and play the demo.

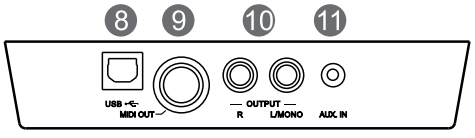
5 [MODE] BUTTON
Press [mode] button to select the mode from PATTERN, KIT, VOICE, CLICK.

6 [PAGE] BUTTON
Press [page] button to browse the menu pages of current selected mode.

Press both [mode] and [page] buttons, the 3-digit LED will display the tempo page, it will temporarily display for 3 seconds, then press [+] or [-] to adjust the tempo.

7 [+]/[-] BUTTON
Press [+]/[-] button to adjust the parameters.

Rear & Side Panel



8 USB PORT
This port is used to connect to a computer(MIDI In/Out via USB).

9 MIDI OUT JACK
Connect with external sound module.

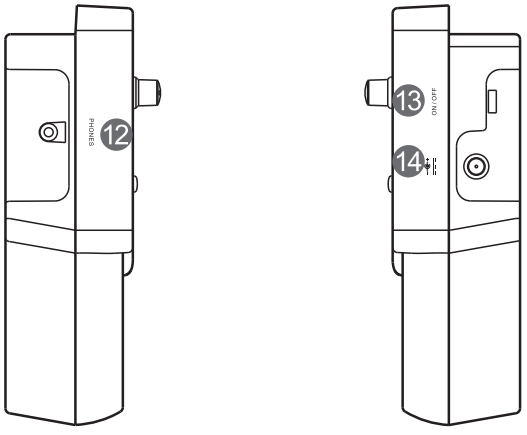
10 LINE OUTPUT JACKS (R, L/MONO)
Stereo output connection to an audio system or drum amplifie

11 AUX IN
This stereo input jack is for an external sound source, such as an MP3 or CD player.

12 PHONES JACK
This stereo jack is used to connect headphones to the unit.
(Connect the headphones will not mute the output jack.)

13 POWER SWITCH
This switch turns the power on and off .

14 DC IN Jack
Connect DC power adaptor.



Caution!

To prevent electric shock and damage to the device, make sure the power is switched OFF on the drum and all related device before making any connection.

Connecting Pads and Pedals

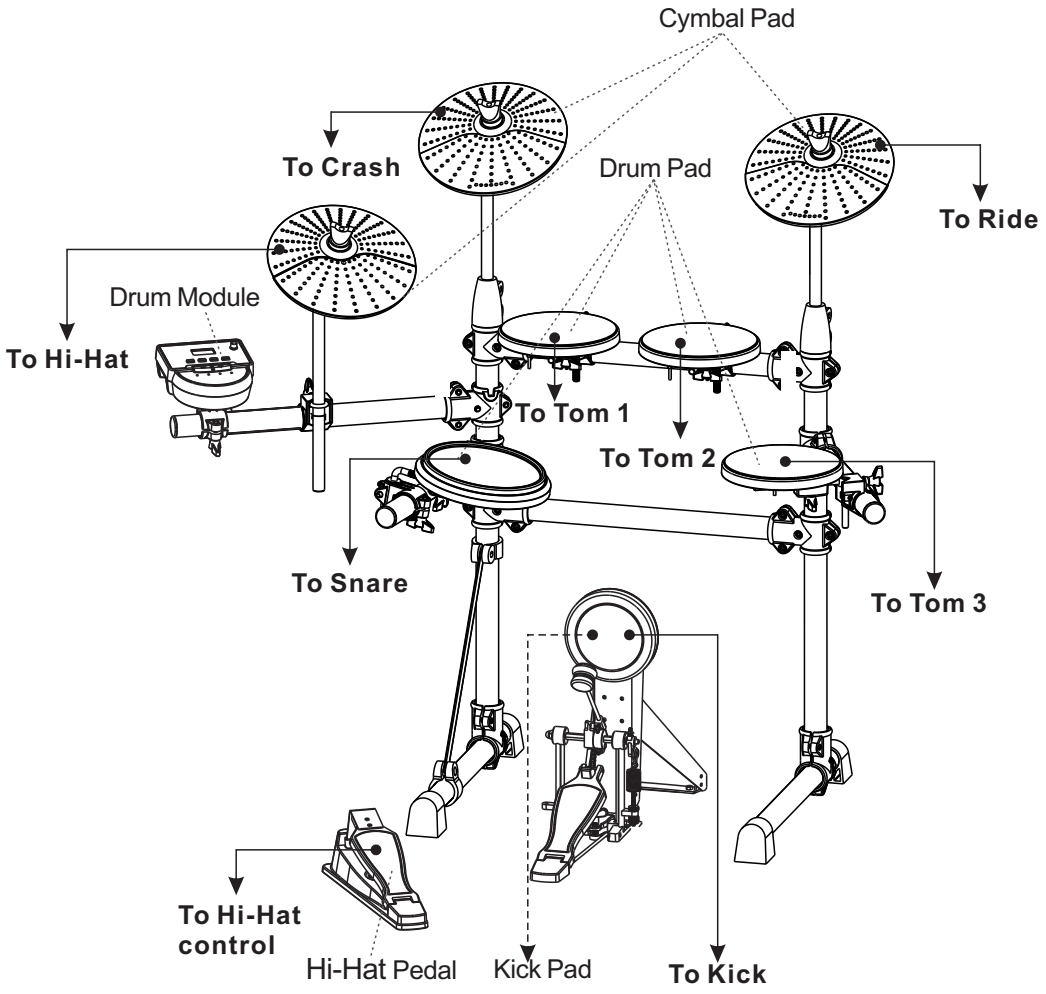
Standard: KICK, SNARE, TOM1-3, CRASH, RIDE, HIHAT, HIHAT CONTROL PEDAL.

Using the provided cables, connect with kick, snare, tom1~tom3, ride, crash, hi-hat, hi-hat controller. Snare is stereo input, support double triggering (increase edge triggering); crash, ride support choke with stereo input; tom, kick, hi-hat are mono input, which can't response edge triggering. Hi-hat control pedal is mono input.

