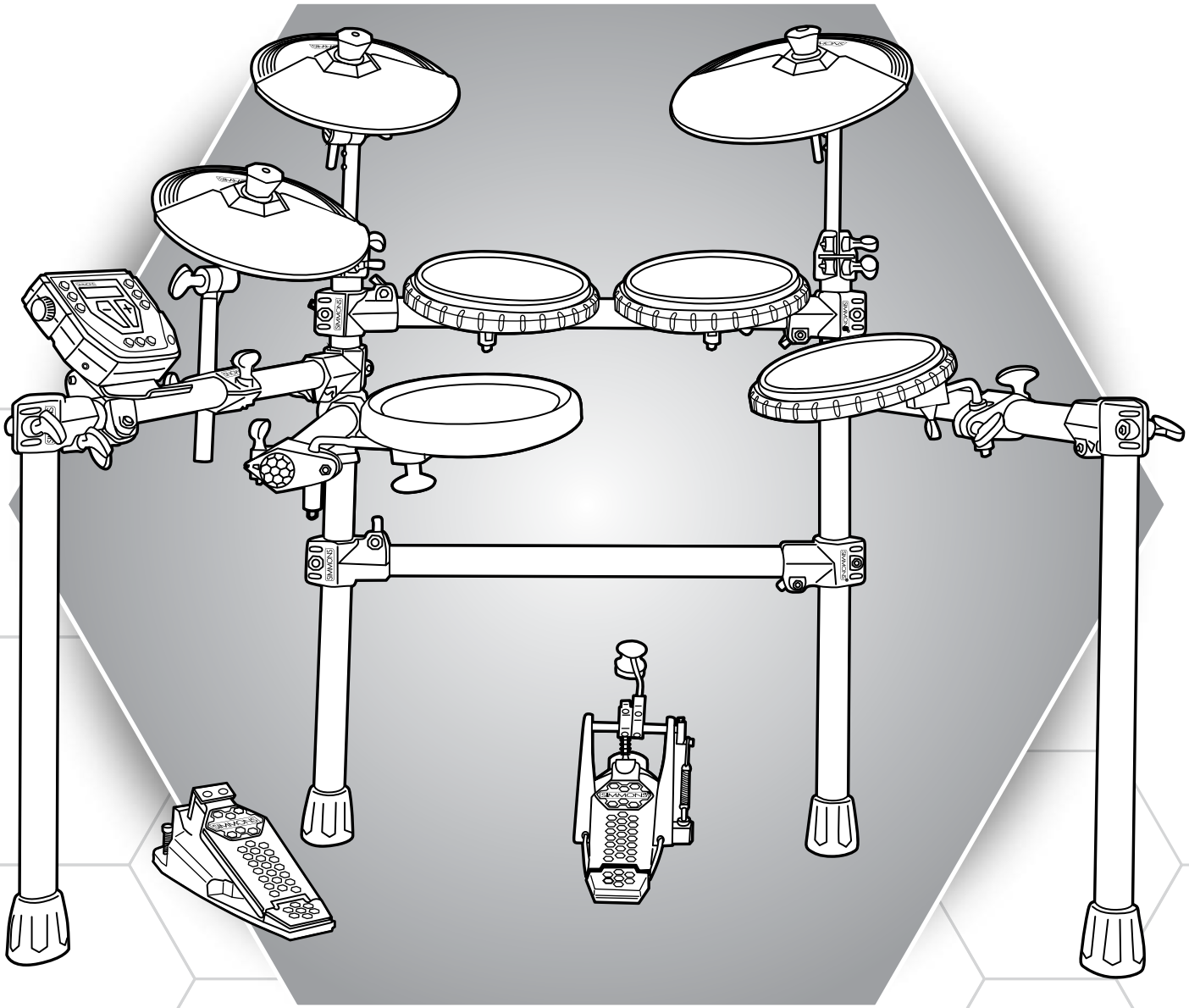
SIMMONS®

The first name in electronic drums.

SD500
ELECTRONIC DRUM KIT



OWNER'S MANUAL

www.SimmonsDrums.net

SAFETY INSTRUCTIONS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE CHASSIS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR.

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.

APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

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 (Figure1).

Figure 1

13) Unplug this apparatus during lightning storms or when unused for a long periods 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.

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.

CONGRATULATIONS!

...on your purchase of Simmons' **SD500 Electronic Drum Kit.** To get the most enjoyment from this kit, we recommend that you skim through this manual at least once, then refer back to it to learn more about specific functions.

Caring for Your SD500 Electronic Drum Set

Location

- Keep the drum kit away from direct sunlight, high temperature sources, and excessive humidity to prevent deformation, discoloration, or more serious damage.

Power Supply

- Turn the power switch OFF when the SD500 is not in use.
- The AC adapter should be unplugged from the AC outlet if the SD500 is not to be used for an extended period of time.
- Avoid plugging the AC adapter into an AC outlet that is also powering high-consumption appliances such as electric heaters or televisions. Also avoid using multi-plug adapters, since these can reduce sound quality, cause operation errors, and result in possible damage.
- To avoid damaging the unit, turn the SD500 and all related devices OFF prior to connecting or disconnecting cables.

Handling and Transport

- Never apply excessive force to controls, connectors, and other parts.
- Unplug cables by gripping the plug firmly. Do not pull on the cable.
- Disconnect all cables before moving the module.
- Physical shocks caused by dropping, bumping, or placing heavy objects on the module can result in scratches and more serious damage.

Cleaning

- Clean the module with a dry, soft cloth.
- A slightly damp cloth may be used to remove stubborn grime and dirt.
- Never use cleaners such as alcohol or thinner.
- To avoid discoloration, do not place vinyl objects on top of module.

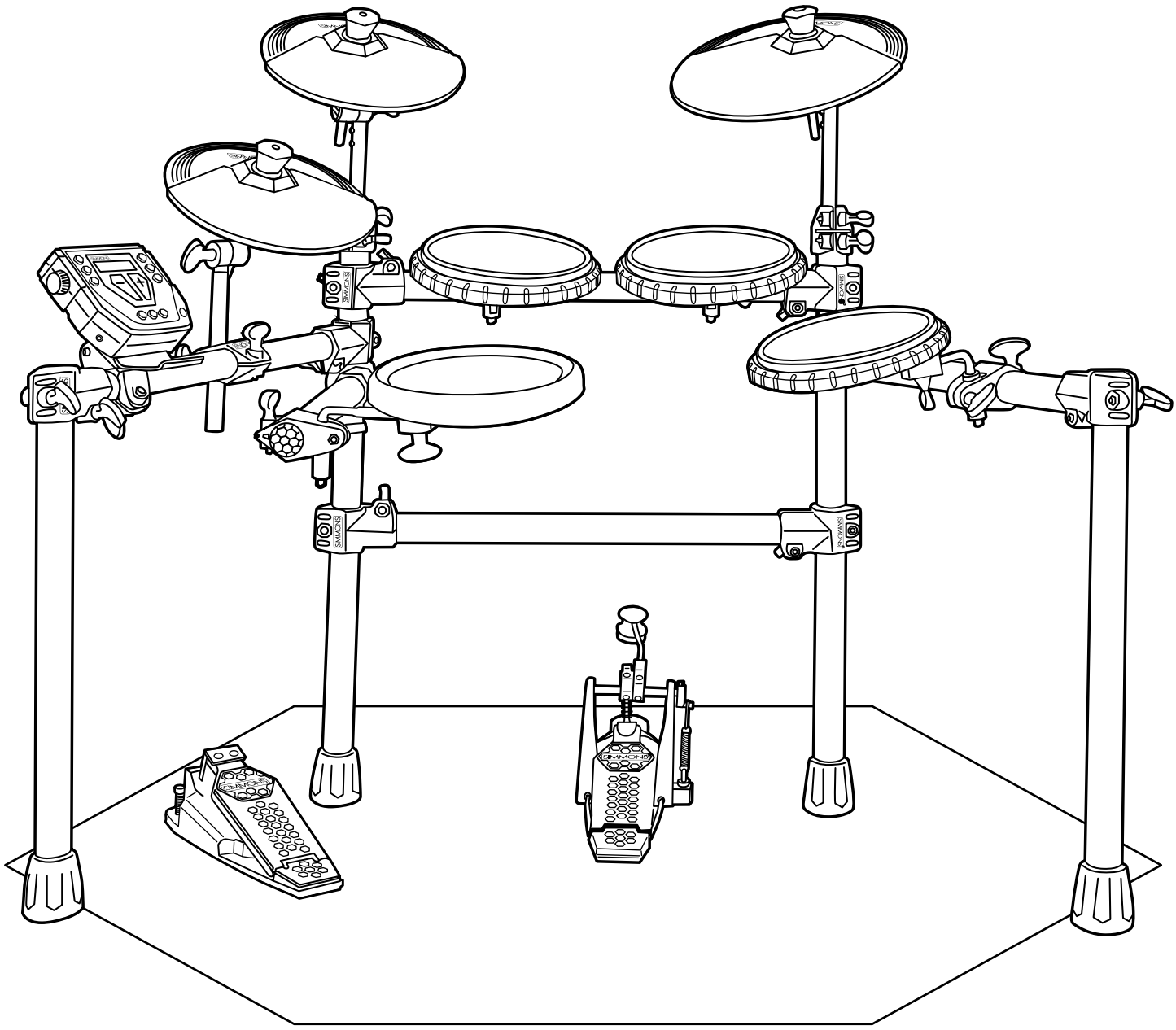
Electrical Interference

- The module contains digital circuitry and may cause interference if placed too close to radio or television receivers. If this occurs, move the SD500 further away from the affected equipment.

Service and Modification

- There are no user serviceable parts in the drum module.
- Do not attempt to open the sound module or make any change in the circuits or parts of the unit. This would void the warranty.

SD500 ASSEMBLED KIT



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Simmons
P.O. Box 5111
Thousand Oaks, CA 91359-5111

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Made in China 1407-10156

FEATURES

New Features of the SD500 Kit

- Custom Sound Library. Completely new sample set based on the most popular classic and modern kits.
- Variable Attack Response. Significantly improved playback with dynamic response according to hit velocity, combined with alternating sample playback by velocity zone.
- S500 Series Pads with increased sensitivity and greater isolation for multi-zone snare pad.

