

# Jackbox

## 7R-909

ANALOG DRUM MODULE



# Operation Manual



---

## 1. Thank You And Welcome!

---

Congratulations for the purchase / trial, and welcome to your new Jackbox 7R-909.  
Thank you for interest in Qudelectra products.

We always put a lot of effort to bring you quality Rack Extensions for your Reason Rack, yet this time we had to go that little extra mile to bring you a faithful reproduction of a true legend.

As with the Jackbox 7R-7x7 modules, before everything else, we've created this Rack Extension, first and foremost as musicians, with true love, awe and appreciation on the history of the original hardware machine and the music that it was inspired by it.

### 1.1. About Jackbox 7R-909

---

Jackbox 7R-909 is crafted as a clone of the legendary Roland™ TR-909 drum machine. One of the most -if not the outmost- legendary pieces of gear that changed music as we know it.

The Jackbox 7R-909 uses both samples and sound synthesis to achieve its sound results. To put it an a different way, your new device uses the best of both worlds to create a sound as close as possible to the original!

*\* Roland is a registered trademark of the Roland Corporation.*

## 2. Front Panel

Your new Jackbox 7R-909 front panel looks like this.



*Fig 2.a: The Jackbox 7R-909 Front Panel*

### 2.1. Global Controls

In this section we take a look at the controls that affect all sounds, plus the controls which are common to all sounds. These are:

- **Master Volume:** Located on the top right of the device, the Master volume knob sets the overall volume level of the unit.
- **Drum Levels:** Dedicated knobs to alter the individual drum level of each sound, are placed either at the top or top right section on each parameter controls group.
- **Drum Pads:** The drum pads are located at the lower area of the unit. You can click on them to get an audible result of the changes you've done to each sound. For future purposes (like the addition of a sequencer) there are 16 drum pads, yet they trigger only 11 sounds, meaning that some consequent drum pads trigger the same sound.
- **MIDI Led:** At the bottom-left there's a MIDI Led indicator that lits whenever there's an incoming signal from either the Drum Pads, the MIDI keys or the CV Gate Ins.
- **Flam Size:** At the left most of the device you can find the “Flam Size” knob, which adjusts, the time between the two drum hits, from which a flam hit consists.



- **Accent Level / Velocity Sensitivity:** The knob right below the “Flam Size”, sets either the “Accent Level” when “Accent Mode” is enabled, or the “Velocity Sensitivity” if “Accent Mode” is disabled.
- **Accent Mode:** At the leftmost of the drum pads there's a button placed that enables or disables the Accent Mode.

*Further information on “Accent Mode”, “Velocity Sensitivity” and “Flam Size” can be found at Chapter 4 of this Manual.*

## 2.2. Bass Drum

---

The Bass drum sound can be controlled using three parameters:

- **Tune:** Tune sets the bass drum tuning. In reality this setting affects the pitch envelope of the bass drum, to produce a low beefy kick at the lowest setting, up to a higher more punchy kick at the highest setting.
- **Attack:** The parameter sets the attack of the bass drum.
- **Decay:** The parameter sets the decay of the bass drum. Lower values will produce a more short and sharp kick sound, while higher values will allow the bass drum low sound to fully evolve.

## 2.3. Snare Drum

---

The Snare drum sound is controlled by the following parameters:

- **Tune:** The parameter tunes the snare drum's body from a lower (fully left) to higher (fully right) frequency.
- **Tone:** In reality this knob affects the decay of the snare.
- **Snappy:** The parameter controls the rattle noise level of the snare.

## 2.4. Toms

---

Jackbox has three tom sounds, There are two parameters that affect their sound.

- **Tune:** The parameter changes the tune of each of the toms by +/- 6 semitones.
- **Decay:** This parameter changes the decay of each tom.

## 2.5. Percussion

---

Jackbox provides also a set of 5 percussive sounds These are:

- **Rim Shot** (There are no extra controls for this sound)
- **Hand Clap** (There are no extra controls for this sound)

## 2.6. Hi-hats

---

Jackbox offers closed and open Hi-hat sounds. Only one parameter is available:

- **Decay:** Alters the Closed or Open Hi-hats' decay.

## 2.7. Cymbal & Ride

---

The cymbal sound has two parameters to control its timbre:

- **Tuning:** Changes the Ride or Crash cymbals' tuning by approximately +/-7 semitones.

### 3. Rear Panel

The Jackbox 7R-909 rear panel looks like this.

