

# GJENGANGAR v2

Gjengangar v2 is an experimental gate delay with some unique capabilities. The delay features a gate and an effect loop allowing dynamic feedback control and the option to integrate other pedals to its circuit for interesting results. Gjengangar v2 is an original circuit build around the popular PT2399 delay chip. As this is a medium fidelity delay, some grit and character should be expected. Compared to the first generation Gjengangar, the v2 sports an increased delay range, an active tone control, a release knob and a switch to alter the effect loops mode of operation.

## Controls

### **TIME:**

Sets the delay time. ~60 to ~800ms. Gjengangar utilizes two PT2399 chips for improved fidelity. Consequently you wont hear much signal degradation at longer delay times (see TONE). An internal trim-pot (top left) can be adjusted to increase the maximum delay time (up to ~1500ms). This expands beyond Gjengangars intended delay range. Distinct signal degradation should be expected. Increasing the delay time internally might skew the linearity of the TIME knob.

### **TONE:**

Sets the tone of the repeats. Dark, mild or very bright. The tone control is to some degree interactive with the feedback and mix knobs. Using the brightest tone option can cause distinct signal degradation at longer delay times. This tone option is included as it can sound great on drum machines or other percussive sounds without tonal content.

### **FEED:**

Sets the delay feedback/regeneration. From a single repeat to runaway feedback.

### **MIX:**

Sets the delay level from silence to somewhere around +6dB depending on the feedback intensity. With effects in the Send/Return-loop, and the LOOP toggle set to DIR (direct) MIX also sets the balance between dry signal and loop signal. From all dry to all loop. This way Gjengangar can be used as an effect-blender.

### **THOLD:**

Sets the threshold for the gate to open. MIN: always open. MAX: always shut. When the gate is open delay level and feedback is set by their respective knobs. When the gate is shut the delay and

feedback loop is muted. By holding down the foot switch for more than ~600ms the gate can momentarily be opened, overriding the THOLD knob until the foot switch is released. Bypassing the pedal closes the gate.

#### **RLEAS:**

Sets the gate release. The duration the gate remain open after the input drops below the gate threshold. From 10ms to approx. 1.5s.

#### **SOFT:**

Sets the gate softness. The speed at which the gate shifts between open and shut. Chose between fast, medium and slow propagation.

#### **S/R (plugs) & LOOP DIR/REP:**

Gjengangar has a send/return-loop for integrating external effects. When LOOP is set to DIR (direct) effects in the loop will be applied to the delay repeats and the direct signal (see MIX knob operation). Think of it as a delayed feedback-looper. When LOOP is set to REP (repeats) effects in the loop will be applied to the delay repeats only, similarly to other delay pedals with effect loops.

#### **TAIL:**

Choose between relay-based true bypass (toggle down) and a buffered bypass. There will be a delay tail (dependent on the softness setting of the gate) when bypassing in buffered mode. If LOOP is set to DIR any effects in the S/R-loop will remain active, and blended with the dry signal according to the MIX-knob when the pedal is in buffered bypass mode.

#### **Bypass Switch:**

The effect can be momentarily engaged by holding down the foot switch (also see THOLD).

#### **Internal Polarity Switch:**

Hear a drop in signal level with effects in the S/R-loop and LOOP set to DIR? Try switch the internal toggle. This will reverse (Ø) the phase of the loop-signal and hopefully eliminate the issue.

#### **A note on adjusting internal parameters:**

Take care when adjusting the internal parameters. Make sure you aren't charged with static electricity, keep the pedal away from liquids and do not touch any part of the circuit board other than the switch/trimmer you are adjusting. If available use a small screwdriver or other tool instead of your fingers. Electronic circuits are sensitive.

## Sample Settings / Understanding the Pedal

Gate: High THOLD, Med RLEAS, Med SOFT

Delay: Long TIME, ~Max FEED

*A single stroke will produce a repeating phrase escalating in intensity (towards runaway feedback) and then drop to silence. Light playing will not trigger the gate. This setting can be used to emphasize key notes.*

Gate: Low THOLD, Short RLEAS, Min SOFT

Delay: Short TIME, ~Max FEED

*Sustaining a note will keep the gate open. Muting the string will then instantly close the gate. This is a good setting for getting a feel on how to control the gate with your playing style. Works well with staccato playing.*

Gate: Medium THOLD, Short RLEAS, Max SOFT

Delay: Long TIME, ~Max FEED

*Playing dynamically can produce a “breathing” delay. Gradually increasing and decreasing feedback intensity from and towards run-away feedback.*

Gate: Min THOLD

*Effectively removes the gate leaving you with a pretty normal delay pedal.*

## Technical Specs

Input impedance: 1 M $\Omega$

Output impedance: ~1 k $\Omega$

Current: ~85 mA

Voltage: 9V DC center negative (Normal Boss/Ibanez/1Spot power supply)

Does not support battery operation

Weight: 375 g

Dimensions: 120 mm x 96 mm x 57 mm