



HD-4



Owner's Manual

Virgin Musical Instruments

Precaution

Thank you for purchasing this electronic instrument. For perfect operation and security, please read the manual carefully and keep it for future reference.

Safety Precautions



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings, install in accordance with the manufacturer's instructions.
- 8) Do not install near the heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety, if the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the



apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over (Figure 1).

13) Unplug this apparatus during lightning storms or when unused for a long period of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION: Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

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

NOTE: 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.

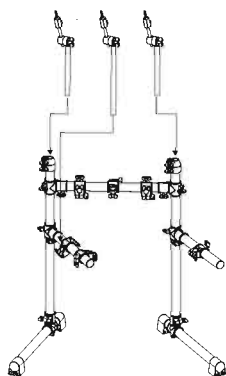
- Consult the dealer or an experienced radio/TV technician for help.

Contents

Assembly Instruction.....	2
Panel Controls	5
Connect.....	9
Connecting the Power Supply.....	9
Connecting an Amplifier.....	9
Connecting a CD Player, etc.(AUX In jack).....	9
USB MIDI.....	10
Using Headphones.....	10
Begin Playing the Drums	11
Switch the Power On	11
Select Drum Kits	12
ENTER Button	12
Back Button	12
Kit Edit Button	13
Setup Button	16
Song Button	20
Click Button	23
Tempo/Tap Button	25
Rec/Play Button	26
Factory Reset	28
Drum Kits List	29
Voice List	30
Style List	34
MIDI Implementation Chart.....	35
Specifications	36

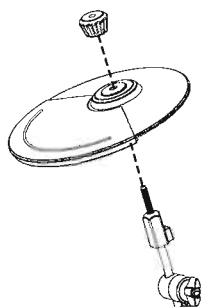
Assembly Instruction

1



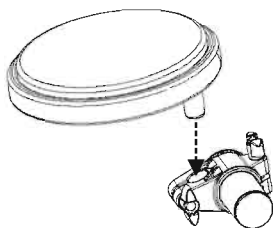
Attach the cymbal arms to the drum frame indicated positions

2



Attach the cymbals to the cymbal arms as shown.

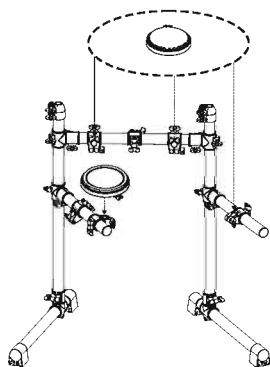
3



Align the holes in Snare Drum Pad and the three Tom Drum Pads and insert into the pole on the Drum Frame as shown.

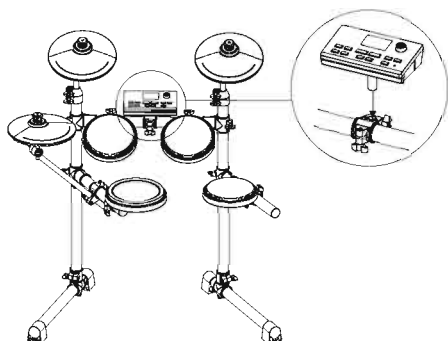
Assembly Instruction

4



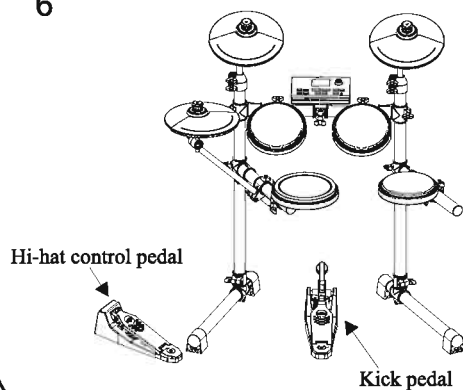
Attach the Drum Pads in the positions shown below.

5



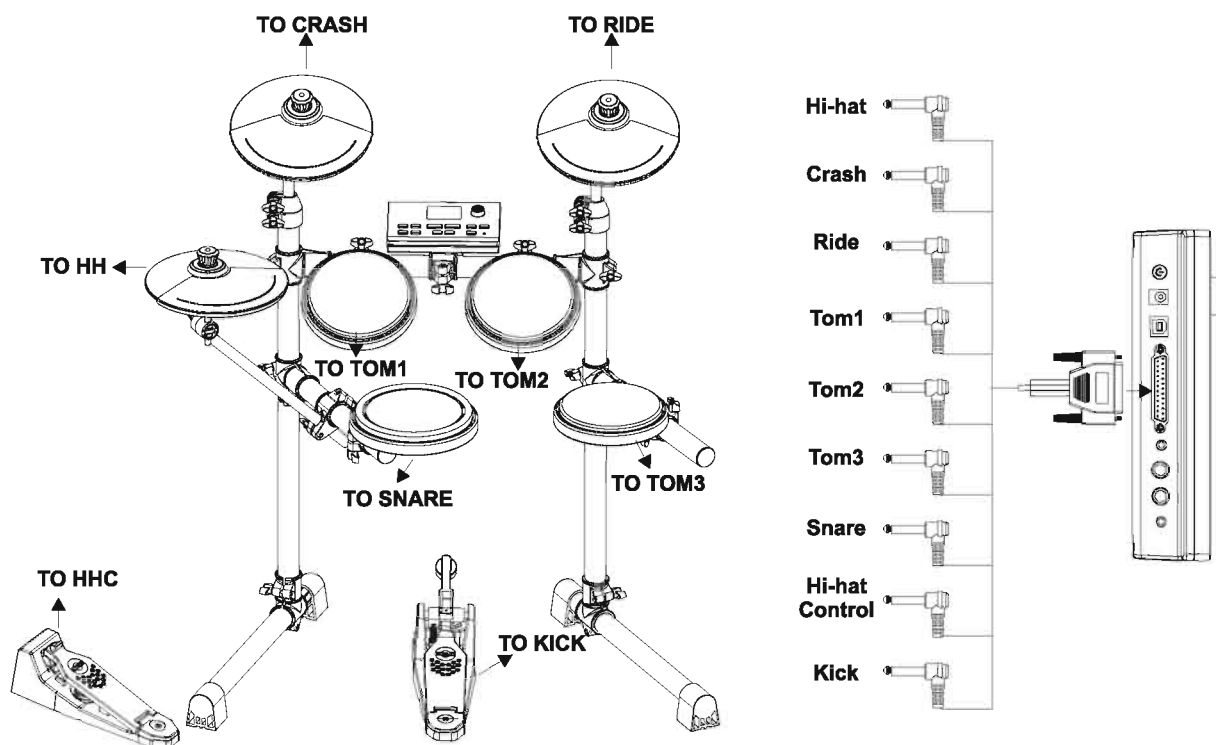
Insert the rod of sound module stand into the Drum Frame clamp as shown, then tighten.

6



Please put Hi-hat control pedal on the left and Kick pedal on the right.

Assembly Instruction

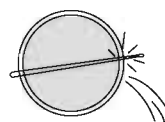


Hi-Hat Foot Controller

- It can produce hi-hat closed sound if you hit hi-hat when pressing foot controller.
- It can produce hi-hat open sound if you hit hi-hat without pressing foot controller.
- Press foot controller directly to produce hi-hat pedal sound.
- The hi-hat tone changes smoothly from open to closed in response to press the pedal while hitting the hi-hat.
- Press the latter part of the pedal quickly and release the pedal immediately to produce splash sound.

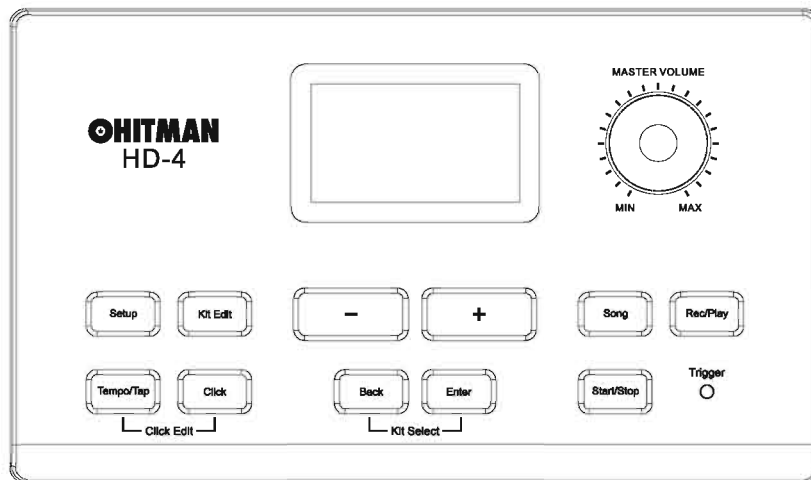
Cross Stick

Only strike the rim of the snare pad to produce stick sound.

