



TB-303 Software Bass Line

Introduction

For details on the settings for the DAW software that you're using, refer to the DAW's help or manuals.

About Trademarks

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Screen Structure

Main window

This shows various knobs and buttons that you use to shape the sound.

Waveform switch

Selects the waveform that is the basis of the sound.
: Sawtooth wave, : Square wave

[OPTION] button

Lets you make various settings, or authorize the software.

[HELP] button

Displays help.

[ABOUT] button

Displays information about TB-303 Software Bass Line.

[1] – [8] button

Switch the variation (1–8) that plays.
 To make a multiple selection, hold down the [Shift] key.
 The currently playing variation button blinks.

[POSITION LOCK TO DAW] button

Specifies whether the TB-303's pattern playback is synchronized to the DAW's transport (play/stop/position).
 If this is on, the TB-303's pattern plays or stops in synchronization with play/stop operations on the DAW. Turn this off if you want to play the TB-303 from a DAW track.

[RUN/STOP] button

Plays or stops the pattern.

[EDIT] button

Accesses the edit window.

[SHUFFLE] knob

Adjusts the amount of shuffle (bounce).

[SCALE] knob

Specifies the note length of each step.

[PLAY MODE] knob

Specifies how the step sequencer plays.

[LIST] button

Displays the Memory Select window.

Display (upper line)

Shows the pattern name.

Display (lower line)

Shows the patch name.

Level meter

Shows the output level.

[▲] [▼] buttons

Recall the previous or next pattern or patch.

[WRITE] button

Saves the pattern or patch.

[PANEL] button

Shows/hides detailed parameters for the sound engine and the effects (p. 4).

- [VCF TRIM] knob
- [MASTER TUNE] knob
- [CONDITION] knob
- [DRIVE TYPE] knob
- [DRIVE TONE] knob
- [DRIVE DEPTH] knob
- [DELAY TYPE] knob
- [DELAY TIME] knob
- [DELAY LEVEL] knob
- [TEMPO SYNC] switch

[VOLUME] knob

Adjusts the volume.

Scale indication

Shows the note length of each step, as specified by the [SCALE] knob.

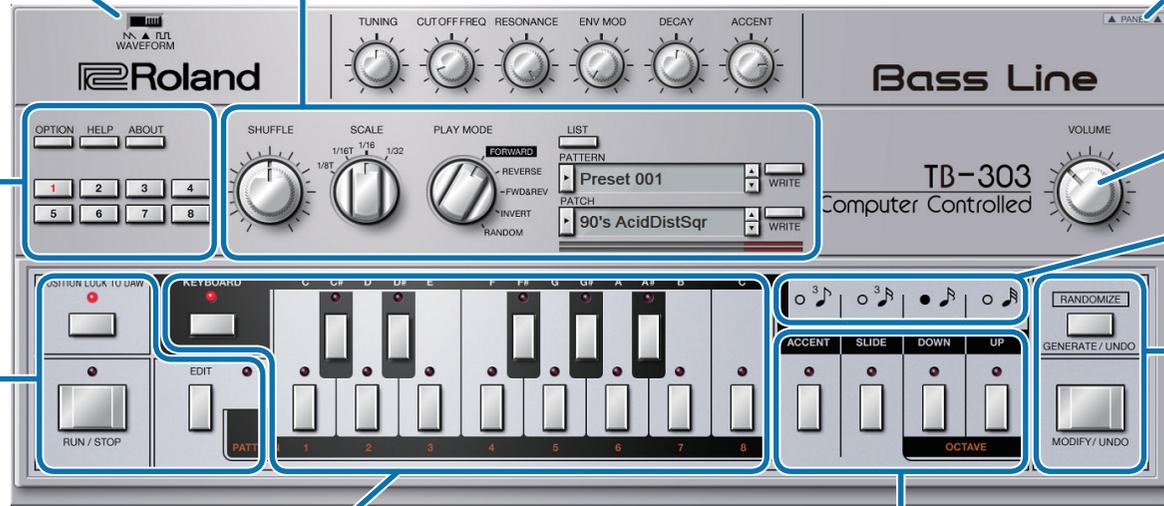
RANDOMIZE [GENERATE/UNDO] button

According to the RANDOMIZE parameters, generates a random pattern for the variation that you're currently editing.
 Right-click this to undo the operation.

