JAX SR (SELECTIVE RANGE)
FLANGER
(AudioUnit)

MANUAL

The JAX SELECTIVE RANGE SERIES

The JAX SR Series of AudioUnits are based on the very special approach of applying audio effects merely to a selected frequency range of the audio stream.

Commonly effects will be applied to the complete frequency range of the audio material, which mostly produces strange side effects and suboptimal results, especially with multi-timbre and polyphonic mixes.

By applying effects of any kind, like for instance phasers, chorusses or flangers to a well separated frequency range, the sonic results can be widely optimized and improved. This technique also can be used for mastering and effective audio correction tasks, where certain ranges need special adjustments or exitement, leaving other areas unchanged.

Tip: Applying a Flanger or phaser effect for instance to separated higher frequency ranges can make your mixes shine due to adding ‚airy‘ frequency content in a more or less subtile way. Static sounding mixes can be vitalized for sounding amazing finally.

Achieving similar results with common bus routing techniques is possible, but actually would require loads of switches, resources, a certain plan and effort. With our selective range audio processors this can be achieved very easy and fast, with great results out of the box.

Heart of the effect processors is the graphical frequency range adjustor, a touch bar, for the effective processing

range. 3 analog modelled filters will split the audio stream into wide, overlapping frequency bands, controlled by the 2 split points (LP and HP), whereby only the resulting center band (BP) will be processed by the attached audio effect.

All other frequencies (the area outside the center processing band) will be passed thru unchanged. The effective processing band can be moved freely to cover any desired frequency range of the audio stream.

The final audio output will then be re-constructed from the 3 band frequency split, after the desired effect was applied.

Additionally a global dry/wet parameter allows to mix the final result between original (unchanged) input signal and the processing result to any amount.

All parameters in our SELECTIVE RANGE Series have got an inbuilt direct MIDI controller assignment for using with external MIDI controllers and automation data via MIDI streams.

Our JAX SR Series are a new generation real universal AudioUnits, available across all modern Apple devices, the iPhone, iPad, including the (native) M1 and Intel processors on the macOS. Basically the same audio units can be used with Logic Pro, MainStage 3, GarageBand and any other host application on the mac, supporting AUv3 audio units. The preset format, which are human readable standard Apple *.plist files also can be exchanged across devices this way. We took special care of the ‚auval' validation process on macOS to ensure maximum compatibility. Please note, that legacy AUv2 hosts are not supported.

JAX SR FLANGER

The JAX SR Series Flanger is a classical delay buffer based stereo Flanger effect and has the following parameters :

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- **depth** - the intensity of the cyclic pitch modulation

- **delay** - basically the buffer size of the internal modulation delay buffer, larger buffers will make the delay effect clearly audible, small buffers will deliver more flanging -alike effects

- **feedback** - how much of the modulated signal is feed back to the input of the processor, this will emphasize some frequencies and often result in a certain ‚tonal' effect, dependent from the frequencies. the feedback parameter is bi-directional with the zero at center position.

- **panning** - global pan adjustment for the added modulated signal, the LFO signal flow is stereo

- **dry/wet** - a percentage of the mix between the original input and the final output signal

Page 2 (LFO)

- **LFO frequency** - the speed of the low frequency oscillator, lower adjustment will make the result smooth and phase shifting, resulting in widening and movement

- **LFO randomness** - parameter for ‚humanizing‘ the cyclic modulation for preventing too much static repeated behavior

- **LFO shape** - the shape of the low frequency oscillator, (currently sine and triangle are supported)

- **stereo** - stereo spread (phase) adjustment for the stereo LFO