SD500 Sound Module General Features

Polyphony

Voices - 64

Sounds

Drum Voices - 328
Keyboard Voice-43
Drum Kits - 25 Preset / 10 User
Songs - 50 Preset / 10 User

Effects

Reverb - Hall1, Hall2, Room1, Room2, Room3, Stage1, Stage2, Plate, Delay, Echo, Off.
Chorus - Chorus1, Chorus2, Chorus3, Chorus4, Feedback, Flanger, Short Delay, Flanger2, Flanger3, Celeste1, Celeste2, Celeste3, Off.

Trigger Inputs

1 x Kick, Single Zone
1 x Snare, Dual Zone
9" Dual zone Snare pad
8" Single zone Tom pads
10" Single zone Hi Hat pad
10" Single zone Crash Cymbal pad with Choke
12" Single zone Ride Cymbal pad
1 x Hi-Hat pedal

Hardware

Drum Rack and mounts
Kick pedal / Trigger module
9" Dual zone Snare pad
8" Single zone Tom pads
10" Single zone Hi Hat pad
10" Single zone Crash Cymbal pad with Choke
12" Single zone Ride Cymbal pad
1 x Hi-Hat pedal

External Connections

1/8" Headphone Output
2 ¼" Master Outputs
1/8" TRS Aux input
USB Connection for MIDI via computer

Sequencer

Preset Songs - 25
User Songs - 10
Tempo- 20-280 BPM
Click/Metronome- Click voice, Time Signature, Tempo, Interval, Volume

Power: 9v, 600ma
Weight: 37.04 lbs / 16.8 kg

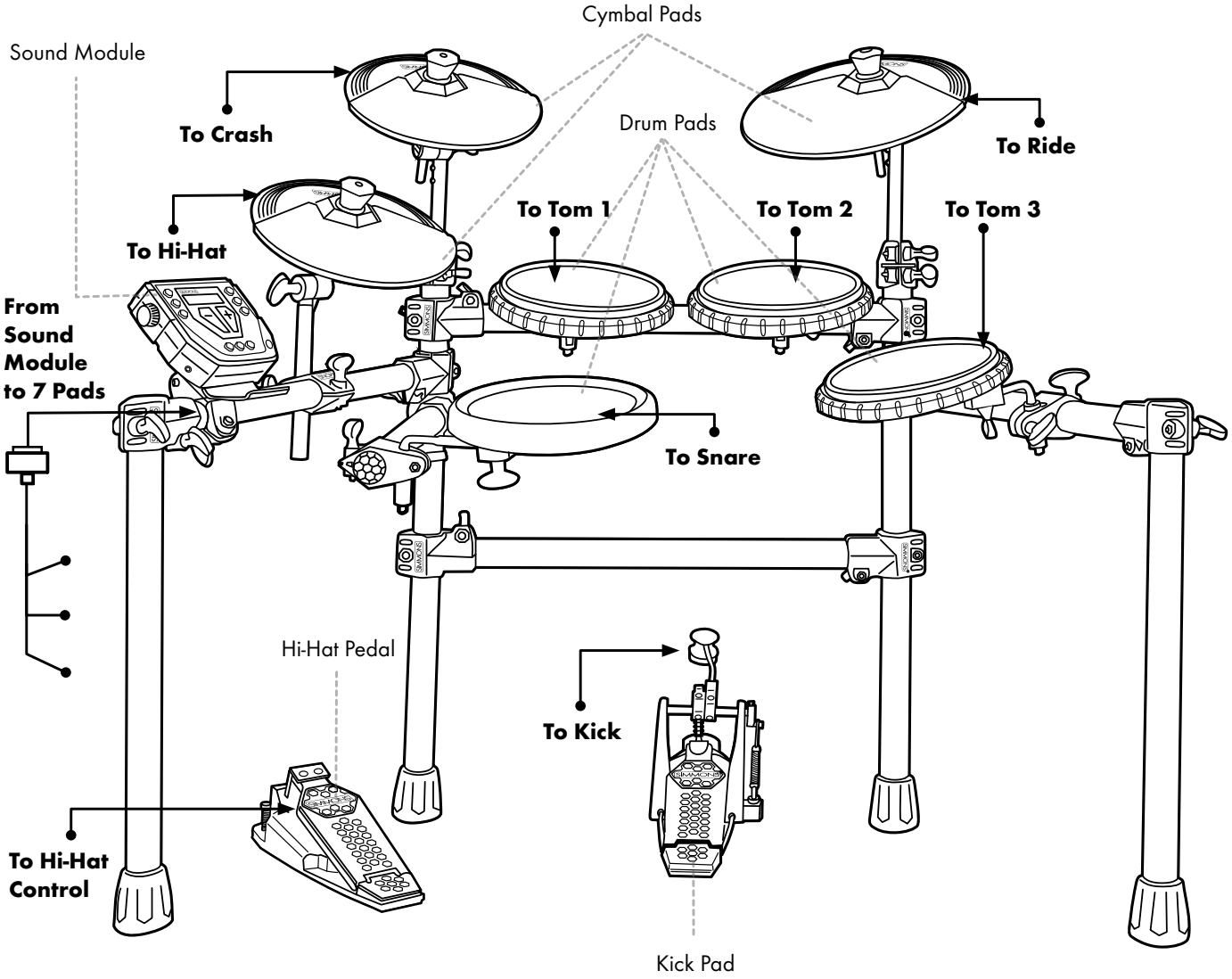
CONNECTIONS

Connecting the Sound Module and Pads

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

Using the provided cables, connect the 1/4" jacks to the corresponding drum pads, cymbal pads and kick pad. The pin connection will attach to the multi-pin connector serial port on the bottom of the sound module. *(See illustration below.)*

The voice of the hi-hat pad is controlled by the hi-hat pedal. Plug into the Hi-Hat pedal the plug that is labelled "Hi-Hat Control". Similar to a real drum kit, the hi-hat pad functions as an 'open hi-hat' when the pedal is released. When the pedal is pressed down, it functions as a 'closed hi-hat'.



**See Appendix for Pad, Triggers, Name and MIDI chart.*

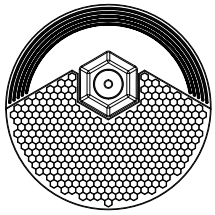
ASSEMBLING YOUR KIT

Inside this package

Before assembly, please make sure that all the items listed below are present.

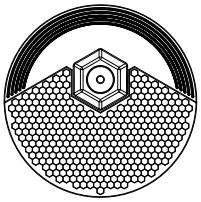
Cymbals

Single Zone 12" Cymbal Pad



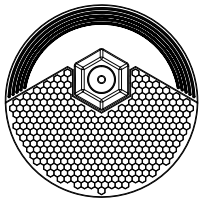
(S500CYM12S)

Single Zone with Choke 10" Cymbal Pad



(S500CYM10SC)

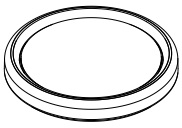
Single Zone 10" Hi-hat Cymbal Pad



(S500CYM10S)

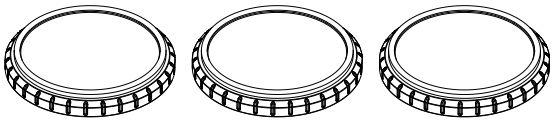
Drum Pads

Dual Zone 9" Snare Pad



(S500PAD9D)

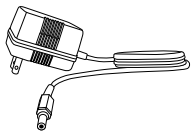
Single Zone 8" Tom Pads



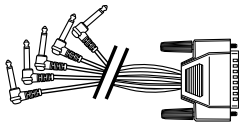
(S500PAD8S)

Accessories

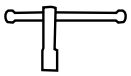
AC Adaptor



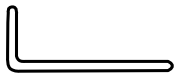
Multi-pin Cable Harness



Drum Key

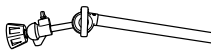


4 L-Rods for Pads

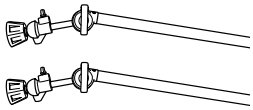


1 Pair Drumsticks

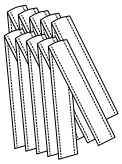
Hi-Hat Arm (Short)



2 Cymbal Arms (Long)

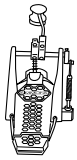


10-Velcro Cable Strips



Kick Pad

Bass Drum Pedal / Trigger module



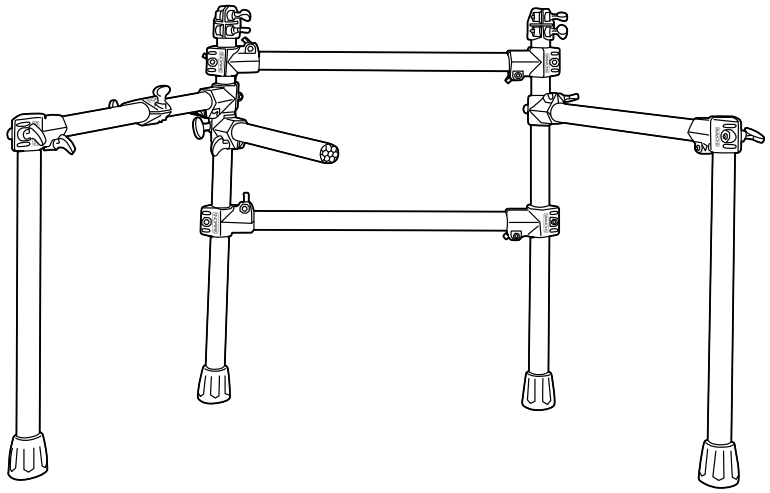
(S500KPD1)

Hi-Hat Pedal

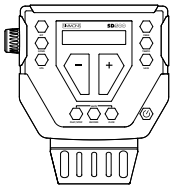
Foot Controller

(S500HHC1)

Drum Rack

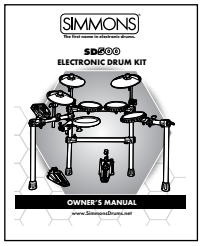


Drum Module



(SD500)

User Manual



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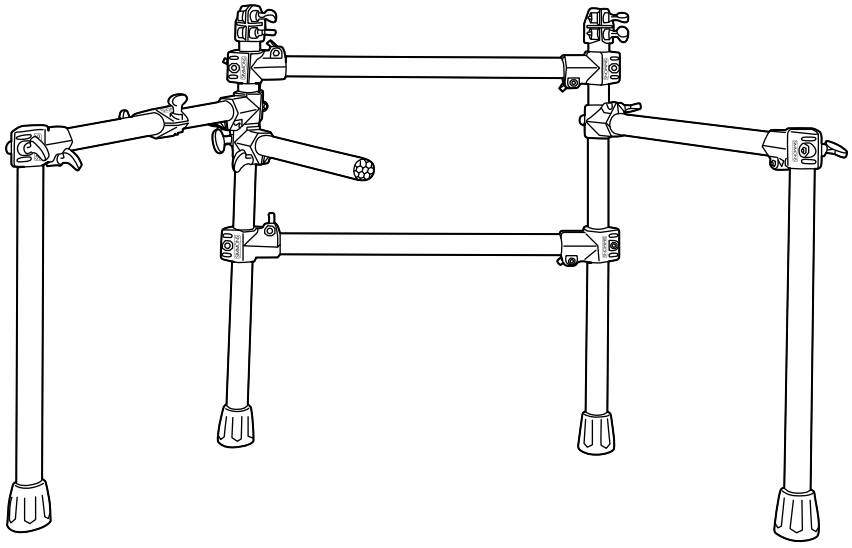
The first name in electronic drums.