RANDOMIZE [MODIFY/UNDO] button

Randomly modifies the currently playing pattern.
 Since accent/slide/octave are modified only for steps whose GATE is on, the rhythmic feel and key of the original pattern are preserved.

* In some cases, the randomly applied result might not be any different than the previous pattern.
 Right-click to undo the operation.



[KEYBOARD] button

Turn this on if you want MIDI note messages to play the TB-303. Turn this off if you want MIDI note messages to switch variations.

Preview keyboard

When KEYBOARD is On:
 You can play the sound engine to check the sound.

When KEYBOARD is Off:
 Switch the variation (1–8) that plays.

[ACCENT] button

Adds an accent to the sounds played by the preview keyboard.

[SLIDE] button

Adds a slide effect to the sounds played by the preview keyboard.

OCTAVE [DOWN] [UP] button

Lowers or raises the sounds played by the preview keyboard by one octave.

Detailed parameters for the sound engine and effects

This is the screen when detailed parameters for the sound engine and effects are shown.

[TUNING] knob

Adjusts the pitch.

[CUT OFF FREQ] knob

Specifies the filter cutoff frequency (brightness of the sound).

[RESONANCE] knob

Specifies the filter resonance (tonal character).

[ENV MOD] knob

Specifies the depth of tonal change produced by the filter envelope.

[DECAY] knob

Specifies the filter envelope's decay (decay time).

[ACCENT] knob

Specifies the strength of the accent that was entered in the pattern.

[VCF TRIM] knob

Adjusts the VCF circuit.
This adjustment raises or lowers the frequency range of the CUT OFF FREQ knob.

[MASTER TUNE] knob

Adjusts the basic pitch.

[CONDITION] knob

Adjusts the tonal change caused by the simulated age of the unit.

This produces slight discrepancies in the octave adjustment, VCF circuit adjustment, and the low-cut.

[DRIVE TYPE] knob

Selects the type of drive.

[DRIVE TONE] knob

Adjusts the tonal character of the drive.

[DRIVE DEPTH] knob

Adjusts the amount of drive (depth of distortion).

[DELAY TYPE] knob

Selects the type of delay.

[DELAY TIME] knob

Adjusts the delay time.

[DELAY LEVEL] knob

Adjusts the volume of the delay sound.

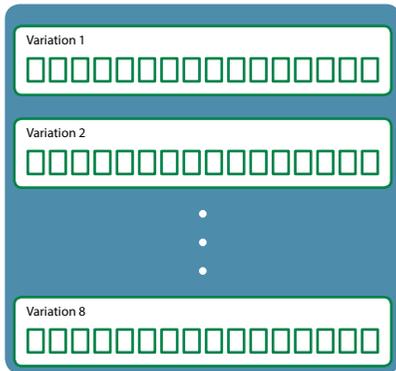
[TEMPO SYNC] switch

If this is ON, the delay time synchronizes with the tempo of the pattern.

