

**V-Drums**  
**TD-50**  
 DRUM SOUND MODULE

Data List



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# DRUM KIT

## DRUM KIT Screen



Parameter	Value	Explanation
XSTICK	OFF, ON	Specifies whether a snare pad produces the cross-stick sound (ON) or not (OFF). If the trigger input of a pad that supports both cross-stick technique and digital connection (such as the PD-140DS) is assigned to a snare, cross-stick playing is always possible. In this case, the screen does not show the XSTICK icon.

## KIT SETTINGS

1. Press the [KIT] button.

1. Press the [F5] (MENU) button.

The menu screen appears.



2. Use the PAGE [UP] [DOWN] buttons to access the editing screen.

3. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.

4. Press the [KIT] button to return to the DRUM KIT screen.

## KIT SETTINGS 1 (page 1)



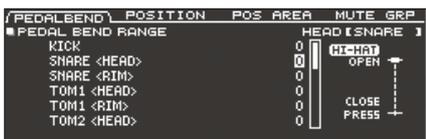
Parameter	Value	Explanation
[F4] button	Edits the name of the drum kit. <b>Reference</b> For details on how to assign a name, refer to "Renaming a Drum Kit" in the "Reference Manual" (PDF).	
<b>VOLUME tab</b>		
Kit Volume	-INF--+6.0 dB	Drum kit volume
<b>COLOR tab</b>		
Kit Color	1: WHITE 2: RED 3: GREEN 4: BLUE 5: PINK 6: PURPLE 7: ORANGE 8: YELLOW 9: EMERALD 10: RAINBOW	Use the [KIT] button or [R1]–[R3] knobs to specify the illumination color.
<b>FAVORITE tab</b>		
Favorite	OFF, ON	Registers (ON)/de-registers (OFF) the drum kit in favorites.

## KIT SETTINGS 2 (page 2)



Parameter	Value	Explanation
<b>BRUSH tab</b>		
Brush Switch	OFF, ON	Specifies whether you're performing with sticks (OFF) or brushes (ON). If this is "ON," you can perform by scraping (sweeping) the brushes. * "Playing with brushes" function will be enabled in the future. The information will be announced at the Roland website. <a href="http://www.roland.com/support/">http://www.roland.com/support/</a>
<b>KIT TEMPO tab</b>		
Kit Tempo	OFF	Use a common tempo (p. 21) for the entire TD-50. The tempo does not change when you switch drum kits.
	ON	Use the tempo that is specified by each drum kit. The click tempo and the tempo of tempo-synchronized effects can be individually specified for each drum kit.
Tempo	20-260	Tempo specified for each drum kit

## PAD CONTROL (page 3)



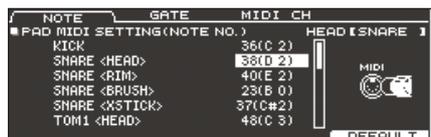
Parameter	Value	Explanation
<b>PEDALBEND tab</b>		
Pedal Bend Range	-24-0-+24	Specifies the amount of pitch change that occurs according to the depth to which you press the hi-hat pedal. You can set this for each pad (head and rim separately) in semitone units.
<b>POSITION tab</b>		
Position Control*1	OFF, ON	Turns on/off tonal changes that occur depending on your strike location or the nuances of your rim shots. You can set this for the snare (head, rim), tom (head, rim), ride (bow), and AUX (head, rim) trigger inputs. Head: Strike position Rim: Rim shot nuance Bow: Strike position
<b>POS AREA tab</b>		
Position Area*1	INSIDE -5-DEFAULT- OUTSIDE +5	Specifies the striking area for the head or rim. "INSIDE" settings make it easier to play notes toward the inside; "OUTSIDE" settings make it easier to play toward the outside.
<b>MUTE GRP tab</b>		
MUTE SEND	-(OFF), 1-8	Specify the mute group number. When you strike the pad of the number specified in MUTE SEND, the sound of the pad assigned to the same number in MUTE RECEIVE is muted.
MUTE RECEIVE		* Even if you specify the same number in MUTE SEND and MUTE RECEIVE for the same location (e.g., head or rim) of the same pad, muting does not occur.

\*1 This supports the following trigger inputs.

- SNARE
- TOM1-4
- The bow (head) of RIDE
- AUX1-4

\* Depending on the pad that is connected or the instrument that is selected, there might be cases in which this has no effect.

## PAD MIDI (page 4)



Parameter	Value	Explanation
<b>NOTE tab</b>		
Note No.	0(C -)-127(G 9)	MIDI note number transmitted and received by each pad
	OFF	Note messages are not transmitted or received
<b>GATE tab</b>		
Gate Time	0.1 – 8.0 s	Duration of the note transmitted by each pad
<b>MIDI CH tab</b>		
MIDI Channel	CH1–CH16	MIDI channel on which each pad transmits or receives note messages or control change messages
	GLOBAL	Transmitted and received on the transmit/receive channel specified in SETUP (p. 32)

### MIDI note numbers transmitted and received by the hi-hat

Item	Explanation
HI-HAT OPEN <BOW>	MIDI note number transmitted and received by open hi-hat (bow, edge)
HI-HAT OPEN <EDGE>	
HI-HAT CLOSE <BOW>	MIDI note number transmitted and received by closed hi-hat (bow, edge)
HI-HAT CLOSE <EDGE>	
HI-HAT PEDAL	MIDI note number transmitted and received by pedal hi-hat

### MIDI note numbers transmitted and received by the snare

Parameter	Explanation
SNARE <HEAD>	MIDI note number transmitted and received by head shot and rim shot
SNARE <RIM>	
SNARE <BRUSH>	MIDI note number transmitted and received by brush sweep
SNARE <XSTICK>	MIDI note number transmitted and received by cross stick

### When setting multiple pads to the same note number

When playing the internal sound generator of the TD-50, if an incoming note number is assigned to more than one pad, that note plays the instrument of the pad with the lowest trigger input number. If the same note number is assigned to both the head and the rim, the head instrument is sounded.

**MEMO**

An asterisk (\*) appears at the right of the note number for trigger inputs that are not sounded.

**Example:**

Note number “38 (D 2)” is set for the head and rim of trigger input 2 SNARE and the head of trigger input 3 TOM 1. In this case, when note number 38 (D2) is received, the instrument assigned to the head of trigger input 2 SNARE is played.

#### About the gate time

Percussion sound modules normally produce sound only in response to “Note on” messages, and ignore “Note off” messages. However general-purpose sound modules or samplers do receive the note-off messages that are transmitted and respond by turning off the sound.

Since gate time is normally not necessary for a percussion sound module, this is set to the minimum value when the unit is shipped from the factory. If a note-off message is received while the sound module has this setting, it is received as an extremely brief note that has almost no time to be heard, and is nearly inaudible. (Alternatively, it is possible that this could be heard as an unwanted noise.) To avoid this, specify the note duration of the MIDI performance data that is produced when you strike each pad.

# KIT CUSTOMIZE

## INSTRUMENT

### 1. Press the [INSTRUMENT] button.

The INSTRUMENT screen appears.



### 2. Select the pad that you want to edit.

### 3. Use the PAGE [UP] [DOWN] buttons and function buttons to select the item that you want to edit.

\* The parameters that you can edit depend on the pad and instrument.

### 4. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.

#### MEMO

For some parameters, you can also use the rotary knobs to edit the value.

### 5. Press the [KIT] button to return to the DRUM KIT screen.

## INSTRUMENT (page 1)



## Parameters that can be edited for each instrument

Parameter	Value	Explanation
<b>INST tab</b>		
Inst	001–418 (preset) U001–U500 (user sample)	Instrument number <b>Reference</b> For more about instruments, refer to “Instrument List” (p. 42).
<b>ADVANCED tab</b>		
Pitch	-4800–4800	Instrument pitch (units of one cent)
Pitch Sweep*1	-100–100	After the sound begins, the pitch gradually rises (falls). Positive (+) values make the pitch start high and then fall; negative (-) values make the pitch start low and then rise. Larger values produce greater change. * In some cases, changing the Pitch setting by a large amount might limit the Pitch Sweep effect.
Decay*1	1–100	Length of decay
Dynamic Enhancer Sw*1, *2	OFF, ON	Specifies whether the sense of strong strikes is enhanced (ON) or not enhanced (OFF).

\*1 If a user sample is assigned to the instrument, you can't specify Dynamic Enhancer Sw. Also, if the user sample's Play Type (p. 18) is set to “LOOP ALT,” the Pitch Sweep and Decay have no effect.

\*2 For some instruments, this cannot be set.

#### MEMO

If you press the [F5] (H&R) button to turn it “ON,” you can simultaneously make settings for the head area and rim area, etc.

## KICK A



Parameter	Value	Explanation
<b>INST tab</b>		
Shell Depth	1.0–30.0	Depth of the shell
Head Type	CLEAR, COATED, PINSTRIPE	Type of head
<b>BASIC 1 tab</b>		
Tuning	-100–100	Tuning of the head
Muffling	OFF, TAPE1–4, BLANKET1–3, WEIGHT1, 2	Muffling (muting) setting
Beater Type	FELT1, 2, WOOD, PLASTIC1, 2	Type of beater
<b>BASIC 2 tab</b>		
Snare Buzz	OFF, 1–8	Resonance to the snare
Low Level	-5–NORMAL+5	Volume of low-frequency sound
Low Decay	-2–NORMAL+2	Decay length of low-frequency sound
<b>ADVANCED tab</b>		
Kit Resonance	OFF, 1–8	Amount of resonance for the entire drum kit

## SNARE A/CROSS STICK



Parameter	Value	Explanation
<b>INST tab</b>		
Shell Depth*1	1.0–30.0	Depth of the shell
Head Type*1	CLEAR, COATED, PINSTRIPE	Type of head
<b>BASIC 1 tab</b>		
Tuning	-100–100	Tuning of the head
Muffling	OFF, TAPE1–7, DONUT1, 2	Muffling (muting) setting
Overtone*1	-5–NORMAL+5	Amount of overtone components
<b>BASIC 2 tab</b>		
Strainer Adj.	LOOSE1–3, MEDIUM1–3, TIGHT1–3	Tension of the strainer (resonating cords)
Wire Type	TYPE1–3	Type of strainer
Wire Level	-4–NORMAL+5	Volume of strainer
<b>ADVANCED tab</b>		
XStick Inst*2	1–5	Cross-stick sound selection
XStick Inst Volume*2	-INF+6.0 dB	Cross-stick sound volume <b>MEMO</b> The "XStick Volume" can also be edited from the MIXER DRUM KIT VOLUME screen (KIT VOL tab) of the MIXER (p. 13).

\*1 Unavailable if the instrument group is CROSS STICK.

\*2 Only if the SNARE A/CROSS STICK instrument is assigned to the rim of the snare (or to the rim of a digitally connected pad that is assigned to snare)

\* PINSTRIPE is a registered trademark of Remo Inc., U.S.A.

## TOM A



Parameter	Value	Explanation
<b>INST tab</b>		
Shell Depth	1.0–30.0	Depth of the shell
Head Type	CLEAR, COATED, PINSTRIPE	Type of head
<b>BASIC 1 tab</b>		
Tuning	-100–100	Tuning of the head
Muffling	OFF, TAPE1–5, FELT1–4	Muffling (muting) setting
Snare Buzz	OFF, 1–8	Resonance to the snare

## HI-HAT



Parameter	Value	Explanation
<b>INST tab</b>		
Size	1.0–40.0	Hi-hat diameter
Thickness	THIN-5–STANDARD–THICK +5	Thickness of the hi-hat
<b>BASIC 1 tab</b>		
Fixed	NORMAL, PRESS, CLOSE, HALF, OPEN	Openness of the hi-hat If something other than “NORMAL” is selected, the openness of the hi-hat does not change, regardless of how you press the hi-hat pedal.
<b>ADVANCED tab</b>		
Pedal HH Volume	-INF–+6.0 dB	Volume of pedal hi-hat <b>MEMO</b> The “Pedal HH Volume” can also be edited from the MIXER DRUM KIT VOLUME screen (KIT VOL tab) of the MIXER (p. 13).

**MEMO**

The closed hi-hat position (Fixed = CLOSE) can be enabled by pressing an optional footswitch or hitting a pad switch. Please refer to “CONTROL” (p. 31).

## CRASH/CHINA/SPLASH/STACKED CYMBAL



Parameter	Value	Explanation
<b>INST tab</b>		
Size	1.0–40.0	Cymbal diameter
Thickness	THIN-5–STANDARD–THICK +5	Thickness of the cymbal
<b>BASIC 1 tab</b>		
Muffling	OFF, TAPE1–19	Muffling (muting) setting
Sizzle Type	OFF, RIVET, CHAIN, BEADS	Type of sizzle
Sizzle Amount	-3–+3	Amount of sizzle

## RIDE



Parameter	Value	Explanation
<b>INST tab</b>		
Size	1.0–40.0	Cymbal diameter
Thickness	THIN-5–STANDARD–THICK +5	Thickness of the cymbal
<b>BASIC 1 tab</b>		
Muffling	OFF, TAPE1–19	Muffling (muting) setting
Sizzle Type	OFF, RIVET, CHAIN, BEADS	Type of sizzle
Sizzle Amount	-3–+3	Amount of sizzle
<b>BASIC 2 tab</b>		
Ping Color*1	LIGHT2, 1, STANDARD, HEAVY1, 2	Tonal character of the ride's ping sound
Ping Level*1	-4–NORMAL–+5	Volume of the ride's ping sound

\*1 For some instruments, these settings are not available.

## MIC POSITION (page 2)

You can edit the mic position and volume for each instrument.

\* For some instruments, these settings are not available.

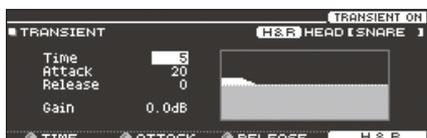


Parameter	Value	Explanation
<b>MIC POS tab</b>		
Mic Position	OUTSIDE4–STANDARD–INSIDE4	Tonal change caused by mic position
<b>ELEMENT tab</b>		
Overhead	-INF–+6.0 dB	Volume of overhead mic
Room	-INF–+6.0 dB	Volume of room mic
<b>WIDTH tab</b>		
Mic Width	-5–+5	Spread of the overhead mic and room mic

## TRANSIENT (page 3)

You can adjust the attack and release (transient) for each instrument.

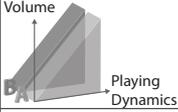
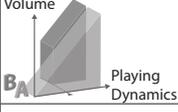
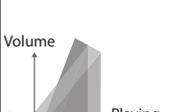
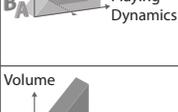
\* For some instruments, these settings are not available.



Parameter	Value	Explanation
[F4] button	OFF, TRANSIENT ON	Turns the transient effect on/off.
Time ([R1] knob)	1–10	Time over which the attack changes
Attack ([R2] knob)	-100–+100	Adjustment of the attack
Release ([R3] knob)	-100–+100	Adjustment of the release
Gain	-12.0–+6.0 dB	Volume following transient adjustment

## SUB INST (page 4)



Parameter	Value	Explanation
[F4] button	OFF, SUB ON	Turns the sub-instrument on/off.
<b>SUB INST tab</b>		
SUB INST	001–418 (preset) U001–U500 (user sample)	Sub-instrument number <b>Reference</b> For more about instruments, refer to “Instrument List” (p. 42).
These parameters specify how the sub instrument will be sounded.		
Layer Type	MIX	 The main instrument (A) and sub instrument (B) always sound together as a layer.
	FADE1	 The sub instrument (B) is added as a layer only if the strike is stronger than “Fade Point.”
	FADE2, FADE3	 If the strike is stronger than “Fade Point,” the sub instrument (B) is added as a layer according to the strength of that strike. <b>FADE2:</b> At 127 or higher, the main instrument (A) and sub instrument (B) are the same volume. <b>FADE3:</b> At 127+32, the main instrument (A) and sub instrument (B) are the same volume (for pads that support digital connection).
	SWITCH	 Strikes weaker than “Fade Point” sound the main instrument (A), and strikes stronger than “Fade Point” switch to sound the sub instrument (B).
Fade Point	1–127+32	Specifies the force of the strike at which the sub instrument begins to be sounded. If this is “1,” the sub instrument is sounded by a strike of any force. If this is “127” (“127+32” for a pad that supports digital connection), the sub instrument is sounded only by the strongest strike. * This is not available if Layer Type is “MIX.”
Sub Volume	-INF+6.0 dB	Volume of the sub-instrument

**Reference**

For details on the parameters that can be edited, refer to “INSTRUMENT (page 1)” (p. 6).

