

Introduction

- The TB-03 is a sound module that uses cutting-edge modeling technology to faithfully model the Roland TB-303 which went on sale in 1982. In addition to its compact size, it allows battery-powered operation and contains a small speaker. You'll be able to enjoy full-fledged TB-303 sound anywhere.
- The TB-03 can operate on batteries or on USB bus power. If you are using batteries, insert four AA batteries, making sure that the batteries are oriented correctly.
 - If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (leaflet "USING THE UNIT SAFELY").
 - When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.
 - When the batteries run low, the "b.L.o." blinks in the display. Replace the battery as soon as possible.

Using the TB-03 in conjunction with the DK-01 Boutique Dock (accessory)

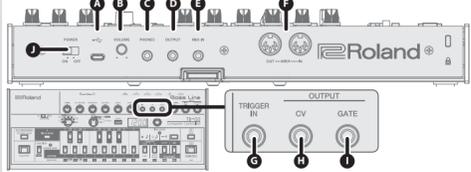
- For installation/removal/angle adjustment, refer to the DK-01's Owner's Manual.

Playing the TB-03 via MIDI or USB

You can also play the TB-03 via MIDI or USB. For details, refer to "Connecting Your Equipment"

Connecting Your Equipment

- To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.



- Micro USB (Type-C) port**
Use a commercially available USB 2.0 cable (A-MicroB) to connect this port to your computer.
It can be used to transfer USB MIDI and USB audio data. You must install the USB driver when connecting the TB-03 to your computer. Download the USB driver from the Roland website. For details, refer to Readme.htm which is included in the download.
→ <http://www.roland.com/support/>
* Do not use a micro USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.

- VOLUME knob**
Adjusts the volume.
- PHONES jack**
Connect headphones (sold separately) here.
- OUTPUT jack**
Connect this jack to your amp or monitor speakers.
- MIX IN jack**
This is the audio input jack. Sound from the connected device is output from the OUTPUT jack and PHONES jack.
- MIDI connectors**
You can synchronize the TB-03 with other MIDI device by using a commercially available MIDI cable to make connections.
- TRIGGER IN jack *1**
You can use a mini-plug (mono) cable to connect this to a device that's equipped with a TRIGGER OUT jack (such as the TR-09). If a plug is inserted into this jack, the TB-03 is disconnected from its internal clock, so that its steps advance each time a trigger pulse is received at this jack.
- CV OUTPUT jack *1**
You can use a mini-plug (mono) cable to connect this jack to an analog synthesizer that's equipped with CV/GATE input jacks.
The pitch that is played by the TB-03 is output from this jack without change. The pitch is output in the range of -1V+7V. This supports OCTV (Hz/V is not supported).
- GATE OUTPUT jack *1**
This jack outputs note-on/off signals. During note-on, +12V is output.

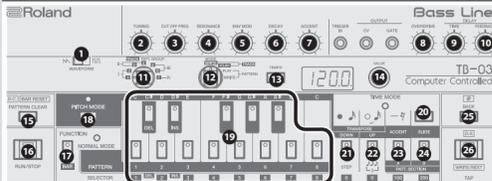


- *1 Do not use a "stereo mini-plug" cable; it won't work correctly.

Turning the Power On

- POWER switch**
This turns the power on/off.
* After you've made connections correctly, be sure to turn on the power in the order of the TB-03 first, and then the connected system. Powering-on in the incorrect order may cause malfunctions or damage. When turning the power off, power-off the connected system first, and then the TB-03.
* Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Playing/Editing a Track



You can arrange patterns to create a track for a song.

Track Playback

Selecting TRACK PLAY mode

- Turn the [MODE] knob to set to "TRACK PLAY".

Selecting a track

- Use the [TRACK] knob to select a track (1-7).
The display shows the measure number.

Playing a track

- Use the [BAR RESET] button to return to measure 1.
- Press the [RUN/STOP] button to play/stop a track.

Playing tracks consecutively
If you use the [TRACK] knob to select a track (1-7) while a track is playing, the next track is played consecutively after the last measure (D.C. measure) of the track has played.

