CARLSBRO

Module: CSD25M

OWNER'S MANUAL

Congratulations!

Thank you for purchasing this Carlsbro digital drum set. This drum set has been developed to act and play like an acoustic drum set but with greater ease and much lower volume. Before you use the instrument, we recommend that you take the time to carefully read through this user guide, to familiarise yourself with the controls and get the best out of your new drum set. It also contains important safety information and practical hints and tips to perfectly setup and configure your drum set.

Taking care of your digital drum set

Location
- Please set up your drum set in a spacious area on a carpet or rug where available.
- Do not expose the unit to the following conditions to avoid deformation, discolouration or more serious damage:
Direct sunlight, high temperatures, next to a heat source, in a car during the day time or in a cold, damp environment.

Power supply
- Make sure to use a correct AC adaptor and that the AC outlet voltage of your country matches the input voltage specified on the AC adaptor, and label on the underside of the sound module.
- Turn the power switch OFF when the Instrument is not in use.
- The AC adaptor should be unplugged from the AC outlet if the instrument is not to be used for an extended period of time.
- Unplug the AC adaptor during electrical storms.
- Avoid plugging the AC adaptor into the same AC outlet as appliances with high power consumption, such as electric heaters or ovens.
- Try to avoid using multi-plug adaptors as these can result in a reduction of sound quality, operational errors, and possibly damage.

Turn power OFF when making connections
- To avoid damage to the instrument and connected devices, turn the power switches of all related devices OFF prior to connecting or disconnecting any cables.

Handling and transport
- Never apply excessive force to the controls, buttons, connectors or other parts of the instrument.
- Always unplug cables by gripping the plug firmly, not by pulling on the cable.
- Disconnect all cables before moving the instrument.
- Physical shocks caused by dropping, bumping, or placing heavy objects on the instrument will result in scratches and more serious damage.
- Do not disassemble any components or try to analyse any internal parts by yourself. There are no user-serviceable parts for this drum set. If any malfunction occurs during use, stop using it and refer to the trouble shooting page towards the end of this user guide.

Cleaning
- Unplug the power plug before cleaning this drum set. Do not touch the power plug with wet hands or materials.
- Clean with a dry soft cloth.
- A slightly damp cloth may be used to remove stubborn grime and dirt.
- Never use cleaners such as alcohol, detergents or thinners.
- Avoid placing vinyl objects on top of the unit (vinyl can stick to and discolour the surface).

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

Unpacking
- Please retain the packaging for this product in the unfortunate event that the product or any individual part needs to be returned for service or repair. Please complete the warranty card included with this product and also write your product serial number in the box at the end of this user guide. Returning the completed warranty card does not diminish your statutory rights in anyway.

Drum kit assembly

1. Open the drum frame as illustrated.

*note: for left handed assembly, open the frame legs backwards, so the snare arm is to the right hand side.

2. Once your frame is in position, slightly tighten the frame bolts with your supplied drum key, to reduce movement.

3. Place cymbal poles and L shape drum arms on the drum frame as illustrated.

Cymbal pole

Cymbal pole

Cymbal pole

Frame bolts

L shape arm

Snare arm
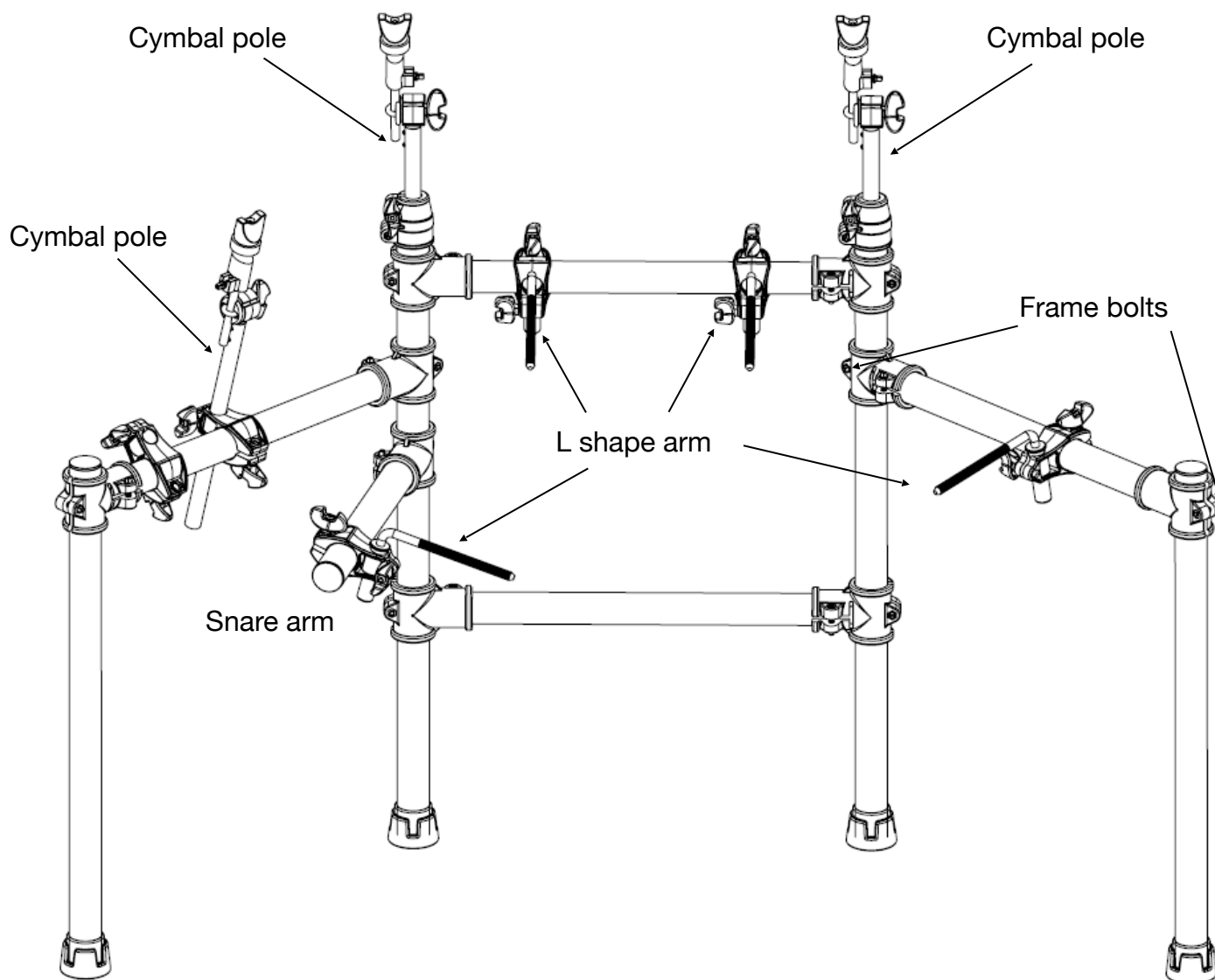
4. Fix the mesh drum pads to the L arms. The snare pad has a rubber top on the rim of the pad.

5. Place the cymbals on top of the cymbal poles and fasten with the cymbal nuts and felt washer above the cymbal. Do not over tighten, the cymbal should have slight movement and not be rigid.

*note: The Hi-Hat Cymbal pad is different to the Crash and Ride cymbal pads, please pay close attention to the labels on the underside of the cymbal pads.

6. Place the sound module in the remaining frame bracket either side of the Hi-Hat cymbal.

*note: It is ideal for younger drummers to have the module to the front of the frame so that the Hi-Hat is closer to reach. For adults the Hi-Hat and Module position can be reversed to give a much larger playing area.

7. Place the Hi-Hat Control pedal on the floor under the Hi-Hat cymbal pad.

8. Place the Kick pedal on the floor to your required position, usually under TOM2 position.

9. Adjust the pedal floor spikes, so the pedals grip to your carpet or rug to reduce movement.

*note: Both floor pedals look identical, so please pay close attention to the label on each pedal, To determine which is KICK and which is Hi-Hat Control.

CRASH

RIDE

HI-HAT

TOM1

TOM2

SOUND
MODULE

TOM3

SNARE

HI-HAT   PEDAL
CONTROL

KICK PEDAL
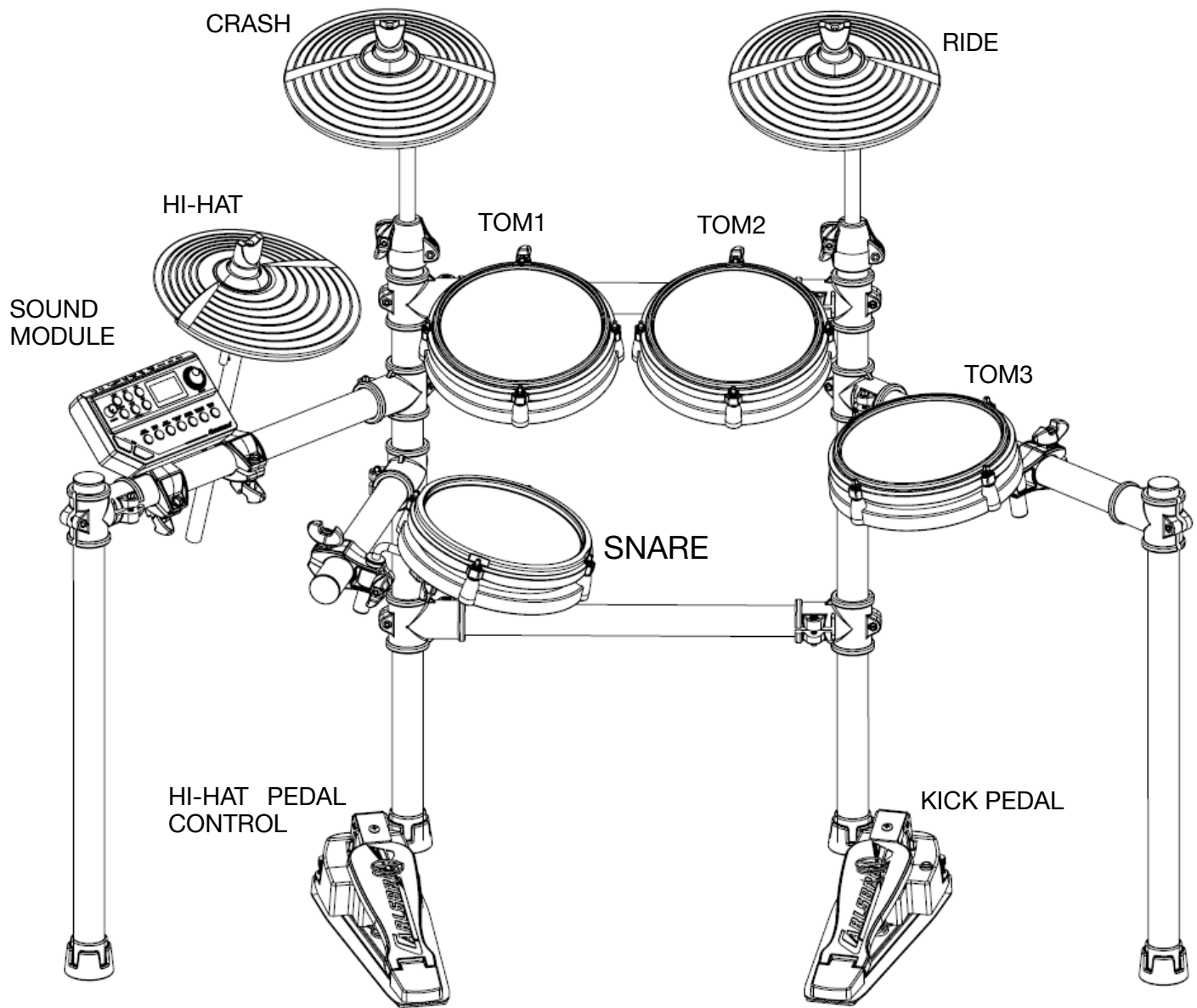
Connecting drum pads

Before connecting the drum cables, make sure that the power supply is switched OFF.

Connect the wiring loom main plug to the drum signal input port on the underside of the module.
Fasten tightly with the 2 locating screws on the plug.