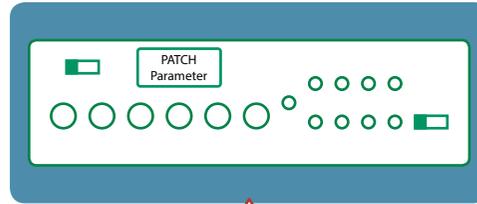


About Patterns and Patches

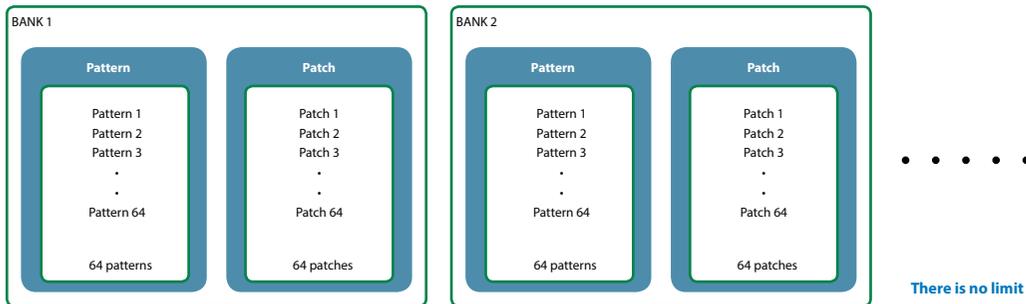
PATTERN



PATCH



BANK



What Is a "Pattern"?

A "pattern" divides the time axis into 16 steps, with information such as pitch, slide, and gate stored for each step.

Each pattern can have eight variations (1–8).

You can use the [1]–[8] buttons of the main window and MIDI messages (p. 13) to switch variations while a pattern plays.

What Is a "Patch"?

A "patch" stores settings for the sound engine and the effects. A pattern is sounded using the patch that's currently selected.

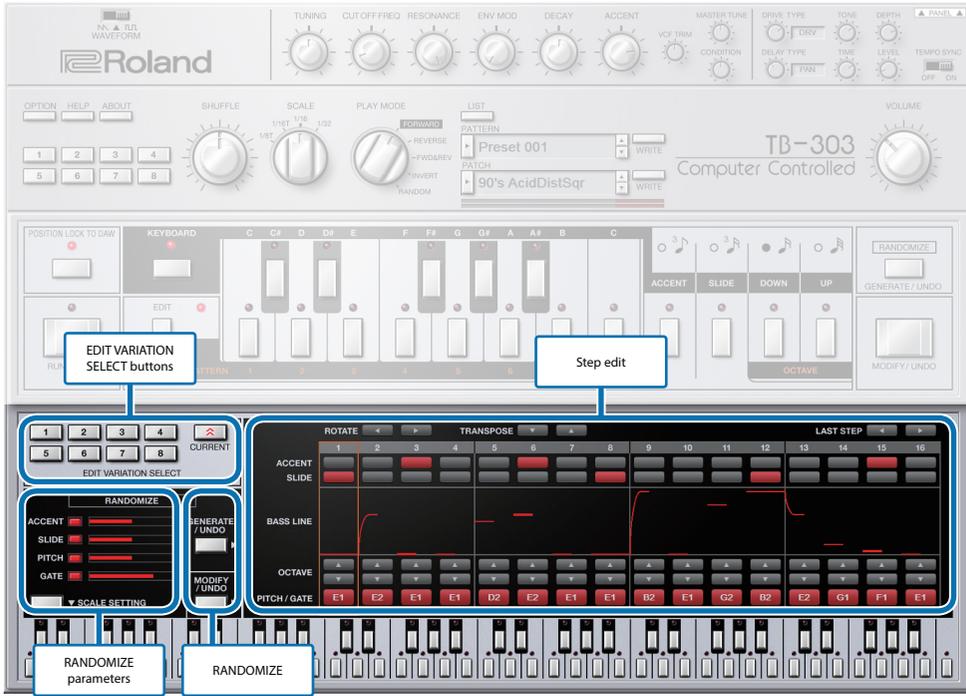
What Is a "Bank"?

A "bank" is a set of 64 patterns and patches.

By switching banks, you can recall a large number of patterns and patches.

You can save a bank as a file (p. 8).

