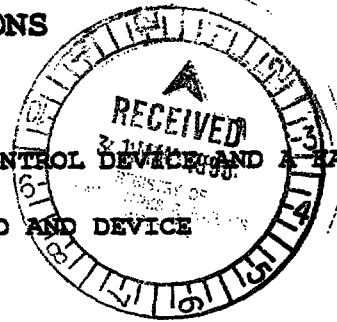




SPECIFICATIONS

AN EFFECT CONTROL METHOD, AN EFFECT CONTROL DEVICE AND A KARAOKE
SYSTEM USING SUCH METHOD AND DEVICE



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BACKGROUND OF THE INVENTION

Technical Field

This invention relates to an effect control method and an
effect control device for automatically controlling audio effect
operations on audio data such as voices input via a microphone and
a karaoke system which uses such a method and device.

Background Art

"Karaoke", is a form of entertainment in which only the
accompaniment music is regenerated and played as one sings the
corresponding lyrics along with it, and has been widely accepted
by the general public maintaining a stable popularity. In "karaoke",
a regeneration device (hereinafter referred to as a karaoke system)
is used to regenerate the accompaniment part of songs and display
the text of the lyrics (telop) on a monitor screen, corresponding
to this accompaniment.

In general, a karaoke system converts the accompaniment part
into digital audio signals as music data based on the MIDI (Musical
Instrument Digital Interface) standards, and converts the lyric part
into character data. These data are stored as music information in



a storage media such as a CD-ROM. There is a karaoke system known wherein, a desired set of music information specified from a terminal device via a public telephone line is read out and transmitted to the terminal device from a host computer which stores a vast amount
5 of different sets of music information. (laid-open Japanese patent publication No. Hei 2-216690).

In such karaoke systems, various means have been conventionally used to provide a more satisfactory stage effect to the singing of a karaoke singer so that he/she may enjoy singing
10 with a sensation of a feeling like a professional singer. Such means are generally called audio effects (hereinafter simply referred to as "effects"). These effects are applied when necessary to the accompaniment music and/or to the singer's voice input from the microphone, in order to enhance the singer's performance.

15 However, in a conventional karaoke system, when the singer wants to apply the desired effects to his/her voice input from the microphone, he/she has to manually operate the effect device or effector installed in the amplification system from the exterior. That is, the effect controls desired for the voice input can only
20 be accepted manually at the stage where the voice input is finally synthesized with the corresponding accompaniment music regenerated. As has been disclosed in laid-open Japanese patent publication No. Sho 60-23896, there does exist a karaoke system wherein automatic control is provided so that an echo effect of appropriate strength
25 and duration is applied to the voice input from the microphone, while



the accompaniment music tape is being played. However, such a device is inflexible, being limited only to the echo type of effect.

In general, when an effect is applied to the accompaniment part of a set of music, the settings for types of required effects are incorporated as part of the music information of the accompaniment part and can often be easily controlled in detail automatically. In contrast, in the case of providing corresponding settings for the voice input from the microphone, a complicated adjustment is necessary, making it difficult to apply desired effects befitting the accompaniment part. Furthermore, even if such adjustments are attempted, a heavy operational burden is placed on the singer, and this distracts the singer from enjoying the singing itself.

The present invention solves the above-mentioned problems of the prior art and has a first object to provide an effect control method to automatically apply the desired type of effects to audio information in general without requiring troublesome manual operations.

A second object of the present invention is to provide an effect control device, including means for realizing the first object and to provide a karaoke system using such an effect control device.

A third object of the present invention is to provide an effect control device and by which effects can be flexibly initially set for each of a plurality of audio information when synthesizing the



plurality of audio information, and to provide a karaoke system using such an effect control device.

A fourth object of the present invention is to provide an effect control device including means for realizing the third object
5 without enlarging the device size and a karaoke system using such an effect control device.

A fifth object of the present invention is to provide an effect control device which can flexibly accept abrupt temporary effect settings for the audio information obtained from the input devices.

10 A sixth object of the present invention is to provide an effect control device equipped with the concrete means for realizing the fifth object in a quick, easy and efficient manner, without enlarging the device size.

A seventh object of the present invention is to provide a
15 practical karaoke system using an effect control device achieving the above-mentioned objects.

An eighth object of the present invention is to provide an effect control device including means for realizing the above-mentioned seventh object without enlarging the device size.