ASSEMBLING YOUR KIT

The SD500 Drum Rack comes preassembled with all clamps already in place.

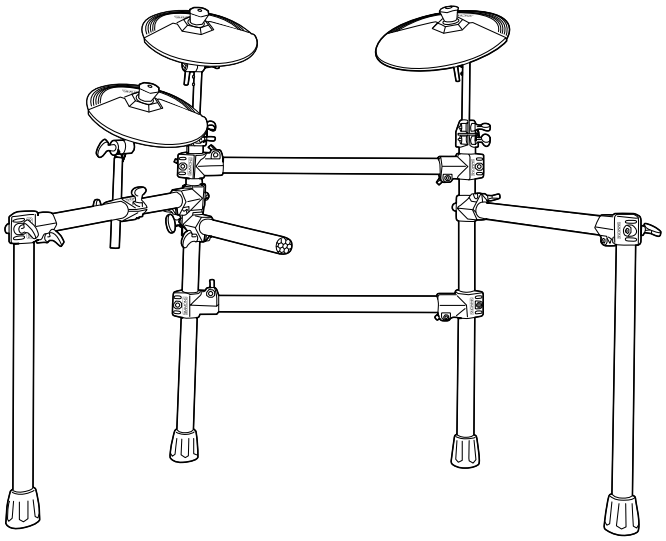
1. Pull rack out of box.
2. Loosen wing nuts on side arms and snare clamps so you can rotate bars.
3. Pull the side arms and snare arm out into their playing positions.
4. Tighten wing nuts on side arm clamps.
5. Loosen L-rod wing nuts on tom clamps. Insert textured plastic of L-rod into tom clamps and tighten wing nuts.
6. Loosen wing nuts on pads.
7. Attach pads to L-rods and tighten wing nut on Tom Pads.



ASSEMBLING YOUR KIT

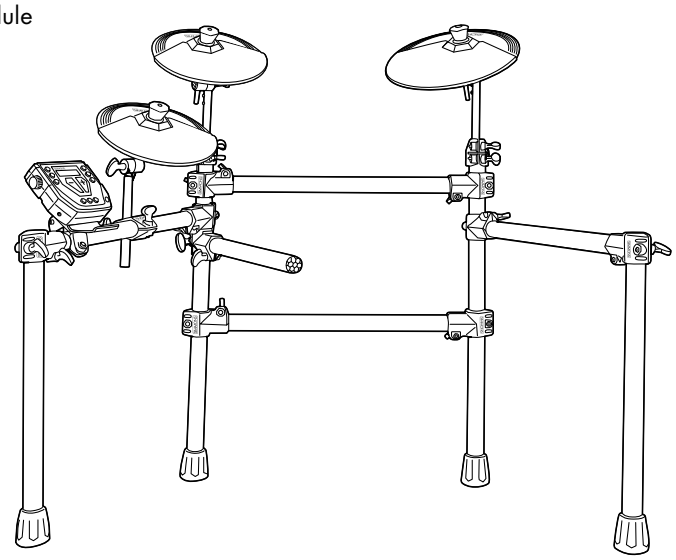
Attaching the Cymbal Pads

1. Insert each cymbal arm into the rack clamp.
2. Insert short hi-hat arm on the left-side arm's cymbal clamp.
3. Remove wing nut from cymbal tilter. Place cymbal pad on tilter assembly.
4. Re-attach washer and wing nut. Tighten wing nut.



Attaching the drum module

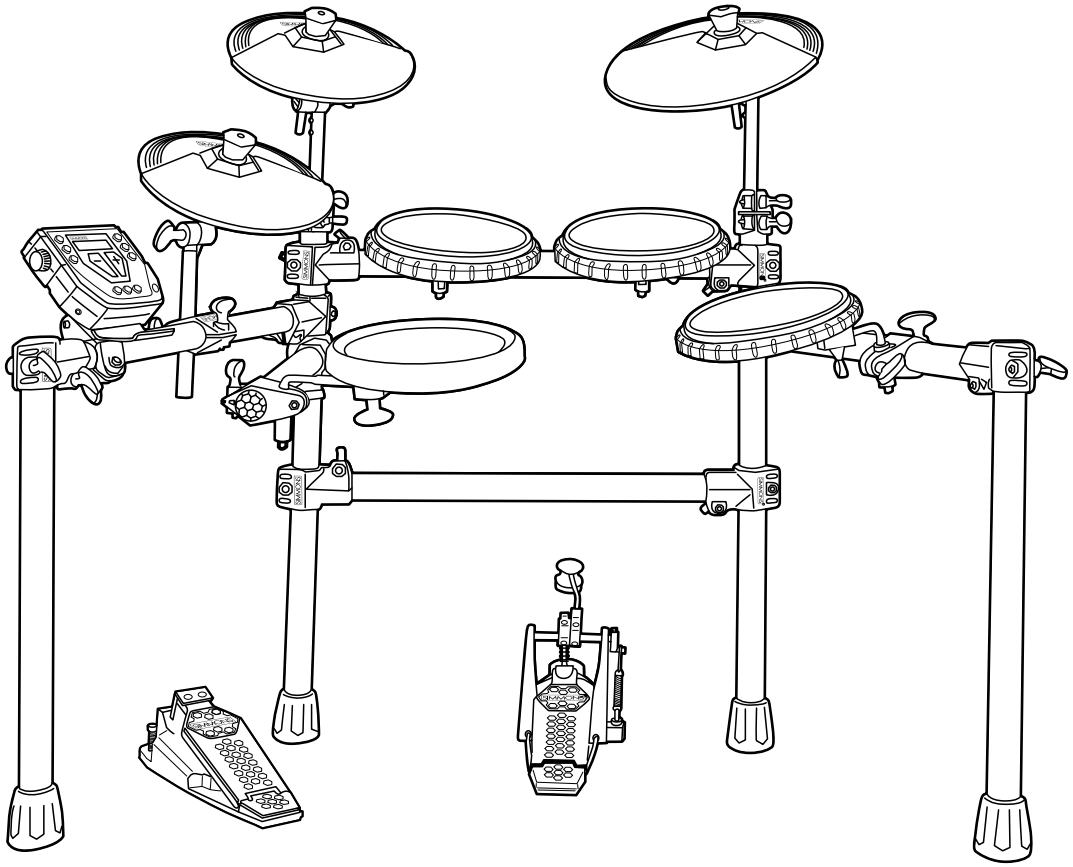
1. Loosen wing screw on drum rack.
2. Place drum module into drum clamp.
3. Tighten wing screw to secure module



ASSEMBLING YOUR KIT

Bass drum, hi-hat pedal and pad connections

1. Place the hi-hat pedal on the floor and to the left, as illustrated below.
2. Connect the marked cables from the pads to their corresponding inputs on the drum module
3. Place the bass pedal on the floor in the center of the rack as illustrated.

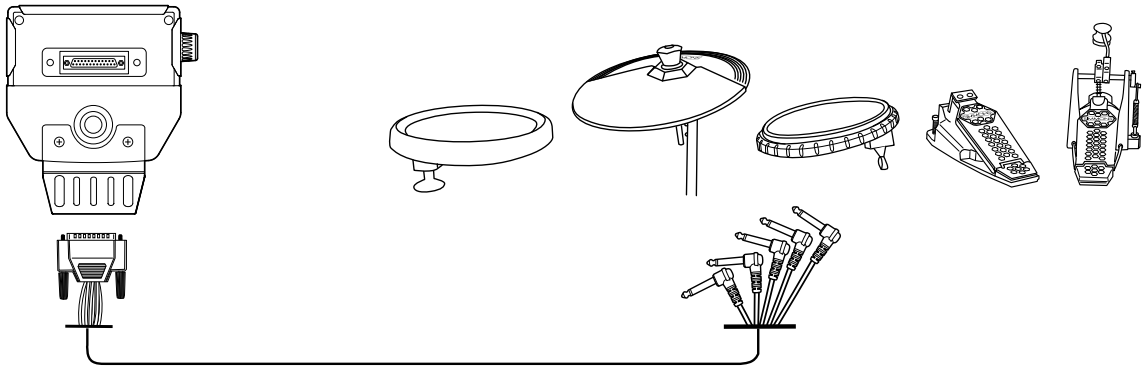


CONNECTIONS

Connecting the Module and Pads

Using the provided cables, connect the 1/4" jacks to the corresponding drum pads, cymbal pads and kick pad. The pin connection will attach to the serial port of the sound module. (See illustration.)