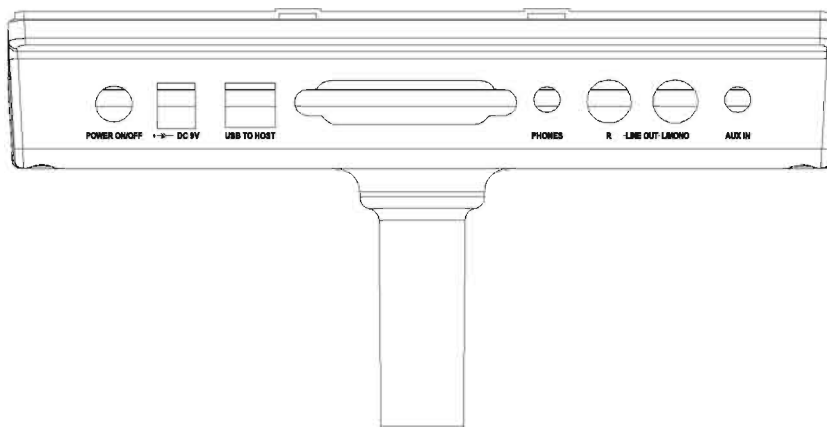


Panel Controls

Top Panel



Rear Panel



Panel Controls

Top Panel

- | | |
|---------------------|---|
| 1.MASTER VOLUME | This is used to adjust LINE OUT volume, headphone volume and LINE IN volume. |
| 2.SETUP Button | This button is used to set retrigger cancel, threshold, velocity curve, effect, etc of the pad. |
| 3.KIT Button | This button is used to set the volume and voice of the pad. |
| 4.+/- Button | This button is used to select the parameters, voices, etc. |
| 5.TEMPO/TAP Button | This button is used to change the song's tempo and metronome tempo, allows you to tap the tempo on the pad to change the song's tempo. |
| 6.CLICK Button | This button is used to enter metronome setting display, to adjust metronome volume, metronome sound and type. |
| 7. SONG Button | This button is used to enter the song select display. You can turn off the percussion track of the song, and adjust the song's volume (percussion track and accompaniment track). |
| 8.START/STOP Button | This button is used to start or stop playing the song. In recording mode, press this button can start or stop recording. In voice selection mode, can listen to the sound. |
| 9.REC/PLAY Button | This button is used to enter recording display, you can also select user song playing mode. |
| 10.ENTER Button | This button is used to confirm current function and save the parameters you set |
| 11.BACK Button | This button is used to return to the previous menu. |

Button Combinations

- | | |
|---------------------------|---|
| 12. [Tempo/Tap] + [Click] | Pressing these buttons at the same time provides access to the volume, sound and time signature of the metronome. |
| 13. [Back] + [Enter] | This button combination is used to return to the Kit Select menu at any time. |

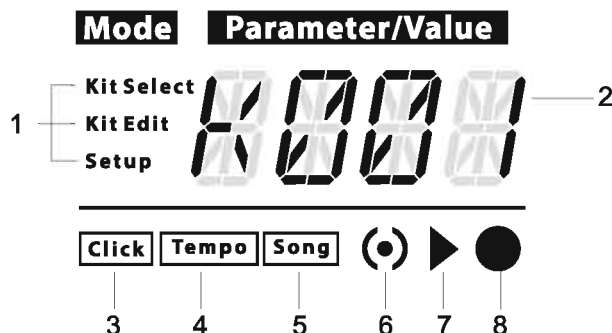
Panel Controls

Rear Panel

- | | |
|--|--|
| 14. USB | Connect to a computer for two-way MIDI communication. This will enable a software program to trigger the drum module sounds, or allow you to use the module as a MIDI trigger interface for the software's virtual drum instruments. |
| 15. Serial connection Jack
for the pad trigger cables | Each pad should be connected to the corresponding trigger input jack on the sound module. |
| 16. POWER ON/OFF | After connecting the included DC adapter, use this switch to turn the power on or off. |
| 17. DC 9V | This jack is intended for use with the included DC adapter only. |
| 18. PHONES | Plug in a pair of stereo headphones here. |
| 19. LINE OUT (R and L) | Stereo audio outputs to connect to external audio sources. |
| 20. AUX IN | Connect the output of an external audio device such as iPod, CD player, etc. |

Panel Controls

The Display

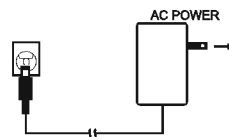


1. Mode
This section indicates which mode you are in depending on which of the three options is lit (Kit Select, Kit Edit, or Setup).
2. Parameter/Value
The four large characters in the display tell you the name of the page you have selected or the value of the current parameter. There are several methods for changing the value or page depending on what is being shown. See the related sections of this manual for details.
3. Click
This icon will light when the metronome is active.
4. Tempo
When this word is lit, the Value being shown is the tempo of the metronome or the current song. You may adjust the tempo using the +/- buttons or by tapping the pad.
5. Song
When this word is lit you'll know the drum module is in Song mode.
6. Metronome indicator
This icon will flash while the click is active, or while recording or playing a song. When the outer edges of the icon are lit, that's the downbeat of the bar. When only the Center dot is lit, that is one of the sub-beats of the current time signature.
7. Playing Song
When the triangle is lit you will know that a song is playing back, not recording.
8. Recording Song
The large dot indicates that a song is currently being recorded. Anything played on the pads will be captured for later playback.

Connect

Connecting the Power Supply

Make sure the power is switch OFF and connect the power adaptor to the “DC 9V” jack on the rear panel.



Connecting an Amplifier

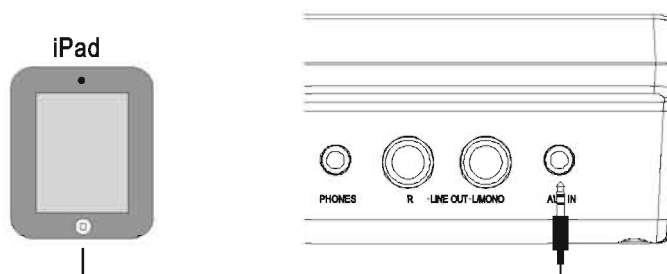
When you want to listen to the voices with an amplifier, connect amplifiers to the LINE OUT jack on the rear panel. The volume is adjusted with the MASTER VOLUME knob.



Connecting a CD Player, etc. (AUX In jack)

The audio output from a CD player connected to the AUX IN jack on the rear panel can be mixed with the sound of the drum brain. This function is convenient when you want to play along with a favourite song.

The volume of the external signal is adjusted with the MASTER VOLUME knob.

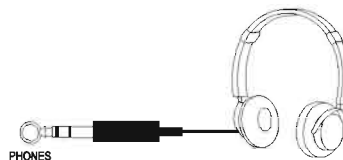


USB MIDI

Your drum module is USB class-compliant. This means you can plug it into a USB class-compliant host (for example, a computer running OS X, Windows XP, Vista or Windows 7) and it should be recognized immediately. There are no drivers to install; simply plug n' play. If you connect the drum module to a computer, you can trigger drum libraries on the computer or record your performance into a MIDI sequencing application. Check the operation and setup instructions for the software you intend to use for more details.

Using Headphones

An optional set of stereo headphones can be connected to the PHONES jack located to the left side of the unit. Use the [MASTER VOLUME] to adjust the headphone volume.

