# Syrah

FLUX:: Immersive

2/6/23

# Table of contents

# 1 Syrah

### 1.0.1 The Creative adaptive-dynamics processor

Product Page | Shop Page

Thank you for using Syrah. We hope that you will get good use of the information found in this manual, and to help you getting acquainted with Syrah we have included a basic walk through in the end of the document.

# 2 Introduction

When we started sketching our new plug-in project, our aim was to create a versatile and truly musical dynamics processor, which handles the dynamics in a way that allows you to be creative, without a complicated user interface.
The result is Syrah, a new generation dynamics processor utilizing real time dynamic detection and level dependent processing, providing adaptive dynamic capabilities, which mean that Syrah is always trying to adapt to the music and to the beat of the material.
Using parts of our exquisite 'BitterSweet' technology, our new adaptive-dynamics technology, and our well-recognized level independent dynamics processing, Syrah will be well suited as a creative versatile processor for recording and mixing, as well as for delicate and demanding mastering tasks.

# 3 User Interface

As you may notice, the controls are not the usual suspects found on a dynamics processor (I/O Gain, Dry Mix and Clipper excepted).
Instead, the controls provided typically affect more than one parameter in the underlying algorithms, with everything carefully tweaked allowing for creative processing still ensuring the finest sound achievable.

# 4 Input Output Section

## 4.1 Input Gain (1)

Controls the gain applied to the dynamic processing input. This setting may affect the dynamics signal detection.

Unit: Decibel (dB)
Range: -48.00 to +48.
Min. Steps: 0.
Default Value: 0.

## 4.2 Output Gain (2)

Controls the gain at the output stage of the dynamic processing, right before the Clipper (and the Clipper is the last, final step, in the entire processing chain).

Unit: Decibel (dB)
Range: -48.00 to +48.
Min. Steps: 0.
Default Value: 0.

## 4.3 Link (3)

Connects Output Gain to Input Gain, when adjusting Input Gain the Output Gain automatically reflects the change.

## 4.4 Gain Comp. (4)

The gain compensation attempts to adjust the output level to match the input level, and compensate for gain alterations produced by the dynamic processing (compression, de-expansion). Due to the extreme range of possible gain structure modifications in the algorithm, according

to the complexity of the audio material, a precise result is nearly impossible to accomplish, and so forth the gain compensation should not be expected to achieve perfection.

## 4.5 Dry Mix (5)

A true dry/wet mix control with gain compensation allowing for parallel compression or simply for fine adjustment of the entire processing.

Unit: Percent (%)
Range: 0.00 to 100.
Min. Steps: 0.
Default Value: 0.

## 4.6 Clipper (6)

The Brick wall clipper is applied at the very last stage of the processing chain. The clipper knee is dependent on other parameter settings and is automatically adjusted in the algorithm. When setting "Mode" to one of the "Dynamic" settings the knee will also alter according to the audio material.

## 4.7 Bypass (7)

Bypasses the plug-in processing by routing the input direct to the output. The actual processing is still performed in the background allowing for a true and smooth transition between the processed and the actual incoming signal.

# 5 Processing Section

## 5.1 Lookahead (8)

Introduces a true zero attack and a "real" sync of the algorithm over the dynamic detection. Default setting is off, and in this state, the attack depends on the Speed parameter value. Turning on the Lookahead will introduce some delay in the processing (not in the detection though).

## 5.2 Mode (9)

This is one of the most significant controls on Syrah, and is defining how the algorithm automatically tries to adapt the processing to the audio material.

### 5.2.1 Mode settings

By selecting one of the two provided dynamic modes, there's a range of parameters that becomes dynamic, these parameters will vary in sync according to the audio analysis, and the algorithm will attempt to process aiming at a result that feels closer to the original material, more natural (unless you are over-processing to achieve a more effectfull processing).

- **Dynamic Soft (Default)**
  In Soft mode, the release becomes automatic (according to the "Velocity" setting) so does the compression, de-expansion, the clipper knee and the "Relax" value.
  This setting is suitable when a more natural kind of sound is desired, such as track compression, bus mix and final mix.
- **Dynamic Deep**
  Dynamic Deep is similar to Dynamic Soft, but with a deeper, stronger compression providing a higher range of effect.
  This mode invites to a much more "creative" use of Syrah, and is very suitable for track compression.

