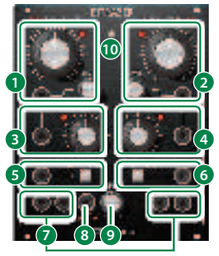
Roland BITRAZER DEMORA TORCIDO SCOOPER

Owner's Manual English

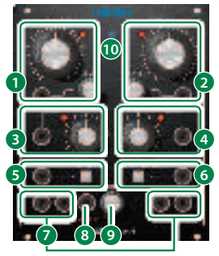
Before using this unit, carefully read leaflet "USING THE UNIT SAFELY" . After reading, keep the document(s) including those sections where it will be available for immediate reference.

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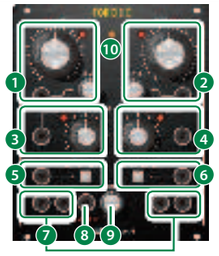
Panel Descriptions



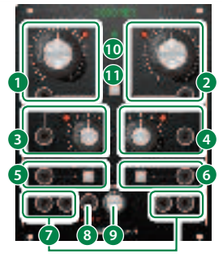
"BITRAZER" (bit crusher effect processor) lowers the sampling rate and bit depth to digitally roughen the sound, giving it a lo-fi character.



"DEMORA" (delay effect processor) layers a time-delayed sound with the original sound, producing an echo effect.



"TORCIDO" (distortion effect processor) intentionally distorts the audio input, creating an intense and deeply distorted sound.



"SCOOPER" (looper and scatter effect processor) records the audio input (phrase) for several seconds and repeatedly plays it back or slices it, transforming it into a different phrase.

Controlling the parameters

Each effect unit lets you control the parameters by using the GRIFFER (GRF) knobs which allow high-precision adjustment, and by inputting a CV/GATE signal.

The settings of the GRIFFER (GRF) knobs are added to the CV/GATE signal.

The indicator beside the knob changes its brightness according to the knob position and the voltage of the CV/GATE signal.

Initial parameters

This manual explains the factory-set parameters of the GRIFFER knobs and the buttons.

By using the dedicated software, you can reassign these to the desired parameters. (➡ "Using the Dedicated Software")

* In the tables below, "B" indicates BITRAZER, "D" indicates DEMORA, "T" indicates TORCIDO, and "S" indicates SCOOPER.

1 [GRF 1] knob

Model	Indication	Explanation
B	SAMPLE RATE	Lowers the sampling rate to create a noisy sound.
D	TIME	Adjusts the delay time.
T	DIST	Adjusts the depth of distortion.
S	SCATTER DEPTH	Adjusts the amount of scatter. "Scatter" adds a digital-feeling groove to the loop playback by exchanging individual steps within the loop playback and also by changing the playback direction or gate length.
B D T	LEVEL	Adjusts the amplitude of the CV signal (voltage) that is input to GRF 1. * When the knob is minimized (turned fully left), the amplitude is 0.

2 [GRF 2] knob

Model	Indication	Explanation
B	FILTER CUTOFF	Adjusts the cutoff frequency of the filter.
D	FEEDBACK	Adjusts the volume of the delay sound.
T	TONE	Adjusts the tonal character of the distortion.
S	SCATTER TYPE	Adjusts the type of scatter.
B D T	LEVEL	Adjusts the amplitude of the CV signal (voltage) that is input to GRF 2. * When the knob is minimized (turned fully left), the amplitude is 0.

3 [GRF 3] knob

Model	Indication	Explanation
B	BIT DOWN	Lowers the bit depth to create a lo-fi sound.
D	WIDTH	Adjusts the volume of the pingpong delay sound (the delay heard alternately from OUTPUT 1 and 2).
T	TUBE WARM	Produces a warm sound as if it were passing through a vacuum tube.
S	PITCH	Adjusts the pitch depth.

4 [GRF 4] knob

Model	Indication	Explanation
B	RESONANCE	Emphasizes the sound in the region of the cutoff frequency.
D T	DRY/WET	Adjusts the balance of the dry sound and wet sound.
S	FILTER	Adjusts the effect of the filter.