Edit Window



Parameter	Value/Explanation
EDIT VARIATION SELECT button	1-8: Select the variation that you want to edit. CURRENT: Select the currently playing variation.
RANDOMIZE	
[GENERATE/UNDO] button	According to the RANDOMIZE parameters, generates a random pattern for the variation that you're currently editing. Right-click to undo the operation.
[MODIFY/UNDO] button	Randomly modifies the variation that you're currently editing. Since accent/slide/octave are modified only for steps whose GATE is on, the rhythmic feel and key of the original pattern are preserved. * In some cases, the randomly applied result might not be any different than the previous pattern. Right-click to undo the operation.
RANDOMIZE parameters	
ACCENT	Adjusts the degree of randomness with which ACCENT turns on when the [GENERATE/UNDO] button is used to generate a pattern.
SLIDE	Adjusts the degree of randomness with which SLIDE turns on when the [GENERATE/UNDO] button is used to generate a pattern.
PITCH	Adjusts the degree of PITCH randomness when the [GENERATE/UNDO] button is used to generate a pattern. With a setting of 0 only the root note is used; with a setting of 100 only the constituent notes are used; a setting of 1-99 adjusts the balance between these two. To specify the root note and the constituent notes, press the [SCALE SETTING] button and use the keyboard area in the lower part of the screen.
GATE	Adjusts the degree of randomness with which GATE turns on when the [GENERATE/UNDO] button is used to generate a pattern.

Parameter	Value/Explanation
[SCALE SETTING] button	Use the keyboard area in the lower part of the screen to specify the range of notes that can be used when generating a pattern with the [GENERATE/UNDO] button. ➔ "About the Scale Setting" (p. 7)
Step edit	
ROTATE [◀] [▶] button	Shifts the pattern forward or backward in units of one step.
TRANSPOSE [▲] [▼] buttons	Changes the pitch of the pattern in units of a semitone.
LAST STEP [◀] [▶] button	Specifies the length of the pattern.
ACCENT	Specifies the accent of each step.
SLIDE	Specifies the slide for each step.
BASS LINE	Visually indicates the bass line. You can modify the pitch by dragging or by operating the wheel.
OCTAVE [▲] [▼] buttons	Raises or lowers the octave of each step.
PITCH/GATE	Specifies the pitch of each step and whether it is sounded.

Specifying the Pattern Length (LAST STEP)

1. Press the LAST STEP [◀] [▶] buttons that you want to specify as the last step.
The default is 16 steps.

Inputting Steps

1. Click the PITCH GATE buttons to turn each step on (sounds) or off (does not sound).

MEMO

To change the pitch that is sounded, use the keyboard buttons located in the area below and the octave buttons for each step. Right click keyboard buttons change the pitch and goes next step.

Inputting an Accent (ACCENT)

Use the top row of step buttons to input an accent.

1. Make the button light for each step at which you want to apply an accent.

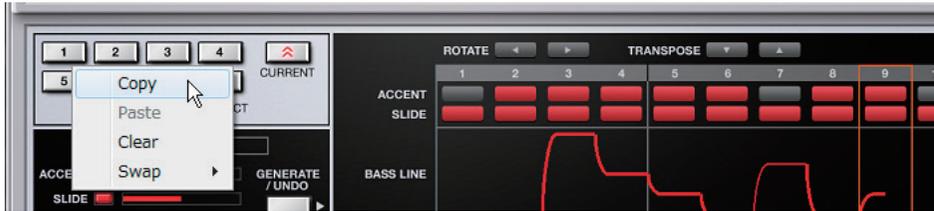
Inputting a Slide (SLIDE)

Use the second row of step buttons from the top to input a slide.

1. Make the button illuminate for steps that you want to slide.

Editing a Variation

Right-click the EDIT VARIATION SELECT button to use the following functions.



Function	Explanation
Copy	Copies the selected variation.
Paste	Pastes the copied variation to the selected variation. The variation is overwritten.
Clear	Erases the selected variation.
Swap - Variation Number	Swap the selected variation for specified.