NOTE: *The voice of the hi-hat pad is controlled by the hi-hat pedal. Similar to a real drum kit, the hi-hat pad functions as an 'open hi-hat' when the pedal is released. When the pedal is pressed down, it functions as a 'closed hi-hat'. Use cable strips to retain cable to rack.*



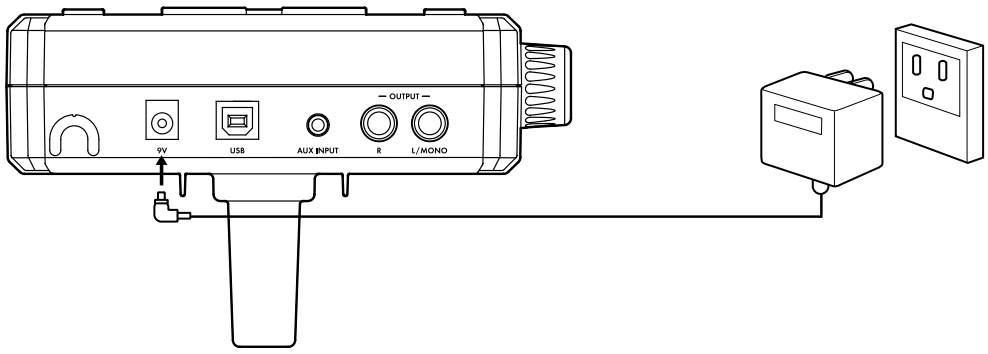
AC Adapter

The SD500 module uses an external power supply called an AC Adapter. This plugs into the back of the module.

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

NOTE: *To protect the speakers, amplifier and the drum module from damage, lower the volume to the minimum level before switching the power ON.*

Make sure the power is switched OFF when connecting the drum module with external devices.

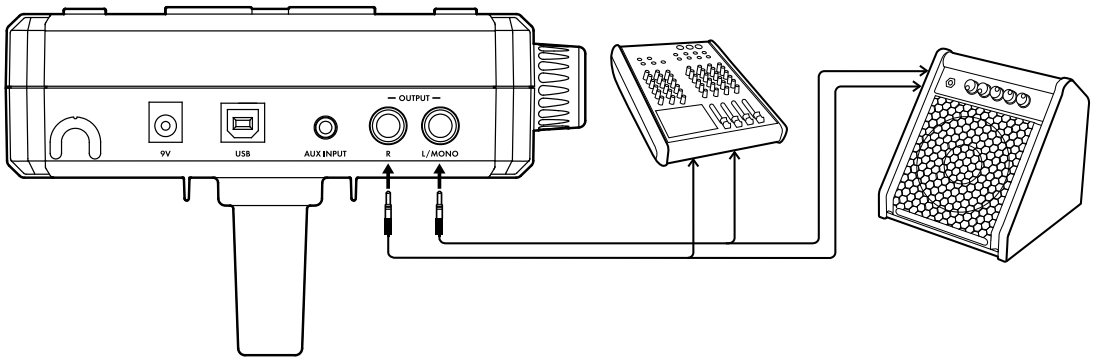


CONNECTIONS

Connecting Audio Equipment

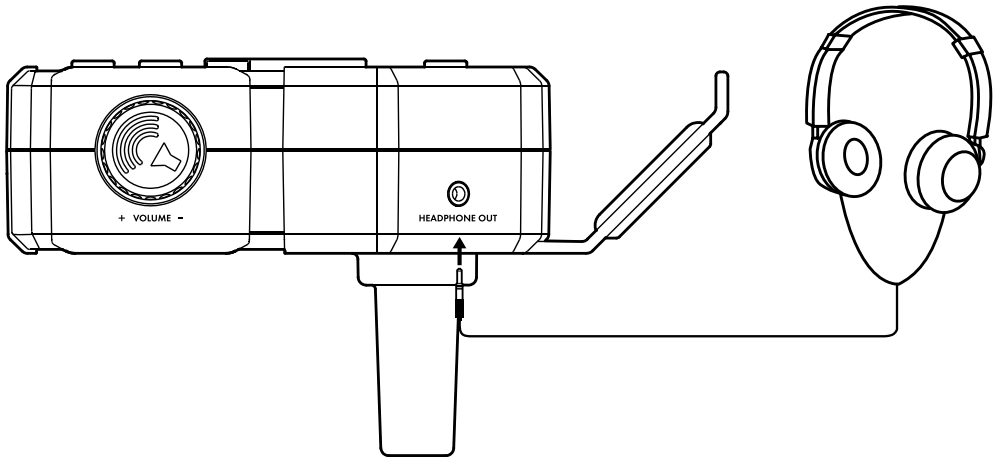
Mixers and Amplifiers

1. When you want to listen to the voices send the drum to a mixer or amplifier. Connect using 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 from the module is adjusted with the VOLUME knob.

You can connect a standard pair of headphones the SD500 module to listen to your electronic drum set without disturbing others. Connect the headphones to the headphone jack located on the side panel of the drum module. Adjust the volume to a comfortable level to avoid damaging your hearing. The Headphone output is separate from the Master Volume output control knob.

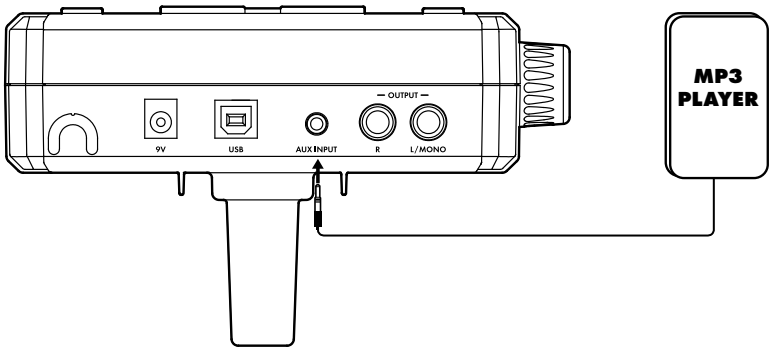


CONNECTIONS

AUX Input

This input allows you to mix the input from the external audio along with the SD500 module's internal sounds.

1. Plug the audio output of MP3 player, or other audio source into the AUX IN jack on the back panel.



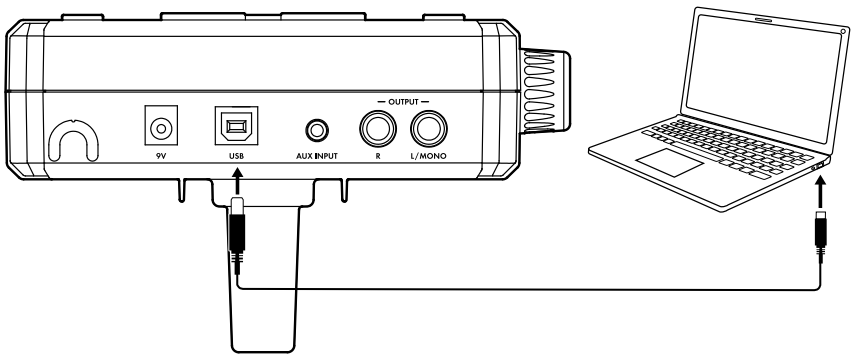
Connecting MIDI Devices and Computers

MIDI stands for Musical Instrument Digital Interface, which is a world-wide standard communication interface that enables electronic musical instruments and computers (of all brands) to communicate with each other. MIDI sends note and other communication between devices. This exchange of information makes it possible to create a system of MIDI instruments and devices that offer 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 USB connection

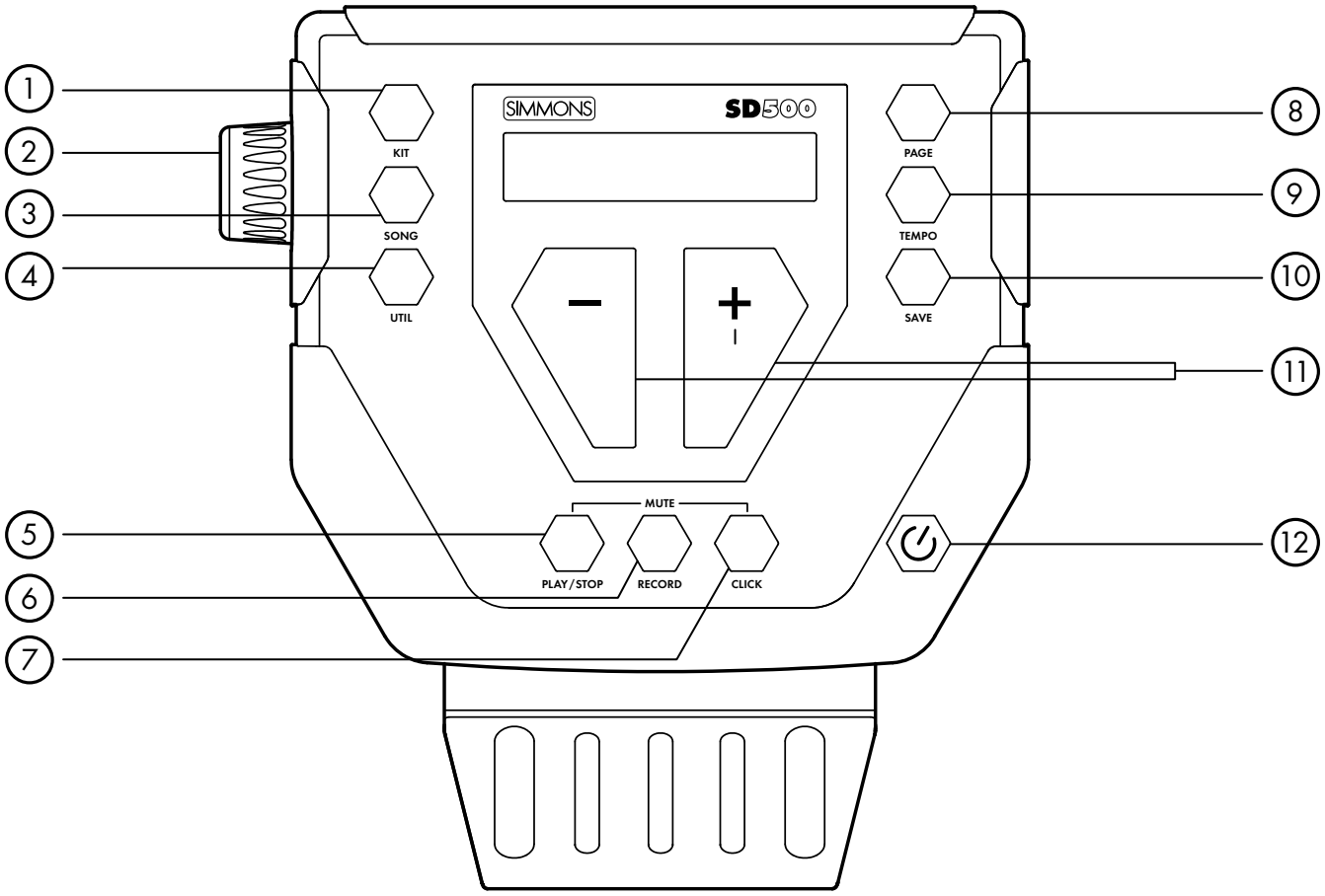
The USB connector allows you to connect the module directly to your computer. It can be connected without driver installation under the Windows & MAC OSX environment. The module will be recognized to receive and transmit MIDI messages through a single USB cable, USB is used only for MIDI messages (MIDI via USB). The SD500 module will appear as "SD500" in the USB device options of your software.