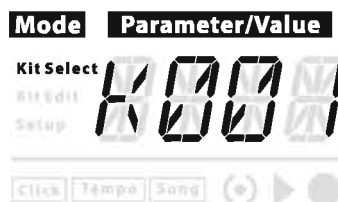
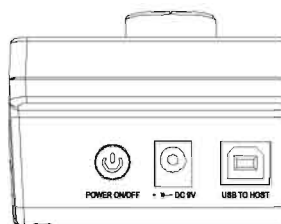


Note: Never use headphones in high volume, as it may hurt your ears.

Begin Playing the Drums

Switch the Power On

With everything set up and ready to go, it's time to start playing the drum kit. Locate the on/off power switch on the drum module and switch the power on. The drum module is ready to operate when the display shown below appears. This is the location from which you select the drum kit you want to play or edit.



Next, connect headphones or a speaker system as described on the previous two pages. Start with the MASTER VOLUME set to MIN and press the [Start/Stop] button on the drum module. Gradually increase the volume until you hear a song playing through your speaker system or headphones. If you hear no sound, please check all of the cables connecting the drum module to your speakers and repeat the procedure. When the levels are set to a comfortable level, press the [Start/Stop] button again to stop the song.

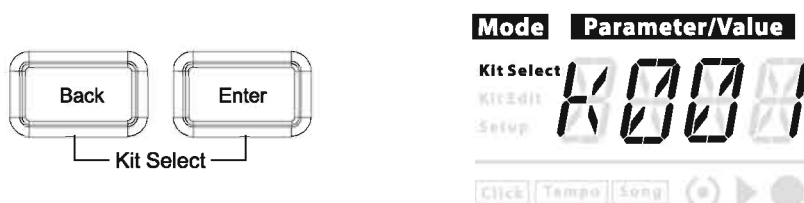
Once you have established that your sound system or headphones are connected correctly to the drum module, play each of the pads, cymbals, and kick and hi-hat pedals. You should hear a sound for every hit. If one pad or cymbal does not play a sound, check the cable connection from that pad to the sound module.

With everything set up and the kit sounding from all pads, it's time to start playing! When you are ready to learn more about your new drum system, pick up the manual again and continue with the next page.

Begin Playing the Drums

Selecting Drum Kits

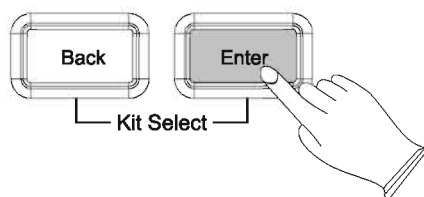
Ready to explore the sound module some more? Then let's cover the rest of the features. The unit comes with 25 preset drum kits, any of which may be edited to suit your tastes. If you're not already at the Kit Select display, press the buttons marked [Back] and [Enter] to get there. You will see the number of the current kit appear in the LCD display along with the letter "K" (for "Kit"). The display should look something like the image pictured below. You can use the [-/+] buttons to step through any of the 30 kits. For a complete list of the preset kits, please see page 29 of this manual.



[Enter] button

Think of the [Enter] button as similar to the Enter or Return key on a computer. It has two main functions:

- To take the unit down another menu level in one of the modes (Kit Edit, Setup, and Song)
- To confirm and save the new value or function of an edited parameter.

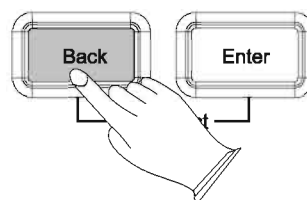


Once the selection has been confirmed, the display will return to the previous menu.

[Back] button

Press the [Back] button if you want to quit the current menu.

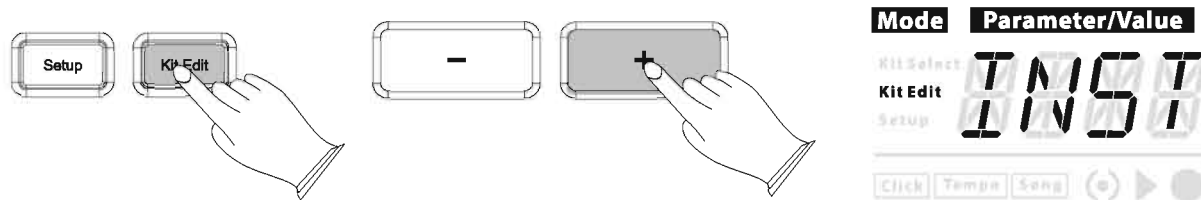
Once pressed the LCD display will take you back to the previous menu.



Begin Playing the Drums

[Kit Edit] Button

Press the [Kit Edit] button, the LCD will display “INST” (Instrument), now, you can use the [+/-] buttons or [Kit Edit] button to select “LEVL” (Level), “REVL” (Reverb Level), “CHOL” (Chorus Level), “COPY” (Copy), and “REST” (Reset).



A. Selecting an Instrument (INST)

Press the [Kit Edit] button: the LCD will display “INST”

1. Press [Enter] button.
2. There are two ways to choose a drum at this point:
 - a. Use the [-/+] buttons to select the desired pad from the list below:

<i>KICK</i>	Bass Drum	<i>RIDE</i>	Ride
<i>SNAR</i>	Snare	<i>CRSH</i>	Crash
<i>SN-R</i>	Snare Rim	<i>HH-O</i>	HiHat Open
<i>TOM1</i>	Tom 1	<i>HH-C</i>	HiHat Closed
<i>TOM2</i>	Tom 2	<i>HH-P</i>	HiHat Pedal
<i>TOM3</i>	Tom 3	<i>HH-S</i>	HiHat Splash

- b. Hit the drum that you want to set.

For example: to select snare voice

1. Press [Kit Edit] button, the LCD will display “INST” .
2. Press [Enter] button, use the [+/-] buttons or hit the snare pad forcefully to select the voice.
3. Press [Enter] button and use the [-/+] buttons to select new snare voice.

In this mode you also can press [Start/Stop] button to listen to the voice.

4. Press [Enter] button to confirm or press [Back] button to return.

Begin Playing the Drums

B. Pad Volume (LEVL)

1. Press the [Kit Edit] button: the LCD will display “INST” .
2. Use the [-/+] buttons or the [Kit Edit] button to select the “LEVL” menu.
3. Press [Enter] button.
4. There are two ways to choose a drum at this point:
 - a. Use the [-/+] buttons to select the desired pad from the list below:

<i>KICK</i>	Bass Drum	<i>RIDE</i>	Ride
<i>SNAR</i>	Snare	<i>CRSH</i>	Crash
<i>SN-R</i>	Snare Rim	<i>HH-O</i>	HiHat Open
<i>TOM1</i>	Tom 1	<i>HH-C</i>	HiHat Closed
<i>TOM2</i>	Tom 2	<i>HH-P</i>	HiHat Pedal
<i>TOM3</i>	Tom 3	<i>HH-S</i>	HiHat Splash

- b. Hit the drum that you want to set.

For example: to select snare voice

1. Press [Kit Edit] button, the LCD will display “INST” .
2. Use the [-/+] buttons or the [Kit Edit] button to select the “LEVL” menu .
3. Press [Enter] button, use the [+/-] buttons or hit the snare pad forcefully to select the voice.
4. Press [Enter] button and use the [-/+] buttons to set a value(Range: 000-127).
In this mode you also can press [Start/Stop] button to listen to the voice.
5. Press [Enter] button to confirm or press [Back] button to return.

C. Reverb level (REVL)

Press the [Kit Edit] button, use the [-/+] buttons or the [Kit Edit] button to select the “REVL”
Press [Enter] button, use the [+/-] buttons to select a pad (For example: SNAR).
Press [Enter] button and use the [-/+] buttons to set a value(Range: 000-127).
Press [Enter] button to confirm or press [Back] button to return.

D. Chorus level (CHOL)

In the [Kit Edit] mode, press the [Enter] button, use the [+/-] buttons to select “CHOL”
Press [Enter] button, use the [+/-] buttons to select a pad (For example: SNAR).
Press [Enter] button and use the [-/+] buttons to set a value(Range: 000-127).
Press [Enter] button to confirm or press [Back] button to return.

Begin Playing the Drums

E. Copy Drum Kit to New Location (COPY)

Any drum kit can be copied from any one of the 25 kit locations. This is handy if you want to change the order in which the kits appear for a live performance, for example.