Functions in Track Mode

You can use the following functions in either track play or write mode.

Recalling a measure number

- Turn the [VALUE] knob to specify the measure number.
Using the [FUNCTION] button to recall a measure number

- Hold down the [FUNCTION] button and use the numeric buttons ([1]-[9], [0], [100], [200]) to specify the measure number.



Example setting:

Measure number	Order to press numeric buttons	Display *1
131	[100] → [3] → [1]	Lit: [100], [3] Blink: [1]
55	[5] → [5]	Lit: Blink: [5]
101	[100] → [1]	Lit: [100], Blink: [1]

- *1 When you press the [FUNCTION] button, the lit or blinking state of the numeric buttons indicates the current measure number.
 - The 10s and 100s places are lit, and the 1s place is blinking.
 - If the measure number consists of repeated digits such as 55 or 33, the lit and blinking states alternate at each beat.

Setting the tempo

In track play/write mode, the display shows the measure number, but you can press the [TEMPO] button to make the tempo appear for three seconds.
While the tempo is shown, you can press the [TEMPO] button to see the two digits of the tempo value below the decimal point.
While the tempo is shown, you can use the [VALUE] knob to adjust the tempo.

Setting the shuffle

- Refer to "Pattern Playback" - "Setting the shuffle".

Indication of D.C. (Da Capo/last measure)

What is D.C. (Da Capo)?
When playback reaches the end of the measure that is specified as D.C., playback returns to the first measure of the track.

- Hold down the [FUNCTION] button and press the [D.C.] button.
The number of the measure specified as D.C. is displayed.

(Segno) indication

What are D.S. (Da Segno) and (Segno)?

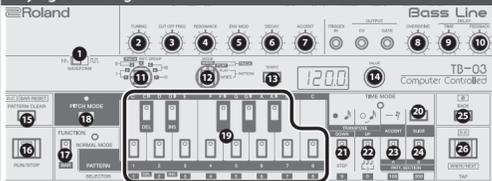
If you press the [D.S.] (Da Segno) button during playback, the playback jumps to the measure that is specified as (Segno).

- Hold down the [FUNCTION] button and press the [D.S.] (Segno) button.
The number of the measure specified as (Segno) is displayed.

Viewing the transpose setting

Regardless of whether you are playing back or stopped, pressing the [PITCH MODE] button makes a [PITCH MODE] keyboard button light to indicate the transpose setting of the current measure.

Playing/Recording a Pattern



Adjusting the Sound

Controller	Explanation
1 [WAVEFORM] switch	□: Saw wave, □: Square wave
2 [TUNING] knob	Tuning
3 [CUT OFF FREQ.] knob	Filter cutoff (brightness of the sound)
4 [RESONANCE] knob	Filter resonance (distinctive character)
5 [ENV MOD] knob	Envelope modulation (tonal change)
6 [DECAY] knob	Decay (duration of the sound)
7 [ACCENT] knob	Strength of accents you've input in the pattern Adjusts the overdrive. Turning this knob fully left turns it off. The overdrive type can be selected in the system settings.
8 [OVERDRIVE] knob	Sets the delay time and feedback. Turning the [FEEDBACK] knob fully left turns it off. The delay type can be selected in the system settings. * When reverb is selected, these knobs adjust the "reverb time" and "dry": wet: Turning the [FEEDBACK] knob fully left turns it off.
9 [DELAY (TIME)] knob	
10 [FEEDBACK] knob	

Pattern Playback

What are patterns and tracks?
A "pattern" is performance data that divides a measure into 16 steps.
The TB-03 has 96 "patterns" and seven "tracks" in which patterns can be arranged.

Selecting PATTERN PLAY mode

- Turn the [MODE] knob to set to "PATTERN PLAY".

