MSX

YAMAHA

YRM-105

DX9 VOICING PROGRAM
OWNER'S MANUAL

DX9 PROGRAMME DE REGISTRATION
MANUEL D'UTILISATION

DX9 VOICING PROGRAM
BEDIENUNGSANLEITUNG

NIPPON GAKKI CO., LTD.
PRINTED IN JAPAN

INTRODUCTION

Congratulations on your purchase of the Yamaha DX9 Voicing Program.
In order to appreciate the full performance of this program, please read this Owner's Manual carefully and completely. Keep it in a safe place for future reference.

For further information on the DX9 programming functions and details on voice creation, read the instruction manual supplied with the DX9.

Features

This DX9 Voicing Program (YRM-105) is a ROM cartridge that enables the Yamaha CX computer to be used for the programming of voices for the Yamaha DX9 Digital Programmable Algorithm Synthesizer. This program makes it much easier to edit and create voices, and store the voices, as well as the function parameters for future use. Here is a list of this program's main features.

- The voicing parameters of the DX9 are all displayed on the monitor screen to simplify the actual process of voice editing or creation from scratch. The data for the EG (Envelope Generator) and keyboard scaling can also be displayed in detail on the monitor so that the actual envelopes can be checked visually.
- The CX-computer is equipped with a voice memory, enabling function parameters to be stored independently for each voice. The voice data, including function parameters, can be sent to the DX9 from the CX-computer.
- The voice data and the list of voices can be printed out.
- Voice data and function parameters can be saved onto cassette tape and into a UDC-01 Data Memory cartridge (sold separately).
- Editing can be done either from the control panel of the DX9 or from the keyboard of the CX computer.

CONTENTS

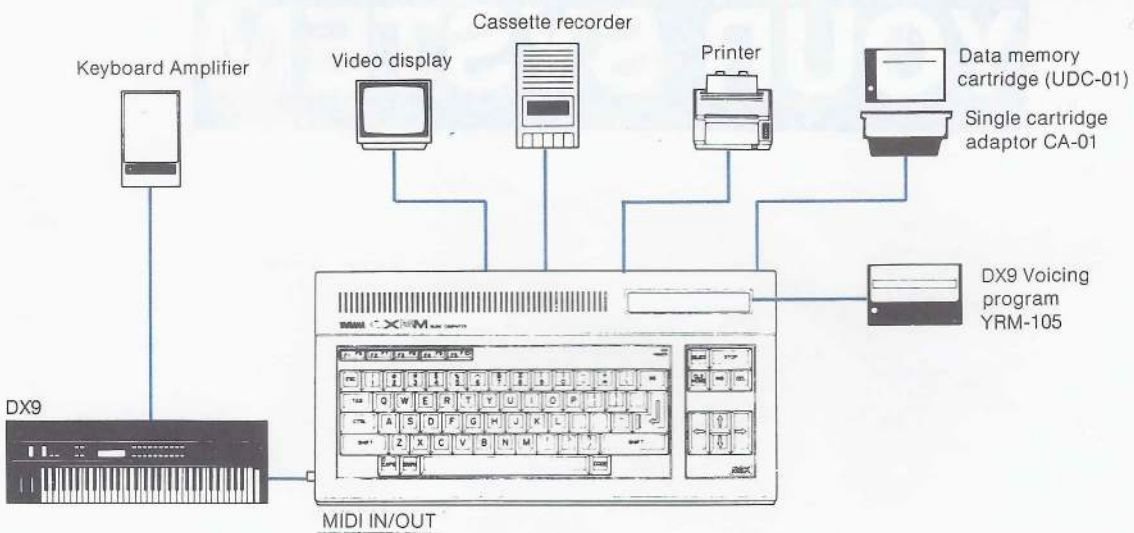
CHAPTER I
CONFIGURING YOUR SYSTEM

SYSTEM COMPONENTS

Here is a list of the components that you need to enjoy the full potential of the DX9 Voicing Program.

• **Yamaha CX-computer (Music Computer)**	The main unit of the system. This computer includes a built-in Yamaha Sound Synthesizer unit.
• **Color monitor or Color TV plus RF Modulator/Adaptor**	Necessary for visual display and control of the voice data.
• **Yamaha DX9 plus two MIDI cables**	This DX9 Voicing Program is designed for exclusive use with the Yamaha DX9 Digital Programmable Algorithm Synthesizer.
• **Cassette recorder**	Necessary for storing the voice data.
• **Yamaha Data Memory Cartridge (UDC-01) plus Single Cartridge Adaptor (CA-01)**	For easy storage of the voice data.
• **MSX standard printer**	To make hard copies of the screen display.
• **Stereo amplifier/speaker system or Keyboard amplifier**	To fully enjoy the high quality FM sound.

Fig. 1 System Configuration

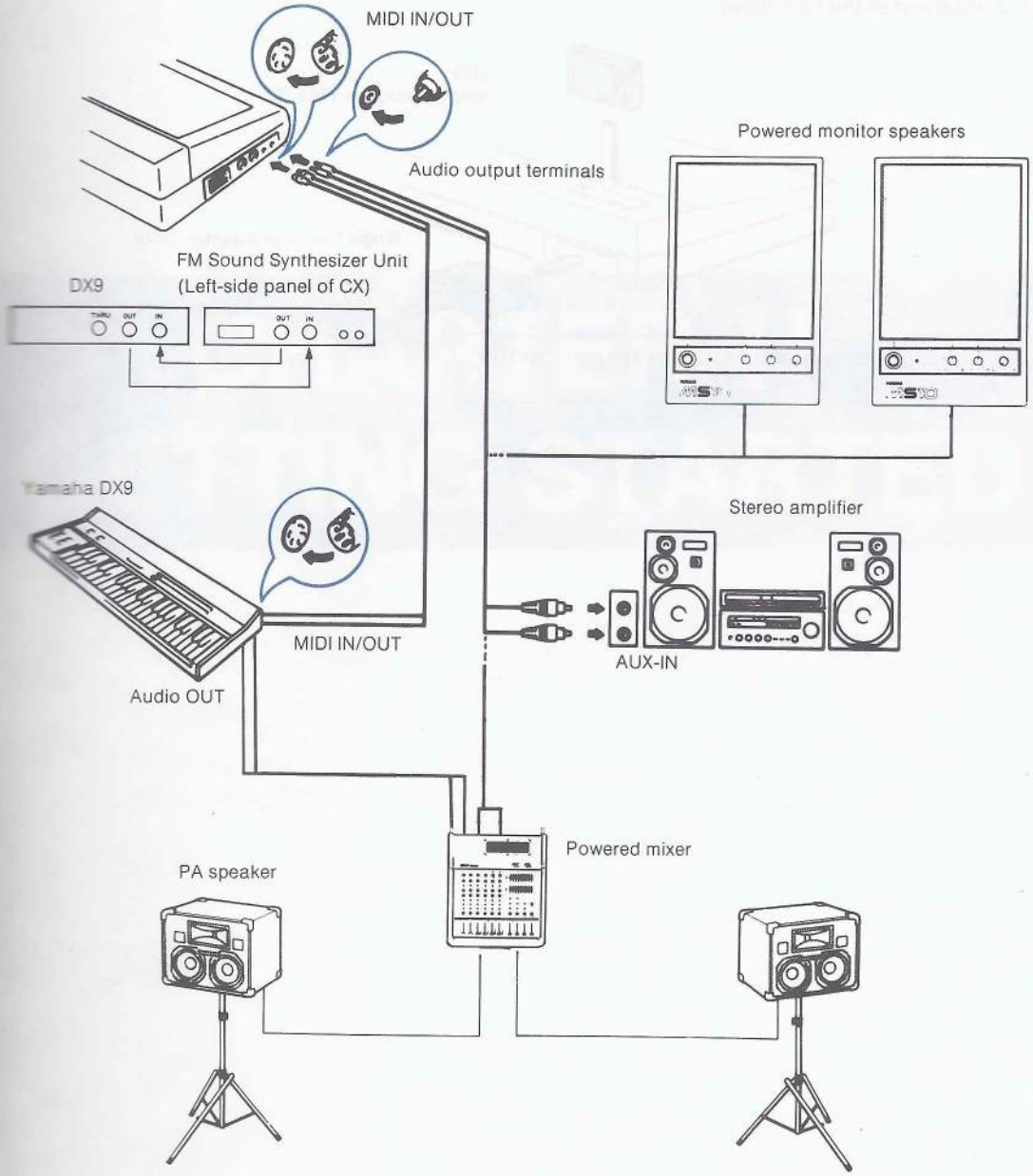


SYSTEM CONNECTIONS

Please refer to the Owner's Manual supplied with your CX Music Computer for connecting video display, printer, and cassette recorder. The following diagram is given for easy reference. Please read carefully the Owner's Manual provided with each component before connecting.