Note:

1. The voice of hi-hat pad hitting is controlled by hi-hat pedal. Similar to a real drum kit, the hi-hat pad functions as an 'open hi-hat' when the pedal is released. When the pedal is stepped, it functions as a 'closed hi-hat'.

2. The valid striking area of cymbal pad (ride, crash or hi-hat) is near the edge of the pad, which is different from other pads.

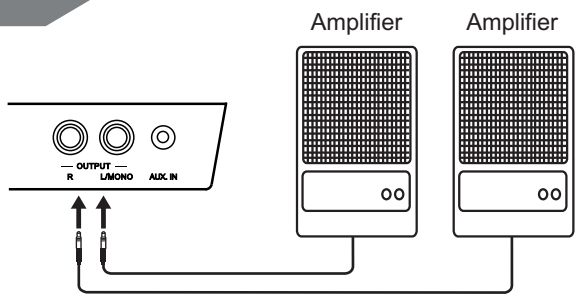


Connections

Connecting an Audio Equipment

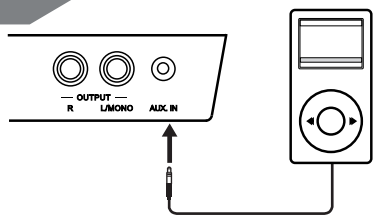
When using an amplifier, connect the Output L/MONO and R jacks on the rear panel to the input of the amplifier.

Note:
For mono playback, use the L/MONO jack.
For stereo playback, connect both L/MONO and R jacks.
The line output volume is controlled by the VOLUME knob.



Connecting an MP3/CD Player

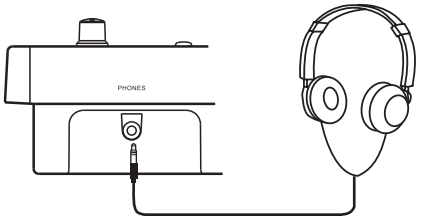
Connect the audio output of an MP3/CD player or other audio source to the stereo AUX IN jack on the rear panel.
The input signal is mixed with the drum signal, allowing you to play along.



Connecting a set of headphones

An optional set of stereo headphones can be connected with the PHONES jack located on the side panel of the drum module.

* Adjust the volume to a comfortable level.

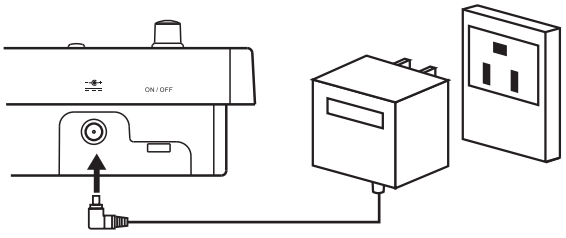


Power supply& Switch

Make sure the power is switched OFF and connect the power adaptor with the DC IN jack on the side panel.

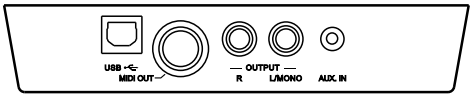
Note:

1. To protect the speakers, amplifier and the drum module from damage, rotate the volume knob to the minimum volume level before switching the power ON.
2. Make sure the power is switched OFF when connecting drum module with external devices.



MIDI and USB

MIDI stands for Musical Instrument Digital Interface, this is a world-wide standard communication interface that enables electronic musical instruments and computers (of all brands) to communicate with each other so that MIDI command and other data can pass between them. This exchange of information makes it possible to create a system of MIDI instruments and devices that offer far greater versatility and control than is available with isolated instruments. Whether you interface with computers, sequencers, expanders or other controllers, your musical horizons will be greatly enhanced.



MIDI connection

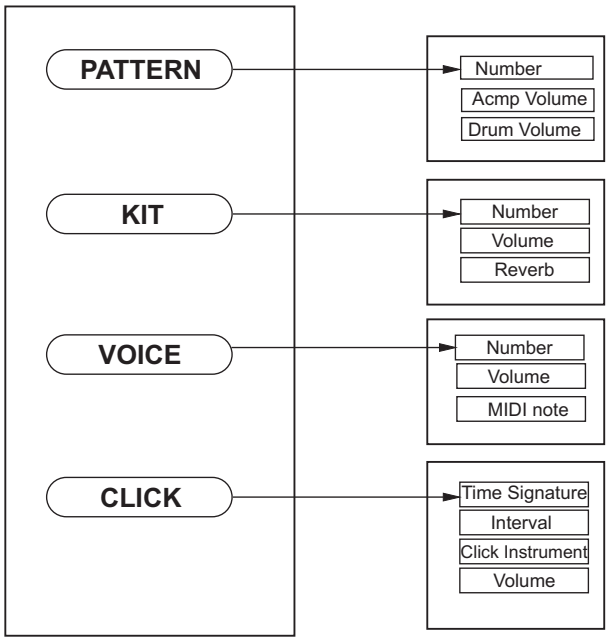
MIDI OUT: This terminal transmits data from this instrument to other MIDI devices.

USB connection

The USB connector allows you to connect the module directly to your computer. It can be connected without driver installation under the Windows XP\ Vista\Windows 7& MAC OSX environment. The modulewill be recognized as 'USB Audio device' to receive and transmit MIDI messages through a single USB cable, USB is used only for MIDI messages(MIDI via USB).

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

Menu tree



In the main menu there are 4 menu items

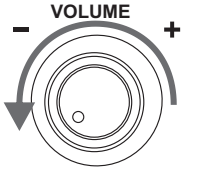
- PATTERN
- DRUM KIT
- VOICE
- CLICK

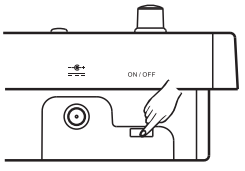
Operation

Press [MODE] button to change the mode.
Press [PAGE] button to select the page of current mode.
Press [+] / [-] button to adjust the parameters.

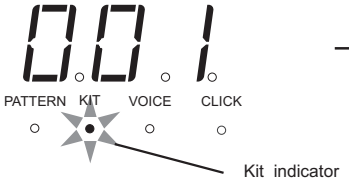
Switch the power ON

After confirming all connection have been completed, rotate the volume knob to the left (minimum volume level) before switching the power on.