Follow the labels on the end of each cable to match the diagram above, using the stickers on the
individual pads and parts for further reference.

Cable 'HH CTRL' (blue) plugs into the Hi-Hat Pedal control.
Cable 'Hi-Hat' (white) plugs into the Hi-Hat cymbal.
Cable 'Kick' (grey) plugs into the Kick pedal.
Cable 'Snare' (yellow) plugs into the mesh snare pad with rubber rim.
Cable 'Tom1' (orange) plugs into the the 1st mesh Tom pad.
Cable 'Tom2' (purple) plugs into the 2nd mesh Tom pad.
Cable 'Tom3' (black) plugs into the 3rd mesh Tom pad.
Cable 'Crash' (red) plugs into the crash cymbal pad position.
Cable 'Ride' (green) plugs into the ride cymbal pad position.

Positioning your pads

Once your drum set is assembled, you can further adjust the positioning of the frame and pads to suit you. The drum set should be comfortable and all pads should be easy to reach without over stretching.

1. The horizontal frame bars and snare arm can be adjusted up and down to suit drummers of different heights. Loosen the outside bolt on both ends, and slowly move the bar to your desired height, tighten the bolts to secure the position.

2. The frame width can be adjusted by turning the outer legs inwards or outwards allowing the Hi-Hat cymbal, sound module and Tom3 to be positioned closer or further away as needed.

3. The Mesh pads can be moved up/down, left/right, forwards/backwards and also be tilted upwards and downwards. It is ideal that the Toms are positioned in a way to reduce the risk of striking the pad rim. Striking the Tom rims can be quite loud, so these should be angled to reduce the risk of unwanted acoustic noise.

4. The cymbals can move up/down and also be tilted, it is important that the cymbals are hit on the rubber playing surface and not the plastic part to reduce noise and possible damage.

5. The Sound module and Hi-Hat cymbal can reverse positions to allow for a wider or narrower playing area. Place the Hi-Hat in the inner holder for a closer set up, or in the outer holder for a larger set up.

6. The pedals have unlimited movement, so place these in a position that is most comfortable for you.
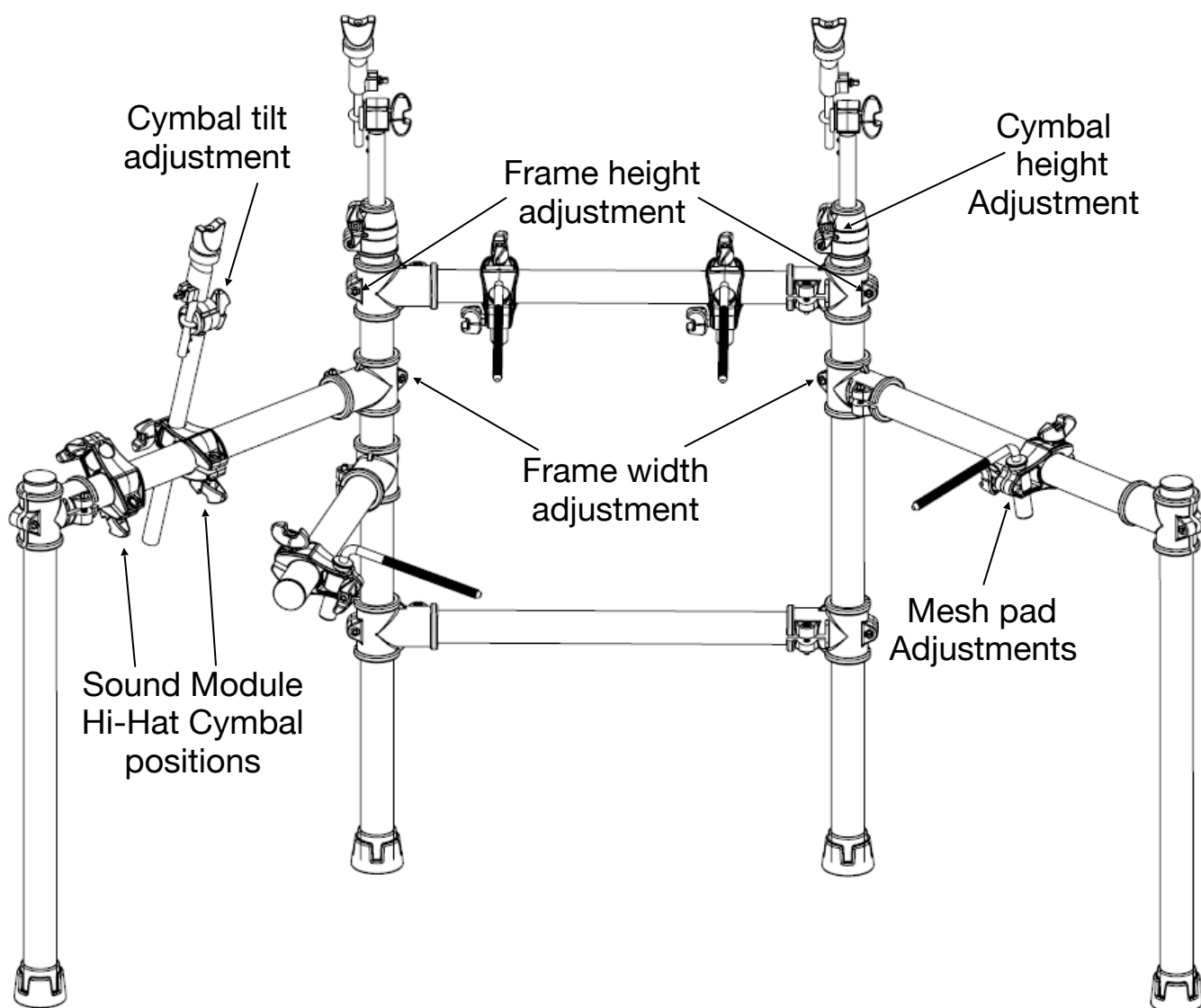
Playing the pads

Similar to an acoustic drum set, this digital drum set responds to various playing techniques, dynamics and velocity. With some voices changing tone depending on the strength of the strike.

1. The Mesh snare pad has 2 sensor zones: main pad and pad rim. On selected voices the rim can have 2 velocity specific sounds that create side stick and rim shot.
2. The Crash and Ride cymbal pads have one zone but also a CHOKE sensor, hit the cymbal and then pinch the central part of the rim to choke (stop) the sound.

Pad

Cross stick

CYMBAL

Rim shot
(Hit strongly)
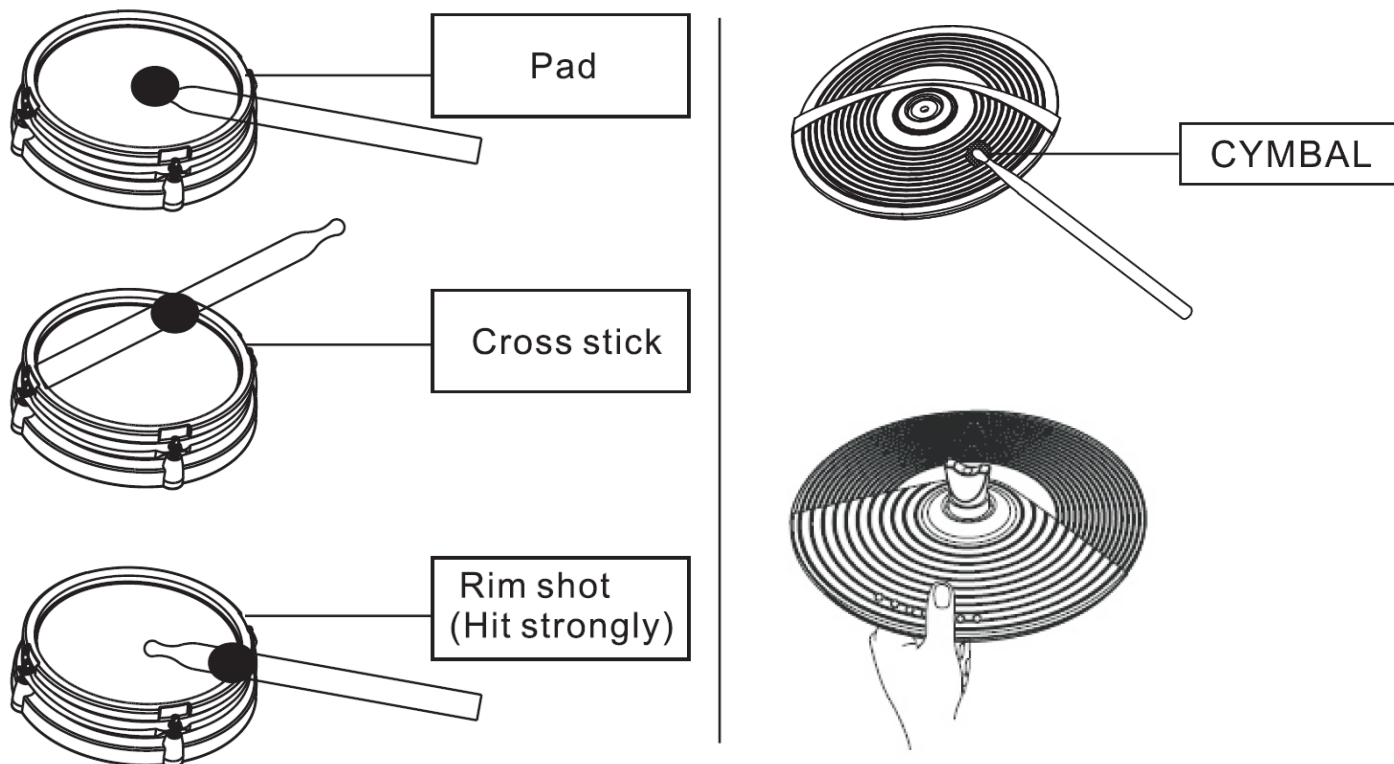
3. All Tom pads have a single sensor, so you can hit the main pad or accidentally hit the pad rim and you will get the same sound regardless.
4. The Hi-Hat cymbal pad is also a single sensor so it does not matter where this is hit, the hit cymbal sounds are controlled by the Hi-Hat control pedal.

