ABSTRACT

In the world of music, learning an instrument from a song is a pleasure. By finding and separating one instrument from the song, the way to learn the instrument from the song much easier. Especially for beginners, their ears are still not used to focus on just one instrument can clearly hear what instrument they want to learn. For example, a song must consist of several instruments. From that instrument we try to learn the drum instrument. So by separating the drum sound of the song we can easily learn the pattern of the game.

To separate the desired instrument from a song, it is combined 2 methods of separation. Namely Independent Component Analysis (ICA) and Binary Time - Frequency Masking. ICA is a very popular method for separating a mixture of data consisting of several components into independent component. Binary Time - Frequency Masking is a separation technique also, but in this case is used as a method combined with the ICA to obtain the signal of each instrument with 2 points of mixing conditions. While the use of ICA methods have been used to get the instruments under conditions of 4 points of mixing.

Merging 2 methods Independent Component Analysis (ICA) and Binary Time - Frequency Masking in separating the desired instrument from a song can be done if the process of dilution using 2 points of mixing.

Keywords : Independent Analysis Component (ICA), Binary Time – Frequency Masking, Blind Source Separation, Musical Signal.