Oenkenstein Audio

KLANK SINGING BOWLS GENERATOR

Operation Manual

Introduction

What is Klank?

Klank is a singing bowls generator.

This Rack Extension has recordings of four different singing bowls, a metal lid and a glass stored in a sample bank. It has a ten channel mixer with controls for release, panning, tuning and fine tuning.

The singing bowls ranges from big to small in size. The two big bowls produce the lowest frequency and the little bowl together with the glass the highest frequency.

The sound of a singing bowl can be divided in stages: The attack phase where the bowl gets hit with different sticks at various velocity levels, the sustain phase and the resonance phase where the bowl is rubbed and finally muted with the hand. These stages of the two big bowls and the little bowl are recorded and are assigned to independent mixer channels. Klank Singing Bowls Generator comes with 31 patches, made for sessions with different settings of the bowls, like tuning and level.

Front of the device

- **Panel overview**
  - **Bowls Level / Release / Pan / Tune / Fine Tune Panel (1)** with:
    - Two Big Bowls.
    - One Middle sized Bowl.
    - One Little Bowl.
    - One Metal Lid.
    - One Glass.
    - Master Level.
    - Convolutiuon Reverb with a modulation routing slot.
  - **Device Label and MIDI Note indicator (2)**.
  - **Patch Browser (3)**.

- **Bowls Level / Release / Pan / Tune / Fine Tune panel**

Klank has a panel with different sections for the two big bowls, the middle sized bowl, the litlle bowl, the metal lid, the glass and a master level secton with a convolution reverb. The sections have one or more mixer channels. Each mixer channel has controls for the channels Level, Release time, Panning, Tuning and Fine Tuning of the instruments.

Section 1 - 6: Bowls and Master Sections

The first Big Bowl in the mixer was recorded at the small home studio of mister Lippe.

Mister Zdenek played two different bowls, the Big Bowl (the second big bowl in the mixer) and the Middle Bowl.

The Little Bowl, Metal Lid and the Glass were recorded in the home studio of Oenkenstein Audio.

Play a note on a MIDI keyboard and hold the note as long you want to hear the bowls audio output from the Klank Singing Bowls Generator and use the controllers on the panel to change the sound. The recordings last between 1 second (Glass) and 1 minute (Big Bowl Milko). There are 6 controllers (1 – 6) for the Big Bowls section and 5 controllers (2 – 6) for the Middle Bowl, the Litlle Bowl, the Metal Lid and the Glass.

- **Swap Big Bowls (1)**: Determines which big bowl will be played on the next note. When the switch is turned Off, the first big bowl (Lippe) on the left will be played. When the switch is turned On, the second big bowl (Zdenek) on the right will be played (Scale: On / Off. Default: Off).
- **Level (2)**: The mixer channel fader controls the volume of the selected bowl. The extra white line in the scale of the fader indicates 0 dB (Scale: - ∞ / + 12,0 dB. Default: - 6,1 dB).
- **Release (3):** Determines the release of the bowl. Use a low value for a short release or 'plucky' sound and a high amount for longer duration (Scale: 0 / 100. Default: 100).
- **Pan (4)**: Determines the panning of the bowl (Scale: - 50 Left / +50 Right. Default: 0).
- **Tune (5)**: Determines the tuning or pitch of a bowl in semitones. 12 semitones is 1 octave. (Scale: -36 / +36. Default: 0).
- **Fine Tune (6)**: Determines the fine tuning of a bowl in cents. 50 cents is 1 semitone (Scale: - 50 / +50. Default: 0).
- **Master level (7)**: Determines the master volume (Scale: - ∞ / + 12,0 dB. Default: - 6,1 dB).
- **Convolution Mode (8)**: A convolution reverb works with Impulse Responses (IR). These are short samples and hold information about a space or device. Convolution Mode determines which IR is loaded in the reverb (Scale: Spread, EMS, Spring, Vocal, Room and Hall. Default: Spread).
- **Convolution Pre Delay (9)**: Determines the initial delay time before reverb (Scale: 0% / 100%. Default: 0%).
- **Convolution Decay (10)**: Applies a volume ramp (decreasing or increasing) to the impulse to adjust the perceived reverb time (Scale: 0% of 18 dB / 100% of 18dB. Default: 0% of 18 dB).
- **Convolution Mix (11)**: Mix between dry and wet signal. (Scale: 0% / 100%. Default: 0%).
- **Convolution Mix Mod Amount (12)**: Determines the amount of modulation for the Convolution Mix (Scale: - 100 / + 100. Default: 0).
- **Convolution Mix Mod Source (13)**: Determines the source of modulation for the Convolution Mix (Scale: Constant, Pitch Bend, Aftertouch and Modulation Wheel. Default: Constant). For example: Set the Convolution Mix Mod Source to Modulation Wheel (MW) and the

