

DIGITAL MUSIC SYSTEMS LTD.

FOR USE WITH YAMAHA CX5 MUSIC COMPUTER

"Just a Guide"

D.M.S.1
REAL-TIME RECORDER
BY Digital Music Systems

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The D.M.S.1 software is designed by musicians for musicians, offering quick easy usage, catering for the beginner to the most discerning professional. Just follow the menus and within minutes the eight track sequence recorder will be offering the most discerning composer/player a quality recording which until now was only obtainable with Hi-Tech instruments costing many hundreds of pounds.

PROGRAMME USE:

Essentially, the program is used to create a memory pool of up to 255 "phrases". Each of these phrases has a length measured in bars which is specified by the user when the phrase is created. There is no limit to the "polyphony" of any phrase. Phrases can be re-recorded at any time.

The tonal characteristics and the polyphony of a phrase are limited by the "part" which is used to play the phrase back. A part can be likened to a musician with a particular instrument. A phrase can be likened to a piece of written music which can be played back by the chosen musician (part). The advantage of using phrases and parts is that just as a piece of written music can be photocopied and presented to a number of musicians with different instruments, a phrase can be recorded once and yet be played back by different parts.

In order to compose a phrase we must first choose an instrument (part) which will be used to monitor the phrase while we record it.

With this objective in mind let us now set up the computer. First turn all power off and insert the program cartridge into the cartridge slot with the label facing you. Then turn on the power. **WARNING:** inserting or removing the cartridge with the power on could result in damage to your computer.

After a short delay during which the machine sets itself up internally, an opening screen with options on it (a menu screen) is displayed with a copyright notice in the lower half of the screen.

The whole program is "menu driven" and providing that you follow one simple rule, is very easy to use. This rule is as follows: First select an item on the screen which seems likely to be connected with the change that you wish to make. Then press the key indicated in the left hand margin directly to the left of your chosen item. You will then be presented with further instructions.

To illustrate the use of this rule, let us now select an instrument with which we are to monitor our first recorded phrase. Selecting an instrument is an "editing" function hence we look for something on the screen which seems likely to lead us in this direction. One of the listed options is "F2 PLAYBACK/EDIT" hence we press the key indicated in the left hand margin which in this case is "F2". The screen now displays a new menu. From the options listed on this menu, "F5 SET PART VOICES" seems likely to allow us to set up a voice hence we press F5.

This now leads us into a menu which gives us the current voicing set up allotted to PART 1. On power up, PART 1 is set up to send any notes that it receives to MIDI CHANNEL 1. If we wish to change the voice in any way then we press the key indicated in the left hand margin, which in this case is F2. This leads to the prompt "(o) onboard (c) channel" appearing. To select one of these two options press the key indicated in the brackets. Hence if you wish to change the allocated MIDI channel then you press "c" which will lead to a prompt asking for the MIDI channel that you require. In which case you simply select the new channel number (1-16), type it out, and then press the (RETURN) key.

If wish to use an onboard CX5 voice then press "o" for onboard instead of "c". The system will then give you one channel of the available eight channels and allocate it to system voice one which is "BRASS 1". The music keyboard is always active in the voice editor menu hence pressing keys on YK-01 or YK-10 will result in the settings on the screen being heard. To change the voice, we apply our rule and press F2 then "v". To change the polyphony we press F2 and "p" and so on.

To get back to our starting menu we simply select the option for previous menu repeatedly until we get back to the starting menu. Hence pressing "m" two times will get us back to the starting menu.

To record a phrase we then press F3 (record). We then select a number for the phrase that we wish to record and the phrase length in bars. The keyboard linked part is the instrument that will be used to monitor the phrase. On selecting the record option you will be given a count in of eight beats and then recording will commence. You can re-record a given phrase but before erasing the old phrase you will be asked "ARE YOU SURE (Y/N)" to confirm your intentions before erasing the old version of the phrase. The number indicated in the top left hand corner of the screen is the amount of memory available for working with.

N.B. The sound output of the metronome is only audible at either the R.F. or the mono sound output on the back of the CX5m. *Metr. volume 0-15*

Once a phrase has been recorded it can be allocated into a part for playback purposes. So from the recording menu press "m" to return to the starting menu. From here press F2 for playback/edit followed by "s" for edit sequence. Then press F5 to enter your phrase into the part.