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



SD500 DRUM MODULE OPERATION

Top Panel



① **Kit Knob**

② **Volume Button**

③ **Song Button**
Access Song Mode

④ **Utility Button**
Access Utility Functions

⑤ **Play/Stop Button**
Starts or Stops the playback of a Song

⑥ **Record Buttons**
Used to enter the Record mode

⑦ **Click**
Turns the Click/Metronome function on/off

⑧ **Page Button**
Move through the Editing pages after each button push

⑨ **Tempo**
Adjusts tempo

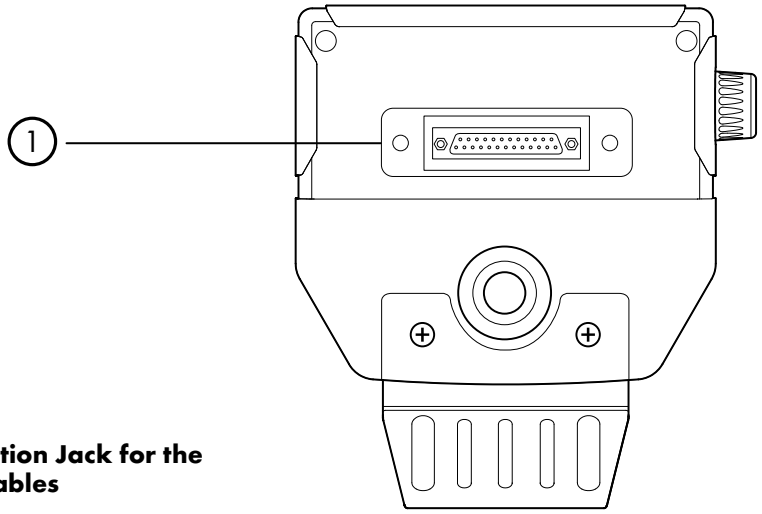
⑩ **Save**
Enters the Save menu when it is available

⑪ **+/- Buttons**
Adjust the current parameter on the screen

⑫ **Power Switch**
This is a soft switch. To turn off, press and hold the button for 5 secs.

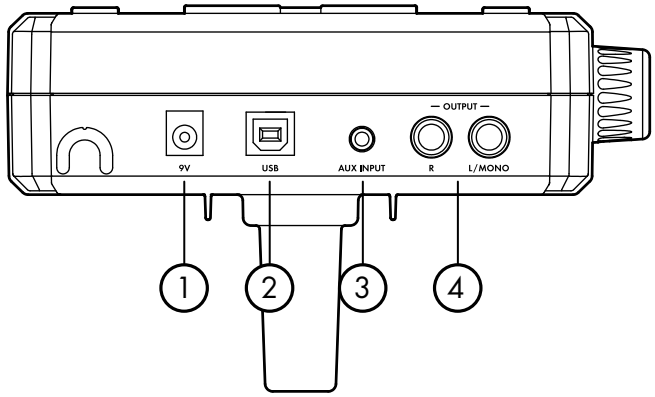
SD500 DRUM MODULE OPERATION

Bottom Panel



① **Serial Connection Jack for the pad trigger cables**

Back Panel



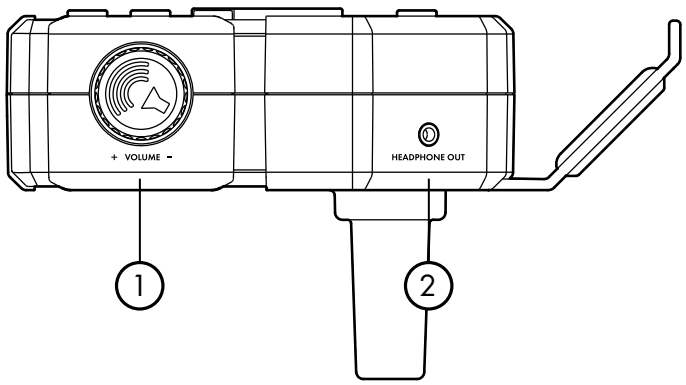
① **AC Adapter Input**
Connection for the 9V DC power adapter

② **USB Port**
Used for connecting the SD500 module to a computer.

③ **AUX Input**
Stereo 1/8" jack to connect CD or MP3 players to the module.

④ **Output**
Stereo audio outputs to connect to external audio sources

Side Panel



① **Volume knob**

② **1/8" TRS headphone jack**

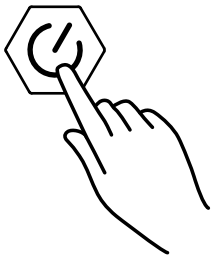
QUICK START OPERATIONS

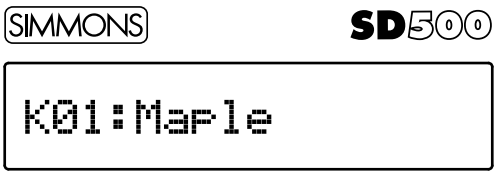
Turning the Power on the Module

1. Connect the AC Adapter to the drum module.

2. Press the power switch on the top panel to turn on the module.

NOTE: *There is an automatic power off function that turns off the module when the kit is not being used for a certain period of time. The default setting is off. If this gets changed you can reset this in the Utility mode.*





Basic Operation and Navigation

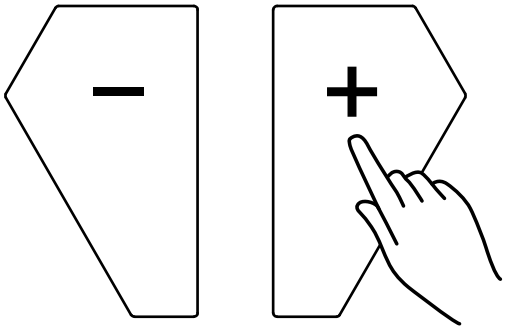
Selecting Modes

There are 3 main modes for the module KIT, SONG and UTILITY. To enter these modes press the corresponding buttons on the top panel of the module.

Adjusting Values

1. Select the parameter to be adjusted.

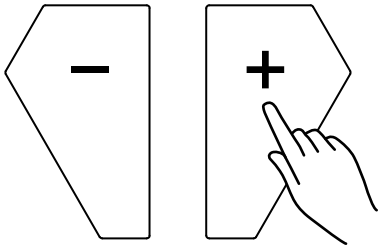
2. Adjust the value using + / - buttons.

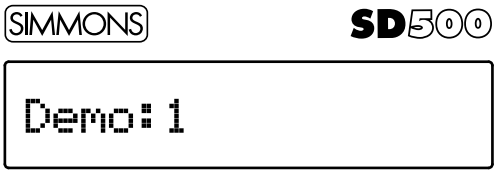


QUICK START OPERATIONS

Listening to the Demo Songs

The demo songs help to show you the capabilities and sounds of the SD500 module. There are two demos in the module. The first demo song is an extended drum solo that switches between various kits in the module. The second demo sound plays a long song that has several patterns combined to show the different genres of music that module can play.





1. Press KIT and SONG button simultaneously to enter Demo Mode. The first song demo will start playing.
2. Press the PLAY/STOP button to stop the demo.
3. Press the + or - buttons to select a Demo to play; use Play button to play the demos
4. After pressing STOP, press any of the Mode buttons (KIT, SONG or UTILITY) to exit the Demo Mode

Selecting a Kit

Entering KIT Mode

1. Press the KIT button. The LCD displays the current Kit number and Kit name.
2. Press the – /+ buttons (Preset or User Kits).

Selecting a Song

1. Press the SONG button and the SONG screen appears with Song Number and Name.
2. Press the –/+ buttons to select the song you want to play.

Playing Song

1. Press PLAY/STOP to play a song.
2. Press the PLAY/STOP button to stop playback of the song.

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

Muting the Drum Part

1. While a Song is playing press the PLAY/STOP and CLICK Button at the same time. This will mute the drum sound. The screen will show the mute status "Mute On" or "Mute Off"
2. To unmute the Drums press the PLAY/STOP and CLICK Buttons at the same time again.
3. The default setting is to mute the drum sound. It also mutes the accompaniments track. See P.21 "Mute Select".

KIT MODE - ADVANCED

Editing a Kit

1. Press the KIT button.
2. Press the PAGE button to see the screen for the current sound
3. Strike a drum pad to view the Voice currently assigned
4. Press the PAGE button to move to the first parameter to be changed on the current sound. Press the PAGE button repeatedly to step through all the available parameters that can be changed on the voice.
5. Press the -/+ buttons to change the parameter
6. Press the SAVE/ENTER button to save the assignment to a User Kit. (See Saving a kit)

Parameter	Definition	Parameter Range[-/+]
voice	Voice index	0-328
volume	volume	0-32
Pitch	Pitch	-8 ~ +8
Decay	Decay	0 ~ -5
Pan	Pan	L8 ~ R8/ Center
R.LVL	Reverb Level	0 ~ 32
C.LVL	Chorus Level	0 ~ 32

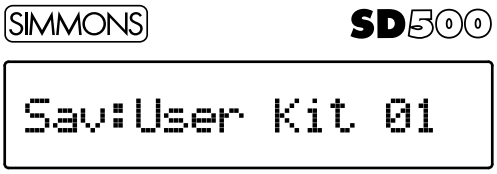
KIT MODE - ADVANCED

Renaming a Kit

1. Select a User Kit.(Preset Kits cannot not be renamed)
2. Press the -/+ buttons to choose the User kit for save.
3. Press the SAVE/ENTER button to rename the User Kit.
4. Press the PAGE button to move the cursor
5. Press [+/-] to change the character
6. Press the SAVE/ENTER confirmation

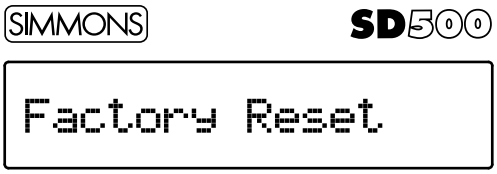
Saving a Kit

1. Press the SAVE/ENTER button to save the assignment to a User Kit.
2. Press the -/+ buttons to choose the User kit for save.
3. Press the SAVE/ENTER button to rename the User Kit.
4. Press the PAGE button to move the cursor
5. Press [+/-] to change the character
6. Press the SAVE/ENTER confirmation



Kit Reset

1. Select a Kit
2. Press the Page Button until you see Factory Reset.
3. Press the Save Button. The screen will show "Current Kit"
4. Press Save to reset just the one kit. If you want to reset all the kits go to the next step.
5. Press the + button. The screen will show "All Kits".
6. Press Save.