Hi-Hat control pedal

The Hi-Hat sound changes depending on the action of the foot controlled Hi-Hat pedal:
1. Strike the Hi-Hat cymbal pad without pressing on the pedal for OPEN Hi-Hat sound.
2. Strike the Hi-Hat cymbal pad with the pedal pressed almost fully down for HALF OPEN Hi-Hat sound.
3. Strike the Hi-Hat cymbal pad with the pedal fully pressed down for CLOSED Hi-Hat sound.
4. Press the Hi-Hat pedal without striking the Hi-Hat cymbal to create the PEDAL Hi-Hat sound.
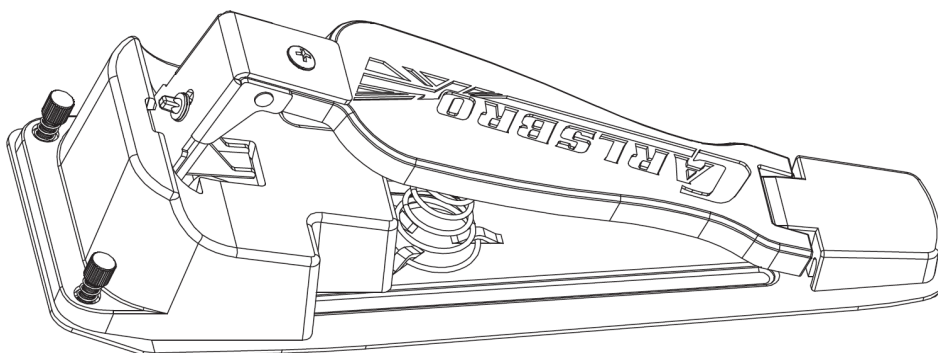
Function buttons
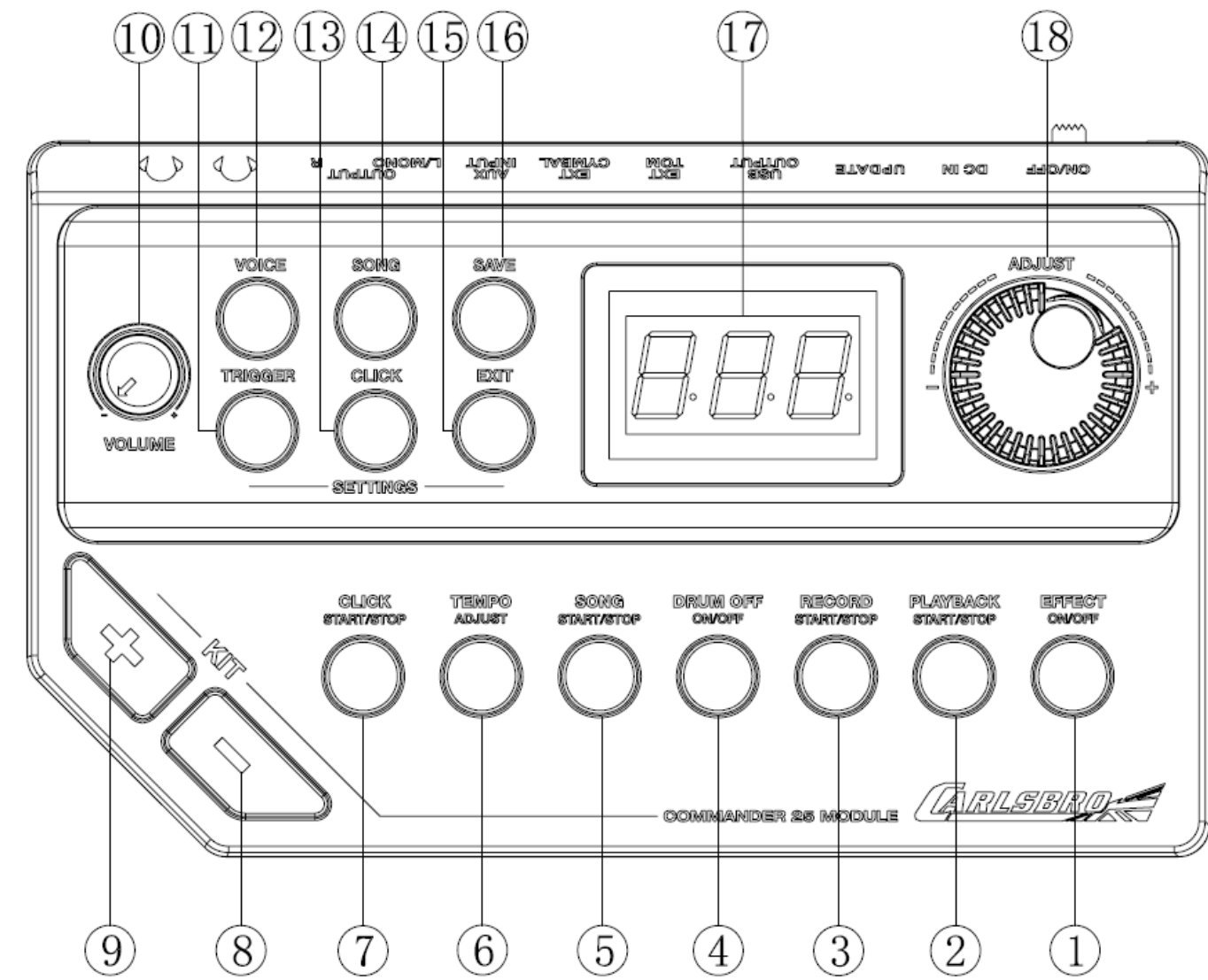
No.	Name	Description
①	EFFECT ON/OFF	When illuminated, the Reverb effect is on.
②	PLAYBACK START/STOP	Press this button once to select the file you wish to listen to, press again to play the selected file.
③	RECORD START/STOP	Press this button once to select which recording file to overwrite. Press again to start the recording. A third press will stop your recording.
④	DRUM ON/OFF	When illuminated, the drum backing track will be removed from the songs.
⑤	SONG START/STOP	Press this button once to start playing a demo song. Press again to stop the demo song
⑥	TEMPO	Quick tempo adjustment for songs and metronome (click)
⑦	CLICK START/STOP	Press this button once to start the metronome, press again to stop the metronome
⑧	KIT-	Change drum kit down
⑨	KIT+	Change drum kit up

	VOLUME	Main Output and Headphone master volume adjustment
⑩	VOLUME	Main Output and Headphone master volume adjustment
⑪	TRIGGER	Enter into Trigger parameter settings
⑫	VOICE	Enter into Voice, User drum kit builder settings
⑬	CLICK	Enter into metronome settings
⑭	SONG	Enter into demo song settings
⑮	EXIT	Exit the current operation and return to kit selection
⑯	SAVE	Save current adjustments to settings
⑰	SCREEN	LED Screen
⑱	ADJUST	Adjustment wheel to adjust parameters

Rear panel
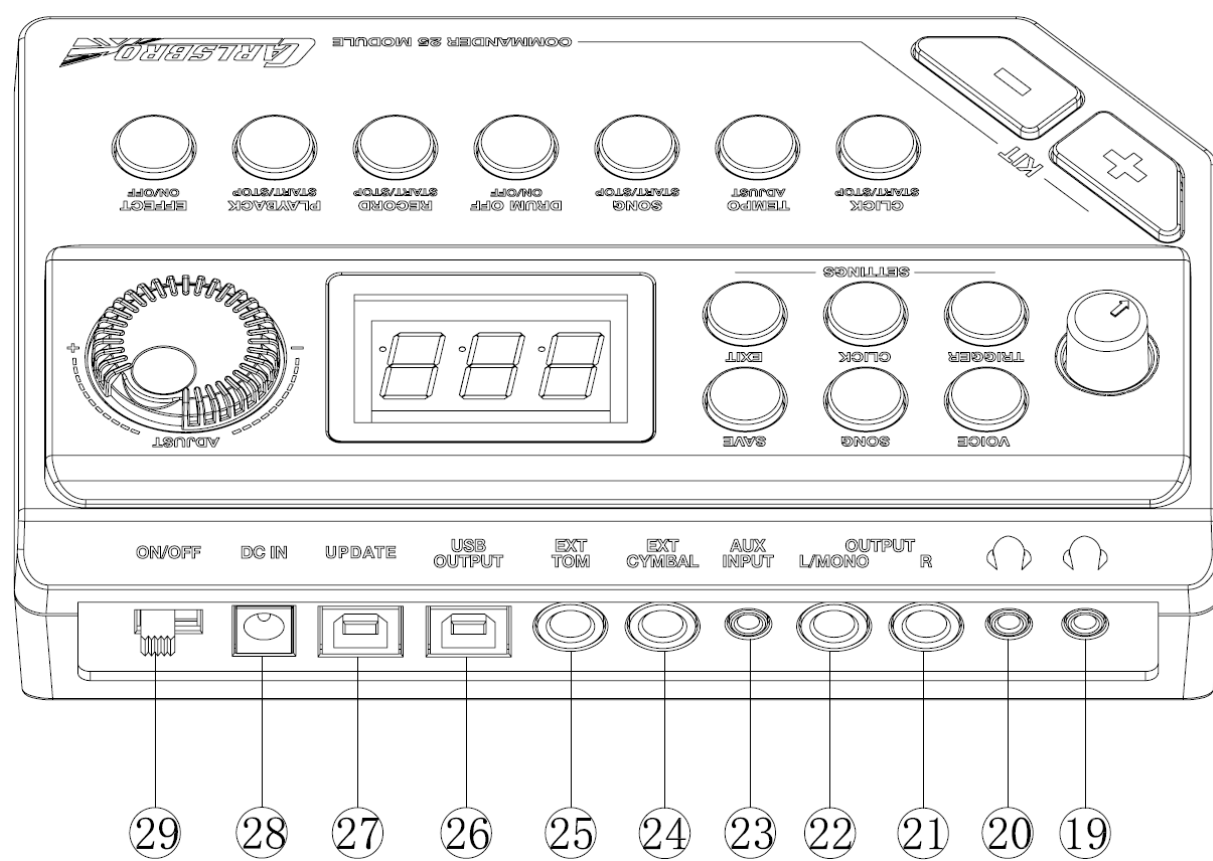
| No.	Name	Description
⑲⑳	HEADPHONE	2x Stereo headphone output (stereo socket)
㉑	R OUTPUT	Right channel of main stereo audio output (mono socket)
㉒	L(MONO) OUTPUT	Left channel of main stereo output (mono socket)

㉓	AUX IN	For connecting an audio device (computer/phone/mp3 player) for music and audio playback.
㉔	EXT CYMBAL	Connect to CRASH2 extension pack (sold separately)
㉕	EXT TOM	Connect to TOM4 extension pack (sold separately)
㉖	USB OUTPUT	Connect to computer for MIDI and Audio data transfer
㉗	UPDATE	Connect to computer for software upgrades and updates
㉘	DC IN	Power adaptor port: 12V 1A
㉙	ON/OFF	Power switch

Bottom panel
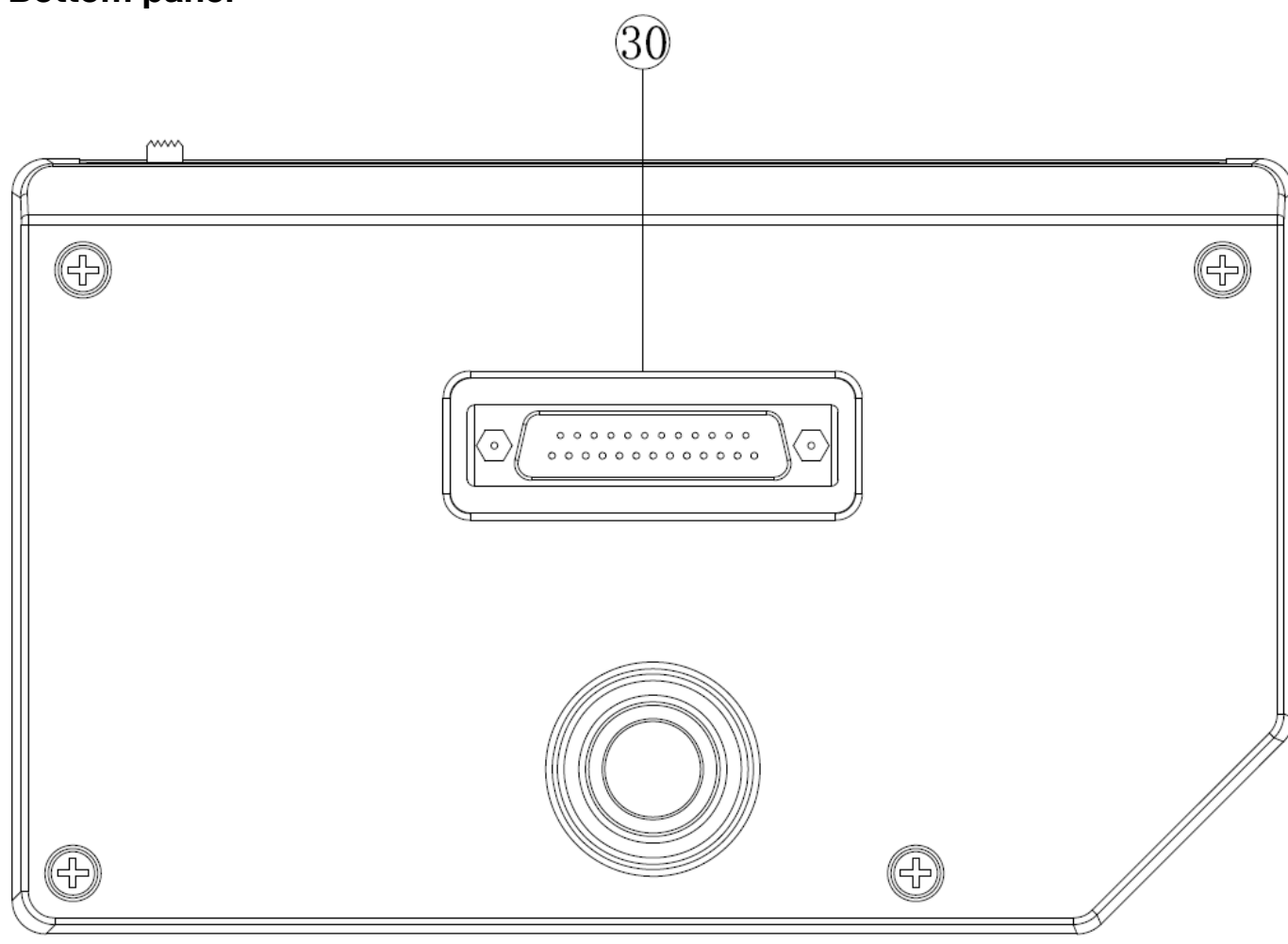
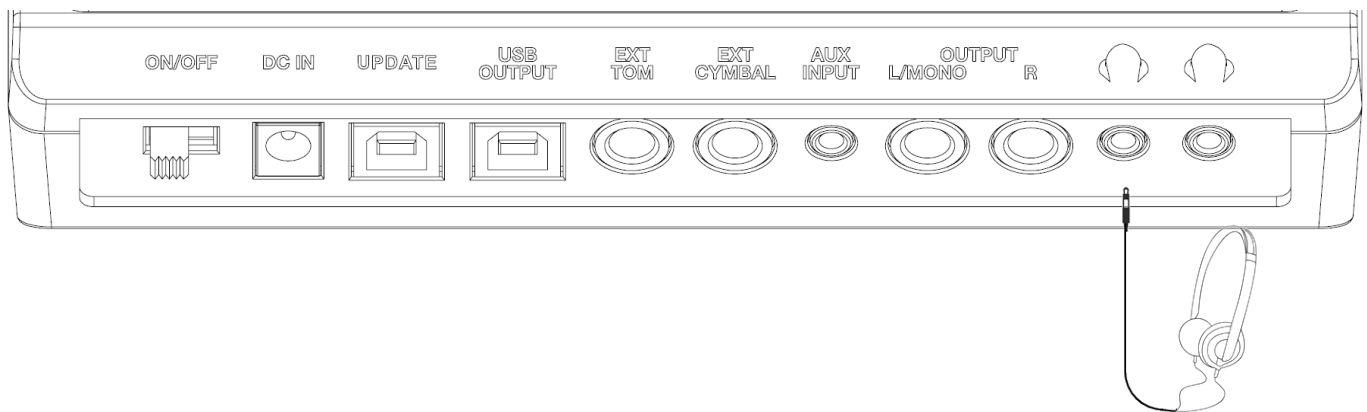| No.	Name	Description
㉚	TRIGGER INPUT	Drum signal input port