20

THE SUMMARY OF THE INVENTION

Technical Improvements & Advantages

To achieve the advantages of the invention and in accordance with the purpose of the invention, as embodied and broadly described,
25 there is provided an effect control method which comprises the steps



of: storing a first set of audio information, setting an audio effect type to be applied to one or more different sets of audio information to be synthesized with the first set of audio information; storing the audio effect type as digital data for effect control in association with the first set of audio information; reading out the first set of audio information and the data for effect control at the same time; and applying the audio effect type to the one or more different sets of audio information based on the associated data for effect control.

10 Also in accordance with the invention there is provided an effect control device, comprising: a storage means for storing first audio information at a predetermined first storage area; reading means for reading out from the storage means one or more sets of audio information; audio information regeneration means for
15 regenerating a set of sound based on the first audio information read out by the reading means; an effector for applying an effect to audio information, input means for inputting one or more sets of second audio information to be synthesized with the regenerated sound of the first audio information, into the effector; initial
20 effect setting means for setting at least one audio effect type to be applied to the one or more sets of second audio information; a second storage area associated with the first storage area, for storing the at least one audio effect type specified by the initial effect setting means, as second effect control data; the reading
25 means for reading out the second effect control data from the second



storage area, concurrently with reading of the first audio information from the first storage area of the storage means; and transmitting means for transmitting the second effect control data read out by the reading means directly to the effector.

5 Further in accordance with the present invention there is provided a karaoke system comprising: storage means for storing sound information for karaoke accompaniment in a predetermined first storage area; a reading means for reading out from said storage means one or more sets of audio information including the sound
10 information; sound regenerating means for regenerating the sound of karaoke accompaniment music based on the sound information read out by the reading means, an effector for applying an effect at least one of voice information and the sound information, input means for inputting into the effector, the voice information to be synthesized
15 with the sound information for karaoke accompaniment music; initial setting means for initially setting at least one audio effect type to be applied to the voice information input via the input means; a second storage area associated with the first storage area, for storing the at least one audio effect type specified by the initial
20 effect setting means, as voice effect control data; the reading means for reading out the voice effect control data from the second storage area concurrently with reading the sound information from the first storage area in said storage means; and transmitting means for transmitting the voice effect control data read out by the reading
25 means directly to the effector.



Thus, broadly, in accordance with the present invention there can generally be applied different effect controls simultaneously and automatically to a plurality of different audio information (or audio data set). That is, when a plurality of different audio information is to be synthesized, the contents of the settings for the appropriate effect controls are converted into digital data (hereinafter referred to as "effect control data") and set respectively for each of such audio information. These effect control data are then stored in association with a specific audio information. When the specific audio information is retrieved, the effect operation data for the plurality of different audio information associated with the specific audio information is also read out automatically. Based on these effect control data, the formerly set contents of the effects are applied to the plurality of different audio information.

Further, an effect control device handles first audio information stored in a predetermined first storage area in storage means, and one or more sets of second audio information input to be synthesized with the first audio information. In such an effect control device, an effect setting means first sets the contents of the effects to be applied to each of the one or more sets of second audio information input from one or more input means.

The contents of the specified effects are respectively stored as second effect control data in one or more second storage areas, each related with the first storage area. Thus when reading means



reads out the first audio information from the first storage area of the storage means, it can also read out the second effect control data from one or more second storage areas at the same time.

The first audio information is transmitted to an audio
5 information regeneration means and regenerated thereby. The second effect control data, that have been read out at the same time, are directly transmitted to an effect operation means by transmitting means. Based on this transmitted second effect control data, the effect operation means then applies the specified effects on the
10 one or more second audio data. .

As a result, automatic effect control of a plurality of different audio information can be practiced. Also, an automatic effect control can be performed on the first audio information as well. That is, first control data for specifying the contents of
15 the effect to be applied to the first audio information are stored in a third storage area, associated with the first audio information. By doing this, various effects can be applied more flexibly to both the first audio information as well as the one or more sets of second audio information.

20 Additionally, an automatic effect control of both the first audio information and the one or more sets of second audio information can be performed in an undivided manner. That is, in the storage means, the first storage area retaining the first audio information, the third storage area retaining the first effect
25 control data set for the audio information, and the second effect



control data set for the one or more sets of second audio information, may be all stored together in the same data block. The scale of the device is thus prevented from becoming enlarged, since different storage areas or storage means do not have to be added for each
5 information or data to be stored.