Note: Simply entering a phrase number will overwrite the location pointed to by the pink pointer with the phrase number. Preceding the phrase number with "i" before entry will insert the phrase at that point, and entering "k" instead of a phrase number will erase the phrase number at the pointer position. (Only the phrase allocation to this part will be erased. NOT the actual phrase.)

A particular phrase can be entered as many times as you like and on any parts. Even phrases that have not yet been recorded can be entered into the part.

To playback press "m" to return to the playback menu and then press F4 for playback. Pressing "STOP" will stop playback. You can also select the bar from which playback starts and the tempo (0-225).

Note: During recording, all the "backing tracks" will playback from the starting bar specified in the playback menu.

RESTS

We recommend that you reserve a certain phrase number(s) as a rests phrase. These are phrases that are simply recorded without any keys on the music keyboard being pressed. You would insert these phrases into parts where rests or "empty bars" are needed.

MASTER/INDIVIDUAL TRANPOSE

Within the voice editor you will find that you can transpose an individual part relative to the other parts. There is also a MASTER transpose facility which transposes the WHOLE song. There is only ONE master transpose and eight individual transpose settings. Transpose range is 23 semitones down to 24 semitones up.

MASTER LFO

When using the onboard SFG-01 sounds of the CX5 you will find that a certain problem arises when you have more than one voice setting implemented at the same time. That is that the CX5 can only hold ONE set of LFO data. "Master LFO part" within the voice editor tells the system from which part to take its LFO settings from. **WARNING: YOU MUST NOT SET MASTER LFO TO A PART THAT IS ALLOCATED TO MIDI, OTHERWISE THE SYSTEM WILL CRASH.**

SUS

Within the voice editor there is a facility labelled "SUS". This is actually a "release control" and its functioning is as follows: When SUS is "off" the release settings are taken from the voicing library data. However, if SUS is a number from 0-15 then the normal release characteristics of the chosen voice will be overridden and the value stated in "SUS" imposed. 0 = min 15 = max release.

THE PHRASE EDITOR MENU

To reach this menu we press F2,P from the starting menu. This menu allows us to do two things:

1. To quantise a phrase, i.e. to correct the TIMING of notes in a particular phrase: The way it works is that by pressing F1 you select the quantise value e.g. if you selected 1/8 then the quantise function would re-arrange a phrase such that all the notes in the phrase lied on the nearest 8th note boundary. To actually quantise a phrase press F3 then enter the phrase number and press RETURN. The quantisation process is almost instantaneous and actually compresses the phrase and returns some more free memory back to you.

N.B. During the quantisation process there is some COMPANDING of the phrase which may sometimes give unpredictable results, hence be prepared to re-record the phrase if you do not like the result after quantisation.

2. To step through a phrase and change the PITCH of notes within the phrase: to execute this function press F5 and specify the phrase number and press RETURN. If you get no response then the phrase does not exist, otherwise the 1st note in the phrase will sound repeatedly and the NOTE indicator at the top of the screen will register "1". To hear the next note press the SPACE BAR until the NOTE indicator advances by one. To change the pitch of the current note that is being played repeatedly, simply press the required note on the music keyboard and you will hear the new note. You can change this as many times as you like. To exit this function without going all the way through the phrase press "STOP".

EXTERNAL CLOCK

During recording and playback a MIDI clock is output from the MIDI OUT port on the CX5. To run a MIDI drum machine from this clock ensure that any "SYSTEM EXCLUSIVE INFORMATION AVAILABLE" option is turned OFF for both MIDI IN and MIDI OUT on the drum machine. When the EXTERNAL CLOCK option is selected, this allows the playback function to be driven by an external MIDI clock e.g. from YMC-10 or RX 11/15/21 via the MIDI IN port on the CX5. However, the recording option will still be driven by the systems INTERNAL CLOCK.

FM VOICING PROGRAM

Voice libraries created using the FM voicing program can be loaded in from tape and saved to disk for future use. **NOTE** any voice libraries used with a song are loaded and saved with the song.