Caution: *Before connecting the system, be sure that the power to all components is turned OFF.*

Fig. 2 Connection diagram for Audio System and Yamaha DX9



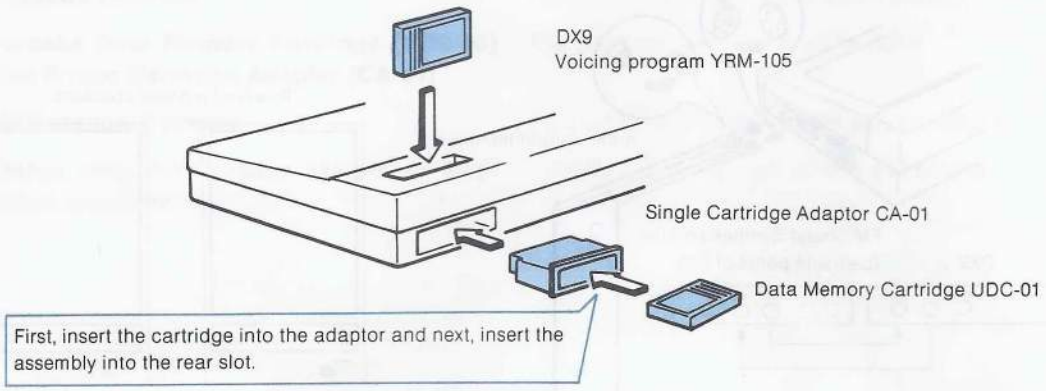
PROGRAM AND DATA MEMORY CARTRIDGE

Precautions regarding the use of cartridges

Always turn the power to music computer OFF before inserting or removing a cartridge; removing or inserting a cartridge when the power is ON can easily cause trouble.

Always return the cartridges into their protective package after use and reinstall the rear slot cover when a cartridge is removed from rear slot as dust on the connection pins can produce erratic operation.

Fig. 3 Insertion of the cartridges



CHAPTER II
GETTING STARTED

POWER-ON DISPLAY AND FUNCTION OUTLINE

Starting the program

(1) Check to see that all components (including the Data Memory Cartridge) are correctly connected.

(2) With the power of the music computer off, insert the YMR-105 ROM cartridge into the computer cartridge slot.

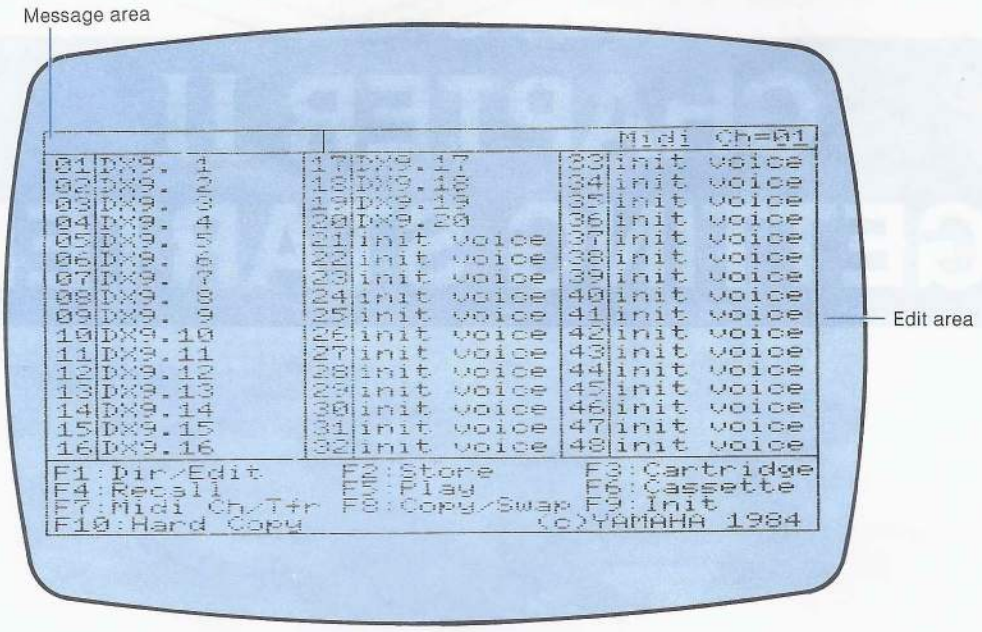
(3) Next turn the power of the DX9 on. Then turn the power of computer on. The internal voice data will be read into the computer and a list of all the voices will appear on the monitor.

★ TURN ON THE POWER OF THE DX9 FIRST BEFORE TURNING THE COMPUTER ON.

★ IF THE PROGRAM WILL NOT RUN, TURN THE COMPUTER OFF, AND CHECK IF THE ROM CARTRIDGE IS PROPERLY INSERTED.

★ DO NOT ATTEMPT TO OPERATE OR PERFORM ON THE DX9 UNTIL THE COMPLETE LIST OF DX9 INTERNAL VOICES APPEARS ON THE VIDEO MONITOR.

Fig. 4 Screen display when power is turned ON



Functions of the DX9 voicing program

The DX9 Voicing program is equipped with a variety of functions. The functions can be roughly divided according to 2 modes of operations as follows.

- Edit mode: Used for editing existing voices or creating new voices from scratch, and for changing the function parameters.
- Command mode: This mode includes all other functions.

These are some of the operations possible though the use of this program:

- Edition of voice data
- Display of existing voice data on the monitor (envelopes, etc., can be displayed graphically)
- Creation of new voices for the DX9
- Storage of new voices onto cassette tape or data memory cartridge
- Print-out of voice data
- General assistance of sound programming operations. The above functions can be selected by using the FUNCTION key.

KEYBOARD OPERATION

The various functions of the DX9 Voicing Program are activated by using the CX5M keys. Here is a simple description of each key.

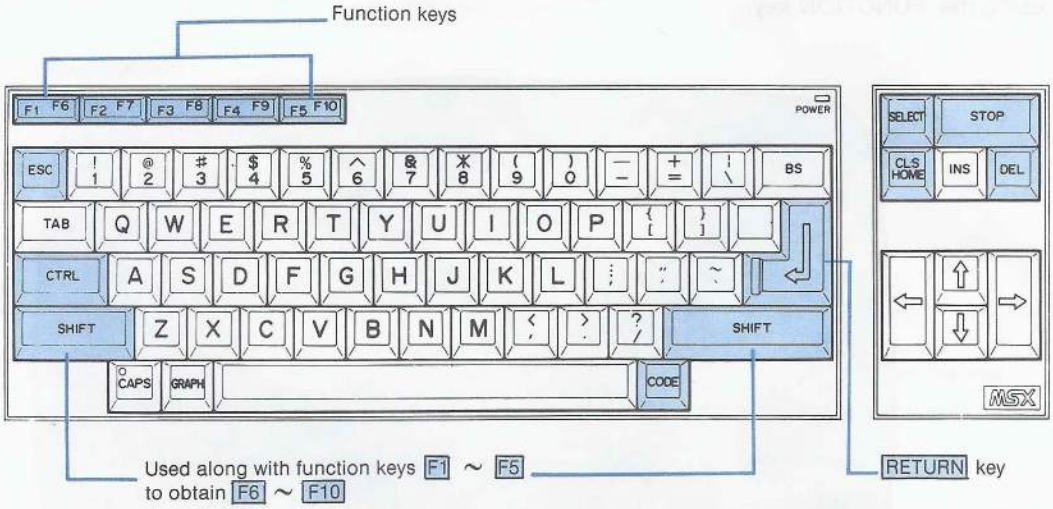
NOTE:

The DX9 voicing program is equipped with a key input repeat function. When in the EDIT mode, for example, it is therefore possible to continuously change data by holding down the data entry key. The video screen selector key is also equipped with a repeat function, so the display on the television screen continues to change, even when the key is released. Press the STOP key to stop the changing of the screen display.

Command keys

These keys are used to activate/deactivate several commands.

