

Introduction

The TR-09 is a sound module that uses cutting-edge modeling technology to faithfully model the Roland TR-909 which went on sale in 1983. In addition to its compact size, it allows battery-powered operation and contains a small speaker. You'll be able to enjoy full-fledged TR-909 sound anywhere.

- The TR-09 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.b.L.o." blinks in the display. Replace the battery as soon as possible.

Using the TR-09 in conjunction with the DK-01 Boutique Dock (accessory)

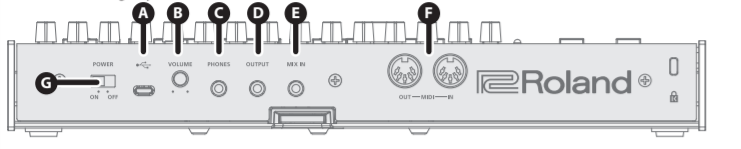
For installation/removal/angle adjustment, refer to the DK-01's Owner's Manual.

Playing the TR-09 via MIDI or USB

You can also play the TR-09 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 (←) port
Use a commercially available USB 2.0 cable (A-microB) to connect this port to your computer. → "Connecting via USB"

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 TR-09 with other MIDI device by using a commercially available MIDI cable to make connections.

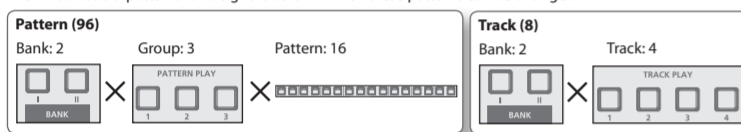
Turning the Power On

POWER switch
This turns the power on/off.

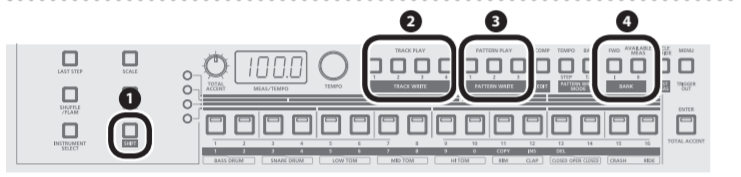
- After you've made connections correctly, be sure to turn on the power in the order of the TR-09 first, and then the connected system. Powering-on in the incorrect order may cause malfunctions or damage. When turning the power off, power-off the connected system first, and then the TR-09.
- Before turning 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.

Overview

The TR-09 has 96 "patterns" and eight "tracks" in which these patterns can be arranged.



Switching the mode



Mode	Operation
Pattern Play	3 PATTERN PLAY [1]-[3] buttons
Pattern Write (Record)	1 [SHIFT] + 3 PATTERN PLAY [1]-[3] buttons
Track Play	2 TRACK PLAY [1]-[4] buttons
Track write (edit)	1 [SHIFT] + 2 TRACK PLAY [1]-[4] buttons
Switching the bank	1 [SHIFT] + 4 BANK [I], [II] button

Playing Sounds

Using the Main Keys [1]-[16] to Play Manually

In track play mode, you can use the main keys [1]-[16] to perform in real time.

- Press one of the TRACK PLAY [1]-[4] buttons.
- Use the main keys [1]-[16] to perform.

- For BASS DRUM, SNARE DRUM, TOM, and HI-HAT, the left key is "accented" and the right key is "unaccented" (example: in the case of BASS DRUM, [1] is accented).
- For HI-HAT, simultaneously pressing [13] and [14] plays the open hi-hat.

Using the Knobs to Adjust the Sound

Controller	Explanation
[LEVEL] knob	Volume
[TUNE] knob	Tuning (pitch)
[ATTACK] knob	Attack strength (BASS DRUM only)
[DECAY] knob	Decay length (SNARE DRUM only)
[SNAPPY] knob	Volume of snare rattle (SNARE DRUM only)

Editing the sound

Here's how to edit parameters that don't have a knob.

- Hold down the [SHIFT] button and press the [EDIT] button.
- Use the [TEMPO] dial to select the parameter.

