XRI systems

MICON

instruction

manual

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**************************
* SUMMARY OF FUNCTIONS *
**************************
```

CODE	FUNCTION	PARA	CODE	FUNCTION	PARA
a	ALTER note	1	m0 or m1	switch DISPLAY	11
c	display CONTROL info	2	PATCH	show PATCH	12
cc##	change channel	2	patch ###	enter PATCH	12
			patch	delete PATCH	12
cp###	change start PATCH	2	p# to p########	set play/ display flag	13
cs###	change SELECT codes	2	P	PLAY start	14
d or d#	DELETE note /step	3	p	PLAY current	14
z#	INPUT	4	ct	change tempo	14
E#	ERASE BAR	5	b###	BAR position	15
x	FIRE up	6	enter or l	SCROLL	15
g or G	set GATE	7	j### ### #	repeat bar	16
i##	INSERT note	8	F?###	LOAD sequen	19
r##	INSERT rest	8	S?###	SAVE sequen	19
KILL	CLEAR all buffers	9	cm	TIME SIGNAT	21
kill or kill #	partial CLEAR	9	t#	TRACK select	23
# (1-8)	alter TOUCH . 22		T###?##	TRANSPOSE	24
			w	WRAP	25

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****************
* INTRODUCTION *
****************
```

The system allows 8 monophonic tracks numbered 1 to 8.
On playback all tracks can be played back simultaneously
(polyphonic).
Each track has :- 2900 events or steps. (this is reduced
to 2100, when using touch option.
an optional Midi select code.
a channel select code.
a patch select parameter to indicate the
patch to be used at the start of
play-back.
a play/display flag to indicate whether
the track is to be played and
displayed.
Bars are numbered 001 upwards.
Patches are numbered from 001 to 256.
Current position is indicated by the shaded line down the
screen.

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***********************
* PREPARATION FOR USE *
***********************
```

« ENSURE THAT THE POWER SUPPLY IS NOT CONNECTED TO THE SPECTRUM. »

Attach the Micon to the Spectrum by aligning the polarising
key in Micon's edge plug with the slot in the Spectrum's edge
connector and then pushing firmly home. Then power up Spectrum.
To connect synth' to Micon use 5 pin DIN leads, that are
wired straight thru, e.g. standard hi.fi. leads with NO
cross-over.

Connect to the synthesiser as shown :
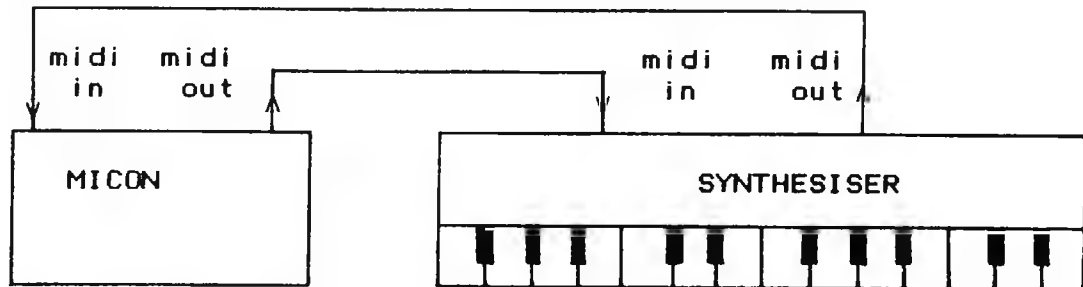
Connect the Spectrum to a tape recorder as defined in the
Spectrum manual.

On the Spectrum keyboard press LOAD "" enter .

Insert Micon step sequencer cassette into the tape recorder
and press 'play' on the cassete recorder.
Load time is approximately 3 minutes. When the Micon
prompts 'TOUCH' Stop the tape.

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********************
* GETTING STARTED *
********************
```

Since velocity information takes up a lot of memory you can choose whether to use it or not, depending upon the synth's that you use. Key <t> followed by enter if using touch otherwise key just enter.

STAGE 1
To input music to the sequencer it is necessary to select the track (ref Para 23) that you require to use.(On load up it is preset to one.)

STAGE 2
The time signature is preset to input in 1/8 notes (this can of course be changed, refer para 21).

To input music in 'tap' mode select the tap sequencer and the number of tracks that you require to lay down (ref para 04).

It is best to experiment with just one track first of all, so key "z1" followed by enter.