- **Static**
  As opposed to the dynamic modes, the Static Mode provides a more manual processing with less dynamic influences and manual release (according to the Velocity).
  This mode is more a traditional kind of dynamic processing, well suited for both track compression and final

  mix.

## 5.3 Speed (10)

Controls the processing integration time and the attack time when Lookahead is not enabled.

Unit: Percent (%)
Range: 0.00 to 100.
Min. Steps: 0.
Default Value: 10.

## 5.4 Velocity (11)

Defines the release time as well as the global algorithm velocity (how fast the processing will react to the dynamic changes in the material).

Unit: Percent (%)
Range: 0.00 to 100.
Min. Steps: 0.
Default Value: 50.

## 5.5 x3 (12)

Multiplies the release range by three, allowing for very slow release times.

## 5.6 Log (13)

By using logarithmic calculations (instead of linear) when defining the release time, a faster reaction time, resulting in a deeper compression impression, is achieved.

## 5.7 Link Ch. (14)

Links the detection over all the processed channels.
Not available when M/S Mode is enabled as the Mid and Side is then processed individually.

## 5.8 Boost (15)

Increases the entire processing intensity; more compression, more de-expansion, more dynamic influence (when using the dynamic "Mode" settings), straightforwardly described – More of everything!

## 5.9 Inverse (16)

Inverts the final gain envelope proposing particularly effect-full processing such as hashing the sound, auto-gating or ambience/reverb reduction.
The inverse parameter is allowing for some really creative tweaking, entirely changing the ongoing processing, and transforming Syrah in a "Dr. Jekyll and Mr. Hyde" kind of way. If no "Amount" is defined, it's perfectly normal if there's no sound at all coming from the Output!

## 5.10 M/S Mode (17)

The Mid/Side mode is only available when processing stereo material.
When enabling the M/S Mode, the material is M/S encoded for individual processing, and then decoded back to stereo again just before the Dry Mix stage.
This is a well known technique often used in mastering allowing to increase or decrease the stereo image, keep or fall down center impact like kick, snare and similar.
An interesting feature with this mode, is that since Syrah analyzes the audio material to adapt the processing, the result will generally match the standard stereo material better, allowing for a bigger range of possible sound modification: dynamically increasing the space (room) impression, boost the main center components and similar tasks.
Link Channel function will not be available in this mode and "Relax Bass" function will only be applied on the M (Mid) component of the material.

## 5.11 MS Width (18)

Only available when in "M/S Mode"
Since the M/S processing can dramatically change the stereo image (as in possibly making it too wide..), MS Width provides control over the actual stereo width.
This setting can be effective when there's a need for enhancing the stereo image width, increasing the room impression and similar tasks.

## 5.12 Thickness (19)

Fattens up the processed material by enhancing the low level frequencies when possible. The processing action will then go from de-expansion to compression (instead of compression only). This parameter works completely sound level independent.

## 5.13 Relax (20)

Defines a certain amount of auto ratio according to the audio material, "relaxing" the compression when working with high dynamics and generates a kind of smooth and dynamic attack. Relax also affects the release by modifying how the dynamic detection will react in time.

## 5.14 Relax Bass (21)

Controls the amount of low-shelve frequencies inserted into the side chain. The more you increase the value, the less the compression will react to low frequency content allowing for more low frequencies to pass through the processing.
In M/S Mode this will only be applied to the M (Mid) component of the material.

## 5.15 Amount (22)

Controls the amount (compression, de-expansion) and the solidity of the processing.

# 6 Metering Section

## 6.1 Signal Input VU meter (23)

Unit: dB vu (Decibel Volume Unit)
Ref: -16 dBFS (Decibels relative to Full Scale)

## 6.2 Signal Output VU meter (24)

Unit: dB vu (Decibel Volume Unit)
Ref: -16 dBFS (Decibels relative to Full Scale)

## 6.3 LCD On/Off (25)

Turns on or off the scroll LCD window.