OTHER tab		* For some instruments, these settings are not available.
Mic Position	OUTSIDE4–STANDARD–INSIDE4	Tonal change caused by mic position
Mic Overhead	-INF+6.0 dB	Volume of the overhead mics
Mic Room	-INF+6.0 dB	Volume of the room mics
Mic Width	-5+5	Spread of the overhead mics and the room mics
Transient Sw	OFF, TRANSIENT ON	Transient on/off
Transient Time	1–10	Time over which the attack changes
Transient Attack	-100+100	Adjustment of the attack
Transient Release	-100+100	Adjustment of the release
Transient Gain	-12.0+6.0 dB	Volume following transient adjustment

## AMBIENCE

### 1. Press the [AMBIENCE] button.

The AMBIENCE screen appears.



### 2. Use the PAGE [UP] [DOWN] buttons to access the editing screen.

### 3. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.

### 4. Press the [KIT] button to return to the DRUM KIT screen.

## AMBIENCE LEVEL (page 1)



Parameter	Value	Explanation
[F1] button	ROOM OFF, ROOM ON	Turns the room ambience (the type and size of room) effect on/off.
[F2] button	REV OFF, REV ON	Turns the reverb (reverberation) effect on/off.
[F3] button	ENHNC OFF, ENHNC ON	Turns the stereo enhancer (spaciousness) effect on/off.
Room ([R1] knob)	-INF--+6.0 dB	Volume of room ambience
Reverb ([R2] knob)	-INF--+6.0 dB	Volume of reverb
Stereo Enhancer ([R3] knob)	-INF--+6.0 dB	Volume of stereo enhancer

## ROOM (page 2)



Parameter	Value	Explanation
[F4] button	OFF, ROOM ON	Turns room ambience on/off.
<b>ROOM tab</b>		
Type ([R1] knob)	BEACH, LIVING ROOM, BATH ROOM, STUDIO, GARAGE, LOCKER ROOM, THEATER, CAVE, GYMNASIUM, DOME STADIUM, BOOTH A, BOOTH B, STUDIO A, STUDIO B, BASEMENT, JAZZ CLUB, ROCK CLUB, BALLROOM, GATE, CONCERT HALL, SPORTS ARENA, EXPO HALL, BOTTLE, CITY, SPIRAL	Type of room reverberation
Level ([R2] knob)	-INF--+6.0 dB	Volume of room ambience
Room Size	TINY, SMALL, MEDIUM, LARGE, HUGE	Size of the room
Room Shape	0-100	Room shape and reverberation length
Wall Type	CURTAIN, CLOTH, WOOD, PLASTER, CONCRETE, GLASS	Wall material
Mic Position	NEXT DOOR, LOW FLOOR, LOW, MID LOW, MID, MID HIGH, HIGH, CEILING A, CEILING B	Tonal change caused by mic position
<b>SEND tab</b>		
Room Send Volume	-INF--+6.0 dB	Amount of room ambience applied to each pad If you press the [F5] (H&R) button to turn it "ON," you can simultaneously make settings for the head area and rim area, etc.

## REVERB (page 3)



Parameter	Value	Explanation
[F4] button	OFF, REV ON	Turns reverb on/off.
<b>ROOM tab</b>		
Type ([R1] knob)	ROOM 1, 2, HALL 1, 2, PLATE	Type of reverb
Level ([R2] knob)	-INF--+6.0 dB	Volume of reverb
Pre Delay	0-100 mSec	Adjusts the delay time from the direct sound until the reverb sound is heard
Time	0.1-10.0 Sec	Time length of reverberation
Density	0-127	Density of reverb sound
Diffusion	0-127	Change in the density of the reverb sound over time The higher the value, the denser the sound becomes as time elapses (The effect is more obvious for longer reverb times).
LF Damp	0-100	Adjusts the low-frequency region of the reverb sound.
HF Damp	0-100	Adjusts the high-frequency region of the reverb sound.
Spread	0-127	Spread of the reverb sound
Tone	0-127	Tonal character of reverb sound
<b>SEND tab</b>		
Reverb Send Volume	-INF--+6.0 dB	Amount of reverb applied to each pad If you press the [F5] (H&R) button to turn it "ON," you can simultaneously make settings for the head area and rim area, etc.

## STEREO ENHANCER (page 4)



Parameter	Value	Explanation
[F4] button	OFF, ENHNC ON	Turns stereo enhancer on/off.
<b>ROOM tab</b>		
Width ([R1] knob)	MONO, 1-4	Spread of stereo enhancer
Level ([R2] knob)	-INF--+6.0 dB	Volume of stereo enhancer
Color	1-6	Tonal character of stereo enhancer
<b>MAIN SEND tab</b>		
Stereo Enhancer Main Inst Send	-INF--+6.0 dB	Amount of stereo enhancer applied to each pad (main instrument) If you press the [F5] (H&R) button to turn it "ON," you can simultaneously make settings for the head area and rim area, etc.
<b>SUB SEND tab</b>		
Stereo Enhancer Sub Inst Send	-INF--+6.0 dB	Amount of stereo enhancer applied to each pad (sub-instrument) If you press the [F5] (H&R) button to turn it "ON," you can simultaneously make settings for the head area and rim area, etc.

## MIXER

### 1. Press the [MIXER] button.

The MIXER screen appears.



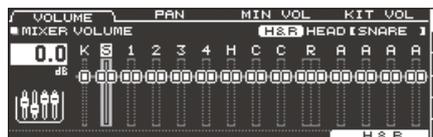
### 2. Use the PAGE [UP] [DOWN] buttons to access the editing screen.

### 3. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.

### 4. Press the [KIT] button to return to the DRUM KIT screen.

## MIXER VOLUME (page 1)

For each drum kit, you can adjust the volume of each pad and adjust the overall volume of the entire drum kit. You can also adjust how the volume responds to the striking force.



Parameter	Value	Explanation
<b>VOLUME tab</b>		
Volume	-INF--+6.0 dB	Volume of each pad
<b>PAN tab</b>		
Pan	L30-CTR-R30	Stereo position of each pad
<b>MIN VOL tab</b>		
Pad Minimum Volume*1	0-15	Minimum volume of each pad This lets you increase the volume of the softest hits while preserving the volume of the strongest hits. This can make it easier to hear ghost notes on the snare or legato notes on the ride cymbal.
Pad Maximum Volume*1	-5-0	Maximum volume of each pad This lets you decrease the volume of the strongest hits while preserving their nuances. You can limit the volume while preserving the nuances of the strongest hits. * This is available only for pads that support digital connection and for input from the MIDI IN connector.
<b>KIT VOL tab</b>		
Kit Volume*2		Drum kit volume
Pedal HH Volume	-INF--+6.0 dB	Pedal hi-hat volume
Xstick Volume		Cross-stick volume

\*1 Use the cursor [▲] [▼] buttons to choose whether you're setting the Pad Minimum Volume or the Pad Maximum Volume.

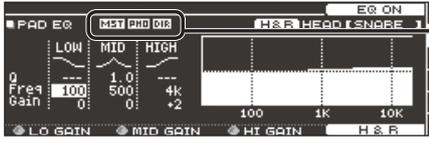
\*2 You can also set "Kit Volume" in the KIT SETTINGS screen (VOLUME tab) (p. 3).

#### MEMO

If you press the [F5] (H&R) button to turn it "ON," you can simultaneously make settings for the head area and rim area, etc.

## PAD EQ (page 2)

This is a three-band equalizer that each drum kit provides for each strike location of each pad. You can disable the pad equalizer effect that is output from the DIRECT OUT jacks (p. 29).



This indicates whether the pad equalizer effect is output ( **MST PHO DIR** ) from each jack or is not output ( **MST DIR** ).

- MST:** MASTER OUT jacks
- PHO:** PHONES jacks (always output)
- DIR:** DIRECT OUT jacks

Parameter	Value	Explanation
[F4] button	OFF, EQ ON	Turns pad equalizer on/off.
Low Freq	20 Hz–1 kHz	Center frequency of the low range
Low Gain ([R1] knob)	-15–+15 dB	Amount of boost/cut for the low range
Mid Freq	20 Hz–16 kHz	Center frequency of the mid range
Mid Q	0.5–8.0	Width of the frequency range A higher Mid Q narrows the affected area.
Mid Gain ([R2] knob)	-15–+15 dB	Amount of boost/cut for the mid range
High Freq	1 kHz–16 kHz	Center frequency of the high range
High Gain ([R3] knob)	-15–+15 dB	Amount of boost/cut for the high range

### MEMO

If you press the [F5] (H&R) button to turn it “ON,” you can simultaneously make settings for the head area and rim area, etc.

- \* If the routing setting (p. 29) PadEq/Comp to direct is “OFF,” the pad equalizer effect does not apply to the sound that is output from the DIRECT OUT jacks.
- \* If the routing setting (p. 29) PadEq/Comp to direct is “OFF,” and Master OUT is set to “DIRECT,” the pad equalizer effect does not apply to the sound that is output from the DIRECT OUT jacks and MASTER OUT jacks.

## PAD COMP (page 3)

This is a compressor that each drum kit provides for each pad.

The pad compressor effect can be applied only to the output from the DIRECT OUT jacks. You can also disable the pad compressor effect from being applied to the PHONES jack output (p. 29).



This indicates whether the pad compressor effect is output ( **MST PHO DIR** ) from each jack or is not output ( **MST PHO DIR** ).

- MST:** MASTER OUT jacks
- PHO:** PHONES jacks
- DIR:** DIRECT OUT jacks

Parameter	Value	Explanation
[F4] button	OFF, COMP ON	Turns pad compressor on/off.
Type ([R1] knob)	KICK 1, 2, SNARE1, 2, TOM 1, 2, CYM 1, 2, SOFT, HARD, LIMITER	Character of the compressor * When you change this parameter, the pad compressor's parameters Ratio, Knee, Attack, and Release change to optimal settings for your selection. You can then make further adjustments to these parameters as necessary.
Threshold ([R2] knob)	-48–0 dB	Volume level at which compression begins
Gain ([R3] knob)	-24–+24 dB	Output level of the compressor
Ratio	1:1–100:1	Compression ratio
Knee	HARD, SOFT1–3	Attack of the sound at the moment compression is applied
Attack	0–100 mSec	Time from when the volume goes up the threshold level until the compressor effect applies
Release	10–1000 mSec	Time from when the volume falls below the threshold level until the compressor effect no longer applies

- \* Pad compressor settings are made for individual pads. They cannot be made for individual strike locations (such as the head or rim).
- \* If the routing setting (p. 29) PadEq/Comp to direct is “OFF,” the pad compressor effect does not apply to the sound that is output from the DIRECT OUT jacks.
- \* If the routing setting (p. 29) PadEq/Comp to direct is “OFF,” and Master Out is set to “DIRECT,” the pad compressor effect does not apply to the sound that is output from the DIRECT OUT jacks and the MASTER OUT jacks.
- \* If the routing setting (p. 29) PadComp to Phones is “OFF,” the pad compressor effect does not apply to the sound that is output from the PHONES jacks.

## Meters shown in the PAD COMP screen

In the PAD COMP screen, the “input meter,” the “gain reduction meter,” and the “output meter” are displayed.

**Input meter**  
The “input meter” shows the level (dB) being input to the pad compressor.

**Gain reduction meter**  
The “gain reduction meter” shows the change in level (dB) produced by the pad compressor.



**Output meter**  
The “output meter” shows the output level following the pad compressor.

Adjust the pad compressor’s “Gain” so that the output meter does not exceed 0 dB (i.e., so that it does not clip).

## MULTI EFFECT (MFX) (page 4)

You can use three multi-effects simultaneously for each drum kit.

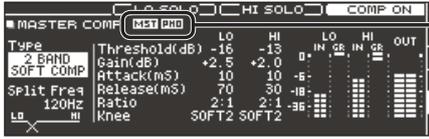


Parameter	Value	Explanation
<b>MFX tab</b>		
[F5] button	OFF, MFX1–3 ON	Turns on/off the multi-effect 1–3 selected by the [R1] knob.
MFX SEL ([R1] knob)	MFX1–3	You can use three multi-effects simultaneously for each drum kit.
Type ([R2] knob)	Type of multi-effect <b>Reference</b> For more about multi-effects, refer to “Multi-Effect Parameters” (p. 34).	
Level ([R3] knob)	-INF--+6.0 dB	Volume of the effect sound for the selected multi-effect
<b>ASSIGN tab</b>		
MFX Assign	MFX1–3	Select the multi-effect 1–3 that is applied to each pad.
<b>SEND tab</b>		
MFX Send Volume	-INF--+6.0 dB	Effect send level for each pad
<b>DRY+MFX tab</b>		
MFX DRY+WET*1	DRY+MFX MFX ONLY	The dry sound and effect sound will be output. Only the effect sound will be output.

\*1 MFX DRY+WET is specified for each pad. It cannot be specified for individual strike locations (such as the head or rim).  
If MFX DRY+WET is set to “MFX ONLY,” some multi-effect settings might cause no sound to be output.

## MASTER COMP (page 5)

This is a two-band equalizer that is provided for each drum kit.  
The master compressor is output from the MASTER OUT jacks and the PHONES jacks.



This indicates whether the master comp effect is output (**MST PHO**) from each jack or is not output (**MST**).

- MST:** MASTER OUT jacks
- PHO:** PHONES jacks (always output)

Parameter	Value	Explanation
[F4] button	OFF, COMP ON	Turns master comp on/off.
Type	SINGLE SOFT COMP, SINGLE HARD COMP, SINGLE LIMITER, 2BAND SOFT COMP, 2BAND HARD COMP, 2BAND LIMITER	Character of the compressor * When you change this parameter, all parameters of the master compressor change to optimal settings for your selection. You can then make further adjustments to these parameters as necessary. Depending on the settings of these parameters, the resulting effect might not match the Type setting.
Split Freq	SINGLE, 10–16000 Hz	Bandwidth of the compressor If this is "SINGLE," the master compressor operates as a single-band compressor that is used only on the high band.
Threshold*1	-48–0 dB	Volume level at which compression begins
Gain*1	-24–+24 dB	Output level of the compressor
Attack*1	0–100 mSec	Time from when the volume goes up the threshold level until the compressor effect applies
Release*1	10–1000 mSec	Time from when the volume falls below the threshold level until the compressor effect no longer applies
Ratio*1	1:1–100:1	Compression ratio
Knee*1	HARD, SOFT1–3	Attack of the sound at the moment compression is applied
[F2] button*2	LO SOLO	When this is operating as a two-band compressor, you can individually audition the low-frequency and high-frequency bands.
[F3] button*2	HI SOLO	* These settings are reset if you perform any of the following operations. <ul style="list-style-type: none"> <li>• Respecify the Type parameter as single band compressor</li> <li>• Set the Split Freq parameter to "SINGLE"</li> <li>• Exit the MASTER COMP screen</li> </ul>

\*1 If Split Freq is set to something other than "SINGLE," the low band and high band can be set independently.

