

# STRATUM

DUAL CLASSIC OVERDRIVE V2



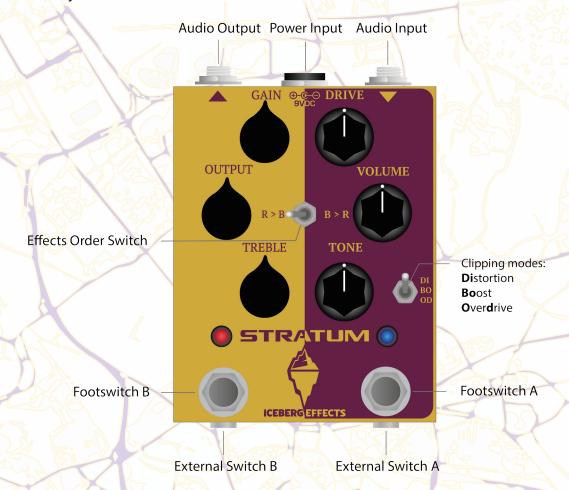
**USER MANUAL** 

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### **Stratum Controls**

The Stratum pedal is a dual overdrive, meaning it has two overdrive effects in one enclosure. The right side is based on the Analogman Prince of Tone (side A), the left side on the Klon Centaur (side B). Both sides can be enabled individually or work together when both engaged. This allows for a wide variety of tones.



Audio Input Connect the Stratum pedal to your guitar or another effect pedal using a 6.35mm (1/4") mono TS audio cable.

Audio Output Connect the stratum to your amp or other effect pedals using a 6.35mm (1/4") mono TS audio cable.

Power input Use a 9V power supply with a 2.1mm center negative plug to power the Stratum pedal. The pedal has an internal charge pump that raises the voltage to 18V. This charge pump will be damaged when connecting the pedal to voltages higher than 9V, thus **only use a 9V power supply!** The pedal draws a current of maximum 150 mA, use a power supply that can supply at least this amount of current.

Effects Order Switch This toggle switch sets which of the two effects comes first. Set to the right (Blue into Red, B > R), the audio input is first sent to the Bluesbreaker side (side A, Blue LED) and then to the Klon side (side B, Red LED), before being sent to the Audio output. Set the effect order switch to the left (Red into Blue) to have the order of the effects reversed and letting the Klon side go before the Bluesbreaker side. The effects order switch only has an impact on the sound when both effects are enabled. Go and try it and see which effects order you like best.

Footswitch A This footswitch engages and disengages the Bluesbreaker side (side A) of the pedal. When disengaged, the effect is completely bypassed and will not have an influence on the sound (True Bypass). When engaged, the blue LED will light up, when disengaged the blue LED will be off.

Drive This control sets the amount of overdrive/distortion for the Bluesbreaker side of the pedal. Turning it up will cause the effect to have more overdrive and get louder. The amount of overdrive is also dependent on the position of the clipping switch.

Volume The Volume knob sets the output volume level for the Bluesbreaker side.

Tone The Tone knob sets the amount of high frequencies in the Bluesbreaker side output signal. Turn it to the left to make the sound darker, turn it to the right to make it brighter.

Clipping Modes This toggle switch sets the clipping mode for the Bluesbreaker side:

Distortion: Uses hard clipping for a more distorted sound. Setting the pedal to distortion mode will give the Bluesbreaker side less output volume. This is part of the design and perfectly normal

**Bo**ost: In Boost mode, there is no clipping for the Bluesbreaker side apart from the natural clipping of the opamp chip. Use this setting to use the Bluesbreaker side as a boost (into the Klon side or just to push your amp a bit harder).

OverDrive: Use this setting to use the Bluesbreaker side in overdrive mode. In Overdrive mode, soft clipping is applied, giving a more amp-like overdrive compared to the distortion mode.

Footswitch B This footswitch engages and disengages the Klon side (side B) of the pedal. When disengaged, the effect is passed via the internal buffer circuit, like in the original Klon Centaur pedals (Buffered Bypass). This guarantees that the higher frequencies in the guitar signal are mantained, even when running long guitar cables or many effects pedals. When engaged, the red LED will light up, when disengaged the red LED will be off.

Gain The Gain knob sets the gain for the Klon side. Like in the original Klon pedal, turning up the gain control simultaneously increases the gain and lowers the blend of clean signal. At the minimum gain setting, you'll only hear the clean signal. At maximum gain, you'll get the saturated clipped sound without any clean signal blended in.

