

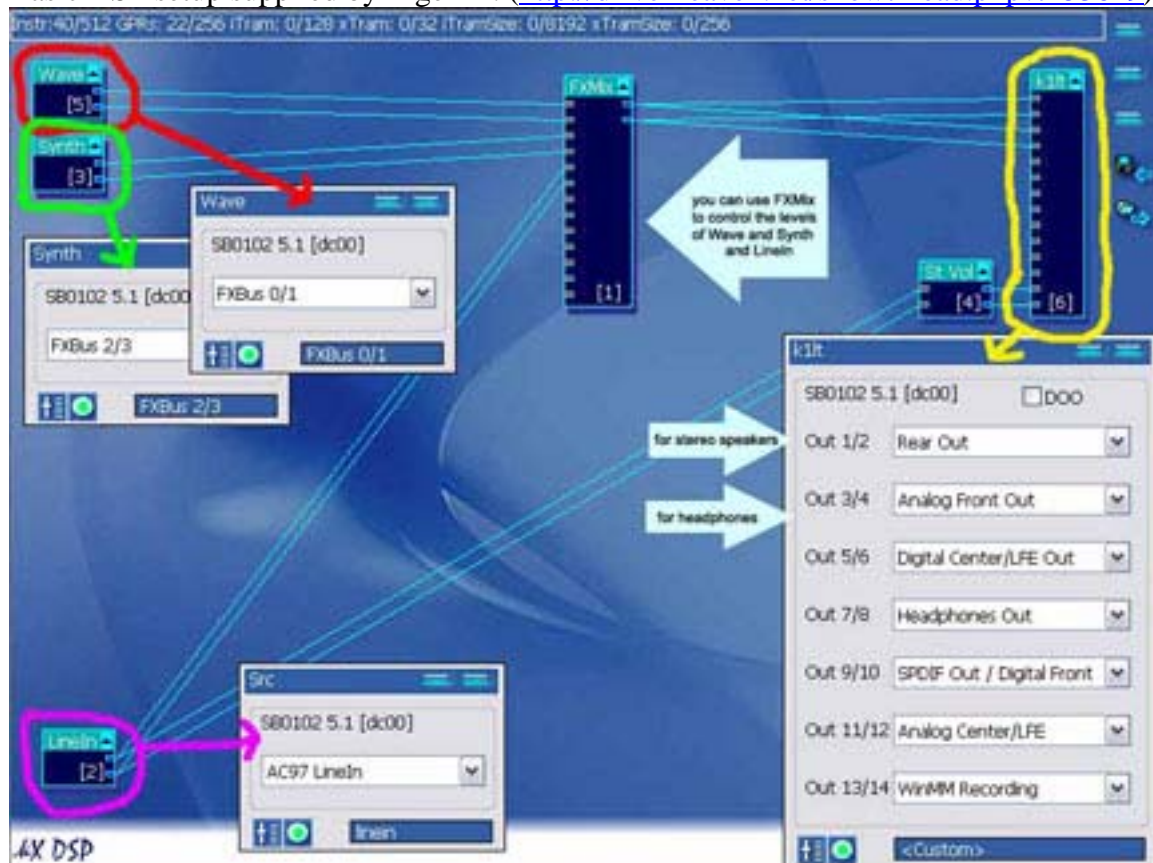
Foreword

The kX Project Audio Driver and software brings excellent music production potential to the 10kX compatible soundcards. However, more documentation is a request of a growing number of users. So, this article serves three purposes. The first purpose is to familiarize a user with a particular plug-in available in the kX DSP. The second purpose is to suggest a common DSP setup which users can utilize to learn about and work with the different plug-ins and effects available. By using a common DSP setup, it is hoped that learning to use the kX Audio Driver and software will be less confusing for new users. Lastly, it is hoped that more kX users will see this article as an idea and take the initiative for writing more articles, guides, and further documentation that can be made available for all kX users. If you haven't done so, please read [A Newbie Guide On kX's Concept](#) or "[How To Setup Your Own DSP.](#)" This is a very helpful article for understanding kX. It was written by LeMury-kX Project Programmer. Also, fresh newbies, please read the kX DSP Guide in the kX Help file, so you will know how to work in the kX DSP.