Connect to mains power
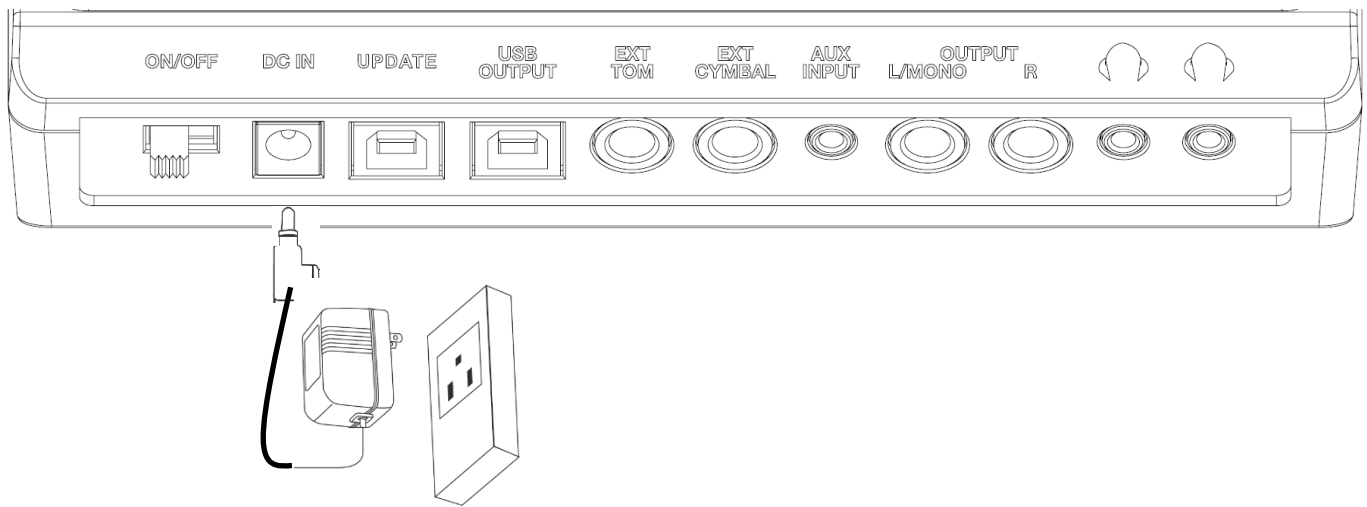
1. Check your AC Adaptor is correct for your countries mains voltage and socket type.
2. Make sure the drum pads, cymbals and pedals are connected correctly.
3. Turn the VOLUME control to minimum.
4. Slide the power switch on the rear panel to the ON position.

Connect to headphones

Connect your headphones to one of the two 3.5mm (1/8") stereo headphone sockets, both sockets can be used simultaneously to hear the sound from the module. The headphone volume is controlled by the VOLUME control.

Connect to amplifier or sound system
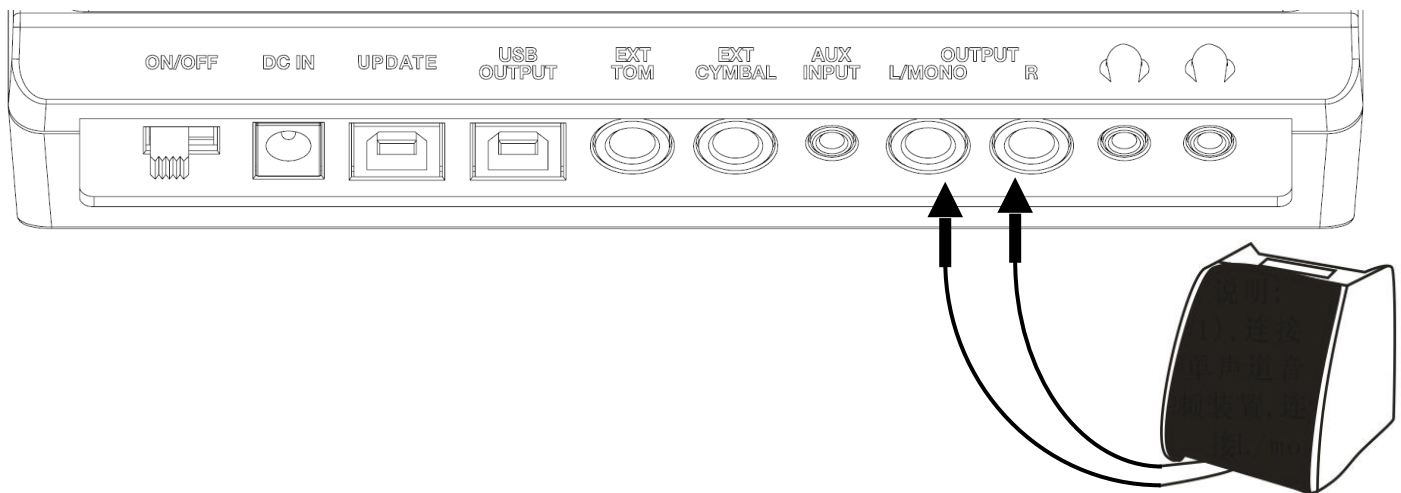
1. Make sure the volume on the sound module and audio system or amplifier are turned down.
2. Connect two mono 6.35mm (1/4") instrument cables to the Left and Right output sockets.
3. Connect the opposite ends of these cables to your audio system or amplifier inputs.
4. If your amplifier or sound system only has one input, you can use one mono 6.35mm (1/4") instrument cable from the L/MONO socket, however you will not get the full effect and quality of the drums.
5. Volume is controlled by the VOLUME control on the sound module and also the volume control for your system or amplifier.
6. For best quality and ease, turn the module volume to full and adjust your amplifier volume to your preference.

*note: It is advised to use an electronic drum amplifier to get the best possible sound. The CSD25M has been designed to work perfectly with the Carlsbro EDA series of drum amplifiers. Contact your Local Carlsbro retailer or distributor for further information and availability on these products.

Connect to audio playback device
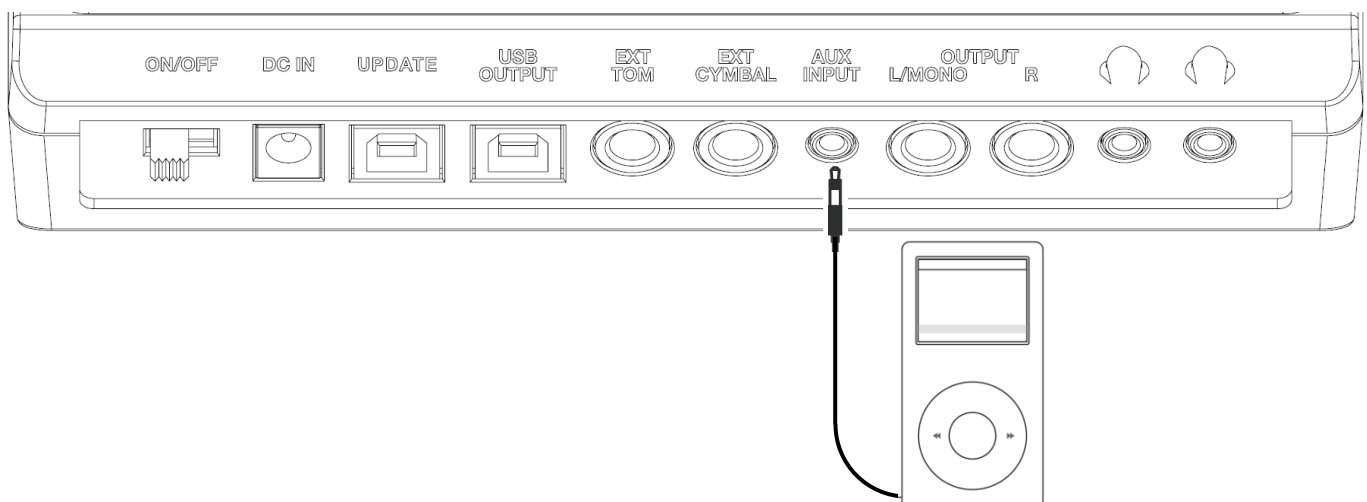
Connect the output of your audio device to the AUX INPUT 3.5mm (1/8") stereo connector. The volume should be adjusted on the audio device so the input signal can be mixed with the volume of the drums.