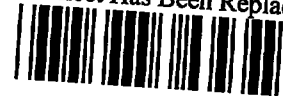
Further, a conventional manual effect control function externally specified can be accepted. That is, temporary setting means can be used to set a manual specification of certain types of desired effects as temporary effect control data, in addition
10 to the initially set effect control data set by the temporary setting means. When both initial and temporary settings are being specified for a single audio input, the temporary effect control data are treated with a higher priority.

Also, initial settings are secured even when a temporary
15 effect is performed. That is, the temporary setting is automatically cleared after once applied to the audio information. This thus encourages more efficient operation.

The temporary and the initial effect settings are performed by using a single setting switch. The effect settings are thus made
20 in a simple and easy way, without enlarging the device size.

The above-described can thus be applied in a practical karaoke system.

Other and further objects, features, and advantages of the present invention will be more fully described in the following
25 description.



Brief Description of the Drawings

The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate embodiments of the invention and, together with the general description of the invention given above and the detailed description of the
5 embodiments given below, serve to explain the objects, advantages, and principles of the invention.

Fig.1 is a block diagram showing the construction of, a commander device of this embodiment.

10 Fig.2 is a block diagram showing a communication karaoke system of an embodiment of the present invention.

Fig.3 is a schematic drawing showing the composition of sound information(MIDI data) into which the effect control data are incorporated in an embodiment of the present invention.

15

Best Mode of Carrying out the Invention

1. Overall composition

An embodiment of the present invention shall now be described with reference to the drawings. Fig.2 is a block diagram showing
20 the construction of a communication karaoke system, according to an embodiment of the present invention. As shown in Fig.2, the karaoke system of the present embodiment accesses a VAN (Value Added Network) 212 via a public telephone line 211 to obtain the necessary
25 music information from among a large amount of different music information stored in a main database 213 of a large-scale host



computer.

In Fig.2, a commander 200, which is the terminal karaoke regeneration device, is connected to a CD changer 201 equipped with an auto-change function for driving a CD-ROM 207, an interface I/F 202 for connecting the commander 200 to the public telephone line 211, an FM receiver 203 for receiving voices input from a microphone 208, an LD regeneration device 204 for outputting a desired image during karaoke performance, a CRT (cathode ray tube) 205 for outputting text of the lyrics (telop) and the accompanying image, and an amplifier 206 for amplifying the music information and the singer's voice and transmitting them to a speaker 209. The commander 200 is remote-controlled by means of an input operation pad 210 for specifying the music information which is desired to be accessed or sung.

In this embodiment, the karaoke music information is compressed and stored in the CD-ROM 207 by the MPEG method. With reference also to Fig.3, music information 3A can include sound information and visual information corresponding to the sound information. Among these, the sound information is the audio portion of the music information which mainly concerns the karaoke accompaniment music. The sound information is converted into digital signals in accordance with MIDI standards (hereinafter referred to as MIDI data).

In Fig.3, each data block 3B for the above-mentioned MIDI data includes sound note data 3a as predetermined sector information,



for specifying each note of the sound comprising the accompaniment part of the corresponding music. If necessary, accompaniment effect control data BGECD 3b, which specifies the type of effect to be applied to the sound note data 3a may also be included as a different
5 predetermined sector information in data block 3B. Furthermore, in this embodiment, microphone effect control data, MECD 3c, which specifies the type of effect to be applied to the voice input from microphone 208 in correspondence with the sound note data 3a, may also be included as another predetermined sector information.

10 With respect to the music information 3A, the visual information includes character data (hereinafter referred to as telop data), which concerns the lyric part of the music information, and image data, which is displayed in accompaniment with the telop data.

15 Fig.1 shows the construction of commander 200 in greater detail, the commander being the regeneration device of the present embodiment. As shown in Fig.1, commander 200 comprises a reading part 100 for reading out the karaoke accompaniment music information and the effect control data which controls the effect operation
20 performed at an effector 105, a built-in hard disk 101, for storing the music information of newly issued songs transmitted from the host database 213, an image regenerating part 102 for synthesizing and regenerating the visual information of the read-out music information, a sound regenerating part 103, for synthesizing and
25 regenerating the sound from the read-out music information, an



effect setting switch 104 for setting the contents of the effects to be applied to the voice input from microphone 208, an effector 105 for applying a predetermined effect to the sound information and/or the voice input from microphone 208, and a controlling line 106 for transmitting the effect control data read by the reading part 100 directly to the effector 105.

2. The Operations and Effects of the Present Embodiment

The operations of the communication karaoke system of the present embodiment having the above-described construction is described next.