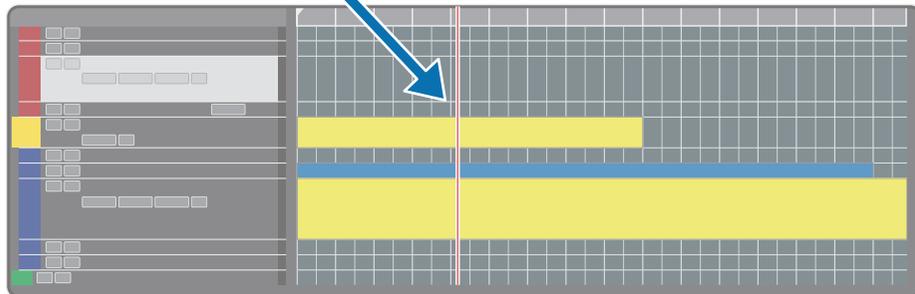
Placing a Pattern in a DAW Track

Performance data from the variation [1]–[8] buttons can be placed in a track of your DAW, either as MIDI or audio data.

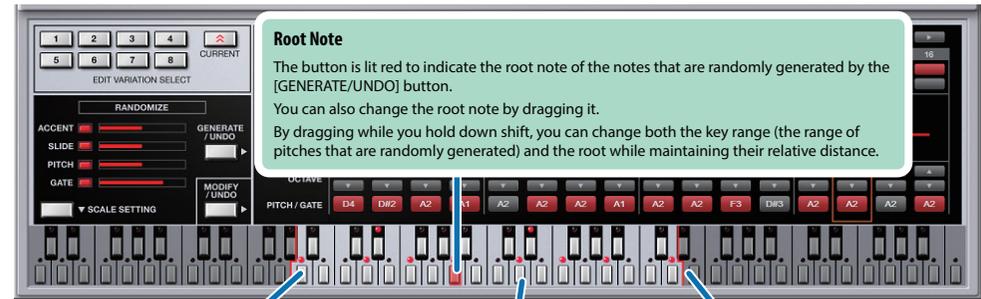
Use the [OPTION] button to choose whether you're placing MIDI data or audio data.



Drag and drop



About the Scale Setting



Root Note
The button is lit red to indicate the root note of the notes that are randomly generated by the [GENERATE/UNDO] button. You can also change the root note by dragging it. By dragging while you hold down shift, you can change both the key range (the range of pitches that are randomly generated) and the root while maintaining their relative distance.

Key range (lower)
Specifies the lower limit of the pitches that are randomly generated by the [GENERATE/UNDO] button. You can also change this by dragging.

Key range (upper)
Specifies the upper limit of the pitches that are randomly generated by the [GENERATE/UNDO] button. You can also change this by dragging.

Constituent notes
You can use the buttons to specify the constituent notes of the pitches that are randomly generated. Constituent note settings apply in the same way to other octaves. For example, if you turn C4 on, the pitches C5 and C6 also turn on. If you right-click on a keyboard button and execute "Set Scale Notes from Variation," the state of the pattern currently shown in the edit window is applied to SCALE SETTING.

Patterns/Patches and Banks

1. Click the [LIST] button.

The Memory Select window opens.

The screenshot shows a window titled 'BANK' with a 'Preset' dropdown set to '1'. Below the dropdown are four buttons: [NEW], [DELETE], [LOAD], and [SAVE]. The main area is a grid with columns for 'PATTERN' and 'PATCH'. The first column of the grid is highlighted. At the bottom left is an 'i' icon, and at the bottom right are [WRITE], [RENAME], and [READ] buttons.

[NEW] button
Creates a new empty bank.

[DELETE] button
Deletes the selected bank.

[LOAD] button
Loads a bank from a file.

[SAVE] button
Exports a bank as a file.

Switches between patterns and patches.

The selected memory is highlighted.

"i" symbol
When you place the mouse cursor (mouse pointer) over this, a list of shortcuts appears.

[WRITE] button
Saves the edited pattern/patch as a memory in the bank.

[RENAME] button
Renames the selected memory.

[READ] button
Loads the data into the pattern/patch.