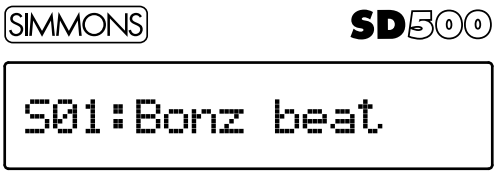
SONG MODE

Playing a Song

1. Press PLAY/STOP to play a song.

2. Press the PLAY/STOP button to stop playback of the song.

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



Muting the Drum Part

1. While a Song is playing press the PLAY/STOP and CLICK Button at the same time. This will mute the drum sound.

2. To unmute the Drums press the PLAY/STOP and CLICK Buttons at the same time again.

Editing a Song

1. Press the SONG Button. The current song will be displayed.

2. If you wish to change to another song press the -/+ buttons until you get to the Song you want to edit.

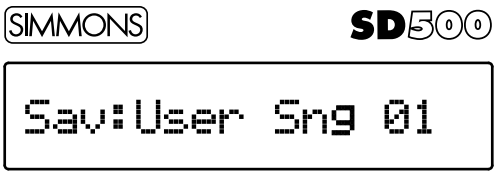
3. From the Song you have selected press the PAGE button. The first selection is the Accompaniment Volume (Acc Vol).

4. Press the -/+ buttons to set the value for the volume. To move to the next parameter press the PAGE button. Each time you press the PAGE button you will come to the next parameter. See the list below of the parameters for Songs.

- Acc Volume
- Drum Volume
- Mute Select: Part Mute - Drums or Accompaniment
- Kit Link: Kit follows the song changes
- Erase Track - Erase Drums or Accompaniment track (only user song)

Copy Song

You can copy Preset song to user song, then erase Drums or Accompaniment track, Re-Recording.



1. Select a Song.

2. Press the SAVE/ENTER button to save the to a User song

3. Press the -/+ buttons to choose the User song for save

4. Press the SAVE/ENTER button to rename the User song.

5. Press the PAGE button to move the cursor

6. Press [+/-] to change the character

7. Press the SAVE/ENTER confirmation

If you want to rename user song, song save to the original position, then use the rename instructions.

RECORDING A SONG

Recording Settings

There are several settings for the Record mode. To enter the setup mode press the RECORD and PAGE buttons.

SIMMONS SD500

1. The first page is the Track you wish to record to. The default is Drum. The other setting is Acc (accompaniment).

   To change between these Press the -/+ buttons.

   To record an accompaniment track you must use an external MIDI device such as MIDI keyboard that is connected to your computer to the USB input.

   Accompaniment track: To record these parts you will need an external MIDI keyboard or MIDI device that can output MIDI notes on MIDI channels 11-16.

   Channel 11: Percussion Part

   Channel 12-16: Accompaniment Part

2. The next Page is Together.

   If on, other track will play together with recording.

3. The next Page is Syn Start.

   This determines if you want the recorder to start recording when you first play a note, rather than waiting for a count-in. When you press the Record button the metronome will play and the recorder will not start until you play.

4. The next page is Pre Count.

   This determines the amount of measures you want to wait before recording. If Syn Start is on. This will be ignored. Press the -/+ buttons to change the parameter setting between 0-2 bars

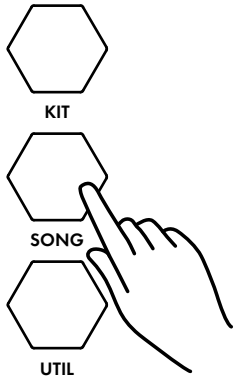
RECORDING A SONG

To Record

1. Press the Song Button
2. Select a User Song
3. Press the Record button.

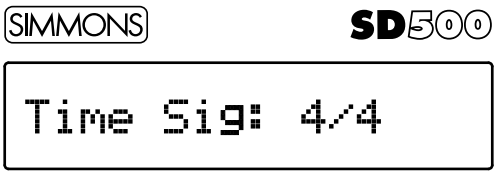
   You will hear the Click metronome sound count in. Begin playing the song after the count off.

4. After you record your song you can also rename the song, Press SAVE/ENTER button to save and rename.



Click Settings

The CLICK is the metronome sound that is played when you are listening to beat to play along with.



Press CLICK button on/off metronome.

1. To edit the Click settings press and hold the CLICK button for 2 seconds, then press the PAGE button.

   The first parameter is the time signature- "T Sig".

3. Press the -/+ buttons to select the time signature that you want.
4. To get to the next parameter press the PAGE button. See the list below of the parameters for the Click.

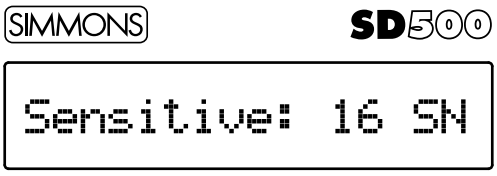
Definitions

Time Signature- Time Signature / T-Sig- For the preset songs, this parameter shows the current song's default value. For the user songs that have material already recording on them the default value is 4/4 and cannot be changed.
Interval- The refers to the note value interval for the click. Ex quarter note, eight note etc.
Click Voice- This refers to the sound for the Click
Click Vol- Click Volume
Reset- Resets the Click to the factory setup

UTILITY MODE

Utility Mode Settings

The Utility mode is for the main functions of the module such as trigger setup for the pads, effects, MIDI setup and saving global settings.



Trigger Settings

You can set the parameters of each drum and cymbals pad in the Trigger menu. While editing the settings, you can select each trigger by hitting the corresponding trigger pad.

1. Press the UTILITY button.
2. Press the PAGE button to see the screen for the current trigger pad- The default is the Snare pad center Sensitivity.
3. Strike the drum pad you want to edit to view the setting currently assigned
4. Press the -/+ buttons to change the parameter setting.
5. To get to the next parameter press the PAGE button. See the list below for the other parameters and explanations.

Parameter definitions

Sensitivity This adjusts the sensitivity of the pad trigger to control the pad response. Higher settings result in higher sensitivity, so that the pad will produce a loud volume even when struck softly. Having the sensitivity set too high can affect the dynamics of the pad.
Retrig-C (Retrigger cancel) Retrigger Cancel prevents retriggering from occurring. Although setting this to a high value prevents retriggering, it then becomes easy for sounds to be omitted when the drums played fast (roll etc.). Set this to the lowest value possible while still ensuring that there is no retriggering.
Threshold This setting allows a trigger signal to be received only when the pad is struck harder than a specified force. This can be used to prevent a pad from sounding in response to peripheral vibrations from another pad.
Curve (Trigger curve) This setting allows you to control the relation between the velocity (striking force) and changes in volume (the dynamic curve.) Adjust this curve until the response feels as natural as possible.
X- Talk (Pad Crosstalk) When two pads are mounted on the same stand, the vibration produced by hitting one pad may trigger the sound from another pad unintentionally (This is called crosstalk.) You can avoid this problem by adjusting Crosstalk Cancel on the pad that is sounding inadvertently. If the value is set too high, then when two pads are played simultaneously, the one that is struck less forcefully will not sound. Be careful when setting this parameter to the minimum value required to prevent crosstalk.

UTILITY MODE

Effects

The SD500 module has built-in Reverb and Chorus which are adjustable in the Utility Effects setup.

1. Press the UTILITY button. The first parameter is for the trigger settings.
2. Press the PAGE button until you see the screen for Reverb type
3. Press the -/+ buttons to change the parameter setting.
4. Press the PAGE button again to go to the screen for the Chorus type
5. Press the -/+ buttons to change the parameter setting.

The available parameters are available below:

Reverb

Hall1, Hall2, Room1, Room2, Room3, Stage1, Stage2, Plate, Delay, Echo, Off.

Chorus

Chorus1, Chorus2, Chorus3, Chorus4, Feedback, Flanger, Short Delay, Flanger2, Flanger3, Celeste1, Celeste2, Celeste3, Off.

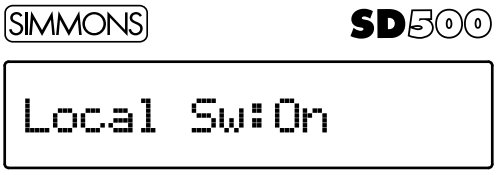
MIDI Settings

The SD500 module is a USB MIDI compatible device. There are no special drivers required to use the module with your computer.

Local - When local is on the front panel buttons and the external MIDI device sends MIDI data. In some cases you may want to turn off the front and remotely send MIDI commands. In this case set the Local to Off. The default setting is set to ON.

To change the Local On/Off.

1. Press the UTILITY button.
2. Press the PAGE button until you see the screen for MIDI Local "On"
3. Press the -/+ buttons to change the parameter setting.



UTILITY MODE

Pad MIDI Note assignments

The MIDI output notes from the SD500 are preset in the Module. The following list has the MIDI notes that are sent from the module when the drum pads and pedals are played.