Convolution Mix Mod Amount to + 100. The Convolution Reverb Mix will only be heard when a note is played and the Modulation Wheel is turned upwards.

Back of the device

- **CV Input / CV Through / CV Output / Audio Output panel**

The back panel of the Klank Singing Bowls Generator is designed to make the device modular. It has 30 CV Inputs and 30 CV Throughs to control the Level, Panning and Tuning of all the channels. 2 CV Inputs are sequencer control inputs (Gate CV and Note CV) and 2 CV Outputs for Velocity and Key.

- **Channel 1 – 10 Level CV Input and Channel 1 – 10 Level CV Through (1)**: Control Voltage Input sockets to control the channels Level. The Trim knobs below the input sockets determines the amount of CV applied. The Control Voltage Through sockets passes the incoming Level CV Input to another CV Input socket.
- **Channel 1 – 10 Pan CV Input and Channel 1 – 10 Pan CV Through (2)**: Control Voltage Input sockets to control the channels Panning. The Trim knobs below the input sockets determines the amount of CV applied. The Control Voltage Through sockets passes the incoming Pan CV Input to another CV Input socket.
- **Channel 1 – 10 Tune CV Input and Channel 1 – 10 Tune CV Through (3)**: Control Voltage Input sockets to control the channels Tuning. The Trim knobs below the input sockets determines the amount of CV applied. The Control Voltage Through sockets passes the incoming Tune CV Input to another CV Input socket.
- **Sequencer Control inputs (4)**: The Gate CV and Note CV inputs allow you to play Klank from another CV / Gate device (typically a Matrix or an RPG-8). The signal to the Note CV input controls the note pitch, while the signal to the Gate CV input delivers note on/off along with velocity.
- **Velocity and Key CV Out (5)**: Control Voltage Output sockets for Velocity and Key.

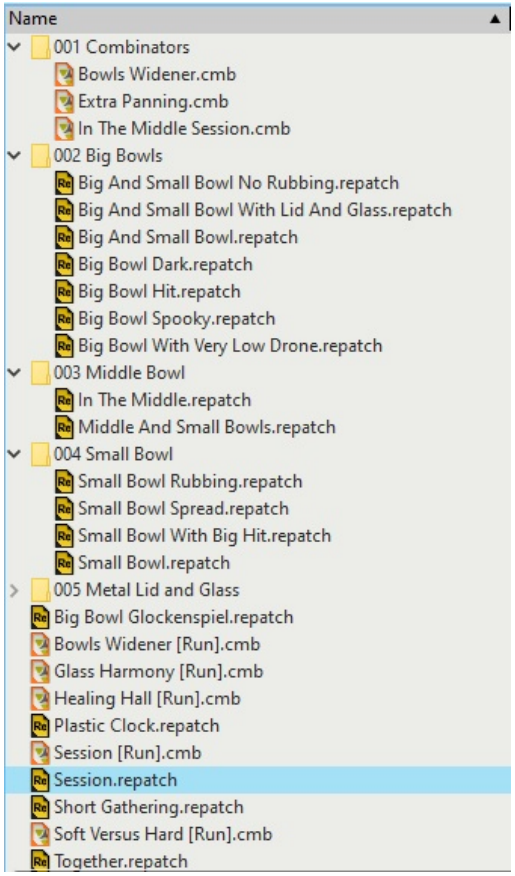
- **Audio Output (6)**: These are the main audio outputs. When you create a new Klank device, these outputs are auto-routed to the first available channel in the Reason main mixer.

Patch Browser

Loading and saving patches

Loading and saving patches is done in the same way as with any other internal Reason device. See the “Sounds and Patches” chapter in the Reason Operation Manual.pdf for details.