Parameter	Explanation
GR IN	GAIN
TUNE	Tuning (pitch)
DECAY	Decay length
DECAY	Decay length

- Press the [ENTER] button, to confirm the parameters. Value appears.
- Press a main key [1]-[16] to select the sound that you want to edit.
- Use the [TEMPO] dial to set the value.
- Press the [EDIT] or [ENTER] button, to exit the edit.

Editing the Compressor Level

You can apply a compressor to the BASS DRUM and SNARE DRUM.

- Press the [COMP] button.
- Press a main key to select BASS DRUM (1-2) or SNARE DRUM (3-4).
- Use the [TEMPO] dial to set the compressor level. To turn the compressor off, turn the knob all the way to the left.
- Press the [COMP] or [ENTER] button, to exit the edit.

Playing/Recording a Pattern

Pattern Playback

Selecting PATTERN PLAY mode

- Press one of the PATTERN PLAY [1]-[3] buttons.

Playing a pattern

- Press the [START] button to play a pattern.
- To stop, press the [STOP/CONT] button.

- When you press the [STOP/CONT] button once again, playback resumes from the location at which you stopped.
- During playback, you can hold down the [SHIFT] button and press the [START] button to pause playback; playback restarts when you release the button. This is a convenient way to match the timing when you're synchronizing manually.

Selecting a pattern

- Hold down the [SHIFT] button and press the BANK [I] or [II] button to select the bank.
- Use the PATTERN PLAY [1]-[3] buttons to select a pattern group.
- Use the main keys [1]-[16] to select a pattern.

- By pressing two main keys simultaneously you can select a range. The selected patterns play back consecutively.
- You can also switch patterns during playback. When a pattern finishes playing, the next pattern plays.

Setting the tempo

Turn the [TEMPO] dial to change the tempo (40.00-300.00). To make a change below the decimal point, hold down the [SHIFT] button and turn the [TEMPO] dial.

Pattern Write

The order of action of recording/editing a one-measure pattern is called "pattern write." Pattern write can be done in either of the following two ways.

Step Write (Step Recording)
Create a pattern by specifying the steps at which each sound is heard.

Tap Write (Realtime Recording)
Create a pattern by using the main keys [1]-[16] to perform in real time while you record that performance.

Step Write (Step Recording)

- Before you continue, use the [SHIFT] + BANK [I] or [II] buttons to select a bank.

Selecting PATTERN WRITE mode

- Hold down the [SHIFT] button and press one of the PATTERN PLAY [1]-[3] buttons.

Clearing a pattern

- Hold down the [CLEAR] button and press one of the main keys [1]-[16] to select the pattern that you want to clear.

Executing step write

- Press the [START] button.
- Hold down the [INSTRUMENT SELECT] button and press one of the main keys [1]-[16] to select the sound that you want to record.

- By holding down the [ENTER] button and pressing a main key [1]-[16], you can enter a note that is skewed 1/2 step later. This lets you enter up to 32 steps in one pattern.
- Repeat steps 2-3.
- Press the [STOP/CONT] button to stop.

Entering backbeats (32 steps)
By holding down the [ENTER] button and pressing a main key [1]-[16], you can enter a note that is skewed 1/2 step later. This lets you enter up to 32 steps in one pattern.

Setting the scale

First this operation in step write or tap write mode (the started condition).

- Press the [SCALE] button to set the scale.

LED	Explanation
16th note triplet (♩)	Six steps will be one beat.
8th note triplet (♩)	Three steps will be one beat.
32nd note (♩)	Eight steps will be one beat.
16th note (♩)	Four steps will be one beat.

* You can prevent the scale from being accidentally changed by pressing a button. Change this setting in the system setting "SCALE button lock."

Playing/Editing a Track

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

Track Playback

Selecting a track

- Hold down the [SHIFT] button and press the BANK [I] or [II] button to select the bank.
- Use the TRACK PLAY [1]-[4] buttons to select a track.

The display shows the measure number "1." If there is no data in the track, the display shows "0."

Playing a track

- Press the [START] button to play a track.
- To stop, press the [STOP/CONT] button.

- When you press the [STOP/CONT] button once again, playback resumes from the location at which you stopped.
- During playback, you can hold down the [SHIFT] button and press the [START] button to pause playback; playback restarts when you release the button. This is a convenient way to match the timing when you're synchronizing manually.