Output The Output knob sets the output volume level for the Klon side, simple as that. It has quite a lot of volume on tap, making the Klon side very suitable for use as a boost.

Treble The Treble knob sets the amount of high frequencies in the Klon side output signal. Turn it to the left to make the sound darker, turn it to the right to make it brighter.

Presence (internal) The pedal has an internal trimpot for presence, controlling the amount of high frequencies in the guitar signal for the Bluesbreaker side. This trimpot works together with the Tone knob. If you are using very dark or very bright guitars and/or amps and using the Tone knob alone is not doing enough, then the presence control can be used for further adjustment. Turn in to the left to make it darker or to the right to make it brighter. This requires opening pedal by undoing the screws on the back of the pedal. We suggest to only do this when the pedal is not connected to the power supply.

9V – 18V Switch (internal) The Bluesbreaker side can either be run at 9V (default) or 18V. The supply voltage can be set using the internal switch. Running the pedal at 18V gives it more volume and headroom (giving it less overdrive/distortion compared to the 9V mode). This is useful, especially when using the Bluesbreaker side as a boost or when using the pedal on bass guitar.

This requires opening pedal by undoing the screws on the back of the pedal. We suggest to only do this when the pedal is not connected to the power supply.

External Switch A This input port provides the option of externally trigger footswitch A, thereby enabling/disabling the Bluesbreaker side of the pedal. This port can be used for connecting the Stratum pedal to other Iceberg Effects pedals. Use a 3.5mm TS or TRS cable to connect the pedals. More detailed information can be found in the section 'External Footswitch Bypass: Linking Pedals'.

**External Switch B** This input port provides the option of externally trigger footswitch B, thereby enabling/disabling the Klon side of the pedal. This port can be used for connecting the Stratum pedal to other Iceberg Effects pedals. Use a 3.5mm TS or TRS cable to connect the pedals. More detailed information can be found in the section 'External Footswitch Bypass: Linking Pedals'.

# **Stratum Relay Bypass System**

The Stratum effects pedal is equipped with a relay-based bypass system for both footswitches. This gives the Stratum the option of using 5 different bypass modes.

### **Bypass modes**

The following four footswitch bypass modes can be used:

#### **Normal Mode (default)**

In normal mode, the footswitches work like in any other dual footswitch pedal; footswitch A turns effect A (Bluesbreaker) on and off, footswitch B enables and disables effect B (Klon). Simple as that. Fresh out of the box, Normal mode is the selected mode.

### **One-at-a-time Mode**

You are in the middle of a song and you want to switch from one effect to the other with just one footswitch stomp? We got you! In One-at-a-time Mode, enabling an effect will automatically disable the other effect, if that effect is on. You can have both effects off at the same time, but not switched on simultaneously.

#### **One-at-a-time Linked Mode**

This mode works the same as the One-at-a-time Mode, but it also sets the external bypass mode for both footswitches to One-at-a-time Mode. This is useful for when linking the Stratum bypass system to that of another Iceberg Effects pedal. When linked, all the pedals will operate together in One-at-a-time Mode, so engaging one (side of the pedal) can automatically disengage the other pedal and vice versa. When you are not linking pedals together, the One-at-a-time Linked Mode works the same as the One-at-a-time Mode.

#### **Always-on Mode**

You are enjoying your Stratum pedal so much that you never want to switch it off? We understand. In always-on mode, at least one side of the pedal is enabled. Disabling the effect that is switched on will automatically engage the effect that is off. Enabling the effect that is off will give both effects at the same time. This allows you to toggle between the two effects with one stomp but also have both effects on at the same time.

### **Toggle mode**

You don't want to worry about stomping on the wrong footswitch whilst in the middle of the guitar solo of your life? Or you want to be able to bypass or enable both effects simultaneously with just one footswitch stomp? Then the Toggle Mode might be just for you. In Toggle mMode, the footswitch that is not pressed automatically follows the footswitch that is pressed. What that means depends on the footswitch states before entering Toggle. If one effect is on and the other is off, pressing either footswitch will reverse the their bypass states. When both effects are on or off, pressing either footswitch will turn both effects on and off at the same time.

### **Switching Between Bypass Modes**

To switch between the different footswitch bypass modes:

◆ Hold both footswitches at the same time until one or both LED's start blinking. The LED's indicate the currently selected bypass mode.

