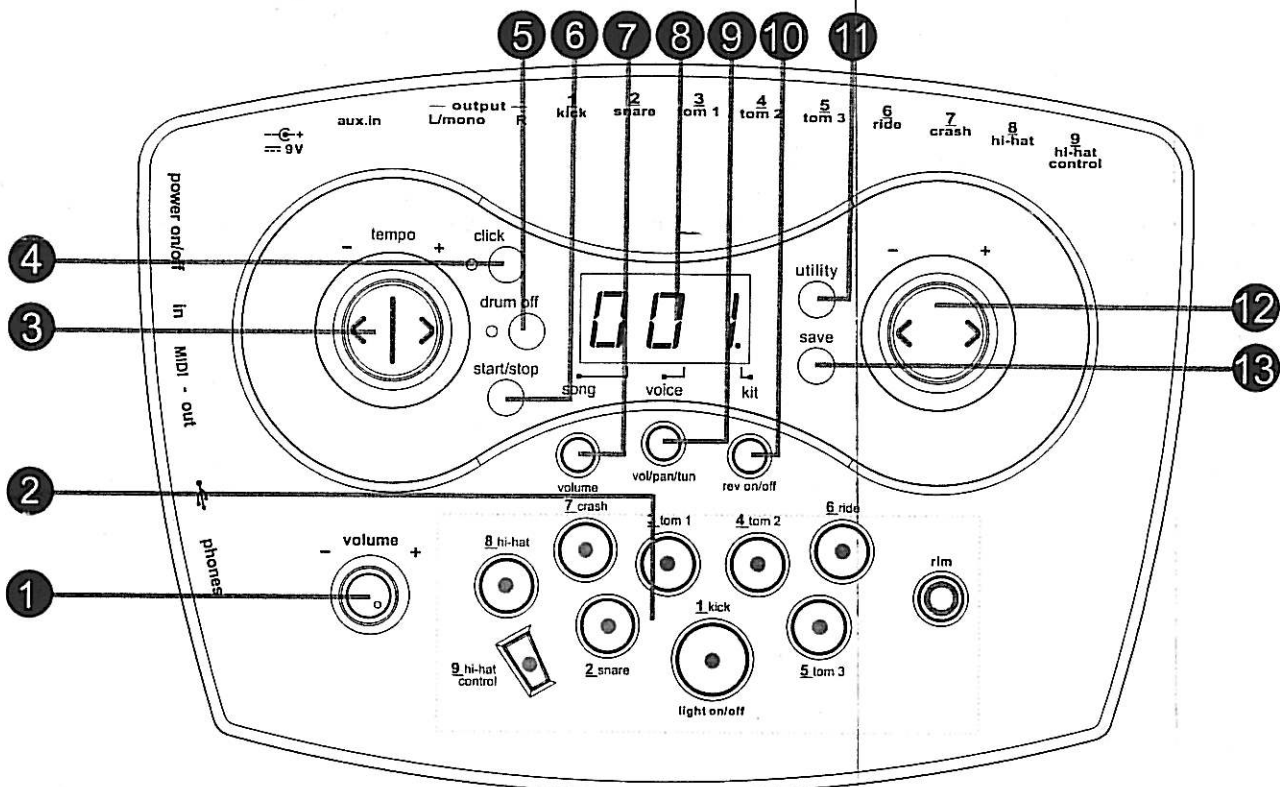# DIGITAL DRUM

Instruction Manual

Panel Controls

Front Panel

1 **Master volume knob**
Control the volume of phone and line output.
Turn it clockwise to increase the volume
and anticlockwise to decrease it.

2 **Pad select buttons and indicators**
Select current pad. When you press them,
the corresponding indicator lights up.

3 **[tempo - / +] button**
Change current tempo.

4 **[click] button**
Turn on or off the metronome.

5 **[drum off] button and indicator**
This button is used to turn on or turn off the
drum voice of song.

6 **[start/stop] button**
Start or stop song playing.

7 **[song / volume] button**
Display the song number, accompaniment volume,
drum volume, local/ external.

8 **3-digit LED display**
Display the parameters of current menu mode.

9 **[voice / volume] button**
Display the voice number, volume, pan and pitch value.

10 **[kit] button**
Display the drum kit number or reverb setting.

11 **[utility] button**
This button is used to enter or switch utility menu pages.

12 **[+] and [-] buttons**
These buttons are used to change the setting
number of kit, voice, song and adjust the corresponding
setting volume.

13 **[save] button**
Save current kit setting to a user kit.

4

Rear Panel
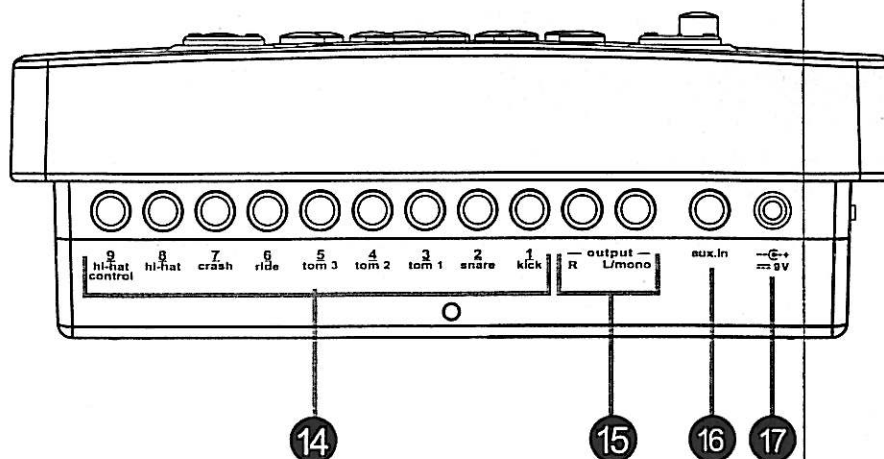
14 Pad input jacks
Connect with pads, cymbals, hi-hat control, kick trigger.

15 Line output jacks (R, L/mono)
made up of right channel output and left channel output which is also used as mono line output.
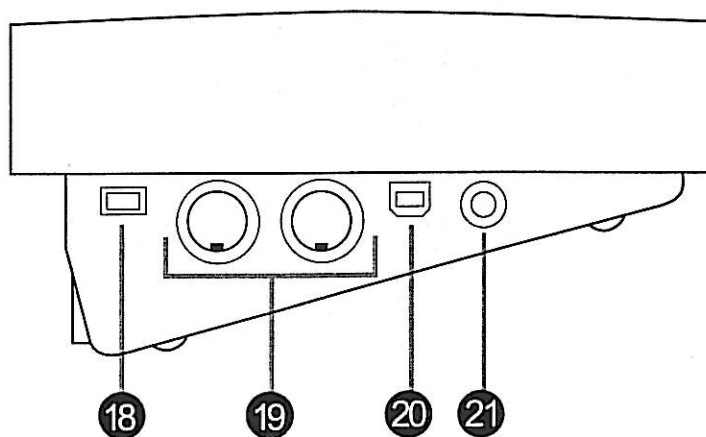
16 Aux.in jack
Connect with external sound source.