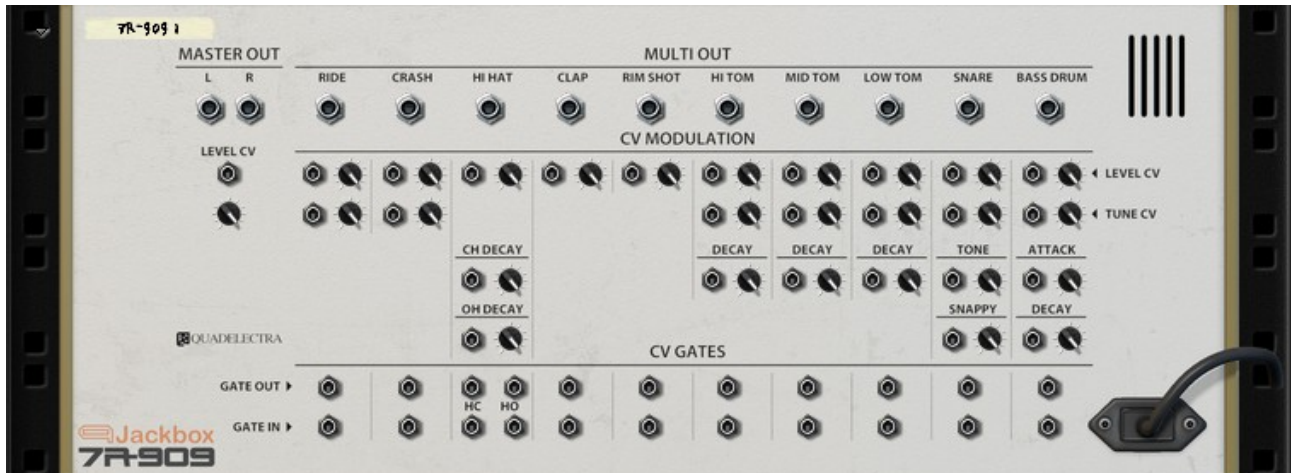


Fig 3.a: The Jackbox 7R-909 rear panel.

#### 3.1. Audio Outputs

Jackbox 7R-909 offers two sets of audio outputs:

- **Master Out:** Master out is the main stereo output for all drum sounds.
- **Multi Out:** Multi outputs are dedicated outputs for each sound. Once you plug an audio jack to an individual output, the corresponding drum sound will not be played back through the main output.

*Note: Both hi-hats share the same output.*

*Note: Changes to the level of each sound will still take effect, when its individual output is used.*

#### 3.2. CV Gates

You can use Jackbox 7R-909 to either send triggers to, or receive triggers from, other devices. This is feasible through the Gate CV Ins and Outs:

- **Gate Outs:** Gate outputs are used when you want to trigger a gate on a foreign machine each time a sound on your Jackbox is triggered. For example you can have a sampled bass drum on a Redrum being triggered each time the Jackbox's Bass Drum is hit.

You do this by connecting the Gate out of the sound of your interest on Jackbox,

to the Gate in of the sound on the target device.

- **Gate Ins:** Just like in other drum machines, Jackbox 7R-909 has it's own gate in jacks to receive gate CV signals from other devices and trigger it's corresponding sounds.

### 3.3. CV Mod Inputs

---

You can control the various sound shaping parameters of you Jackbox 7R-909 using external CV signals from other sources.

All of the parameters for each drum sound can be modulated with the use of external CV signals. More information on these parameters can be found in chapter 2 of this manual.

In this section we make a reference to their corresponding CV Modulation Inputs:

- **Level CV:** Applies to all sounds. Controls the level (volume) of each sound.
- **Tune CV:** Applies to all sounds except Hi-hat, Hand Clap and Rim Shot. In general changes the pitch of the sounds, however in some sounds such as the Snare or the Bass Drum, “tuning” has a more complex meaning, affecting the pitch envelope too.
- **Decay CV:** Applies to Open & Closed Hi-hats, the Toms and the Bass Drum and sets the amount of decay for each sound.
- **Attack CV:** Applies only to the Bass Drum, and controls the amount of the attack.
- **Tone CV:** Applies only to the Snare Drum, and acts like a decay.
- **Snappy CV:** Applies only to the Snare Drum, and sets the amount of the rattle noise.



---

## 4. Working With Your Jackbox 7R-909

---

This chapter covers some special issues concerning the Jackbox 7R-909 operation.

### 4.1. Accent Mode & MIDI Velocity

---

All devices in the Jackbox series have an Accent Mode which can be either enabled or disabled.

