

### About NOVELTECH from Finland

Noveltech Solutions Ltd was founded to commercialize novel technologies resulting from scientific research. For more information about Noveltech please visit [www.noveltechaudio.com](http://www.noveltechaudio.com).

### Introduction

The CHARACTER™ algorithm offers a fundamentally new and intuitive approach to audio processing. The latest scientific research in digital signal processing and psychoacoustics has led to the birth of this revolutionary plugin.

The CHARACTER™ algorithm is based on Noveltech's Intelligent Adaptive Filtering (IAF) technology. The processing affects both the frequency response and dynamic properties of the input material in a highly time-varying sense. CHARACTER™ intelligently identifies and enhances the characteristics in audio material that are pleasing to the human ear. One example of such characteristics is the time related attack and decay properties of the signal's transients.

The processing is non-linear and highly dependent on the source material's original content, aiming to enhance the perceivably favored characteristics of the original musical instrument or voice.

**CHARACTER™** intelligently enhances the relevant characteristics found in the source, automatically adjusting complex sets of parameters rather than only statically boosting e.g. one specific frequency region. This revolutionary approach allows you to get to the desired results much faster - with almost instant gratification, requiring only three intuitive user parameters!

Keep in mind however, that CHARACTER™ doesn't perform magic or miracles – It can only emphasize existing characteristics that are present in the source material.

**Enjoy! The Noveltech Audio Team**

### General plugin controls

The CHARACTER™ Plug-In is designed for ease of use. Three different processing modes ensure the suitability for basically all types of audio material. The Target parameter adjusts the processing focus of the algorithm from the low to the high frequency region, and Character adjusts the amount of processing.

### MODE

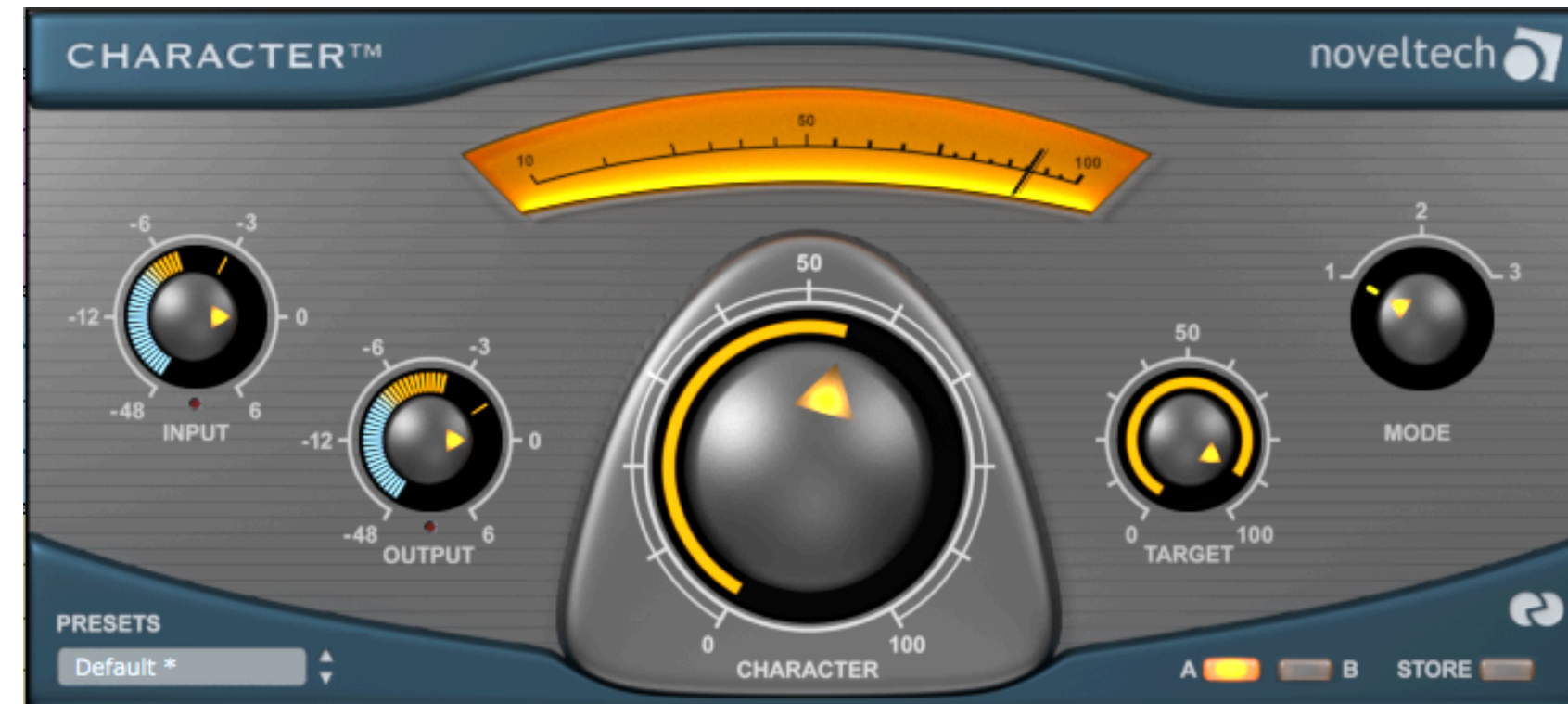
There are three different modes, which are used to select the type of characteristics to be enhanced.