\*2 Only if Split Freq is set to something other than "SINGLE"

\* If the routing setting (p. 29) Master Out is "DIRECT," the master compressor does not apply to the sound that is output from the MASTER OUT jacks.

## Meters shown in the MASTER COMP screen

In the MASTER COMP screen, the "input meter," the "gain reduction meter," and the "output meter" are displayed.

When Split Freq is "SINGLE" (single compressor)

When Split Freq is "10–16000 Hz" (2-band compressor)

**Input meter**  
The "input meter" shows the level (dB) being input to the master comp.

**Gain reduction meter**  
The "gain reduction meter" shows the change in level (dB) produced by the master comp.

**Output meter**  
The "output meter" shows the output level following the master comp.

**Input meter**  
The "input meter" shows the level (dB) being input to the master comp. This is shown individually for the low and high bands.

**Gain reduction meter**  
The "gain reduction meter" shows the change in level (dB) produced by the master comp. This is shown individually for the low and high bands.

**Output meter**  
The "output meter" shows the output level following the master comp.

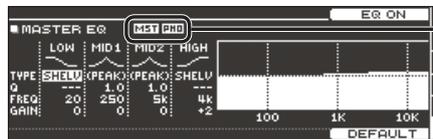
Adjust the master comp's "Gain" so that the output meter does not exceed 0 dB (i.e., so that it does not clip).

## MASTER EQ (page 6)

This is a four-band equalizer that is provided for each drum kit.

You can adjust the equalizer's effect (shelving and peaking) for the low frequency (LOW) and high frequency (HIGH).

The master EQ is not output from the MASTER OUT jacks and PHONES jacks.



This indicates whether the master EQ effect is output ( **MST PHO** ) from each jack or is not output ( **MST** ).

**MST:** MASTER OUT jacks

**PHO:** PHONES jacks (always output)

Parameter	Value	Explanation
[F4] button	OFF, EQ ON	Turns master EQ on/off.
Type	SHELV (Shelving), PEAK (MID1 and MID2: fixed to "PEAK")	Type of equalizer
Q	0.5–8.0 (only when Type is set to "PEAK")	Width of the frequency range A higher Q narrows the affected area.
Freq	20 Hz– 1 kHz (LOW) 20 Hz–16 kHz (MID1, 2) 1 kHz–16 kHz (HIGH)	Center frequency
Gain	-12–+12 dB	Amount of boost/cut

\* If the routing setting (p. 29) Master Out is set to "DIRECT," the effect of the master EQ does not apply to the sound that is output from the MASTER OUT jacks.

### MEMO

To return to the default values, press the [F5] (DEFAULT) button.

# USER SAMPLE

## SAMPLE LIST



Parameter	Value	Explanation
[F5] button	<p>RENAMES the currently selected user sample.</p> <p><b>Reference</b></p> <p>For details on how to assign a name, refer to “Renaming a Drum Kit” in “Reference Manual” (PDF).</p>	
<b>LIST tab</b>		
Play Type		Specifies how the user sample is sounded.
	ONESHOT MONO	When you strike the pad, the currently-heard sound is silenced before the new sound is heard. Notes do not overlap.
	ONESHOT POLY	When you strike the pad repeatedly, the sounds of the notes are heard overlapping.
	LOOP ALT	The user sample plays repeatedly (loop). Each time you strike the pad, the sound alternately plays or stops.
<b>START/END tab</b>		
Zoom ([R1] knob)	–	Zooms the waveform display in or out. You can zoom-in/out on the horizontal axis by turning the [R1] knob or by holding down the [SHIFT] button and pressing the cursor [◀] [▶] buttons. If you hold down the [SHIFT] button and turn the [R1] knob or use the cursor [▲] [▼] buttons, you'll zoom-in/out on the vertical axis.
Start ([R2] knob)*1	0–07937742	Adjusts the start point (the location at which the user sample starts playing).
End ([R3] knob)*1	257–07937999	Adjusts the end point (the location at which the user sample stops playing).

\*1 You can't set the end point earlier than the start point.

You can't set the start point and end point to the same value.

For both the start point and end point, you can't specify a value that exceeds the length of the user sample.

# SONG

## SONG (page 1)



Parameter	Value	Explanation
Speed ([R3] knob)	50-150 %	Changes the song's (audio file) playback speed. * When you switch songs, this returns to 100%. Depending on the type of song, this might not be available.

## SONG INFO (page 2)



Parameter	Value	Explanation
[F4] button*1	Change the name of recorded data. <b>Reference</b> For details on how to assign a name, refer to "Renaming a Drum Kit" in "Reference Manual" (PDF).	
Loop Type	ONE SHOT	Play back only once and then stop.
	LOOP	Play repeatedly.
Song Level	-INF--+6.0 [dB]	Song volume
Click Track Level*2	-INF--+6.0 [dB]	Click track volume

\*1 Only recorded data

\*2 Only if there is a click track corresponding to the song

# SET LIST

## SETUP



Parameter	Value	Explanation
[F4] button	<b>Reference</b>	Renames the set list. For details on how to assign a name, refer to "Renaming a Drum Kit" in "Reference Manual" (PDF).

## 1. Press the [CLICK] button.

The CLICK screen appears.



Parameter	Value	Explanation
[F5] button	OFF, ON	Turns click on/off.
<b>TEMPO tab</b>		
Tempo*1	20–260	Tempo
Beat*1	1–9	Number of beats per measure
Rhythm	♩–♩♩	Interval of the click
<b>SOUND tab</b>		
Sound	METRONOME, CLICK, VOICE, BEEP 1, BEEP 2, TEK CLICK, STICKS, CLAVES, WOOD BLOCK, COWBELL, TRIANGLE, TAMBOURINE, MARACAS, CABASA	Sound for the click
Level	-INF–+6.0 dB	Volume of click
LED Ref	OFF, ON	Specifies whether the [CLICK] button blinks in time with the click (ON) or does not blink (OFF).
<b>OTHER tab</b>		
Click Pan	L30–CTR (CENTER)–R30	Stereo position of the click
Amb(Reverb)Send	-INF–+6.0 dB	Depth of ambience reverb Applying ambience reverb makes the click easier to hear. <b>MEMO</b> The effect specified by the ambience reverb setting is applied. This means that reverb must be turned on (p. 12).
Tap Sw	OFF, ON	You can specify the tempo by striking the pad specified by Tap Pad or by pressing a button (Tap Tempo).
Tap Pad	KICK–PREVIEW	Select the pad or button that can be struck or pressed to set the tap tempo.

\*1 This cannot be changed while playing back a drum performance data song (p. 46) or recorded data.

## Quiet Count settings

### 1. In the CLICK screen, press the [F4] (QUIET CNT) button.

### 2. Press the [F2] (SETUP) button.

The setting screen appears.



### 3. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.

Parameter	Value	Explanation
Measures	2, 4, 8, 16 (Measures)	Specify the length (measures) of the interval for which the click will alternate between “Sounding” and “Quiet.”
Quiet	Of the measures specified by “Measures,” this setting specifies the length of the measures that will be “Quiet.”	
	RANDOM	The length of the Quiet interval will randomly change each time.
	1, 2, 4	Specifies the length (number of measures) of the Quiet interval. * This setting cannot be longer than half of the Measures value.

# TRIGGER

## 1. Press the [TRIGGER] button.

The TRIGGER screen appears.



## 2. Use the PAGE [UP] [DOWN] buttons to access the editing screen.

## 3. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.

## 4. Press the [KIT] button to return to the DRUM KIT screen.

## TRIG BASIC (page 1)



Parameter	Value	Explanation
[F5] button	Reference	Renames the trigger bank. For details on how to assign a name, refer to "Renaming a Drum Kit" in "Reference Manual" (PDF).
<b>BANK tab</b>		
Bank No.	1–8	Trigger bank number
Trig Type	For details, refer to "Trig Type list" (p. 23).	Specifies the model of pad (trigger type) that is connected to each trigger input. * You can't change the trigger type of a trigger input that's assigned to a pad that supports a digital connection. <b>MEMO</b> When you specify the trigger type, the trigger parameters (with the exception of certain parameters such as cross-stick cancel) are set to optimal values. These values are only general guidelines; you can make fine adjustments as appropriate according to how you attach the pad and how you use it.
<b>DIGITAL tab</b>		
Assign	N/A, KICK–AUX4	Specifies the trigger input to which a digitally-connected pad is assigned. A digitally connected pad for which you select "N/A" is not used; the settings of the pad connected to the TRIGGER IN jack are applied. * Even if this is assigned to "HI-HAT," hi-hat open/close techniques cannot be performed.
<b>SENS tab</b>		
Trig Type	This parameter is the same as the Trig Type parameter of the BANK tab.	
Sensitivity	1.0–32.0	You can adjust the sensitivity of the pads to accommodate your personal playing style. Increasing this value increases the sensitivity, so that even soft strikes on the pad are sounded at high volume. Decreasing this value decreases the sensitivity, so that even strong strikes on the pad are sounded at low volume.
Rim Gain	0–3.2	Adjusts the balance between the force of striking the rim or edge and the loudness of the sound. If you increase this value, even soft strikes on the rim are sounded at high volume. If you decrease this value, even strong strikes on the rim are sounded at low volume. This is available for pads that support rim shots.
<b>HI-HAT tab</b>		
Trig Type	This parameter is the same as the Trig Type parameter of the BANK tab.	
Hi-Hat Type	Type of hi-hat This is set automatically according to the parameter selected in Trig Type.	
Offset*1, *2	-100–+100 (automatically)	Extent of opening Hi-Hat The bigger the value is, the wider the opening extent is. <b>Reference</b> For details on how to adjust the offset, refer to "Reference Manual." You can make fine adjustments to the hi-hat parameters as necessary.
Foot Splash Sens*2	-10–+10	Amount of how easy to make the foot splash
Noise Cancel*1, *2	1–3	Amount of strength to cancel the bow and edge noise when you play foot close. The bigger the value is, the more difficult to have a noise excluding the foot close.
CC MAX*2, *3	90, 127	Amount of control change that is transmitted in stepping the hi-hat pedal down completely. * There's no need to change this setting if you're performed only with the TD-50 and the pads.

\*1 Only if Trig Type is set to "VH13" or "VH12"

\*2 Digitally-connected pads do not support hi-hat pedal performance.

\*3 Only if Trig Type is set to something other than "VH13" or "VH12"

## Making detailed settings for digitally-connected pads

1. Press the [TRIGGER] button.
2. Press the PAGE [UP] button to access page 1 (TRIG BASIC).
3. Press the [F2] (DIGITAL) button.
4. Press the [F5] (ADVANCED) button.

The DIGITAL TRIGGER ADVANCED screen appears.



5. Use cursor buttons to select a parameter, and use the [-] [+] buttons or the dial to edit the value.
6. Press the [F4] (EXIT) button to return to the DIGITAL TRIGGER IN screen.

\* The parameters that can be set differ depending on the type of pad.

Parameter	Value	Explanation
Position Adjust	1-10	Adjusts how the tonal character is affected by strike position. Lower values adjust toward the center, and higher values adjust toward the circumference.
XStick Detect Sens	OFF, 1-5	Adjusts how easy it is to use cross-stick playing technique. If this is "OFF," cross-stick technique is unavailable.
Choke Sens	OFF, 1-5	Adjusts the sensitivity of choking technique. If this is "OFF," choking technique is unavailable.
Bell Gain	0-3.2	Adjusts the balance between the force of a strike on the bell (bell shot technique) and the loudness of the sound. With higher values of this setting, a high volume can be produced even by a soft strike on the bell.

## Trig Type list

Used modes	Trig Type	Rim shot	Bell shot	Positional sensing		Choke play
				Head	Rim	
KD-A22	KDA22	-	-	-	-	-
KD-140	KD140	-	-	-	-	-
KD-120	KD120	-	-	-	-	-
KD-85	KD85	-	-	-	-	-
KD-9	KD9	-	-	-	-	-
KD-8	KD8	-	-	-	-	-
KD-7	KD7	-	-	-	-	-
KT-10	KT10	-	-	-	-	-
PD-128S, PD-128	PD128	✓	-	✓	✓	-
PD-125XS, PD-125X	PD125X	✓	-	✓	✓	-
PD-125	PD125	✓	-	✓	✓	-
PD-108	PD108	✓	-	✓	✓	-
PD-105X	PD105X	✓	-	✓	✓	-
PD-105	PD105	✓	-	✓	✓	-
PD-85	PD85	✓	-	✓	✓	-
PDX-100	PDX100	✓	-	✓	✓	-
PDX-8	PDX8	✓	-	-	-	-
PDX-6	PDX6	✓	-	-	-	-
PD-8	PD8	✓	-	-	-	✓
VH-13	VH13	✓	-	-	-	✓
VH-12	VH12	✓	-	-	-	✓
VH-11	VH11	✓	-	-	-	✓
CY-15R	CY15R	✓	✓	✓	-	✓
CY-14C	CY14C	✓	-	✓	-	✓
CY-13R	CY13R	✓	✓	✓	-	✓
CY-12C	CY12C	✓	-	✓	-	✓
CY-12R/C	CY12R/C	✓	✓	✓	-	✓

Used modes	Trig Type	Rim shot	Bell shot	Positional sensing		Choke play
				Head	Rim	
CY-8	CY8	✓	-	-	-	✓
CY-5	CY5	✓	-	-	-	✓
BT-1	BT1	-	-	-	-	-
	BT1 SENS*1	-	-	-	-	-
Generic pads	PAD1	✓	-	-	-	✓
	PAD2	✓	-	-	-	-
	PAD3	✓	-	-	-	✓
RT-30K	RT30K	-	-	-	-	-
RT-30HR	RT30HR	✓	-	-	-	-
RT-30H	RT30H SN*2	-	-	-	-	-
	RT30H TM*3	-	-	-	-	-
RT-10K	RT10K	-	-	-	-	-
RT-10S	RT10S	✓	-	-	-	-
RT-10T	RT10T	-	-	-	-	-

\*1 When using the BT-1, it is possible to further increase the sensitivity for soft strikes, but this increases the possibility of unwanted triggering by vibration from the surroundings.

\*2 Select this if you attach an RT-30H to the snare.

\*3 Select this if you attach an RT-30H to a tom.

## Trigger inputs and playing methods corresponding chart

### Rim shot/cross stick

\* Use a dual-trigger type pad.

Trigger Input	Rim Shot		Cross Stick
	Rubber Pad	Mesh Pad	
KICK	-	-	-
SNARE	✓	✓	✓
TOM 1-4	✓	✓	-
HI-HAT	✓	-	-
CRASH 1, 2	✓	-	-
RIDE	✓	-	-
AUX 1-4	✓	✓	-

### Positional sensing/rim shot nuance

Trigger Input	Positional Sensing (Head)	Rim Shot Nuance
KICK	-	-
SNARE	✓	✓
TOM 1-4	✓	✓
HI-HAT	-	-
CRASH 1, 2	-	-
RIDE	✓	-
AUX 1-4	✓	✓

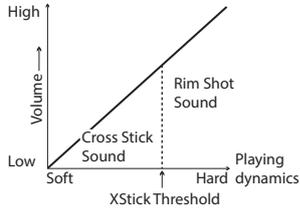
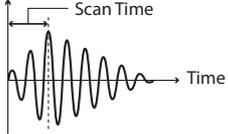
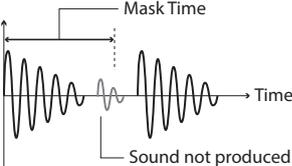
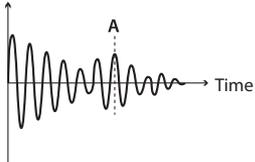
#### MEMO

- Brush sweep can be used only SNARE.
- Each playing method can be used with the instruments corresponding to it.
- Bell shots are possible only for "RIDE."
- Cross-stick is possible only for "SNARE."