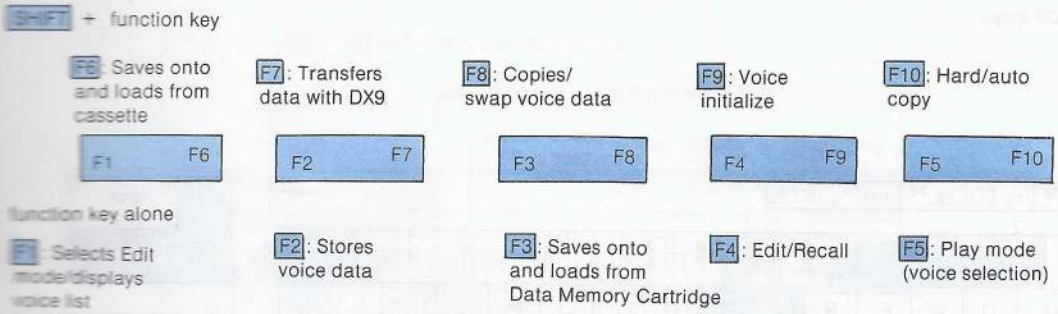
Fig. 5 Command keys



The main command keys are the function keys; other command keys are used to enter or cancel a command. The CODE key is usefull to switch the cassette recorder motor ON/OFF and to select the size of hard copies.

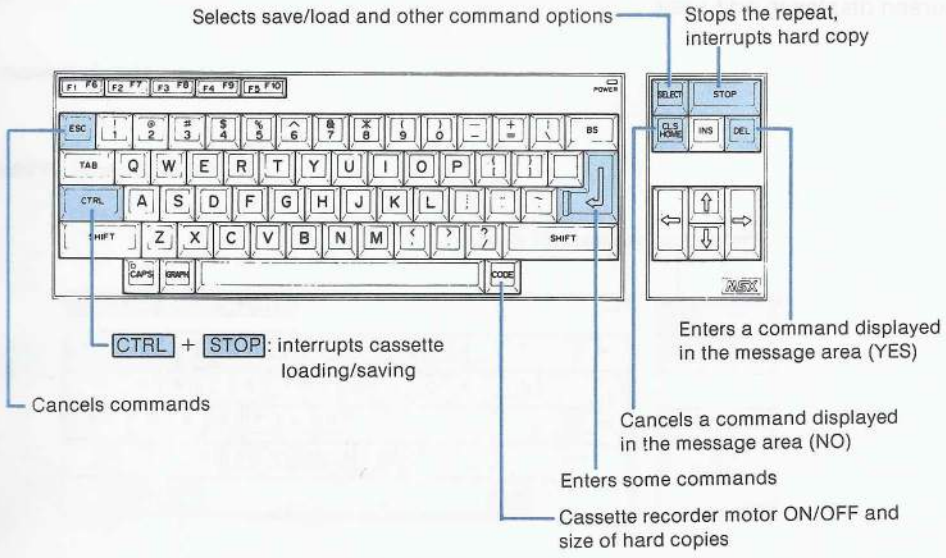
Function keys

Fig. 6 Function key definition



Other command keys

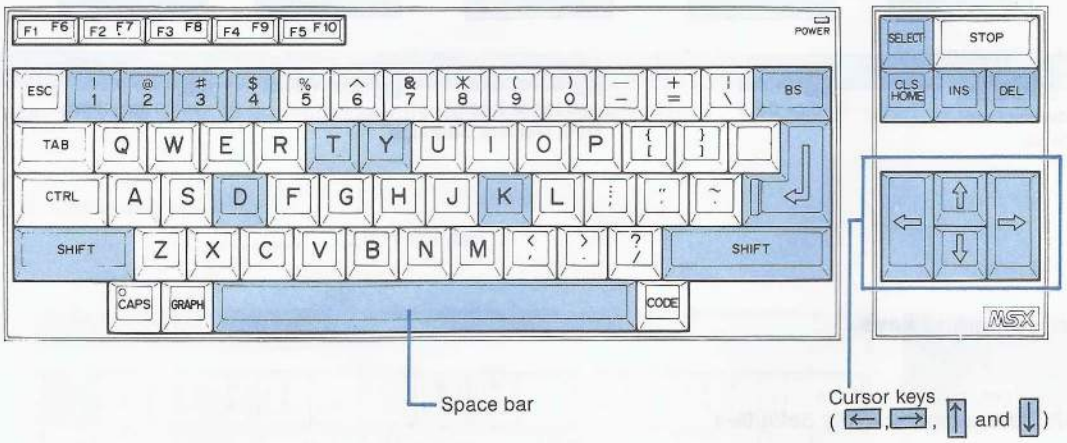
Fig. 7 Other command key definition



Edit keys

These keys are used for the actual creation of voices (Edit mode) and for the selection of block display.

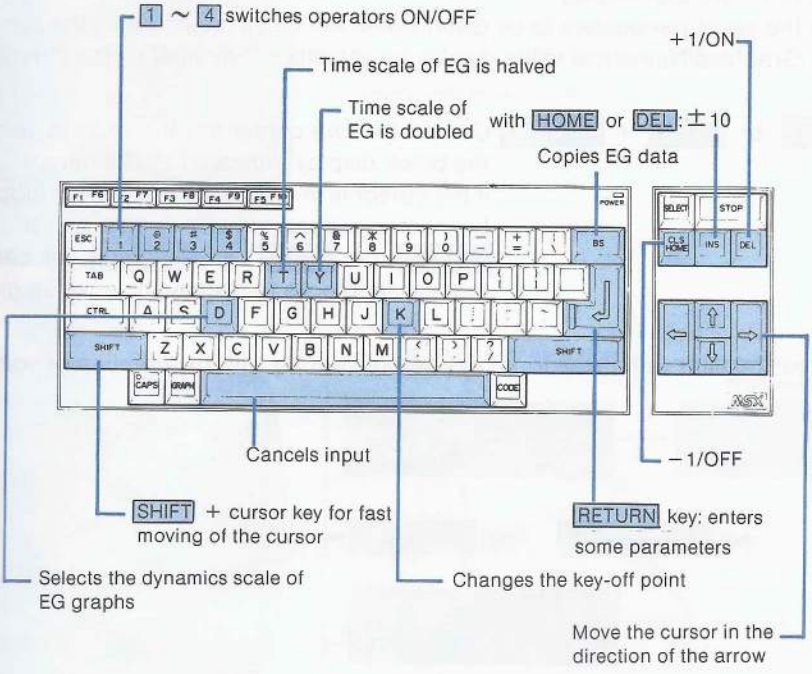
Fig. 8 Edit keys



Some keys are used to modify the voice parameters (input, correction, etc.); other keys are used to select the screen display in edit area.

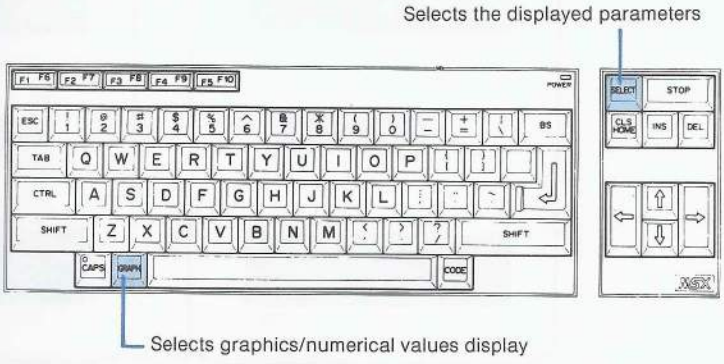
Keys used to modify the voice parameters