5 [GRF 5] button

Model	Indication	Explanation
B	LPF/HPF	Switches between a low pass filter and high pass filter.
D	HOLD	Continues holding the delay sound.
T	LO BOOST	Boosts the low-frequency sound.
S	SYNC TRIG	Uses the GATE signal input to control the operation of the [REC/PLAY] button. ➡ "11 [REC/PLAY] button (SCOOPER only)"

6 [GRF 6] button

Model	Indication	Explanation
B D T	BYPASS	Bypasses the effect so that no effect is applied.
S	SCATTER	Turns the SCATTER effect on/off.

7 INPUT 1/2 jacks, OUTPUT 1/2 jacks

These are two monaural input/output jacks.

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

8 REMOTE IN jack (➡ "Using the Dedicated Software")

Connect this to your tablet so that dedicated software settings can be input as audio signals.

When an audio signal is input to the [REMOTE IN] jack, the color or illumination of the center indicator shows the reception status.

● Center indicator during REMOTE input (common to all four models)

Indicator illumination	Reception status
Blinking colorfully	The audio signal is being input correctly.
Blinking alternately red and green	Reception error. The audio signal is not being input correctly.

* If the center indicator does not change when you input an audio signal, or if a reception error occurs, adjust the volume of the tablet and input the signal again.

9 [VOLUME] knob

Adjusts the output volume.

10 Center indicator

Lights when the power is on. The color and illumination indicates the status of this unit.

* For BITRAZER, DEMORA, and TORCIDO, this indicator is unlit when you turn BYPASS on. For SCOOPER, this indicator is off if SCATTER is off and there is no recorded loop phrase.

11 [REC/PLAY] button (SCOOPER only)

If a GATE signal is not being input to the "GRF 5 SYNC TRIG," recording (REC) or playback (PLAY) starts the moment you press the button.

If a GATE signal is being input to the GRF 5 "SYNC TRIG," recording (REC) or playback (PLAY) start the moment a GATE signal is input after you press the button.

Rear panel

12 DC IN jack

Connect a Eurorack power cable, or the included AC adaptor.



13 [POWER] switch

This turns the power on/off.

14 USB port (➡ "Using the Dedicated Software": "Using the dedicated software on a computer")

Use a commercially available USB 2.0 cable (A-microB type) to connect your computer.

If this is connected, you'll be able to edit the parameters of this effect unit from your computer. You'll also be able to use your computer to record and store the input from the INPUT 1/2 jacks and CV/GATE jacks and the output to the OUTPUT 1/2 jacks.

* You must install the USB driver before connecting the effect processor 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/**

Turning the Power On

1. **To the [DC IN] jack, connect the AC adaptor or a Eurorack power supply cable. (➡ "Using a Eurorack Power Cable")**
2. **Observing the cautions listed below, turn on the rear panel [POWER] switch.**
   * This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.

⚠ CAUTION

* After you've made connections correctly, be sure to **turn on the power in the order of the effect processor 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 effect processor.**

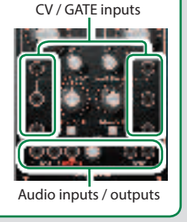
* Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

CV / GATE Input

CV stands for "Control Voltage," an electrical signal (control voltage) that modifies the behavior of an analog synth or Eurorack module. GATE is a trigger signal that controls the beginning and end of an envelope or other control voltage.

* This unit can receive CV in the range of "-10 – +10 V." Adjust your output device to stay within this range that can be received. You must input a gate voltage of "+3 V" or higher.

* Use patch cables with monaural mini-plugs to connect other equipment.



Recording / Stop / Playback / Delete (SCOOPER only)

SCOOPER plays the recorded audio input as a loop phrase, and adds an effect such as SCATTER.

Recording

SCOOPER can record one loop phrase of up to 10 seconds.

* The recorded phrase disappears when you power-off the unit.

1. **Press the [REC/PLAY] button to start recording.**
   * During recording, the [REC/PLAY] button blinks, and the center indicator is lit red.
2. **Press the [REC/PLAY] button once again to stop recording.**
   When recording stops, the recorded sound plays repeatedly.
   * During playback, the [REC/PLAY] button is lit, and the center indicator blinks blue.

Stop

1. **While the recorded sound is playing back, press the [REC/PLAY] button.**
   * If there is input at the INPUT 1/2 jacks, the output switches from the recorded sound to the audio input.

Playback

1. **While stopped, press the [REC/PLAY] button.**
   * If there is input at the INPUT 1/2 jacks, the output switches from the audio input to the recorded sound.