## TRIG ADVANCED (page 2)



Parameter	Value	Explanation	
<b>THRESHOLD tab</b>			
Trig Type		This is the same parameter as Trig Type (p. 22) in the BANK tab.	
Threshold	0-31	<p>Minimum sensitivity of the pad</p> <p>This setting allows a trigger signal to be received only when the pad is above a determined force level (velocity). This can be used to prevent a pad from sounding because of vibrations from other pads. In the following example, B will sound but A and C will not sound.</p> <p>Check this and adjust accordingly. Repeat this process until you get the perfect setting for your playing style.</p>	
Curve	Volume change in response to pad strike strength		
	LINEAR	<p>LINEAR Playing dynamics</p>	The standard setting. This produces the most natural correspondence between playing dynamics and volume change.
	EXP1, EXP2	<p>EXP1 Playing dynamics EXP2 Playing dynamics</p>	Compared to "LINEAR," strong dynamics produce a greater change.
	LOG1, LOG2	<p>LOG1 Playing dynamics LOG2 Playing dynamics</p>	Compared to "LINEAR," a soft playing produces a greater change.
	SPLINE	<p>SPLINE Playing dynamics</p>	Extreme changes are made in response to playing dynamics.
LOUD1, LOUD2	<p>LOUD1 Playing dynamics LOUD2 Playing dynamics</p>	Very little dynamic response, making it easy to maintain strong volume levels. If you're using a drum trigger as an external pad, these settings will produce reliable triggering.	

Parameter	Value	Explanation
<b>THRESHOLD tab</b>		
ExtNoiseCancel*1	OFF, 1-5	<p>This setting lets you prevent a drum from being triggered unwantedly by a strike on a drum to which no drum trigger is attached, or by sound or vibration from the surroundings (noise cancellation). This noise cancel function can be used if you use a stereo cable to connect an "RT-30K" or "RT-30HR" drum trigger to the following TRIGGER IN jacks and specify the Trig Type.</p> <p>Supported TRIGGER IN jacks</p> <ul style="list-style-type: none"> <li>• KICK</li> <li>• SNARE</li> <li>• TOM1-4</li> <li>• AUX1-4</li> </ul> <p>* The "RT-30H" does not support the noise cancel function.</p>
<b>RIM tab</b>		
Trig Type	This is the same parameter as Trig Type (p. 22) in the BANK tab.	
Head/Rim Adjust*2	0-80	<p>If the rim sound is heard when you strike the head strongly, increase this value. If the head sound is heard when you play an open rim shot, decrease this value. If the head sound is heard when you softly play a rim shot, decrease this value.</p> <p><b>MEMO</b></p> <p>If the rim shot sound is heard when you play a head shot, or if a head shot sound is heard when you play a rim shot, make small changes to the Head/Rim Adjust values while you continue trying out the results. Extreme changes to the values will cause the wrong sound to be heard when you strike the pad, for example producing the rim shot sound when you play a head shot.</p>
XStick Threshold*2	0-127	<p>For a pad that is connected to a TRIGGER IN jack, this specifies the force at which to switch between the cross stick sound and open rim shot sound. Setting this to a higher value makes it easier to get cross stick sounds. When set to "0," playing a cross stick produces the open rim shot sound.</p> <p>For a digitally connected pad that allows cross stick technique, playing a cross stick with a strike that is stronger than the value of this setting produces the open rim shot sound.</p> <p>* For a pad that is connected to a TRIGGER IN jack, be aware that if this value is raised excessively, the cross stick sound will also be heard when you play an open rim shot.</p> 
<b>SCAN tab</b>		
Trig Type	This is the same parameter as Trig Type (p. 22) in the BANK tab.	
Scan Time	0-4.0 ms	<p>Trigger signal detection time</p> <p>Since the rise time of the trigger signal waveform may differ slightly depending on the characteristics of each pad or acoustic drum trigger (drum pickup), you may notice that identical hits (velocity) may produce sound at different volumes. If this occurs, you can adjust the "Scan Time" so that your way of playing can be detected more precisely.</p> <p>While repeatedly hitting the pad at a constant force, gradually raise the Scan Time value from 0 msec, until the resulting volume stabilizes at the loudest level. At this setting, try both soft and loud strikes, and make sure that the volume changes appropriately.</p> <p>* As the value is set higher, the time it takes for the sound to be played increases. Set this to the lowest value possible.</p> 
Mask Time	0-64 ms	<p>Double triggering prevention</p> <p>When playing a kick trigger the beater can bounce back and hit the head a second time immediately after the intended note—with acoustic drums sometimes the beater stays against the head—this causes a single hit to "double trigger" (two sounds instead of one). The Mask Time setting helps to prevent this. Once a pad has been hit, any additional trigger signals occurring within the specified "Mask Time" will be ignored.</p> <p>Adjust the "Mask Time" value while playing the pad. When using a kick trigger, try to let the beater bounce back and hit the head very quickly, then raise the "Mask Time" value until there are no more sounds made by the beater rebound.</p> <p><b>MEMO</b></p> <p>If two or more sounds are being produced when you strike the head just once, then adjust Retrigger Cancel.</p> 
Retrigger Cancel	1-16	<p>Detecting trigger signal attenuation</p> <p>Important if you are using acoustic drum triggers. Such triggers can produce altered waveforms, which may also cause inadvertent sounding at Point A in the following figure (Retrigger).</p> <p>This occurs in particular at the decaying edge of the waveform. Retrigger Cancel detects such distortion in and prevents retriggering from occurring.</p> <p>While repeatedly striking the pad, raise the "Retrigger Cancel" value until retriggering no longer occurs.</p> <p>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.</p> <p><b>MEMO</b></p> <p>You can also eliminate this problem of retriggering with the Mask Time setting. Mask Time does not detect trigger signals if they occur within the specified amount of time after the previous trigger signal was received. Retrigger Cancel detects the attenuation of the trigger signal level, and triggers the sound after internally determining which trigger signals were actually generated when the head was struck, while weeding out the other false trigger signals that need not trigger a sound.</p> 

Parameter	Value	Explanation
<b>POSITION tab</b>		
Trig Type	This is the same parameter as Trig Type (p. 22) in the BANK tab.	
Position Detect*2	Positional sensing on/off If you turn strike position detection on, you'll be able to produce tonal change by varying the strike position on the head or by changing the nuance of your rim shots.	
	Head	OFF, ON Turns head strike position detection on/off
	Rim	OFF, ON Turns rim strike position detection on/off

\*1 Only when Trig Type is set to "RT30K" or "RT30HR"

\*2 For some Trig Type settings, this cannot be specified.

**MEMO**

To return to the default values, press the [F5] (DEFAULT) button.

The following parameters do not return to their default values when you change the Trig Type or press the [F5] (DEFAULT) button.

- Hi-hat parameters
  - Offset
  - Foot Splash Sens
  - Noise Cancel
  - CC MAX
- XStick Threshold
- XTalk Cancel Rate

TRIG MONITOR (page 3)



Parameter	Value	Explanation
<b>XTALK tab</b>		
XTalk Cancel Rate	0-80	Strength of crosstalk cancellation <b>Reference</b> For details on how to make these settings, refer to "Reference Manual"

# SETUP

## 1. Press the [SETUP] button.

The SETUP MENU screen appears.



## 2. Use the PAGE [UP] [DOWN] buttons and the function buttons to select the setup menu that you want to edit.

Setup menu	Explanation	Page
OUTPUT	Specifies the output destination of the sounds.	p. 27
USB AUDIO	Makes USB audio settings.	p. 30
OPTION	Makes settings for the [PREVIEW] button, the MIX IN jacks, and the display.	p. 30
CONTROL	Assigns functions to the footswitch and pads.	p. 31
MIDI	Makes MIDI settings.	p. 32
AUTO OFF	Makes AUTO OFF settings.	p. 33
INFO	Displays information about the TD-50 itself, such as the program version.	p. 33
FACTORY RESET	Returns the TD-50 to its factory settings. <b>Reference</b> For details on the factory reset operation, refer to "Reference Manual" (PDF).	-

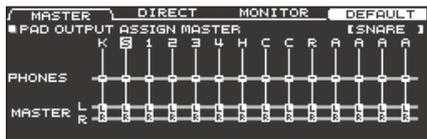
## 3. Edit the settings of the menu that you selected.

### Reference

For details on operations in the setup menu, refer to "Reference Manual" (PDF).

## OUTPUT

### PAD OUTPUT (page 1)



Parameter	Value	Explanation
<b>MASTER tab</b>		
PAD OUTPUT ASSIGN MASTER	PHONES (MASTER OFF), PHONES+MASTER LR	Specifies each pad's output from the PHONES jacks and the MASTER OUT jacks (when Master Out (p. 29) is "NORMAL").
<b>DIRECT tab</b>		
PAD OUTPUT ASSIGN DIRECT	OFF, 1, 2, 1+2, 3, 4, 3+4, 5, 6, 5+6, 7, 8, 7+8, MASTER DIRECT L, MASTER DIRECT R, MASTER DIRECT L+R	Specifies each pad's output from the DIRECT OUT 1–8 jacks and the MASTER OUT jacks (when Master Out (p. 29) is "DIRECT").
<b>MONITOR tab</b>		

Monitor the output volume of each jack.



### MEMO

To return to the default values, press the [F4] (DEFAULT) button.

## OTHER OUTPUT (page 2)



Parameter	Value	Explanation
<b>MASTER tab</b>		
OTHER OUTPUT ASSIGN MASTER	PHONES (MASTER OFF), PHONES+MASTER LR	Specifies how ambience and MFX are output from the PHONES jacks and the MASTER OUT jacks (when Master Out (p. 29) is "NORMAL").
<b>DIRECT tab</b>		
OTHER OUTPUT ASSIGN DIRECT	OFF, 1, 2, 1+2, 3, 4, 3+4, 5, 6, 5+6, 7, 8, 7+8, MASTER DIRECT L, MASTER DIRECT R, MASTER DIRECT L+R	Specifies how ambience and MFX are output from the DIRECT OUT1-8 jacks and the MASTER OUT jacks (when Master Out (p. 29) is "DIRECT").
<b>MONITOR tab</b>		

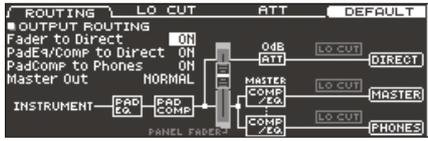
Monitor the output volume of each jack.



### MEMO

To return to the default values, press the [F4] (DEFAULT) button.

## OUTPUT ROUTING (page 3)



Parameter	Value	Explanation
<b>ROUTING tab</b>		
Fader to Direct*1	OFF, ON	Specifies whether the fader values are applied to the output from the DIRECT OUT jacks (ON) or are not applied (OFF). If this is "OFF," the output from the DIRECT OUT jacks is not affected by the panel faders. If the OUTPUT ROUTING Master Out is "DIRECT," and Fader to Direct is "OFF," the output from the MASTER OUT jacks is also unaffected by the panel faders. Regardless of the Fader to Direct setting, the output from the PHONES jacks is always affected by the panel faders. This means that the faders at hand can be used to adjust the balance of the sound monitored by the performer, independently of the balance adjusted by the PA.
PadEq/Comp to Direct*1	OFF, ON	Specifies whether the pad equalizer (p. 14) and pad compressor (p. 14) effects are applied (ON) or are not applied (OFF) to the sound that is output from the DIRECT OUT jacks. If this is "OFF," the pad equalizer and pad compressor are bypassed for the output of the DIRECT OUT jacks. If the OUTPUT ROUTING Master Out is "DIRECT," and PadEq/Comp to Direct is "OFF" the output from the MASTER OUT jacks also bypasses the pad equalizer and pad compressor.
PadComp to Phones	OFF, ON	Specifies whether the pad compressor (p. 14) is applied (ON) or is not applied (OFF) to the sound that is output from the PHONES jacks. If this is "OFF," the pad compressor does not affect the output from the PHONES jacks. For example, this lets you use the pad compressor to reduce the dynamic range for the drum monitor or PA, but hear the full dynamics in the monitor headphones while you perform.
Master Out*1	NORMAL, DIRECT	Selects whether the output of the MASTER OUT jacks is the same signal as the DIRECT OUT jacks (DIRECT) or not (NORMAL). If this is "DIRECT," the output of the MASTER OUT jacks is not affected by the master compressor and master EQ, allowing you to use the MASTER OUT jacks as DIRECT OUT jacks (the setting of the [MASTER] knob does apply). This setting also applies to the USB audio output to your computer.
<b>LO CUT tab</b>		
LoCut Frequency	20–200 Hz	Cuts the frequency region below the specified frequency (low cut). This setting is common to all output jacks.
DirectOut*2	OFF, ON	Specifies whether low cut is applied (ON) or is not applied (OFF) to the sound that is output from the DIRECT OUT jacks.
MasterOut*2	OFF, ON	Specifies whether low cut is applied (ON) or is not applied (OFF) to the sound that is output from the MASTER OUT jacks.
PhonesOut	OFF, ON	Specifies whether low cut is applied (ON) or is not applied (OFF) to the sound that is output from the PHONES jacks.
<b>ATT tab</b>		
Direct Out Att*2	-12, -6, 0db	Lowers the volume of the DIRECT OUT jacks (attenuator). This lets you decrease the volume if the output of the TD-50 is too high, causing distortion on the device that receives these signals. This applies to all DIRECT OUT jacks. If Master Out is set to "DIRECT," this also applies to the output from the MASTER OUT jacks.

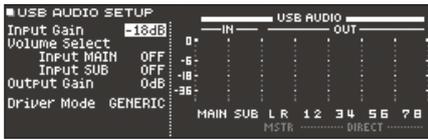
\*1 This also applies to the TD-50's sound that is output via USB audio.

\*2 Low cut and attenuator do not apply to the TD-50's sound that is output via USB audio.

**MEMO**

To return to the default values, press the [F4] (DEFAULT) button.

## USB AUDIO



Parameter	Value	Explanation
Input Gain	-36--+12 dB	Adjusts the input level This setting is common to Input MAIN and SUB.
Volume Select Input MAIN, SUB	OFF	The volume is not adjusted by a knob.
	SONG	The [SONG] knob adjusts the volume.
	CLICK	The [CLICK] knob adjusts the volume.
Output Gain	-24--+24 dB	Adjusts the output level This setting is common to all outputs.
Driver Mode	Switches between the TD-50's dedicated USB driver and the driver provided by your operating system.	
	<b>MEMO</b> The setting takes effect when the TD-50 is powered off and on again.	
	GENERIC	Use the driver provided by the operating system. Operation is limited to USB MIDI.
	VENDOR	Use the TD-50's dedicated driver provided by Roland. USB MIDI and USB audio can be used.

## OPTION



Parameter	Value	Explanation
<b>PREVIEW tab</b>		
Preview Mode	Specifies how the sound is played when the [PREVIEW] button is pressed.	
	FIXED	The sound is heard at a fixed volume regardless of how strongly the button is pressed.
	DRUM KIT	The velocity changes depending on how strongly the button is pressed. The velocity changes in the range of 1-127 according to the pad that is connected. For a digitally connected pad, the velocity changes in the range of 1-127+32.
Velocity	1-127+32	Velocity when Preview Mode is set to "FIXED"

### MIX IN tab

The MIX IN jack can be used not only as a stereo input but also as mono input x2.

For example, if the click sound is being played through the L-channel of the MIX IN jack and the backing through the R-channel, set Mode to "MONO" so that the click and backing are both heard from the center.

This setting is common to the front panel and rear panel MIX IN jacks.