LOAD/SAVE

First set "media" to the device that you wish to communicate with, i.e. cassette or disk. Then select the data type that you wish to save i.e. SONG or VOICE data. When saving you MUST specify a name, however when loading, you only have to specify a name if loading from disk. To load the first file encountered from tape enter a few presses of the space bar for the name. Otherwise type the file name out in full. When a load or save operation has been completed the starting menu screen is displayed.

USING MSX DISK DRIVES (formatting/directories)

You can use any MSX compatible disk drive with the system. But before you can use any disks for storing information on, you must "format" them. To do this you switch off the power to both the disk and the computer. Then remove the real time software cartridge. Now power up the disk and computer. When you are asked by the computer for the date simply press RETURN. Then type: format and press RETURN. You will be asked for the ID of

the drive containing the disk to be formatted. Press "a". The formatting procedure will begin and whirring noises will be heard from the disk drive. DO NOT EJECT THE DISK IN THE DRIVE WHILE THE RED LIGHT ON THE DRIVE IS ON. When the formatting process is complete, the CX5 will inform you with a message on the screen. Your disk is now ready for use.

REMEMBER: IF YOU ARE GOING TO USE A NEW DISK YOU MUST FORMAT THE DISK USING THE ABOVE PROCEDURE "BEFORE" YOU START A RECORDING SESSION USING THE REAL TIME SOFTWARE.

To see the files that are on a disk power both computer and disk drive OFF. (Ensure any work done has been saved to disk FIRST). Then remove the sequencer software cartridge and power back up again. Press RETURN when prompted for a date. Then insert disk into disk drive, type: files and press RETURN. The files present in the disk will be displayed. Song files will have a .SNG printed after the name and voice files will have a .VCE printed after the name.

To see the amount of room left on the disk type: print dsk(1) and then press return. The room left on the disk will be displayed in Kilobytes (1000 bytes in a Kilobyte).

To erase a file from a disk type: kill "filename.extension" e.g. KILL "TUNE_1.SNG"

Voice Directory

Voices 1-46 (standard YAMAHA preset voices)

Voices 47-100 (extended preset voice library)

Voices 101-148 (voices loaded in from FM voicing program)

GUIDE TO THE EXTENDED VOICE LIBRARY

47	BRASS 3	high bass/brass
48	BRASS 4	analogue brass
49	BRASS 5	brass noise
50	STRING 3	analogue strings
51	STRING 4	high strings
52	STRING 5	string 5ths
53	STRING 6	mellow strings
54	STRING 7	string/brass
55	STRING 8	low strings
56	STRING 9	string stab
57	STRING a	analogue strings
58	STRING b	bowed cello
59	STRING c	high strings
60	STRING d	strings (LFO/noise)
61	PIANO 4	chorus piano
62	PIANO 5	sharp sustained piano
63	PIANO 6	mellow piano with key-click
64	PIANO 7	upright piano
65	PIANO 8	sustained piano with zing
66	PIANO 9	deep piano

67	SYNTH 1	plucked clavinet
68	SYNTH 2	atmospheric synth with LFO
69	SYNTH 3	emulator synth
70	SYNTH 4	bass brass
71	SYNTH 5	synth bass
72	SYNTH 6	wah bass
73	SYNTH 7	funky brass
74	SYNTH 8	power brass
75	SYNTH 9	bass piano (transpose - 12)
76	SYNTH a	percussive bass
77	SYNTH b	church organ
78	SYNTH c	piano/guitar
79	SYNTH d	mono deep brass
80	SYNTH e	space orchestra
81	FX 1	orchestra/chimes
82	FX 2	tubular bells
83	FX 3	space clavinet
84	FX 4	tubular bells
85	FX 5	space flute
86	FX 6	outer space
87	FX 7	close encounter
88	FX 8	soprano glock
89	FX 9	atmospheric
90	FX a	bass pulse
91	FX b	exposive ricochet
92	FX c	alien planet
93	FX d	fantare
94	BASS 5	growl bass
95	BASS 6	wet bass
96	BASS 7	ppg bass
97	BASS 8	power bass
98	BASS 9	clavi bass
99	BASS a	clunk bass
100	BASS b	bell bass