Connect to computer for MIDI and audio data transfer
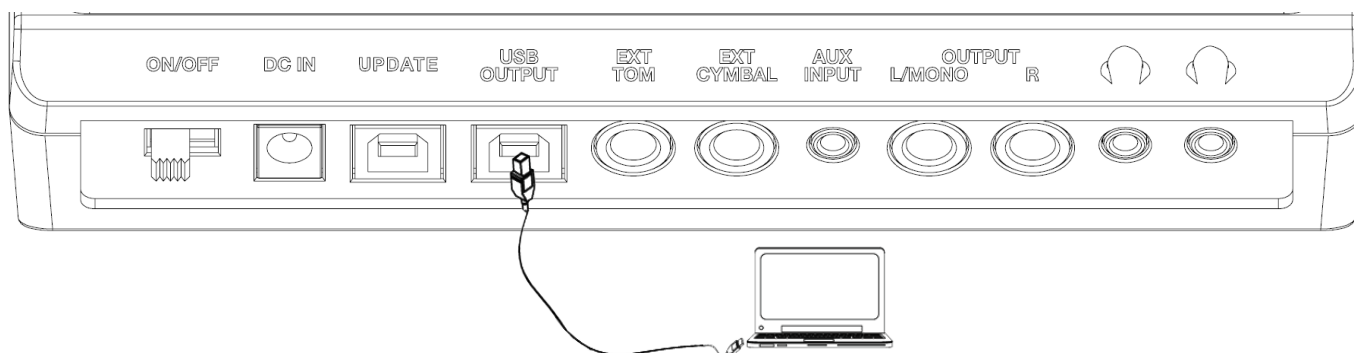
1. Make sure the module is switched off
2. Connect the USB output to your computer with a USB A to USB B cable (not included)
3. Load your desired music software and switch the module on.
4. Your software should automatically prompt you to use device USB AUDIO.
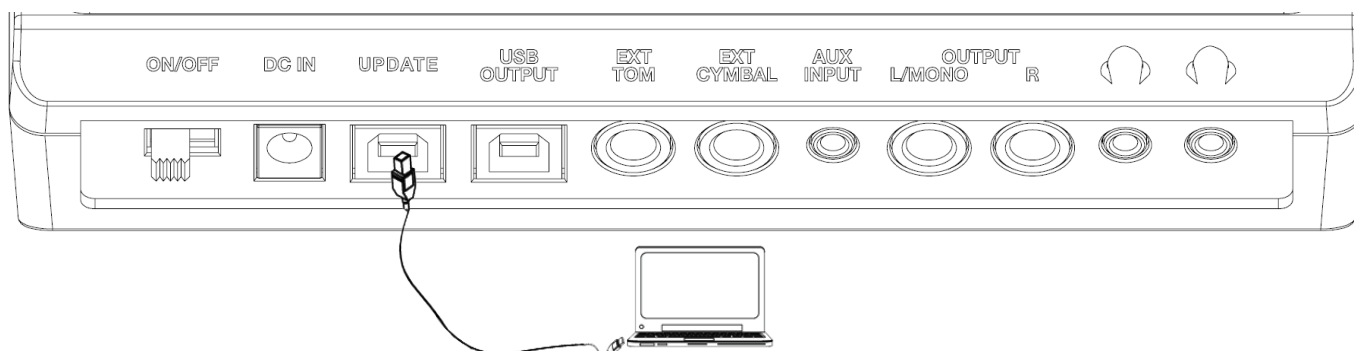5. The sound module can be used as a MIDI input device or an Audio input device, you can select this in your computer software preference settings.
6. Reference MIDI SETTINGS later in this guide for further information.

Connect to PC for software update

1. Make sure the module is switched off
2. Connect the UPDATE socket to your PC with a USB A to USB B cable (not included)
3. Switch the sound module on.
4. Press and hold the SAVE button for 5 seconds, the module buttons will all light up and the module screen will go blank.
5. Your computer will now identify the sound module as a device drive.

6. Download the software update from carlsbro.com/support .
7. Update files are identified as "EDRUMH**_CSD25M.bin" (H** = software version number).
8. Copy the .bin file and paste it to the device drive folder.
*Do not rename or alter this file in anyway.
9. The update will begin.
10. Do not turn off the Sound module or power supply during the update process.
11. If the update is successful, the module will automatically return to its normal state and the device will automatically unmount from the computer.
12. You can now remove the USB cable.
13. If for any reason the module does not return to its normal state, press the EXIT button to return to the module home screen.

Basic operation

Selecting a drum kit
The CSD25M has 22 preset drum kits: 001-022 and 10 user defined drum kits: U01-U10.
Press the KIT- or KIT+ buttons to quickly change drum kit, the LED display shows the currently selected drum kit. You can also use the Adjust wheel to quickly cycle though kits.
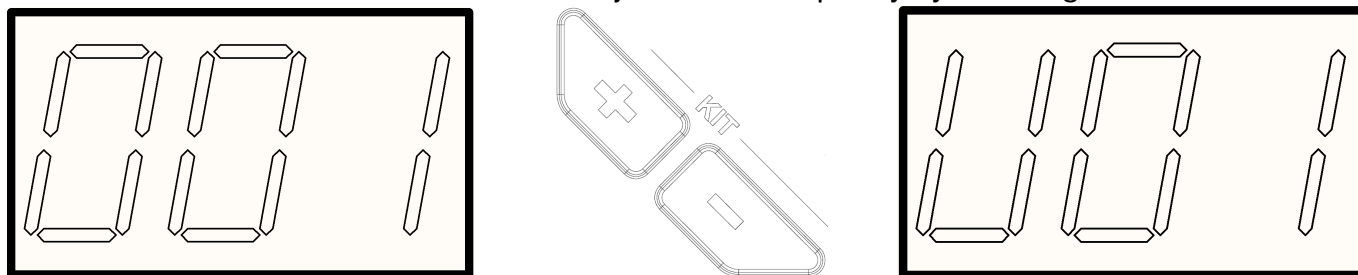
Playing songs
1. Press the SONG START/STOP button to start the DEMO SONG, press the button again to stop the song.
2. The screen displays the song number you are currently listening to.
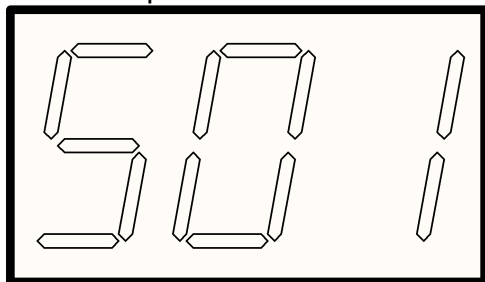3. Use the adjust wheel to scroll though the songs and the SONG START/STOP button to start and stop.

Adjusting songs
Press the SONG button to enter the SONG settings. Here you can adjust the volume of the song A?? and the volume of the drums in the song d??.
1. Press the SONG button once to select the volume of the song volume with the adjustment wheel.
2. Press the SONG button again to select the volume of the drum track with the adjustment wheel
3. Once you are happy with your levels press the save button TWICE to store these settings.
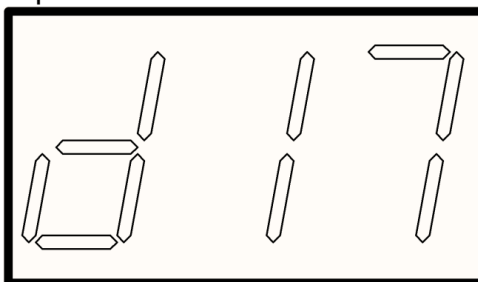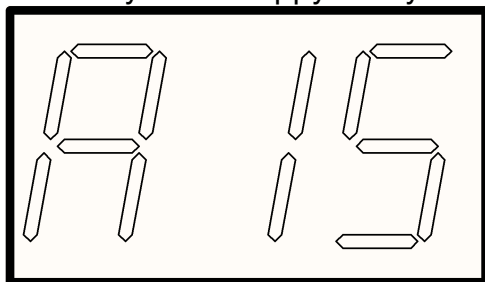
Removing the drum backing from songs (DRUM OFF)
The CSD25M allows you to quickly remove the drum sounds from the built in songs, to allow you to play along. To do so, press the DRUM OFF button. When this button is lit, the drums will be removed from the backing track.

Adjust the tempo of song tracks and metronome
Press the TEMPO ADJUST button, the screen will show the current BPM. Use the adjustment wheel to quickly adjust the speed of the songs and click to your desired BPM.

Using the metronome

Press the CLICK START/STOP button, The metronome will start, you will hear a click and also see the CLICK START/STOP button flash to indicate the timing. A red light indicates the first beat of the bar and green lights show the following beats.

Press CLICK settings button to scroll through the metronome settings:
1. The screen will show L?? Use the adjustment wheel here to select the volume of the metronome 0-32.
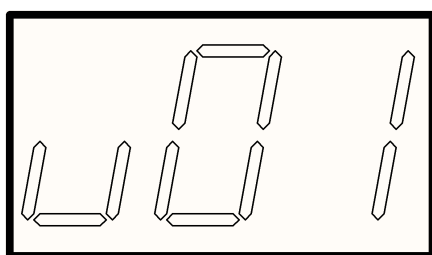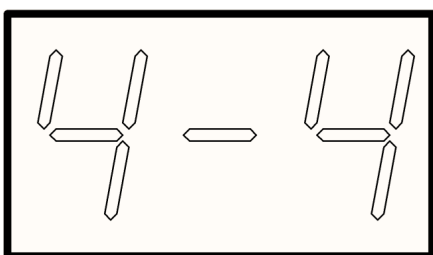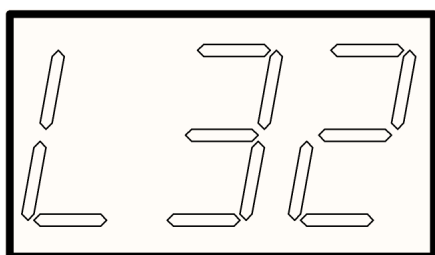2. The screen will show ?-? Use the adjustment wheel to select the time signature of the metronome.

   1/2、2/2、3/2、4/2、5/2、6/2、7/2、8/2、9/2、1/4/、2/4、3/4、4/4、5/4、6/4、7/4、8/4、

   9/4、1/8、2/8、3/8、4/8、5/8、6/8、7/8、8/8、9/8

3. The screen will show U0? Use the adjustment wheel to select the metronome voice u01 (electronic metronome 1), u02 (traditional metronome), u03 (Electronic metronome 2), u04 (counting voice).

Recording

The CSD25M has a built in recording function, to allow you to quickly record and save your drum beats and musical ideas. The built in recorder allows you to save 3 separate recordings
1. Press the RECORD START/STOP button, the screen will flash rc?
2. Use the Adjustment wheel to select which recording slot to record to: rc1, rc2, rc3
3. Press the RECORD START/STOP button to confirm your selection and start your recording. The actual recording will start when you strike the first pad, so there is no need to rush.
4. When you have finished your beat, Press the RECORD START/STOP button to stop the recording.
5. The recording is now automatically saved to the previously selected recording slot rc1, rc2, rc3.
6. The screen will flash again to allow you to record over your current recording or select another record slot to record to.

Listening to your recordings

1. Press the PLAYBACK button to enter the playback menu, the screen will flash with rc?
2. Use the Adjustment wheel to select which recording slot to listen to: rc1, rc2, rc3
3. Press PLAYBACK button to confirm your selection and your recording will now begin to play.
4. Press PLAYBACK button at anytime to stop the playback and return to the playback menu.
5. When playback of your recording finishes you will automatically return to the playback menu.
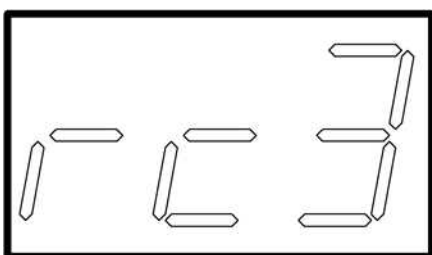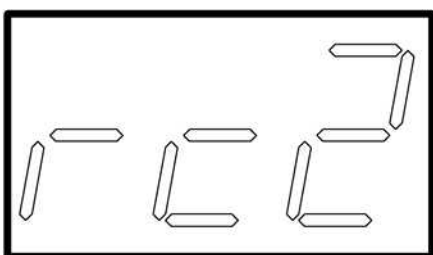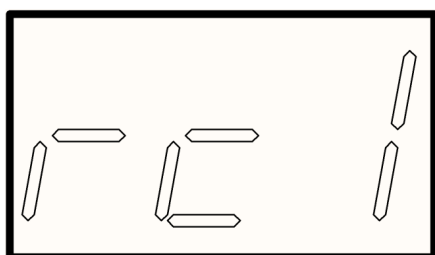
Building your own drum kits

The CSD25M has 10 User defined drum kit slots, you can choose the sounds that you hear on every single pad, to create your own personalised selection of drum kits. Pick from any of the 320 drum and percussion sounds, select which pad to add the sound to. Adjust the volume, tuning, stereo balance, reverb amount and also MIDI note of any and every pad and zone.