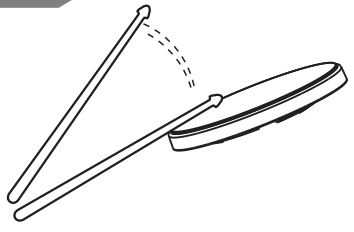


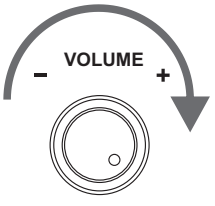
Set the power switch to "ON" position to switch on the power. Display shows the kit's number and its indicator lights up.



Set the main volume

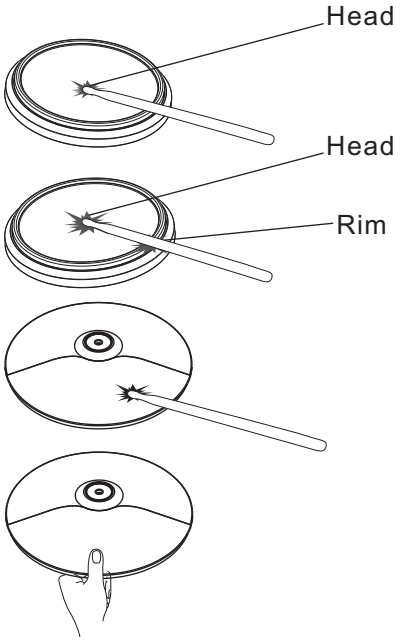
While hitting a pad, gradually rotate the volume knob until a comfortable volume level is reached.





Playing the pads

Similiar 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.



Snare Drum Pad Head or Rim shot
The Snare drum pad detects head and rim shots(rim shots trigger the rim voice)

Cymbal Choke
Both Crash and Ride have cymbal choke.

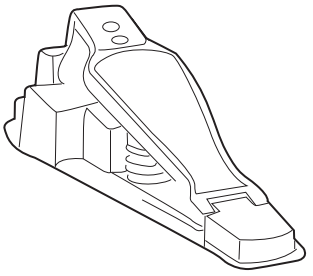
Choking the cymbal's edge with the hand immediately after hitting the cymbal mutes the cymbal sound .

Hi-Hat
The Hi-hat sound varies depending on the position of the Hi-Hat pedal:

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.

Pedal Close: Press the pedal completely down without striking the pad.



Pattern

In pattern mode, there are 3 pages:
1.Pattern number (001- 042,default 1)
2.Pattern accompaniment volume(0-32)
3.Pattern drum volume (0-32)

Select a pattern

In pattern mode, Pattern number (001-042,default 001)

1.Press the [MODE] button to select the pattern mode, the pattern LED indicator will be lighted up, the 3-digit-LED will display the pattern number(001)

2. Press [+] or [-] button to adjust the value.
Range: 001 to 042

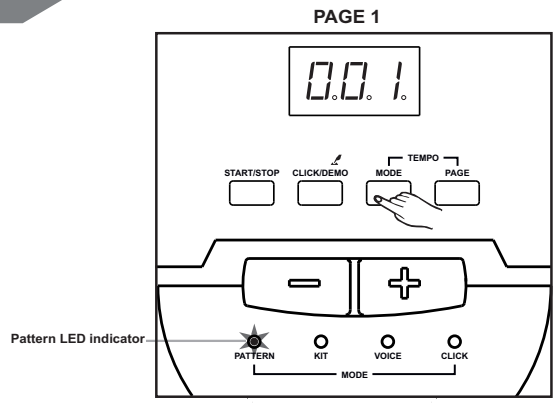


Figure Pattern number

Adjust the accompaniment volume

In pattern mode, pattern accompaniment volume(0-32)

1. Press [MODE] button to select the pattern mode, the pattern LED indicator will be lighted up.

2. Press [PAGE] button to select the accompaniment volume page, the 3-digit-LED will display the accompaniment volume(A22).

3. Press [+] or [-] button to adjust the value.
Range: 0 to 32.

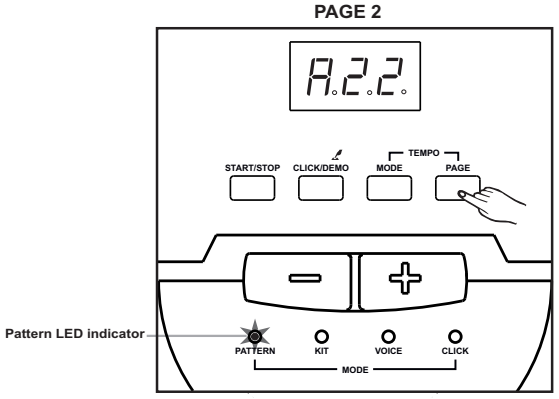


Figure Pattern accompaniment volume

Adjust the drum volume

In pattern mode, pattern drum volume(0-32)

1. Press [MODE] button to select the pattern mode, the pattern LED indicator will be lighted up,

2. Press [PAGE] button to select the drum volume page, the 3-digit-LED will display the drum volume(d22).

3. Press [+] or [-] to adjust the value.
Range: 0 to 32

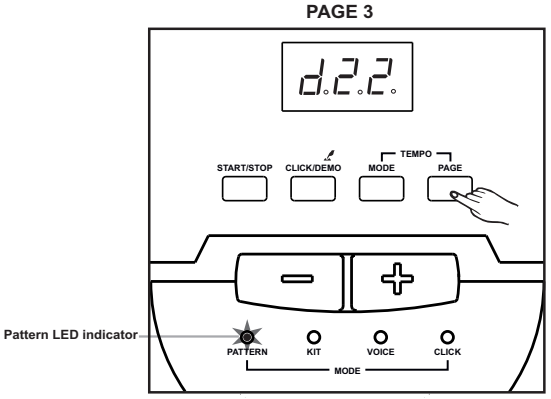


Figure Pattern drum volume

In kit mode, there are 3 pages:
1. kit number(001-012,default 1).
2. kit volume (0-32).
3. kit reverb(on/off, default on).

Select a kit

In kit mode, kit number(001-012,default 1).

1. Press [MODE] button to select the kit mode, the kit LED indicator will be lighted up, the 3-digit-LED will display the kit number(001).