Starting from mid-way (recalling a measure number)

- Hold down the [SHIFT] button and press the following buttons in the order given. Use the main keys to specify the measure number (0-9) → [ENTER]
- Example: to specify measure 20 [2] → [0] → [ENTER]
- Press the [STOP/CONT] button to continue playback.

Track mode functions

Controller	Explanation
[TEMPO] button	Indicates the tempo. While holding down the button, you can turn the [TEMPO] dial to change the tempo. To make an adjustment below the decimal point, hold down the [SHIFT] button and turn the [TEMPO] dial.
[BACK] button	Moves one measure back.
[FWD] button	Moves one measure forward.
[AVAILABLE MEAS] button	Displays the number of measures that can be entered.
[CYCLE/GUIDE] button	(Only in track play mode) Loop plays the track.
[SHIFT] + [CYCLE/GUIDE]	(Only in track play mode) Displays the last measure number.

Track Write

Before you continue, use the [SHIFT] + BANK [I] or [II] buttons to select a bank.

Selecting TRACK WRITE mode

- Hold down the [SHIFT] button and press the TRACK PLAY [1]-[4] buttons to select a track. That TRACK PLAY [1]-[4] button blinks. The display shows the measure number.

Deleting a track

- Hold down the [SHIFT] button and press the following buttons in the order given. [1] → [ENTER] → [DEL] (13) → [LAST MEAS] (CYCLE/GUIDE) → [ENTER]

Executing track write

- Press the [START] button.
- Use the PATTERN PLAY [1]-[3] buttons and the main keys [1]-[16] to select the pattern that you want to enter at the first measure.
- You can only select patterns that are in the same bank as the track.
- Press the [ENTER] button. The pattern is entered, and you advance to the second measure.
- Repeat steps 2-3 for the second and following measures.
- To exit the track write, press the [STOP/CONT] button.

Making Corrections

If you made an entry by mistake, correct it as follows.

- Hold down the [SHIFT] button and press the TRACK PLAY [1]-[4] buttons to select a track.
- Press the [START] button.
- Use one of the following methods to move to the measure that you want to correct.
 - Use the [ENTER] button to advance the measure.
 - Use the [FWD] / [BACK] buttons to move to a measure.
 - Recall the measure number using step 1 of "Starting from mid-way (recalling a measure number)."
- Use the main keys [1]-[16] to re-select the rhythm pattern.
- Press the [ENTER] button.
- Press the [STOP/CONT] button.

Convenient Functions

Delete

You can delete patterns from the track in units of measures.

- Use one of the following methods to move to the measure at which you want to delete.
 - Use the [ENTER] button to advance the measure.
 - Use the [FWD] / [BACK] buttons to move to a measure.
 - Recall the measure number using step 1 of "Starting from mid-way (recalling a measure number)."
- Hold down the [SHIFT] button and press the following buttons in the order given. [DEL] (13) → use the main keys to specify the last measure to delete (0-9) → [ENTER]
- Example: deleting to measure 25 [DEL] (13) → [2] → [5] → [ENTER]
- Example: deleting only the first measure [DEL] (13) → [ENTER]
- Example: deleting to the last measure [DEL] (13) → [LAST MEAS] (CYCLE/GUIDE) → [ENTER]

Insert

You can insert patterns into the track.

- Move to the measure that you want to insert. Example: If you select measure 5, the pattern is inserted between measure 4 and measure 5.
- Use the procedure described in "Selecting a pattern" to select the pattern that you want to insert.

* You can also select multiple patterns by simultaneously pressing two of the main keys.

- Hold down the [SHIFT] button and press the following buttons in the order given. [INS] (12) → [ENTER]

Copy

You can copy and paste the contents of a track in units of measures.

- Move to the paste-destination measure. Example: If you select measure 5, the data is pasted between measure 4 and measure 5.
- Select the copy-source pattern. Hold down the [SHIFT] button and press the following buttons in the order given. [COPY] (11) → use the main keys to specify the starting measure number → [ENTER] → use the main keys to specify the ending measure number → [ENTER]

* If the display indicates "0000," you specified a measure that can't be copied.

Tempo Memory

You can specify a tempo for each track.