The computer will now wait for you to play a note on the synth' keboard. Play the note and release it. The computer will input the pitch from the synth'.
If you want the note to last for one step, i.e an 1/8 note, then tap the "space" key once, you will then see the music appear on the screen. If you want to make the note last for two events i.e. a 1/4 note then tap space key for a second time, you will see that the note changes to a longer length.

By tapping the "space" key you get the length of note that you require. Notice that the music scrolls off the screen to the left. The whole procedure can be repeated to input more notes.

If It is required to insert a rest merely tap the "0" (zero) key for the number of events the rest should be. It is possible to use the "q" key instead of the "space" key. This will cause the staccato gate "1" setting to be set. (please refer to para 07).

Note 1
If you make a mistake when keying into one track it can easily be corrected by re-keying the note before tapping the "space" key.
Note 2
If you lay down more that one track:-
        a) the track selected is the lowest track used.
        b) You can play the notes required for an event, as a chord or, in series before you tap the space "key".

STAGE 3
Key in a progression of notes then key "x" to return to the "INP CODE" prompt.

STAGE 4
     To play back the music key capital "P" followed by enter, the system will then initialise the play buffers.
     Press "s" and play-back will start immediately.
     Press "x" to stop play-back.
Note 1
     For accurate play-back, it is necessary to turn the music display off by keying "m0" followed by enter. Turn it back on again by keying "m1".

STAGE 5
     To go back to the start of the composition, key "b001" followed by enter. (refer para 15).
     This instruction can also be used to position to any bar in the music score.
     You can then scan to the right through your music by holding the "enter" key down or you can scan to the left by keying "l" (small L) and holding the enter key down.

STAGE 6
     (Editing only applies to one track selected)
     Assuming that you want to delete a note. Position the offending note so that it is over the shaded line using commands described in stage 4.
     Then key the "d" key followed by "enter" and it will remove all the note.

     If it is positioned over a rest, it will be reduced by one event.

STAGE 7
     To insert a note, first position the music to the start of a note or to a rest event. (using instructions outlined in stage 5).
     Decide on the duration of the note , then key "i" followed by the number of events. e.g. "i02" for a 1/4 note.

     The system will then wait for you to press and release the note on the synth' keyboard.

     After you have played the note, the music will be re-displayed with the new note and you will return to the message "INP CODE".

STAGE 8
     To insert a rest position the music to the start of a note or a rest.
     Decide on the number of rest events you require and key "r" followed by the number of events.
     E.G. key "r02" for a rest of two events".

STAGE 9
     To alter the pitch of a note, position to the start of note that requires alteration.
     Key "a" to INP CODE message. The computer will then wait for the new note to be keyed and played on the synth' : it will then return to the INP CODE prompt.