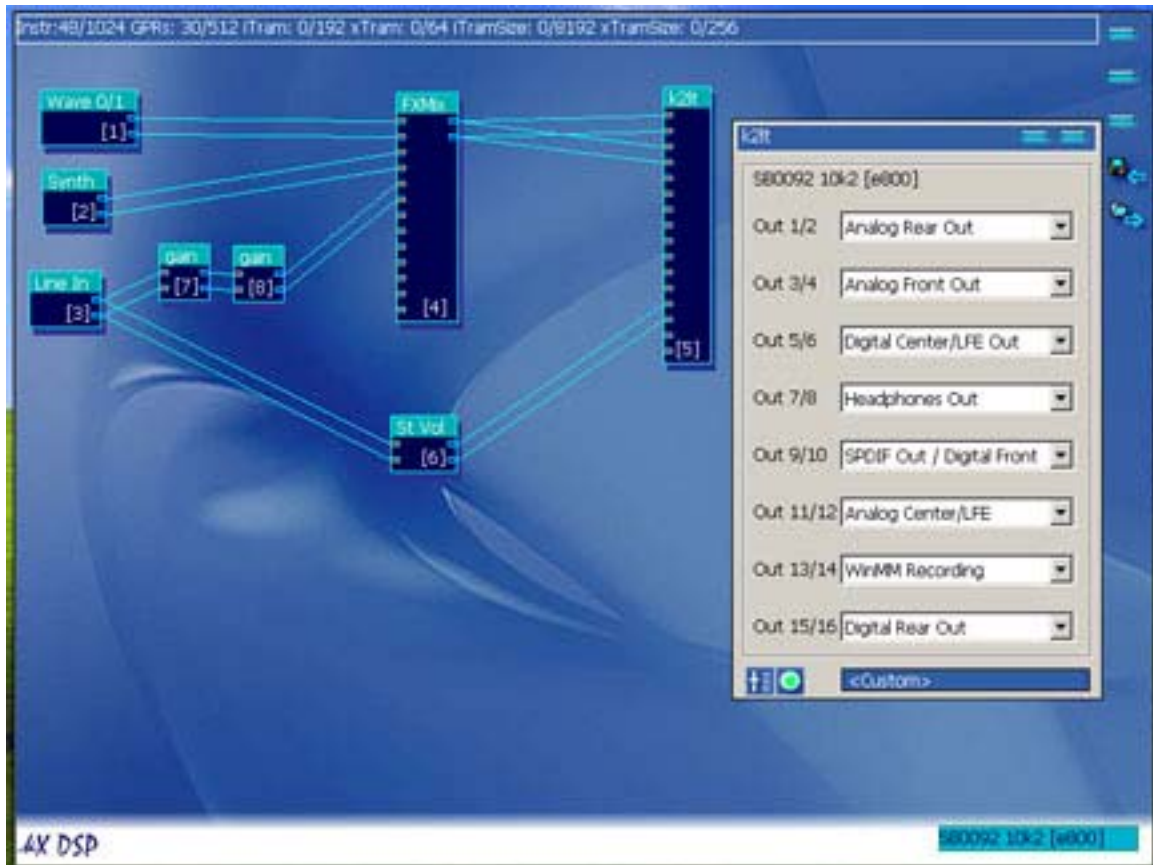
Example Basic DSP Setup

This article uses a basic example DSP setup (shown below), so users and writers of various articles can have a common DSP setup for working with the different kX effects used in the kX DSP.