Mode 1 is optimized for percussive instruments and vocals.

Mode 2 is optimized for guitars and synths.

Mode 3 is optimized for bass guitar and pads.

**TIP:** While all modes can be used for any type of input source, we recommend starting with Mode 1, which works with the widest range of material.



## TARGET

The Target parameter sets the relative frequency range where the processing is targeted. The target parameter affects relatively depending on the input material. The target scale from 0 to 100 does not represent absolute frequency. It represents the relative position in the full frequency range of the input signal at a current time instant. For example, the frequency range of the characterization with the same target value will be significantly different for bass guitar and for female voice. Furthermore, the frequency range of the characterization for each string of a bass guitar will be different in order to achieve a similar level and type of characterization in a perceived sense.

## CHARACTER

The character parameter sets the amount of processing.

## Best results with CHARACTER™

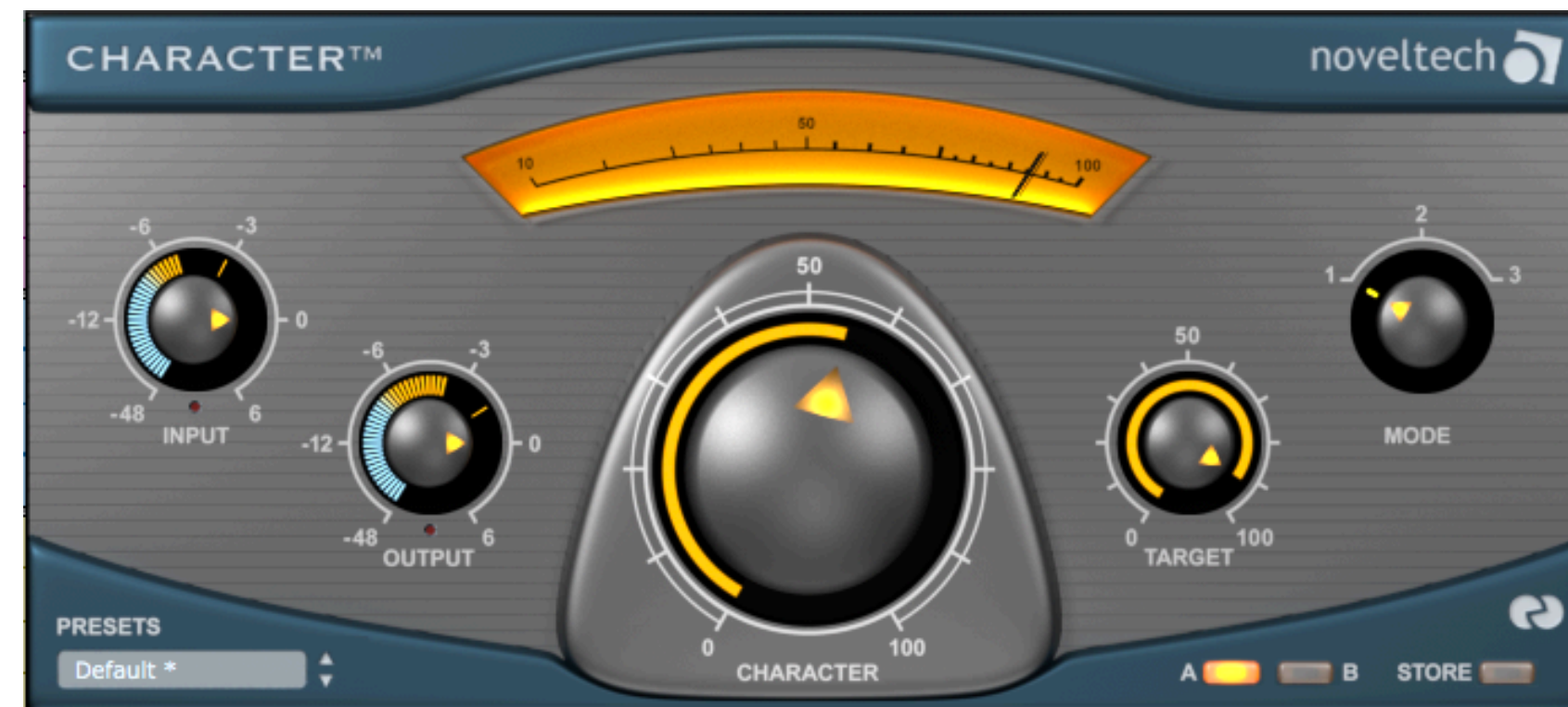
The CHARACTER™ is designed for unprocessed audio material. Heavily compressed material can overdrive the algorithm and result in over-characterization, which will sound unnatural. The CHARACTER™ is optimized for single instruments, but it can also create good results for mixed groups such as drums and guitars etc. The use of Mode 1 for mixed material is recommended.

