Jackbox
7R-808
Analog Drum Module

Operation Manual

QUADELECTRA AUDIOWORX

Re Rack Extension

1. Thank You And Welcome!

Congratulations on the purchase / trial of your Jackbox 7R-808 Rack Extension from Quadelectra. Thank you for your interest in our products. Allow us to welcome you to the world of your new Jackbox device.

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 extra mile to bring you a faithful reproduction of a true legend. The Jackbox 7R-808!

As with the Jackbox 7R-7x7 modules, before everything else, we've created this Rack Extension, first and foremost as musicians, with true love, respect and appreciation on the history of the original hardware, since we ourselves are part of a generation that was inspired by the sound and the music created using it.

1.1. About Jackbox 7R-808

Your Jackbox 7R-808 has been crafted after the legendary Roland™ TR-808 drum machine. Touching the boundaries of the myth, the TR-808 has been one of the most inspirational electronic pieces of gear ever made, significantly changing the face of dance music as we know it.

From the days of early electro hip-hop, and 80s pop music, to Detroit Techno, and Minimal. And from the explosion of Acid and House music, to today's modern Trap sound. The Roland TR-808 has steered them all. With it's iconic sounds, it is always recognizable and loved by it's millions of fans around the world.

Your Jackbox 7R-808 is a hybrid. It uses both samples and sound synthesis to achieve its sound results. To put it an a different way, Jackbox 7R-808 uses the best of both worlds to create a sound as close as possible to the original hardware!

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2. Front Panel

Your Jackbox 7R-808 front panel looks like this.

Fig 2.a: The Jackbox 7R-808 Front Panel

2.1. Global Controls

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

- **Master Volume:** The master volume knob can be found at the left side of the device above the MIDI led and Accent Mode switch. It controls the entire volume of the device.

- **Accent Mode:** Counter-wise, Accent Mode is the big white button, found under the “Master Volume” knob. Enabling it will enable the Accent Mode. More on this feature is discussed in section 4.1 of this manual.

- Between “Accent Mode” switch and “Master Volume” the MIDI Led is lit whenever there's an activity from the drum pads, MIDI keys or CV Gate inputs.

- **Accent Level / Velocity Sensitivity:** Accent Level & Velocity Sensitivity both refer to the same knob. Marked with orange color, it is found under the first group called “Accent”. The knob handles either the first or the second parameter, depending on the state of the “Accent Mode” switch. More about this knob is discussed in chapter 4.1 of this manual.

- **Drum Levels:** Drum levels are a set of orange knobs located at the top of each sound parameter group. Each affects that designated sound's volume.

  Note: Some sounds like the toms, the rim shot and the hand claps are switchable. In these cases the level knob affects both sounds.

- **Drum Pads:** The drum pads are found at the lower side of the device. You can click on them to get an audible feedback of the changes you make to each sound. For future purposes, like the addition of a sequencer in forthcoming versions, there are 16 drum pads present, but only 11 sounds. This means that some drum pads trigger the same sounds.

2.2. Bass Drum

The Bass drum sound can be controlled using two parameters:

- **Tone:** Affects the tone but also the attack of the bass drum. Lower values "darken" the sound, and smooth out the attack, while higher values brighten up the sound and produce a more punchy attack.

- **Decay:** The parameter affects the decay of the bass drum. Lower values produce a sharper decay, making the bass drum cut through the low-mid in the mix, while higher values will produce *that* well known boomy bass drum sound, the TR-808 is known for.

2.3. Snare Drum

The Snare drum sound is controlled by the following parameters:

- **Tone:** The tone parameter, balances the timbre of the snare drum between a high and a low harmonic. Lower values reveal -or favor- the lower harmonic of the snare, while higher values favor the higher harmonic timbre.

- **Snappy:** Snappy (Snappiness) controls the noise (rattle) level of the snare.

2.4. Toms / Congas

Jackbox has three tom sounds, which can be switched to conga sounds. The three conga sounds are in fact the same tom sounds, pitched up. Besides this setting Jackbox allows fine tuning for each of these sounds.

- **Tuning:** This parameter fine tunes the pitch of each tom. The range is approximately +/-3 semitones.