To copy the current drum kit to another location:

1. Press the [Kit Edit] button: the LCD will display “INST” .
2. Use the [-/+] buttons or the [Kit Edit] button to select the “COPY” menu.
3. Press [Enter] button and use the [-/+] buttons to select one of the drum kit numbers as the destination. The display will flash the number of the targeted kit (USE1~USE5) .

Note: the next step will overwrite the destination kit. Be sure you have chosen the right one before you proceed!

Press [Enter] button to confirm the destination kit to be overwritten or press [Back] button to exit the Copy function without making any changes.

If you pressed [Enter] to execute the Copy function in the previous step, the display will flash “END” and exit to the Kit Select page with the new location selected.

F. Resetting the Current Drum Kit(REST)

If you have made changes to the current drum kit and decide you want to get back to the factory starting point, we've provided a way to do this.

The procedure has been divided into two parts: resetting the instrument/pad assignments and resetting the effects. We'll cover how to reset the effects in the next section. If you want to reset the instrument/pad assignments for the current drum kit, here's what to do:

1. Press the [Kit Edit] button: the LCD will display “INST”
2. Use the [-/+] buttons or the [Kit Edit] button to select the “RSET” menu
3. Press [Enter] button. The display will flash “END” and return to the previous menu.

Begin Playing the Drums

[SETUP] Button

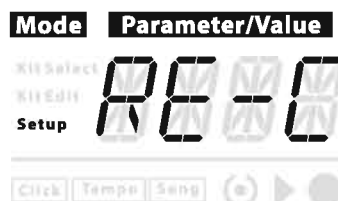
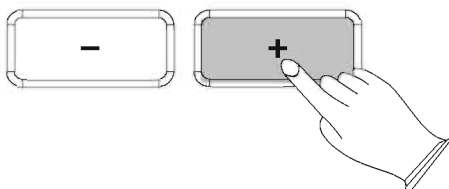
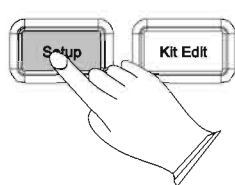
In this mode, you can set the Pad Trigger, Local On/Off, Effects, Sleep On/Off, and Resetting functions.

A. Trigger Setting

The trigger functions allow you to adapt how the drum module responds to your playing style. Adjustable parameters include sensitivity, threshold, velocity curve and crosstalk. We will explain each function in detail, but first, let's go through the basic process of changing these parameters.

For example, if you would like to adjust the trigger settings for the snare drum pad:

1. Press the [Setup] button: the display will display "TRIG"
2. Press [Enter] button and use the [-/+] buttons to select one of the options (RE-C, THRS, CURV and XTAL).



3. Press [Enter] button and use the [-/+] buttons to select the desired pad from the list below:

<i>KICK</i>	Bass Drum	<i>RIDE</i>	Ride
<i>SNAR</i>	Snare**	<i>CRSH</i>	Crash
<i>SN-R</i>	Snare Rim**	<i>HHAT</i>	HiHat Closed*
<i>TOM1</i>	Tom 1	<i>HH-C</i>	HiHat Pedal
<i>TOM2</i>	Tom 2	<i>HH-S</i>	HiHat Splash
<i>TOM3</i>	Tom 3		

4. Press [Enter] button to access the adjustable parameter and use the [-/+] buttons to select a new value.
5. Press [Enter] button to confirm the choice or press [Back] button to retain the original value.

* The Open and Closed hi-hat triggers share the same set of trigger parameters, so you will see the same label in the display for both.

**The Snare and Snare Rim triggers share the same set of SENSparameters, but their THRS, CURV and XTLK parameters are independent.

Begin Playing the Drums

- SENS** Sensitivity: Simply put, set this to as high a value as you can. The lower the value, the less sensitive the pad will be. If you find the pad overly sensitive, including the unexpected triggering of the pad you are playing, try reducing the sensitivity of the pad a little. Range: 001-008
- THRS** Threshold: This setting allows a trigger signal to be received only when you hit the pad above a certain force level. This can be used to prevent a pad from sounding because of vibrations from other pads. When set to a higher value, no sound is produced when you strike the pad lightly. Range: 000-050
- CURV** Velocity Curve: This allows you to choose a curve for each pad so it responds the way you want. There are four velocity curves from which to choose: Normal (NORL), Dynamic (DYN), EASY, and Fixed (FID).
- EASY** As the name implies, this curve makes it relatively easy to reach the maximum MIDI velocity of 127. So as a general rule, lower velocity hits are more likely to produce a louder volume.
- NORL** Allows an evenly-distributed change in output in response to changes in velocity.
- DYN** This setting provides the widest dynamic range overall. As a result it is possible to play more quietly, easier to produce a more subtle change in volume, and requires slightly more forceful playing to reach the maximum MIDI velocity of 127.
- FID** No matter how hard or soft you hit the pad, the engine will always receive a MIDI velocity of 100.
- XTAL** Crosstalk can happen when you strike one of the pads forcefully, causing one of the other instruments in the kit to be triggered unintentionally. When you have noticed that one trigger pad is picking up signals from the other pads, adjust the XTAL setting for the affected pad to a higher value until it stops receiving trigger events from the pads that are causing the problem. Range: 000-080

Note: the hi-hat foot trigger (HH-P) does not offer adjustments for SENS, THRS, or XTAL. HH-S does not offer adjustments for THRS or XTAL. You will see the word "NULL" when you select those parameters for those instruments. You can adjust their velocity curves, however.

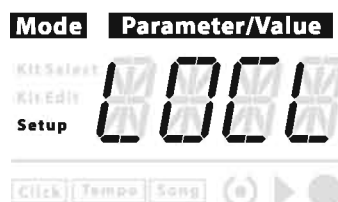
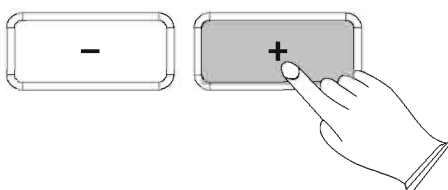
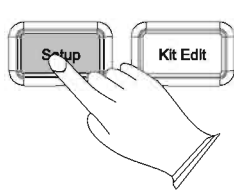
Begin Playing the Drums

B. Using the Drum Pads as MIDI Triggers Only (LOCL)

You might want to use the pads to trigger another sound source over USB but not hear the drum module's internal sounds at the same time. This condition is known as "Local Off." It can also be useful if you are triggering the drum module's sounds via USB MIDI and want to eliminate any double triggering.

To configure the drum module in this way, do the following:

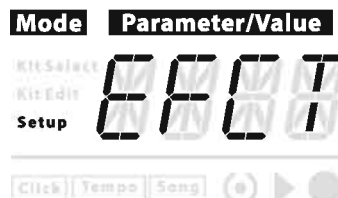
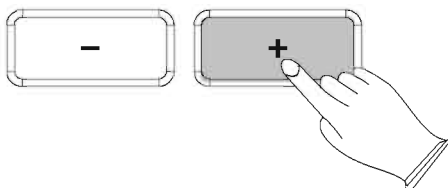
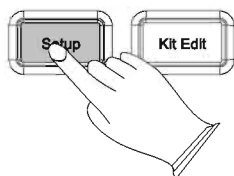
1. Press the [Setup] button: the LCD will display "TRIG"
2. Use the [-/+] buttons or the [Setup] button to select the "LOCL" menu.
3. Press [Enter] and use the [-/+] buttons to select either "Off" or "On" depending on what you want to do. "On" is the normal operating mode: when you play the pads the internal sounds will trigger. "Off" will not trigger the internal sounds directly.
4. Press [Enter] to confirm the choice, or press [Back] to exit without making any changes.



C. Defeating the Effects for All Drum Kits (EFCT)

We have added reverb effects to many of the drum kits. However, it's possible you might want to turn off the reverb for all of the drum kits and process the audio with an external effects unit. To do this:

1. Press the [Setup] button: the LCD will display "TRIG"
2. Use the [-/+] buttons or the [Setup] button to select the "EFCT" menu.
3. Press [Enter] and use the [-/+] buttons to select one of the following options:
 - REVB: The next step will allow you to toggle the reverb off or on for all kits
 - CHRS: The next step will allow you to toggle the chorus off or on for all kits



Begin Playing the Drums

4. Press [Enter] button and use the [-/+] buttons to select the reverb or chorus styles:
5. Press [Enter] button again to confirm your choice or press [Back] button to exit to the previous menu without having changed anything.