Bank

A "bank" contains 64 patterns and 64 patches. By switching banks, you can access a large number of patterns or patches. A bank can be saved as a file.

Bank	
Pattern	Patch
1	1
2	2
3	3
⋮	⋮
64	64

Changing to Other Bank

1. Click the Bank field.

The bank list window opens.

2. Click the bank that you want to recall.

By pressing the [▲] [▼] buttons located at the right of the bank field, you can switch to the next or previous bank.

Exporting the Bank

Exports a bank as a file.

1. Click the [SAVE] button.

The file name input window opens.

2. Enter a file name and save.

The file is exported.

Importing a Bank

1. Click the [LOAD] button.

The file selection window opens.

2. Select a file and load it.

The bank is loaded.

Creating/Deleting a Bank

Creating a bank

Click the [NEW] button to create a new empty bank.

Deleting a bank

Here's how to delete the selected bank.

- 1. Select a bank as described in "Changing to Other Bank" (p. 8).**
- 2. Click the [DELETE] button.**
A confirmation message appears.
- 3. Click [OK] to delete the bank.**

Renaming a Bank

- 1. Select a bank as described in "Changing to Other Bank" (p. 8).**
- 2. At the left of the bank field, click ►.**
- 3. Edit the name and press the [Return (Enter)] key.**

Patterns and Patches

TB-303 Software Bass Line manages 64 patterns and patches as one bank.

Loading a Pattern or Patch

Here's how to load a pattern or patch that's saved in a bank. When you load a pattern or patch, its settings are shown in the screen, allowing you to edit the settings.

- 1. Click the number of the pattern or patch that you want to load.**
- 2. Click the [READ] button. Or press the [Return (Enter)] key.**

The pattern or patch is loaded.

* You can also load a pattern or patch by double-clicking the pattern or patch number.

Saving a Pattern or Patch

Here's how to save your edited sounds in the bank as a pattern or patch.

- 1. Click the number of the pattern or patch that you want to save.**
- 2. Click the [WRITE] button.**

The pattern or patch are saved in the bank.

Renaming a Pattern or Patch

- 1. Click the number of the pattern or patch that you want to rename.**
- 2. Click the [RENAME] button.**
- 3. Change the memory name. (Up to 16 letters)**

MIDI Learn Function

Here's how to associate a MIDI control change with a sound parameter, so that the parameter can be controlled by that MIDI message.

Procedure



1. Right-click the sound parameter controller (knob or slider).
2. Choose "Learn MIDI CC."
3. Operate your external MIDI device to transmit a control change message.

NOTE

You can't associate more than one MIDI control change with a single controller. Only the most recent setting is used.

Cancelling



1. Right-click the sound parameter controller (knob or slider).
2. Choose "Forget MIDI CC."

Setting

Option

1. Click the [OPTION] button.

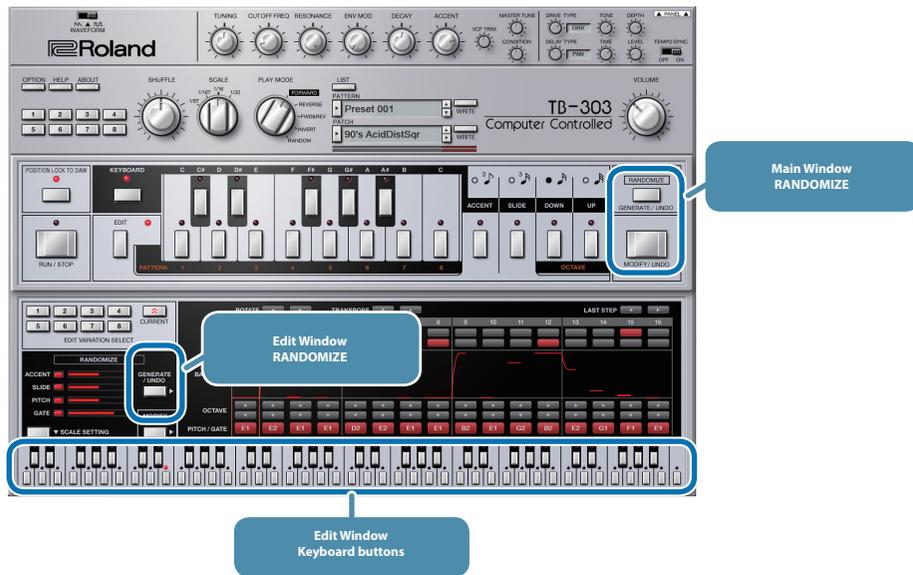
2. Select items.