BLUE = Normal Mode

RED = One-at-a-time Mode

RED FAST BLINKING = One-at-a-time Linked Mode

RED + BLUE = Always-on Mode

RED + BLUE FAST BLINKING = Toggle Mode

- Release the footswitches.
- Use Footswitch B to scroll through the 5 different modes. The LED's will change according to the selected mode.
- Once the desired mode is selected, use Footswitch A to confirm. The bypass mode is now set and the footswitch bypass states are set accordingly

The pedal remembers the selected bypass mode during pedal power-down, so that next time you use it, it will automatically set the bypass mode. When powering up the pedal, the LED's will briefly blink to indicate the selected bypass mode. The bypass states of each footswitch are also stored in the pedal's memory, so that when you power up the pedal, you can start where you left the pedal before switching it off.

# **Footswitch Momentary Mode**

The Stratum relay bypass system makes use of a momentary function. If one of the footswitches is held for more than 400 miliseconds, the momentary function is enabled and when releasing the footswitch, the footswitch state will go back to the state that was enabled before holding the footswitch. The momentary mode is useful when you want to only briefly engage the effect.

By default, the momentary function is enabled. If you want to disable the momentary mode, follow the instructions below:

- Hold Footswitch A while powering up the pedal for more than two seconds. LED A will first blink rapidly (to set the external bypass mode, see next chapter). After two seconds, LED A will blink less frequent. The footswitch can no be released.
- When releasing the footswitch, the Momentary mode is adjusted. When the Momentary mode was enabled, it will now be disabled, and vice versa. LED A will blink to indicate the Momentary Mode status:

BLINK ONCE: Momentary mode disabled BLINK TWICE: Momentary mode enabled

The selected momentary mode is stored in the pedal's memory, so that it is set to your preference the next time you use the pedal.

The momentary mode works together with the bypass mode. This means you can temporarily switch between the two effects by holding one of the footswitches, depending on the bypass mode that is selected. This is also the case when multiple pedals are linked together. Holding a footswitch of one pedal can temporarily disengage another pedal (depending on the selected bypass mode and external bypass modes).

# **External Footswitch Bypass: Linking pedals**

The Stratum effects pedal is equiped with two ports for externally triggering the footswitches; there is one port for each footswitch. These ports allow you two link two Iceberg Effects pedals together and have the footswitches of the two pedals work together! This for example allows you to automatically enable one effect when disabling another. The external bypass modes that can be used between the linked pedals are the same as the pedal internal bypass modes described on the previous page. Linking the two pedals can be done by using a 3.5mm TS or TRS cable (only the tip carries signal). When linking pedals, make sure to select the same external bypass mode for the footswitches that are connected.



# **Setting External Bypass Mode Footswitch A**

To set the external footswitch bypass mode, follow these steps:

- Hold Footswitch A while powering up the pedal for no longer than two seconds. LED A will blink rapidly.
- When releasing the footswitch, the LED's will indicate the currently selected external bypass mode for Footswitch A

RED = One-at-a-time Mode

RED + BLUE = Always-on Mode

RED + BLUE FAST BLINKING = Toggle Mode (Default)

- Use Footswitch B to scroll through the 3 different modes. The LED's will change according to the selected mode.
- Once the desired mode is selected, use Footswitch A to confirm. The external bypass mode for Footswitch A is now set.

The pedal will now continue it's start-up routine and is ready for use. The external bypass mode is saved in the pedal memory and will be automatically set the next time you power up the pedal.

### **Setting External Bypass Mode Footswitch B**

The procedure for setting the external bypass mode for Footswitch B is the same as for Footswitch A, but this time holding footswitch B while powering up the pedal.

# **Examples of linking pedals**

This section shows a few examples of how the bypass systems of different Iceberg Effects pedals can be linked together. There are many different combinations possible; experiment and see what combination works best for your situation!

## Toggle between two effects (default)



When leaving the Stratum pedal in its default settings and connecting it to another Iceberg effects pedal (the Strijp in this example), pressing the connected footswitch (footswitch A of the Stratum and footswitch B of the Strijp in this example), will either toggle between the two effects or

engage/disengage both pedals at the same time, depending on the footswitch state before connecting the pedals together.

- Stratum Footswitch A state = Strijp Footswitch B state before linking via 3.5mm cable: either of the two footswitches will enable/disable both effects at the same time
- Stratum Footswitch A state =/= Strijp Footswitch B state before linking via 3.5mm cable: either of the two footswitches will toggle between the two effects

In this example, Stratum footswitch B and Strijp Footswitch A are not linked and work individually like on any other pedal.