- **Tom / Conga Switch:** Each tom can be switched to a conga sound, like in the original hardware. This switching in fact is a transpose of the tom sound to a higher frequency.

2.5. Percussion

Jackbox provides also a set of 5 percussive sounds, that do not have any sound shaping parameters. These are:

- **Rimshot (RS) or Claves (CL):** A single sound that can be switched to either a rimshot or a clave.
- **Maracas (MA) or Hand Clap (CP): A** single sound that can be switched between a Maracas hit or a Handclap.
- **A Cowbell (CB) sound.**

2.6. Cymbal

The cymbal sound has two parameters to control its timbre:

- **Tone:** Tone knob changes the frequency attenuation of the cymbal. Lower values will cause hi-mid frequencies to attenuate, while higher values will raise the center frequency to higher values.

  There's also a slight change in the attack, with lower settings easing it in.

- **Decay:** This knob of course controls the decay of the cymbal.

2.7. Hihats

There are two kinds of hi-hat sounds exposed by the device: The closed and open Hi-hat. The open hi-hat has a single parameter to control its decay.

3. Rear Panel

The rear panel of your Jackbox 7R-808 looks like this.

Fig 3.a: The Jackbox 7R-808 rear panel.

3.1. Audio Outputs

Jackbox 7R-808 offers two sets of audio outputs:

- **Master Out:** Master out is the main stereo output for all drum sounds. Note that the output is stereo for conventional reasons, such as being able to cope with true stereo effects. Following its hardware paradigm, Jackbox 7R-808 output is monophonic.

- **Multi Out:** Multi outputs are dedicated outputs for each sound. Sounds are routed exclusively. Meaning that once you plug an audio jack to an individual output, the corresponding drum sound will not be played back through the master.

  Note that changes to the level of each sound are still in effect, when that sound is routed through its individual output.

3.2. CV Gates

You can use Jackbox 7R-808 to either send triggers to, or receive triggers from, other devices:

- **Gate Outs:** You use gate outputs 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 slot being triggered each time the Jackbox'es Bass Drum is hit to stack Bass Drums without using multiple parts in the editor.

  You do this by connecting the Gate out of the sound you wish to use as master on

your Jackbox, to the Gate in of the sound to be used as slave on the target device.

- **Gate Ins:** Just like in other drum machines, Jackbox 7R-808 has it's own Gate In CV jacks to receive gate CV signals from other devices. This means that the procedure described above for the Gate outs can apply in reverse to Jackbox it self, if you want to use it as a slave.

3.3. CV Mod Inputs

You can control the various sound shaping parameters discussed in Chapter 2, using external CV signals from other sources.

In this section we make just a reference to the CV Modulation Inputs:

- **Level CV:** Applies to all sounds. Controls the level (volume) of each sound.
- **Tune / Tone CV:** Applies to Cymbal (CY), Toms / Congas (HT/HC, MT/MC, LT/LC), Snare Drum (SD) and Bass Drum (BD).

  For Toms these CV Input attachments control the fine tuning of the toms (or congas),

  For Cymbal (CY), Snare Drum (SD) and Bass Drum (BD) the CV Input controls their “Tone” parameter.
- **Decay CV:** Applies to Open Hi-hat (OH), Cymbal (CY), Snare Drum (SD) and Bass Drum (BD), and controls the decay of each sound.

  In Snare Drum, the CV Input controls the Snappiness parameter instead.

4. Working With Your Jackbox 7R-808

This chapter covers some special issues concerning your Jackbox 7R-808 operation.

4.1. Accent Mode & MIDI Velocity

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

The Accent Mode, when enabled, will force the the velocity of all notes played by MIDI to snap to either an unaccented or an accented level. More specifically 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 works as expected, obeying the MIDI note velocities. 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.