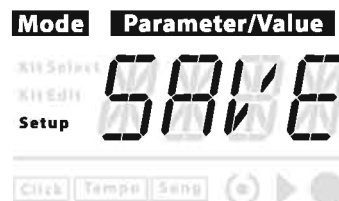
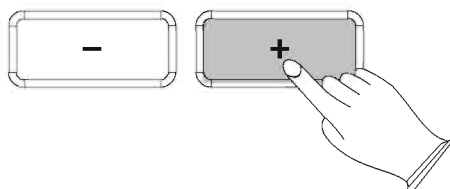
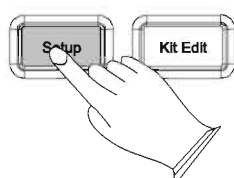
D. Sleep on/off

Press the [SETUP] button and use the [+/-] button to select “SAVE” , then press [ENTER] button, use [+/-] button to select “On” or “Off” .

Press the [ENTER] button to confirm.

“ON” Mode: When the Sleep Function is on and there is no operation within thirty minutes, the drum will automatically enter the Sleep State. Press [POWER ON/OFF] button twice to restart.

“OFF” Mode: Turns the Sleep function off.

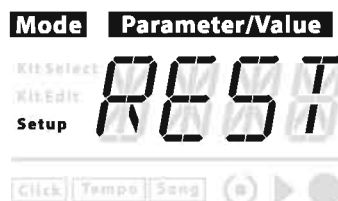
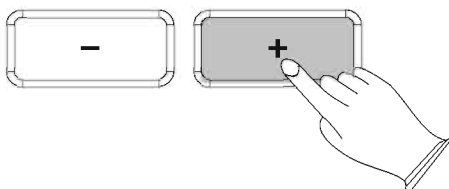
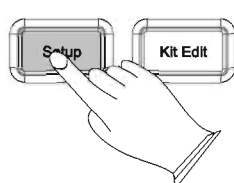


Begin Playing the Drums

E. Restoring All Trigger Settings to the Factory Defaults (REST)

If you have set up your drum kit in a new location, such as on a stage with a drum riser, you may find that you need to readjust your trigger crosstalk settings, for example. If you would prefer to start over from the factory trigger settings, follow this procedure:

1. Press the [Setup] button: the LCD will display “TRIG”
2. Use the [-/+] buttons or the [Setup] button to select the “REST” menu.
3. Press [Enter] button. The display will flash “END” and the settings will have been restored to their factory defaults.



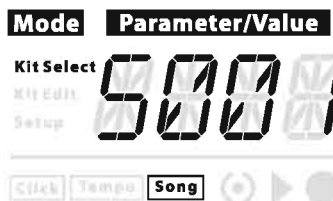
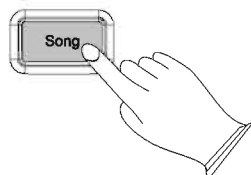
[Song] button

Your drum provides 30 (001-030) preset songs, and 2 (d-1/d-2) song demos.

Song Selection

Here's how to select and listen to the songs:

1. Press the [Song] button. The display will show the number of the last song selected.
2. Use the [-/+] buttons to select one of the songs you'd like to listen to.
3. Press the [Start/Stop] button to start or stop the song.

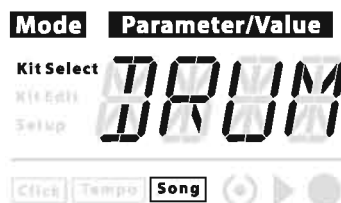
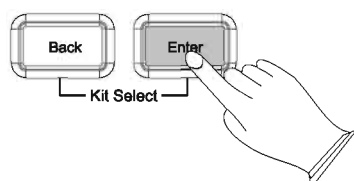


Begin Playing the Drums

A. Drum On/Off (DRUM)

We've included songs in a number of styles and tempos from which you can choose. If you would like to play along to these songs without listening to the pre-recorded drum and percussion parts, here is the method for disabling those parts:

1. Press the [Song] button the the LCD will display "S001"
2. Press [Enter] button and use the [-/+] buttons to select the "DRUM" menu
3. Press [Enter] button and use the [-/+] buttons to select either "Off" or "On" depending on what you want to do. If you want to mute the pre-recorded drums, select "Off."
4. Press [Enter] button to confirm. Note: The value will be returned to "On" on power-down.

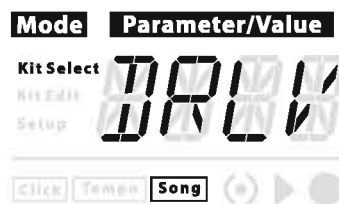
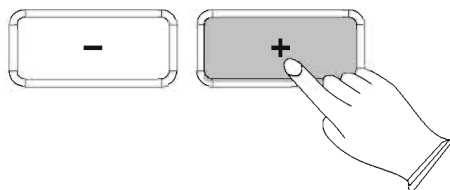
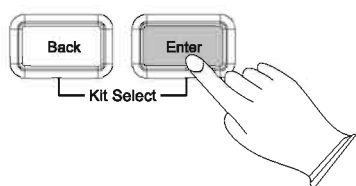


B. Drum Part Volume (DRLV)

If you'd like to adjust the volume of the pre-recorded drums while listening to or playing along with the songs, here is how to do that:

1. Press the [Song] button the the LCD will display "S001"
2. Press [Enter] and use the [-/+] buttons to select the "DRLV" menu
3. Press [Enter] and use the [-/+] buttons to adjust the volume up or down. Press both [-] and [+] at the same time to reset the drum part volume to the default value of 028. Range: 000-032
4. Press [Enter] to confirm the new value. The change is not permanent, though; the value will be returned to the default value of "028" on power-down.

Note: The drum part volume setting of 000 will silence the drum parts, but a quicker way to do that is to use the Drum On/Off feature described on the previous page.



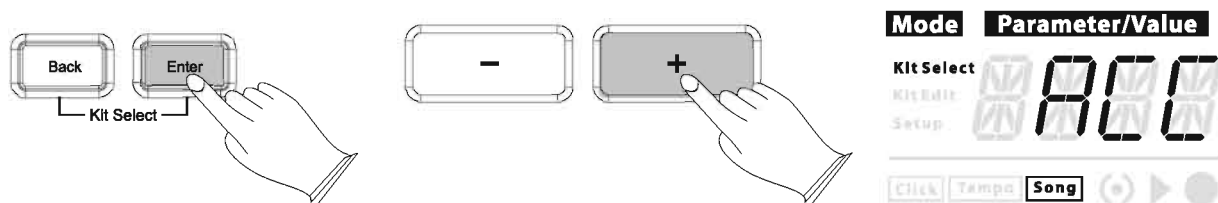
Begin Playing the Drums

C. Accompaniment Part Volume (ACC)

If you'd like to adjust the volume of the pre-recorded accompaniment instruments while listening to or playing along with the songs, here is what to do:

1. Press the [Song] button the the LCD will display “S001”
2. Press [Enter] button and use the [-/+] buttons to select the “ACC” menu
3. Press [Enter] button and use the [-/+] buttons to adjust the volume up or down. Press both [-] and [+] at the same time to reset the accompaniment part volume to the default value of 028. Range: 000-032
4. Press [Enter] button to confirm the new value.

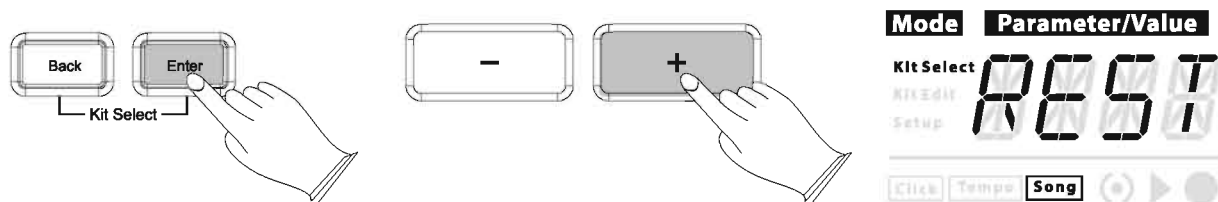
Note: The accompaniment part volume setting returns to the default value on power-down.