### **Double Toggle**



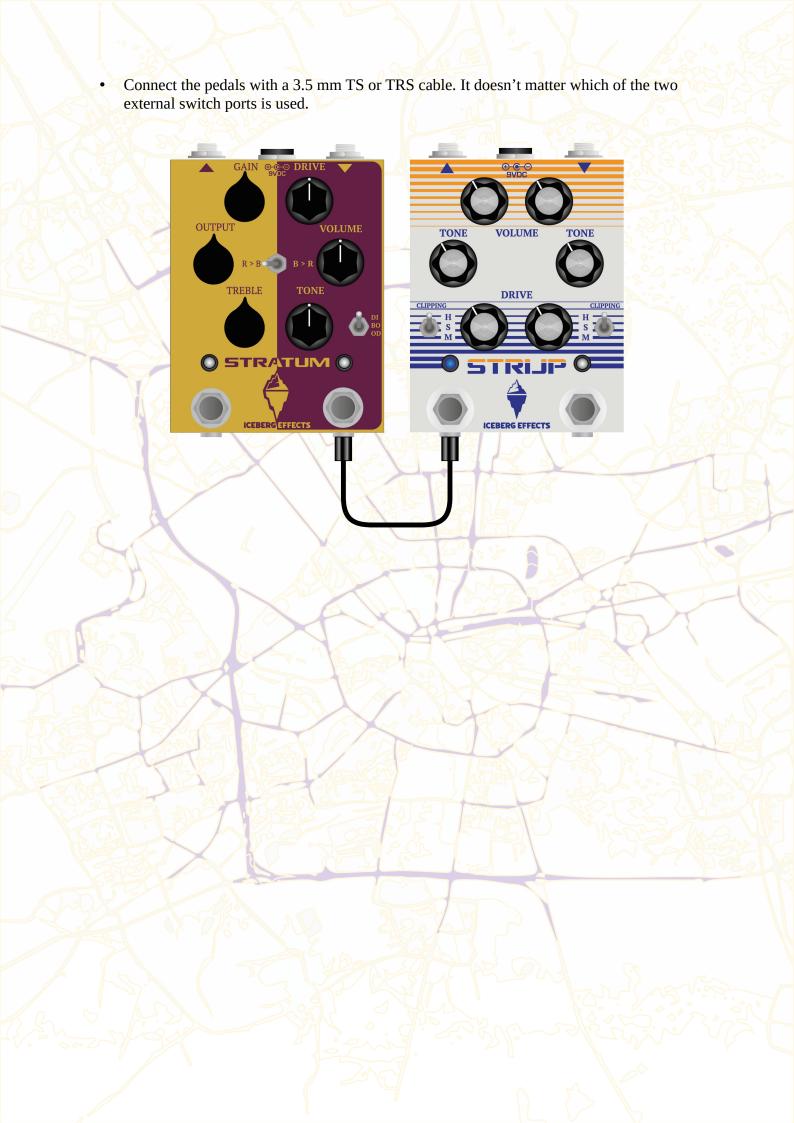
You want to take the toggling experience one step further? Why not use two 3.5mm cables and connect both sides of the pedals? When leaving the bypass mode and external bypass modes in default (Normal and Toggle, respectively), pressing any of the connected footswitches will toggle between those effects.

### **One-at-a-time Linked Mode**

You don't really stack your overdrives and want to use only one effect at a time? Try the One-at-a-time Linked Mode. Engaging any effect will automatically disengage any other effect that is on.

To use this mode:

Set each pedal to One-at-a-time Linked Mode (see section Changing Bypass Modes)



# **Bypass Mode Cheat Sheet**

Hold left footswitch while powering up pedal:

- Release footswitch to go to Footswitch A external bypass mode selection
- Set external bypass mode using left and right footswitch, see Change Bypass Mode



Hold right footswitch while powering up pedal:

#### < 2 seconds

- BLUE LED blinks rapidly
- Release footswitch to go to Footswitch A external bypass mode selection
- Set external bypass mode using left and right footswitch, see Change Bypass Mode

#### > 2 seconds

Releasing footswitch will toggle between Momentary mode on and off. LED will blink once for off, twice for on.

### **Change Bypass Mode:**

- Hold both Footswitches until LED's blink
- Release footswitches
- Use left footswitch to scroll through bypass modes
- Use right footswitch to confirm

### Blinking LED's indicate selected bypass mode:

**BLUE: Normal Mode** 

RED: One-at-a-time Mode

**RED FAST:** One-at-a-time Linked Mode

RED + BLUE: Always-on Mode RED + BLUE FAST: Toggle Mode