Input	Selects the jack(s) to use as an input.	
	L + R	Use both channels
	L ONLY	Use only the left channel
Mode	R ONLY	Use only the right channel
	STEREO	Use as stereo input
Gain	MONO	Use as monaural x 2
	0, +6, +12 dB	Adjusts the input level

### LCD tab

Contrast	1-16	Display contrast
Brightness	1-16	Display brightness

### GUIDE tab

Guide Display Sw	OFF, ON	Specifies whether the guide is shown (ON) or not shown (OFF) on the screen when switching pages.
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# CONTROL



Parameter	Value	Explanation
<b>FOOT SW tab</b>		
Foot Switch 1 Func(SW1), Foot Switch 2 Func(SW2)	See below	<p>Assigns a function to a footswitch (separately sold: BOSS FS-5U, FS-6) connected to the TD-50.</p> <p>Connecting an FS-5U</p> <p>* If you use a mono cable to connect a single FS-5U, it will operate as SW 2. * The FS-5L cannot be used.</p> <p>Connecting an FS-6</p>
<b>PAD CTRL tab</b>		
Aux3 Head Func, Aux3 Rim Func	See below	Assigns functions to a pad connected to TRIGGER IN jack 13/AUX3. You can assign separate functions to the head and to the rim.
Aux4 Head Func, Aux4 Rim Func		Assigns functions to a pad connected to TRIGGER IN jack 14/AUX4. You can assign separate functions to the head and to the rim.

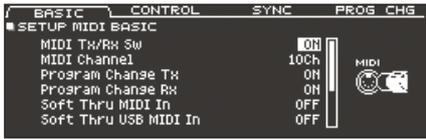
## Functions that you can assign to a footswitch or pad

Value	Explanation
OFF	No function is assigned.
KIT# INC	Calls up the previous kit.
KIT# DEC	Calls up the next kit.
SETLIST# INC	Calls up the previous set list.
SETLIST# DEC	Calls up the next set list.
SONG# INC	Calls up the previous song.
SONG# DEC	Calls up the next song.
SONG PLAY	Play the song.
SONG STOP	Stop the song.
SONG TOP	Return to the beginning of the song.
SONG PLAY/STOP	Play/stop the song.

Value	Explanation
SONG AB REPEAT	Specifies A-B repeat.
MFX 1 ON/OFF	Turns on/off the multi-effect 1.
MFX 2 ON/OFF	Turns on/off the multi-effect 2.
MFX 3 ON/OFF	Turns on/off the multi-effect 3.
XSTICK ON/OFF*1	Switches between sounding or not sounding the cross-stick sound.
FIXED HH ON/OFF	Switches between setting the hi-hat Fixed (p. 8) to "CLOSE" or not.
ALL SOUND OFF	Stops the currently-sounding drum performance sound or user sample playback.

\*1 If the trigger input (p. 22) of a digitally-connected pad (such as the PD-140DS) is assigned to snare, "XSTICK ON/OFF" has no effect.

# MIDI



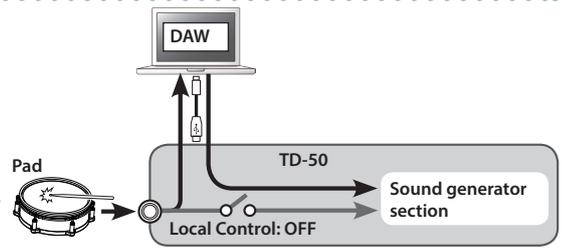
Parameter	Value	Explanation
<b>BASIC tab</b>		
MIDI Tx/Rx Sw	OFF, ON	Turns the transmitting and receiving MIDI messages on/off.
MIDI Channel	1–16Ch	Transmit and receive channel.
Program Change Tx	OFF, ON	Turns program change transmission on/off
Program Change Rx	OFF, ON	Turns program change reception on/off
Soft Thru MIDI In	This allows performance data from a MIDI device connected to the TD-50's MIDI IN connector to be transmitted to another MIDI device connected to the MIDI OUT connector or to a computer connected to the USB COMPUTER port.	
	OFF	Performance data received from the TD-50's MIDI IN connector will not be sent to the MIDI OUT connector or the USB COMPUTER port.
	ON (MIDI OUT)	Performance data received from the TD-50's MIDI IN connector will be sent to the MIDI OUT connector.
	ON (USB MIDI)	Performance data received from the device connected to the TD-50's MIDI IN connector will be sent to the USB COMPUTER port.
Soft Thru USB MIDI In	Performance data from a computer connected to the TD-50's USB COMPUTER port can be transmitted to a MIDI device connected to the MIDI OUT connector.	
	OFF	Performance data received via the TD-50's USB COMPUTER port is not transmitted to the MIDI OUT connector.
	ON (MIDI OUT)	Performance data received via the TD-50's USB COMPUTER port is transmitted to the MIDI OUT connector.
Local Control	OFF, ON	Turns on/off the connection between the performance data from the pads and the TD-50's sound generator section Normally you'll leave this "ON." If this is "OFF," the performance data from the pads is not connected to the TD-50's sound generator section.
Device ID	17–32	Device ID setting The setting described here is necessary only when you wish to transmit separate data to two or more TD-50 units at the same time. Do not change this setting in any other case.
Transmit Edit Data	OFF, ON	Specifies whether changes in the TD-50's settings are transmitted as system exclusive messages (ON) or not transmitted (OFF).
Receive Exclusive	OFF, ON	Specifies whether system exclusive messages are received (ON) or not received (OFF).
<b>CONTROL tab</b>		
HH Pedal CC	OFF, 1, 2, 4, 11, 16, 17, 18, 19	Control change used for transmitting/receiving the depth to which the hi-hat pedal pressed
Snare CC		Control change used for transmitting/receiving the strike position of the snare
Ride CC		Control change used for transmitting/receiving the strike position of the ride
TOMs/AUXs CC		Control change used for transmitting/receiving the strike position of the tom 1–4 and AUX 1–4
HH Note# Border	0–127	This number specifies the pedal position at which to switch from open hi-hat to closed hi-hat. * There's no need to change this setting if you're performed and recording only with the TD-50 and the pads.
Hi-Reso Velocity	OFF, ON	Disables CC#88 (high resolution velocity prefix). If this is disabled, the maximum velocity handled by the TD-50 is limited to 127. Velocity is also limited to 127 for strikes on digitally-connected pads and for input via the MIDI IN connector.
Cymbal Choke Shot	OFF, ON	Switches support for the performance technique of striking a pad while choking it. If this is "ON," striking a pad while choking it immediately mutes the sound after it begins. If this is "OFF," the sound is not muted immediately even if you strike a pad while choking it.
<b>SYNC tab</b>		
Sync Mode	Specifies the synchronization signal according to which the TD-50 operates.	
	INTERNAL	Choose this setting if you're using the TD-50 by itself without synchronizing it to another device, or if you want another device to operate in synchronization with the TD-50.
	EXTERNAL	The TD-50 operates as a slave device. Choose this setting if you want the TD-50 to operate according to synchronization messages that it receives from another device.
Clock Source	MIDI, USB MIDI	When Sync Mode is "EXTERNAL," this specifies whether the TD-50 synchronizes to synchronization messages from the MIDI IN connector (MIDI) or to synchronization messages from the USB COMPUTER port (USB MIDI).
Sync Out	OFF, ON	Specifies whether MIDI synchronization messages are transmitted to another device (ON) or not transmitted (OFF).
<b>PROG CHG tab</b>		
MIDI Program Change	1–127	You can freely specify the correspondence between drum kits and the program change numbers that are transmitted and received.

## Using the Local Control setting

If you're using a DAW with the performance data from the pads and TD-50's sound generator section, you should turn the Local Control "OFF." Here's why.

We need to connect these sections in the following order: the performance data from the pads → a DAW → the TD-50's sound generator section.

Since the performance data from the pads and TD-50's sound generator section are connected internally, such a connection order would normally be impossible. However, if the Local Control is "OFF," the performance data from the pads and TD-50's sound generator section will be independent, allowing you to use a DAW as shown here in the illustration.



## Specifying the HH Note# Border

The note number transmitted when you strike the hi-hat will change depending on the amount of pressure on the hi-hat pedal.

At the factory default value (127), the closed hi-hat note number will be transmitted only if the hi-hat pad is played with the pedal completely depressed. If you want this note number to be transmitted when the pedal is slightly raised, set this to a value such as "90."

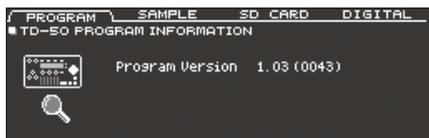
\* In some cases, changing the hi-hat note number border setting might cause a song to play back differently than when it was recorded.

## AUTO OFF



Parameter	Value	Explanation
Auto Off	OFF	The power does not turn off automatically.
	4 HOURS	When four hours have elapsed without any pad being struck or any operation being performed, the unit will turn off automatically.
		Specifies whether the unit will turn off automatically after a certain time has elapsed. If you don't want the unit to turn off automatically, choose "OFF" setting

## INFO



Parameter	Value	Explanation
<b>PROGRAM tab</b>		
Program Version	Program version	
<b>SAMPLE tab</b>		
Imported Sample	Number of imported user samples	
Memory Remain	Remaining amount for user samples in user memory	
<b>SD CARD tab</b>		
Backup All	Backup data saved on the SD card (all settings)	
1 Kit	Kit backup data saved on the SD card	
Rec Data	Number of recorded data saved on the SD card	
<b>DIGITAL tab</b>		
Pad	Indicates a pad that is digitally connected to the TD-50.	
Program Version	Indicates the program version of a pad that is digitally connected to the TD-50.	

# Multi-Effect Parameters

The multi-effects feature 30 different kinds of effects. Some of the effects consist of two or more different effects connected in series.

Effect type	Page
DELAY	p. 35
TAPE ECHO	p. 35
REVERSE DELAY	p. 35
3TAP PAN DELAY	p. 35
OD → DELAY	p. 36
DS → DELAY	p. 36
CHORUS	p. 36
SPACE-D	p. 36
OD → CHORUS	p. 36
DS → CHORUS	p. 36
PHASER A	p. 37
PHASER B	p. 37
STEP PHASER	p. 37
FLANGER	p. 37
REVERB	p. 38
LONG REVERB	p. 38
SUPER FILTER	p. 38
FILTER+DRIVE	p. 38
AUTO WAH	p. 39
OD/DS → TWAH	p. 39
LOFI COMPRESS	p. 39
DISTORTION	p. 39
OVERDRIVE	p. 39
SATURATOR	p. 39
T-SCREAM	p. 40
BIT CRUSHER	p. 40
ISOLATOR	p. 40
RING MODULATOR	p. 40
PITCH SHIFTER	p. 40
AUTO PAN	p. 40

## About note values

Some effect parameters (such as Rate or Delay Time) can be set by using note values.

	Sixty-fourth-note triplet		Sixty-fourth note		Thirty-second-note triplet		Thirty-second note
	Sixteenth-note triplet		Dotted thirty-second note		Sixteenth note		Eighth-note triplet
	Dotted sixteenth note		Eighth note		Quarter-note triplet		Dotted eighth note
	Quarter note		Half-note triplet		Dotted quarter note		Half note
	Whole-note triplet		Dotted half note		Whole note		Double-note triplet
	Dotted whole note		Double note				

### NOTE

If you set the delay time as a note value, slowing down the tempo will not change the delay time beyond a certain length. There is an upper limit for the delay time so if it is set as a note value and you slow down the tempo until this upper limit is reached, the delay time cannot change any further. This upper limit is the maximum value that can be specified when setting the delay time as a numerical value.

## DELAY

This is a stereo delay.

Parameter	Value	Explanation
Tempo Sync Left, Right	OFF, ON	Specifies whether the delay time value of the left/right delay sounds is specified as a note value (ON) or not (OFF).
Delay Left, Right Time	1–1300 ms, note	Delay time from the original sound until the left/right delay sound is heard
Phase Left, Right	NORMAL, INVERSE	Phase of the delay sound
Feedback Mode	NORMAL, CROSS	Selects the way in which delay sound is fed back into the effect <b>NORMAL:</b> The left/right delay sounds are fed back without modification. <b>CROSS:</b> The left/right delay sounds are alternately exchanged when fed back.
Feedback	-98–+98 %	Adjusts the amount of the delay sound that's fed back into the effect. Negative "-" settings will invert the phase.
HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don't want to filter out any high frequencies, set this parameter to BYPASS.
Low Gain	-15–+15 dB	Gain of the low frequency range
High Gain	-15–+15 dB	Gain of the high frequency range
Level	0–127	Output Level

## TAPE ECHO

A virtual tape echo that produces a realistic tape delay sound. This simulates the tape echo section of a Roland RE-201 Space Echo.

Parameter	Value	Explanation
Mode	S, M, L, S+M, S+L, M+L, S+M+L	Combination of playback heads to use Select from three different heads with different delay times <b>S:</b> Short <b>M:</b> Middle <b>L:</b> Long
Repeat Rate	0–127	Tape speed Increasing this value will shorten the spacing of the delayed sounds.
Intensity	0–127	Amount of delay repeats
Bass	-15–+15 dB	Boost/cut for the lower range of the echo sound
Treble	-15–+15 dB	Boost/cut for the upper range of the echo sound
Head S Pan	L64–R63	Independent stereo location for the short, middle, and long playback heads
Head M Pan	L64–R63	
Head L Pan	L64–R63	
Tape Distortion	0–5	Amount of tape-dependent distortion to be added This simulates the slight tonal changes that can be detected by signal-analysis equipment. Increasing this value will increase the distortion.
W/F Rate	0–127	Speed of wow/flutter (complex variation in pitch caused by tape wear and rotational irregularity)
W/F Depth	0–127	Depth of wow/flutter
Level	0–127	Output level

## REVERSE DELAY

This is a reverse delay that adds a reversed and delayed sound to the input sound. A tap delay is connected immediately after the reverse delay.

Parameter	Value	Explanation
Threshold	0–127	Volume at which the reverse delay will begin to be applied
Tempo Sync Rev	OFF, ON	Specifies whether the delay time value of the reverse delay is specified as a note value (ON) or not (OFF).
Rev Delay Time	1–1300 ms, note	Delay time from when sound is input into the reverse delay until the delay sound is heard
Rev Delay Feedback	-98–+98 %	Proportion of the delay sound that is to be returned to the input of the reverse delay. Negative "-" settings will invert the phase.
Rev Delay HF Damp	200–8000 Hz, BYPASS	Frequency at which the high-frequency content of the reverse-delayed sound will be cut (BYPASS: no cut)
Rev Delay Pan	L64–63R	Stereo location of the reverse delay sound
Rev Delay Level	0–127	Volume of the reverse delay sound
Tempo Sync Delay 1–3	OFF, ON	Specifies whether the delay time value of the tap delay is specified as a note value (ON) or not (OFF).
Delay 1–3 Time	1–1300 ms, note	Delay time from when sound is input into the tap delay until the delay sound is heard
Delay 3 Feedback	-98–+98 %	Proportion of the delay sound that is to be returned to the input of the tap delay (negative values invert the phase)
Delay HF Damp	200–8000 Hz, BYPASS	Frequency at which the high frequency content of the tap delay sound will be cut (BYPASS: no cut)
Delay 1 Pan, Delay 2 Pan	L64–63R	Stereo location of the tap delay sounds
Delay 1 Level, Delay 2 Level	0–127	Volume of the tap delay sounds
Low Gain	-15–+15 dB	Gain of the low frequency range
High Gain	-15–+15 dB	Gain of the high frequency range
Level	0–127	Output Level

## 3TAP PAN DELAY

Produces three delay sounds; center, left and right.

