

Proposal

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Date: 23 October 2013

Executive Summary

The manual (in instruction form) will provide basic information about the operation and functionality of the recording software called Reaper. This manual will help the readers understand how to use this software for sound mixing, which is vital in the music recording process. Graphical representations of ideal mixing scenarios will be included to help the readers understand and visualize the process better. The importance of using virtual instruments in this software will also be discussed. Overall, this manual will guide readers through the process of recording, using additional third party software (plugins) in the recording software. This will provide an insight to other necessary tools needed for recording and finally a thorough discussion of the equalization process used in sound mixing will be provided.

Introduction

The project is about systematic equalizing in the music mixing and recording process. This will allow the user of Reaper or other similar recording software to understand how to go about sound mixing in a music production. This manual is mainly aimed to provide a solution for users who wish to create a low cost yet near professional grade music recording at home. The manual also gives an insight on how to understand and isolate the individual sounds of recorded instruments that are amplified in the speaker. This will ensure that the sound from each instrument and the vocals are “glued” together properly in a recorded song, thus making the recorded music flawless without any unwanted distortion. Such a manual can be retailed in music-oriented stores like Guitar Center.

Definition of Problem

The problem in the recording process occurs when you record an instrument and try to blend it with other instruments. The sound that an artist gets after recording is all messy and the recorded instruments sounds sloppy. Most amateur musicians who play and record a musical instrument have limited knowledge about the intricacy of the entire recording process. Usually, when they record the notes from any instrument and mix these notes with a pre-programmed drum beat or other music sounds, the mixed sound do not come out very clean or professional and seldom meets the expectations of the recording artists. Most of the recording manuals that I have read, focusses only on the problems that arise and never provides a solution to such problems.

Solution of Problem

The manual will help users understand and perform a clean recording process with minimal effort. This will definitely save music recorders a lot of time and get a handle on the ambiguous procedure of sound mixing. The users will also be able to recognize the bottlenecks in the equalizing process. In addition to this, the manual will help the users understand and identify the frequencies of sounds created by the different music instruments. Thus, the users will have a better understanding of the tedious process of listening to recorded music and quickly identify the problem areas and correct them as needed.

Therefore, the goal of this manual is to make the musicians understand the step-by-step process of equalizing and sound mixing. This will help them identify, separate and eliminate the unwanted sounds from a recorded music. In this manual, the proper procedure of recording music will be discussed first, followed by a detailed explanation of the equalizing process with the help of graphics. The manual will provide a better solution to sound mixing and recording because it will provide information not only about the sound recording process but will also discuss the common problems that arise in such recording scenarios and how these problems can be eliminated. In this manual, I have tried focusing more on how to solve the problems that surface during recording rather than focusing on how such problems surface. The readers can directly apply the knowledge from this manual into using the recording software properly. This will definitely help them record a cleaner and more professional music at home. The solution will include:

- How to record in the Reaper (Digital Audio Workstation).
- Equipment needed to record.
- Software needed to work in Reaper.
- What Virtual Studio Plugin (VST) is.
- The terms involving mixing and mastering.
- How to equalize for three different instruments and for vocal.
- How to go through the equalizing thinking process.

Qualification

I have been playing guitar professionally for about 10 years and performed several small gigs and live shows over the years. I have also worked as an audio engineering assistant in Sonic Occult Music Production. During that time, I have helped many music bands record their music professionally and helped increase the overall profits of the music production company by 15 percent. My major is in electrical engineering and I am currently studying about Communication Systems and Signal Processing, which deal with audio and video frequencies.

Budget

This will not cost me much as I have purchased this software several years ago and have been using it been using this software since then. Currently, the only cost that I would be dealing with is time. As a full time engineering student, this can be quite challenging since I have to balance my time with other course works and group projects in this semester. The proposed solution will help cut the expense of a professional grade music recording to at least one-third without compromising on quality. This will also provide a clear solution and understanding to a person who is amateur in music production. Therefore, my cost for making this manual will be the time – for the following works.

- Research (few days)
- Organizing the information (few hours)
- Working with the software (few hours)
- Writing (few days)

Conclusion

Readers might think that the equalizing process in the manual will work exactly the same way with any kind of music genre but in reality it all depends on the kind of music sounds that the home artist wants and can create using the limited virtual resources available. This manual helps the user to recognize the sound effects that they want and also build a cognitive thinking process to eliminate the unwanted noise arising in music recording. The equalization method varies from person to person and is dependent on an individual's music taste. In a nutshell, the manual provides a good starting point for any artist, new in recording, to practice professional grade recording at home at an affordable cost.