[Operations of the present embodiment]

The present embodiment is characterized in that the effect control for the voice input via microphone 208 is performed automatically. In order to perform this automatic control, the type of effect to be applied to an arbitrary composition must be set initially with the above-mentioned effect setting switch 104, shown in Fig.1.

In the present embodiment, effect setting switch 104 is a single switch for specifying and setting the various types of effects to be applied to the voice input via the microphone by selecting a unique number in a rotary fashion. The present embodiment is arranged so that six effect types (echo, short reverb, harmonizer, exciter, comp, and duck voice) can be set respectively with an integer from 1 to 6 selected by the effect setting switch 104. For example, if an echo is to be applied to the voice input from microphone



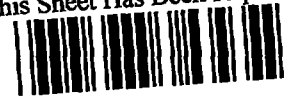
208, the number of the effect setting switch 104 is set initially to "1".

The type of the effect thus set becomes the default value of the above-mentioned microphone effect control data (MECD), and is incorporated as sector information of a predetermined data block in the sound information (MIDI data) of the corresponding music information, which is stored in CD-ROM 207, or, if the above-mentioned music information is on a new tune, stored in built-in hard disk 101.

10 The operation of the karaoke system of the present embodiment during karaoke performance shall be described next. First, as shown in Fig.1, the song desired by the singer is specified by means of input operation pad 210. The reading part 100 searches CD-ROM 207 and reads out the music information of the specified song. If the music information of the specified song does not exist within CD-ROM 15 207, reading part 100 searches the built-in hard disk 101 and reads out the music information of the specified song.

Of the music information read out by reading part 100, the visual information is transmitted to image regenerating part 102. 20 The sound information (MIDI data) is transmitted to sound regenerating part 103. If the microphone effect control data (MECD) is included within the MIDI data at this time, reading part 100 transmits this microphone effect control data directly to effector 105 via controlling line 106.

25 The visual information transmitted to the image regenerating

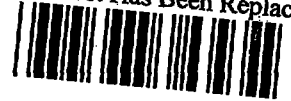


part 102, is expanded and regenerated as the telop data and the accompanying image data. If an image other than the image originally accompanying the telop is desired, the video data for the desired image is read out from a separately installed optical disk by LD
5 regeneration device 204 and displayed. This video image data is transmitted via reading part 100 to image regenerating part 102 and is synthesized by part 102 with the telop data. The visual information thus synthesized is transmitted to CRT 205 and displayed on the monitor.

10 On the other hand, the MIDI data, which is the transmitted music information, is expanded by the sound regenerating part 103. With respect to the MIDI data, the sound information for the karaoke accompaniment music is regenerated by a synthesizer based on MIDI standards and transmitted to effector 105. If accompaniment effect
15 control data (BGECD) exists in the MIDI data at this time, it is also transmitted together to effector 105.

The voice of the singer singing the song is directly inputted from microphone 208 and via FM receiver 203 to effector 105.

Of the two types of effect control data transmitted to effector
20 105, the accompaniment effect control data (BGECD) is originally set as part of the MIDI data and this setting cannot be changed in this case. On the other hand, the microphone effect control data (MECD) is incorporated secondarily into the above-mentioned MIDI data as described above and can thus be set and changeable at any time by
25 means of effect setting switch 104.



Based on the microphone effect control data (MECD) transmitted from reading part 100 and the accompaniment effect control data (BGECD) transmitted from sound regenerating part 103, effector 105 applies the specified effect to the voice input from the microphone and the music information of the regenerated accompaniment music, respectively.

If, during the rendering of the karaoke music, the effect setting switch 104 is manually operated by the singer and a value different from the initially set default value is specified as a desired effect type, the reading part 100 temporarily places priority on the newly specified value and treats this as microphone effect control data (MECD) by transmitting it to effector 105 for effect operation on the microphone-input voice. After the karaoke performance is finished, the specified value is cleared.

The karaoke accompaniment music and the microphone-input voice, to which appropriate effects have been applied by effector 105 as described above, are then mixed and transmitted to amplifier 206 to be amplified and then output via speaker 209 in a manner synchronized with the image displayed on the CRT 205.

[Effects of the present embodiment]

As has been described in accordance with the present embodiment, the default value of the type of effect to be applied to the microphone-input voice is set in advance by means of effect setting switch 104 and this default value is stored in a specific sector set in the MIDI data. This default value is thereby associated



with the sound information for specifying audio data of accompaniment music, and is read out simultaneously with the sound information of the accompaniment music and transmitted to effector 105. The effect control to the corresponding part of the microphone-input voice is thus automated.