17 Power supply jack (DC in 9V)
Connect an AC adaptor to this jack.

Side Panel

18 Power switch
Turn the power on/off.

19 MIDI IN and OUT connector
Connect with external sound module.

20 USB Port
Connect to computer.

21 Phones jack
Connect a pair of stereo headphones to this jack.
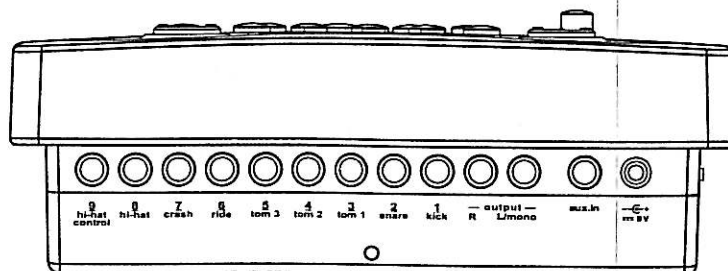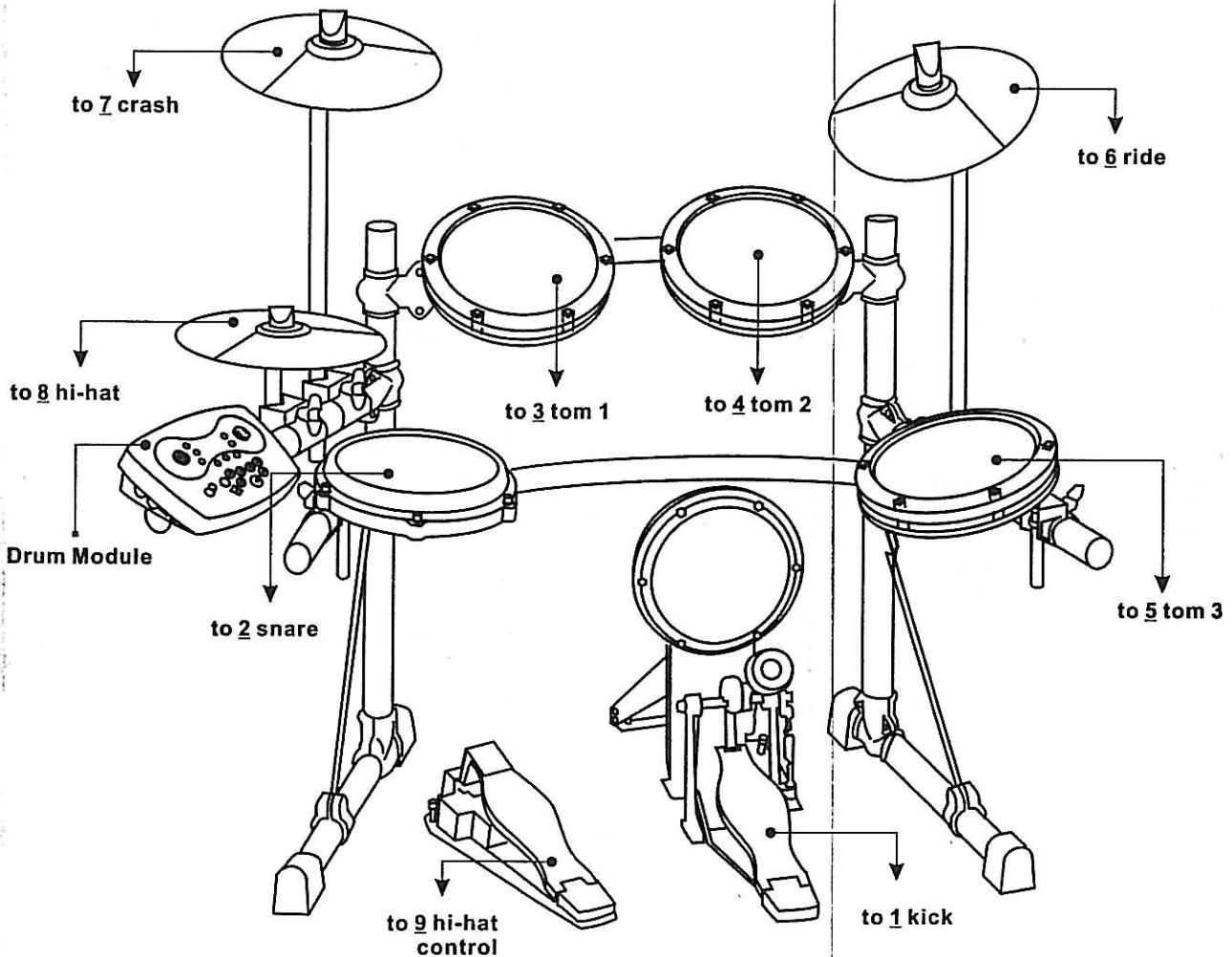(Connect the headphones will not mute the output jacks.)

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.

Connect the pads and the pedal

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:

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 stepped. When the pedal is released, it functions as a 'closed hi-hat'.
2. The valid striking area of a cymbal pad (ride, crash or hi-hat) is near the edge of the pad, which is different from other pads.

to 7 crash

to 6 ride

to 8 hi-hat

to 3 tom 1

to 4 tom 2

Drum Module

to 5 tom 3

to 2 snare

to 9 hi-hat control

to 1 kick

9 hi-hat control   8 hi-hat   7 crash   6 ride   5 tom 3   4 tom 2   3 tom 1   2 snare   1 kick   — output — R L/mono   aux.in   ⏻ 9V

Connect an audio equipment

1. When you want to listen to the voices with an amplifier, connect amplifiers with the Output L/MONO and R 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 VOLUME knob.
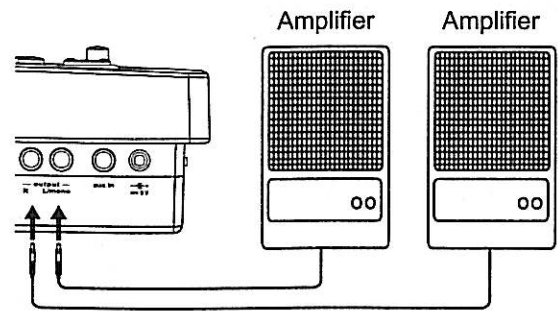
## Connect a CD player, etc.(Aux. In jack)

1. The audio output of a CD player, or other audio source, to connect with the AUX IN jack on the rear panel can be mixed with the sound of the drum. This function is convenient that let you play along with a favourite song.

2. The volume of the external signal is adjusted with the VOLUME knob.
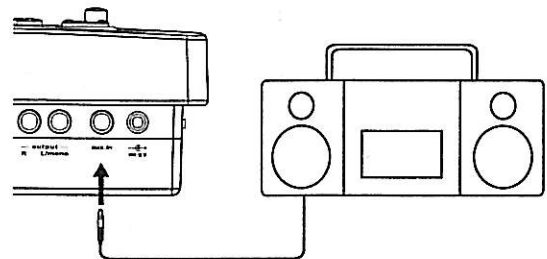
Connect headphones

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

* Adjust the volume to a comfortable level.
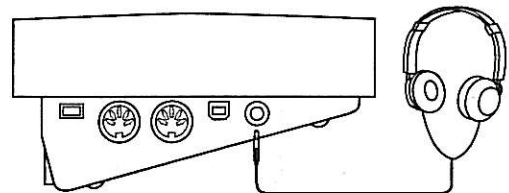
Connect the power supply jack

Make sure the power is switched OFF and connect the power adaptor with 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 switching the power ON.
2. Make sure the power is switched OFF when connecting drum module with external devices.
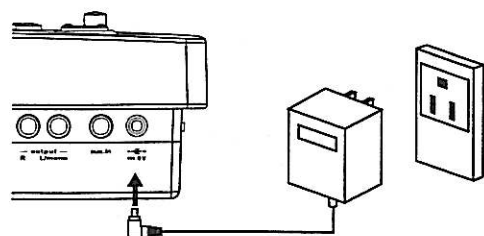
MIDI stands for Musical Instrument Digital Interface, this is a world-wide standard communication interface that enables electronic musical instruments and computers (of all brands) to communicate with each other so that instructions and other data can pass between them. This exchange of information 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 IN: This terminal receives MIDI data from an external MIDI device.
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 & MAC OSX environment. The module will 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.

