Jackbox



Operation Manual







1. Welcome To Jackbox 7R Series!

Welcome and thank you for choosing our Jackbox 7R series devices.

The 7R series, consists of two devices. The 7R-707 Drum Module, and the 7R-727 Perc Module, inspired by the original hardware series TR-707 and TR-727 by Roland. The Rack Extension counterparts, try to mimic the behaviour of the original devices, in terms of UI interface, sounds, and channel grouping. Nevertheless for the time being, they have not pattern sequencer capabilities.

The TR-707 and 727 where essential producer choices, in the days of early Chicago house music. Legendary artists and bands have created some of their most classic tunes using these machines. Artists like Ralphy Rosario, Virgo, Joe Smooth, Larry Heard, Bu-Khan, Phuture to mention just a few.

They can also be found in many early Detroit Techno tracks as well.

For us it was a labour of our love, to bring to bring back, even these stripped down versions of these beautiful machines. As Reason fanatics, and classic house music lovers, it was always a fascinating idea. And it was a long wait.

This manual covers both of the Jackbox devices, since they work in a similar manner.



2. Front Panel

The front panel in both devices, is separated in two parts:

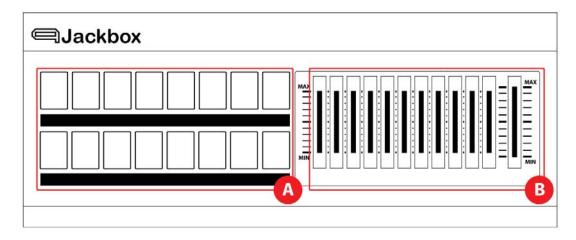


Fig2a: An abstract look to the front panel of both 7R-707 & 7R-727 devices.

- **A.** Drum Pads: The drum pads give you immediate access to the drum sounds of the device. Following the original hardware, the Closed Hi Hat (HC) in 707 and Short Whistle (SWHIS) in 727 have two dedicated trigger buttons.
- **B.** Level Faders: There are three types of level faders that the device uses to control various parameters
 - a. Accent Fader: Found in the leftmost of the fader section, the Accent Fader defines the amount of Accent to use when the Accent automation switch is enabled. Note that "Accent" applies only when playing the drum pads.

The device will use the value of CV Gate In signals and the velocity from MIDI events, to determine the strength (velocity) of the hit.

More information on the Gate Inputs, are provided at Chapter 3 of this manual.

Moreover you can find the drum set MIDI key mapping for each device at APPENDIX I, of this manual.

b. Main Volume: This is found at the rightmost of the fader section. Controls the volume of the entire device.

The main volume control setting does not affect the volume on drums that run through their dedicated outputs.



c. Individual Drum Faders: The ten faders between the Accent and the Main Volume fader, control the volume of the drum sounds, on the device. Most of the faders control one sound, but there are also faders that control two.

For the faders that control grouped sounds, the grouping is similar to the original hardware TR-707 / 727 devices.

Chapters 2.1 and 2.2 discuss the details, of the individual fader names per device and sound groupings.



2.1. The 7R-707 Specifics

The information below are specific to owners of Jackbox 7R-707. For a list of the 7R-727 specifics see section 2.2.



fig. 2.1.a The Jackbox 7R-707 Front Panel

DRUMPADS		
BD1 (BassDrum 1)	LT (Low Tom)	
BD2 (BassDrum 2)	MT (Mid Tom)	
SD1 (SnareDrum 1)	HT (Hi Tom)	
SD2 (SnareDrum 2)	HC (Hihat Closed)	
RIM (RIMshot)	HC (Hihat Closed)	
HCLP (HandCLaP)	OH (Open Hihat)	
TAMB (TAMBurine)	CRASH (CRASH Cymbal)	
COW (COWbell)	RIDE (RIDE Cymbal)	