The microphone effect control data(MECD) is maintained in CD-ROM 207 until the default value is reset. Thus, if an appropriate effect content is set once as a default value, this setting may be used repeatedly. By automating effect control in this manner, the singer him/herself is relieved of the trouble of manually operating the effector each time he/she sings and can always obtain an amplified voice with the desired effect applied.

In the present embodiment, if the singer wishes, an effect setting besides the default value can also be externally applied to the karaoke system. As a result, the karaoke system can provide the singer with a high level of satisfaction and joy of singing by eliminating the complication of manual effect operation, without enlarging the device size.

Also, since audio information are specified note-by-note in the form of MIDI data, the effect control can be set in detail for each note of the sound information. Further, the default value of the effect type setting for the microphone-input voice can be set and changed easily by means of effect setting switch 104. As a result, the karaoke system enables a rich variation of microphone-output voices, to which various effects are applied in a detailed and



flexible manner, enabling achievement of high level of satisfaction.

3. Other Embodiments

The practice of the present invention is not limited to the present embodiment and can be obtained in various other applications involving audio data input functions. For example, the present invention may be applied to an independent music editing device (mixer) or an audio recording device (recorder), or any other device or system which requires effect operation for various kinds of audio information. Also, with regard to the present embodiment, the karaoke system does not require use of a communication network via public telephone line, but may use any other means to receive music information, to which it applies the effect control method explained above. Or, a more varied form of chorus function can be enjoyed by preparing a plurality of microphones for input voices and by setting different effect types for each voice input via each microphone. Alternatively, by setting the microphone effect control data (MECD) as identical with the corresponding accompaniment effect control data (BGECD), singing that matches the tone of the accompaniment music can be performed automatically.

Also, each sound note data for the sound information comprising the karaoke accompaniment music is stored in a single data block together with the corresponding accompaniment effect control data (BGECD) and microphone effect control data (MECD) in this embodiment, so that they can be read out in an associated manner. However, if an appropriate relation-setup is provided between these



data, it is obviously possible to separately store the effect control data in other data blocks of the same storage means or in a completely different storage means.

Additional advantages and modifications will readily occur
5 to those skilled in the art. The invention in its broader aspects is therefore not limited to the specific details, representative apparatus and method, and illustrative examples shown and described. Accordingly, departures may be made from such details without departing from the spirit or scope of the general inventive concept.
10 Thus, it is intended that this invention cover the modifications and variations of the invention provided they are within the scope of the appended claims and their equivalents.

Industrial Applicability

15 As described above, the present invention provides an effect control method, an effect control device and a karaoke system using such method or device by which a richly diverse voice output can be obtained with high flexibility and yet without enlarging the device size. The present invention is thus highly practical and
20 beneficial.

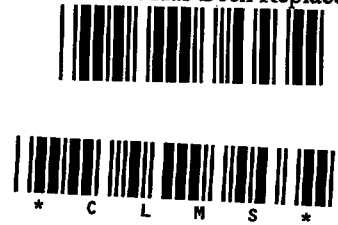


CLAIMS



WHAT IS CLAIMED IS:

1. An effect control method comprising the steps of:
 - 5 storing a first set of audio information;
 - setting an audio effect type to be applied to one or more different sets of audio information to be synthesized with said first set of audio information;
 - storing said audio effect type as digital data for effect
 - 10 control in association with said first set of audio information;
 - reading out said first set of audio information and said data for effect control at the same time; and
 - applying the audio effect type to said one or more different sets of audio information based on the associated data for effect
 - 15 control.
2. An effect control device comprising:
 - storage means for storing first audio information at a predetermined first storage area;
 - 20 reading means for reading out from said storage means one or more sets of audio information;
 - audio information regeneration means for regenerating a set of sound based on said first audio information read out by said reading means;
 - 25 an effector for applying an effect to audio information;



input means for inputting one or more sets of second audio information to be synthesized with said regenerated sound of said first audio information, into said effector;

5 initial effect setting means for setting at least one the audio effect type to be applied to said one or more sets of second audio information;

a second storage area associated with said first storage area, for storing said at least one audio effect type specified by said initial effect setting means, as second effect control data;

10 said reading means for reading out said second effect control data from said second storage area, concurrently with reading out said first audio information from said first storage area of said storage means; and

15 transmitting means for transmitting said second effect control data read out by said reading means directly to said effector.

3. An effect control device as set forth in claim 2, further comprising a predetermined third storage area associated with said
20 first storage area, for storing first effect control data which specifies each audio effect type to be applied to said first audio information.