Basic adjustment

1. Press the VOICE button to enter into the dum kit designer mode. The VOICE button will remain lit whilst in this menu. The first screen shows you the voice number for the last pad that was played 001-320.
2. Strike a pad you wish to begin with. The screen will show you the voice number for this pad.
3. Use the adjustment wheel to change the voice of the pad. A full list of voices and corresponding numbers can be found towards the end of this manual.
4. Strike the pad again to hear the new sound.
5. Once you have found the sound you like you can now save your adjustment to one of the 10 User kits.
6. Press the SAVE button, the screen will flash U01, use the adjustment wheel to select which kit you would like to save to U01-U10.
7. When you have selected the kit you wish to save to, press the SAVE button again to confirm your selection and permanently save your kit.

*note: Be careful not to strike any other pads or pedals whilst making your adjustments, as the adjustment parameters will then move on to that pad.
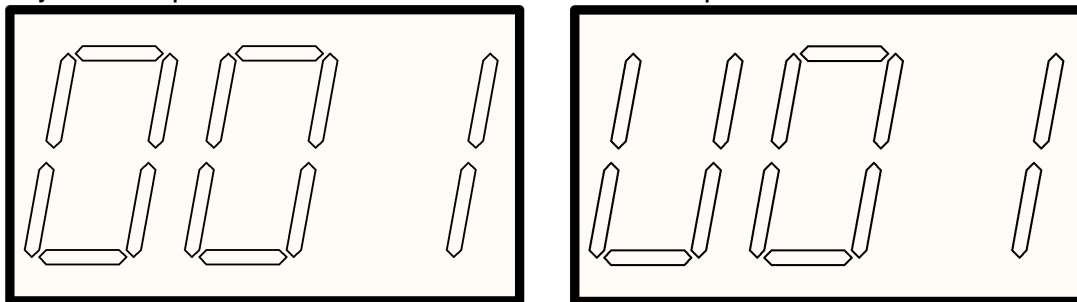
Advanced drum kit building

1. Whilst in the VOICE menu press the VOICE button again to adjust the voice volume for this pad L00-L32
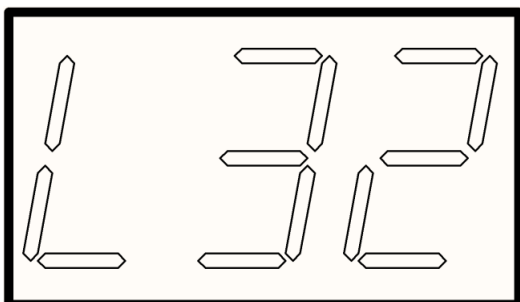
2. Press the VOICE button again to adjust the pitch tuning of the voice for this pad T-5-T+5. 0 has no tuning change to the voice, increase the number to make the pitch higher, reduce the number to make the pitch lower.
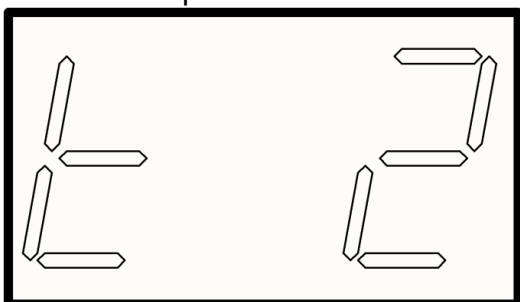
3. Press the VOICE button again to adjust the stereo panning of the voice P-8-P+8. 0 is the central position, negative negative values shift the voice to the left side of the stereo field, Positive numbers shift the voice to the right of the stereo field.
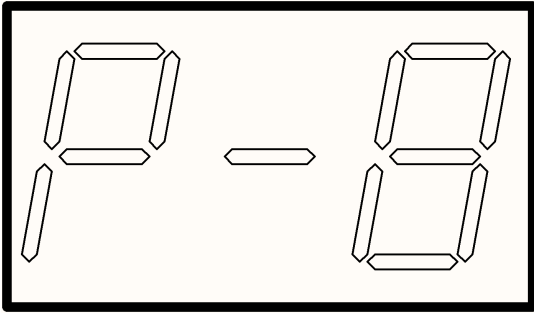
4. Press the VOICE button again to adjust the reverb amount of the voice r00-r32. 0 is no reverb applied. The higher the number the more reverb effect that is added to the voice.
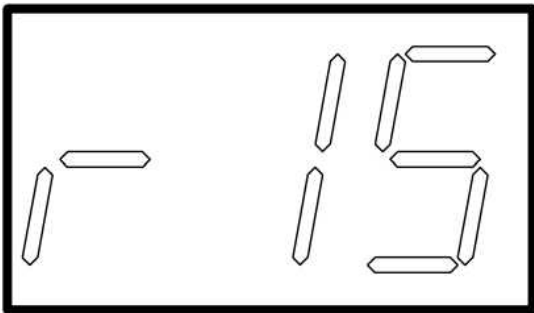
5.Press the VOICE button again to adjust the MIDI Note for this pad or zone. The preset values are set to work with most controller and tuition software, so this value should not need to be adjusted, Unless you are using specific software or hardware applications that may require different notes to trigger different sounds.
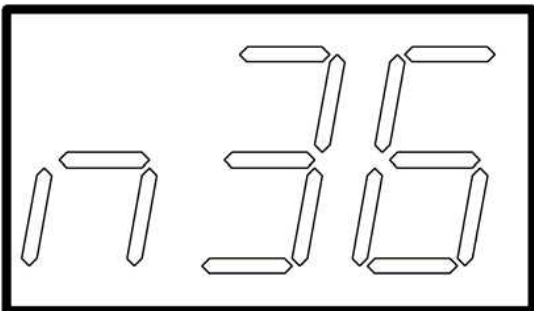
6. When you are happy with your adjustments, remember to save your creations to a user kit of your choice. It is advised to save your settings often whilst making adjustments, Just press the SAVE button, select the user kit number you wish to store your kit to, using the adjustment wheel, and press SAVE again to confirm your selection.

Trigger settings

The CSD25M has adjustable settings for each pad trigger. The adjustments made here will affect how each individual pad reacts. These settings are navigated similarly to the VOICE settings above.

Pad Curve
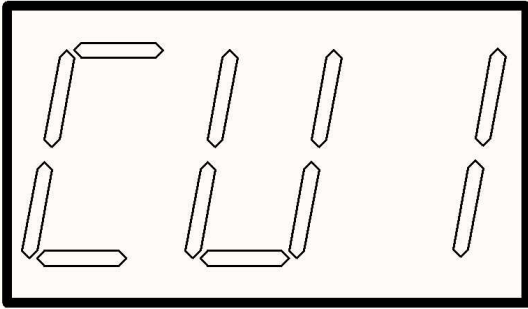
Press the TRIGGER button to enter trigger settings, the screen will first display pad curve CU?
Pad curve adjusts the ratio between strike velocity (the strength of your strike) and voice volume. Strike the pad you wish to adjust, use adjustment wheel to select curve, press SAVE twice to store.
Curve 1. (Boosted) Lighter strikes will have increased volume.
Curve 2. (Straight) Lighter strikes have low volume, heavy strikes have loud volume.
Curve 3. (Natural) Emulates acoustic drum feel, volume increases smoothly with your velocity.
Curve 4. (Boosted natural) Curve 3 with a slight low velocity volume boost.
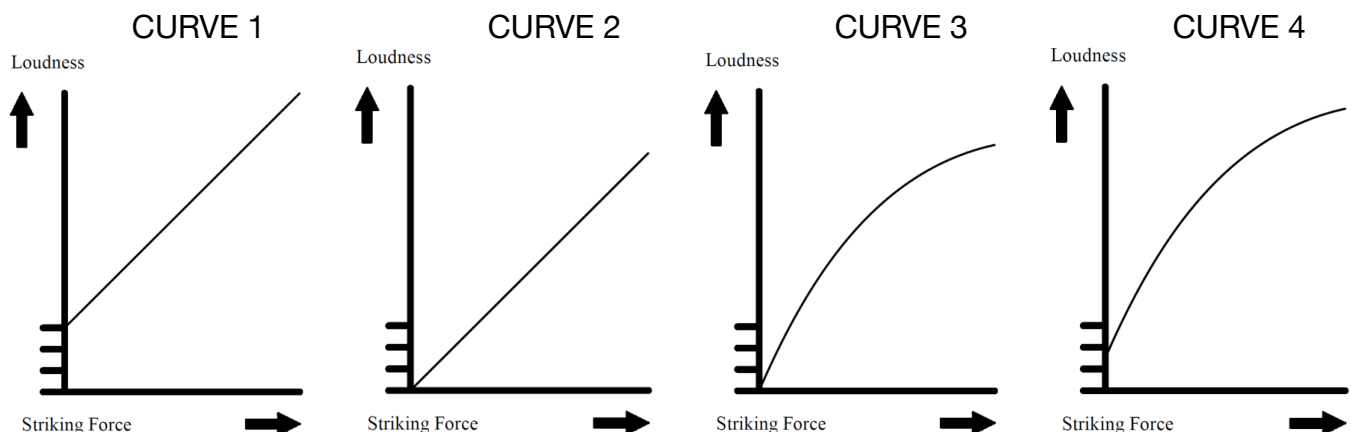
Pad threshold
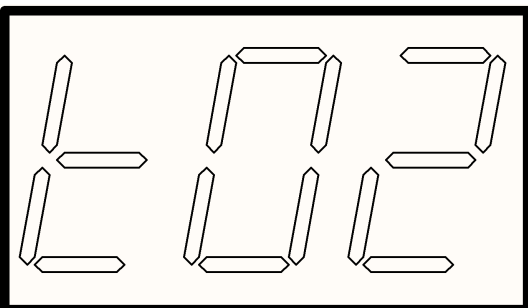
Press the TRIGGER button a second time to enter the threshold adjustment t??.
Threshold sets the level at which a strike can be heard. This value is important to reduce unwanted triggering from vibration from other pads and through the frame. The higher the threshold value the higher the velocity necessary to trigger the pad.
Strike the pad you wish to adjust, use the adjustment wheel to change the value and press SAVE TWICE to store your settings.
*note: If you can hear another pad triggering which you have not played, locate that pad, and increase the threshold value until the unwanted triggering disappears.

Pad sensitivity
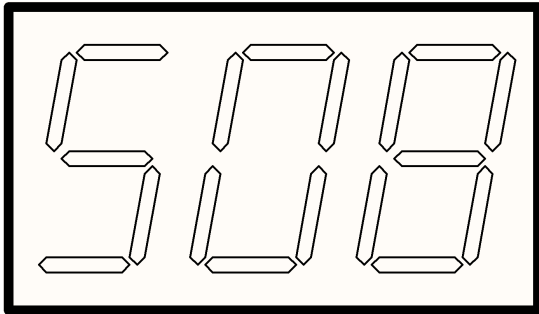
Press the TRIGGER button a third time to enter the sensitivity adjustment S??.
Higher sensitivity value allows the pad to produce a louder volume when played softer.
Lower sensitivity value allows the pad to produce a quieter volume when played harder.
Strike the pad you wish to adjust, use adjustment wheel to change value and press SAVE TWICE to store.

Pad crosstalk
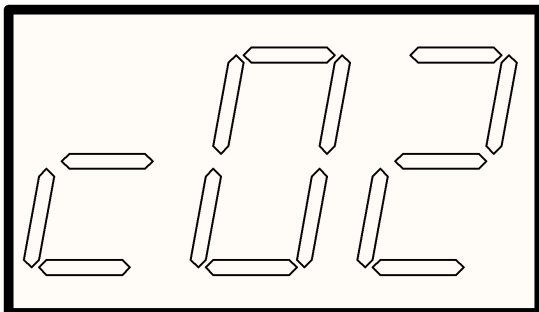
Press the TRIGGER button a fourth time to enter the crosstalk adjustment c??.
Similar to Threshold, the crosstalk adjustment works for pads that are located closely together, where close proximity can cause an adjacent pad to mis-trigger. This can be eliminated by setting a high crosstalk value to the mis-triggering pad.

*note: In most cases this value should not need to change from the factory preset. However if you do discover a crosstalk issue, the value should only be adjust 1-3 points, as small adjustments can make a large difference. You can also consider adjusting the location of the offending pads to create a larger gap between the pads.