LOCAL mode
From a MIDI point of view, the module is composed of two 'devices':
* A controller transmitting data: the pads and Hi-Hat control pedal (via an internal trigger to MIDI converter)
* A sound generator receiving MIDI data (the sound module).

In normal operation (Local ON, default mode), those two devices are connected together internally, allowing the pads to play the voices from the sound module without any external connection. When setting Local mode to Local OFF mode in the Utility menu, this internal link is disconnected. The sound module receives MIDI messages via MIDI input only, not from the pads anymore. However, the pad trigger data is still sent to the MIDI output, therefore looping externally the MIDI out of the module back to its MIDI In will enable the pads to play the voices from the sound module. Local OFF mode is intended to be used when both the MIDI input and output (or the USB port) of the module are connected to a MIDI sequencer with soft thru function (which loops the MIDI data received from the MIDI output back to the MIDI input). This prevents doubling or flanging effect when playing the pads (caused by the sound generator receiving the same MIDI data both directly from the pads and back through the sequencer).

MIDI channels
MIDI channel 10: Primary percussion channel
MIDI channel 9: Secondary percussion channel
MIDI channel 1~8, 11~16: Melody voice channels
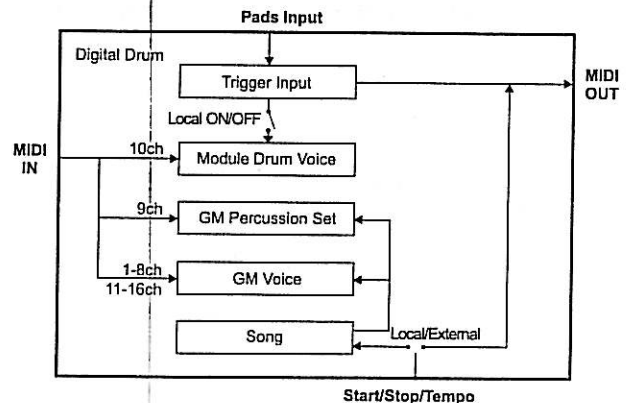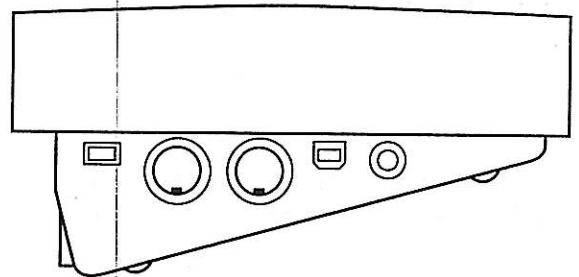
Operation

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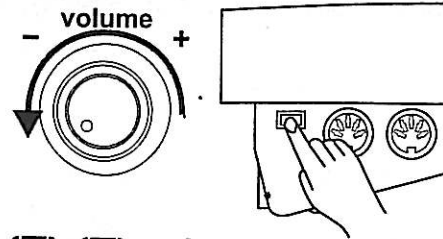
Set the power switch to "on" position to switch on the power. Display shows the kit's number and its indicator lights up.
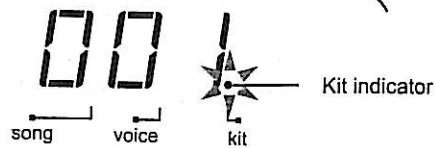
Set the main volume

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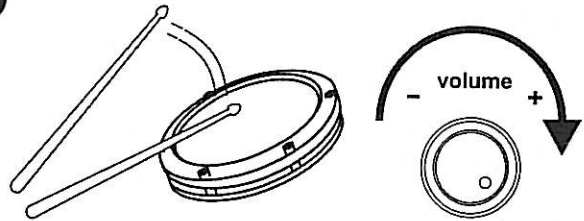
Playing the pads

Head shot
Hit only the head of pad.
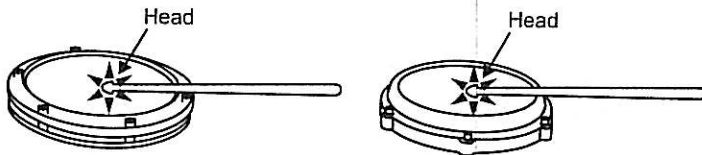
Rim shot
When playing the snare, you must strike both the head and rim of the pad.
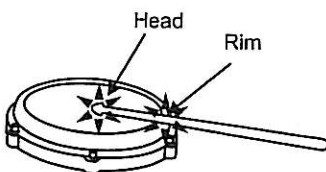
Cymbal Bow or Edge shots
Strike the bow of the pad to produce bow sounds ; And the edge sounds will be heard if you strike the edge of the pad.
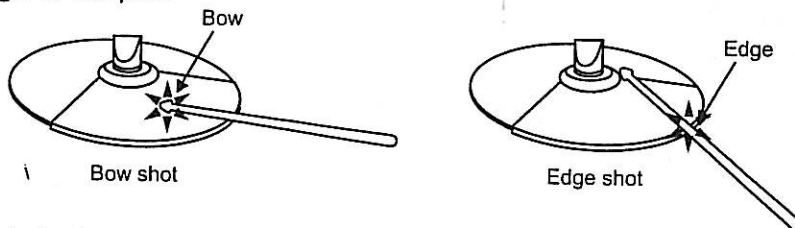
Cymbal choke
Choking the cymbal's edge with the hand immediately after hitting the cymbal makes sound stop.
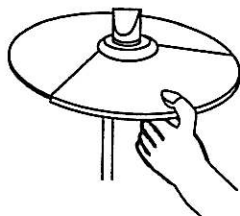
Play with a metronome

There are two types of sounds: Click (Bell and click sounds) and Vocal Counting (one, two, three, four...)

1. Press the [click] button to start the metronome. The beat indicator is flashing and click sound begins to play.

2. Press the [click] button a second time, clicking voice will be switched to vocal counting.

3. Press the [click] button again to stop the metronome.

While the metronome is playing, the display shows the current time signature. There are five time signature types available (2/4, 3/4, 4/4, 5/4, 6/8), which can be selected by button [+] or [-].

Adjust the volume of the click sound
Hold down the [click] button and press the [+] or [-] button, the display shows: " CXX" (XX= metronome volume, 00 to 16), press the press the [+] or [-] button again to adjust the volume.
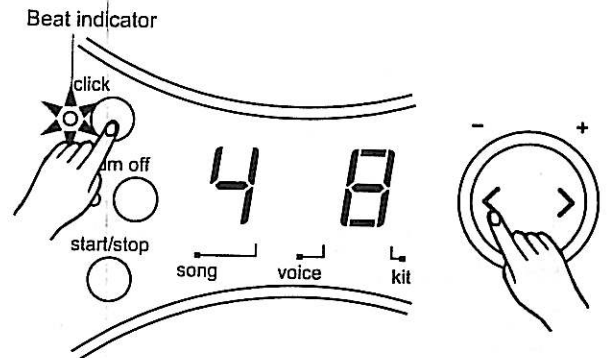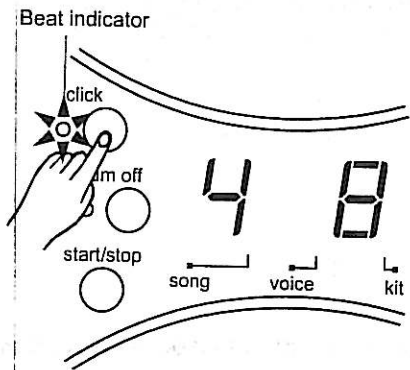
Select a drum kit

The unit comes with 20 (001-020) preset drum kits and 10 user kits (021-030). (Reference kit list: page 21)
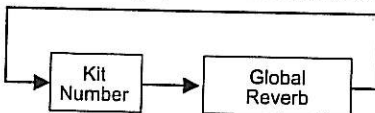
1. Press [kit] button.
   The current kit number appears and the kit indicator lights.