Basic DSP setup supplied by Tiger M. (<http://driverheaven.net/showthread.php?t=53629>)



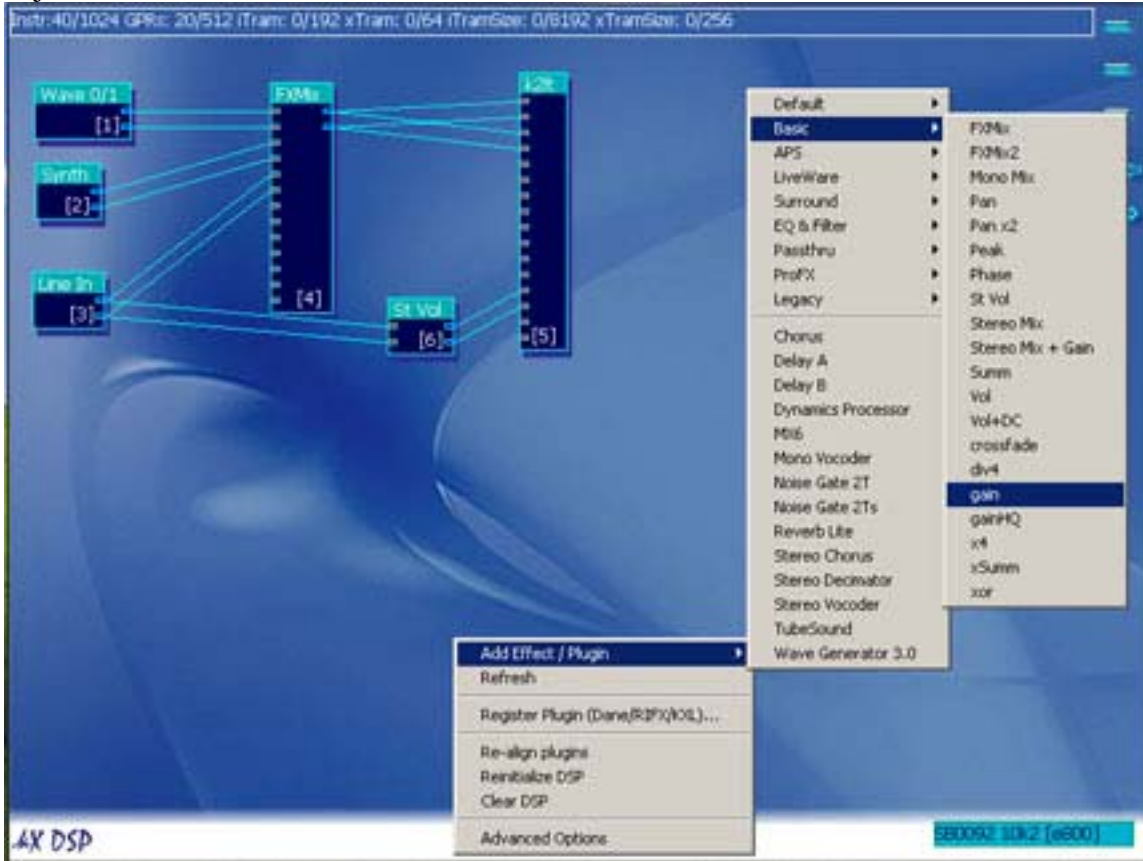
The pic below shows a PC having an Audigy, so the ProFX plug-in k2lt is used instead of k1lt. A very minor difference of an additional output pair in the Output assignment window can be seen in the pic below. Audigy/Audigy2 users will use k2lt. SB Live! Users will use k1lt.