Hi-Hat control type selection
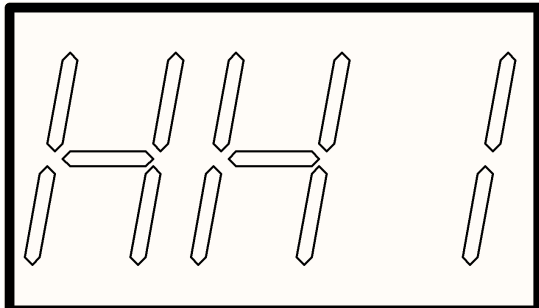
Press the TRIGGER button a fifth time to enter the HI-HAT control type selection HH?.
The CSD25M allows you to upgrade your Hi-Hat control to a hardware Hi-Hat stand (available separately).
HH1 - Included Hi-Hat control pedal.
HH2 - Open/Close hardware stand and stand mount HH CTRL.

Bass drum control type selection
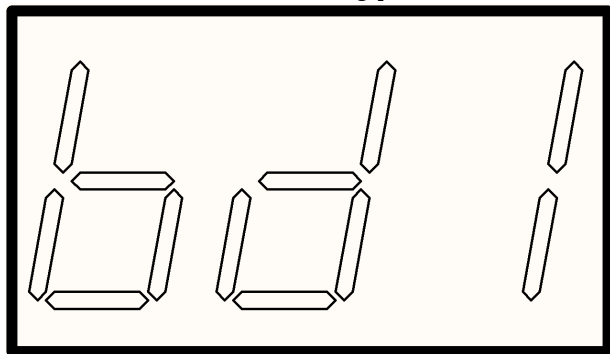
Press the TRIGGER button a sixth time to enter the bass drum control type selection bd?.
The CSD25M allows you to upgrade your control pedal to a hardware bass pad (available separately).
bd1 - Setting for included kick control pedal.
bd2 - Setting for hardware 2" rubber floor bass pad with stand and bass drum pedal with beater.
bd3 - Setting for hardware 8" mesh bass drum pad with stand and bass drum pedal with beater.

Local control
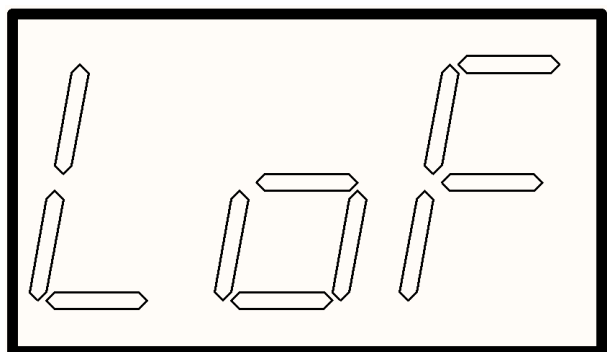
Press the TRIGGER button a seventh time to adjust the local MIDI control setting, used to control the connection between the trigger and the controller.
Lon: Default, the pads are connected with the module to send MIDI data to your MIDI source.
LoF: The sounds on the module are controlled by MIDI data from a MIDI source, and not by the pads.

Factory reset
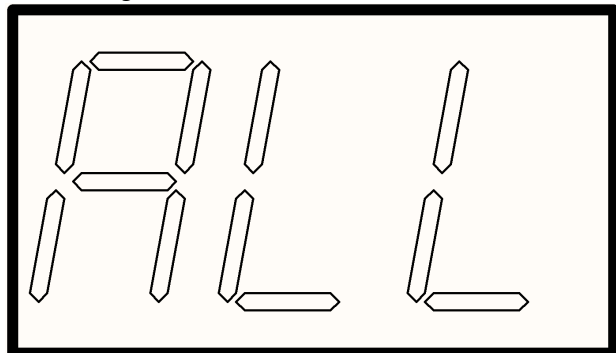
Press and hold the SAVE and EXIT buttons together for 5 seconds.
The screen will display ALL.
Press the SAVE button to fully reset the module to its factory status.
OR
Press the KIT +/- buttons to reset an individual USER drum kit.
The Screen will show U01, use the adjustment wheel to select the kit you wish to reset.
Press the SAVE button to reset the selected USER drum kit to its factory status.

Expanding your CSD25M

The CSD25M allows for the following pads and upgrade packs to be added to your drum set:

Carlsbro TOM4 8" single zone mesh tom pad with accessories: **CSDPK-T8MP**
Carslbro CRASH2 10" single zone cymbal pad w/choke with accessories: **CSDPK-C10B**
Carlsbro 10" dual zone mesh snare pad with accessories: **CSDPK-T10MP**
Carlsbro upright mesh bass pad and tower stand: **CSDPK-MBP**
Carslbro bass drum kick pedal with beater (used with CSDPK-MBP): **CSDPK-PDL1**
Carslbro hardware open/close hi-hat with accessories: **CSDPK-OCHH2**

All above expansion packs include all the required hardware and accessories.
Contact your Local Carlsbro retailer or distributor for further information and availability.

MIDI settings

This device is compatible with various MIDI software, hardware and GM standard.

Connection for MIDI control and recording:
1. Connect the sound module USB output to a computer with a USB A to USB B cable (not included).
2. Software should automatically register the sound module as a USB MIDI input.
3. Select or create a MIDI track.
4. Select a software drum kit or instrument.
5. Set the track input as a USB MIDI device.
6. Play the pads to control your chosen software instrument.

Connection for tutorial software:
1. Connect the sound module USB output to a computer with a USB A to USB B cable (not included).
2. Software should automatically register the sound module as a USB MIDI input.
3. If needed, set the software input device as USB MIDI.
4. Play the pads to control your tutorial software.

If your software is unable to recognise certain pads, you can adjust the output MIDI notes for each pad to correspond with your software:
1. Press the VOICE button until you reach the MIDI note setting, n??
2. Strike the pad you need to adjust.
3. Use the adjustment wheel to select the required MIDI note for your software.
4. Press the SAVE button to save these settings as a USER DRUM KIT U??

CSD25M default MIDI notes

TRIGGER	MIDI NOTE	TRIGGER	MIDI NOTE	TRIGGER	MIDI NOTE
KICK	36	TOM3	43	CRASH	49
SNARE RIM	37	HI-HAT PEDAL	44	RIDE	51
SANRE	38	TOM2	45	CRASH2	57
TOM4	41	HI-HAT OPEN	46		
HI-HAT CLOSED	42	TOM1	48		

Using the CSD25M module as a MIDI audio source

Connect with a computer via USB. A MIDI interface, keyboard or sequencer device also connected via this computer, can send MIDI data to the Module. The Module will receive a MIDI output signal from the computer, and replay the MIDI data with the sounds from the selected DRUM KIT 001-U10.

*note: Song playback data and metronome notes are not transferred via MIDI.

MIDI USB: USB2.0 interface. Compatible with most computer operating systems such as: Win10, Win7, Vista, Mac OSX, etc.
This device connects and transfers data via MIDI channel 10.

MIDI support and limitations are described in the MIDI list below:

MIDI list

FUNCTION		TRANSMITTED	RECOGNISED	REMARKS
B A S I C CHANNEL	DEFAULT	10 Ch	1-16	
	CHANGED	1-16	1-16	
MODE	DEFAULT	x	x	
	MESSAGES	x	x	
	ALTERED	**********	**********	
NOTE NUMBER：	TRUE VOICE	0-127	0-127	
		**********	0-127	
VELOCITY	NOTE ON	O 9nH,V=1-127	○	
	NOTE OFF	X (9nH,V=0)	○	
AFTER	KEY'S	x	x	
TOUCH	CH'S	x	x	
PITCH BEND			x	
CONTROL	0	x	○	BANK SELECT
CHANGE	1	x	○	MODULATION
	5	x	○	PORTAMENTO TIME
	6	x	○	DATA ENTRY
	7	x	○	VOLUME
	10	x	○	PAN
	11	x	○	EXPERSSION
	64	x	○	SUSTAIN PEDAL
	65	x	○	PORTAMENTO ON/OFF

	66	x	○	SOSTENUTO PEDAL
	67	x	○	SOFT PEDAL
	80	x	○	REVERB PROGRAM
	81	x	○	CHORUS PROGRAM
	91	x	○	REVERB LEVEL
	93	x	○	CHORUS LEVEL
	120	x	○	ALL SOUND OFF
	121	x	○	RESET ALL CONTROLLERS CONTROLLERS
	123	x	○	ALL NOTES OFF
TONE		○	○	
CHANGE	TRUE NUMBER	**********	0-127	
SYSTEM EXCLUSIVE			○	
SYSTEM	：SONG POSITION	x	x	
COMMON	：SONG SELECT	x	x	
	：TUNE	x	x	
SYSTEM	：CLOCK ON/OFF	○	x	
REAL TIME	：COMMANDS	○	x	START AND STOP ONLY
AUX	：LOCAL ON/ OFF	x	x	
MESSAGE	：ALL NOTES OFF	x	x	
	：ACTIVE SENSING	○	x	
	：RESET	x	x	

Trouble shooting

Problem	Reason or solution
No sound from headphones	1. Make sure the volume control is set correctly and turn the volume control clockwise to its full position. 2. Check that the headphones are connected to one of the 3.5mm 1/8" headphone sockets without the use of any adaptors. 3. Test the headphones in another device to check that the headphones are working correctly.
No sound from amplifier or sound system	1. Make sure the volume control is set correctly and turn the volume control clockwise to its full position. 2. Check that the cables are connected to the module L and R output sockets and the other end of the cables are connected to your amplifier or sound system inputs. Make sure the cables used are mono instrument cables, not speaker cables or TRS/Stereo cables.
No sound from a drum pad	1. Check that the labelled cable is connected to the correct pad or pedal, reference Connecting Drum Pads. 2. Check that local setting is set to on 'Lon', reference Trigger Settings. 3. Check that the corresponding pad voice volume is not set to 0, 'L00'. reference Voice Settings. 4. Test the suspect pad or pedal with a similar pad or pedal cable, [Cymbals], [Mesh pads], [Pedals]. 5. Check the main loom connection on the underside of the sound module. Remove and refit making sure the locating screws are fully inserted and tightened.
No sound from Bass Drum	Check bass drum trigger settings selection type (Bd?) matches your bass drum hardware. *Reference page 18*
No sound from Hi-Hat	Check Hi-Hat trigger settings selection type (HH?) matches your Hi-Hat hardware. *Reference page 17*
No sound on metronome	Check that metronome volume is not 0. *Reference page 13*
No sound on DEMO SONG	Check that song volume is not 0. *Reference page 12*
There is no signal to MIDI communication devices	1. Check whether the USB cable used is connected to the USB OUTPUT socket and not the UPDATE socket. 2. Verify the computer software communication channel is set to channel 10. 3. Verify the software audio input and also individual MIDI track input is set to a USB MIDI input. 4. Test the USB cable in another device to check for damage.
Module unresponsive	1. Switch power off and back on. 2. Press EXIT button.
Unable to resolve above	1. Perform factory reset. 2. Check for software update. 3. Contact your place of purchase for further assistance.

Sound module specifications

Polyphony: 64

Display: 3-segment numeric LED

Voice: 320 drum and percussion voices + 128 GM music tones

Drum Kits: 22 factory-shipped DRUM KITS + 10 user defined DRUM KITS

Sequencer:
   3 Recording slots. 1000 notes
   20 factory demo songs

Tempo function:
   Tempo tones: 4
   Tempo range: 30-250BPM
   Time signatures: 1/2-9/8

Connection:
Headphone Output: Stereo 3.5mm (1/8") x2
AUX Input: Stereo 3.5mm (1/8")
Audio Output: Left (MONO) Output, Right Output mono 6.35mm (1/4")
Pad Sensors: (D-SUB 25P)

MIDI IN/OUT Data Interface: USB B
AUDIO Data Interface: USB B
USB Update Interface: USB B
Extension sockets: EXT CYMBAL (Crash2), EXT TOM (Tom4) 6.35mm (1/4") TRS Jack with 3 core cable.