## 6.4 LCD Scroll Waveform Speed (26)

Defines the display integration time (the scroll speed).

## 6.5 LCD Scroll Waveform Freeze. (27)

Freezes the scroll display waveform at its current state.

## 6.6 LCD Input Waveform (28)

The waveform displays the mono mix of the incoming signal.

## 6.7 LCD Output Waveform (29)

The waveform displays the mono mix of the outgoing processed signal.

## 6.8 Gain Envelope (30)

Displays the final gain envelope (linear).

## 6.9 Compressor and De-Expander meter (31)

### 6.9.1 Compressor (Red)

Unit: Decibel (dB)
Range: -16 to 0

### 6.9.2 De-Expander (Orange)

Unit: Decibel (dB)
Range: 0 to +

All information is displayed at a refresh rate of 30 fps and displaying the maximum action during the processing period.

# 7 Preset Management

Syrah, as well as all other Flux:: plug-ins, provides two preset slots referred to as slot A and slot B, which means that you can have direct access to two sets of parameter settings simultaneously. In addition to just recall (33) the settings for each of the slots individually and alternate between their settings, a morphing slider (35) is provided offering the possibility to morph between the slots and their corresponding settings. When clicking on one of the preset slots (38), the built in preset manager appears.

The preset manager contains three preset banks, the Factory bank contains factory presets, this bank is not available for saving of presets but any of the presets can be loaded into a preset slot and then saved into, the User bank, where all user presets are saved. Finally, the Global bank, which is a bit special, here you can save a complete snapshot with all the settings from both preset slots, as well as the position of the morphing slider.

In the preset manager, any preset can be loaded into a preset slot by double clicking on the name of the desired preset in the actual preset list, the preset will then be loaded into the preset slot corresponding to the position of the morphing slider.

## 7.1 Additional Controls In The Preset Manager Window

- Recall A loads the selected preset into the corresponding slot.
- Recall B loads the selected preset into the corresponding slot.
- Update, saves the current settings into the selected preset.
- New, saves the current settings into a new preset.
- Duplicate creates a copy of the selected preset and saves it to the list.
- Edit allows for changes to the preset meta properties.
- Delete, removes the selected preset.
- Export, creates a file reflecting the content of the current preset bank.
- Import, allows for import of a preset bank file by adding the imported banks content to the content in the current preset bank.

When saving or editing a preset, an option to protect the preset is presented. The preset protection, if engaged, only allows the original preset author to uncheck and edit the preset. This means that you can protect your presets in a multi-user configuration. Protected presets can only be modified using the session used for their creation. If used in another user session they can only be imported or deleted.

## 7.2 Preset Management Controls

## 7.3 Save (32)

To save a new preset using the built in preset manager, simply click Save in the corresponding preset slot (A/B), and to save changes to your preset, simply click Save again.
If you want to resave your preset under a new name, open the preset manager by clicking the corresponding (A/B) preset slot (38), select New, enter a name for your preset, and press Save.

## 7.4 Recall (33)

Recalls the settings of the corresponding slot.

## 7.5 Copy A/B (34)

To copy all parameters between the preset slots (A to B or B to A), press the Copy A or Copy B button, and the parameters from the corresponding preset slot will be copied into the current preset slot. When copying parameters from one slot to another, the preset morph slider will automatically slide to the slot the parameters where copied to.

## 7.6 Morphing Slider (35)

The morphing slider provides mixing between the settings of slot A and B and allows for some very creative tweaking.
The result of the morphing can be saved as a global preset containing the actual settings of both preset slots as well as the morphing slider position.
To save a Global preset, open the preset manager by clicking the corresponding (A/B) preset slot (38), then click Global, select New and enter a name for your global preset, then press Save.

## 7.7 Automation (Morphing Slider) (36)

When enabling the Automation control button, the morphing slider will be exposed and available for both automation read and write.

Though with the button engaged, only the morphing slider value is applied when reading automation.
The Automation control button must be engaged if the morphing slider needs to be mapped on a control surface.

## 7.8 Preset Name (37)

Displays the name of the current preset.