The Basic Gain Plug-in

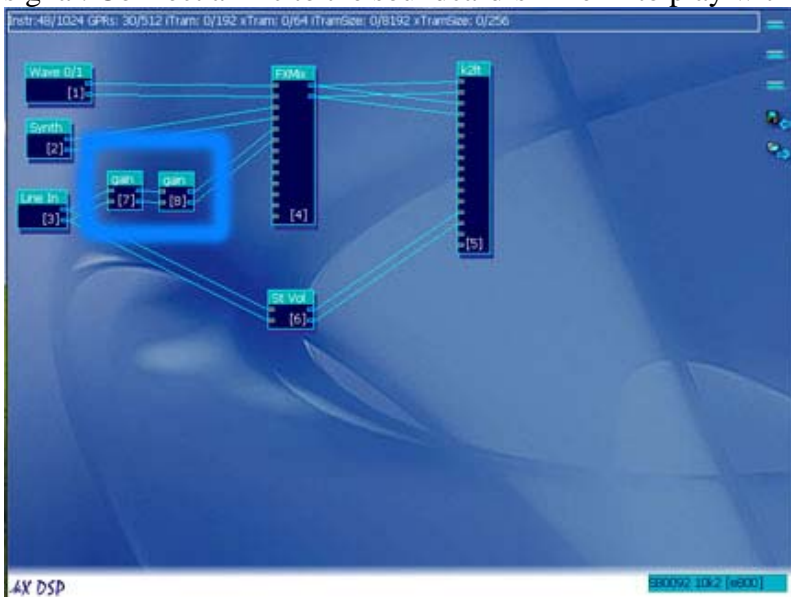
This plug-in increases the signal of any DSP object connected to its input by a maximum db increase of approximately 12db for each plug-in instance used. The Gain plug-in is useful for increasing signals low in db or volume. For example, if you don't have an external preamp for your microphone, this plug in can be used to increase the microphone's signal as a sort of internal preamp. If a 12 db gain is not sufficient, you can increase the signal more by connecting two or more instances of this plug-in in a chain. However, be aware that noise and hiss will increase with the signal as you add any number of this plug-in to the kX DSP. One way to decrease the increased noise and hiss is to use a software noise reduction effect in the audio FX track of your Host Sequencer.

Right click on the DSP and follow the path below to add the basic Gain plug-in as an object in the kX DSP:

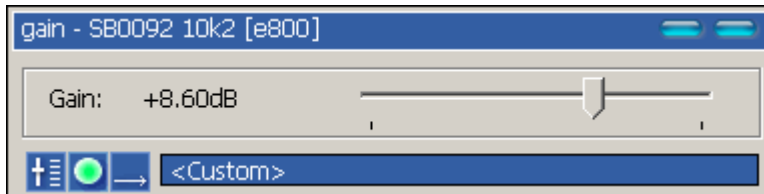


Make your connections for this plug-in. For example, connect the Line In outputs into the Gain inputs, and connect the Gain outputs to the desired destination.

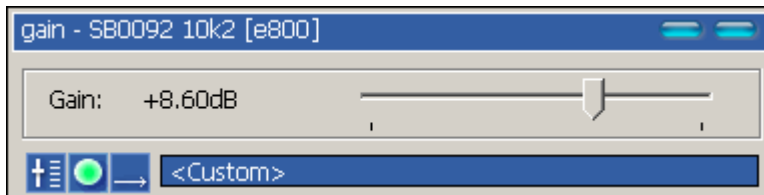
Here's an example of two instances of gain added to a DSP setup to increase the Mic signal. Connect a Mic to the soundcard's Line In to play with gain levels:



Double click the Gain object to access its graphical control interface. To adjust the amount of gain, left click and hold the gain slider while dragging left or right. The gain control interface also has a reset button, a mute button, a bypass button, and a custom preset menu feature.



Basic Gain Control Interface



Move the mouse cursor over each button at the bottom of the Gain control interface to see the name of each button.

- Reset Button: Hit the reset button to set the gain level to the default setting of 0.00db.
- Mute Button: Clicking on the mute button mutes any signal coming through that instance of the Gain plug in. Click mute again to unmute.
- Bypass Button: Click on the bypass button to toggle between gain applied and gain not applied.
- Custom Presets You may save your own gain levels as custom presets by setting the slider to the setting you want, clicking on <Custom> and selecting save from the drop down menu. Type in the preset name you want and select the check mark to save it.

To load the preset you want, click on <Custom> and select the name of the preset you want to load.