2. Press [+] or [-] to adjust the value.
Range: 001-012.

PAGE 1

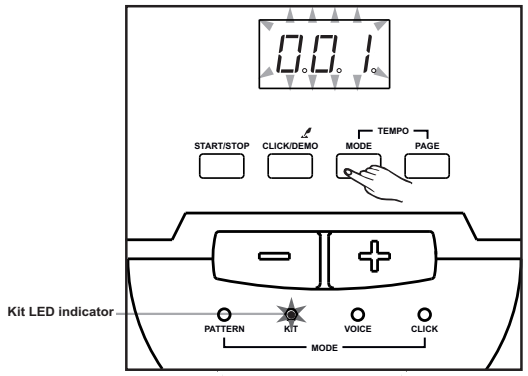


Figure Kit number

Adjust the kit volume

In kit mode, kit volume (0-32).

1. Press the [MODE] button to select the kit mode, the kit LED indicator will be lighted.

2. Press the [PAGE] button to select the kit volume page, the 3-digit-LED will display the kit volume(L30).

3.Press [+] or [-] to adjust the value (Automatic save).
Range: 0 to 32.

PAGE 2

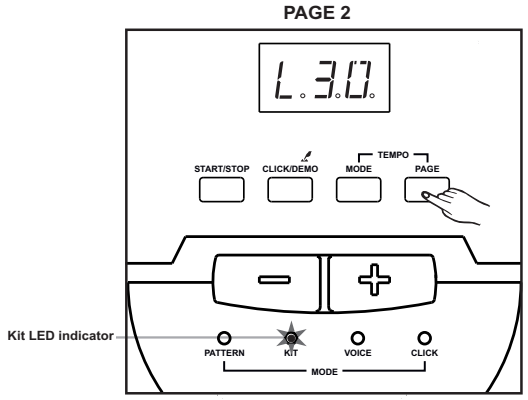
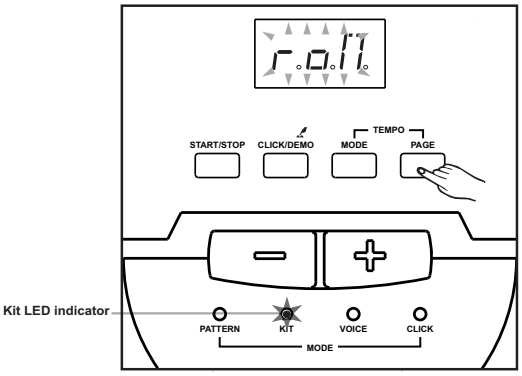


Figure Kit volume

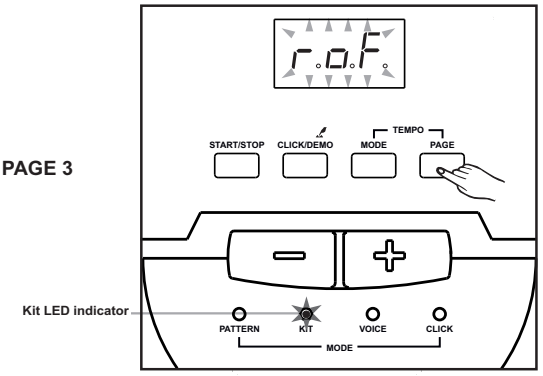
Switch reverb on/off

1. Press [MODE] button to select the kit mode, the kit LED indicator will be lighted up.

2. Press the [PAGE] button to select the kit reverb page, reverb effect can be turn on or off by pressing button [+] or [-].



PAGE 3



Voice

In voice mode, there are 3pages:
1. Voice number (1-120).
2. Voice volume (0-32).
3. Midi note (0-99).

Select the voice

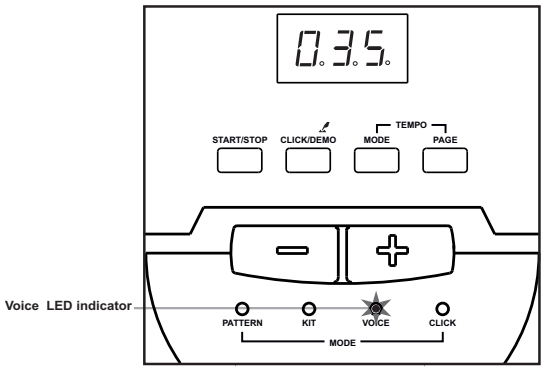
In voice mode, voice number (1-120).

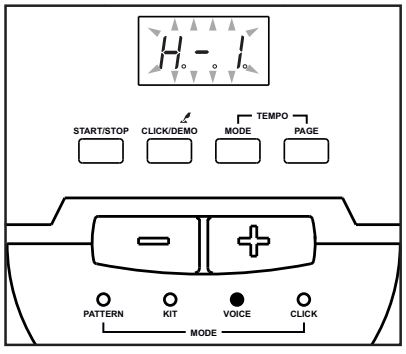
1. Press [MODE] button to select the voice mode, the voice LED indicator will be lighted up, strike a drum pad, the 3-digit-LED will display the voice number.

2. Press [+] or [-] to adjust the value(Automatic save). Range: 001 to 120.

NOTE:
When you select a voice for hi-hat drum, you only can select the hi-hat group voices, from group 1-group 4(Automatic save), the display is: H-I.

PAGE 1





Adjust the voice volume

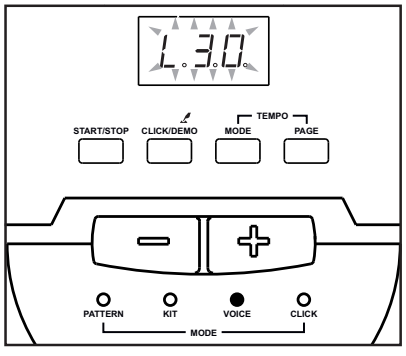
In voice mode, voice volume (0-32).

1. Press [MODE] button to select the voice mode, the voice LED indicator will be lighted up.

2. Press [PAGE] button to select the voice volume page, strike a drum pad, the 3-digit-LED will display the voice volume(L30).