FADERS / GROUPINGS		
BD (BassDrum)	BD1, BD2	
SD (SnareDrum)	SD1, SD2	
LT (Low Tom)	LT	
MT (Mid Tom)	MT	
HT (Hi Tom)	НТ	
RIM / COW	RIM, COW	
HCLP / TMB	HCLP, TMB	
HH (Hihat)	нс, он	
RIDE	RIDE	
CRASH	CRASH	



2.2. The 7R-727 Specifics

The information below are specific to owners of Jackbox 7R-727. For a list of the 7R-707 specifics see section 2.1.



fig. 2.1.a The Jackbox 7R-707 Front Panel

DRUMPADS		
BONGO HI	HTIMB (Hi TIMBale)	
BONGO LOW	LTIMB (Low TIMBale)	
CONGA HI	HI AGOGO	
CONGA LOW	LOW AGOGO	
CONGA MUTE	CBSA (CaBaSA)	
WHIS (WHIStle) SHORT	MRCAS (MaRaCAS)	
WHIS (WHIStle) SHORT	QJADA (QuiJADA)	
WHIS (WHIStle) LONG	CHIME (Star CHIME)	

FADERS / GROUPINGS		
BG (Bongo)	BONGO HI, LOW	
HC (Hi Conga)	CONGA HI, MUTE	
LC (Low Conga)	CONGA LOW	
HTB (Hi Timbale)	HTIMB	
LTB (Low Timbale)	LTIMB	
AG (Agogo)	AGOGO HI, LOW	
CS / MC	CBSA, MRCAS	
WHIS (Whistle)	WHIS SHORT, LONG	
QJDA (Quijada)	QJADA	
CHIM (Star Chime)	CHIME	



3. Back Panel

The back panel for both devices, like the front, shares some common elements. Here's an abstract schematic, showing the main regions.

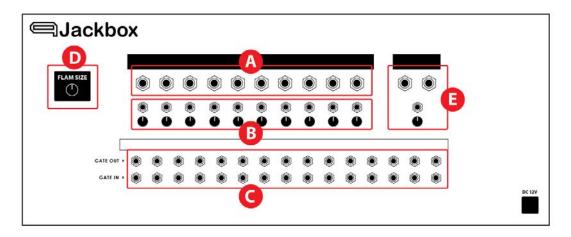


Fig. 3.a. The Jackbox back panel abstract design for both devices.

A. Individual Outputs: Jackbox Devices, expose a set of separate audio outputs, one for each fader of the front panel. Therefore the outputs are labelled after the front fader names, and will carry out their audio signal if -and only if- they are connected.

If an audio output is left disconnected, the signal from its owning fader is passed through the main volume, and finally to the main output.

B. Level CV Inputs: Under each audio output, there is a CV Input jack, that allows you to control the volume of that output, from an external CV source.

The Level CV Input will accept bipolar signals, that will be summed to the current volume of the owning fader.

- **C.** Gate Ins & Outs: Jackbox units also expose a set of gate inputs and outputs, at the back. There is one pair (in & out) for each available drum sound.
 - a. Gate Ins, allow you to trigger single drum sounds using an external sequencer.
 - b. Gate Outs, allow you to connect trigger inputs from other devices, so that they can be controlled whenever a drum sound is played.



- **D.** Flam Size Knob: Jackbox, provides a flam size knob, with which you can control the interval between two individual flam hits.
- **E.** Main Output: This is the device's main output, which is stereo. Note that although the individual outputs are mono, the drum sounds are positioned in the stereo field, when played through the main output.

Right below the stereo outputs, there is a CV Level Modulation Input, which can be used to control the main level of the device from an external source. The CV Input value is summed to that of the main volume.



4. Features

This chapter discusses other features, of the two Jackbox 7R devices.

4.1. Flam And Accent

Jackbox devices, 7R-707 and 7R-727 both support flam and accent functions.

Although there are not any dedicated switches in the front panel for enabling "Accent" and "Flam" functionality, the user has access to them via MIDI control, and Reason's automation.

However, when it comes to setting up each effect parameter, devices provide visual controls on the back and front panel, depending on the original hardware designs.