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**********************
* LIST of FUNCTIONS *
**********************
```

ALTER NOTES   "a"   PARA 1

This procedure is used for altering the pitch of a note.
Identify the track (ref para 13) . Position to the note
that you require to change.
Then key "a" followed by enter. The computer will wait for
you to 'punch' in the new note.
Play the note on the synth',the new note is displayed and
control returns to "INP CODE".

CONTROL INFORMATION   PARA 2
"c" or "cp###" or "cs###" or "cc##"

Display information   "c"
If you key "c" followed by enter the screen will display
the track control information
For each track the following information is displayed :--
channel number, start patch number, whether the track has
been used, whether the play/display flag is set , and the mode
select code.

Channel number "cc##"
Channel numbers are used to direct a track(s) to a certain
synth' or channel of a synth'. Certain synths' enable you to
assign them to a certain channel and some even allow you to
assign each voice to a different channel.
By changing the channel numbers for the different tracks
you can send different tracks to different synths'.
To alter the channel , select the track, then key "cs"
followed by a two digit channel number (they are   01 to 16),
then key enter.
E.G. "cs04" assigns the currently selected track   to
channel-04

Patch number "cp###"
Micon identifies patch numbers as being numbered from 001
to 255.
Select a track, then key "cp" followed by the three digit
patch number, then key enter. Whenever you play back a patch
select will be sent depending on the channel assigned to the
track.
E.G. "cp002" will initiate patch number "002" to the
appropriate track.
Please note that in flight patch changes take priority over
patch changes set at start.

Play/Display flags
Please refer to paragraph 13.

Mode select "cs###"
At load time these are set to zero, it is USUALLY not
necessary to change from these settings.
Please refer to fire-up (para 06).
If you require to send a mode message at play-back :-select
the track, then key "cs" followed by the three digit code
followed by enter, e.g."cs122" selects local keyboard control
for the selected track.
It is rarely necessary to use this command, so please refer
to your synth' manual.

To delete a note, first position the music to the offending note, check that the track selected corresponds to where the note is (if necessary by altering the play/display flags; refer para 13).
Then key "d" followed by enter. The note will be removed.
If a 3 note chord is to be deleted, proceed as follows:-
Identify the tracks that the chord occupies (for examples sake tracks 2 , 3 & 4).
Positon to the lowest track used (in this case 2).
Key "d" followed by a number in the range " 1 - 8 ", indicating how many tracks ; then key enter. (in the above example key " d3 ".
Rests
The delete function can also be used to delete rests, however, the rest is only reduced by one step each time the "d" function is used on it.

ENTERING MUSIC   (Z#)   PARA 4

The music is entered into the sequencer by playing the synth' keyboard for pitch (also touch on if required) and tapping the Spectrum keyboard for rhythm and gate settings. It is possible to enter into all 8 tracks at the same time, however it is recommended that a new user should use only one track at a time.

Select the track required (para 23); then key "z" followed by the number of tracks required (1 to 8), followed by enter. The system will now wait for notes from the keyboard.
Assuming that, the rhythm setting is for 1/8 notes (para xx) and only one track is being used, it is necessary to proceed as follows :-

Play a note on the synthesizer, then tap the space key on the Spectrum to specify the no of steps; e.g. for an 1/8 note tap once, for a 1/4 note twice and for a note lasting for three 1/8s (dotted crotchet) tap three times. Release the note.
The music will appear on the screen as the space bar is tapped for rhythm.
Repeat the procedure, using synth' keyboard for pitch and Spectrum for rhythm.
(If you choose the wrong note you can replay it providing that the Spectrum key has not been tapped).

When the music has been entered press the "x" key, the system will then return to the "INP CODE" prompt.

NOTE THAT ANY MUSIC PRESENT ON THE TRACK IS OVERWRITTEN.

Chords

It is possible to specify more than one track, for example, if the track selected is "1" and "z3" is keyed as opposed to "z1", then you can play up to 3 note chords on the synth' whilst tapping out the rhythm on the Spectrum.
In this case tracks 1 , 2 & 3 are assigned to the chord.

rests
If a rest is required,do not key a note, merely key "0".

Gate settings

To get more expression to the music it is possible to specify notes as having a choice of two gate settings (e.g. staccato or legato). Refer to paragraph 07. Tapping the space key gives the notes played gate 2 setting (e.g.legato) alternatively, tapping the "q" key will cause the notes to have a gate 1 setting (e.g.staccato).

Touch on

If you are using a synth' with a touch sensitive keyboard, then it is possible to configure the MICON system to program touch on. Refer to para 22.

When using the "z" function for entering the notes, touch on will be taken from the synth'. This can be overridden by tapping a numeric key (1 - 8), instead of the space key.