Parameter	Value	Explanation
Tempo Sync Left, Right, Center	OFF, ON	Specifies whether the delay time value of the left/right/center delay sound is specified as a note value (ON) or not (OFF).
Delay Left, Right, Center Time	1–2600 ms, note	Adjusts the time until the delay sound is heard.
Center Feedback	-98–+98 %	Adjusts the amount of the delay sound that's fed back into the effect. Negative "-" settings invert the phase.
HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you do not want to filter out any high frequencies, set this parameter to BYPASS.
Left, Right, Center Level	0–127	Volume of each delay
Low Gain	-15–+15 dB	Gain of the low frequency range
High Gain	-15–+15 dB	Gain of the high frequency range
Level	0–127	Output Level

## OD → DELAY

Parameter	Value	Explanation
Overdrive Drive	0–127	Degree of distortion Also changes the volume.
Overdrive Pan	L64–63R	Stereo location of the overdrive sound
Tempo Sync	OFF, ON	Specifies whether the delay time value of the delay is specified as a note value (ON) or not (OFF).
Delay Time	1–2600 ms, note	Adjusts the delay time from the direct sound until the delay sound is heard.
Delay Feedback	-98–+98 %	Adjusts the proportion of the delay sound that is fed back into the effect. Negative “-” settings will invert the phase.
Delay HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

## DS → DELAY

The parameters are essentially the same as in “OD → DELAY” with the exception of the following two.  
Overdrive Drive → Distortion Drive, Overdrive Pan → Distortion Pan

## CHORUS

This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound.

Parameter	Value	Explanation
Filter Type	OFF, LPF, HPF	Type of filter <b>OFF:</b> no filter is used <b>LPF:</b> cuts the frequency range above the Cutoff Freq <b>HPF:</b> cuts the frequency range below the Cutoff Freq
Cutoff Freq	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Tempo Sync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180 deg	Spatial spread of the sound
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## SPACE-D

This is a multiple chorus that applies two-phase modulation in stereo. It gives no impression of modulation, but produces a transparent chorus effect.

Parameter	Value	Explanation
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Tempo Sync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180 deg	Spatial spread of the sound
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## OD → CHORUS

Parameter	Value	Explanation
Overdrive Drive	0–127	Degree of distortion Also changes the volume.
Overdrive Pan	L64–63R	Stereo location of the overdrive sound
Chorus Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Tempo Sync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Chorus Depth	0–127	Depth of modulation
Chorus Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).
Level	0–127	Output Level

## DS → CHORUS

The parameters are essentially the same as in “OD → CHORUS” with the exception of the following two.  
Overdrive Drive → Distortion Drive, Overdrive Pan → Distortion Pan

## PHASER A

A phase-shifted sound is added to the original sound and modulated.

Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual	0–127	Adjusts the basic frequency from which the sound will be modulated.
Tempo Sync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Polarity	INVERSE, SYNCHRO	Selects whether the left and right phase of the modulation will be the same or the opposite. <b>INVERSE:</b> The left and right phase will be opposite. When using a mono source, this spreads the sound. <b>SYNCHRO:</b> The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback
Cross Feedback	-98–+98 %	Adjusts the proportion of the phaser sound that is fed back into the effect. Negative “-” settings will invert the phase.
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## PHASER B

This simulates a different analog phaser than Phaser A.

Parameter	Value	Explanation
Speed	0–100	Frequency of modulation
Depth	0–127	Depth of modulation
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## STEP PHASER

The phaser effect will be varied gradually.

Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual	0–127	Adjusts the basic frequency from which the sound will be modulated.
Tempo Sync (Rate)	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Polarity	INVERSE, SYNCHRO	Selects whether the left and right phase of the modulation will be the same or the opposite. <b>INVERSE:</b> The left and right phase will be opposite. When using a mono source, this spreads the sound. <b>SYNCHRO:</b> The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback
Cross Feedback	-98–+98 %	Adjusts the proportion of the phaser sound that is fed back into the effect. Negative “-” settings will invert the phase.
Tempo Sync (Step Rate)	OFF, ON	Specifies whether the modulation rate of the phaser effect is specified as a note value (ON) or not (OFF).
Step Rate	0.10–20.00 Hz, note	Rate of the step-wise change in the phaser effect
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## FLANGER

This is a stereo flanger. (The LFO has the same phase for left and right.) It produces a metallic resonance that rises and falls like a jet airplane taking off or landing. A filter is provided so that you can adjust the timbre of the flanged sound.

Parameter	Value	Explanation
Filter Type	OFF, LPF, HPF	Type of filter <b>OFF:</b> no filter is used <b>LPF:</b> cuts the frequency range above the Cutoff Freq <b>HPF:</b> cuts the frequency range below the Cutoff Freq
Cutoff Freq	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Tempo Sync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180 deg	Spatial spread of the sound
Feedback	-98–+98 %	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative “-” settings will invert the phase.
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## REVERB

Adds reverberation to the direct sound, simulating an acoustic space.

Parameter	Value	Explanation
Type	ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2	Type of reverb
Pre Delay	0.0–100 msec	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	0–127	Time length of reverberation
HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which the reverberant sound will be cut (BYPASS: no cut).
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## LONG REVERB

This is a very rich sounding reverb with a choice of character.

Parameter	Value	Explanation
Depth	0–127	Depth of the effect
Time	0–127	Time length of reverberation
Pre LPF	16–15000 Hz, BYPASS	Frequency of the filter that cuts the high-frequency content of the input sound (BYPASS: no cut)
Pre HPF	BYPASS, 16–15000 Hz	Frequency of the filter that cuts the low-frequency content of the input sound (BYPASS: no cut)
Peaking Freq	200–8000 Hz	Frequency of the filter that boosts/cuts a specific frequency region of the input sound
Peaking Gain	-15–+15 dB	Amount of boost/cut produced by the filter at the specified frequency region of the input sound
Peaking Q	0.5–8.0	Bandwidth of the filter that boosts or cuts the specified frequency region of the input sound
HF Damp	16–15000 Hz, BYPASS	Frequency at which the high-frequency content of the resonant sound will be cut (BYPASS: no cut)
LF Damp	BYPASS, 16–15000 Hz	Frequency at which the low-frequency content of the resonant sound will be cut (BYPASS: no cut)
Character	1–6	Type of reverb
EQ Low Freq	200–400 Hz	Center frequency of the low region
EQ Low Gain	-15–+15 dB	Gain of the low range
EQ High Freq	2000–8000 Hz	Center frequency of the high region
EQ High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## SUPER FILTER

This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically

Parameter	Value	Explanation
Filter Type	Filter type	Frequency range that will pass through each filter
	LPF	Frequencies below the cutoff
	BPF	Frequencies in the region of the cutoff
	HPF	Frequencies above the cutoff
Filter Slope	NOTCH	Frequencies other than the region of the cutoff
	Amount of attenuation per octave	
	-12 dB	Gentle
Filter Cutoff	-24 dB	Steep
	-36 dB	Extremely steep
Filter Cutoff	0–127	Cutoff frequency of the filter Increasing this value will raise the cutoff frequency.
Filter Resonance	0–127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
Filter Gain	0–+12 dB	Amount of boost for the filter output
Modulation Sw	OFF, ON	On/off switch for cyclic change
Modulation Wave	How the cutoff frequency will be modulated	
	TRI	Triangle wave
	SQR	Square wave
	SIN	Sine wave
	SAW1	Sawtooth wave (upward)
	SAW2	Sawtooth wave (downward)
Tempo Sync		
	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Rate of modulation
Depth	0–127	Depth of modulation
Attack	0–127	Speed at which the cutoff frequency will change This is effective if Modulation Wave is SQR, SAW1, or SAW2.
Level	0–127	Output Level

## FILTER+DRIVE

This is a low-pass filter equipped with overdrive. It cuts the upper range and adds distortion.

Parameter	Value	Explanation
Cutoff	0–127	Cutoff frequency of the filter Increasing this value will raise the cutoff frequency.
Resonance	0–127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
Drive	0–127	Amount of distortion
Level	0–127	Output Level

## AUTO WAH

Cyclically controls a filter to create cyclic change in timbre.

Parameter	Value	Explanation
Filter Type	LPF, BPF	Type of filter <b>LPF:</b> The wah effect will be applied over a wide frequency range. <b>BPF:</b> The wah effect will be applied over a narrow frequency range.
Manual	0–127	Adjusts the center frequency at which the effect is applied.
Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
Sens	0–127	Adjusts the sensitivity with which the filter is controlled.
Polarity	UP, DOWN	Direction in which the filter will move <b>UP:</b> Move toward a higher frequency <b>DOWN:</b> Move toward a lower frequency
Tempo Sync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180 deg	Adjusts the degree of phase shift of the left and right sounds when the wah effect is applied.
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## OD/DS → TWAH

Parameter	Value	Explanation
Drive Switch	OFF, ON	Turns overdrive/distortion on/off
Drive Type	OVERDRIVE, DISTORTION	Type of distortion
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Switch	OFF, ON	Turns the Amp Simulator on/off.
Amp Type	SMALL, BUILT-IN, 2-STACK, 3-STACK	Type of guitar amp <b>SMALL:</b> small amp <b>BUILT-IN:</b> single-unit type amp <b>2-STACK:</b> large double stack amp <b>3-STACK:</b> large triple stack amp
Touch Wah Switch	OFF, ON	Wah on/off
Touch Wah Mode	LPF, BPF	Type of filter <b>LPF:</b> Produces a wah effect in a broad frequency range. <b>BPF:</b> Produces a wah effect in a narrow frequency range.
Touch Wah Polarity	DOWN, UP	Direction in which the filter will move <b>UP:</b> Move toward a higher frequency <b>DOWN:</b> Move toward a lower frequency
Touch Wah Sens	0–127	Sensitivity with which the filter is modified
Touch Wah Manual	0–127	Center frequency at which the wah effect is applied
Touch Wah Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
Touch Wah Balance	D100:0W–D0:100W	Volume balance of the sound that passes through the wah (W) and the unprocessed sound (D)
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## LOFI COMPRESS

This is an effect that intentionally degrades the tone character for creative purposes.

Parameter	Value	Explanation
Pre Filter Type	1–6	Selects the type of filter applied to the sound before it passes through the Lo-Fi effect. <b>1:</b> Compressor off <b>2–6:</b> Compressor on
LoFi Type	1–9	Degrades the tone character. The tone character grows poorer as this value is increased.
Post Filter Type	OFF, LPF, HPF	Selects the type of filter applied to the sound after it passes through the Lo-Fi effect. <b>OFF:</b> no filter is used <b>LPF:</b> cuts the frequency range above the Cutoff <b>HPF:</b> cuts the frequency range below the Cutoff
Post Filter Cutoff	200–8000 Hz	Basic frequency of the Post Filter
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## DISTORTION

This is a distortion effect that provides heavy distortion.

Parameter	Value	Explanation
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Sw	OFF, ON	Turns the Amp Simulator on/off.
Amp Type	SMALL, BUILT-IN, 2-STACK, 3-STACK	Type of guitar amp <b>SMALL:</b> small amp <b>BUILT-IN:</b> single-unit type amp <b>2-STACK:</b> large double stack amp <b>3-STACK:</b> large triple stack amp
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Pan	L64–63R	Stereo location of the output sound
Level	0–127	Output Level

## OVERDRIVE

This is an overdrive that provides heavy distortion. The parameters are the same as for "DISTORTION."

## SATURATOR

A saturator which distorts the sound is connected in parallel with a compressor, producing a rougher tonal character and boosting the loudness. This also cuts the low-frequency region of the input audio.

Parameter	Value	Explanation
Saturator Gain	0–127	Input volume to the saturator
Saturator Drive	0–127	Degree of distortion
Saturator Level	0–127	Output volume of the saturator
Comp Depth	0–127	Amount of compression
Comp Level	0–127	Output volume of the compressor
Hi Gain	-12–+6 dB	Gain of the high range
Level	0–127	Output Level

## T-SCREAM

This models the analog overdrive of the past. It adds a nice amount of overtones without dirtying the sound.

Parameter	Value	Explanation
Distortion	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Level	0–127	Output Level

## BIT CRUSHER

This creates a lo-fi sound.

Parameter	Value	Explanation
Sample Rate	0–127	Adjusts the sample rate.
Bit Down	0–18	Adjusts the bit depth.
Filter	0–127	Adjusts the filter depth.
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## ISOLATOR

This is an equalizer which cuts the volume greatly, allowing you to add a special effect to the sound by cutting the volume in varying ranges.

Parameter	Value	Explanation
Boost/Cut Low	-60–+4 dB	These boost and cut each of the High, Middle, and Low frequency ranges At -60 dB, the sound becomes inaudible. 0 dB is equivalent to the input level of the sound.
Boost/Cut Mid		
Boost/Cut High		
Anti Phase Low Sw	OFF, ON	Turns the Anti-Phase function on/off for the Low frequency ranges When turned on, the counter-channel of stereo sound is inverted and added to the signal.
Anti Phase Low Level	0–127	Adjusts the level settings for the Low frequency ranges Adjusting this level for certain frequencies allows you to lend emphasis to specific parts (This is effective only for stereo source.).
Anti Phase Mid Sw	OFF, ON	Settings of the Anti-Phase function for the Middle frequency ranges
Anti Phase Mid Level	0–127	The parameters are the same as for the Low frequency ranges.
Low Boost Sw	OFF, ON	Turns Low Booster on/off This emphasizes the bottom to create a heavy bass sound.
Low Boost Level	0–127	Increasing this value gives you a heavier low end * Depending on the Isolator and filter settings this effect may be hard to distinguish.
Level	0–127	Output Level

## RING MODULATOR

This is an effect that applies amplitude modulation (AM) to the input signal, producing bell-like sounds. You can also change the modulation frequency in response to changes in the volume of the sound sent into the effect.

Parameter	Value	Explanation
Frequency	0–127	Adjusts the frequency at which modulation is applied.
Sens	0–127	Adjusts the amount of frequency modulation applied.
Polarity	UP, DOWN	Direction in which the frequency modulation will move UP: Towards higher frequencies DOWN: Towards lower frequencies
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## PITCH SHIFTER

A stereo pitch shifter.

Parameter	Value	Explanation
Coarse	-24–+12 semi	Adjusts the pitch of the pitch shifted sound in semitone steps.
Fine	-100–+100 cent	Adjusts the pitch of the pitch shifted sound in 2-cent steps.
Tempo Sync	OFF, ON	Specifies whether the delay time value of the delay is specified as a note value (ON) or not (OFF).
Delay Time	1–1300 ms, note	Adjusts the delay time from the direct sound until the pitch shifted sound is heard.
Feedback	-98–+98 %	Adjusts the proportion of the pitch shifted sound that is fed back into the effect. Negative “-” settings will invert the phase.
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

## AUTO PAN

Cyclically modulates the stereo location of the sound.