D. Reset All Mix Parameters (REST)

If you'd like to restore the default values for all of the Mix parameters, follow these steps:

1. Press the [Song] button the the LCD will display “S001”
2. Press [Enter] button and use the [-/+] buttons to select the REST menu
3. Press [Enter] to execute the procedure. The display will flash “END” indicating that the setting of the songs have been restored.



Begin Playing the Drums

[Click] button

Press [CLICK] button to turn on or turn off metronome.

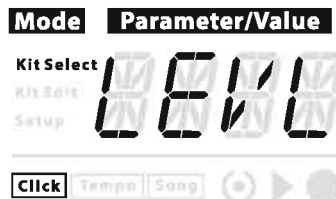
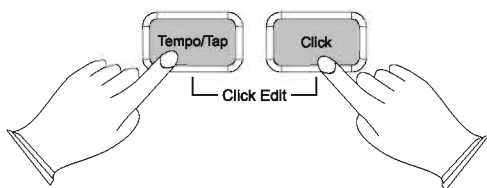
Click edit: [Tempo/Tap] + [Click]

It is possible to adjust the metronome volume, change its assigned instrument, or select a different time signature. To access these parameters you will need to press two buttons at the same time: [Tempo/Tap] and [Click]. After you have done this, the following options become available to you:

A. Click Volume (LEVL)

To adjust the metronome volume, follow these steps:

1. Press the [Tempo/Tap] and [Click] buttons at the same time. The LCD will display “LEVL”
2. Press [Enter] and use the [-/+] buttons to adjust the click volume up or down.
Pressing both [-] and [+] at the same time will reset the click volume to the default value of 020. Range: 000-032
3. Press [Enter] to confirm the choice.

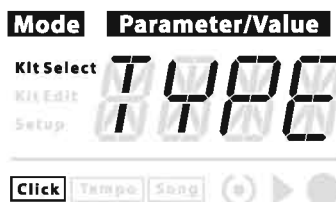
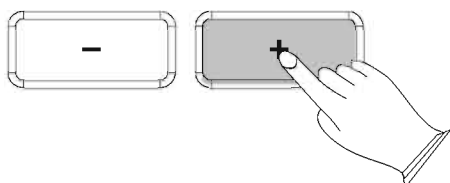


B. Changing the Time Signature (TYPE)

The metronome settings can be changed to accommodate a number of different time signatures. To change the time signature, follow these steps:

1. Press [Tempo/Tap] and [Click], The LCD will display “LEVL”
2. Use the [-/+] buttons to select the “TYPE” menu
3. Press [Enter] again and use the [-/+] buttons to select the new time signature. Pressing both [-] and [+] at the same time will reset the click to the default value of 4-4.
Range: 1-4, 2-4, 3-4, 4-4, 6-4, 3-8, 6-8, and 12/8.
4. Press [Enter] to confirm the choice.

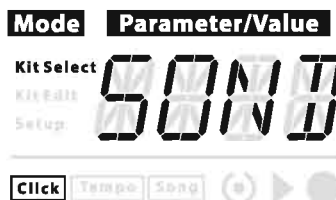
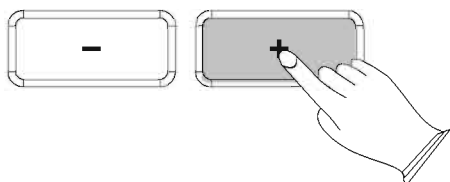
Begin Playing the Drums



C. Selecting the Click Sound (SOND)

It is possible to select one of three different sounds for the metronome click. If you'd like to experiment with the options to see which one is best for you, here is what to do:

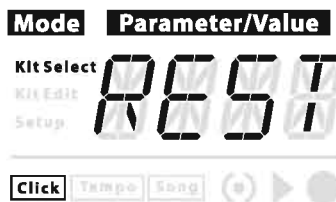
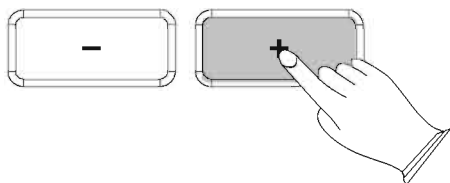
1. Press [Tempo/Tap] and [Click], The LCD will display “LEVL”
2. Use the [-/+] buttons to select the “SOND” menu
3. Press [Enter] button and use the [-/+] buttons to select one of the three sounds.
4. Press [Enter] button to confirm the choice.



D. Restoring Factory Click Settings (REST)

There's a quick way to return all of the click settings to their factory defaults. If you would like to do this, follow this procedure:

1. Press [Tempo/Tap] and [Click], The LCD will display “LEVL”
2. Use the [-/+] buttons to select the “REST” menu
3. Press [Enter] button to execute the reset procedure. The display will flash “END” and return to the “REST” menu.



Begin Playing the Drums

[Tempo/Tap] button

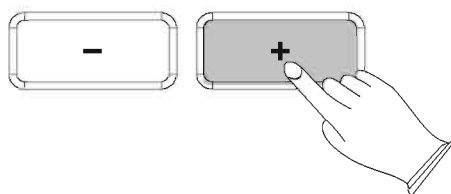
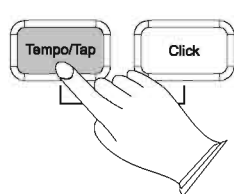
The tempo of the click or the current song may be set by using one of several methods. Each of these procedures is detailed in the paragraphs ahead:

A. Setting the Tempo with the [-/+] Buttons

For making precise adjustments to the tempo, use this procedure:

1. Press the [Tempo/Tap] button: the current tempo value will be shown
2. Use the [-/+] buttons to change the tempo value. Range: 020-240

Pressing both [-] and [+] at the same time will reset the tempo to the default value of 135



B. Setting the Tempo by Tapping

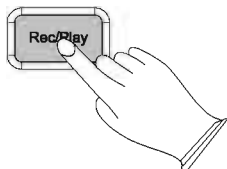
You can also enter the tempo by tapping it out on the [Tempo/Tap] button or by using one of the pads. Here's how:

1. Press the [Tempo/Tap] button: the current tempo value will be shown
2. Press the [Enter] button: the tempo value will flash
3. Tap on one of the pads four times. Those four taps will be used to calculate the new tempo value. Range: 020-240

Begin Playing the Drums

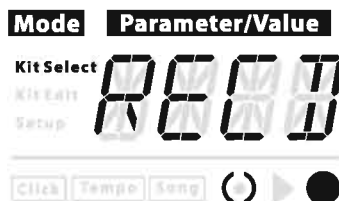
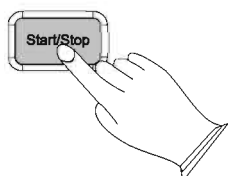
[Rec/Play] button

Press the [REC/PLAY] button to enter the record mode, then use the [+/-] buttons to change the menu.



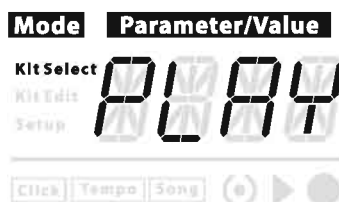
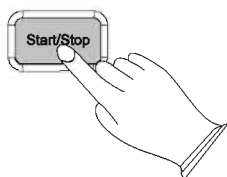
A. "RECD" (Record)

Press the [START/STOP] button to start recording.



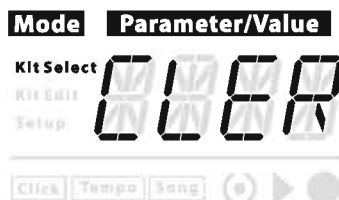
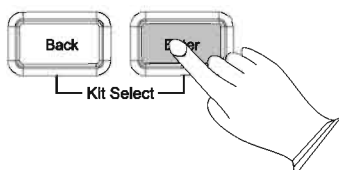
B. "PLAY"

Press the [START/STOP] button to start playing the song. Press it again to stop playing.



C. "CLER" (Clear)

Press the [ENTER] button to delete the song.