Naturally "8" will give the highest velocity on value to the note.

When gate "1" (staccato) notes are required you use "caps-shift" with the mumeric key (1-8) instead of the "q" key.

(Note that all notes entered as chords will have the same velocity-on setting, this of course, can be changed later.)

ERASE BAR   (E#)   PARA 5

This function is used to replace an entire bar with rests; it will work on between one and eight tracks.

To erase a bar , select the track (refer para 23), then position to the obnoxious bar, then key "E1" enter.

To erase a bar over several tracks, identify the tracks, select the lowest track , then key "E" followed by the number of tracks , then enter.

FIRE-UP   (x)   PARA 6

When the system is loaded , it will send out a poly mode calling signal on channel "1". THIS IS SUFFICIENT FOR MOST SYNTHS'. (Please refer to the synth' manual).

In certain circumstances it is necessary to send out the call out code after the sequence is loaded. This is necesary in the following case:-

If MICON is loaded without the synth' powered on and the synth' requires a certain calling code to fire it up.

The fire up message can be repeated by keying "x" followed by enter.

Again it is sometimes necessary to give a "mono" call-out signal (e.g. a Sixtrax) or a signal to split the keyboard (e.g. Jupiter 6). To change the poly call-up code to a message suitable for a synth' of the above kind, proceed as follows:-

LOAD the program.

Break the program by keying cap shift "6".

Decide on the protocol required by referring to your manual.

Edit line 7000.

Change so that only your codes are present followed by "999"; e.g.

PRESET 7000 DATA   176,124,176,127,999
NEW   7000 DATA   176,124,176,126,999

Store the line back in the listing.

The program can be saved to disc or tape, refer to para 18.

Gate settings are used to make a note last for a shorter or longer duration- but without affecting the note length.

For example suppose a bar has 4 notes in it, and the gate time is 100% ; the first note would be played at the start of the bar and released at the same time as the second note is played. Note 2 would be released when the Note 3 is played , and so on.

This note is being played legato.

Now suppose we play the same bar but whith a gate setting of 60% .

In this case the notes would still be played at the same time intervals, but each note would be released some time before the next one is played - in fact just after midway between one note starting and the next.

Very short gate times e.g. 10% are termed staccato.

The step sequencer allows you to allocate notes to either of 2 settings- gate "1" (shortest) and gate "2". (for altering the % factor on these gates refer to para 14).

Gate commands

These commands are used to assign different gate settings to a note, e.g. convert it from legato to stacatto or vice versa.

Note that these commands are used to alter the gate settings AFTER the music has been entered. To assign gate settings whilst the music is being entered refer para 04.

To allocate a gate "2" setting to a note, select the track, position the music and key "G" followed by enter.

Holding the enter key down will cause the music to scroll allocating gate 2 settings to each note highlighted.

To allocate gate "1" settings use the above procedure,but use "g" instead of "G".

Inserting a note is very simple, position the music to where the note is to go, select the appropriate track.

Calculate the note length in steps (for example, if you are keying in 1/8 notes and you want to insert a 1/4 note it would be two steps).

Key "i" followed by the two digit number for the number of steps, followed by enter (in the example above you would key "i02").

The system will open up a space in the music for the note, and will wait for you to punch the pitch of the note on to the synth'.

Press and release the required note.

After you have played the note, the music will be re-displayed with new note, and you will return to the message "INP CODE".

Inputting rests is similar, however you key "r" instead of "i" (e.g. "r02") and obviously there is no need to play a note on the synth' keyboard.

The kill commands are used to delete music from the
sequencer.
To completely clear all music and initialise all parameters
key "KILL" followed by enter.

To clear part, or all of a single track, select the track,
position the music to just after the last bar that you want to
keep, then key "kill" followed by enter.

To clear out two or more adjacent tracks, position to the
lowest track you want to clear , and key "kill" then "space"
then the number of tracks you want to kill.
E.G. "kill 3" would clear three tracks.

MICRODRIVE   (files)   PARA 10

You need only read this section if you have Interface 1 and
a Microdrive for your Spectrum.
With a microdrive the loading time of programs   and
sequences is greatly reduced.
The first thing that you will need to do is to copy the
program from cassette to Microdrive.
Load the master cassette , hold <m> down whilst the sharps
are being played, then follow the instructions on the screen.

(Please Note: This facility is included to allow you to make
security copies or customised versions . Passsing copies to
other people is a breach of copyright.)
The program is dumped with the name "run", this means that