Basically, CHARACTER™ can be used with all types of source material. Mode 1 is optimized for percussive signals such as kick drums, snares, or cymbals. For example, getting the high frequency snap added to your kick drum has never been easier: just select Mode 1 and twist the target knob towards the higher frequency range until you hear the desired result.

Mode 2 is tuned for guitars and synths, whereas Mode 3 is designed mainly for electric bass.

All of the modes can be used for any type of input material, depending on what type of characterization is required. However, for complex audio material mode 3 may create slow modulation. To prevent this, use mode 3 only with relatively stationary audio material.

**TIP:** The use of CHARACTER increases the output peak level which might cause clipping problems. In case of clipping decrease the input level until the clipping disappears.



#### METERING OPTIONS (right-click option)

CHARACTER™ has three different meters: Input level, Output level, and a Main meter for the amount of characterization. By right-clicking the input and output level meters you will have access to customize the visual feedback provided by the meters (click the meters with your **right** mouse-button to access these features).

#### LEVEL FALLBACK (right-click option)

The Level Fallback parameter sets the level indication's display speed to fall back to the current level. '20dB/s' is the fastest setting; '3dB/s' is the slowest setting.

#### PEAK HOLD (right-click option)

The Peak Hold option adjusts the time that the maximum peak value is displayed in the meter. The hold time range, in seconds, is 5, 2, 1, or None.

#### PEAK FALLBACK (right-click option)

The Peak Fallback parameter sets the speed of the peak level indication to fall back to the current peak level (after the hold time is over). '20dB/s' is the fastest setting; '3dB/s' is the slowest setting.

#### CLIP HOLD (right-click option)

The Clip Hold option adjusts the time that the plug-in displays clipping in the Clip Indicator. The Hold Time options are "6 seconds", "Forever" and "Disabled". There is also a Reset option, which is useful when Clip Hold "Forever" is engaged.

#### PRESETS

There are several presets built into the main window. You can select them but not alter them. They are reference presets to get you started fast and easy.

To store your own settings please use the standard preset system of your DAW system.

You will find all the info you need in the manual of your audio host program.

#### A / B switches and STORE

You can compare two different Character settings with the A/B switches. Any changes you make will be stored automatically in the Setting you are using.

If you press STORE the current setting will be stored in B. Now you can switch back to A and alter settings to your taste, afterwards you can toggle between A and B easily.

You can automate A and B to recall 2 different settings for certain parts of your song / audio project.