2. Press [+] or [-] buttons to select drum kit number (001-050, looped) you want to use.
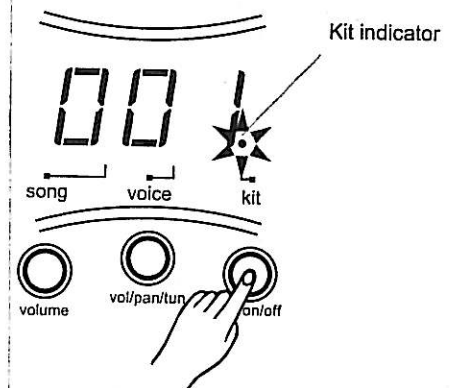
Global reverb

1. In the kit number page, press the [kit] button to enter the global reverb mode, the LED shows the current reverb status("roN" for reverb on of "roF" for reverb off).

2. Press the [+] or [-] buttons to turn or of off the global reverb effect.

3. Press the [kit] button again to return to the kit number page.

Reverb On   Reverb Off
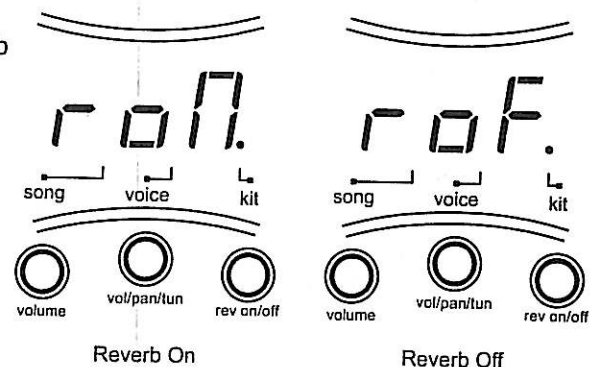
Play a Song

Select a song

This drum module has a total of 50 preset songs.
Note: The preset song setting is 001 after you slide on power.

Song indicator


```
Song      →  Accompaniment  →  Drum    →  Local/External
Number       Volume            Volume     Selection
                                              ↓
                                        External Song
                                        Selected
```
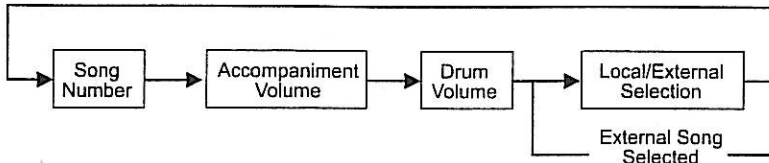
1. Press [song / volume] button.
   The song indicator lights and the current song's number appears.

2. Press [+] or [-] buttons to select one of the song and listen to it.
   Song numbers 001 - 050 are preset songs.
   (Reference song list : page 21)
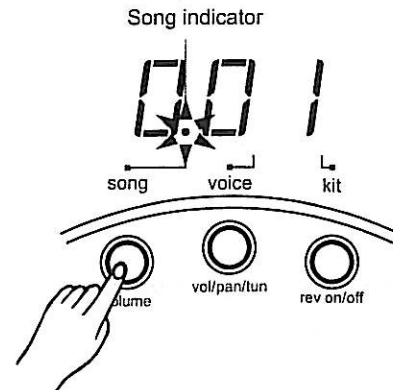
Listen to the song

1. Press [start/stop] button and the pad's indicator will flash
   according to the song play., the song will start playback from
   the beginning.

2. The song will stop when it reaches the end.
   You can stop the song during playback by pressing the
   [start/stop] button.

Beat indicator

Note: The pad's indicator can be lighted off by pressing
[kick] button.
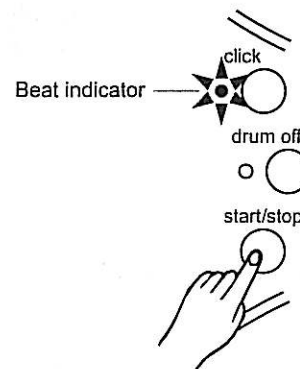
Adjust the accompaniment volume

1. Press the [song/volume] button until "AXX" is displayed.
   (XX = accompaniment volume, 00 to 32)

2. Press [+] or [-] buttons to adjust the volume of song
   accompaniment.

* It will be restored to default value on the next power on.
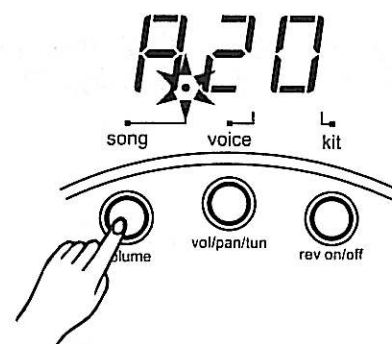
Adjust the drum volume

1. Press the [song/volume] button until "dXX" is displayed.
   (XX = drums part volume, 00 to 32)

2. Press [+] or [-] buttons to adjust the song,s drum volume.

* It will be restored to default value on the next power on.
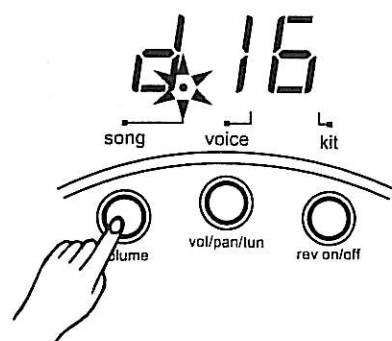
Create a User Drum Kit

Set a drum voice

The unit comes with 307 high quality percussion sounds that you can assign to any of the drum pad, 3 cymbals, hi-hat control and bass drum. This way you can create your own drum kit that consists of the voice you want. (Reference voice list : page 20) The kit number 021-050 is use for saving your own drum kit.

```
┌──▶ Voice   ──▶ Volume ──▶ Pan ──▶ Tuning
│    Number
```
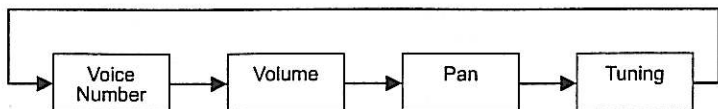
1. Press [voice] button.
   The voice indicator lights and the display shows the voice number of this pad.

2. Press [pad] button or hit the pad you want to set. The pad indicator light and display shows the current voice number of lighting pad.

3. Press [+] or [-] buttons to select the voice number you want to assign.

4. Repeat step 2 and 3 for to set the voice for another pad or bass drum.

Note: When the snare pad is selected, press the [rim] button to select the snare rim (or strike the rim of the snare pad.)
When the cymbal pad (crash or ride) is selected, press the [rim] button to select the edge shot.

Voice indicator

Adjust the volume of the pad

This unit allows you to adjust the volume of every voices in the kit that let you control the individual level (volume) of the pads or bass drum.

1. Press the [voice / volume] button to select the volume level setting display shows : " L XX".
   (XX = level value, 00 to 32)
   The pad button indicator lights and display shows the current volume level of lighting pad.

2. Press the [PAD] button or kit the percussion pad you want to adjust.

3. Press the [+] or [-] buttons to increase or decrease the volume. While you are adjusting, hit the corresponding pad and listen carefully the sound level until reaching the level you want.