Specifying the tempo

- Perform this operation in track play mode.
- Hold down the [TEMPO] button and press the [ENTER] button. The displayed tempo is specified for the selected track.

Recalling the tempo

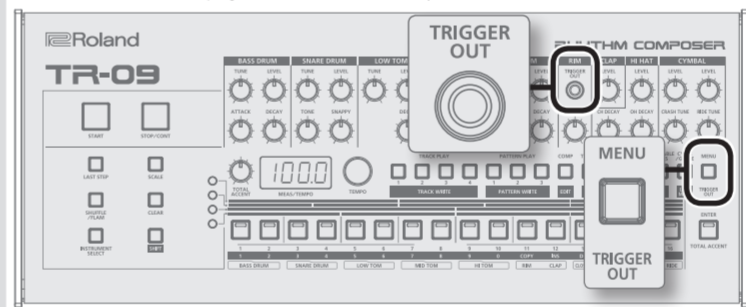
Normally, the track plays at the current tempo, but you can recall the specified tempo as follows.

- Hold down the [TEMPO] button and press one of the TRACK PLAY [1]-[4] buttons to select the track.

Trigger Out

The TRIGGER OUT jack outputs a trigger pulse. You can use a mini-plug (mono) cable to connect this jack to an external device and control that device from the TR-09.

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



Using step write to specify trigger out

- Perform this operation in step write mode (the started condition).
- Hold down the [INSTRUMENT SELECT] button and press the [TRIGGER OUT] (MENU) button.
- Use the main keys [1]-[16] to specify the steps at which a trigger is output.

Using tap write to specify trigger out

- Perform this operation in tap write mode (the started condition).
- Hold down the [INSTRUMENT SELECT] button and press the [TRIGGER OUT] (MENU) button at the moment that you want a trigger to be output.
- To clear this, hold down the [CLEAR] + [INSTRUMENT SELECT] + [TRIGGER OUT] buttons.

Restoring the Factory Settings (Factory Reset)

Here's how to return the TR-09 to its factory-set state.

- While holding down the [2] button, turn on the power. The [ENTER] button blinks. If you decide to cancel the factory reset, turn off the power.
- Press the [ENTER] button to execute the factory reset.
- When all buttons blink, turn the TR-09's power off, then on again.

Data Backup/Restore

Backup

- Connect your computer to the TR-09's USB port via USB cable.
- While holding down the [START] button, turn on the power.
- Open the "TR-09" drive on your computer. The backup files are located in the "BACKUP" folder of the "TR-09" drive.
- Copy the backup files into your computer.
- After copying is completed, eject the USB drive and then disconnect the USB cable.

Windows
Right-click on the "TR-09" icon in "Computer" and execute "Eject."

Mac OS
Drag the "TR-09" icon to the Trash icon in the Dock.

- Turn the TR-09 power off.

Restore

- As described in the procedure for "Backup" Step 1-3, open the "TR-09" drive on your computer.
- Copy the TR-09 backup files into the "BACKUP" folder of the "TR-09" drive.
- After copying is completed, eject the USB drive and then press the [ENTER] button.
- After the LEDs have completely stopped blinking, turn off the power.

Setting the last step

- Perform this operation in step write mode (the started condition).

- Hold down the [LAST STEP] button and press a main key [1]-[16] to specify the last step. You can also change the Last Step by holding down the [LAST STEP] button and turning the [TEMPO] dial.

Entering the total accent

- Perform this operation in step write mode (the started condition).

- Hold down the [INSTRUMENT SELECT] button and press the [TOTAL ACCENT] (ENTER) button.
- Press the main keys [1]-[16] of the steps to which you want to add an accent.
- Use the [TOTAL ACCENT] knob to adjust the strength of the accent.

Shuffle settings

- Perform this operation in step write mode (the started condition).

- Hold down the [SHUFFLE/FLAM] button and press one of the main keys [1]-[7] to specify the shuffle setting. Higher numbers produce greater shuffle. You can use the [TEMPO] dial to adjust the setting in detail. SHUFFLE OFF: [SHUFFLE/FLAM] + [8]

Entering a flam

Here's how to enter a flam for the BASS DRUM, SNARE DRUM, or TOM.