The Accent Mode, when enabled, will force the the notes played by MIDI to switch to an unaccented or an accented level. Particularly velocities lower than 100 will produce unaccented notes, while velocities higher than -and including- 100 will produce accented notes. The amount of accent in relation to velocity is set by the “Accent” knob.

When Accent Mode is disabled, Jackbox uses the velocity from MIDI for each sound -as you'd expect. However the “Accent” knob once “Accent Mode” is disabled, switches to “Velocity Sensitivity” allowing you to adjust the said parameter for all sounds.

Both Accent Level and Velocity Sensitivity can be automated.

*Note: When enabled “Accent Mode” will cause pads to play in their accented velocity.*

### 4.2. Flam & Flam Size

---

Flam Mode, currently is accessible either by Automation, or MIDI key switch only.

Flam is applied globally, so when in flam mode, each drum sound is played twice with a short interval in-between to simulate, what is called, a “flam” drum hit.

You can either select to automate the corresponding “Flam” parameter from the Automation Combo box, or keep MIDI Key #24 (C0) pressed for as long as you need the effect to take place.

The interval between two successive drum hits is set by “Flam Size” knob, right above the “Accent” Knob. Note also that in Jackbox 7R-909 the “Flam Size” parameter is automatable.

## APPENDIX I: MIDI Keyboard Mapping

NOTE(MIDI) SOUND

C1(36) BD	
D1(38) SD	C#1(37) RIM
	D#1(39) HCLAP
F1(41) LOW T	
G1(43) LOW T	F#1(42) HHC
A1(45) MID T	G#1(44) HHC
B1(47) MID T	A#1(46) HHO
C2(48) HI T	
D2(50) HI T	C#2(49) CRASH
	D#2(51) RIDE

### 1. Legend

Mnem.	Sound
BD	Bass Drum
CRASH	Crash Cymbal
HCLAP	Hand Clap
HHC	Closed Hi-hat
HHO	Open Hi-hat
HI T	Hi Tom
LOW T	Low Tom
MID T	Mid Tom
RIDE	Ride Cymbal
RIM	Rim Shot
SD	Snare Drum

### 2. Reverse Lookup

Mnem.	MIDI (Note)
BD	36 (C1)
CRASH	49 (C#2)
HCLAP	39 (D#1)
HHC	42 (F#1), 44 (G#1)
HHO	46 (A#1)
HI T	48 (C2), 50 (D2)
LOW T	41 (F1), 43 (G1)
MID T	45 (A1), 47 (B1)
RIDE	51 (D#2)

RIM	37 (C#1)
SD	38 (D1)

## APPENDIX II: MIDI CC Table

MIDI CC #.	Parameter
4	Accent Level
5	Velocity Sensitivity
7	Main Volume
65	Flam
67	Accent
128	Level - Bass Drum
129	Level - Snare Drum
130	Level - Low Tom
131	Level - Mid Tom
132	Level - Hi Tom
133	Level - Rim Shot
134	Level - Hand Clap
135	Level - Hi-hat
136	Level - Crash Cymbal
137	Level - Ride Cymbal
140	Tune - Bass Drum
141	Tune - Snare Drum
142	Tune - Low Tom
143	Tune - Mid Tom
144	Tune - Hi Tom
145	Tune - Crash Cymbal
146	Tune - Ride Cymbal
147	Tone - Snare Drum

150	Attack - Bass Drum
151	Decay - Bass Drum
152	Snappy - Snare Drum
153	Decay - Low Tom
154	Decay - Mid Tom
155	Decay - Hi Tom
156	Decay - Closed Hi-hat
157	Decay - Open Hi-hat



## TABLE OF CONTENTS

1. Thank You And Welcome!.....	3
1.1. About Jackbox 7R-909.....	3
2. Front Panel.....	4
2.1. Global Controls.....	4
2.2. Bass Drum.....	5
2.3. Snare Drum.....	5
2.4. Toms.....	5
2.5. Percussion.....	6
2.6. Hi-hats.....	6
2.7. Cymbal & Ride.....	6
3. Rear Panel.....	7
3.1. Audio Outputs.....	7
3.2. CV Gates.....	7
3.3. CV Mod Inputs.....	8
4. Working With Your Jackbox 7R-909.....	9
4.1. Accent Mode & MIDI Velocity.....	9
4.2. Flam & Flam Size.....	9
APPENDIX I: MIDI Keyboard Mapping.....	10
1. Legend.....	10
2. Reverse Lookup.....	10
APPENDIX II: MIDI CC Table.....	12
TABLE OF CONTENTS.....	14