Fig. 9 Keys used to modify the voice parameters



Keys used to select display

Fig. 10 Keys used to select display



SCREEN DISPLAY

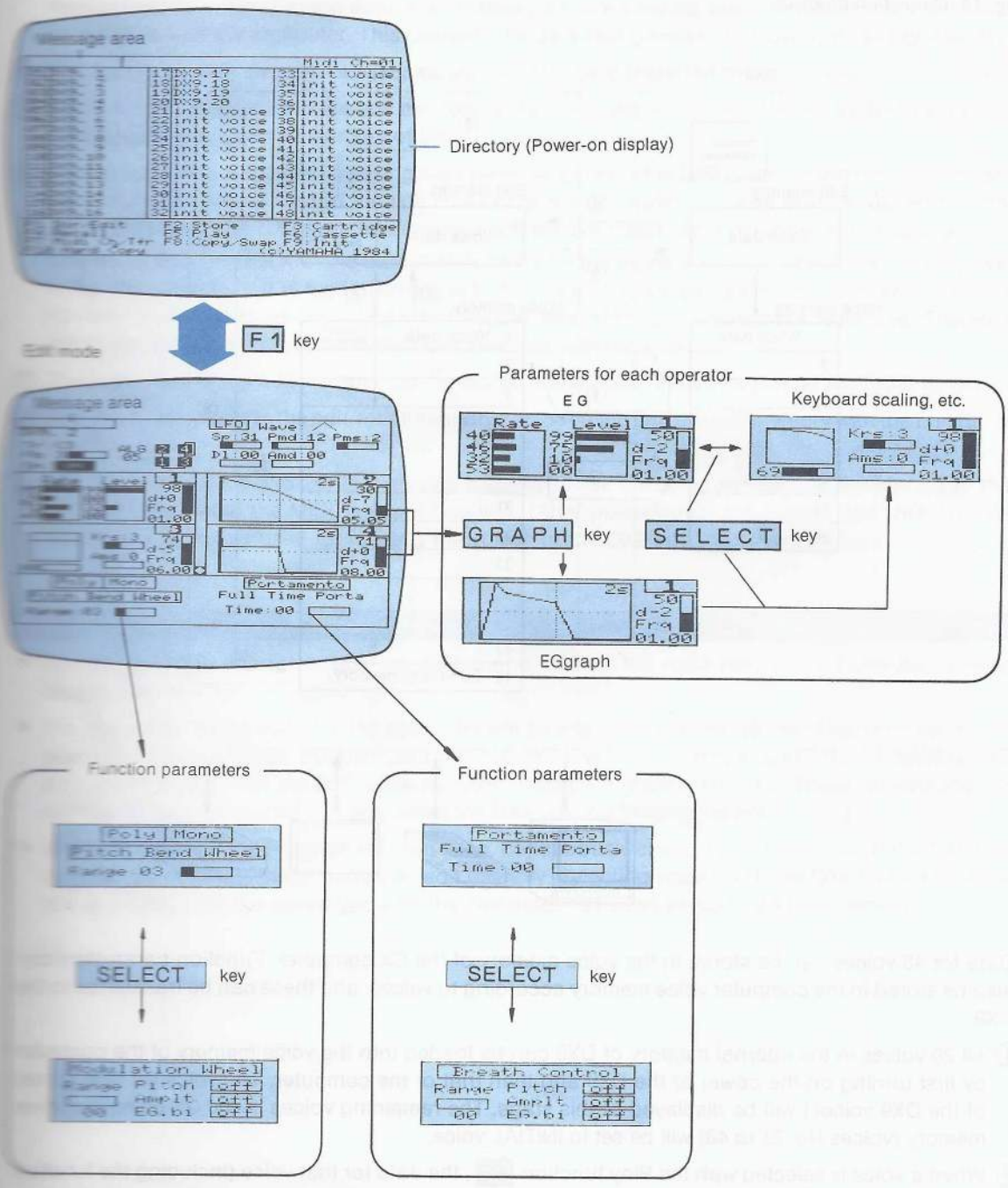
There are two main types of screen displays; one for the Edit mode and the other for the Voice List (or the "directory"). The Edit mode is further divided into different screens which can be selected. The different types of displays and the keys that are used to make them appear on the screen are explained here.

F1 Selects Directory/Edit display
SELECT Selects the set of parameters to be displayed in the block indicated by the cursor
GRAPH Selects Graphics/Numerical value display for the block indicated by the cursor

SHIFT + GRAPH or SHIFT + SELECT Causes the four center block display to be matched with the block display indicated by the cursor. For example, if the cursor is in one of the four center blocks and if this block displays the envelop graph, pressing SHIFT + GRAPH or SHIFT + SELECT will cause all of the four center blocks to display the envelop graph.

You should become familiar with these four keys before starting with the creation of voices.

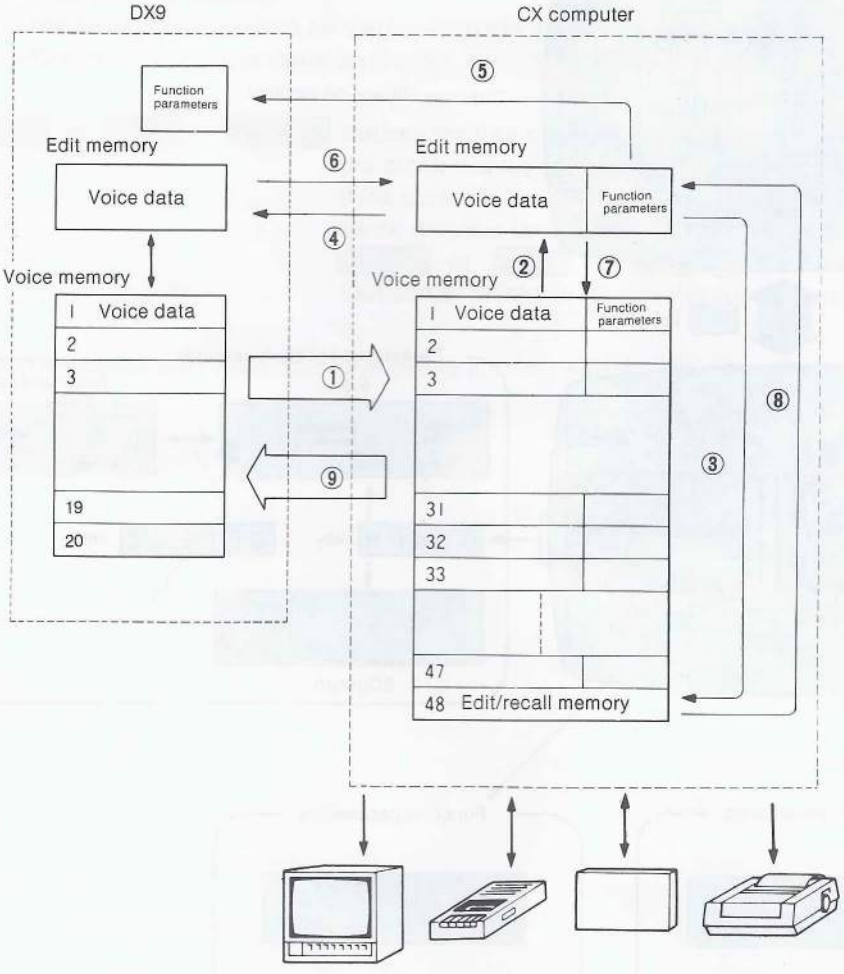
Fig. 11 Display diagram



OPERATION OUTLINE

The operation outline of the DX9 Voicing Program is as follows:

Fig. 12 Operation diagram



Data for 48 voices can be stored in the voice memory of the CX computer. Function parameters can also be stored in the computer voice memory according to voices; and these can be transferred to the DX9.

① All 20 voices in the internal memory of DX9 can be loaded into the voice memory of the computer by first turning on the power of the DX9 and then that of the computer. The voice list (the names of the DX9 voices) will be displayed at this stage. The remaining voices in the CX computer voice memory (voices No. 21 to 48) will be set to INITIAL voice.

② When a voice is selected with the Play function F5, the data for that voice (including the function parameter) will be entered into the edit memory of the CX computer. (Henceforth, any reference to the edit memory will refer to that of the CX computer, not the DX9, unless otherwise indicated.) The selected voice can be edited by pressing the F1 key.

The default voice in the edit memory is voice No.1 which is automatically loaded when the system is turned on.

③ When you select a new voice to edit by using the Play function, the voice data that was in the edit memory will be entered in the edit/recall memory for voice No.48; but only if that voice data is to be modified with the computer. This prevents the data being edited from being erased by mistake.

④ The data in the edit memory of the computer will also be transferred to the edit memory of the DX9.

⑤ The function parameters in the edit memory of the computer will be transferred to the function parameter (function control) memory of DX9.

⑥ Whenever a voice is selected by using the operation panel of the DX9 (even during the PLAY mode), that voice data will be sent to the edit memory of the computer, insuring that the contents in the edit memories of the DX9 and the computer will always match. This means that everything heard from the DX9 coincides with the data that appears on the monitor screen. The voice data that was in the edit memory, if it is being revised with the computer, will be sent to the edit/recall memory. However, if envelopes are copied with the DX9, the data in the computer will not be revised. Therefore envelopes should be copied with the computer, not with the DX9.

⑦ The voice data in the edit memory can be stored in the voice memory by using the Store function.

⑧ The voice data that is in the edit/recall memory can be called into the edit memory with the Edit Recall function.

⑨ The 20 voices (No.'s 1 to 20) in the voice memory of the CX computer can be transferred to that of the DX9 by using the MIDI Transfer function. (After powering up the system, the MIDI Transfer function also can be used for loading the voices of the DX9 into the CX computer.)