Parameter	Value	Explanation
Mod Wave	TRI, SQR, SIN, SAW1, SAW2, TRP	Modulation wave <b>TRI:</b> Triangle wave <b>SQR:</b> Square wave <b>SIN:</b> Sine wave <b>SAW1:</b> Sawtooth wave (upward) <b>SAW2:</b> Sawtooth wave (downward) <b>TRP:</b> Trapezoidal wave
	<p>The diagram shows two sawtooth waves. The first wave, labeled SAW1, starts at a low level on the left (L) and rises to a high level on the right (R). The second wave, labeled SAW2, starts at a high level on the right (R) and falls to a low level on the left (L).</p>	
Tempo Sync	OFF, ON	Specifies whether the rate of modulation applied to the effect is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00 Hz, note	Frequency of the change
Depth	0–127	Depth to which the effect is applied
Low Gain	-15–+15 dB	Gain of the low range
High Gain	-15–+15 dB	Gain of the high range
Level	0–127	Output Level

# Drum Kit List

No.	Drum kit name	Sub name
1	Jarrah Ply	Hardwood
2	Rock Legend	Studio"LiveRoom"
3	STUDIO B	Med/Stone Wall
4	WalnutPopper	Compact Kit
5	Power Metal	
6	Rootsy Funk	
7	BubingaBoom	
8	FAT+808	RnB,HipHop Style
9	Perc Tribe	Pedal:Pitch Bend
10	Beatnik	Processed Hybrid
11	STUDIO A	Large/Hi Ceiling
12	Stainless	70's Vintage
13	Second Line	New Orleans
14	Heavy Prog	
15	Blues Club	
16	JarrahFunk	Contemporary
17	MuterBeat	
18	Loop-U-Lator	Ring Modulator
19	Cosmic Pop	w/ Super Saw
20	Trash Noiser	
21	Drum Booth	Med/Cloth Wall
22	BigBeat Rock	
23	Waxy Jazz	Bebop Style
24	GroovePopper	
25	Hard Rock	80's/90's
26	Moon Walk	Tape Echo
27	Bubinga	w/ 80'sBeechS
28	Hybrid DnB	
29	Funky Fat	Overdrive
30	TrashElectro	2nd Hi-Hat
31	Studio	LiveRoom Session
32	Phasin' Rock	
33	Round Badge	60's Vintage
34	80's Studio	Deep Shell Toms
35	ShallowShell	w/ ProtoChinaCym
36	Roots Reggae	w/ Timbales
37	RinginTones	No Muffling
38	Warm Groove	
39	Jazz Hop	Compact Kit
40	ExtremeMetal	Lo-Fi Compress
41	Verb Ballad	w/ Percussion
42	DownUnder	West Coast
43	60/70's Hit	
44	Dance Beats	Old School
45	House=909	2nd Hi-Hat
46	Ana Hybrid	Flanger&Phaser
47	Short Tail	Melodic Toms
48	Unplugged	Cajon CompactKit
49	+Latin Perc	w/ Tambourine HH
50	Laboratory	Sound Textures
51	User Kit	
52	User Kit	
53	User Kit	
54	User Kit	
55	User Kit	
56	User Kit	
57	User Kit	
58	User Kit	
59	User Kit	
60	User Kit	
61	User Kit	
62	User Kit	
63	User Kit	
64	User Kit	
65	User Kit	
66	User Kit	
67	User Kit	
68	User Kit	
69	User Kit	

No.	Drum kit name	Sub name
70	User Kit	
71	User Kit	
72	User Kit	
73	User Kit	
74	User Kit	
75	User Kit	
76	User Kit	
77	User Kit	
78	User Kit	
79	User Kit	
80	User Kit	
81	User Kit	
82	User Kit	
83	User Kit	
84	User Kit	
85	User Kit	
86	User Kit	
87	User Kit	
88	User Kit	
89	User Kit	
90	User Kit	
91	User Kit	
92	User Kit	
93	User Kit	
94	User Kit	
95	User Kit	
96	User Kit	
97	User Kit	
98	User Kit	
99	User Kit	
100	User Kit	

# Instrument List

No.	Instrument name	Instrument group	Remarks
0	OFF	OFF	
1	JarraH Ply K	KICK A	*M1 *T
2	MapleWlnutChrryK	KICK A	*M1 *T
3	Birch 18" K	KICK A	*M1 *T
4	Bubinga 9Ply K	KICK A	*M1 *T
5	60sRoundBdge20"K	KICK A	*M1 *T
6	70s Maple 24" K	KICK A	*M1 *T
7	70sStainless24"K	KICK A	*M1 *T
8	Tight Kick 1	KICK PROC	
9	Tight Kick 2	KICK PROC	
10	Tight Kick 3	KICK PROC	
11	Impact Kick	KICK PROC	
12	Hybrid Kick	KICK PROC	
13	Tronic Kick	KICK PROC	
14	Electro Knock K	KICK PROC	
15	Minimal House K	KICK PROC	
16	Early House Kick	KICK PROC	
17	BreakBeats Kick1	KICK PROC	
18	BreakBeats Kick2	KICK PROC	
19	DnB Kick 1	KICK PROC	
20	DnB Kick 2	KICK PROC	
21	Nu Hip Kick	KICK PROC	
22	Lo-Fi Kick	KICK PROC	
23	Hi Jumper Kick	KICK PROC	
24	Lo Jumper Kick	KICK PROC	
25	Dance Kick	KICK PROC	
26	Dancer Kick	KICK PROC	
27	Voice Kick 1	KICK PROC	
28	Voice Kick 2	KICK PROC	
29	Analog Kick 1	KICK ELEC	
30	Analog Kick 2	KICK ELEC	
31	Analog Kick 3	KICK ELEC	
32	CR-78 Kick	KICK ELEC	
33	TR-606 Kick	KICK ELEC	
34	TR-808 Kick 1	KICK ELEC	
35	TR-808 Kick 2	KICK ELEC	
36	TR-808 Kick Long	KICK ELEC	
37	TR-909 Kick 1	KICK ELEC	
38	TR-909 Kick 2	KICK ELEC	
39	TR-909 Kick 3	KICK ELEC	
40	DR-110 Kick	KICK ELEC	
41	R-8 Kick	KICK ELEC	
42	JarraH Ply S	SNARE A	*P *M1 *X *T *D
43	JarraH Ply SR	SNARE A	*P *M1 *X *T *D
44	MapleOilFinish S	SNARE A	*P *M1 *X *T *D
45	MapleOilFinishSR	SNARE A	*P *M1 *X *T *D
46	80sBeech 12Ply S	SNARE A	*P *M1 *X *T *D
47	80sBeech12Ply SR	SNARE A	*P *M1 *X *T *D
48	Steel TubeLugs S	SNARE A	*P *M1 *X *T *D
49	SteelTubeLugs SR	SNARE A	*P *M1 *X *T *D
50	WalnutPopper12"S	SNARE A	*P *M1 *X *T *D
51	WalnutPoper12"SR	SNARE A	*P *M1 *X *T *D
52	JarraH Ply X	CROSS STICK	*M1 *X *T
53	MapleOilFinish X	CROSS STICK	*M1 *X *T
54	80sBeech 12Ply X	CROSS STICK	*M1 *X *T
55	Steel TubeLugs X	CROSS STICK	*M1 *X *T
56	WalnutPopper12"X	CROSS STICK	*M1 *X *T
57	OldSchool Snare	SNARE PROC	
58	DnB Snare	SNARE PROC	
59	Dub Step Snare	SNARE PROC	
60	Disto Slap Snare	SNARE PROC	
61	House Low Snare	SNARE PROC	

No.	Instrument name	Instrument group	Remarks
62	Hip Snare	SNARE PROC	
63	Garage Snare	SNARE PROC	
64	Radio Snare	SNARE PROC	
65	Voice Snare	SNARE PROC	
66	Voice CrossStick	SNARE PROC	
67	Analog Snare 1	SNARE ELEC	
68	Analog Snare 2	SNARE ELEC	
69	CR-78 Snare	SNARE ELEC	
70	TR-808 Snare 1	SNARE ELEC	
71	TR-808 Snare 2	SNARE ELEC	
72	TR-909 Snare	SNARE ELEC	
73	TR-909 S w/ Clap	SNARE ELEC	
74	TR-606 Snare	SNARE ELEC	
75	TR-707 Snare	SNARE ELEC	
76	DR-110 Snare	SNARE ELEC	
77	CR-78 Rim	SNARE ELEC	
78	TR-808 Rim	SNARE ELEC	
79	TR-909 Rim	SNARE ELEC	
80	JarraH Ply 8"	TOM A	*M1 *T
81	JarraH Ply 8" R	TOM A	*P *M1 *T
82	JarraH Ply 10"	TOM A	*M1 *T
83	JarraH Ply 10" R	TOM A	*P *M1 *T
84	JarraH Ply 12"	TOM A	*M1 *T
85	JarraH Ply 12" R	TOM A	*P *M1 *T
86	JarraH Ply 14"	TOM A	*M1 *T
87	JarraH Ply 14" R	TOM A	*P *M1 *T
88	JarraH Ply 16"	TOM A	*M1 *T
89	JarraH Ply 16" R	TOM A	*P *M1 *T
90	Bubinga 9Ply 10"	TOM A	*M1 *T
91	Bubinga9Ply10" R	TOM A	*P *M1 *T
92	Bubinga 9Ply 12"	TOM A	*M1 *T
93	Bubinga9Ply12" R	TOM A	*P *M1 *T
94	Bubinga 9Ply 14"	TOM A	*M1 *T
95	Bubinga9Ply14" R	TOM A	*P *M1 *T
96	Bubinga 9Ply 16"	TOM A	*M1 *T
97	Bubinga9Ply16" R	TOM A	*P *M1 *T
98	60sRoundBadge13"	TOM A	*M1 *T
99	60sRoundBdge13"R	TOM A	*P *M1 *T
100	60sRoundBadge16"	TOM A	*M1 *T
101	60sRoundBdge16"R	TOM A	*P *M1 *T
102	70sStainless 12"	TOM A	*M1 *T
103	70sStainless12"R	TOM A	*P *M1 *T
104	70sStainless 13"	TOM A	*M1 *T
105	70sStainless13"R	TOM A	*P *M1 *T
106	70sStainless 16"	TOM A	*M1 *T
107	70sStainless16"R	TOM A	*P *M1 *T
108	70sStainless 18"	TOM A	*M1 *T
109	70sStainless18"R	TOM A	*P *M1 *T
110	Gong Drum 20"	TOM A	*M1 *T
111	Analog Tom1 T1	TOM ELEC	
112	Analog Tom1 T2	TOM ELEC	
113	Analog Tom1 T3	TOM ELEC	
114	Analog Tom1 T4	TOM ELEC	
115	Analog Tom2 T1	TOM ELEC	
116	Analog Tom2 T2	TOM ELEC	
117	Analog Tom2 T3	TOM ELEC	
118	Analog Tom2 T4	TOM ELEC	
119	TR-808 Tom T1	TOM ELEC	
120	TR-808 Tom T2	TOM ELEC	
121	TR-808 Tom T3	TOM ELEC	
122	TR-808 Tom T4	TOM ELEC	
123	TR-909 Tom T1	TOM ELEC	

No.	Instrument name	Instrument group	Remarks
124	TR-909 Tom T2	TOM ELEC	
125	TR-909 Tom T3	TOM ELEC	
126	TR-909 Tom T4	TOM ELEC	
127	Trad Lathed HH	HI-HAT	*M2 *T
128	Trad Lathed HHE	HI-HAT	*M2 *T
129	Dark&Warm HH	HI-HAT	*M2 *T
130	Dark&Warm HHE	HI-HAT	*M2 *T
131	Club Hi-Hat	HI-HAT PROC	
132	Sharp Hi-Hat	HI-HAT PROC	
133	Hip Hi-Hat	HI-HAT PROC	
134	House Hi-Hat	HI-HAT PROC	
135	DnB Hi-Hat	HI-HAT PROC	
136	LowStep Hi-Hat	HI-HAT PROC	
137	Voice Hi-Hat	HI-HAT PROC	
138	Spoke Hi-Hat	HI-HAT PROC	
139	CR-78 Hi-Hat	HI-HAT ELEC	
140	TR-808 Hi-Hat	HI-HAT ELEC	
141	TR-909 Hi-Hat	HI-HAT ELEC	
142	Trad MedThin Rd	RIDE	*P *M2 *T
143	Trad MedThin RdE	RIDE	*M2 *T
144	Trad MedThin RdB	RIDE	*M2 *T
145	Dry & Heavy Rd	RIDE	*P *M2 *T
146	Dry & Heavy RdE	RIDE	*M2 *T
147	Dry & Heavy RdB	RIDE	*M2 *T
148	Trad Thin Cr	CRASH	*M2 *T
149	Trad Thin CrE	CRASH	*M2 *T
150	Warm MedThin Cr	CRASH	*M2 *T
151	Warm MedThin CrE	CRASH	*M2 *T
152	Silvery Cr	CRASH	*M2 *T
153	Silvery CrE	CRASH	*M2 *T
154	Legacy Thin Cr	CRASH	*M2 *T
155	Legacy Thin CrE	CRASH	*M2 *T
156	Power Medium Cr	CRASH	*M2 *T
157	Power Medium CrE	CRASH	*M2 *T
158	Eight-sided Cr	CRASH	*M2 *T
159	Eight-sided CrE	CRASH	*M2 *T
160	Bright Thin Cr	CRASH	*M2 *T
161	Bright Thin CrE	CRASH	*M2 *T
162	Warm & Dark Ch	CHINA	*M2 *T
163	Warm & Dark ChE	CHINA	*M2 *T
164	Dark Swish Ch	CHINA	*M2 *T
165	Dark Swish ChE	CHINA	*M2 *T
166	70s BlackLogo Ch	CHINA	*M2 *T
167	70sBlackLogo ChE	CHINA	*M2 *T
168	Mini China	CHINA	*M2 *T
169	Mini China E	CHINA	*M2 *T
170	TinyPrototype Ch	CHINA	*M2 *T
171	TinyPrototypeChE	CHINA	*M2 *T
172	Warm MedThin Sp	SPLASH	*M2 *T
173	Warm MedThin SpE	SPLASH	*M2 *T
174	BrightMedThin Sp	SPLASH	*M2 *T
175	BrightMedThinSpE	SPLASH	*M2 *T
176	NickelCoating Sp	SPLASH	*M2 *T
177	NickelCoatingSpE	SPLASH	*M2 *T
178	Chinese Type Sp	SPLASH	*M2 *T
179	Chinese Type SpE	SPLASH	*M2 *T
180	CleanSuperThinSp	SPLASH	*M2 *T
181	CleanSuprThinSpE	SPLASH	*M2 *T
182	18"Ch+18"Ch St	STACKED CYMBAL	*M2 *T
183	18"Ch+18"Ch StE	STACKED CYMBAL	*M2 *T
184	12"Ch+12"Ch St	STACKED CYMBAL	*M2 *T
185	12"Ch+12"Ch StE	STACKED CYMBAL	*M2 *T