4. An effect control device as set forth in claim 2, wherein said
25 storage means includes:



said first storage area for storing said first audio information; and

said second storage area for storing said second effect control data set for said one or more sets of second audio information,
5 respectively in different sectors of a single data block.

5. An effect control device as set forth in claim 3, wherein said storage means includes:

said first storage area for storing said first audio
10 information; and

said third storage area for storing said first effect control data, respectively in two different sectors of a single data block.

6. An effect control device as set forth in claim 3, wherein said
15 storage means includes:

said first storage area for storing said first audio information; and

said second storage area for storing said second effect control data set for said one or more sets of second audio
20 information; and

said third storage area for storing said first effect control data, respectively in different sectors of a single data block.

7. An effect control device as set forth in claims 2, 3, 4, 5, or
25 6 further comprising;



temporary setting means for temporarily specifying an audio effect type, different from said audio effect type set by said initial setting means, for said one or more sets of second audio information from said input means, and for selecting said specified
5 effect types as temporary second effect control data.

8. An effect control device as set forth in claim 7, wherein said temporary setting means includes means for automatically clearing the setting of the audio effect type set by said temporary setting
10 means, once the effect operation is performed based on said temporary second effect control data.

9. An effect control device as set forth in claim 7 or claim 8, wherein said initial setting means and said temporary setting means comprise
15 a single effect type switching means.

10. An effect control device as set forth in claim 9, wherein said effect type switching means comprises a rotary switch by which each of the audio effect types is uniquely represented and selectable
20 among predetermined codes.

11. An effect control device as set forth in claim 10, wherein said predetermined codes are represented by integers.

25 12. A karaoke system comprising;



storage means for storing sound information for karaoke accompaniment in a predetermined first storage area;

reading means for reading out from said storage means one or more sets of audio information including said sound information;

5 sound regenerating means for regenerating the sound of karaoke accompaniment music based on the sound information read out by said reading means;

an effector for applying an effect to at least one of voice information and said sound information;

10 input means for inputting into said effector said voice information to be synthesized with said sound information for karaoke accompaniment music;

initial setting means for initially setting at least one audio effect type to be applied to said voice information input via
15 said input means;

a second storage area associated with said first storage area, for storing said at least one audio effect type specified by said initial effect setting means, as voice effect control data;

said reading means for reading out said voice effect control
20 data from said second storage area concurrently with reading out said sound information from said first storage area in said storage means; and

transmitting means for transmitting said voice effect control data read out by said reading means directly to said effector.



13. A karaoke system as set forth in claim 12 further comprising a predetermined third storage area for storing accompaniment effect control data which specify at least one audio effect type to be applied to said sound information for karaoke accompaniment music.

5

14. A karaoke system as set forth in claim 12, wherein said storage means includes:

said first storage area for storing said sound information for karaoke accompaniment music; and

10 said second storage area for storing said voice effect control data specified for one or more sets of said voice information, respectively in different sectors of a single data block.

15. A karaoke system as set forth in claim 13, wherein said storage means includes:

said first storage area for storing said sound information for karaoke accompaniment music; and

20 said third storage area for storing said accompaniment effect control data, respectively in two different sectors of a single data block.

16. A karaoke system as set forth in claim 13, wherein said storage means includes:

25 said first storage area, for storing said sound information for karaoke accompaniment music;



said one or more second storage areas for storing said voice effect control data set for one or more sets of said voice information input via said input means; and

said third storage area, for storing said accompaniment effect control data for specifying the audio effect types to be applied to said sound information for karaoke accompaniment music, respectively in different sectors of a single data block.

17. A karaoke system as set forth in claims 12, 13, 14, 15, or claim 16 further comprising;

temporary setting means for temporarily specifying an audio effect type, different from said audio effect type set by said initial setting means, for one or more sets of said voice information from said input means, and for selecting the specified effect type as temporary voice effect control data.

18. A karaoke system as set forth in claim 17, wherein said temporary setting means includes means for automatically clearing the setting of the audio effect type set by said temporary setting means, once the effect operation is performed based on said temporary voice effect control data.

19. A karaoke system as set forth in claim 17 or claim 18, wherein said initial setting means and said temporary setting means comprise a single effect type switching means.



20. A karaoke system as set forth in claim 19, wherein said effect
type switching means comprises a rotary switch by which each of the
audio effect types is uniquely represented and selectable among
5 predetermined codes.

21. A karaoke system as set forth in claim 20, wherein said
predetermined codes are represented by integers.