PRECAUTIONS

- Do not attempt to operate or play the DX9 during the time the voice data of the computer is being loaded into the DX9.
- The voice data being edited in the computer will be altered if any operations other than voice programming (such as MIDI, EDIT/RECALL, VOICE INIT, BATTERY CHECK, CARTRIDGE SAVE/LOAD etc.) are carried out on the DX9 while the DX9 Voicing Program is running. These non-editing operations should be carried out only when the DX9 Voicing Program is not running.
- While the DX9 Voicing Program is being used, continuously changing the voices with the DX9 may damage the contents in the computer edit memory. Selecting voices with the DX9 should be done one at a time, after the edited voice on the computer has been saved to a voice memory.

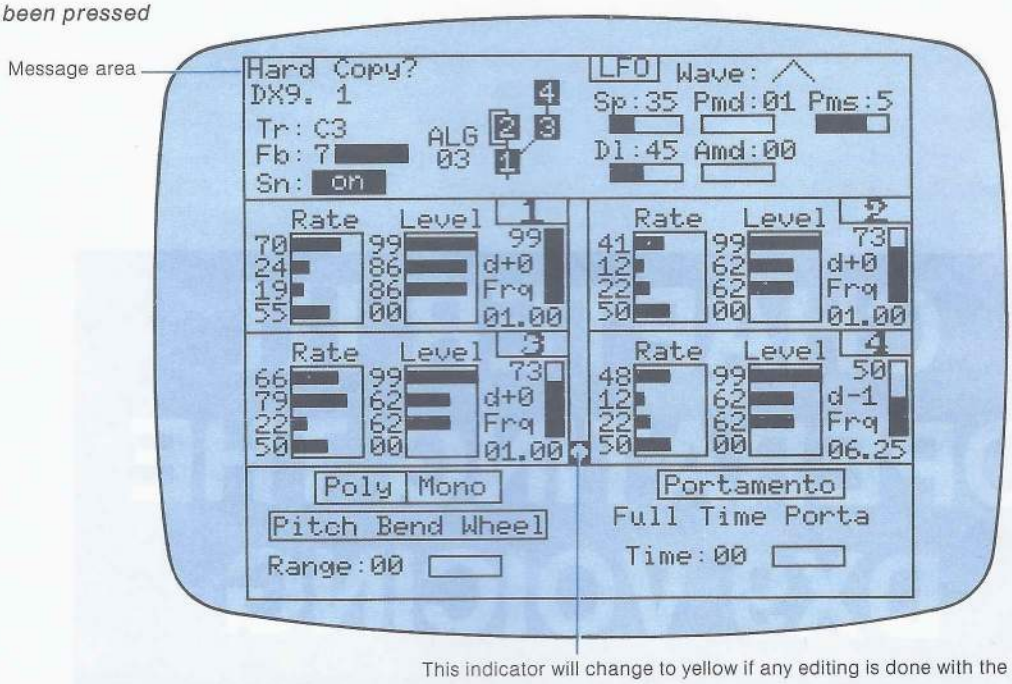
CHAPTER III
OPERATING THE DX9 VOICING PROGRAM

EDIT MODE

The Edit mode revises the voice data in the edit buffer memory and modifies the existing voice or creates entirely new voices. In addition, effects (function parameters) such as pitch bending and modulation can also be revised.

Press the F1 key to initiate the Edit mode. The edit mode screen display will appear, and the voice data will be displayed. Using the arrow keys, move the cursor (the red blinking mark) to the parameter that is to be edited.

Fig. 13 The screen in the Edit mode immediately after the power has been turned on, and the F1 key has been pressed



Moving the cursor

The cursor is moved with the arrow keys which are called cursor keys. Move the cursor in the direction of the parameter that is to be edited by pressing the arrow key that points in the proper direction. The screen display is divided into 8 blocks as shown in the figure. The cursor can be moved between blocks by pressing the cursor key while holding down the SHIFT key. This causes the cursor to move to the very beginning of the block.

Changing the parameters

The voice editing and performance parameters are changed with the HOME key and the DEL (delete) key, which operate like the DATA ENTRY buttons on the DX9. The HOME key does exactly the same thing as the −1 button of the DX9 and the DEL key does the same thing as the +1 button.

If a large change in a numeric value is desired, press the INS key together with the HOME or the DEL key and the value can be changed by units of +/−10. (Thus, HOME together with INS or DEL is analogous to the DX9's DATA ENTRY slider.)

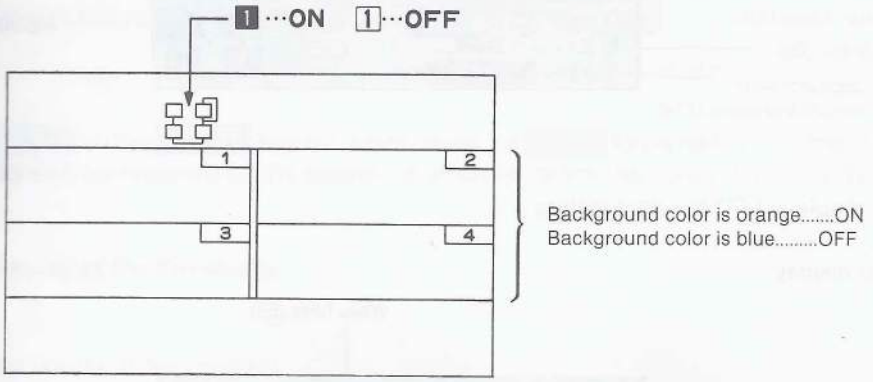
HOME key	−1, OFF, NO
DEL key	+1, ON, YES

The change in parameters can be cancelled by pressing the SPACE key before the cursor is moved. The data will return to its original status before the change was initiated.

Turning the operators ON and OFF

Numeric keys [1] to [4] are used for turning the operators on and off. When keys [1] to [4] are pressed, the operator corresponding to that number will turn off; pressing the same key once again causes the operator to turn on.

Fig. 14 Turning the operators ON/OFF



Individual block display

The DX9 has an extremely large number of parameters. To facilitate the monitoring of these parameters, the DX9 Voicing Program divided the parameters into groups and alternately switches the display screen as required. The main editing screen is sub-divided into 8 blocks as mentioned before. Here is a description of what kind of parameters are in each block. Blocks names have been assigned arbitrarily as a matter of convenience.

Fig. 15 Edit display configuration

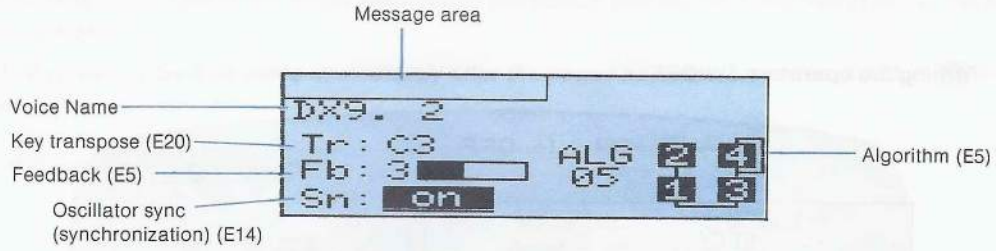
A BLOCK	B BLOCK
C1 BLOCK	C2 BLOCK
C3 BLOCK	C4 BLOCK
D1 BLOCK	D2 BLOCK

The symbol within the parentheses (see Fig. 16 ~ 24) after the parameter name indicates which switch on the DX9 that parameter corresponds to. For example, E8 corresponds to Edit mode 8, and F2 corresponds to function mode 2.

BLOCK A

This block displays the algorithms and the voice names, etc.

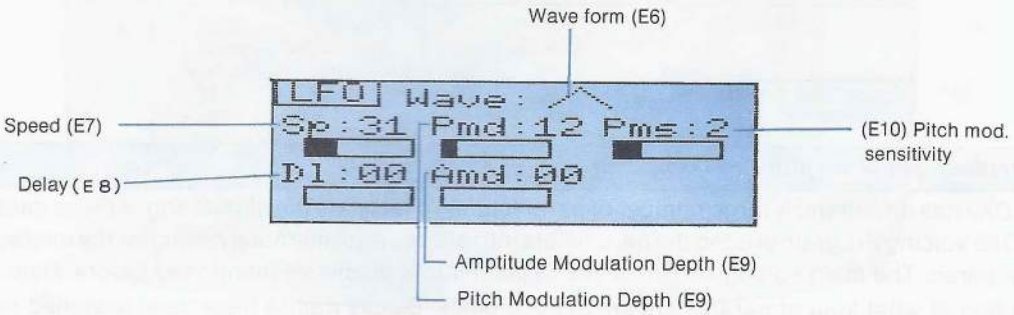
Fig. 16 Block A



BLOCK B

This block displays LFO the parameters.