4. Repeat step 2 and 3 to adjust the volume of other pad voices.
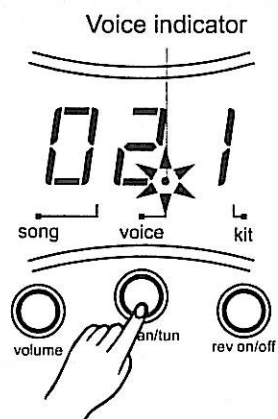
Adjust the pan of the pad

1. Press the [voice] button until the LED display shows : "PXX". (XX = Pan value, -8 to 8). The pad button indicator lights and display shows the current value of lighting pad.

2. Press the [PAD] button or hit the percussion pad you want to adjust.

3. Press the [+] or [-] buttons to adjust the level of the current pad.

4. Repeat step 2 and 3 to adjust the level of other pad.

Note: P-8 (left) -- 0 (center) -- P8 (right)
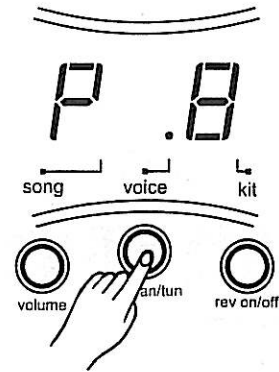
Adjust the tuning of the pad

1. Press the [voice] button until the LED display shows : "tXX". (XX = Tuning value, -8 to 8). The pad button indicator lights and display shows the current value of lighting pad.

2. Press the [PAD] button or hit the percussion pad you want to adjust.

3. Press the [+] or [-] buttons to adjust the tuning of the current pad.

4. Repeat step 2 and 3 to adjust the level of other pad.

Note: P-8 (left) -- 0 (center) -- P8 (right)
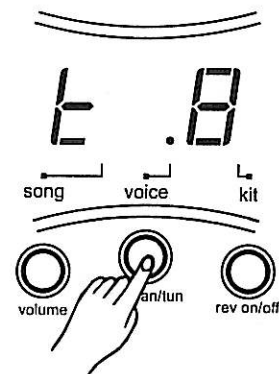
Set a user drum kit

Once completing to your own drum kit, you have to save them in the unit; otherwise your drum kit will be erased when you turn off the unit.

1. Press [voice] button.
   The kit number 021 appears and is flashing.

2. Press [+] or [-] buttons to set the kit number (021-050) for saving your drum kit.

3. Press [save] button again. The flashing kit number stops.

4. Repeat step 2 and 3 for to set the other user kits.
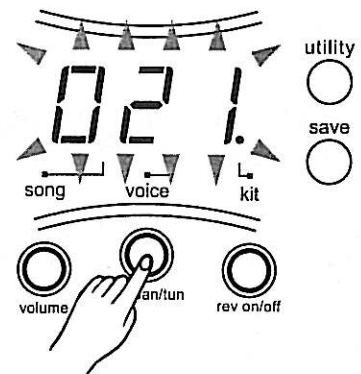
Utility

Press [utility] button will enter utility menu and switch all utility menu pages in turn.

```
┌──────────────────────────────────────────────────────────────────────────────┐
│                                                                                │
│  ┌──────┐    ┌──────────┐   ┌──────────┐   ┌───────┐   ┌──────────┐   ┌────────┐   ┌──────────┐ │
└─▶│ Gain │─▶ │   Rim    │─▶│ Crosstalk│─▶│ Curve │─▶│  Splash  │─▶│  Local   │─▶│ MIDI Out │
   └──────┘    │Sensitivity│   └──────────┘   └───────┘   │Seneitivity│   │  On/Off  │   │  Format  │
              └──────────┘                              └──────────┘   └────────┘   └──────────┘
```
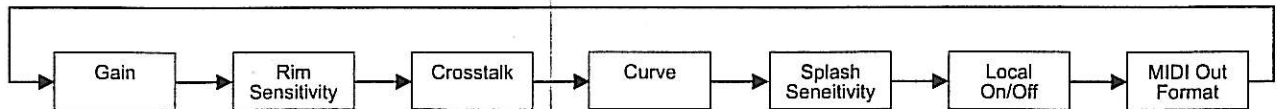
Pad sensitivity

You can adjust the sensitivity(gain) of the inputs from pads.

1. Press the [utility] button until the display shows: "EXX", the pad sensitivity value is indicated. (XX=gain level value, 01 to 16)

2. Press [pad] button or hit the pad you want to set. The pad indicator light .

3. Press [+] or [-] buttons to adjust the sensitivity of pads. Range : 01-16
   Large values will produce a high sensitivity even if the pad is hit softly.
   Lower values will producing a low sensitivity even if the pad is hit forcefully.

4. Repeat step 2 and 3 for to set the voice for another pad or bass drum.

Note: If turn off the power without save, you will lose the changes you have just made.
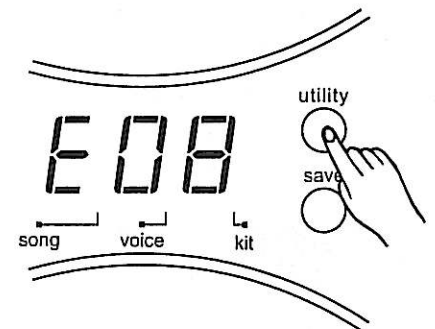
Rim sensitivity

Rim sensitivity(gain) of dual triggers (snare, crash and ride) can be adjusted to balance the head-rim velocities.
Display shows: "rEX", (X=rim sensitivity level, 1 to 8).

1. Press the [utility] button until display shows: "rEX", the rim sensitivity level is indicated.
   (X=rim sensitivity level value, 1 to 8)

2. Press [snare], [crash] or [ride] button, then press [rim] button to adjust the rim sensitivity.

3. Press [+] or [-] buttons to adjust the rim sensitivity.

4. Repeat step 2 and 3 for to set the voice for another pad or bass drum.

Note: A bar will be shown instead of the sensitivity level if rim triggering is not supported by current selected pad.
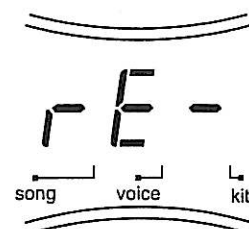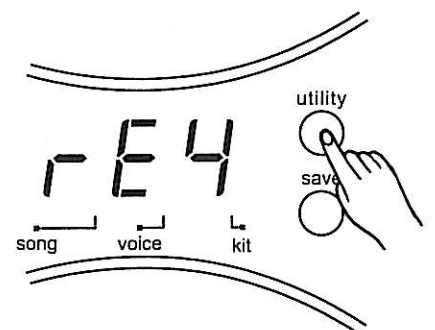
Crosstalk

1. Press the [utility] button until display shows: "oXX", the crosstalk value is indicated. (XX=crosstalk value, 01 to 16).

2. Press [pad] button or hit the pad you want to set. The pad indicator light .

3. Press [+] or [-] buttons to adjust the setting. This effect can be eliminated by setting this parameter to a higher value on the pad that is sounding inadvertently.

4. Repeat step 2 and 3 for to set the voice for another pad or bass drum.
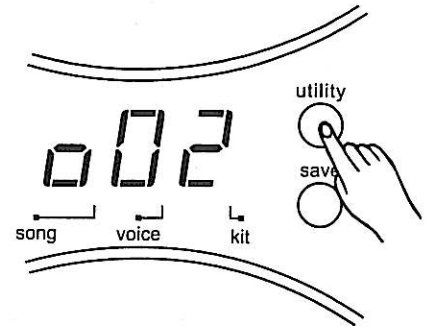
Velocity curve

This setting allows to control the relation between the velocity (Striking force) and the loudness (the dynamic curve).