Patch list



Credits

- Mister Zdenek, providing two singing bowls.
- Mister Robert Kwakkelstein, recording Mister Zdenek.
- Mister Milko Lippe, providing a big bowl and microphones.
- Mister Ronald, providing the little bowl.
- Reason Studios for their support.
- The beta testers.

Appendixes

- **MIDI Implementation Chart**

MIDI CC

[12] = Swap_Big_Bowls
[13] = Channel_1_Level
[14] = Channel_2_Level
[15] = Channel_3_Level
[16] = Channel_4_Level
[17] = Channel_5_Level
[18] = Channel_6_Level
[19] = Channel_7_Level
[20] = Channel_8_Level
[21] = Channel_9_Level
[22] = Channel_10_Level
[23] = Channel_1_Release
[24] = Channel_2_Release
[25] = Channel_3_Release
[26] = Channel_4_Release
[27] = Channel_5_Release
[28] = Channel_6_Release
[29] = Channel_7_Release
[30] = Channel_8_Release
[31] = Channel_9_Release
[33] = Channel_10_Release
[34] = Channel_1_Pan
[35] = Channel_2_Pan
[36] = Channel_3_Pan
[37] = Channel_4_Pan
[39] = Channel_5_Pan
[40] = Channel_6_Pan
[41] = Channel_7_Pan
[42] = Channel_8_Pan
[43] = Channel_9_Pan
[44] = Channel_10_Pan
[45] = Channel_1_Tune
[46] = Channel_2_Tune
[47] = Channel_3_Tune
[48] = Channel_4_Tune
[49] = Channel_5_Tune
[50] = Channel_6_Tune
[51] = Channel_7_Tune
[52] = Channel_8_Tune
[53] = Channel_9_Tune
[54] = Channel_10_Tune
[55] = Channel_1_Fine_Tune
[56] = Channel_2_Fine_Tune
[57] = Channel_3_Fine_Tune
[58] = Channel_4_Fine_Tune
[59] = Channel_5_Fine_Tune

[60] = Channel_6_Fine_Tune
[61] = Channel_7_Fine_Tune
[62] = Channel_8_Fine_Tune
[63] = Channel_9_Fine_Tune
[65] = Channel_10_Fine_Tune
[66] = Master_Level
[67] = Convolution_Mode
[68] = Convolution_Pre_Delay
[69] = Convolution_Decay
[70] = Convolution_Mix
[71] = Convolution_Mix_Mod_Amount
[72] = Convolution_Mix_Mod_Source

- **Remote items list**

Scope Oenkenstein Audio com.wordpress.oenkenstein.KLANK
Property Name
Swap Big Bowls
Channel 1 Level
Channel 2 Level
Channel 3 Level
Channel 1 Release
Channel 2 Release
Channel 3 Release
Channel 1 Pan
Channel 2 Pan
Channel 3 Pan
Channel 1 Tune
Channel 2 Tune
Channel 3 Tune
Channel 1 Fine Tune
Channel 2 Fine Tune
Channel 3 Fine Tune
Channel 4 Level
Channel 4 Release
Channel 4 Pan
Channel 4 Tune
Channel 4 Fine Tune
Channel 5 Level
Channel 6 Level
Channel 7 Level
Channel 8 Level
Channel 5 Release
Channel 6 Release
Channel 7 Release
Channel 8 Release
Channel 5 Pan
Channel 6 Pan
Channel 7 Pan
Channel 8 Pan
Channel 5 Tune

Channel 6 Tune
Channel 7 Tune
Channel 8 Tune
Channel 5 Fine Tune
Channel 6 Fine Tune
Channel 7 Fine Tune
Channel 8 Fine Tune
Channel 9 Level
Channel 9 Release
Channel 9 Pan
Channel 9 Tune
Channel 9 Fine Tune
Channel 10 Level
Channel 10 Release
Channel 10 Pan
Channel 10 Tune
Channel 10 Fine Tune
Master Level
Reverb Mode
Reverb Pre Delay
Reverb Decay
Reverb Mix
Reverb Mix Mod Amount
Reverb Mix Mod Source
Mod Wheel
Breath Control
Expression
Sustain Pedal
Aftertouch
Pitch Bend
Device Name
Patch Name
Select Patch Delta
Select Previous Patch
Select Next Patch