Delete

1. **During playback or while stopped, hold down the [REC/PLAY] button.**
   When the recorded sound is deleted, the center indicator blinks yellow/red. Then the SCATTER status is indicated (on: green, off: unlit).
   * You can also delete by holding down the [SYNC TRIG] button and pressing the [REC/PLAY] button.

Restoring the Factory Settings (Factory Reset)

You can return the knob and button parameter assignments to their factory-set (initial parameter) settings.

1. **While holding down the [GRF 5] and [GRF 6] buttons, turn the power on.**
   The [GRF 5] button blinks.
2. **Press the [GRF 5] button.**
   The [GRF 5] button and [GRF 6] button light.
3. **Turn the power off and then on again.**
   The settings are initialized, and the unit returns to the factory-set condition.

Installing in a Eurorack case

Use the included screws (4 pcs.) to attach the unit to your Eurorack case at the locations indicated.



⚠ CAUTION

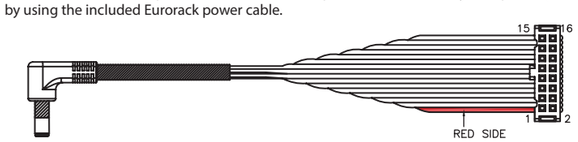
● **Keep small items out of the reach of children**

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.

- Included Parts: Eurorack installation screws

Using a Eurorack Power Cable

In addition to an AC adaptor, the unit can also be operated on Eurorack system power (+12 V) by using the included Eurorack power cable.



1. **Insert the 16-pin connector of the Eurorack power cable into the Eurorack power connector. When inserting the connector, align it with the groove.**
   If there is no groove, align the wire bearing the red mark with pin number 1.
2. **Connect the other connector of the Eurorack power cable to the DC IN jack of this unit.**
   * The +12 V power of the unit draws 450 mA of current. Use a power supply that can deliver this amount of current.

For more about Eurorack power supply units, refer to the Roland website. Here you can find the latest information about units that have been verified to be compatible.

➡ **http://www.roland.com/support/**

⚠ WARNING

● **Electrocution hazard**

* Always turn the Eurorack unit off and unplug the power cord before plugging the Eurorack power cable.

* Do not touch the electrical terminals when attaching the Eurorack power cable.

Using the Dedicated Software

Dedicated software lets you add a filter or LFO, or to assign the desired parameters to the knobs and buttons by using your tablet or computer.

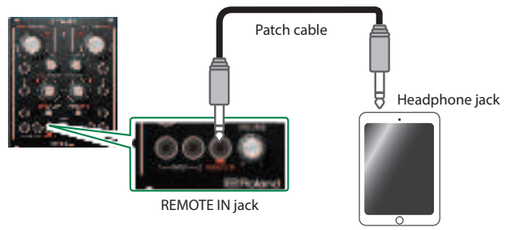
By assigning parameters that are different than the initial parameters, you can also use this unit virtually as a different effect processor.

You can access and download dedicated software for your device from the following locations. For details on the dedicated software, refer to the help that is included with the dedicated software.

Device	Destination website
iOS tablet	App Store
Android tablet	Google Play
Computer (Win, Mac)	Roland website: **http://www.roland.com/support/**

Using the dedicated software on a tablet

Use a patch cable to connect this unit's REMOTE IN jack to your tablet's headphone jack.



Using the dedicated software on a computer

Use a separately sold USB 2.0 cable (A-microB type) to connect the USB port on the rear panel of this unit to your computer.

* In order to connect this unit to your computer, you must install the USB driver.

Main Specifications

Roland: BITRAZER/ DEMORA/ TORCIDO/ SCOOPER

Model	BITRAZER	DEMORA	TORCIDO	SCOOPER
Power Supply	AC adaptor or Eurorack power			
Current Draw	950 mA (AC adaptor), 450 mA (Eurorack power)			
Dimensions	106.6 (W) × 128.4 (D) × 58.3 (H) mm		4-1/4 (W) x 5-1/16 (D) x 2-5/16 (H) inches	
Weight	320 g (excluding AC adaptor)			12 oz (excluding AC adaptor)
Accessories	AC adaptor, Owner's Manual, Leaflet USING THE UNIT SAFELY, Eurorack installation screws (4 pcs.), Eurorack power cable			

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

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