

Description

THE KARAOKE SYSTEM USING AN AUDIO CASSETTE
WHICH IS CAPABLE OF BEING VISUALIZED



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Technical Field of the Invention

The present invention relates to the Karaoke
multiplex audio cassette combined with a visualizing or
display instrument.

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Background of the Invention

The Karaoke has become one among the entertaining
facilities. There are various kinds of Karaoke
instruments, such as the type going with visualization,
among others: the Laser Disc, the VCR, the Graphic CD and
Karaoke without visualization, among others: the
multiplex audio cassette. Starting from the foregoing
fact, an idea came up to add another visualization to the
karaoke multiplex audio cassette. So the Karaoke with the
multiplex audio cassette being capable of being
visualized would create a more vivacious atmosphere and
support the music being played, as it can display the
text of the song to be sung or the like.

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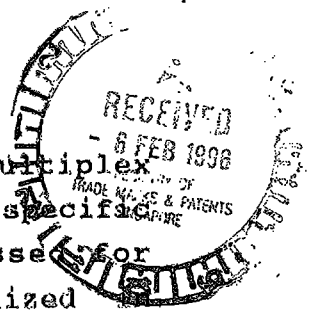
Brief Description of the Invention

The objective of the present invention is to enhance
the function of the Karaoke multiplex audio cassette,
when initially the singer would only be assisted by
viewing notes, to become a Karaoke multiplex audio
cassette capable of being visualized, so that the singer
could see the text of the song or the like through some
visualizing device or some display screen. Another
excellence is the presence of a song-guiding text which
makes it easier for the singer to adapt him or herself to
the music, as is the case with the Laser Disc, the VCR,

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the Graphic CD. This system employs a Karaoke multiplex audio cassette tape having been overlaid with a specific data signal. Such data signal will be processed for visualization. Such data signal overlay is organized such a way that the cassette remains in keeping with the common Karaoke multiplex audio cassette. The common audio cassette player set (kit) has been developed by adding a special equipment to allow functioning as a Karaoke Multiplex audio cassette player set capable of displaying the text of the song and/or some other information. The audio cassette player set is hereinafter named the "SINGASONG" Karaoke audio cassette player.

Brief Description of the Drawings

The invention would be better understood by following the explanation below, based on the attached drawings, viz.:

Figure 1 is a block diagram explaining the "SINGASONG" Karaoke audio cassette system with the Karaoke multiplex audio cassette.

Detailed Description of the Invention

In broad outlines figure 1 comprises 2 main parts. viz.: a block diagram of the common Karaoke audio cassette player (A) and 2* a block diagram of the visualizing section of the "SINGASONG" Karaoke (B).

The block diagram of the common Karaoke audio cassette player (A) comprises: a Head section (left/right), the Pre-Amplifier Head (1), the Power Amplifier (2) and the Speaker (SP).

The block diagram of the visuazing section of the "SINGASONG" Karaoke (B) comprises: the LOW PASS FILTER SECTION (3), High Pass Filter (4), Amplifier (5), Shaper (6), Frequency to Voltage Converter (7) Amplifier and Level Shifter (8), Schmitt Trigger (9), Micro Processor and Display Controller (10) and the Display device



section (11).

The said Display device section may be: a Color TV, a B/W TV, a Liquid Crystal Display Panel (LCD), Light Emitting Diode Display (LED), Vacuum Fluorescent Display (VPD), Plasma Display (PDP), Electroluminescent Display (ELD) or a Computer Monitor.

The Low Pass Filter Section (3) serves to suspend undesired signals so as to acquire a proper audio signal which is consequently strengthened by the Power Amplifier Section (2), this being equal to the case with a common audio cassette player.

The "SINGASONG" Karaoke visualization block diagram (8) is an instrument added to the common karaoke audio cassette player to serve the purpose of the karaoke visualization.

Output I from the Pre-Amplifier Head (1) is connected to the HighPass Filter (4) to pass the high frequency signals which are signals not being disturbed (upset) by any audio signal. The intended data signal has a frequency ranging from 2 KHz to 50 KHz, being serial data signals. Overlapping serial data signals on the karaoke multiplex audio cassette may carry one or more frequencies which change in keeping with their logic levels. The Karaoke multiplex audio cassette having been overlapped by the said serial data signals, are called "SINGASONG" audio cassettes.

When an audio cassette player used by more than 2 tracks or uses a special track for signal data, the frequency may range from 100 Hz to 30 KHz, in this case the "SINGASONG" karaoke visualization block diagram section (B), section 4, 5, 6, 7, 8 and 9 are not necessarily used. The result produced by the High Pass Filter Section (4) is strengthened by the Amplifier Section (5) in order that signals are acquired in keeping with the Shaper Section (6). The Shaper Section (6) functions to shape received signals into box signals. the result of the Shaper section (6) is connected to the Frequency to Voltage Converter section (7) which



functions to convert the box signal of a certain frequency into a direct current level. The product of the Frequency to Voltage Converter section (7) is connected to the Amplifier and Level Shifter Section (8) to strengthen the signal by the direct current level received and regulated by the Level Shifter in keeping with what is needed by the Schmitt Trigger section (9). The Schmitt Trigger section (9) functions to shape a range of pulsas which change in accordance with the logic level for the Micro Processor's need so that it can be re-translated by the Micro Processor section (10) for the purpose of visualization. To regulate the visualization, the Micro Processor is equipped with a Display Controller. The Display Device section (11) used may be of various types such as is mentioned above in keeping with the Display Controller's section (10) used.

This Sheet Has Been Replaced



Claims

1. The common audio cassette player system having been developed to become the Karaoke visual audio media, which comprises : a Karaoke multiplex audio cassette overlaid by a serial data signal and a common karaoke audio cassette player supplemented with a special set so as to be capable of functioning as a Karaoke multiplex audio cassette player which can display a song text and/or any other information, which supplementary special set comprises a low pass filter section, a high pass filter section, an amplifier section, a shape section and a level shifter, a schmitt trigger section, a microprocessor section, a display controller section and a display device section, such audio cassette player set hereinafter to be called a "SINGASONG" Karaoke audio cassette player and a Karaoke multiplex audio cassette already containing a serial data signal is called a "SINGASONG" Karaoke audio cassette.

2. With such system as is described under claim 1, the Display device section may use one or more of the following display devices: a color TV, a B/W TV, a Liquid Crystal Display Panel (LCD), a Light Emitting Diode Display Panel (LED), a Vacuum Fluorescent Display (VFD), a Plasma Display Panel (PDP), an Electroluminescent Display (ELD), a Monitor Computer.

3. With such system as is described under claim 2, the serial data signal being used has a frequency ranging from 2 KHz to 50 KHz.

4. With such system as is described under claim 3, if the serial data signal is made to overlay a special track or if the karaoke audio cassette player uses more than 2 tracks, the serial data signal used, will have a frequency range of 100 Hz to 30 KHz, in this case the "SINGASONG" karaoke visualization block diagram (B) sections 4, 5, 6, 7, 8 and 9 do not have to be used.



5. With such system as is described under claim 3, the data signal overlay on the audio cassette tape containinng one or more frequencies changing in keeping with the logic level.

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