the sequencer can be subsequently loaded by keying NEW enter,
then RUN enter.

Loading / Saving sequences
Refer to these commands , note that the   computer
distinguishs the media by the second   command   character
i.e. < d > or < m >. For example FD001 as opposed to FM001.

File Maintenance
The "files" command provides an easy way to examine files
or delete unwanted files from a Microdrive.
Key "files" enter.
A list of files will be displayed.
To delete a file key its name followed by enter.
To return to the "INP CODE" command key enter by itself.

MUSIC ON and OFF (m1,m0)   PARA 11

"m0" followed by enter turns the music display off : "m1"
followed by enter turns the music on. It is possible to play
sequences with the music display on, however the timing will not
be correct; it is therefore necessary to turn the music off in
order to obtain accurate timing for play-back.

     Used to alter the patch (voice) dynamically during
playback.
     Patch changes are entered after the music has been entered
and they are not affected by the normal delete, insert, repeat
bar commands etc.

     80 patch changes are allowed, these can be held on any
track to allow for multi-timbral synths' or when several synths'
are chained together.

     When using any of the patch change commands, select the
track first (if relevant to your set-up).

     Set-up
     Position the music to the desired place.
     Then key "patch",then a "space" followed by the three digit
patch number, then enter
     E.G. "patch 012" for patch 12.
     The patch number will appear on the screen, key "x" enter
to return to the command line.

     Display
     Key "PATCH" followed by enter. The program will search the
music from the current position onwards, until it finds the next
patch change.
     When a patch is found, press enter to find the next one or
"x" to return to the command line.

     Change
     Using the display instruction , position the music to the
appropriate patch change , then rekey as for set-up.

     Delete
     Using the display instruction , position to the offending
patch change. Then key patch.

     NOTE patch change in flight only works correctly with "P"
play-back ,incosistent results can occur with "p" play-back.

                         PLAY/DISPLAY FLAGS   PARA 13
                       (p#) to (p#########)

     These are used to identify which tracks the notes are on ,
and they also control which tracks are played back.
     Key "p" followed by up to eight track numbers that you
require.
     E.G. "p6" will display only track 6, and if you go into
play mode , only tack 6 will be played back. Likewise "p253"
would be for display and play of tracs 2 , 3 & 5.

"P" enter will get ready to play from the first bar
onwards.
"p" enter will get ready to play from the current position.
Press "s" to start the playback.

Playback can be interrupted at any time by pressing "x".

NOTE Playback with music display on will be out of time.

Tempo control
Press "ct" enter : this command is used to alter the tempo
on playback.
After using this command , the screen will show all the
current settings, you can change them or enter through them to
leave the settings unchanged.

tempo
Enter the number of beats per minute for playback.
NOTE THIS FIGURE REFERS TO DIFFERENT VALUES IF USING SYNCH

gate "1"
This can be any number between 1 & 95% .
IT MUST BE A LOWER VALUE THAN GATE 2.

gate "2"
This can be any number between 5 & 100% .
IT MUST BE A HIGHER VALUE THAN GATE 1.

Please refer to para 7 for info on gates.

WHEN USING ALL EIGHT TRACKS AVOID GATE 2 SETTINGS ABOVE 94%

Sync
the valid replies to this are as follows:-
"n" for NO sync', the playback tempo is controlled by the
MICON.

*** REFER TO PARA 20 BEFORE USING "m" or "y" REPLIES ***

"y" for external sync' from drum m/c.

"m" for sync' from midi.

POSITIONING MUSIC   PARA 15
(enter) , (l) or (b###)

Forwards
To scroll the screen forwards press "enter"

Backwards
To scroll backwards key "l" (small L) followed by "enter".
If you hold the "enter" key down it will continue scrolling
backwards.
Direct
To position direct to a bar key "b" followed by the three
digit bar number, then enter

E.G. "b003" will position the music to bar 003.

This command is used to copy a bar or several bars from one place to another.

Single
To repeat a single bar, position the music to the place where you want the bar to go.
Then key "j" followed by the three digit bar number followed by enter.
E.G. to copy bar 007 to bar 010 , position the music to the start of bar 10, and key "j007"

Multiple
To repeat several bars, position the music to the place that you want the bars to be copied to
Then key "j" followed by the first bar number to be copied, a "space" then the last bar number to be copied.
E.G. to copy bars 003,004,005,006,007&008 to bar 025 onwards, position to bar 025 and key "j003 008.

Generate
Note that this can be used to repeat a single bar many times e.g. if you position to bar 002 and key "j001 099" , this would generate one hundred bar 001 look alikes.

Multi-track
You can also specify the number of tracks that the repeat will operate over by keying "j", low bar, space ,high bar, space and then number of tracks e.g. "j002 005 4"

SCREEN FORMAT   PARA 17

The top of the screen summarises the control information.