## 7.9 Preset Slot (38)

By pressing the little arrows in the preset slot, the built in preset manager appears

# 8 Plug-in Settings

Pressing the cogwheels in the top right corner opens a settings window providing information about the plug-in version/build, a direct access button to the user manual, as well as setup for latency report and OSC (Open Sound Control). OSC is available in Syrah only, and is not supported in Syrah Studio Session.

# 9 Get started

As with everything, there's always more than one way to perform a certain task, but to understand how the processing reacts, and to get acquainted with Syrah, we have created this basic walk through.
First of all, make sure all settings are at their default value (easily done by creating a new instance of Syrah).
Then while listening:

- Increase the Amount progressively then decrease it and enable Boost.
- Increase the Amount progressively then decrease it, disable Boost and then enable Wide.
- Increase the Amount progressively then decrease it, now enable Boost again.
- Increase the Amount progressively and then decrease it.
- Then do the same all over again, but when you reach the maximum Amount, try modifying the Relax and the Relax Bass settings.
- Now do the same once again, but when you reach the maximum Amount, or any other value that you prefer, try increasing the Thick parameter.
- Do the same process one more time, but with Lookahead enabled, and when you find a sound that you like, disable it and toggle between enabled/disabled to feel and hear the difference.
- Finally, switch Mode, and change the Velocity setting, and repeat one or several of the above tasks, more than once, to get a feel for how Mode and Velocity works.

Another thing that can create quite interesting results is when modifying the Input Gain with different Amount settings.

The Relax parameter is much more efficient and significant when Lookahead is enabled.

Try the invert (Inv) without Thickness on drums or other percussion, you will pretty soon find out that this can create some very interesting results..

With the Gain Comp enabled, Syrah will adjust the Output Gain, which can make it easier to compare with the incoming signal and understand the changes you have made on the sound. And then you can enable the clipper to increase the Output Gain and make your sound louder.

## 9.1 And some extra tricks

As Thickness is completely level independent, and since it's not adding any compression, you can add a lot off thickness and still fine tune the amount of compression by doing the following:

- Set Amount and Thickness to 100 %
- Enable the gain Link control
- Now start decreasing the Input Gain

Now you will see and hear the Thickness acting, but the compression will decrease. Now try it again, but make sure to adjust all the other parameters to get the kind of processing you want first.

Another little trick, is to decrease the Amount up to round about 50 %, this will be particularly interesting when in "Dynamic Deep" Mode.

## 9.2 Have fun!

Now you should have a basic understanding of how the processing works, but never forget that Syrah tries to adapt to material you are processing and the result can be astonishingly different for a voice than for a bass or for drums, or a keyboard, guitar etc. and of course, for a complete mix…

# 10 Specifications

### 10.0.1 Processing Specifications - Syrah

- Up to 16 channels Input/Output.
- 64-bits internal floating point processing.
- Sampling rate up to 384 kHz DXD (Pyramix and Ovation MassCore/Native).
- Sampling rate up to 192 kHz for Native (AU/VST/ST3/AAX/AAX AudioSuite).

### 10.0.2 Processing Specifications - Syrah Studio Session

- Mono/Stereo Input/Output.
- 64-bits internal floating point processing.
- Sampling rate up to 96 kHz.

### 10.0.3 Licence Requirements

In order to use Syrah or Syrah Studio Session, an iLok.com user account is required (the iLok USB Smart Key is not required).

# 11 Compatibility

### 11.0.1 Windows - 10, 64 bits only.

- VST (2.4) in 64 bit
- VST3 (3.1) in 64 bit
- AAX Native/DSP/AudioSuite, all in 64 bit*
- Waves WPAPI Native/Soundgrid in 64 bit
- VS3** Pyramix 10 and more in 64 bit and Ovation 6 and more
- AVID VENUE Systems

### 11.0.2 macOS (Intel and ARM) - 10.12 (Sierra) and more, 11 and 12.

- VST (2.4) in 64 bit
- VST3 (3.1) in 64 bit
- AU in 64 bit
- AAX Native/DSP/AudioSuite, all in 64 bit*
- Waves WPAPI Native/Soundgrid in 64 bit
- AVID VENUE Systems

** VS3 for Pyramix & Ovation Native/MassCore sold only through Merging Technologies and authorized dealers.