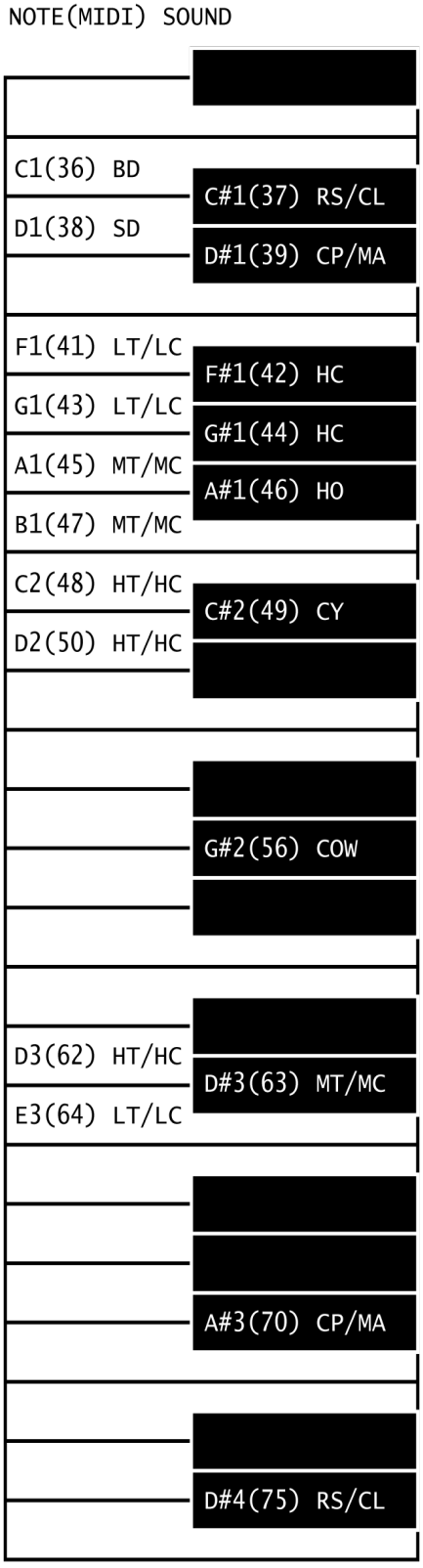
4.2. The Mute Hihat

Original TR-808 had a special type of hi-hat called “Mute Hi-hat” in the producer's jargon.

This special sound occurred when you'd enable the same steps for both open and closed hi-hat sequencer tracks (causing them to be triggered in the same time). The sound resembles the color of the open hi-hat but with a short closed hi-hat decay.

Jackbox emulates this functionality too. But bare in mind that it's very hard to synchronize the two hi-hats to hit simultaneously by hand! The effect works best when you write the events in a clip / part, or trigger the gates simultaneously using a step sequencer.

APPENDIX I: MIDI Keyboard Mapping



1.Legend

Mnem.	Sound
BD	Bassdrum
CB	Cowbell
CP/MA	Handclap / Maracas
CY	Cymbal
HC	Hihat Closed
HO	Hihat Open
HT/HC	Hi Tom / Hi Conga
LT/LC	Low Tom / Low Conga
MT/MC	Mid Tom / Mid Conga
RS/CL	Rimshot / Clave
SD	Snaredrum

2. Reverse Lookup

Mnem.	MIDI (Note)
BD	36 (C1)
CB	56 (G#2)
CP/MA	39 (E#1), 70 (A#3)
CY	49 (C#2)
HC	42 (F#1), 44 (G#1)
HO	46 (A#1)
HT/HC	48 (C2), 50 (D2), 62 (D3)
LT/LC	41 (F1), 43 (G1), 64 (E3)
MT/MC	45 (A1), 47 (B1), 63 (D#3)

RS/CL	37 (C#1), 75 (D#4)
SD	38 (D1)

APPENDIX II: MIDI CC Table

MIDI CC #.	Parameter
4	Accent Level
5	Velocity Sens.
67	Accent Mode
128	BD Level
129	SD Level
130	LT Level
131	MT Level
132	HT Level
133	RS/CL Level
134	CP/MA Level
135	CB Level
136	CY Level
137	CH Level
138	OH Level
140	BD Decay
141	SD Snappy
142	CY Tune
143	CY Decay
144	OH Decay
150	BD Tone
151	SD Tune
152	LT/LC Tune
153	MT/MC Tune

154	HT/HC Tune
160	LT/LC Switch
161	MT/MC Switch
162	HT/HC Switch
163	RS/CL Switch
164	CP/MA Switch

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