Fig. 17 LFO display

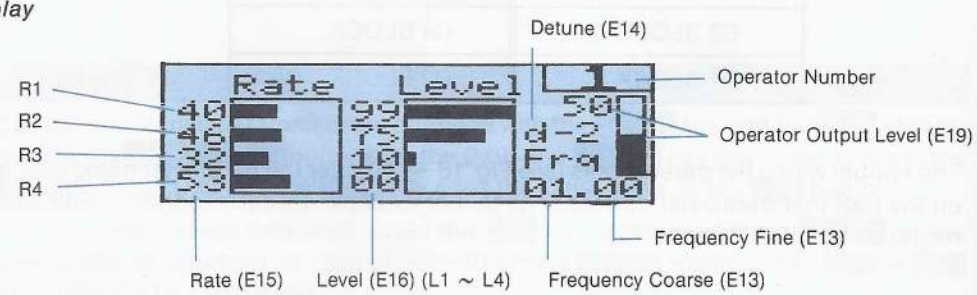


BLOCK C (C1 to C4)

These blocks are used to display the parameters which are set independently for the respective operators. Each C block, from C1 to C4 corresponds to a single operator. The following will be displayed when the EDIT mode is selected directly after turning the power on.

- EG Display

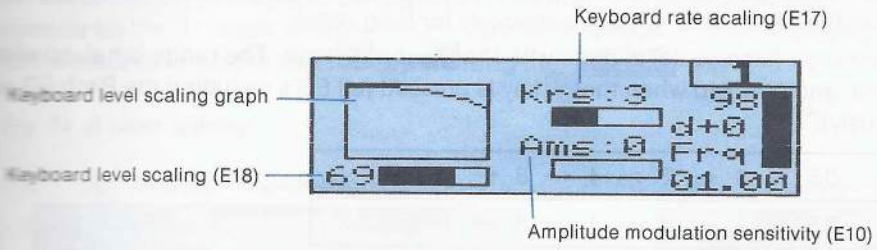
Fig. 18 EG display



When the cursor is within this block, pressing the SELECT key causes the EG display block to change as shown on the following page, so that parameters such as keyboard scaling, etc., will be displayed. Pressing the SELECT key again causes the EG display to reappear.
Pressing the GRAPH key when the EG parameters are being displayed causes the EG parameters to be graphically displayed. Press the GRAPH key once again to cancel the graphics display function.

- Display for Keyboard Scaling etc.

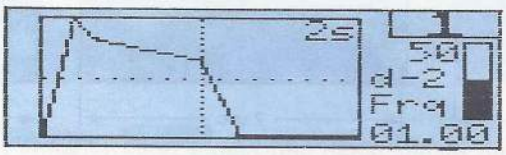
Fig. 19 DX9 keyboard scaling display



★ If the SELECT or the GRAPH key is pressed while the SHIFT key is held down, the entire BLOCK C display can be matched to the display of whatever block the cursor happens to be in at the time.

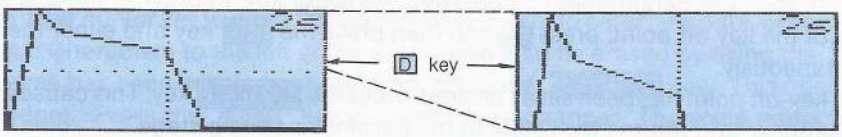
- Graphic Display of the Envelopes

Fig. 20 Graphic display of the envelops



When the D key is pressed, the vertical height of the EG's for all operators will be enlarged to twice the original size as shown below, and the background color will turn from green to blue. Pressing the D key once again will restore the original display.

Fig. 21 Change in dynamics scale



Editing can be done while the graphic display is on the screen. When the graphic display is selected, parameter R1 will be indicated in the right half of the screen. Imagining that the parameters are listed in the same manner as the numeric value display, select the the parameter to be edited with the cursor key. For example, press the ↓ key twice when R3 is to be edited. The selected parameter itself will be displayed in the right half of the block. However, its position on the envelope graph will be indicated either by an "x" (rate) or a "+" (level).

Any changes in the parameters will be reflected in the envelope display.

★ If the position of the chosen parameter cannot be indicated within the envelope display (ie. if the value overflows the displayable range) the direction of the actual position will be indicated by a red arrow. This is also true when display is not possible following key-off.

- **Changing the time scale**

The graphic display of the envelopes is shown with a time scale of 2 seconds. However, the time scale can be altered between 0.5 to 16 seconds, enabling the user to get a condensed view or see very small changes in the attack and sustain, especially for long notes.

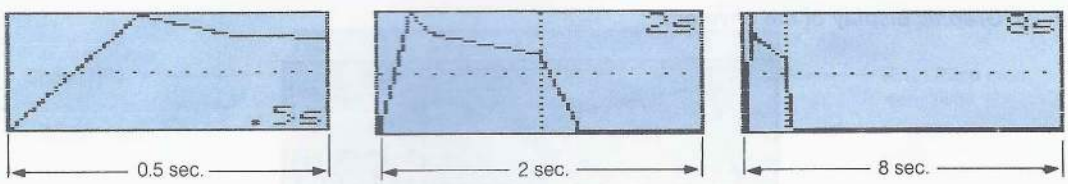
The switching of the range (time scale) is done with the [T] and [Y] keys. The range is halved when the [T] key is pressed, and doubled when the [Y] key is pressed (all EG's including the Pitch EG will change simultaneously).

[T] key	0.5 ← 1 ← 2 ← 4 ← 8 ← 16 sec.
[Y] key	0.5 → 1 → 2 → 4 → 8 → 16 sec.

Fig. 22 Change in time scale

★ Setting the keyboard rate scaling will cause the time scale (rate) of the envelopes to vary according to the position on the keyboard of the key being played. In order to provide a uniform frame of reference, despite actual envelope differences due to rate scaling, the DX9 Voicing Program graphically indicates the envelope of the note played by the C3 key.

- **Changing the key-off point**



The actual envelope which results when you play a note depends on the elapsed time between pressing the key and letting the key return to its resting position. In order to see the results of different key-off points graphically, the CX5M enables you to change the location of the key-off point. The vertically dotted line in the graphic display indicates the key off point.

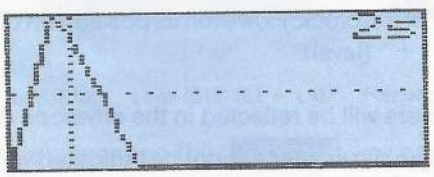
The initial default value of the key off point is 1 second after the key-on point.

In order to change this, the [K] key is pressed. A black dotted line will appear on the screen, signaling that the key off points of all EG's can be moved to the left (shortened) by pressing the [HOME] key, or moved to the right (lengthened) by pressing the [DEL] key. In order to make a major change in the value of the key off point, press [K] and then press the [INS] key and either the [HOME] or [DEL] key simultaneously.

When the key-off point has been set as desired, press the [RETURN] key. This causes the black dotted line to disappear and returns the CX5M to the parameter editing stage.

In order to cancel the key-off change before you commit to it, press the [SPACE] key instead of the [RETURN] key.

Fig. 23 Key-off point setting

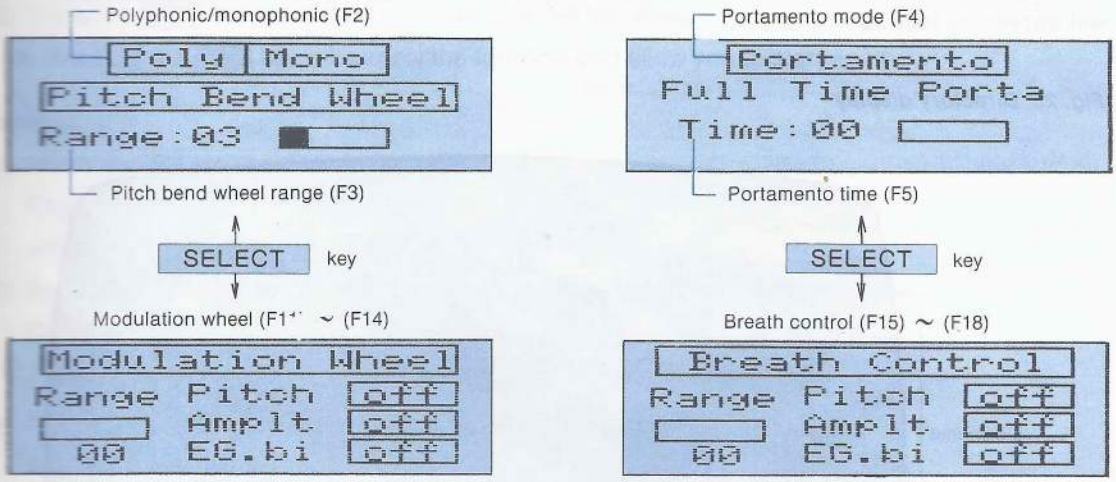


★ Revision of the key-off point cannot be accepted unless the block with the cursor has its envelopes displayed graphically. When a change in the key-off point is to be made, press the [K] key after first activating the envelope graphic display for that block, or move the cursor to a block in which the envelopes are graphically displayed.