3. Press [+] or [-] to adjust the value(Automatic save). Range: 0 to 32.

PAGE 2



Adjust the midi note

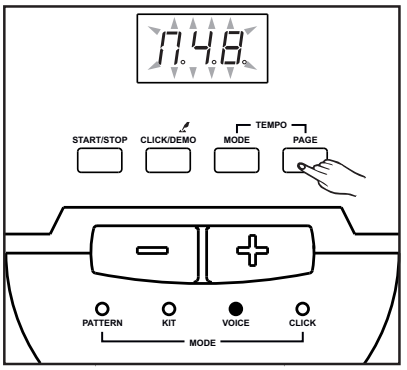
In voice mode, midi note (0-99).

1. Press [MODE] button to select the voice mode, the voice LED indicator will be lighted up.

2. Press [PAGE] button to select the midi note page, strike a strike a drum pad, the 3-digit-LED will display the midi note (n48).

3.Press [+] or [-] to adjust the value(Automatic save). Range: 0 to 99.

PAGE 3



THE DEFAULT MIDI NOTE:

NO.	NAME	NOTE
1	CRASH1	49
2	TOM 1	48
3	TOM 2	45
4	TOM 3	43
5	RIDE	51
6	KICK	36
7	SNARE	38
8	SNARE RIM	40
9	HIHAT CLOSE	42
10	HIHAT OPEN	46
11	HIHAT PEDAL	44

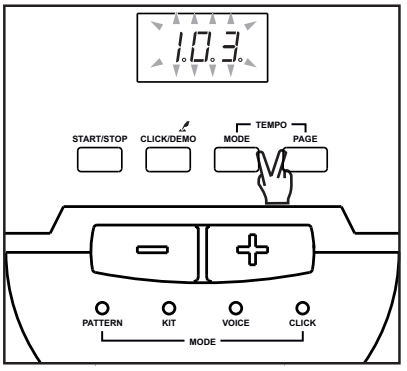
Tempo

The tempo range is 30-280

Adjust the tempo

1.Press both [MODE] and [PAGE] buttons, the 3-digit-LED will display the tempo page, it will temporarily display for 3 seconds.

2. Press [+] or [-] to adjust the value.

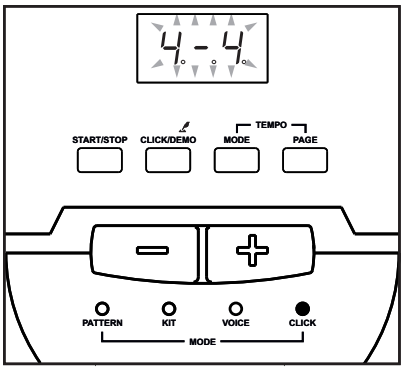


Click

In click mode, there are 4 pages:
1.Time signature (1/4-7/4,3/8,6/8).
2. Interval (1/4,1/8,1/12,1/16,1/24,default 1/4).
3. Instrument (1-5,default 1).
4. Click volume (0-32).

Adjust the click time signature

PAGE 1



In click mode, Time signature:(1/4-7/4,3/8,6/8).

1. Press [MODE] button select the click mode, the click LED indicator will be lighted up.

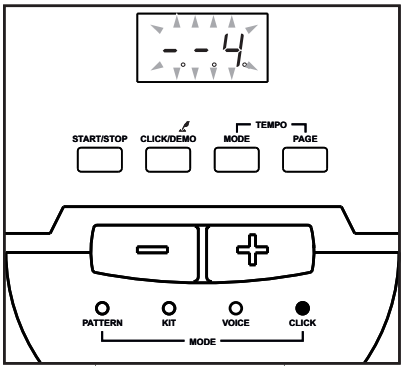
2. Press [PAGE] button select the click time signature page, the 3-digit-LED will display the click time signature(4-4).

3. Press [+] or [-] to adjust the value.
Range: 1/4-7/4, 3/8, 6/8.

Note: The click time signature will follow the pattern, when pattern is playing, it can not be edited.

Adjust the click interval

PAGE 2



In click mode, interval (1/4,1/8,1/12,1/16,1/24,default 1/4).

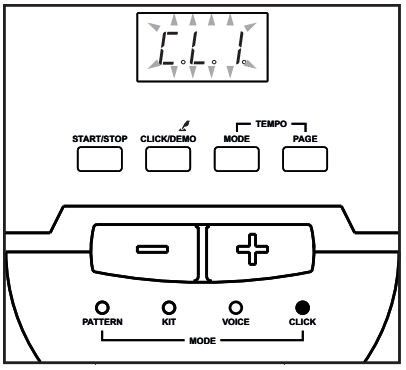
1. Press [MODE] button to select the click mode, the click LED indicator will be lighted up.

2. Press [PAGE] button to select the click interval page, the 3-digit-LED will display the click interval(--4) .

3. Press the [+] or [-] button to adjust the value.
Range: --4 to -24.

Adjust the click instrument

PAGE 3



In click mode, instrument (1-5,default 1).

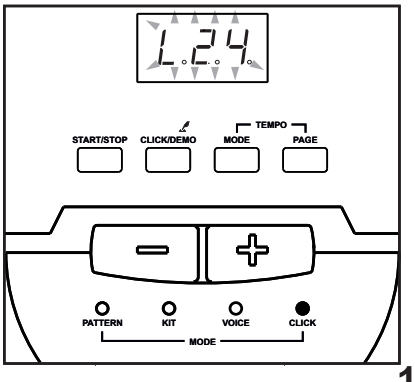
1. Press [MODE] button to select the click mode, the click LED indicator will be lighted up.

2. Press [PAGE] button to select the click instrument page, the 3-digit-LED will display the click instrument(CL1).

3. Press [+] or [-] to adjust the value.
Range: CL1 to CL5.

Adjust the click volume

PAGE 4



In click mode, click volume(0-32).