No.	Instrument name	Instrument group	Remarks
186	10"Ch+8"Ch St	STACKED CYMBAL	*M2 *T
187	10"Ch+8"Ch StE	STACKED CYMBAL	*M2 *T
188	10"HH+8"Ch+Sp St	STACKED CYMBAL	*M2 *T
189	10"HH+8"Ch+SpStE	STACKED CYMBAL	*M2 *T
190	18"ChCr+12"ChSt	STACKED CYMBAL	*M2 *T
191	18"ChCr+12"ChStE	STACKED CYMBAL	*M2 *T
192	18"Ch+12"Ch St	STACKED CYMBAL	*M2 *T
193	18"Ch+12"Ch StE	STACKED CYMBAL	*M2 *T
194	18"Cr+12"Ch St	STACKED CYMBAL	*M2 *T
195	18"Cr+12"Ch StE	STACKED CYMBAL	*M2 *T
196	18"Ch+11"TrashSt	STACKED CYMBAL	*M2 *T
197	18"Ch+11"TrshStE	STACKED CYMBAL	*M2 *T
198	Accent Cymbal	CYMBAL OTHERS	
199	Chime Cymbal	CYMBAL OTHERS	
200	Cross Cymbal 1	CYMBAL OTHERS	
201	Cross Cymbal 2	CYMBAL OTHERS	
202	Mini Cymbal	CYMBAL OTHERS	
203	Metal Crasher	CYMBAL OTHERS	
204	Pair Cymbal 1	CYMBAL OTHERS	
205	Pair Cym 1 Smash	CYMBAL OTHERS	
206	Pair Cymbal 2	CYMBAL OTHERS	
207	Pair Cym 2 Choke	CYMBAL OTHERS	
208	Sweep Crash	CYMBAL PROC	
209	Lo-Fi Crash	CYMBAL PROC	
210	Ambient Crash	CYMBAL PROC	
211	Verby Crash	CYMBAL PROC	
212	Trashy Ride	CYMBAL PROC	
213	Phasing Ride	CYMBAL PROC	
214	Cosmo Bell	CYMBAL PROC	
215	Electra Bell	CYMBAL PROC	
216	Reflective Bell	CYMBAL PROC	
217	Voice Crash	CYMBAL PROC	
218	Analog Cymbal	CYMBAL ELEC	
219	TR-808 Cymbal	CYMBAL ELEC	
220	TR-606 Cymbal	CYMBAL ELEC	
221	Finger Cymbal	BELL/CHIME/GONG	
222	Rama Cymbal	BELL/CHIME/GONG	
223	Zil	BELL/CHIME/GONG	
224	Crotale	BELL/CHIME/GONG	
225	Sleigh Bells	BELL/CHIME/GONG	
226	Bell Tree	BELL/CHIME/GONG	
227	Tree Chime	BELL/CHIME/GONG	
228	Pin Chime	BELL/CHIME/GONG	
229	Tam Tam	BELL/CHIME/GONG	
230	Gong	BELL/CHIME/GONG	
231	Bend Gong	BELL/CHIME/GONG	
232	Cowbell 1	BLOCK/COWBELL	
233	Cowbell 1 Tip	BLOCK/COWBELL	
234	Cowbell 2	BLOCK/COWBELL	
235	Cowbell 2 Tip	BLOCK/COWBELL	
236	Cowbell 3	BLOCK/COWBELL	
237	Cowbell 4	BLOCK/COWBELL	
238	Cowbell 5	BLOCK/COWBELL	
239	Cowbell 6	BLOCK/COWBELL	
240	Cowbell 7	BLOCK/COWBELL	
241	Agogo Hi	BLOCK/COWBELL	
242	Agogo Lo	BLOCK/COWBELL	
243	Wood Block Hi	BLOCK/COWBELL	
244	Wood Block Lo	BLOCK/COWBELL	
245	Plastic Block Hi	BLOCK/COWBELL	
246	Plastic Block Lo	BLOCK/COWBELL	
247	Mini Block	BLOCK/COWBELL	

## Instrument List

No.	Instrument name	Instrument group	Remarks
248	Temple Block Hi	BLOCK/COWBELL	
249	Temple Block Lo	BLOCK/COWBELL	
250	Bongo Hi Open	PERCUSSION	
251	Bongo Hi Slap	PERCUSSION	
252	Bongo Lo Open	PERCUSSION	
253	Bongo Lo Slap	PERCUSSION	
254	Conga Open	PERCUSSION	
255	Conga Slap	PERCUSSION	
256	Conga Bass	PERCUSSION	
257	Conga Gliss	PERCUSSION	
258	Tumba Open	PERCUSSION	
259	Tumba Slap	PERCUSSION	
260	Tumba Bass	PERCUSSION	
261	Tumba Gliss	PERCUSSION	
262	Timbale Hi Open	PERCUSSION	
263	Timbale Hi Rim	PERCUSSION	
264	Timbale Hi Paila	PERCUSSION	
265	Timbale Mid Open	PERCUSSION	
266	Timbale Mid Rim	PERCUSSION	
267	Timbale MidPaila	PERCUSSION	
268	Timbale Lo Open	PERCUSSION	
269	Timbale Lo Rim	PERCUSSION	
270	Timbale Lo Paila	PERCUSSION	
271	Cajon Open	PERCUSSION	
272	Cajon Edge	PERCUSSION	
273	Cajon Slap	PERCUSSION	
274	Cajon Bass	PERCUSSION	
275	Pandeiro Open	PERCUSSION	
276	Pandeiro Slap	PERCUSSION	
277	Pandeiro Bass	PERCUSSION	
278	Pandeiro Jingle	PERCUSSION	
279	Djembe Open	PERCUSSION	
280	Djembe Slap	PERCUSSION	
281	Djembe Bass	PERCUSSION	
282	Djembe Ears	PERCUSSION	
283	Pot Drum Side	PERCUSSION	
284	Pot Drum Bass	PERCUSSION	
285	Pot Drum Release	PERCUSSION	
286	Pot Drum Side/Mt	PERCUSSION	
287	Tabla Na	PERCUSSION	
288	Tabla Ti	PERCUSSION	
289	Tabla Tin	PERCUSSION	
290	Tabla Tun	PERCUSSION	
291	Baya Ge	PERCUSSION	
292	Baya Ge Slide	PERCUSSION	
293	Baya Gin	PERCUSSION	
294	Baya Ka	PERCUSSION	
295	Darabuka Open	PERCUSSION	
296	Darabuka Slap	PERCUSSION	
297	Darabuka Bass	PERCUSSION	
298	Hira Taiko	PERCUSSION	
299	Hira Taiko Rim	PERCUSSION	
300	Nagado Taiko	PERCUSSION	
301	Nagado Taiko Rim	PERCUSSION	
302	Timpani Hi D	PERCUSSION	
303	Timpani Lo G	PERCUSSION	
304	Doumdoumba	PERCUSSION	
305	Doumdoumba Rim	PERCUSSION	
306	Repinique	PERCUSSION	
307	Repinique Rim	PERCUSSION	
308	Tamborim	PERCUSSION	
309	Surdo	PERCUSSION	

No.	Instrument name	Instrument group	Remarks
310	Bombo	PERCUSSION	
311	Bendir	PERCUSSION	
312	Tambourine 1	PERCUSSION	
313	Tambourine 2	PERCUSSION	
314	Tambourine 3	PERCUSSION	
315	Triangle 1	PERCUSSION	
316	Triangle 1 Mute	PERCUSSION	
317	Triangle 2	PERCUSSION	
318	Triangle 2 Mute	PERCUSSION	
319	Castanets	PERCUSSION	
320	Clapsticks	PERCUSSION	
321	Claves 1	PERCUSSION	
322	Claves 2	PERCUSSION	
323	Afro Claves	PERCUSSION	
324	Guiro Slide	PERCUSSION	
325	Guiro Shot	PERCUSSION	
326	Maracas	PERCUSSION	
327	Metal Maracas	PERCUSSION	
328	Shaker	PERCUSSION	
329	Caxixi	PERCUSSION	
330	Ganza	PERCUSSION	
331	Chafchas	PERCUSSION	
332	Afuche	PERCUSSION	
333	African Bracelet	PERCUSSION	
334	African Jingle	PERCUSSION	
335	Ankle Beads	PERCUSSION	
336	Rain Stick	PERCUSSION	
337	Vibra-Slap	PERCUSSION	
338	Ratchet	PERCUSSION	
339	Flex Metal	PERCUSSION	
340	FlexMetal BendUp	PERCUSSION	
341	Waterphone Hit	PERCUSSION	
342	CR-78 Bongo	PERC ELEC	
343	CR-78 Cowbell	PERC ELEC	
344	CR-78 Claves	PERC ELEC	
345	CR-78 Guiro	PERC ELEC	
346	CR-78 Maracas	PERC ELEC	
347	CR-78 Tambourine	PERC ELEC	
348	CR-78 Metal Beat	PERC ELEC	
349	TR-808 Conga Hi	PERC ELEC	
350	TR-808 Conga Mid	PERC ELEC	
351	TR-808 Conga Lo	PERC ELEC	
352	TR-808 Cowbell 1	PERC ELEC	
353	TR-808 Cowbell 2	PERC ELEC	
354	TR-808 Claves	PERC ELEC	
355	TR-808 Maracas	PERC ELEC	
356	TR-707 Cowbell	PERC ELEC	
357	TR-727 Agogo	PERC ELEC	
358	DR-55 Claves	PERC ELEC	
359	Clap	CLAP	
360	Claps	CLAP	
361	Torio Clap	CLAP	
362	Flamenco Clap	CLAP	
363	Ambience Clap	CLAP	
364	House Clap	CLAP	
365	Noise Clap	CLAP	
366	TR-808 Clap	CLAP	
367	TR-909 Clap	CLAP	
368	Finger Snap	CLAP	
369	Dense Click	SOUND FX	
370	Pulse	SOUND FX	
371	High Q	SOUND FX	

No.	Instrument name	Instrument group	Remarks
372	Dyna Filter	SOUND FX	
373	Random Noise 1	SOUND FX	
374	Random Noise 2	SOUND FX	
375	Beep	SOUND FX	
376	Fat Beep	SOUND FX	
377	Disto Beep	SOUND FX	
378	Techno Beef	SOUND FX	
379	Space Beep	SOUND FX	
380	Voice Beep	SOUND FX	
381	Super Low	SOUND FX	
382	Prevision	SOUND FX	
383	Ejector	SOUND FX	
384	Echoic Shot	SOUND FX	
385	Super Shot	SOUND FX	
386	Rusty Iron	SOUND FX	
387	Digi Cup	SOUND FX	
388	Abstract Noise	SOUND FX	
389	Industrial 1	SOUND FX	
390	Industrial 2	SOUND FX	
391	Junk	SOUND FX	
392	Emergency	SOUND FX	
393	Discovery	SOUND FX	
394	Cave	SOUND FX	
395	Stomped Box	SOUND FX	
396	LP Noise	SOUND FX	
397	Low Frequency 1	ELEMENTS	
398	Low Frequency 2	ELEMENTS	
399	Low Frequency 3	ELEMENTS	
400	Attack 1	ELEMENTS	
401	Attack 2	ELEMENTS	
402	Attack 3	ELEMENTS	
403	Attack 4	ELEMENTS	
404	Noise 1	ELEMENTS	
405	Noise 2	ELEMENTS	
406	Noise 3	ELEMENTS	
407	Noise 4	ELEMENTS	
408	Noise 5	ELEMENTS	
409	Noise 6	ELEMENTS	
410	White Noise 1	ELEMENTS	
411	White Noise 2	ELEMENTS	
412	Sine Wave 1kHz	ELEMENTS	
413	Sine Wave C	ELEMENTS	
414	Triangle Wave C	ELEMENTS	
415	Square Wave C	ELEMENTS	
416	Sawtooth Wave1 C	ELEMENTS	
417	Sawtooth Wave2 C	ELEMENTS	
418	Super Saw C	ELEMENTS	

\*P Can get various changes of the sound in accordance with the positioning where on the pad you hit with a stick. In rim sounds, can get such various changes of the sound in accordance with the depth of the stick on the rim.

\*M1 Mic Position, Mic Overhead, Mic Room, and Mic Width are supported.

\*M2 Mic Position, Mic Overhead, and Mic Width are supported.

\*X Rim shot and cross stick can be played separately.

\*T TRANSIENT is supported.

\*D Dynamic Enhancer is supported.

\* For details on how the trigger input corresponds to your performance technique and striking position, refer to "Trig Type list" (p. 23).

# Song List

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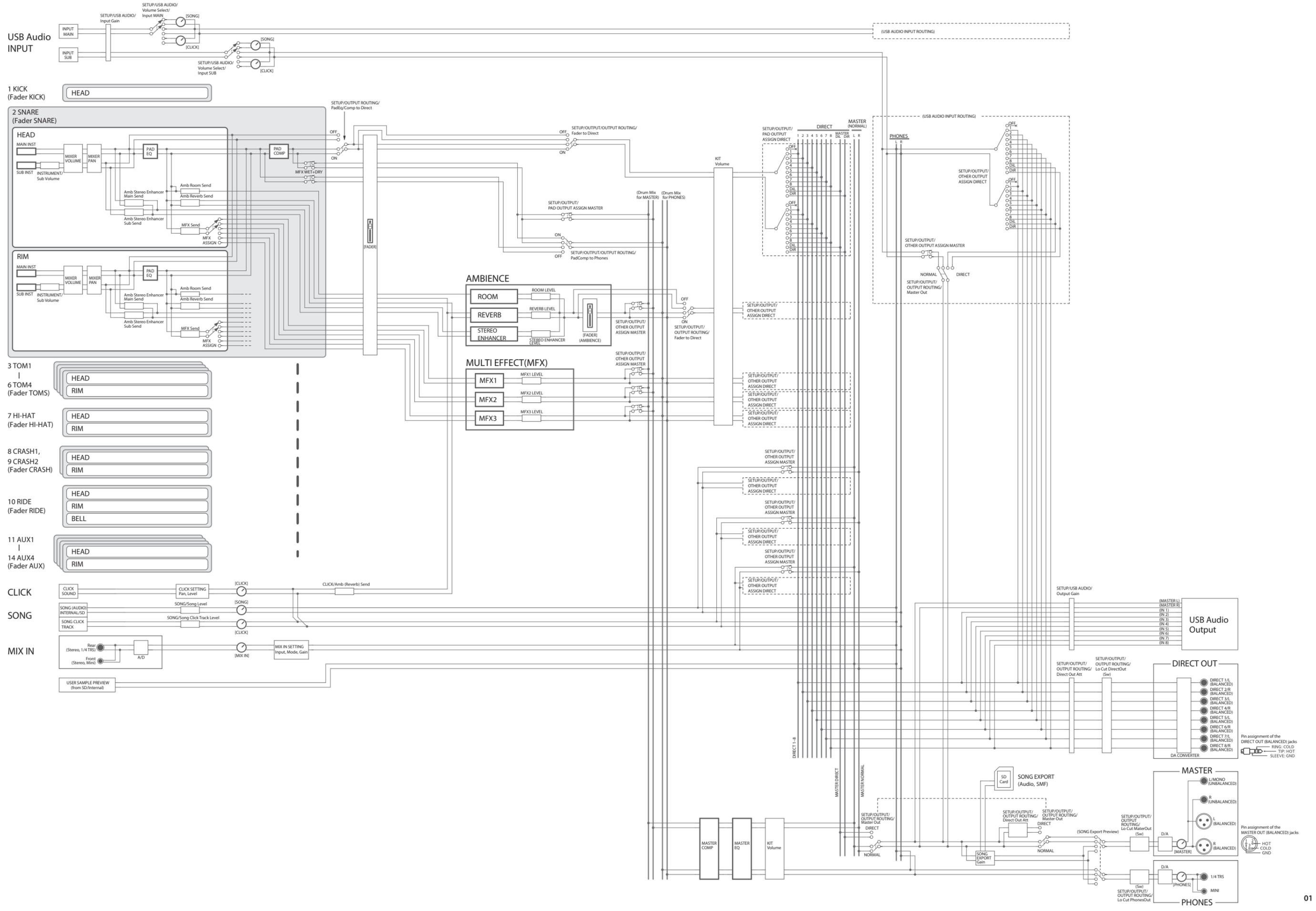
001–007: Drum performance data

008–027: Audio data

No.	Song name
001	Drum Solo
002	Ride Demo
003	Kick Demo
004	Toms Demo
005	Preview 1
006	Preview 2
007	Preview 3
008	Rock 1 (AUDIO)
009	Rock 2 (AUDIO)
010	Rock 3 (AUDIO)
011	Rock 4 (AUDIO)
012	Jazz 1 (AUDIO)
013	Jazz 2 (AUDIO)
014	Jazz 3 (AUDIO)
015	Jazz 4 (AUDIO)
016	Pop 1 (AUDIO)
017	Pop 2 (AUDIO)
018	Pop 3 (AUDIO)
019	Funk 1 (AUDIO)
020	Funk 2 (AUDIO)
021	Funk 3 (AUDIO)
022	Funk 4 (AUDIO)
023	Metal 1 (AUDIO)
024	Metal 2 (AUDIO)
025	Latin (AUDIO)
026	Dance 1 (AUDIO)
027	Dance 2 (AUDIO)



# Block Diagram



Pin assignment of the DIRECT OUT (BALANCED) jacks  
 1 RING COLD  
 2 TIP HOT  
 3 SLEEVE GND

Pin assignment of the MASTER OUT (BALANCED) jacks  
 1 HOT  
 2 COLD  
 3 GND