1. Press the [utility] button until display shows: "CUX", the curve number is indicated. (X=curve number, 1 to 6).

2. Press [pad] button or hit the pad you want to set. The pad indicator light .

3. Press [+] or [-] buttons to adjust the setting.

4. Repeat step 2 and 3 for to set the voice for another pad or bass drum.

Loudness	Loudness	Loudness	Loudness	Loudness	Loudness
Striking force →	Striking force →	Striking force →	Striking force →	Striking force →	Striking force →
Curve 1	Curve 2	Curve 3	Curve 4	Curve 5	Curve 6
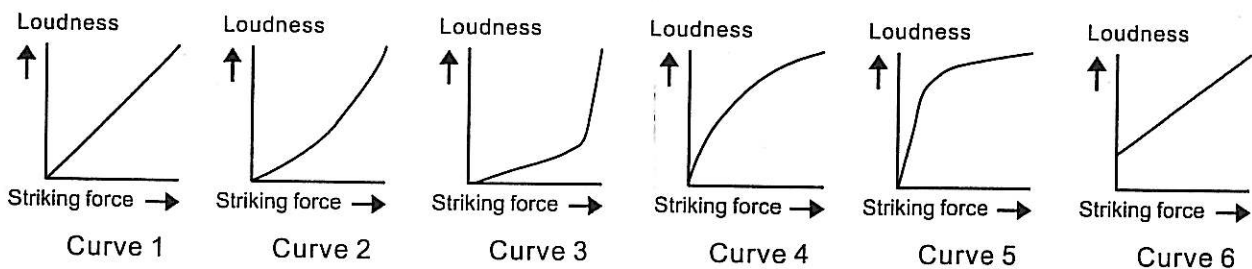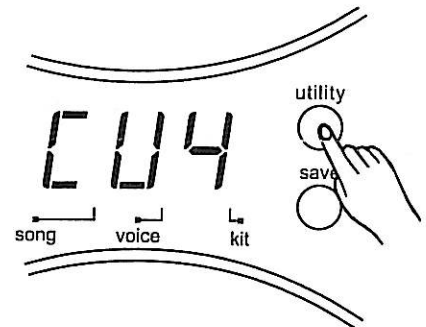
Splash sensitivity

This setting controls the sensitivity of the foot splash.

1. Press the [utility] button until display shows: "FXX", the value number is indicated. (XX= value, -4 to 4).

2. Press [+] or [-] buttons to adjust the setting.
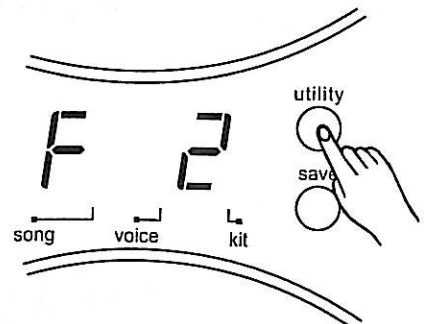
Local

Local control on is the default function mode, display shows: "LoN".
The internal link between pad triggers and sound generator will be
broken when local control is turned off, display show: "LoF".
In local control off mode, the sound module will receive MIDI messages
via MIDI input only. But the functions of panel preview, clicking and
song player are still available in this mode.

LoN

song   voice   kit

Local On

LoF

song   voice   kit

Local Off
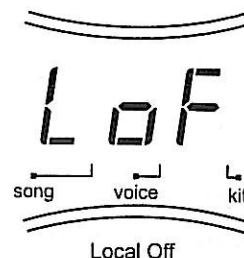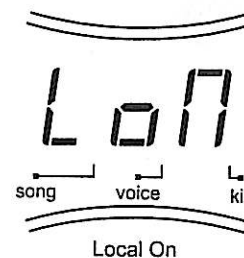
MIDI output

One of the two different MIDI output formats can be select for the
Digital Drum: the internal format (default setting) and the GM format.
The internal format is used when the Digital Drum works as sound
module (Digital Drum to Digital Drum); The GM format is used when
some other sound module applied (the Digital Drum to other product),
such as computer.

When the internal format is selected, the LED shows: "P-N", which
means program change and then note-on/off (program change will
always be transmitted for internal voice bank addressing).
When the GM format is selected, the LED shows: "--N", which means
only the 'note-on/off' will be transmitted (GM percussion note
arrangement, program change not supported!).

NOTE: This setting will only affect the primary percussion channel
(MIDI channel 10).

$P-N$

song   voice   kit

Internal format

$--N$

song   voice   kit

GM format
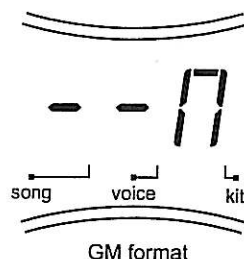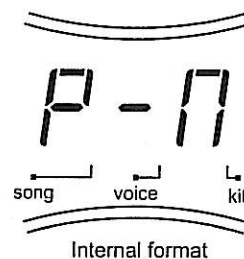
Saving setting

Setting all the data (gain, rim sensitivity, crosstalk, velocity curve and
splash sensitivity), you can save them into built-inmemory, press the
[save] button to store all settings.

Note: If turn off the power without saving, you will lose the changes
you have just made.

Factory reset

This drum module will reset its to initial settings.
Beware all data will be lost.

1. Turn the power off.

2. Turn on the power while holding the [tempo -] and [tempo +]
   Buttons

Specifications

Drum Pad:	4 drum pads , 3 cymbal pads ,1 hi-hat control pedal , 1 kick trigger
Voices:	307 voices
Drum kits:	20 preset kits, 30 user kits
Song:	50 preset songs
Controls:	MIDI IN / OUT, POWER SWITCH, USB, PHONES, START/STOP, SAVE, KIT, VOICE/VOLUME, SONG/VOLUME, DRUM OFF, CLICK, HI-HAT, CRASH, RIDE, HI-HAT CONTROL, SNARE, TOM 1, TOM 2, TOM3, KICK, VOLUME, + / -, TEMPO + / -
Display:	LED display
Connections:	Hi-hat control Hi-hat Crash Ride Snare Tom 1 Tom 2 Tom 3 Kick Output (R & L/MONO) Aux in
Power Supply:	AC adaptor (--- 9V)

