

# *Full Bucket Phaser*

**Analog Phaser Simulation**

Version 2.0

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## Introduction

The *Full Bucket Phaser (FBPhaser)* is an effect plug-in for Microsoft Windows (VST2/VST3) and Apple macOS (VST2/VST3/AU) simulating the functionality and sound of classic analog Phasers. It is written in native C++ code for high performance and extremely low CPU consumption. The main features are:

- Authentic simulation of classic analog Phaser models
- 4 or 8 stages
- LFO modulation
- Stereo!
- Double precision audio processing
- Plug-in supports Windows and macOS

*FBPhaser* is based on the new **iPlug2** framework maintained by **Oli Larkin and the iPlug2 team**. Big thanks, guys!!! Without your work it would not have been possible to create a resizable user interface.

To resize the plug-in you just grab the yellow triangle at the bottom right of the window and drag it. You can save the current window size using the entry "Save Window Size" in the context menu that opens when you right-click somewhere.

If you have trouble with the standard version of *FBPhaser*, please grab the (sound-wise identical) "N" version of the plug-in which is based on the original **iPlug** framework.

## Gosh, Why Another Phaser Plug-In?

The *FBPhaser* is an offspring of the tiny Phaser units within many of my instrument plug-ins (*Deputy Mark II, Nabla, ModulAir*). Just for fun I separated it into its own C++ project and decided to share it.

## User Interface

The layout of the *FBPhaser's* user interface is straight forward: In the "PHASER" section you can select the number of stages (4 or 8), set the center frequency ("MANUAL"), the frequency separation of the stages ("SPREAD"), and the feedback level.

Click the yellow triangle to select one of the ten presets



The "LFO" section controls the speed (up to 25Hz) and the depth of the low frequency oscillator modulating the Phaser frequency. The mix between original and effect is set in the "OUTPUT" section.

Finally, you can select one of the ten presets by clicking on the yellow triangle at the top left corner of the effect screen. These presets give you some examples of what you can do with the *FBPhaser*.

## New Version 2.0 Parameters

Version 2 of *FBPhaser* adds two new parameters:

- **Sync To Host**

When activated the LFO speed will be synchronized to the host's tempo clock.

- **Waveform**

Sets the waveform of the LFO (*Sine* or *Triangle*).

- **Stereo**

This parameter controls the "stereo" amount of the LFO modulation:

- When turned to the left, the LFO modulation between the left and right channels is getting out of phase (0° to 180°).
- When turned to right, the LFO modulation not only gets out of phase but also pans between the two channels.

I strongly recommend to put on a headphone and tweak the Stereo parameter to hear what is going on. ☺

## Parameters

parameter	ID	description
<i>Stages</i>	0	Number of Phaser stages (4 or 8)
<i>Manual</i>	1	Center frequency of the Phaser
<i>Spread</i>	2	Frequency separation of the individual stages
<i>Feedback</i>	3	Amount of feedback
<i>Speed</i>	4	LFO speed (0 to 25 Hz)
<i>Depth</i>	5	Depth of frequency modulation by LFO
<i>Mix</i>	6	Mix between original and effect signal
<i>Sync To Host</i>	7	Sync LFO speed to the host's tempo clock
<i>Stereo</i>	8	Amount of LFO stereo modulation
<i>Waveform</i>	9	Waveform of LFO

## Frequently Asked Questions

### ***How do I install FBPhaser (Windows VST2 32 bit version)?***

Just copy the file `fbphaser.dll` from the ZIP archive you have downloaded to your system's or favorite DAW's VST2 plug-in folder. Your DAW should automatically register the *FBPhaser* VST2 plug-in the next time you start it.

### ***How do I install FBPhaser (Windows VST2 64 bit version)?***

Just copy the file `fbphaser64.dll` from the ZIP archive you have downloaded to your system's or favorite DAW's VST2 plug-in folder. Your DAW should automatically register the *FBPhaser* VST2 plug-in the next time you start it.

Note: You may have to remove any existing (32 bit) `fbphaser.dll` from your VST2 plug-in folder or else your DAW may screw the versions up...

### ***How do I install FBPhaser (Windows VST3 64 bit version)?***

Just copy the files `fbphaser64.vst3` from the ZIP archive you have downloaded to your system's or favorite DAW's VST3 plug-in folder. Your DAW should automatically register the *FBPhaser* VST3 plug-in the next time you start it.

### ***How do I install FBPhaser (Mac VST2/VST3/AU 64 bit)?***

Locate the downloaded PKG package file `fbphaser_2_0_1_mac.pkg` in Finder (!) and do a right- or control-click on it. In the context menu, click on "Open". You will be asked if you really want to install the package because it comes from an "unidentified developer" (me 😊). Click "OK" and follow the installation instructions.

### ***What is the plug-in ID of FBPhaser?***

The ID is `fbph`.

### ***No Sync-to-Host Tempo Possible? This sucks!***

Errr... it's available now with version 2.0 – see section *New Version 2.0 Parameters*.

### ***No MIDI CC either? This really sucks!***

Yes. Like the original units.