1. Press [MODE] button to select the click mode, the click LED indicator will be lighted up.

2. Press [PAGE] button to select the click volume page, the 3-digit-LED will display the click volume(L24).

3. Press [+] or [-] to adjust the value.
Range: 0 to 32

Restore the factory preset

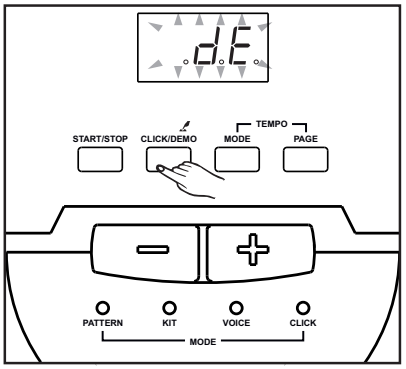
Restoring the factory preset can be implemented by following operations:
Turn on the power with both [+] and [-] unreleased.

This function will replace the current settings of following parameters by their default preset values:
Kit volume, voice number, voice volume and MIDI note.

Play the demo

1. Hold on the [CLICK] button 2 seconds to enter the demo and play the demo, the 3-digit-LED will display the demo “dE”.

2. Press [START/STOP] button to stop the demo playing.



Play the pattern

1. Press [START/STOP] button play the pattern.
2. Press [START/STOP] button again to stop the pattern playing.

Play the click

1. Press the [CLICK] button to start the click, the click indicator will flash following the beat.

2. Press the [CLICK] button again to stop the click.

Specifications

Drum Pad
4 drum pads , 3 cymbal pads ,1 hi-hat control pedal , 1 kick pedal

Preset Drum kits
12 preset kits

Drum Instrument
120

Preset Pattern
42

Controls
MIDI OUT, POWER SWITCH, USB, PHONES, START/STOP,PATTERN, KIT, VOICE, CLICK, MODE, PAGE, DEMO, TEMPO, VOLUME, + / -

Hardware
8" dual zone Snare pad,
7.5" 1-zone Tom pad x 3,
10" 1-zone with choke for Crash,
10" 1-zone with choke for Ride,
10" 1-zone for Hi-hat,
Hi-hat Pedal,
Kick pad,

Display
LED display

Connections
PHONES
AUX IN
OUTPUT (R & L/MONO)
MIDI OUT
USB
ON/OFF

Power Supply
DC IN

Preset Drum KIT List

No.	Name
001	Acoustic 1
002	Standard 1
003	Rock
004	Standard 2
005	Funk 1
006	Jazz
007	Brush
008	Electronic
009	808
010	house
011	Acoustic 2
012	Funk 2

Drum Instrument List

No.	Name
KICK	
001	Standard Kick 1
002	Standard Kick 2
003	Standard Kick 3
004	Room Kick 1
005	Room Kick 2
006	Rock Kick 1
007	Rock Kick 2
008	Acoustic Kick 1
009	Acoustic Kick 2
010	Hiphop Kick 1
011	Hiphop Kick 2
012	Funk Kick 1
013	Funk Kick 2
014	Jazz Kick 1
015	Jazz Kick 2
016	Electronic Kick 1
017	Electronic Kick 2
018	808 Kick
019	House Kick 1
020	House Kick 2
SNARE	
021	Classic Snare 1
022	Classic Snare Rim 1
023	Classic Snare 2
024	Classic Snare Rim 2
025	Room Snare 1
026	Room Snare 2
027	Acoustic Snare 1
028	Acoustic Snare Rim 1
029	Acoustic Snare 2
030	Acoustic Snare Rim 2
031	Funk Band Snare
032	Funk Band Snare Rim
033	Camco Snare
034	Camco Snare Rim
035	Brush Snare 1
036	Brush Snare Rim
037	Electronic Snare 1
038	Electronic Snare 2
039	808 Snare
040	House Snare 1
041	House Snare 2
TOM	
042	Classic Tom 1
043	Classic Tom 2
044	Classic Tom 3
045	Classic Tom 4
046	Classic Tom 5
047	Classic Tom 6
048	Camco Tom 1
049	Camco Tom 2
050	Camco Tom 3
051	Camco Tom 4
052	Camco Tom 5
053	Camco Tom 6
054	808 Tom 1
055	808 Tom 2
056	808 Tom 3
057	808 Tom 4
058	808 Tom 5
059	808 Tom 6
060	Electronic Tom 1
061	Electronic Tom 2
062	Electronic Tom 3
063	Electronic Tom 4
064	Electronic Tom 5
065	Electronic Tom 6
RIDE	
066	Classic Ride 1
067	Classic Ride Bell 1
068	Classic Ride 2
069	Classic Ride Bell 2
070	Rock Ride
071	808 Ride
CRASH	
072	Standard Crash 1
073	Standard Crash 2
074	Rock Crash 1
075	Rock Crash 2
076	Splash 1
077	Splash 2
078	Brush Carsh
079	808 Crash 1
080	808 Crash 2
HI-HAT	
081	Standard Hi-hat Open
082	Jazz Hi-hat Open
083	Electronic Hi-hat Open
084	808 Hi-hat Open
085	Standard Hi-hat Close
086	Jazz Hi-hat Close
087	Electronic Hi-hat Close
088	808 Hi-hat Close
089	Standard Hi-hat Pedal
090	Jazz Hi-hat Pedal
091	Electronic Hi-hat Pedal
092	808 Hi-hat Pedal
PERCUSSTION	
093	High Bongo
094	Low Bongo
095	Mute High Conga
096	Open High Conga
097	Low Conga
098	High Timbale
099	Low Timbale
100	High Agogo
101	Low Agogo
102	Cabasa
103	Maracas
104	Short Whistle
105	Long Whistle
106	Short Guiro
107	Long Guiro
108	Claves
109	High Wood Block
110	Low Wood Block
111	Mute Cuica
112	Open Cuica
113	Mute Triangle
114	Open Triangle
115	Shaker
116	Jingle Bell
117	Belltree
118	Castanets
119	Mute Surdo
120	Open Surdo