Begin Playing the Drums

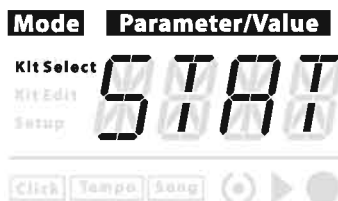
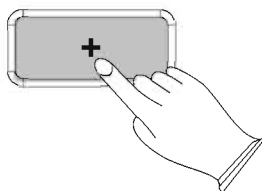
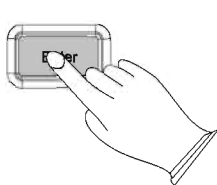
D. “STAT” (Start mode)

Press the [ENTER] button to select the start mode of the recording .

Use the [+/-] button to select “SYN” or “AUTO” .

SYN ----- If you use Syn mode ,it will start recording when you start playing the instrument.

AUTO ----- Means that After four beats it will automatically start recording.



Factory Reset

There is a simple way to restore everything in the drum module to the factory settings. This includes all trigger settings, drum kits, effects, and the song you recorded. If you are certain you want to do this, follow these steps:

- Turn the power switch to OFF
- Hold down the [-/+] buttons
- Turn the power switch to ON. The display will show “REST” , which means all of the parameters in the drum module have been restored to their factory settings.

Drum Kits List

Kit #	Name	Kit #	Name
001	Acoustic 1	016	Latin
002	Acoustic 2	017	Pop
003	Room	018	Eight-oh
004	Nine-oh	019	Electro-pop
005	Rock 1	020	Trash
006	Dance Club	021	Rock 2
007	Jazz	022	Reggae-pop
008	Rap-hop	023	Brush
009	Early R&B	024	Modern R&B
010	Electronic 1	025	Drum Box 2
011	Crunch	026	Acoustic 1 (duplicate)
012	Compressed	027	Acoustic 2 (duplicate)
013	Electronic 2	028	Room (duplicate)
014	Analog	029	Eight-oh (duplicate)
015	Drum Box 1	030	Rock 1 (duplicate)

Voice List

Group 1: Kick Drums

01 Acoustic kick 1
02 Acoustic kick 2
03 Room kick 1
04 Room kick 2
05 Rock kick 1
06 Jazz kick
07 Early R&B kick
08 Compressed kick
09 Latin kick
10 Pop kick
11 Trash kick
12 Rock kick 2
13 Reggae-pop kick
14 Brush kick
15 Modern R&B kick
16 Big kick
17 Rock kick 3
18 Rock kick 4
19 Rock kick 5
20 8-oh kick
21 9-oh kick
22 Dance club kick
23 Rap-hop kick
24 Electronic kick 1
25 Electronic kick 2
26 Analog kick
27 Drum box kick 1
28 Drum box kick 2
29 Crunch kick
30 Electro-pop kick
31 Thick kick

Group 2: Snare Drums

01 Acoustic snare 1
02 Piccolo snare 1
03 Piccolo snare 2
04 Room snare 1
05 Room snare 2
06 Rock snare 1
07 Rock snare 2
08 Rock snare 3
09 Rock snare 4
10 Compressed snare
11 Jazz snare
12 Acoustic snare 2
13 Acoustic snare 3
14 Trash snare
15 Pop snare 1
16 Reggae-pop snare
17 Brush snare
18 Early R&B snare
19 Pop snare 2
20 Latin snare+tambourine
21 Electro-pop snare
22 Rap-hop snare
23 Analog snare 1
24 Modern R&B snare
25 Rock snare 5
26 Electronic snare 1
27 Drum box snare 1
28 8-oh snare
29 Dance club snare
30 9-oh snare
31 Drum box snare 2

32 Crunch snare 1
33 Electronic snare 2
34 Analog snare 2
35 Crunch snare 2
36 Drum box snare 3
37 Noise snare
38 Reso-snare
39 Bubble snare
40 Acoustic rimshot 1
41 Early R&B rimshot
42 Pop rimshot 1
43 Piccolo rimshot 1
44 Rock rimshot 1
45 Jazz rimshot 1
46 Acoustic rimshot 2
47 Compressed rimshot
48 Room rimshot
49 Pop rimshot 2
50 Rock rimshot 2
51 Reggae-pop rimshot
52 Brush rimshot
53 Analog rimshot 1
54 Modern R&B rimshot
55 Trash rimshot
56 Drum box rimshot 1
57 8-oh rimshot
58 Dance club rimshot
59 Electronic rimshot 1
60 Crunch rimshot
61 Electronic rimshot 2
62 Analog rimshot 2
63 Drum box rimshot 2
64 Electro-pop rimshot

Voice List

65 Piccolo snare 3
66 Piccolo rimshot 2
67 Rock snare 6
68 Rock rimshot 3

Group 3: Toms

01 Acoustic tom 1 (high)
02 Acoustic tom 1 (mid)
03 Acoustic tom 1 (low)
04 Acoustic tom 2 (high)
05 Acoustic tom 2 (mid)
06 Acoustic tom 2 (low)
07 Room tom 1 (high)
08 Room tom 1 (mid)
09 Room tom 1 (low)
10 Compressed tom (high)
11 Compressed tom (mid)
12 Compressed tom (low)
13 Rock tom 1 (high)
14 Rock tom 1 (mid)
15 Rock tom 1 (low)
16 Rock tom 2 (high)
17 Rock tom 2 (mid)
18 Rock tom 2 (low)
19 Pop tom 1 (high)
20 Pop tom 1 (mid)
21 Pop tom 1 (low)
22 Pop tom 2 (high)
23 Pop tom 2 (mid)
24 Pop tom 2 (low)
25 Tight tom (high)
26 Tight tom (mid)
27 Tight tom (low)
28 D-dub tom (high)
29 D-dub tom (mid)

30 D-dub tom (low)
31 Rock tom 3 (high)
32 Rock tom 3 (mid)
33 Rock tom 3 (low)
34 Rock tom 4 (high)
35 Rock tom 4 (mid)
36 Rock tom 4 (low)
37 Rock tom 5
38 Modern R&B tom (high)
39 Modern R&B tom (mid)
40 Modern R&B tom (low)
41 Jazz tom (high)
42 Jazz tom (mid)
43 Jazz tom (low)
44 Brush tom (high)
45 Brush tom (mid)
46 Brush tom (low)
47 Early R&B tom (high)
48 Early R&B tom (mid)
49 Early R&B tom (low)
50 Reggae-pop tom & timbale
51 Reggae-pop tom & conga
52 Reggae-pop tom & conga
53 Latin tom & conga
54 Latin tom & bongo
55 Electro-pop tom (high)
56 Electro-pop tom (mid)
57 Electro-pop tom (low)
58 Electro-pop tom 2 (high)
59 Electro-pop tom 2 (mid)
60 Electro-pop tom 2 (low)
61 Trash tom (high)
62 Trash tom (mid)
63 Trash tom (low)
64 Crunch tom (high)
65 Crunch tom (mid)

66 Crunch tom (low)
67 Rap-hop tom (high)
68 Rap-hop tom (mid)
69 Rap-hop tom (low)
70 Electronic tom 1 (high)
71 Electronic tom 1 (mid)
72 Electronic tom 1 (low)
73 Electronic tom 2 (high)
74 Electronic tom 2 (mid)
75 Electronic tom 2 (low)
76 Analog tom (high)
77 Analog tom (mid)
78 Analog tom (low)
79 9-oh tom (high)
80 9-oh tom (mid)
81 9-oh tom (low)
82 9-oh tom 2 (high)
83 9-oh tom 2 (mid)
84 9-oh tom 2 (low)
85 8-oh tom-fall (high)
86 8-oh tom-fall (mid)
87 8-oh tom-fall (low)
88 Drum box tom 1 (high)
89 Drum box tom 1 (mid)
90 Drum box tom 1 (low)
91 Drum box tom 2 (high)
92 Drum box tom 2 (mid)
93 Drum box tom 2 (low)
94 Dance club tom (high)
95 Dance club tom (mid)
96 Dance club tom (low)