Voice List

No.	Name	No.	Name	No.	Name	No.	Name	No.	Name
	KICK		**SNARE**		**TOM**	173	Cartoon Tom 1	241	Junkyard Crash 1
001	Standard Kick 1	039	Star Snare 1	101	Standard Tom 1	174	Cartoon Tom 2	242	Junkyard Crash 2
002	Standard Kick 2	040	Star Snare Rim	102	Standard Tom 2	175	Cartoon Tom 3	243	Noise Crash 1
003	Rock Kick 1	041	Standard Snare 1	103	Standard Tom 3	176	Junkyard Tom 1	244	Noise Crash 2
004	Rock Kick 2	042	Standard Snare Rim	104	Standard Tom 4	177	Junkyard Tom 2	245	SFX Crash 1
005	Rock Kick 3	043	Standard Snare 2	105	Standard Tom 5	178	Junkyard Tom 3	246	SFX Crash 2
006	Room Kick 1	044	Rock Snare 1	106	Standard Tom 6	179	Noise Tom 1	247	Industry Crash
007	Room Kick 2	045	Rock Snare Stick	107	Rock Tom 1	180	Noise Tom 2	248	Industry Crash Bell
008	Jazz Kick 1	046	Rock Snare 2	108	Rock Tom 2	181	Noise Tom 3	249	Standard Crash 4
009	Jazz Kick 2	047	Rock Snare 3	109	Rock Tom 3	182	Voices Tom 1	250	Standard Crash 5
010	Jazz Kick 3	048	Room Snare 1	110	Rock Tom 4	183	Voices Tom 2		
011	Bigband Kick	049	Room Snare Rim	111	Rock Tom 5	184	Voices Tom 3		**HI-HAT**
012	Funk Kick	050	Room Snare 2	112	Rock Tom 6	185	Industry Tom 1	251	Standard Hi-hat
013	Fusion Kick	051	Jazz Snare 1	113	Room Tom 1	186	Industry Tom 2	252	Standard Hi-hat 2
014	Hiphop Kick 1	052	Jazz Snare 1 Rim	114	Room Tom 2	187	Industry Tom 3	253	Rock Hi-hat
015	Hiphop Kick 2	053	Jazz Snare 2	115	Room Tom 3	188	Timpani	254	Pop Hi-hat
016	Hiphop Kick 3	054	Jazz Snare 2 Rim	116	Room Tom 4			255	Brush Hi-hat
017	Hiphop Kick 4	055	Jazzlatin Snare	117	Room Tom 5		**RIDE**	256	1969s Hi-hat
018	1969s Kick	056	Bush Snare	118	Room Tom 6	189	Standard Ride20"	257	Ska Hi-hat
019	1971s Kick	057	Bigband Snare	119	Jazz Tom 1	190	Standard Ride21"	258	House Hi-hat
020	1976s Kick	058	Funk Snare 1	120	Jazz Tom 2	191	Standard Ride21" Bell	259	808 Hi-hat
021	Pwrbd Kick	059	Funk Snare Stick	121	Jazz Tom 3	192	Rock Ride21"	260	909 Hi-hat
022	R&B Kick	060	Funk Snare 2	122	Jazz Tom 4	193	Rock Ride21" Bell	261	Cartoon Hi-hat
023	House Kick 1	061	Fusion Snare	123	Jazz Tom 5	194	Bigband Ride	262	Voices Hi-hat
024	House Kick 2	062	Fusion Snare Stick	124	Jazz Tom 6	195	Bigband Ride Bell	263	Junkyard Hi-hat
025	House Kick 3	063	Pwrbd Snare	125	Brush Tom 1	196	Jazz Ride Bell	264	Noise Hi-hat
026	Drumbass Kick	064	Hiphop Snare 1	126	Brush Tom 2	197	Step Ride	265	Industry Hi-hat
027	808 Kick	065	Hiphop Snare 2	127	Brush Tom 3	198	Step Ride Bell		
028	909 Kick	066	Ringo Snare	128	Brush Tom 4	199	1969s Ride		**PERCUSSION**
029	Electronic Kick	067	Ringo Snare Rim	129	Brush Tom 5	200	1969s Ride Bell	266	High Q
030	Step Kick	068	Lowfi Snare	130	Brush Tom 6	201	Pop Ride	267	Slap
031	Teckno Kick	069	Lowfi Snare Stick	131	Funk Tom 1	202	Ska Ride	268	Scratch Push
032	Voic Kick	070	506 Snare	132	Funk Tom 2	203	Orchestra Ride	269	DJ SFX
033	Lowfi Kick	071	506 Snare Rim	133	Funk Tom 3	204	Teckno Ride 1	270	Sticks
034	Junkyard Kick	072	506 Low Snare	134	Fusion Tom 1	205	Teckno Ride 2	271	Square Click
035	Disco Kick	073	506 Low Snare Rim	135	Fusion Tom 2	206	Junkyard Ride 1	272	Metro Click
036	Industry Kick	074	1969s Snare	136	Fusion Tom 3	207	Junkyard Ride 2	273	Metro Bell
037	Noise Kick	075	1969s Snare Stick	137	1969s Tom 1	208	Cartoon Ride	274	Standard Clap
038	Cartoon Kick	076	1971s Snare	138	1969s Tom 2	209	Voices Ride	275	Tambourine
		077	1971s Snare Stick	139	1969s Tom 3	210	Standard Ride21" Rim	276	Standard Cow Bell
		078	1976s Snare	140	1971s Tom 1	211	Rock Ride21" Rim	277	Mute Cow Bell
		079	1976s Snare Stick	141	1971s Tom 2	212	1969s Ride Rim	278	Rock Cow Bell
		080	R&B Snare	142	1971s Tom 3	213	Pop Ride Rim	279	Vibraslap
		081	R&B Snare Stick	143	1976s Tom 1	214	Ska Ride Rim	280	Hi Bongo
		082	House Snare 1	144	1976s Tom 2			281	Low Bongo
		083	House Snare Rim	145	1976s Tom 3		**CRASH**	282	Mute Hi Conga
		084	House Snare 2	146	Old Tom 1	215	Standard Crash 1	283	Open Hi Conga
		085	Step Snare	147	Old Tom 2	216	Standard Crash 2	284	Low Conga
		086	Step Snare Stick	148	Old Tom 3	217	Standard Crash 3	285	High Timbale
		087	Teckno Snare 1	149	Hiphop Tom 1	218	Standard Crash 1 Bell	286	Low Timbale
		088	Teckno Snare 2	150	Hiphop Tom 2	219	Standard Crash 2 Bell	287	High Agogo
		089	Drumbass Snare	151	Hiphop Tom 3	220	Standard China	288	Low Agogo
		090	808 Snare	152	Hiphop Tom 4	221	Standard Splash8"	289	Cabasa
		091	909 Snare	153	Hiphop Tom 5	222	Standard Splash8" Bell	290	Maracas
		092	Electronic Snare	154	Hiphop Tom 6	223	Rock Crash20"	291	Short Whistle
		093	Junkyard Snare	155	808 Tom 1	224	Rock Splash8"	292	Long Whistle
		094	Junkyard Snare Stick	156	808 Tom 2	225	Jazz Splash10"	293	Short Guiro
		095	Noise Snare	157	808 Tom 3	226	Jazz Splash10" Bell	294	Long Guiro
		096	Industry Snare	158	808 Tom 4	227	Hiphop Crash	295	Claves
		097	Industry Snare Stick	159	808 Tom 5	228	Hiphop Crash Bell	296	Hi Wood Block
		098	Voice Snare	160	808 Tom 6	229	China Crash	297	Low Wood Block
		099	Voice Snare Stick	161	Electronic Tom 1	230	China Carsh Bell	298	Mute Cuica
		100	Cartoon Snare	162	Electronic Tom 2	231	Orchestar Crash 1	299	Open Cuica
				163	Electronic Tom 3	232	Orchestar Crash 2	300	Mute Triangle
				164	Electronic Tom 4	233	Orchestar Crash Bell	301	Open Triangle
				165	Electronic Tom 5	234	Mute Crash Bell	302	Shaker
				166	Electronic Tom 6	235	Drumbass Crash 1	303	Jingle Bell
				167	Step Tom 1	236	Drumbass Crash 2	304	Belltree
				168	Step Tom 2	237	808 Crash 1	305	Castanets
				169	Step Tom 3	238	808 Carsh 2	306	Mute Surdo
				170	909 Tom 1	239	909 Crash 1	307	Open Surdo
				171	909 Tom 2	240	909 Crash 2		
				172	909 Tom 3				

Drum Kit List

No.	Name	No.	Name	No.	Name
001	Fusion	008	House	015	Drumbass
002	Standard	009	Jazz	016	Funk
003	Room	010	Brush	017	Hiphop-3
004	Rock	011	1969songo	018	Huose-2
005	Hiphop	012	1971s	019	Vintage
006	Electronic	013	1976disco	020	Junkyard
007	Cartoon	014	909		
021	M-box	031	Hiphop	041	Drumbass
022	Step	032	Electronic	042	Funk
023	Industry	033	Cartoon	043	Hiphop-3
024	Lowfi	034	House	044	Huose-2
025	Metal	035	Jazz	045	Vintage
026	Pop-rock	036	Brush	046	Junkyard
027	Fusion	037	1969songo	047	M-box
028	Standard	038	1971s	048	Step
029	Room	039	1976disco	049	Industry
030	Rock	040	909	050	Lowfi

Note: Kit 1~20 are preset kits and kit 21~50 are user kits.