Preset Pattern List

No.	Name	Tempo	Kit
001	Fusion 1	103	1
002	Cool Funk	125	5
003	Country	168	3
004	Electronic&Funk	116	9
005	Modern Pop	136	1
006	HipHop	110	9
007	Latin Jazz 1	130	7
008	Funk 1	120	5
009	Big Band 1	170	6
010	Funk 2	112	1
011	Pop Funk 1	112	1
012	Fusion 2	112	1
013	Funk 3	120	5
014	Fusion 3	108	1
015	Fusion 4	116	1
016	Pop Funk 2	106	5
017	R&B	86	9
018	Drum & Bass 1	168	9
019	Break Beat	108	5
020	Dance	130	9
021	Drum & Bass 2	170	1
022	Latin Dance	126	5
023	Swing	172	6
024	Latin Jazz 2	126	7
025	Big Band 2	152	6
026	3/4 Jazz	120	7
027	Jazz	150	7
028	6/8 Ballad	96	3
029	Pop Ballad	80	3
030	Pop Bossa	120	2
031	16Beat Pop	120	5
032	Pop Shuffle	86	5
033	Samba	236	1
034	Mambo	126	5
035	Latin Rock	136	1
036	Latin Pop	126	5
037	Guitar Bossa	84	5
038	Country Blues	128	3
039	Rock	100	1
040	Reggae	78	1
041	60's Rock	120	2
042	Blues	96	2
Demo Funk		100	1

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

MALLET
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

NET NO.	Standard 1 (bank 0)	Standard 2 (bank 4)	Room (bank 8)	Rock (bank 16)	Funk (bank 17)
27—D#1	High Q	<-	<-	<-	<-
28—E1	Slap	<-	<-	<-	<-
29—F1	Scratch Push	<-	<-	<-	<-
30—F#1	Scratch Pull	<-	<-	<-	<-
31—G1	Sticks	<-	<-	<-	<-
32—G#1	Square Click	<-	<-	<-	<-
33—A1	Metronome Click	<-	<-	<-	<-
34—A#1	Metronome Bell	<-	<-	<-	<-
35—B1	Acoustic Bass Drum	<-	Room Bass Drum 1	Rock Bass Drum 1	Funk Bass Drum 1
36—C2	Standard 1 Bass Drum	Standard 2 Bass Drum	Room Bass Drum 2	Rock Bass Drum 2	Funk Bass Drum 2
37—C#2	Side Stick	<-	<-	<-	<-
38—D2	Standard 1 Snare	Standard 2 Snare	Room Snare	Rock Snare	Funk Snare
39—D#2	Hand Clap	<-	<-	<-	<-
40—E2	Standard 1 Snare Rim	Standard 2 Snare Rim	Room Snare Rim	Rock Snare Rim	Funk Snare Rim
41—F2	Standard 1 Tom 6	Standard 2 Tom 6	Room Tom 6	Rock Tom 6	Funk Tom 6
42—F#2	Standard 1 Hi-hat Close	Standard 2 Hi-hat Close	Room Hi-hat Close	Rock Hi-hat Close	Funk Hi-hat Close
43—G2	Standard 1 Tom 5	Standard 2 Tom 5	Room Tom 5	Rock Tom 5	Funk Tom 5
44—G#2	Standard 1 Hi-hat Pedal	Standard 2 Hi-hat Pedal	Room Hi-hat Pedal	Rock Hi-hat Pedal	Funk Hi-hat Pedal
45—A2	Standard 1 Tom 4	Standard 2 Tom 4	Room Tom 4	Rock Tom 4	Funk Tom 4
46—A#2	Standard 1 Hi-hat Open	Standard 2 Hi-hat Open	Room Hi-hat Open	Rock Hi-hat Open	Funk Hi-hat Open
47—B2	Standard 1 Tom 3	Standard 2 Tom 3	Room Tom 3	Rock Tom 3	Funk Tom 3
48—C3	Standard 1 Tom 2	Standard 2 Tom 2	Room Tom 2	Rock Tom 2	Funk Tom 2
49—C#3	Standard 1 Crash 1	Standard 2 Crash 1	Room Crash 1	Rock Crash 1	Funk Crash 1
50—D3	Standard 1 Tom 1	Standard 2 Tom 1	Room Tom 1	Rock Tom 1	Funk Tom 1
51—D#3	Standard 1 Ride	Standard 2 Ride	Room Ride	Rock Ride	Funk Ride
52—E3	Chinese Cymbal 1	<-	<-	<-	<-
53—F3	Ride Bell	<-	Room Ride Bell	Rock Ride Bell	<-
54—F#3	Tambourine	<-	<-	<-	<-
55—G3	Splash Cymbal	<-	Room Splash Cymba	Rock Splash Cymbal	<-
56—G#3	Standard 1 Cowbell	Standard 2 Cowbell	Room Cowbell	Rock Cowbell	<-
57—A3	Standard 1 Crash 2	Standard 2 Crash 2	Room Crash 2	Rock Crash 2	Funk Crash 2
58—A#3	Vibra-slap	<-	<-	<-	<-
59—B3	Ride Cymbal	<-	<-	<-	<-
60—C4	Hi Bongo	<-	<-	<-	<-
61—C#4	Low Bongo	<-	<-	<-	<-
62—D4	Mute Hi Conga	<-	<-	<-	<-
63—D#4	Open Hi Conga	<-	<-	<-	<-
64—E4	Low Conga	<-	<-	<-	<-
65—F4	High Timbale	<-	<-	<-	<-
66—F#4	Low Timbale	<-	<-	<-	<-
67—G4	High Agogo	<-	<-	<-	<-
68—G#4	Low Agogo	<-	<-	<-	<-
69—A4	Cabasa	<-	<-	<-	<-
70—A#4	Maracas	<-	<-	<-	<-
71—B4	Short Whistle	<-	<-	<-	<-
72—C5	Long Whistle	<-	<-	<-	<-
73—C#5	Short Guiro	<-	<-	<-	<-
74—D5	Long Guiro	<-	<-	<-	<-
75—D#5	Claves	<-	<-	<-	<-
76—E5	Hi Wood Block	<-	<-	<-	<-
77—F5	Low Wood Block	<-	<-	<-	<-
78—F#5	Mute Cuica	<-	<-	<-	<-
79—G5	Open Cuica	<-	<-	<-	<-
80—G#5	Mute Triangle	<-	<-	<-	<-
81—A5	Open Triangle	<-	<-	<-	<-
82—A#5	Shaker	<-	<-	<-	<-
83—B5	Jingle Bell	<-	<-	<-	<-
84—C6	Bell Tree	<-	<-	<-	<-
85—C#6	Castanets	<-	<-	<-	<-
86—D6	Mute Surdo	<-	<-	<-	<-
87—D#6	Open Surdo	<-	<-	<-	<-