Under this mindset, The "Accent" (AC) fader, which was originally present next to drum channel faders, in the TR-7x7 series hardware, is present in the rack extension too, while the "Flam Size" switch, which has no dedicated control in the original hardware, is situated at the back panel.

4.2. Drum Sounds, Outputs & Stereo Image

Jackbox devices, use monophonic samples for playback, sampled at 44100Hz.

All individual drum outputs are monophonic too and they provide a flexible way to treat individual drum sounds, using Reason's mix channel strip effects.

However the main output, on both devices, is stereo and each drum sound is positioned in the stereo image.

Please note, that when you connect an individual output drum channel to an external target, in order to playback audio, the sounds associated with it will stop being played back from the main outputs.

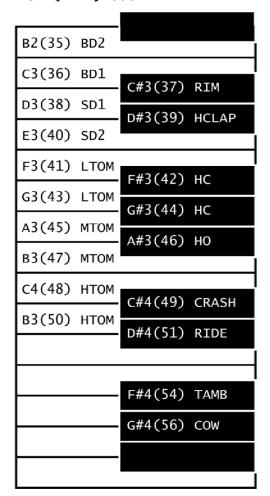


APPENDIX I: MIDI Note Assignments

Al.1: The 7R-707 MIDI Drum Mapping

Keyboard Lookup:

NOTE(MIDI) SOUND



Name Lookup:

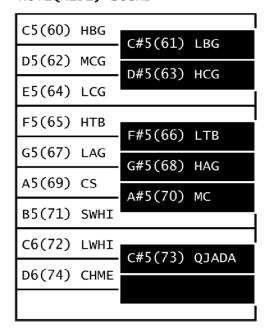
- 1. Bass Drum 2 (BD2): B2 35
- 2. Bass Drum 1 (BD1): C3 36
- 3. Rim Shot (RIM): C#3 37
- 4. Snare 1 (SD1): D3 -38
- 5. Hand Claps (HCLAP): D#3 39
- 6. Snare 2 (SD2): E3 40
- 7. Low Tom (LTOM): F3, G3 41, 43
- 8. Closed Hi Hat (HC): F#3, G#3 42, 44
- 9. Mid Tom (MTOM): A3, B3 45, 47
- 10. Open Hi Hat (HO): A#3 46
- 11. Hi Tom (HTOM): C4, D4 48, 50
- 12. Crash Ride (CRASH): C#4 49
- 13. Ride Cymbal (RIDE): D#4 51
- 14. Tambourine (TAMB): F#4 54
- 15. Cowbell (COW): G#4 56



Al.2: The 7R-727 MIDI Drum Mapping

Keyboard Lookup:

NOTE(MIDI) SOUND



Name Lookup:

- 1. High Bongo (HBG): C5 60
- 2. Low Bongo (LBG): C#5 61
- 3. Mute Conga (MCG): D5 62
- 4. High Conga (HCG): D#5 63
- 5. Low Conga (LCG): E5 64
- 6. High Timbale (HTB): F5 65
- 7. Low Timbale (LTB): F#5 66
- 8. Low Agogo (LAG): G5 67
- 9. High Agogo (HAG): G#5 68
- 10. Cabasa (CS): A5 69
- 11. Maracas (MC): A#5 70
- 12. Short Whistle (SWHIS): B5 71
- 13. Long Whistle (LWHIS): C6 72
- 14. Quijada (QJADA): C#6 73
- 15. Star Chime (CHME): D6 74



APPENDIX II: MIDI CC

MIDI CC	7R-707	7R-727
4	Accent Volume	
7	Volume	
67	Accent	
68	Flam	
128	BD Volume	BG Volume
129	SD Volume	HC Volume
130	LT Volume	LC Volume
131	MT Volume	HTB Volume
132	HT Volume	LTB Volume
133	RIM / COW Volume	AG Volume
134	HCLP / TAMB Volume	CS/MC Volume
135	HH Volume	WHIS Volume
136	RIDE Volume	QJADA Volume
137	CRASH Volume	CHIME Volume



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