BLOCK D (D1 and D2)

The D block displays the effects data for the pitch bend and modulation wheel, etc. This function means that the effects data can also be edited. Selecting the EDIT mode directly after the power has been turned on will cause the following to be displayed. However, it is possible to select the modulation wheel parameter fot the D1 block, and the breath control parameter for the D2 block by first moving the cursor to the respective blocks and then by pressing the SELECT key.

Fig. 24 D block display



When changing the data, use the HOME key (corresponds to the −1 key of the DX9) and the DEL key (corresponds to the +1 key of the DX9).

- Changing voice names

The procedure for changing the voice name differs from other data entry procedures. Usable data are 0 ~ 9, A ~ Z, and space, which are all entered directly from the keyboard of the computer. Use the ← and → cursor key to move the cursor left and right to enter new data, or cancel erroneously entered data. Characters to the left of the cursor can also be erased by using the BS key. After the voice name has been satisfactorily entered, press the RETURN key. This completes the data entry procedure. Press the ESC key to cancel data changes. The voice name being changed will revert to that previously set.

- Copying EG data

Pressing the BS key when the cursor is in the C block (Block displaying the parameters for the respective operators) allows EG copy functions to be carried out. The EG data for the block in which the cursor is located will be copied. Pressing the BS key will cause EGcpy to (n = operator number) to appear in the message area.
Enter the destination operator number onto which the source EG data is to copied. Pressing the RETURN key activates the EG copy function. Pressing the ESC key will interrupt the EG copy function.

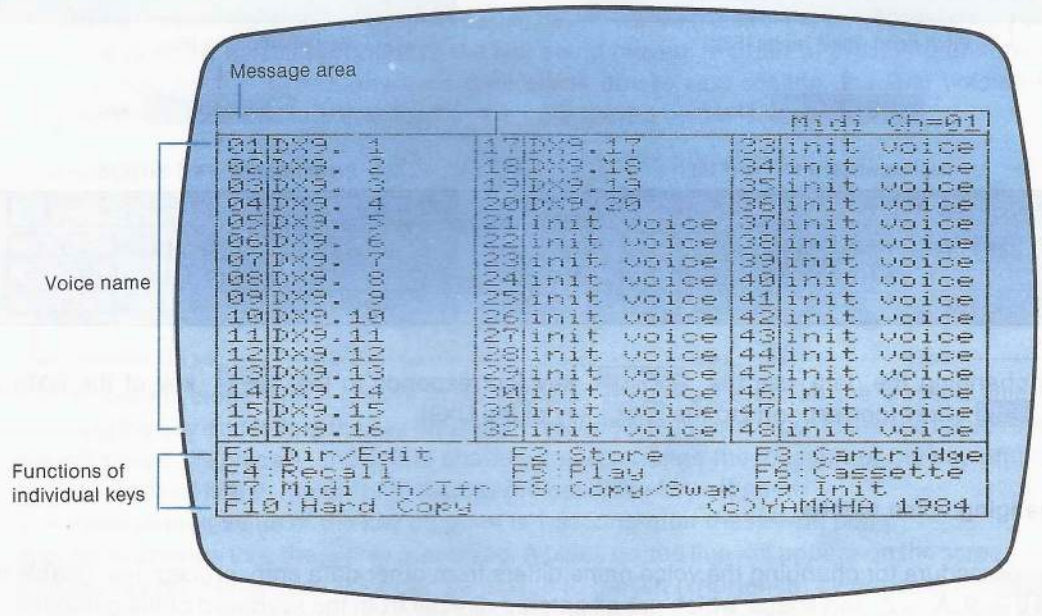
FUNCTION KEYS

Initialization and storage of voice data is done using the function keys. This section will help you understand what each of these function keys actually do. Also, as an added user convenience, when a function key is pressed, a message corresponding to that function will appear in the message area. If a command is given at this stage, that command will be put into effect. Press the ESC key to interrupt any of the functions in progress.

F1 *Key [Directory/Edit]*

This key selects the Edit mode. When the F1 key is pressed during the Edit mode, the voice list (directory) will appear as follows.

Fig. 25 Directory display



The blinking red mark designates the last voice number that was selected with the Play function F5 of the computer.

F2 *Key [Store Memory]*

This key is for storing the voice data from the computer edit buffer into the computer voice memory locations. By pressing the F2 key, the directory will appear and the prompt Store = will appear in the message area. Type the number of the voice that is to be stored and press the RETURN key. Pressing the ESC key will cancel the function and allow you to start again.

F3 *Key [Cartridge Load/Save]*

This key loads the data from a data memory cartridge connected to the computer into the computer voice memory. It also saves the contents of the computer voice memory in the data memory cartridge. Data for 32 voices (including function parameter data) from the voice memory can be saved on the data memory cartridge connected to the computer.

Saving

(1) When the F3 key is pressed, the prompt

Cartridge Save?

will appear in the message area.

(2) Press the DEL key and the confirming message

Are you sure?

appears.

(3) Press the DEL key once again and the data will be saved.

★ Pressing the ESC key will cancel the function and allow you to start again.

Loading

(1) When the F3 key is pressed, the prompt

Cartridge Save?

will appear in the message area.

(2) Press the SELECT key and the prompt will change to

Cartridge Load?

(The system will return to 'Save' if the SELECT key is pressed once again.)

(3) Pressing the DEL key will cause the prompt

Are you sure?

to appear.

(4) Press the DEL key once again and the data will be loaded.

★ Pressing the ESC key will cancel the function and allow you to start again.

F4 *Key [Edit/Recall]*

This key loads the voice data from the special edit/recall memory into the edit memory.

(1) When the F4 key is pressed, the prompt

Edit Recall?

will appear in the message area. Press the DEL key.

Are you sure?

will appear.

(2) Press the DEL key once again to start the edit recall.

★ Pressing the ESC key will cancel the function and allow you to start again.

F5 *Key [Play]*

This key is used to select the voice data from one of the computer voice memories. The selected voice data will be input simultaneously into the computer edit buffer memory and transferred to the DX9. The sound of the voice that has been selected should be heard from the DX9 when it is played.

When the F5 key is pressed, the directory will be displayed and the message Play = will appear in the message area. Type the desired voice number and press the RETURN key.

★ Pressing the ESC key will cancel the function and allow you to start again.

F6 *Key (SHIFT + F1 keys) [Cassette Load/Save]*

This key loads the data from a cassette tape recorder into the computer voice memories or saves the contents of the computer voice memories onto a cassette tape.

Saving

All 48 voices stored in the voice memory, including the function parameters, can be saved onto cassette tape.

(1) Connect the cassette recorder to the computer and insert a cassette tape into the recorder. The tape should be wound past the blank leader.

(2) Pressing the F6 key will cause the prompt

Cassette Save =

to be displayed in the message area. Type the name of the data (or file) to be saved on the tape. The name can be any combination of up to six alphanumeric characters. We recommend that you write the name on the cassette label for future reference, along with the tape counter location.

(3) Now, set the cassette recorder to the recording mode and press the RETURN key to start saving.

(4) After saving has been completed, the cassette recorder motor will stop (due to the remote control cable). Manually return the recorder to the STOP mode by pressing its stop button.

Loading

(1) Connect the cassette recorder to the computer and insert a cassette tape. Wind the tape so that the data to be loaded is ready to play. If you cannot wind the tape with recorder connected to the computer, press the CODE key to enable the recorder motor, and then press the CODE key again after the tape is parked at the correct location, disabling the cassette motor.

(2) Pressing the F6 key will cause the prompt

Cassette Save =

to appear in the message area. Press the SELECT key.

The prompt

Cassette Load =

will replace the preceding message.

(Pressing the SELECT key once again toggles the display back to Save.)

(3) Type the exact name of the data (file) to be loaded. Set the recorder to the playback mode and press the RETURN key and the data will load. If the name of the file is different from the name that is saved on cassette, the cassette will continue to play and the computer will wait until an identical type file name is found. However, if the name has been abbreviated, using only the first letters the type file that is found first with the same beginning letters will be loaded.