GM Drum Kit List

NET NO.	Electronic (bank 24)	808 (bank 25)	House (bank 28)	Jazz (bank 32)	Brush (bank 40)
27—D#1	<-	<-	<-	<-	<-
28—E1	<-	<-	<-	<-	<-
29—F1	<-	<-	<-	<-	<-
30—F#1	<-	<-	<-	<-	<-
31—G1	<-	<-	<-	<-	<-
32—G#1	<-	<-	<-	<-	<-
33—A1	<-	<-	<-	<-	<-
34—A#1	<-	<-	<-	<-	<-
35—B1	Electronic Bass Drum 1	808 Bass Drum 1	House Bass Drum 1	Jazz Bass Drum 1	Brush Bass Drum 1
36—C2	Electronic Bass Drum 2	808 Bass Drum 2	House Bass Drum 2	Jazz Bass Drum 2	Brush Bass Drum 2
37—C#2	<-	<-	<-	<-	<-
38—D2	Electronic Snare	808 Snare	House Snare	Jazz Snare	Brush Snare
39—D#2	<-	<-	House Hand Clap	<-	<-
40—E2	Electronic Snare Rim	808 Snare Rim	House Snare Rim	Jazz Snare Rim	Brush Snare Rim
41—F2	Electronic Tom 6	808 Tom 6	House Tom 6	Jazz Tom 6	Brush Tom 6
42—F#2	Electronic Hi-hat Close	808 Hi-hat Close	House Hi-hat Close	Jazz Hi-hat Close	<-
43—G2	Electronic Tom 5	808 Tom 5	House Tom 5	Jazz Tom 5	Brush Tom 5
44—G#2	Electronic Hi-hat Pedal	808 Hi-hat Pedal	House Hi-hat Pedal	Jazz Hi-hat Pedal	<-
45—A2	Electronic Tom 4	808 Tom 4	House Tom 4	Jazz Tom 4	Brush Tom 4
46—A#2	Electronic Hi-hat Open	808 Hi-hat Open	House Hi-hat Open	Jazz Hi-hat Open	<-
47—B2	Electronic Tom 3	808 Tom 3	House Tom 3	Jazz Tom 3	Brush Tom 3
48—C3	Electronic Tom 2	808 Tom 2	House Tom 2	Jazz Tom 2	Brush Tom 2
49—C#3	<-	808 Crash 1	<-	<-	Brush Crash 1
50—D3	Electronic Tom 1	808 Tom 1	House Tom 1	Jazz Tom 1	Brush Tom 1
51—D#3	<-	<-	<-	Jazz Ride	Brush Ride
52—E3	<-	<-	<-	<-	<-
53—F3	<-	<-	<-	<-	<-
54—F#3	<-	<-	<-	<-	<-
55—G3	<-	<-	<-	<-	<-
56—G#3	<-	<-	<-	<-	<-
57—A3	<-	808 Crash 2	<-	ChineseCymbal 2	Brush Crash 2
58—A#3	<-	<-	<-	<-	<-
59—B3	<-	<-	<-	<-	<-
60—C4	<-	<-	<-	<-	<-
61—C#4	<-	<-	<-	<-	<-
62—D4	<-	808 Mute Hi Conga	<-	<-	<-
63—D#4	<-	808 Open Hi Conga	<-	<-	<-
64—E4	<-	808 Low Conga	<-	<-	<-
65—F4	<-	<-	<-	<-	<-
66—F#4	<-	<-	<-	<-	<-
67—G4	<-	<-	<-	<-	<-
68—G#4	<-	<-	<-	<-	<-
69—A4	<-	<-	<-	<-	<-
70—A#4	<-	808 Maracas	<-	<-	<-
71—B4	<-	<-	<-	<-	<-
72—C5	<-	<-	<-	<-	<-
73—C#5	<-	<-	<-	<-	<-
74—D5	<-	<-	<-	<-	<-
75—D#5	<-	808 Claves	<-	<-	<-
76—E5	<-	<-	<-	<-	<-
77—F5	<-	<-	<-	<-	<-
78—F#5	<-	<-	<-	<-	<-
79—G5	<-	<-	<-	<-	<-
80—G#5	<-	<-	<-	<-	<-
81—A5	<-	<-	<-	<-	<-
82—A#5	<-	<-	<-	<-	<-
83—B5	<-	<-	<-	<-	<-
84—C6	<-	<-	<-	<-	<-
85—C#6	<-	<-	<-	<-	<-
86—D6	<-	<-	<-	<-	<-
87—D#6	<-	<-	<-	<-	<-

MIDI Implementation Chart

	Function...	Transmitted	Recognized	Remarks
Basic	Default	10 ch	1-16	
Channel	Changed	X	X	
	Default	X	X	
Mode	Messages	X	X	
	Altered	**********	**********	
Note		0-127	0-127	
Number:	True voice	**********	0-127	
Velocity	Note on	O 99H, V=1-127	0-127	
	Note off	O (9 9H. V=0)	0-127	
After	Key's	X	X	
Touch	Channel's	X	X	
Pitch Bend		X	O	
Control	0	X	O	Bank Select
Change	1	X	O	Modulation
	5	X	O	Portamento Time
	6	X	O	Data Entry
	7	X	O	Volume
	10	X	O	Pan
	11	X	O	Expression
	64	X	O	Sustain Pedal
	65	X	O	Portamento ON/OFF
	66	X	O	Sostenuto Pedal
	67	X	O	Soft Pedal
	80	X	O	Reverb Program
	81	X	O	Chorus Program
	91	X	O	Reverb Level
	93	X	O	Chorus Level
	120	X	O	All Sound OFF
	121	X	O	Reset All Controller
	123	X	O	All Notes OFF
Program Change		X	O	
System Exclusive		X	O	
System	: Song Position	X	X	
Common	: Song Select	X	X	
	: Tune	X	X	
System	: Clock	O	X	START \ STOP
Real Time	: Commands	O	X	
Aux	: Local ON/OFF	X	X	
	: All Notes OFF	X	X	
Messages	: Active Sense	O	X	
	: Reset	X	X	

O : YES
X : NO

DD403_G03