Selecting a pattern

- Use the [PATT. GROUP] knob to select a pattern group (I-IV).
Pattern group "I" is selected regardless of whether you select numbers 1 or 2.
- Use the [PATT. SECTION (A|B)] buttons to select a pattern section (A, B, C).
You can press the [A] and [B] buttons simultaneously to select C (both [A] and [B] are lit).
- Use the [PATTERN (1)-[8]] buttons to select a pattern.

Playing patterns consecutively
When selecting a pattern, you can select multiple patterns by pressing two buttons at the same time. The patterns you've selected will play consecutively. The currently-playing pattern blinks.

Playing a pattern

- Press the [RUN/STOP] button to play/stop a pattern.

Pattern transpose

- Hold down the [PITCH MODE] button and then press the [PITCH MODE] keyboard button.

Setting the tempo

In pattern play mode, the display shows the tempo.
You can press the [TEMPO] button to see the two digits of the tempo value below the decimal point.
You can use the [VALUE] knob to adjust the tempo.

Setting the shuffle

If you long-press the [TEMPO] button, the shuffle value is displayed.
You can set the shuffle setting by holding down the [TEMPO] button and turning the [VALUE] knob (-50-0-50, 0=Shuffle off).

Temporarily changing the number of steps in a pattern

Hold down the [TIME MODE] button and turn the [VALUE] knob to change the number of steps in the pattern (1-16).
* This change in the number of steps is temporary; it is not saved. If you want to save the change, change the number of steps in "pattern write" mode.

What is "step"?

Each pattern is divided into 16 grid locations called "steps." One step is a 16th note long (♩).

Track Write

Selecting TRACK WRITE mode

- Turn the [MODE] knob to set to "TRACK WRITE".

Selecting a track

- Use the [TRACK] knob to select a track (1-7).
The display shows the measure number.

The pattern group that can be written to a track

The pattern group that can be written to a track is the group that is selected by the [TRACK] knob. For example in the case of tracks 1 and 2, the pattern group is "I".

Writing a track

- Use the [BAR RESET] button to return to measure 1.
- Press the [RUN/STOP] button.
Loop-playback occurs during track write. The pattern that plays at this time is the pattern that was written into measure 1.
- Use the [PATT. SECTION (A|B)] buttons and the [PATTERN (1)-[8]] buttons to select the pattern that is entered at measure 1.
If you want to write with transposition, hold down the [PITCH MODE] button and press a [PITCH MODE] keyboard button to specify the transposition key.
- Press the [WRITE/NEXT] button.
The pattern is entered, and you proceed to measure 2.
- Repeat steps 3-4 to enter up to one measure before the last measure.
- Select the pattern for the last measure.
- Press the [D.C.] button, and then press the [WRITE / NEXT] button.
D.C. (Da Capo) is entered.
- Press the [RUN/STOP] button to exit the track write.

Making Corrections

If you entered something by mistake, you can correct it as follows.

- Turn the [MODE] knob to set to "TRACK WRITE".
- Recall the measure number as described in "Recalling a measure number".
- Press the [RUN/STOP] button.
- Use the [PATT. SECTION (A|B)] buttons and the [PATTERN (1)-[8]] buttons to re-select the pattern.
Entering D.C. (Da Capo)
Pressing the [D.C.] button enters D.C. (Da Capo) at the current measure.
Entering (Segno)
Pressing the [D.S.] (Segno) button enters (Segno) at the current measure.
- Press the [WRITE/NEXT] button.
- Press the [RUN/STOP] button.

Delete

Here's how to delete one measure from the patterns in the track.

- Turn the [MODE] knob to set to "TRACK WRITE".
- As described in "Recalling a measure number", move to the measure that you want to delete.
- Hold down the [FUNCTION] button and press the [DELETE] (C #) button.

Insert

You can insert patterns into the track.

- Turn the [MODE] knob to set to "TRACK WRITE".
- As described in "Recalling a measure number", move to the measure at which you want to insert.
Example: If you select measure 4, the pattern is inserted between measure 3 and measure 4.
- Hold down the [FUNCTION] button and press the [INS] (D#) button.
- Press the [RUN/STOP] button.
- Use the [PATT. SECTION (A|B)] buttons and [PATTERN (1)-[8]] buttons to select the pattern that you want to insert.
- Press the [WRITE/NEXT] button.
- Press the [RUN/STOP] button.