MIDI Note	Pad
36	Kick
38	Snare – Center
40	Snare – Rim
48	Tom 1
45	Tom 2
43	Tom 3
46	Hi Hat- Open
42	Hi Hat – Closed
44	Hi Hat - Pedal
49	Crash
51	Ride

For more details on MIDI functionality please see the MIDI Implementation Chart in the Appendix section of the manual.

Auto Power Mode

Auto Close

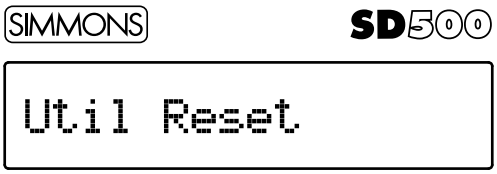
On: If you don't use SD500 exceeding 30 min. It will Automatically shutdown the module.

Off: The module will not shutdown Automatically. (default setting)

UTILITY MODE

Factory Reset

There may be occasions where you want the module to return to the factory settings. This function will return the module back to factory setup.



To Reset the Module to Factory Setup

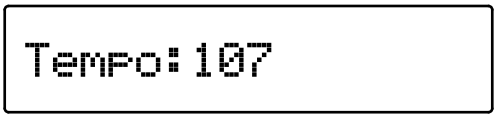
1. Press the UTILITY button.
2. Press the PAGE button until you see the screen for "Util Reset"*
3. Press the SAVE button to reset the module.
   The module will go through the reset procedure and afterwards return to the Kit mode screen.

* There are two types of resets. Utility reset just resets the module settings. Reset All will reset all the sounds as well as the module settings. (Press PAGE button again to Reset All.)

Tempo

To adjust tempo press the TEMPO button. The current tempo will be displayed.

You can adjust the tempo with the -/+ buttons. You can also change the tempo by tapping on the drum pads. To do this press the SAVE/ENTER button. The screen will show "Tap.." to indicate the module can accept your tempo input from the drum pads.



APPENDIX

Voice List

#	Type	Voices
1	Bass Drum	BD-Gated
2	Bass Drum	BD-ClassRok
3	Bass Drum	BD-EltroFnk
4	Bass Drum	BD-Funk 1
5	Bass Drum	BD-Funk 2
6	Bass Drum	BD-GTRKick
7	Bass Drum	BD-HvyMtl
8	Bass Drum	BD-Jazz
9	Bass Drum	BD-LAFunk
10	Bass Drum	BD-PhatFunk
11	Bass Drum	BD-Maple
12	Bass Drum	BD-Metal
13	Bass Drum	BD-Studio
14	Bass Drum	BD-Old Funk
15	Bass Drum	BD-Vintage
16	Snare	SD-Gated
17	Snare	SD-GatedCS
18	Snare	SD-GatedRS
19	Snare	SD-Aluminum
20	Snare	SD-AlummCS
21	Snare	SD-AlummRS
22	Snare	SD-BellBrass
23	Snare	SD-BllBrsCS
24	Snare	SD-BllBrsRS
25	Snare	SD-Brush
26	Snare	SD-BrushRS
27	Snare	SD-Bubinga
28	Snare	SD-BubngaCS
29	Snare	SD-BubngaRS
30	Snare	SD-ClassRok
31	Snare	SD-ClssRkCS

Voice List

#	Type	Voices
32	Snare	SD-ClssRkRS
33	Snare	SD-DepBrass
34	Snare	SD-DpBrssCS
35	Snare	SD-DpBrssRS
36	Snare	SD-ElctFkRS
37	Snare	SD-ElctrFnk
38	Snare	SD-Funk1
39	Snare	SD-Funk1CS
40	Snare	SD-Funk1RS
41	Snare	SD-Funk2CS
42	Snare	SD-Funk2RS
43	Snare	SD-HeavyMetal
44	Snare	SD-HvyMtlCS
45	Snare	SD-HvyMtlRS
46	Snare	SD-LAFnkRok
47	Snare	SD-LAFkRkCS
48	Snare	SD-LAFkRkRS
49	Snare	SD- Maple
50	Snare	SD-MapleCS
51	Snare	SD-MapleRS
52	Snare	SD-Metal
53	Snare	SD-MetalCS
54	Snare	SD-MetalRS
55	Snare	SD-Reggae
56	Snare	SD-ReggaeCS
57	Snare	SD-ReggaeRS
58	Snare	SD-ShllwBrs
59	Snare	SD-ShBrsCS
60	Snare	SD-ShBrsRS
61	Snare	SD-ShalWood
62	Snare	SD-ShWdCS

APPENDIX

Voice List

#	Type	Voices
63	Snare	SD-ShWdRS
64	Snare	SD-Steel1
65	Snare	SD-Steel1CS
66	Snare	SD-Steel1RS
67	Snare	SD-Steel 2
68	Snare	SD-Steel2CS
69	Snare	SD-Steel2RS
70	Snare	SD-Studio
71	Snare	SD-StudioCS
72	Snare	SD-StudioRS
73	Snare	SD-Vintage
74	Snare	SD-VintagCS
75	Snare	SD-VintagRS
76	Snare	SD-OldFunk
77	Tom	TM-GatedHi
78	Tom	TM-GatedLo
79	Tom	TM-GatedMd
80	Tom	TM-BrushHi
81	Tom	TM-BrushLo
82	Tom	TM-BrushMd
83	Tom	TM-ClssRKHi
84	Tom	TM-ClssRKLo
85	Tom	TM-ClssRKMd
86	Tom	TM-FunkHi
87	Tom	TM-FunkLo
88	Tom	TM-FunkMd
89	Tom	TM-HvyMtlHi
90	Tom	TM-HvyMtlLo
91	Tom	TM-HvyMtlMd
92	Tom	TM-LA Funk Hi
93	Tom	TM-LA Funk Lo

Voice List

#	Type	Voices
94	Tom	TM-LA Funk Md
95	Tom	TM-PhtFnkHi
96	Tom	TM-MapleHi
97	Tom	TM-PhtFnkLo
98	Tom	TM-MapleLo
99	Tom	TM-PhtFnkMd
100	Tom	TM-MapleMd
101	Tom	TM-MetalHi
102	Tom	TM-MetalLo
103	Tom	TM-MetalMid
104	Tom	TM-StudioHi
105	Tom	TM-StudioLo
106	Tom	TM-StudioMd
107	Tom	TM-OldFnkHi
108	Tom	TM-VintagHi
109	Tom	TM-OldFnkLo
110	Tom	TM-VintagLo
111	Tom	TM-OldFnkMd
112	Tom	TM-VintagMd
113	Hi Hat	HH-1Closed
114	Hi Hat	HH-2Closed
115	Hi Hat	HH-1Foot
116	Hi Hat	HH-2Foot
117	Hi Hat	HH-1Open
118	Hi Hat	HH-2Open
119	Hi Hat	HH-3Closed
120	Hi Hat	HH-3Foot
121	Hi Hat	HH-3Open
122	Hi Hat	HH-4Closed
123	Hi Hat	HH-4Foot
124	Hi Hat	HH-4Open

APPENDIX

Voice List

#	Type	Voices
125	Ride	RD-Ping
126	Ride	RD-Bell1
127	Ride	RD-Bell2
128	Ride	RD-Bow1
129	Ride	RD-Bow2
130	Ride	RD-RideEdg1
131	Ride	RD-Bell3
132	Ride	RD-Bow3
133	Ride	RD-RideEdg2
134	Crash	CY-China
135	Crash	CY-Crash1
136	Crash	CY-Crash2
137	Crash	CY-Crash3
138	Percussion	PR-AgogoLrg
139	Percussion	PR-AgogoSm
140	Percussion	PR-Bell
141	Percussion	PR-BongoLrg
142	Percussion	PR-BongoSm
143	Percussion	PR-CabasaLg
144	Percussion	PR-Cabasa
145	Percussion	PR-Clave
146	Percussion	PR-CongaSlp
147	Percussion	PR-Conga
148	Percussion	PR-CowbllOp
149	Percussion	PR-CowbllMt
150	Percussion	PR-CowblM2O
151	Percussion	PR-Guiro
152	Percussion	PR-Marcas
153	Percussion	PR-PandroOp
154	Percussion	PR-PandroRk
155	Percussion	PR-PandrSlp

Voice List

#	Type	Voices
156	Percussion	PR-QuicaDwn
157	Percussion	PR-QuicaHi
158	Percussion	PR-Shaker
159	Percussion	PR-Sleghbel
160	Percussion	PR-Surdo
161	Percussion	PR-TmbrnSlp
162	Percussion	PR-Tambourn
163	Percussion	PR-TimbleHi
164	Percussion	PR-TimbleLo
165	Percussion	PR-TimbleRm
166	Percussion	PR-TimbleSm
167	Percussion	PR-Timbale
168	Percussion	PR-Timpani
169	Percussion	PR-TriangMt
170	Percussion	PR-TrangM2O
171	Percussion	PR-TrangOpn
172	Percussion	PR-TmbOpnSp
173	Percussion	PR-TumbaSlp
174	Percussion	PR-Tumba
175	Percussion	PR-Vibraslp
176	Percussion	PR-WhstlLng
177	Percussion	PR-Whstlsht
178	Percussion	PR-WdblokLo
179	Percussion	PR-WdblokHi
180	Electronic Kick	EK-808Kick
181	Electronic Kick	EK-TekSynK
182	Electronic Kick	EK-Hip Hop1
183	Electronic Kick	EK-Hip Hop2
184	Electronic Kick	EK-Hip Hop3
185	Electronic Kick	EK-Techno1
186	Electronic Kick	EK-Techno2

APPENDIX

Voice List

#	Type	Voices
187	Electronic Kick	EK-Techno3
188	Electronic Kick	EK-Techno4
189	Electronic Kick	EK-Techno5
190	Electronic Kick	EK-Techno6
191	Electronic Kick	EK-Techno7
192	Electronic Kick	EK-Techno8
193	Electronic Kick	EK-Techno9
194	Electronic Kick	EK-Techno10
195	Electronic Kick	EK-Techno11
196	Electronic Kick	EK-Techno12
197	Electronic Kick	EK-Techno13
198	Electronic Kick	EK-Techno14
199	Electronic Kick	EK-Techno15
200	Electronic Kick	EK-Techno16
201	Electronic Kick	EK-Techno17
202	Electronic Kick	EK-Techno18
203	Electronic Kick	EK-Techno19
204	Electronic Kick	EK-Techno20
205	Electronic Kick	EK-Techno21
206	Electronic Kick	EK-Techno22
207	Electronic Kick	EK-Simmons1
208	Electronic Kick	EK-Simmons2
209	Electronic Snare	ES-Electro!
210	Electronic Snare	ES-Tech1
211	Electronic Snare	ES-Tech2
212	Electronic Snare	ES-Tech3
213	Electronic Snare	ES-Tech4
214	Electronic Snare	ES-Tech5
215	Electronic Snare	ES-Tech6
216	Electronic Snare	ES-Tech7
217	Electronic Snare	ES-Tech8