A ✓ is shown for the selected item.

Item	Explanation
Zoom	Changes the size of the main window.
Set MIDI Control Mapping for TB-03	Sets the MIDI control change mapping to a state for using the TB-03 as a control surface. ➔ "Control Change Mapping" (p. 12)
Set MIDI Control Mapping for TB-3	Sets the MIDI control change mapping to a state for using the TB-3 as a control surface. ➔ "Control Change Mapping" (p. 12)
Clear MIDI Control Mapping	Clears all MIDI control change mapping.
Drag & Drop Pattern as MIDI	When you place variation performance data in your DAW, it is placed as MIDI data.
Drag & Drop Pattern as Audio	When you place variation performance data in your DAW, it is placed as audio data.
Flip Scroll Direction (Only on Mac)	Inverts the direction of change when using the scroll wheel of the mouse to edit a value.
Roland Cloud...	Displays the Roland Cloud site.
Authentication...	Performs user authentication for the TB-303 Software Bass Line.

Appendix

Operations You Can Perform by Right-Clicking



Main Window/Edit Window RANDOMIZE

- [GENERATE/UNDO] button: Execute undo for GENERATE
- [MODIFY/UNDO] button: Execute undo for MODIFY

Edit Window keyboard buttons

- Only if SCALE SETTING is ON
- You can apply the state of the pattern shown in the edit screen to SCALE SETTING.

Controllers that support MIDI Learn

You can associate MIDI control changes with sound parameters and control them.

Control Change Mapping

TB-303 Software Bass Line receives the following CC messages.

For “Default Settings” and “Set MIDI Control Mapping for TB-03”

CC	Address	Parameter
1	0x01	VCF BEND DOWN
11	0x0B	MASTER LEVEL
12	0x0C	ENV MOD
16	0x10	ACCENT
17	0x11	DRIVE DEPTH
18	0x12	DELAY TIME
19	0x13	DELAY LEVEL
64	0x40	HOLD PEDAL
71	0x47	RESONANCE
74	0x4A	CUT OFF FREQ
75	0x4B	DECAY
104	0x68	TUNING

For “Set MIDI Control Mapping for TB-3”

CC	Address	Parameter
1	0x01	VCF BEND DOWN
11	0x0B	MASTER LEVEL
12	0x0C	ENV MOD
13	0x0D	DECAY
16	0x10	ACCENT
17	0x11	DRIVE DEPTH
64	0x40	HOLD PEDAL
71	0x47	RESONANCE
74	0x4A	CUT OFF FREQ
104	0x68	TUNING

About Note Numbers and Variation Switching

When the [KEYBOARD] button is off, you can switch variations by using the keyboard buttons of the main window or by using note messages from an external MIDI device.

The following table shows the correspondence between the note numbers received by TB-303 Software Bass Line and the variations that are selected.

Note number	Explanation
C4: 60	Variation 1
D4: 62	Variation 2
E4: 64	Variation 3
F4: 65	Variation 4
G4: 67	Variation 5
A4: 69	Variation 6
B4: 71	Variation 7
C5: 72	Variation 8
C#5: 73	RUN
D#5: 75	STOP
F#5: 78	RANDOMIZE GENERATE (p. 3)
G#5: 80	RANDOMIZE MODIFY (p. 3)
A#5: 82	RANDOMIZE UNDO (p. 3)