Pattern Write (TB-03 Original Mode)

Original mode and step recording mode

The TB-03 has two pattern write modes.
"Original mode" reproduces the pattern write operation of the TB-303, and "step recording mode" is newly added on the TB-03. You can use the system setting "Step Recording Mode" to switch between these modes.

Selecting PATTERN WRITE mode

- Turn the [MODE] knob to set to "PATTERN WRITE".

Selecting a pattern

- Refer to "Pattern Playback" - "Selecting a pattern".

Setting the tempo

In pattern write mode, the display shows the step number, but you can press the [TEMPO] button to make the tempo appear for three seconds.
While the tempo is shown, you can press the [TEMPO] button to see the two digits of the tempo value below the decimal point.
While the tempo is shown, you can use the [VALUE] knob to adjust the tempo.

Setting the shuffle

- Refer to "Pattern Playback" - "Setting the shuffle".

Clearing a pattern

- Hold down the [PATTERN (1)-[8]] button that you want to clear, and press the [PATTERN CLEAR] button.

To use a triplet grid

By default, each step is a 16th note, but by holding down the [FUNCTION] button and pressing the [TRIPLET] button you can use a triplet grid (each step is an 8th note triplet).

Changing the number of steps in a pattern

- Hold down the [FUNCTION] button and press the [STEP] button the number of times that you want to specify.
Example: If you want there to be eight steps, press the button eight times.
The display shows the number of steps.
* You can also change the number of steps in the pattern by holding down the [TIME MODE] button and turning the [VALUE] knob (1-16).

Entering the pitches

In TB-303 original mode, you enter the notes of a pattern using separate operations to specify the pitch and the timing. Enter the pitches first.

- Press the [PITCH MODE] button so it's lit.
You're in pitch entry mode.
- Use the [PITCH MODE] keyboard buttons to enter the pitches.
Example: In the case of the following notes, enter pitches in the order "C, C, D#, C, C, G, F, D#".



The display shows a number (1, 2, 3, ...) in the order of the notes that you enter; you can use the [VALUE] knob to select a number.

Entering octave-up or octave-down pitches

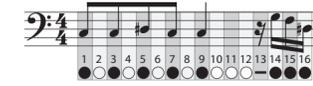
- Shift the octave up or down by pressing (or holding down) [TRANSPOSE UP] or [TRANSPOSE DOWN], then press a [PITCH MODE] keyboard button (Lit: ± 1 octave, Blink: ± 2 octaves).

Checking the pitches

- Press the [PITCH MODE] button so it's lit.
- Press the [TAP] button to check the pitch of each note.
- Press the [FUNCTION] button.
If the pitches were not entered as you intended, re-enter them starting with step 1 of "Entering the pitches".
* Note that when you re-enter the pitches, the accent and slide data you entered are lost.

Entering the timing

- Press the [TIME MODE] button so it's lit.
You're in time entry mode.
- Use the note selector [NOTE], [TIE], and [REST] buttons to enter the timing.
Example: In the case of the following notes, enter "C, C, C" in that order.



The display shows the step number; you can use the [VALUE] knob to select the step.
When you've finished entering all of the steps (16 steps by default), the [TIME MODE] button goes dark.

Checking the time

- Press the [TIME MODE] button so it's lit.
- Press the [TAP] button to check the data of each note.

System Settings

- Hold down the [FUNCTION] button and turn the [VALUE] knob to select a parameter.
When you release the [FUNCTION] button, the parameter is finalized and the value is displayed.
- Use the [VALUE] knob to set the value.
- Press the [FUNCTION] button, to exit the system settings.