*** The specification is subject to change without prior notice ***

Drum kit list

No.	Name	No.	Name
KIT01	ROCK	KIT17	BRUSH
KIT02	FUNK/POP	KIT18	ELE1
KIT03	JAZZ	KIT19	ELE2
KIT04	LATIN	KIT20	COUNTRY
KIT05	DANCE	KIT21	ORCH
KIT06	POP1	KIT22	PERCUSSION
KIT07	POP2	KIT23	USER01
KIT08	POP3	KIT24	USER02
KIT09	HARD ROCK	KIT25	USER03
KIT10	METAL	KIT26	USER04
KIT11	FUNK1	KIT27	USER05
KIT12	FUNK2	KIT28	USER06
KIT13	HIP-HOP	KIT29	USER07
KIT14	FUSSION	KIT30	USER08
KIT15	BLUES	KIT31	USER09
KIT16	CUBAN	KIT32	USER10

Voice list

	KICK		SNARE		HI-HAT		TOM		CYMBAL		PERCUSSION
1	KICK01	27	SNARE01	72	CLHIHAT01	143	TOMH1	174	CRSH01	223	HI_Q
2	KICK02	28	SNARE02	73	CLHIHAT02	144	TOMH2	175	CRSH02	224	SLAP
3	KICK03	29	SNARE03	74	CLHIHAT03	145	TOMH3	176	CRSH03	225	SCRCH1
4	KICK04	30	SNARE04	75	CLHIHAT04	146	TOMH4	177	CRSH04	226	SCRCH2
5	KICK05	31	SNARE05	76	CLHIHAT05	147	TOMH5	178	CRSH05	227	STICK
6	KICK06	32	SNARE06	77	CLHIHAT06	148	TOMH6	179	CRSH06	228	SQCLCK
7	KICK07	33	SNARE07	78	CLHIHAT07	149	TOMH7	180	CRSH07	229	CLICK
8	KICK08	34	SNARE08	79	CLHIHAT08	150	TOMM1	181	CRSH08	230	BELL
9	KICK09	35	SNARE09	80	CLHIHAT09	151	TOMM2	182	CRSH09	231	CLAP1
10	KICK10	36	SNARE10	81	CLHIHAT10	152	TOMM3	183	CRSH10	232	CLAP2
11	KICK11	37	SNARE11	82	CLHIHAT11	153	TOMM4	184	CRSH11	233	CLAP3
12	KICK12	38	SNARE12	83	CLHIHAT12	154	TOMM5	185	CRSH12	234	TAMBRINE
13	KICK13	39	SNARE13	84	CLHIHAT13	155	TOMM6	186	CRSH13	235	COWBELL1

14	KICK14	40	SNARE14	85	CLHIHAT14	156	TOMM7	187	CRSH14	236	COWBELL2
15	KICK15	41	SNARE15	86	CLHIHAT15	157	TOMM8	188	CRSH15	237	COWBELL3
16	KICK16	42	SNARE16	87	CLHIHAT16	158	TOML1	189	CRSH16	238	COWBELL4
17	KICK17	43	SNARE17	88	PDLHHT01	159	TOML2	190	CRSH17	239	ECOWBELL1
18	KICK18	44	SNARE18	89	PDLHHT02	160	TOML3	191	CRSH18	240	ECOWBELL2
19	KICK19	45	SNARE19	90	PDLHHT03	161	TOML4	192	CRSH19	241	VSLAP
20	KICK20	46	SNARE20	91	PDLHHT04	162	TOML5	193	CRSH20	242	HIBONGO
21	KICK21	47	SNARE21	92	PDLHHT05	163	TOML6	194	CRSH21	243	LOBANGO
22	KICK22	48	SNARE22	93	PDLHHT06	164	TOML7	195	CRSH22	244	MUTECONGA1
23	KICK23	49	SNARE23	94	PDLHHT07	165	TOML8	196	CRSH23	245	MUTECONGA2
24	KICK24	50	SNARE24	95	PDLHHT08	166	TOML9	197	CRSH24	246	HICONGA1
25	KICK25	51	SNARE25	96	PDLHHT09	167	TOME1	198	CRSH25	247	HICONGA2
26	KICK26	52	SNARE26	97	PDLHHT10	168	TOME2	199	CRSH26	248	LOCONGA1
		53	SNARE27	98	PDLHHT11	169	TOME3	200	CRSH27	249	LOCONGA2
		54	SNARE28	99	PDLHHT12	170	TOME4	201	CRSH28	250	HTIMBL1
		55	SNRIM1	100	PDLHHT13	171	TOME5	202	RIDE1	251	HTIMBL2
		56	SNRIM2	101	PDLHHT14	172	TOME6	203	RIDE2	252	LTIMBL1
		57	SNRIM3	102	PDLHHT15	173	TOME7	204	RIDE3	253	LTIMBL2
		58	SNRIM4	103	PDLHHT16			205	RIDE4	254	HIAGOGO
		59	SNRIM5	104	OPNHHT01			206	RIDE5	255	LOAGOGO
		60	SNRIM6	105	OPNHHT02			207	RIDE6	256	CABASA
		61	SNRIM7	106	OPNHHT03			208	RIDE7	257	MARACS
		62	SNRIM8	107	OPNHHT04			209	RIDE8	258	WHISTLE_S
		63	ESNR1	108	OPNHHT05			210	RDBELL1	259	WHISTLE_L
		64	ESNR2	109	OPNHHT06			211	RDBELL2	260	SGUIRO
		65	ESNR3	110	OPNHHT07			212	RDBELL3	261	GUIRO_S
		66	ESNR4	111	OPNHHT08			213	RDBELL4	262	GUIRO_L
		67	ESNR5	112	OPNHHT09			214	RDBELL5	263	CLAVES
		68	ESNR6	113	OPNHHT10			215	RDBELL6	264	WBLK_H
		69	ESNR7	114	OPNHHT11			216	RDBELL7	265	WBLK_L
		70	ESNR8	115	OPNHHT12			217	ELCRASH1	266	CUICA_M
		71	ESNR9	116	OPNHHT13			218	ELCRASH2	267	CUICA_O1
				117	OPNHHT14			219	ELCRASH3	268	CUICA_O2
				118	OPNHHT15			220	ELCRASH4	269	MTRIANGLE
				119	OPNHHT16			221	ELCRASH5	270	OTRIANGLE
				120	HOPNHHT01			222	ELCRASH6	271	SHAKER1
				121	HOPNHHT02					272	SHAKER2
				122	HOPNHHT03					273	JNGLBL

										123	HOPNHHT04					274	BLTREE
										124	HOPNHHT05					275	CSTNTS1
										125	HOPNHHT06					276	CSTNTS2
										126	HOPNHHT07					277	SURDO_M
										127	HOPNHHT08					278	SURDO_O
										128	HOPNHHT09					279	TLKNDML
										129	LSHHT1					280	TLKNDMH
										130	LSHHT2					281	TABLA1
										131	LSHHT3					282	TABLA2
										132	LSHHT4					283	SNAP
										133	LSHHT5					284	DJMB1
										134	LSHHT6					285	DJMB2
										135	LSHHT7					286	DJMB3
										136	ELCHHT1					287	CAJON1
										137	ELCHHT2					288	CAJON2
										138	ELCHHT3					289	CAJON3
										139	ELCHHT4					290	TMPNI1
										140	ELCHHT5					291	TMPNI2
										141	ELCHHT6					292	GONG_L
										142	ELCHHT7					293	ELCLKH
																294	ELCLKL
																295	TAIKO
																296	BELL
																297	BAN
																298	SIGU
																299	DONG1
																300	DONG2
																301	GONG1
																302	PIATIH
																303	HGONG1
																304	HGONG2
																305	GONG2
																306	GONG3
																307	PIATIM
																308	ESCRCH
																309	ECLK
																310	CIRCLE
																311	DOWN

											312	VOCAL1
											313	VOCAL2
											314	VOCAL3
											315	VOCAL4
											316	VOCAL5
											317	VOCAL6
											318	VOCAL7
											319	VOCAL8
											320	VOCAL9

GM drum list

Note No.	Standard name	Voice No.	Voice Name
27 − D#1	High Q	223	High Q
28 E1	Slap	224	SLAP
29 − F1	Scratch Push	225	SCRCH1
30 − F#1	Scratch Pull	226	SCRCH2
31 − G1	Sticks	227	STICK
32 − G#1	Square Click	228	SQCLCK
33 − A1	Metronome Click	229	CLICK
34 − A#1	Metronome Bell	230	BELL
35 − B1	Acoustic Bass Drum	1	KICK01
36 − C2	Bass Drum 1	6	KICK06
37 − C#2	Side Stick	55	SNRIM1
38 − D2	Acoustic Snare	49	SNARE23
39 − D#2	Hand Clap	231	CLAP1
40 − E2	Electric Snare	28	SNARE02
41 − F2	Low Floor Tom	160	TOML3
42 − F#2	Closed Hi Hat	72	CLHIHAT01
43 − G2	High Floor Tom	160	TOML3
44 − G#2	Pedal Hi-Hat	88	PDLHHT01
45 − A2	Low Tom	151	TOMM2
46 − A#2	Open Hi-Hat	104	OPNHHT01
47 − B2	Low-Mid Tom	144	TOMH2
48 − C3	Hi-Mid Tom	144	TOMH2

49 – C#3	Crash Cymbal 1	184	CRSH11
50 – D3	High Tom	144	TOMH2
51 – D#3	Ride Cymbal 1	206	RIDE5
52 – E3	Chinese Cymbal	193	CRSH20
53 – F3	Ride Bell	213	RDBELL4
54 – F#3	Tambourine	234	TAMBRINE
55 – G3	Splash Cymbal	191	CRSH18
56 – G#3	Cowbell	235	COWBELL1
57 – A3	Crash Cymbal 2	185	CRASH12
58 – A#3	Vibraslap	241	VSLP1
59 – B3	Ride Cymbal 2	209	RIDE8
60 – C4	Hi Bongo	242	HIBONGO
61 – C#4	Low Bongo	243	LOBANGO
62 – D4	Mute Hi Conga	244	MUTECONGA1
63 – D#4	Open Hi Conga	246	HICONGA1
64 – E4	Low Conga	248	LOCONGA1
65 – F4	High Timbale	250	HTIMBL1
66 – F#4	Low Timbale	252	LTIMBL1
67 – G4	High Agogo	254	HIAGOGO
68 – G#4	Low Agogo	255	LOAGOGO
69 – A4	Cabasa	256	CABASA
70 – A#4	Maracas	257	MARACS
71 – B4	Short Whistle	258	WHISTLE_S
72 – C5	Long Whistle	259	WHISTLE_L
73 – C#5	Short Guiro	260	SGUIRO
74 – D5	Long Guiro	262	GUIRO_L
75 – D#5	Claves	263	CLAVES
76 – E5	Hi Wood Block	264	WBLK_H
77 – F5	Low Wood Block	265	WBLK_L
78 – F#5	Mute Cuica	266	CUICA_M
79 – G5	Open Cuica	267	CUICA_O1
80 – G#5	Mute Triangle	269	MTRIANGLE
81 – A5	Open Triangle	270	OTRIANGLE
82 – A#5	Shaker	271	SHAKER1

83 − B5	Jingle Bell	273	JNGLBL
84 − C6	Bell Tree	274	BLTREE
85 − C#6	Castanets	275	CSTNTS1
86 − D6	Mute Surdo	277	SURDO_M
87 − D#6	Open Surdo	278	SURDO_O

Demo song list

No.	Name	Meter	Tempo
DEMO 01	POP ROCK	4/4	90
DEMO 02	FUNK	4/4	110
DEMO 03	SHUFFLE	4/4	117
DEMO 04	SHUFFLE	4/4	128
DEMO 05	ROCKBLUES	4/4	105
DEMO 06	ROCK	2/4	120
DEMO 07	ROCK	4/4	138
DEMO 08	DANCE	2/4	140
DEMO 09	POP	4/4	123
DEMO 10	POP	4/4	100
DEMO 11	POP	4/4	82
DEMO 12	POP	4/4	159
DEMO 13	COUNTRY	4/4	120
DEMO 14	COUNTRY	4/4	108
DEMO 15	SWING	4/4	140
DEMO 16	WALTZ	3/4	180
DEMO 17	BOSSA	4/4	120
DEMO 18	REGGAE	4/4	110
DEMO 19	LATIN	4/4	180
DEMO 20	FLAMINGO	3/4	110

SERIAL NUMBER

30