- Perform this operation in step write mode (the started condition).

- Hold down the [INSTRUMENT SELECT] button and simultaneously press the two buttons shown below.

 Press two buttons simultaneously. (Example: for BASS DRUM, press [1] + [2])
- Press a main key [1]-[16] to specify the step at which you want to enter a flam.
- By holding down the [SHUFFLE/FLAM] button and press one of the main keys [9]-[16] you can specify the spacing of the flam. Higher numbers produce a more widely spaced flam. You can use the [TEMPO] dial to adjust the setting in detail.

Tap Write (Realtime Recording)

Before you continue, use the [SHIFT] + BANK [I] or [II] buttons to select a bank.

Selecting PATTERN WRITE mode

- Hold down the [SHIFT] button and press one of the PATTERN PLAY [1]-[3] buttons. That PATTERN PLAY [1]-[3] button blinks.

Selecting TAP WRITE (Realtime Recording) mode

- Hold down the [SHIFT] button and press the [TAP] (BACK) button.

Clearing a pattern

- Hold down the [CLEAR] button and press one of the main keys [1]-[16] to select the pattern that you want to clear.

Executing tap write

- Press the [START] button.
- Press the [CYCLE/GUIDE] button. You'll hear the click.
- Use the main keys [1]-[16] to perform.
 - Refer to "Using the Main Keys [1]-[16] to Play Manually."
- During recording, you can clear a sound by holding down the [CLEAR] button and then holding down a main key of the sound that you want to clear (in the case of SNARE DRUM, either [3] or [4]).
- Your performance is entered at the timing that you specified by the scale setting (quantized).
- Press the [STOP/CONT] button to stop.

Convenient Functions

Copying a Pattern

Here's how to copy a pattern. You can also copy to another bank or group.

- Select the paste-destination pattern. Hold down the [SHIFT] button and press the following buttons in the order given. BANK (I, II) → PATTERN GROUP (1-3) → MAIN KEY (1-16)
- Select the copy-source pattern. Hold down the [SHIFT] button and press the following buttons in the order given. [COPY] (11) → BANK (I, II) → PATTERN GROUP (1-3) → MAIN KEY (1-16) → [ENTER]

Chain (Connecting Patterns)

You can connect two or more patterns and use them as a single pattern.

- Perform this operation in step write or tap write mode (the unstarted condition).

Setting a chain

- Hold down the first and last buttons of the pattern that you want to connect as a chain, and press the [ENTER] button. Example: to chain patterns 7-10 [7] + [10] + [ENTER]

Removing a chain

- Hold down the pattern that you want to unchain, and press the [ENTER] button. Example: to remove pattern 7 from patterns 7-10 [7] + [ENTER]

System Settings

- Press the [MENU] button to make it light.
- Use the [TEMPO] dial to select the parameter, and then press the [ENTER] button.
- To set the value. To exit the system settings, press the [MENU] button to make it go dark.

Display	Parameter	Value	Explanation
CH	MIDI Channel	1-16, OFF	Specifies the MIDI transmit/receive channel (1-16, OFF).
SynC	MIDI Clock Source	RUL, D	If MIDI clock is being input to the MIDI IN connector or the USB port, the TR-09's tempo will automatically synchronize to MIDI clock (default).
R OFF	Auto Off	OFF	The power does not turn off automatically.
		30 (min)	The power turns off automatically after 30 minutes (default). * Auto Off does not occur while USB-connected.
d ENO	LED Demo	OFF	Specifies the time until the LED DEMO is shown (default: 3). Each time you press, the setting cycles in the order of OFF → Weak → Strong (default).
		1 (min)	
		3 (min)	
P-CO	Programming Mode	P-F	Each time you press, the setting cycles in the order of OFF → Strong → Weak.
		F-P	

Connecting via USB
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 TR-09 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.

In addition to the USB audio port MIX, the TR-09 provides four USB audio ports for parallel output. Sounds for which you press the main keys [1]-[16] to make them blink when making this setting are output via parallel output.

* Sounds that are assigned to parallel output are not output from the USB audio port MIX.

The output of the OUTPUT jack (stereo mini) is split between left and right channels