Voice List

Group 4: Cymbals

- 01 Crash cymbal 1
- 02 Crash cymbal 2
- 03 Rap-hop crash
- 04 Mid crash 1
- 05 Mid crash 2
- 06 Dark crash
- 07 18" crash 1
- 08 18" crash 2
- 09 Mid splash
- 10 High splash
- 11 Crispy splash
- 12 Trash splash
- 13 Small splash
- 14 Electro splash
- 15 Dark splash
- 16 Low crash 1
- 17 Low crash 2
- 18 Analog crash
- 19 Electro-pop crash
- 20 Dance club crash
- 21 Electro crash 1
- 22 Electro crash 2
- 23 Falling crash
- 24 Submarine crash
- 25 Sizzle ride
- 26 Sizzle ride plus bell
- 27 Cymbal ride bell 1
- 28 Cymbal ride bell 2
- 29 Low ride
- 30 Early R&B ride
- 31 Ride crash
- 32 Brush ride

- 33 Cymbal ride plus bell 3
- 34 Latin ride & cowbell
- 35 Cymbal ride plus bell 1
- 36 Cymbal ride plus bell 2
- 37 Trash ride
- 38 Electronic ride 1
- 39 Electro-pop ride
- 40 High ping ride
- 41 Drum box ride
- 42 9-oh ride crash
- 43 Pie tin ride
- 44 Electronic ride 2
- 45 Crunch ride
- 46 Electronic crash-ride
- 47 Electronic ride 3

Group 5: Hi-hats

- 1 Brush hat 1 closed
- 2 Brush hat 1 foot
- 3 Brush hat 1 open
- 4 Brush hat 1 splash
- 5 Brush hat 2 closed
- 6 Brush hat 2 foot
- 7 Brush hat 2 open
- 8 Brush hat 2 splash
- 9 Room hat closed
- 10 Room hat foot
- 11 Room hat open
- 12 Room hat splash
- 13 Rock hat 1 closed
- 14 Rock hat 1 foot
- 15 Rock hat 1 open
- 16 Rock hat 1 splash
- 17 Rock hat 2 closed
- 18 Rock hat 2 foot

- 19 Rock hat 2 open
- 20 Rock hat 2 splash
- 21 Small hat 1 closed
- 22 Small hat 1 foot
- 23 Small hat 1 open
- 24 Small hat 1 splash
- 25 Small hat 2 closed
- 26 Small hat 2 foot
- 27 Small hat 2 open
- 28 Small hat 2 splash
- 29 Snappy brush hat closed
- 30 Snappy brush hat foot
- 31 Snappy brush hat open
- 32 Snappy brush hat splash
- 33 Trash hat closed
- 34 Trash hat foot
- 35 Trash hat open
- 36 Trash hat splash
- 37 Early R&B hat closed
- 38 Early R&B hat foot
- 39 Early R&B hat open
- 40 Early R&B hat splash
- 41 Boom snap hat closed
- 42 Boom snap hat open
- 43 Boom snap hat splash
- 44 Rock hat 3 closed
- 45 Rock hat 3 open
- 46 8-oh hat closed
- 47 8-oh hat foot
- 48 8-oh hat open
- 49 Dance club hat closed
- 50 Dance club hat foot
- 51 Dance club hat open
- 52 Rap-hop hat closed

Voice List

53 Rap-hop hat foot
54 Rap-hop hat open
55 Rap-hop hat splash
56 Electronic hat 1 closed
57 Electronic hat 1 foot
58 Electronic hat 1 open
59 Crunch hat closed
60 Crunch hat foot
61 Crunch hat open
62 Electronic hat 2 closed
63 Electronic hat 2 foot
64 Electronic hat 2 open
65 Electronic hat 2 splash
66 Analog hat closed
67 Analog hat foot
68 Analog hat open
69 Drum box hat 1 closed
70 Drum box hat 1 foot
71 Drum box hat 1 open
72 9-oh hat closed
73 9-oh hat foot
74 9-oh hat open
75 9-oh hat splash
76 Electro-pop hat closed
77 Electro-pop hat foot
78 Electro-pop hat open
79 Electro-pop hat splash
80 Modern R&B hat closed
81 Modern R&B hat foot
82 Modern R&B hat open
83 Modern R&B hat splash

84 Drum box hat 2 closed
85 Drum box hat 2 foot
86 Drum box hat 2 open
87 Shaker hat closed

Group 6: Percussion

01 Agogo (high)
02 Agogo (low)
03 Agogo (high/low)
04 Conga (high)
05 Conga (low)
06 Hand claps
07 Timbale (high)
08 Timbale (low)
09 Triangle mute
10 Triangle open
11 Triangle (open/mute)
12 Woodblock (high)
13 Woodblock (low)
14 Woodblock (high/low)
15 Shaker
16 Tambourine (down)
17 Tambourine (up)
18 Tambourine (up/down)
19 Cowbell
20 8-oh cowbell

Style List

Number	Song Name/Style
01	Rock Shuffle
02	Surf Pop
03	Techno
04	60's Rock
05	Hard Rock
06	Pop Bossa
07	80's Rock
08	16 Beat
09	Pop Shuffle
10	Guitar Pop
11	Modern 6/8
12	Swing Funk
13	Piano Ballad
14	Rap
15	16 Beat Ballad

Number	Song Name/Style
16	Pop Ballad
17	8 Beat Dance
18	8 Beat Modern
19	70's Disco
20	Big Band
21	Country 8 Beat
22	3/4 Gospel
23	Soul
24	8 Beat Two
25	Reggae
26	Swing Reggae
27	English Waltz
28	Tango
29	Rhythm & Blues
30	Polka

MIDI Implementation Chart

Function	Transmitted	Recognized	Remarks
Basic Default	1-16CH	1-16CH	
Channel Changed	1-16CH	1-16CH	
Mode Default	Mode 3	Mode 3	
Messages	X	X	
Altered	*****	X	
Note Number : True voice	0~127 *****	0~127 0~127	
Velocity Note ON Note OFF	O 9nH,v=1~127 O 8nH,v=0	O 9nH,v=1~127 O 9nH,v=0 or 8nh	
Affter Key's	X	X	
Pitch Bender	X	O	
Control Change 0, 32	O	O	Bank Select
1	X	O	Modulation
5	X	O	Portamento time
6	O	O	Data Entry
7	O	O	Volume
10	X	O	Pan
11	X	O	Expression
64	X	O	Sustain
65	X	O	Portamento
66	X	O	Sostenuto
67	X	O	Soft pedal
80, 81	O	O	DSP TYPE
91, 93	O	O	DSP DEPTH
100,101	X	O (*1)	RPN LSB,MSB
121	X	O	Reset all Controllers
Program Change : True	O 0-127 0-127	O 0-127 0-127	
System Exclusive	X	X	
System : Song Position	X	X	
: Song Select	X	X	
Common : Tune	X	X	
Aux : Local on/off	X	O	
: All Notes Off	O	O	
Messages : Active Sense	X	O	
: Reset	X	O	

Mode1:OMNI ON, POLY
Mode3:OMNI OFF, POLY

Mode2:OMNI ON, MONO
Mode4:OMNI OFF, MONO

O: Yes
X: NO

*1: Registered parameter number:

#0: Pitch sensivity

#1: Fine tuning cents

#2: Coarse tuning in half-tones

10506094-V1.0

Specifications

- ☆ **Drum Pads:** 1 Snare with RIM Function, 3 TOM Pads, 1 Cymbal,
1 Ride, 1 Hi-Hat, 1 Hi-Hat Control, 1 Kick Trigger
- ☆ **Display:** Function backlit LCD display
- ☆ **Polyphony:** 64 Notes Max
- ☆ **Voice Control:** 349 drum instruments, 30 customizable kits
- ☆ **Effect:** Reverb type (10), Level, Chorus type (13), Level
- ☆ **Styles:** 30 Styles
- ☆ **Pad Control:** Sensitivity; Threshold ;Velocity Curve
- ☆ **Demo:** 2 Songs
- ☆ **Song recording:** Real-time Record and Playback
- ☆ **Others:** Tap, Click Level, Click Sound, Click Tempo,
Metronome (1/4, 2/4, 3/4, 4/4, 6/4, 3/8, 6/8, 12/8)
- ☆ **Interface:** DC 9V Power Socket, PHONES, USB TO HOST,
LINE OUT, AUX IN, Serial connection jack for the
pad trigger cables

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