Display	Parameter	Value	Explanation
CH	MIDI Channel	1-16, OFF	Specifies the MIDI transmit/receive channel.
Sync	MIDI Clock Source	RUL: 0	If MIDI clock is input from the MIDI IN connector or the USB port, the tempo automatically synchronizes to MIDI clock (default). If MIDI clock is input simultaneously from the MIDI IN connector and the USB port, the USB port takes priority.
		In: 1	The tempo operates according to the TB-03's own setting. Use this setting if you don't want to synchronize with an external device.
		π: d: 1	The tempo synchronizes to MIDI clock being input from the MIDI IN connector.
thru	Soft Thru	OFF, On	Specifies whether data received from the MIDI IN connector will be retransmitted from the MIDI OUT connector (On: default) or will not be retransmitted (OFF).
POFF	Auto Off	OFF 30 (min)	The power does not turn off automatically. The power turns off automatically after 30 minutes (default). * Auto Off does not occur while USB-connected.
dEND	LED Demo	OFF	
		1 (min)	
		3 (min) 10 (min)	Specifies the time until the LED DEMO is shown (default: 3).
Mode	Step Recording Mode	Or: 0	This is original mode, which reproduces the TB-303's pattern write operation (default setting). This mode uses a unique concept in which pitch and timing (time) are entered using separate processes, and requires practice in order to enter the phrase that you intend. Although this mode requires complex operation, it can result in some remarkable phrases being created by accident, so please try using it.
		5: tEP	This is step recording mode, which was newly added on the TB-03. You can enter notes while watching the step number in the display. Compared with original mode, this mode makes it easier to enter the phrase that you intend. We recommend that beginners start by learning this mode.
Od	Overdrive Type	1	This is the high-gain overdrive sound of the BOSS OD-2.
		2 3	This gives a basic, traditional distortion sound. This produces a distortion sound with both the smoothness of an overdrive along with a deep distortion.
d.tYP	Delay Type	t: tPE	Type Echo
		d: tG r: E: 1	Digital Delay Reverb
d. S: nC	Delay Tempo Sync	OFF	
		S: S: nC	Delay time is synchronized to the tempo (default: off).

Controller	Explanation
1 [VALUE] knob	Moves between steps.
2 [KEYBOARD] buttons	Enter a note and proceed to the next step.
3 [DOWN] button	Shift the octave up/down. Lit: ± 1 octave Blink: ± 2 octaves
4 [UP] button	
[TIME MODE] button	While you hold down this button, the note, tie, and rest are shown by the lit buttons.
[TIME MODE] + [UP] button	Enters a tie and proceeds to the next step.
[TIME MODE] + [DOWN] button	Enters a rest and proceeds to the next step.
5 [ACCENT] button	Enters an accent on/off (the step does not advance).
6 [SLIDE] button	Enters a slide on/off (the step does not advance).

- Hold down the [PATTERN (1)-[8]] button that you want to clear, and press the [PATTERN CLEAR] button.

Step recording

- Press the [PITCH MODE] button so it's lit.
You're in step recording entry mode.
- Use the buttons and the [VALUE] knob to enter performance data into the steps.
The display shows the current step number (1-16). You can also use the [VALUE] knob to move to a different step.
Even during step recording, you can play back the pattern by pressing the [RUN/STOP] button.

- To exit the step recording, press the [FUNCTION] button.
* For details on the following operations, refer to "Pattern Write (TB-303 Original Mode)".
- Using a triplet grid
- Changing the number of steps in the pattern

System Settings

- Hold down the [FUNCTION] button and turn the [VALUE] knob to select a parameter.
When you release the [FUNCTION] button, the parameter is finalized and the value is displayed.
- Use the [VALUE] knob to set the value.
- Press the [FUNCTION] button, to exit the system settings.

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thru	Soft Thru	OFF, On	Specifies whether data received from the MIDI IN connector will be retransmitted from the MIDI OUT connector (On: default) or will not be retransmitted (OFF).
POFF	Auto Off	OFF 30 (min)	The power does not turn off automatically. The power turns off automatically after 30 minutes (default). * Auto Off does not occur while USB-connected.
dEND	LED Demo	OFF	
		1 (min)	
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