

# Warm Chorus - Demo

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## Abstract

*The Abstract*

**Keywords** — Keyword 1, keyword 2

## 1 Introduction

## 2 Theory

### 2.1 Generic Chorus

Generic chorus algorithm is based on calculational motivation. The algorithm has three basic functions. First it multiplies input signal and delays the copies and then detunes those to create the effect of more than one player. That creates beating effect and other unwanted characteristics into the sound due to lack of the variance of the parameters used.

Industry standard chorus is based on delay line modulated with low-frequency oscillator.

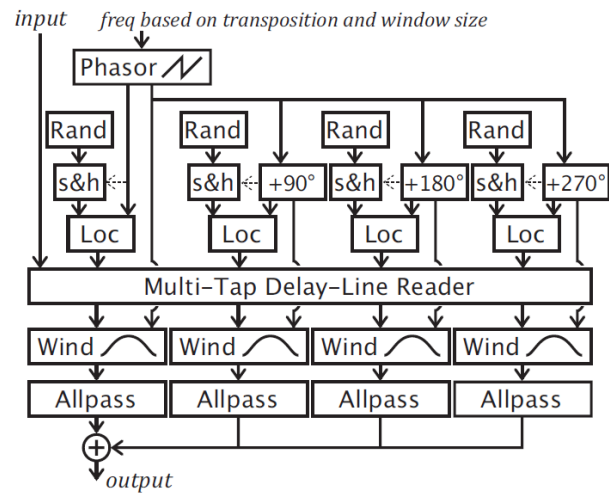
## 3 Implementation

### 3.1 Harmonizer

Harmonizer is structure which detunes input signal slightly to get different "players" play slightly out of tune as it is in the real orchestra.

In the harmonizer each window is detuned differently to reduce beating effect. This is as well real life phenomena as the players of the section will not play all the time same amount out of tune.

## 4 Results



**Figure 1:** Chorus Harmonizer Block Diagram. [1]

## **5 Conclusions**

Conclusions text.

## References

- [1] Warm Chorus...