Interrupting the save/load function

In order to interrupt the save/load function in progress, simultaneously press the CTRL + STOP keys on the computer. If the loading of data is interrupted prematurely, the entire voice memory of the computer will be initialized and the message Data error! will be displayed.

F7 *Key* (SHIFT + F2 *key*) *[MIDI Channel/Transfer]*

This is the key that controls MIDI channel data transfer functions. This key is used for voice data transfer between the DX9 and the computer.

MIDI channel

The MIDI channel for both the DX9 and the computer should be set to 1. To begin MIDI transfer, press F7 key and the prompt:

MIDI Ch =

to appear in the message area. Simply press the RETURN key to select the default of channel 1. First make sure DX9 is set to system available in its MIDI/Function menu.

Transferring the voice data in the DX9 internal memory to the computer voice memory

(1) Press the F7 key and the prompt

MIDI Ch =

will appear in the message area.

(2) If the MIDI channel displayed in the message area is set to the desired channel, press the SELECT key and the prompt

MIDI Tfr from DX9?

will replace the previous message.

(3) Press the DEL key. The prompt

Are you sure?

will be displayed next.

(4) Press the DEL key once again and all data in the DX9 internal memory will be transferred to the voice memory of the computer.

★ The data sent will be assigned voice numbers from 1 to 20. Therefore if data is sent from the DX9, the voice data that previously corresponded with the voice numbers 1 to 20 will be replaced with the new DX9 voice data. If you do not want to lose a computer voice in memory locations 1～20, transfer it first to memories 21 through 48, or save it to cassette. Then begin the MIDI transfer.

★ Do not attempt to operate the DX9 while it is transferring data to the computer.

Transferring the voice data in the computer voice memory to the DX9 internal voice memory

(1) Pressing the F7 key will cause the prompt

MIDI Ch =

to appear in the message area. If the MIDI channel displayed in the message area is set to the desired channel, press the SELECT key twice. The prompt

MIDI Tfr to DX9?

will replace the previous message.

(2) Press the DEL key and the prompt

Are You Sure?

will appear.

Press the DEL key once again and the first 20 voices in the computer voice memory will be sent to the DX9.

★ The voices cannot be accepted by the DX9 if its memory is protected. THEREFORE, BE SURE THE MEMORY PROTECT FUNCTION OF THE DX9 IS DEACTIVATED BEFORE YOU ATTEMPT THE TRANSFER.

F8 *key* (SHIFT + F3 *key*) *[Copy/Swap]*

This key is used for editing the computer voice memory. The voice data is copied or replaced.

Copying

Press the F8 key and the prompt

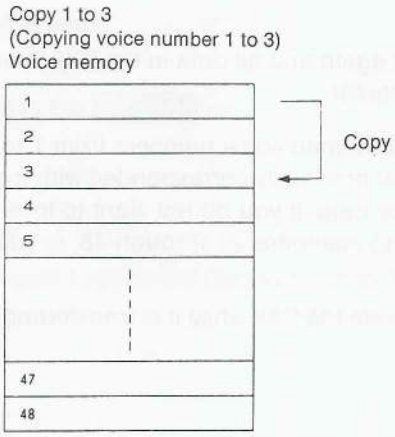
Copy

will appear.

Type the number of the voice memory to be copied and press the RETURN key. Next the system will ask where to place the copied voice. Type the voice memory number in which you wish to store the copy and press the RETURN Key. This completes the copying process. The contents of the edit buffer memory will remain the same.

★ Pressing the ESC key instead of the RETURN will cancel the function and allow you to start again.

Fig. 26 Copy diagram



Swapping

(1) Press the F8 key and the prompt

Copy

will appear. Press the SELECT key and the previous message will be replaced by

Swap

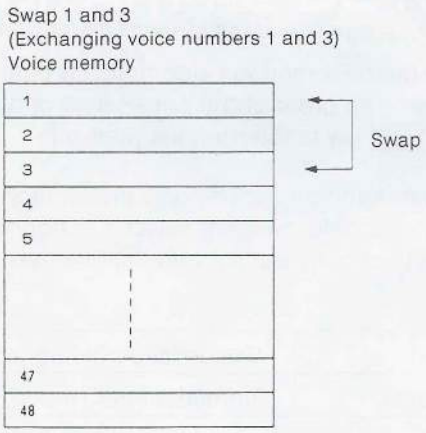
(Pressing the SELECT key once again toggles the display and the system will return to the Copy prompt.)

(2) Input the voice number to be swapped and press the RETURN key. Input the other voice number and press return to complete the swapping process. This simply exchanges the voices in the two memory locations.

★ Pressing the ESC key instead of RETURN will cancel the function and allow you to start again.

The contents in the edit buffer memory will remain the same.
This function is useful for rearranging voices in the order you wish to use them fpr a performance, or for swapping voices in memories 21 to 48 with those in 1 to 20.

Fig. 27 Swapping diagram



F9 *key* (SHIFT + F4 *key*) *[Voice initialize]*

This key is used to create sounds from scratch. Press the F9 key and the prompt

Voice Init?

will appear in the message area. Press the DEL key and the prompt

Are You Sure?

will appear. Press the DEL key once again and the initialized voice (pure sine wave, AIG1, square envelopes) will be loaded into the edit buffer memory. Pressing the ESC key will cancel the function and allow you to start again. This allows you to create sounds from a simple starting point rather than editing an existing voice.

F10 key (SHIFT + F5 key) [Hard copy/Auto copy]

This key is used to print out the contents of the screen. Using the Hard Copy option will create a printout of the current screen display. The Auto Copy option will create a printout of the EG parameter, Keyboard Scaling parameter and Performance parameter displays.

Making hard copies

(1) Press the F10 key and the prompt

Hard Copy?

will appear in the message area. Press the DEL key and the contents will be printed out. Pressing the ESC key will cancel the function and allow you to start again.

Auto copying

(1) Press the F10 key and the prompt

Hard Copy?

will appear in the message area. Press the SELECT key and the prompt

Auto Copy?

will replace the previous message.

(Press the SELECT key once again and the system will return to Hard Copy.)

(2) Press the DEL key here and the screen will automatically change and a hard copy of all the parameters will be printed out. The order of the parameters printed out will change depending on the situation. Press the STOP key to interrupt the print-out.

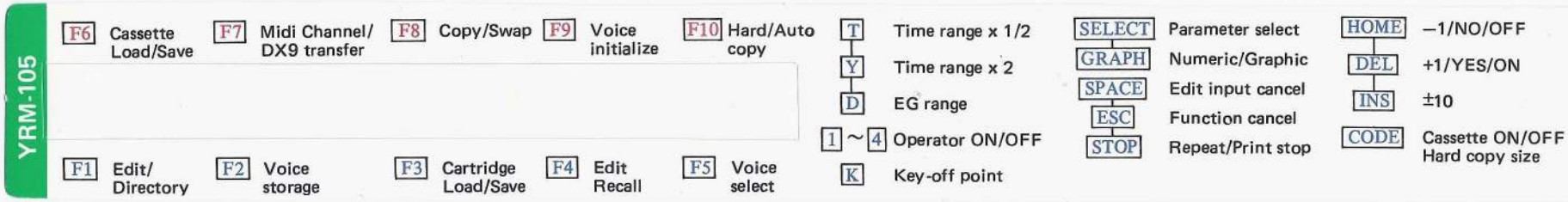
★ Please use an MSX printer. Additionally, on some printer models, the right side of the hard copy will not be printed. If this should happen, select the condensed printing mode by pressing the CODE key, and then carry out the printing of a hard copy.

Motor ON	Condensed printing mode
Motor OFF	Normal printing mode

SINCE 1887 YAMAHA

NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

OMD-126M 85 04 0.8 Printed in Japa


YRM-105
F6 Cassette Load/Save
F7 Midi Channel/ DX9 transfer
F8 Copy/Swap
F9 Voice initialize
F10 Hard/Auto copy
T Time range x 1/2
Y Time range x 2
D EG range
1 ~ 4 Operator ON/OFF
K Key-off point
SELECT Parameter select
GRAPH Numeric/Graphic
SPACE Edit input cancel
ESC Function cancel
STOP Repeat/Print stop
HOME −1/NO/OFF
DEL +1/YES/ON
INS ±10
CODE Cassette ON/OFF Hard copy size
F1 Edit/ Directory
F2 Voice storage
F3 Cartridge Load/Save
F4 Edit Recall
F5 Voice select