Song List

No.	Name	No.	Name	No.	Name
001	Funk 1	018	Pop	035	Funk 2
002	Fusion 1	019	Rock 'n Roll 1	036	Acid Fusion
003	Latin Jazz	020	House	037	Folk Pop
004	Dance	021	Hip Hop	038	Latin
005	Big Band	022	6/8 Ballad	039	Ballad 2
006	Slow Fusion	023	Ballad 1	040	Disco
007	Samba	024	Boogie	041	8 Beat
008	Modern Jazz	025	Punk	042	Funk 3
009	Country	026	Rock 'n Roll 2	043	Slow Rock
010	Reggae	027	Metal	044	R&B 1
011	Salsa	028	16 Beat	045	R&B 2
012	Bluegrass	029	Rhumba	046	6/8 R&B
013	Mambo	030	Shuffle	047	Pop Rock
014	Beguine	031	Swing	048	Hard Rock
015	Drum 'n Bass	032	Blues 1	049	Pop Ballad
016	Jazz	033	Blues 2	050	New Age
017	Bossa	034	Fusion 2		

Percussion Set List

		Standard	Room	Rock	Electronic	808	Jazz	Brush	Orchestra
27	D#1	High Q	<	<	<	<	<	<	Closed Hi-Hat 2
28	E 1	Slap	<	<	<	<	<	<	Pedal Hi-Hat
29	F 1	Scratch Push	<	<	<	<	<	<	Open Hi-Hat 2
30	F#1	Scratch Pull	<	<	<	<	<	<	Ride Cymbal 1
31	G 1	Sticks	<	<	<	<	<	<	<
32	G#1	Square Click	<	<	<	<	<	<	<
33	A 1	Metronome Click	<	<	<	<	<	<	<
34	A#1	Metronome Bell	<	<	<	<	<	<	<
35	B 1	Acoustic Bass Drum	<	<	<	<	Jazz Kick 2	Jazz Kick 2	Concert BD 2
36	C 2	Bass Drum 1	<	Rock Kick Drum	El Kick Drum	808 Kick Drum	Jazz Kick 1	Jazz Kick 1	Concert BD 1
37	C#2	Side Stick	<	<	<	<	<	<	<
38	D 2	Acoustic Snare	<	Rock Snare Drum	El Snare Drum	808 Snare Drum	808 Snare Drum	Brush Tap	Concert SD
39	D#2	Hand Clap	<	<	<	<	<	Brush Slap	Castanets
40	E 2	Electric Snare	<	<	<	<	<	Brush Swirl	Concert SD
41	F 2	Low Floor Tom	Room Low Tom 2	Rock Low Tom 2	El Low Tom 2	808 Low Tom 2	808 Low Tom 2	Brush Low Tom 2	Timpani F
42	F#2	Closed Hi-Hat	<	<	<	<	<	<	Timpani F#
43	G 2	High Floor Tom	Room Low Tom 1	Rock Low Tom 1	El Low Tom 1	808 Low Tom 1	808 Low Tom 1	Brush Low Tom 1	Timpani G
44	G#2	Pedal Hi-Hat	<	<	<	<	<	<	Timpani G#
45	A 2	Low Tom	Room Mid Tom 2	Rock Mid Tom 2	El Mid Tom 2	808 Mid Tom 2	808 Mid Tom 2	Brush Mid Tom 2	Timpani A
46	A#2	Open Hi-Hat	<	<	<	<	<	<	Timpani A#
47	B 2	Low-Mid Tom	Room Mid Tom 1	Rock Mid Tom 1	El Mid Tom 1	808 Mid Tom 1	808 Mid Tom 1	Brush Mid Tom 1	Timpani B
48	C 3	Hi-Mid Tom	Room Hi Tom 2	Rock Hi Tom 2	El Hi Tom 2	808 Hi Tom 2	808 Hi Tom 2	Brush Hi Tom 2	Timpani c
49	C#3	Crash Cymbal 1	<	<	<	<	<	<	Timpani c#
50	D 3	High Tom	Room Hi Tom 1	Rock Hi Tom 1	El Hi Tom 1	808Hi Tom 1	808Hi Tom 1	Brush Hi Tom 1	Timpani d
51	D#3	Ride Cymbal 1	<	<	<	<	<	<	Timpani d#
52	E 3	Chinese Cymbal	<	<	<	<	<	<	Timpani e
53	F 3	Ride Bell	<	<	<	<	<	<	Timpani f
54	F#3	Tambourine	<	<	<	<	<	<	<
55	G 3	Splash Cymabl	<	<	<	<	<	<	<
56	G#3	Cowbell	<	<	<	<	<	<	<
57	A 3	Crash Cymbal 2	<	<	<	<	<	<	Concert Cymbal 2
58	A#3	Vibraslap	<	<	<	<	<	<	<
59	B 3	Ride Cymbal 2	<	<	<	<	<	<	Concert Cymbal 1
60	C 4	Hi Bongo	<	<	<	<	<	<	<
61	C#4	Low Bongo	<	<	<	<	<	<	<
62	D 4	Mute Hi Conga	<	<	<	<	<	<	<
63	D#4	Open Hi Conga	<	<	<	<	<	<	<
64	E 4	Low Conga	<	<	<	<	<	<	<
65	F 4	High Timbale	<	<	<	<	<	<	<
66	F#4	Low Timbale	<	<	<	<	<	<	<
67	G 4	High Agogo	<	<	<	<	<	<	<
68	G#4	Low Agogo	<	<	<	<	<	<	<
69	A 4	Cabasa	<	<	<	<	<	<	<
70	A#4	Maracas	<	<	<	<	<	<	<
71	B 4	Short Whistle	<	<	<	<	<	<	<
72	C 5	Long Whistle	<	<	<	<	<	<	<
73	C#5	Short Guiro	<	<	<	<	<	<	<
74	D 5	Long Guiro	<	<	<	<	<	<	<
75	D#5	Claves	<	<	<	<	<	<	<
76	E 5	Hi Wood Block	<	<	<	<	<	<	<
77	F 5	Low Wood Block	<	<	<	<	<	<	<
78	F#5	Mute Cuica	<	<	<	<	<	<	<
79	G 5	Open Cuica	<	<	<	<	<	<	<
80	G#5	Mute Triangle	<	<	<	<	<	<	<
81	A 5	Open Triangle	<	<	<	<	<	<	<
82	A#5	Shaker	<	<	<	<	<	<	<
83	B 5	Jingle Bell	<	<	<	<	<	<	<
84	C 6	Belltree	<	<	<	<	<	<	<
85	C#6	Castanets	<	<	<	<	<	<	<
86	D 6	Mute Surdo	<	<	<	<	<	<	<
87	D#6	Open Surdo	<	<	<	<	<	<	<

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 (99H. 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		O	O	
System Exclusive		X	O	
System	: Song Position	X	X	
Common	: Song Select	X	X	
	: Tune	X	X	
System	: Clock	O	X	START and STOP only
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