Voice List

#	Type	Voices
218	Electronic Snare	ES-Tech9
219	Electronic Snare	ES-Tech10
220	Electronic Snare	ES-Tech11
221	Electronic Snare	ES-HouseSnr
222	Electronic Snare	ES-Kling
223	Electronic Snare	ES-TekCrazy
224	Electronic Snare	ES-TekCrzy2
225	Electronic Snare	ES-Hip Hop1
226	Electronic Snare	ES-Hip Hop2
227	Electronic Snare	ES-Hip Hop3
228	Electronic Snare	ES-Hip Hop4
229	Electronic Snare	ES-Techno1
230	Electronic Snare	ES-Techno2
231	Electronic Snare	ES-Techno3
232	Electronic Snare	ES-Hip Hop5
233	Electronic Snare	ES-Simmons1
234	Electronic Snare	ES-Simmons2
235	Electronic Snare	ES-Simmons3
236	Electronic Snare	ES-Simmons4
237	Electronic Snare	ES-Simmons5
238	Electronic Snare	ES-Simmons6
239	Electronic Snare	ES-Simmons7
240	Electronic Snare	ES-Simmons8
241	Electronic Snare	ES-Simmons9
242	Electronic Snare	ES-Simmns10
243	Electronic Snare	ES-Simmns11
244	Electronic Snare	ES-808
245	Electronic Snare	ES-DRAS
246	Electronic Snare	EP-808Snare
247	Electronic Tom	ET-Electro1
248	Electronic Tom	ET-Electro2

APPENDIX

Voice List

#	Type	Voices
249	Electronic Tom	ET- Simmns1
250	Electronic Tom	ET- Simmns2
251	Electronic Tom	ET- Simmns3
252	Electronic Tom	ET- Simmns4
253	Electronic Tom	ET- Simmns5
254	Electronic Tom	ET- Simmns6
255	Electronic Tom	ET- Simmns7
256	Electronic Tom	ET- Simmns8
257	Electronic Tom	ET-Techno1
258	Electronic Tom	ET-Techno2
259	Electronic Tom	ET-Techno3
260	Electronic Tom	ET-Techno4
261	Electronic Tom	ET-Techno5
262	Electronic Tom	ET-909
263	Electronic Percussion	EC-606Clsd1
264	Electronic Percussion	EC-606Clsd2
265	Electronic Percussion	EC-606Open
266	Electronic Percussion	EC-808
267	Electronic Percussion	EC-808Clsd
268	Electronic Percussion	EC-808Open
269	Electronic Percussion	EC-909Crash
270	Electronic Percussion	EC-909Open
271	Electronic Percussion	EC-ClosdHat
272	Electronic Percussion	EC-Crash1
273	Electronic Percussion	EC-Crash2
274	Electronic Percussion	EC-Crash3
275	Electronic Percussion	EC-HHfoot
276	Electronic Percussion	EC-ClsdHat1
277	Electronic Percussion	EC-ClsdHat2
278	Electronic Percussion	EC-ClsdHat3
279	Electronic Percussion	EC-ClsdHat4

Voice List

#	Type	Voices
280	Electronic Percussion	EC-ClsdHat5
281	Electronic Percussion	EC-ClsdHat6
282	Electronic Percussion	EC-OpenHat1
283	Electronic Percussion	EC-OpenHat2
284	Electronic Percussion	EC-OpenHat3
285	Electronic Percussion	EC-OpenHat4
286	Electronic Percussion	EC-OpenHat5
287	Electronic Percussion	EC-OpenHat6
288	Electronic Percussion	EC-HpHpClH1
289	Electronic Percussion	EC-HpHpClH2
290	Electronic Percussion	EC-HpHpOpH1
291	Electronic Percussion	EC-HpHpOpH2
292	Electronic Percussion	EC-HpHpOpH3
293	Electronic Percussion	EC-SimmnsRd
294	Electronic Percussion	EC-SimmnsCr
295	Electronic Percussion	EC-SimnsCH1
296	Electronic Percussion	EC-SimnsOH1
297	Electronic Percussion	EC-SimnsOH2
298	Electronic Percussion	EC-SimnsOH3
299	Electronic Percussion	EC-TechHHCl
300	Electronic Percussion	EC-TechCrsh
301	Electronic Percussion	EC-TechChna
302	Electronic Percussion	EC-TechOHH1
303	Electronic Percussion	EC-TechOHH2
304	Electronic Percussion	EC-TechRd1
305	Electronic Percussion	EC-TechRd2
306	Electronic Percussion	EC-TechCrFX
307	Electronic Percussion	EP-NoiseClp
308	Electronic Percussion	EP-Sinetick
309	Electronic Percussion	EP-808Bleep
310	Electronic Percussion	EP-808Clap

APPENDIX

Voice List

#	Type	Voices
311	Electronic Percussion	EP-808Clap2
312	Electronic Percussion	EP-808Clave
313	Electronic Percussion	EP-808Conga
314	Electronic Percussion	EP-808Cowbl
315	Electronic Percussion	EP-808Marca
316	Electronic Percussion	EP-808Rim
317	Electronic Percussion	EP-Blip
318	Electronic Percussion	EP-Crack
319	Electronic Percussion	EP-ElctrClp
320	Electronic Percussion	EP-FiltrSnp
321	Electronic Percussion	EP-Kling
322	Electronic Percussion	EP-Ping
323	Electronic Percussion	EP-Punch
324	Electronic Percussion	EP-Sboing
325	Electronic Percussion	EP-Sinetick
326	Electronic Percussion	SlpBasPhrse1
327	Electronic Percussion	SlpBasPhrse3
328	Electronic Percussion	GitarPhrse2

Kit List

#	No.	Display Name
1	K01:	Maple
2	K02:	LA Funk Rok
3	K03:	Funk 1
4	K04:	Vintage
5	K05:	Metal
6	K06:	Bubinga Kit
7	K07:	Classic Rock
8	K08:	Funk 2
9	K09:	Heavy Metal
10	K10:	Techno 1
11	K11:	Country
12	K12:	Hip Hop 1
13	K13:	Simmons
14	K14:	Latin Perc
15	K15:	Studio
16	K16:	ElectroFunk
17	K17:	Jazz
18	K18:	Brushes
19	K19:	Reggae
20	K20:	80's Gated
21	K21:	Mental
22	K22:	Breakbeat
23	K23:	Funk 3
24	K24:	Crazy!
25	K25:	Hip Hop 2

APPENDIX

Key Map

#	PG#	Manual Name
1	0	Acoustic Piano
2	4	Electric Piano
3	7	Clavinet
4	16	Drawbar Organ
5	17	Percussion Organ
6	24	Nylon Guitar
7	25	Steel Guitar
8	27	Tweed Guitar
9	28	Muted Guitar
10	29	Distorted Guitar 1
11	30	Distorted Guitar 2
12	32	Acoustic Bass
13	38	Acoustic Bass Slap
14	39	Acoustic Bass Slide
15	33	Fingered Bass
16	40	Slap bass hardthumb
17	37	Muted Bass
18	34	Pick Bass
19	35	Rock Bass
20	36	Slap Bass
21	41	Slap Bass Softthumb
22	42	Slap Bass Phrase 1
23	43	Slap Bass Phrase 2
24	44	Slap Bass Phrase 3
25	45	Funk Guitar Phrase 1
26	46	Funk Guitar Phrase 2
27	47	Funk Guitar Phrase 3
28	48	Funk Guitar Phrase 4
29	49	Funk Guitar Phrase 5
30	50	Funk Guitar Phrase 6
31	61	Horn Section

Key Map

#	PG#	Manual Name
32	80	Synth 1
33	81	Synth 2
34	82	Synth 3
35	83	Synth 4
36	84	Synth 5
37	85	Synth 6
38	86	Synth 7
39	87	Synth 8
40	88	Synth 9
41	89	Synth 10
42	90	Synth 11
43	91	Synth 12

APPENDIX

Patterns

	Display Name
S01:	Bonz beat
S:02	Funky D
S:03	Blues Beat
S:04	HeadBanger
S:05	Black Magic
S:06	Funky Fly
S:07	Metalhead
S:08	MoreCowbell
S:09	RockShuffle
S:10	Hip Hoppin'
S:11	Tech Step
S:12	Surf's Up
S:13	Fusion Gruv
S:14	Alt Rock
S:15	Salsa
S:16	Funky Strut
S:17	Texas Blues
S:18	Big 70's
S:19	ItsGt2BFnky
S:20	80's Rock
S:21	East Coast
S:22	Freakiness
S:23	SearchLite
S:24	Jazz Walk
S:25	B' Good
S:26	BreakDown
S:27	Train Groove
S:28	HVY Groove
S:29	PhatCheck
S:30	Rock Blues
S:31	LA Funk

Patterns

	Display Name
S:32	Ballad Rock
S:33	Rockin'Out
S:34	UpBeat
S:35	Stage Funk
S:36	Samba
S:37	NightClub
S:38	70's Rock
S:39	New Reggae
S:40	Last Dance
S:41	Big Rock
S:42	Steady 8's
S:43	Funky Pop
S:44	R&B
S:45	B Invasion
S:46	80's Pop
S:47	Freaky
S:48	Hard Trance
S:49	Maracas
S:50	Texas2Stp

APPENDIX

MIDI Implementation Chart

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

Mode1: OMNI ON, POLY
Mode2: OMNI ON, MONO
Mode3: OMNI OFF, POLY
Mode4: OMNI OFF, MONO

*1: Registered parameter number:
#0: Pitch sensivity
#1: Fine tuning in cents
#2: Coarse tuning in half-tones

O: Yes
X: NO