```
( selected )      (current)
( track     )     ( bar no)
      V                V

┌────────────────────────────────────────────┐
│ XRI   84   PLAY   T 2 X 3     B029   p12345678 │
└────────────────────────────────────────────┘
        ∧               ∧               ∧
    (current)       (No tracks)     (play/disp)
    (command)       (in use  )      (flags)
```

If velocity on is used the information is shown below the music , the figures are weighted 1 to 8 .

SECURITY COPY   PARA 18

To copy the program to tape, proceed as follows:-
Load the master tape and press "c" whilst the sharps are playing , the program will continue loading then stop and prompt you through the various stages of taking a security copy.
After this stage ,the tape is restarted and before the second stage the program will stop at line 900 (or 901 for disc) ; normally it is sufficient to press CONT to finalise the copy procedure, if you require to alter line 7000, (refer function <x>) then EDIT 7000, GOTO 900 and CONT to finish copy.

(Please Note: This facility is is included to allow you to make security copies or customised versions . Passsing copies to other people is a breach of copyright.)

Save & fetch entire buffer
These commands save all the information in the buffer, including patch information and tempo settings.

To save to tape key "SM" then a three character identifier, and enter- e.g. "SM01a" will save the information in file "01a".

To fetch the sequence back, key "FM" , the name and enter- e.g. "FM01a".

To verify use "VM" ,name , enter - e.g. "VM01a".
**** IF ERROR GOTO 3050 ****

Single track
A single track can be saved , however , only the pitch and note lengths are saved.

To save to tape use "sm" , name , enter : to load use "fm" name , enter- e.g. "fm01a" or "sm01a.
**** IF ERROR GOTO 8500 ****

Microdrive
In order to use Microdrive specify a "D" or "d" in place of the "M" or "m" - e.g. "FD01a" , "SD01a" , "VD01a" , "fd01a" or "sd01a".

<p align="center">SYNCHRONISATION   PARA 20</p>

MICON can be synch'd to most rhythm units.

Tempo control
When you specify sync' the playback tempo is controlled by the rhythm unit. The tempo value no longer relates to beats per minute instead you need to specify the number of sync' pulses per 1/4 note, that you will receive from the rhythm unit.

Most rhythm units give out 24 timing signals for each 1/4 note they play.

When using sync' ("y" or "m") the tempo should be set to one of the following values
tempo - 12 , 6 , 24 , 48 or 96 , it will vary depending on the rhythm unit and how the composition was entered into it.

ON PLAY-BACK PRESS the "s" ON MICON BEFORE STARTING DRUM M/C.

DIN. PHONO SYNC'   (5-6 volt)

MICON's sync in is wired PIN 2 GROUND , PIN 3 SYNC . Autostart is incorporated , so for most drum m/cs take a straight 5 pin din connection from the drum m/c SYNC OUT to Micon's SYNC IN.

Where the drum machine has phono/jack SYNC OUT you will have to make up a suitable connecting lead and also disenable the auto-start on the Micon.

This is done by carefully removing the lid on the Micon, if you look by the SYNC IN Din socket you will see a small plastic jumper connection , this should be replaced so that it connects the lower two of the three pins.

MIDI SYNC

Connect Midi out on the drum m/c to Midi in on the Micon. Remember to start Micon and press "s" before starting the drum m/c.

TIME SIGNATURE   (cm)   PARA 21

If you key "cm" followed by enter, the time signature screen will be displayed.
You can leave the parameters unchanged by entering through the prompts, or you can key new values.

Events per bar
This is the number of steps per bar: It is normally the (number of 1/4 notes in a bar) X (the number of steps to a 1/4 note).It is best to use figures around 8 (even if strictly not correct) as complete bars will then fit on the screen.

Events per 1/4 note
This is the number of steps per 1/4 note. Before keying any music in , decide on the smallest unit, e.g. if the smallest note length you will key is a 1/16 you should enter 4.

The following table gives the an example of settings and the corresponding number of steps required for input.

Events 1/4 nt	1 Step	2 Step	3 Step	4 Step	6 Step
1	1/4 note	1/2 note	3/4 note	1 note	
2	1/8 note	1/4 note	3/8 note	1/2 note	
4	1/16 note	1/8 note	3/16 note	1/4 note	
8	1/32 note	1/16 note	3/32 note	1/8 note	
2	FOR 1/8 TRIPLETS 1/8 trip	1/4 trip	1/8 note		1/4 note
4	FOR 1/16 TRIPLETS 1/16 trip	1/8 trip	1/16 note		1/8 note

IF YOU CHANGE THIS SETTING YOU MUST GO INTO THE "ct" SCREEN AND ENTER THRU THE PROMPTS SO THAT THE TEMPO CAN BE RECALCULATED.

NOTE THAT, WITH TRIPLETS NOTE LENGTHS WILL BE DISPLAYED AS THREE TIMES LONGER THAN ACTUAL.

This command will only work if your synth' has velocity
sense keys and you have the touch version of the sequencer.
   To set touch - position the music to the note, select the
track and key a number from "1" (softest) to "8", then key
enter. Holding the enter key down will cause the value to be
repeated.

TRACK SELECT   (t#)   PARA 23

Before using the edit or input commands you should always
position to the track to be used. This is done by keying "t"
followed by the track number (1 - 8) then followed by enter.
Note that, if a function is being used that operates over
several tracks, the track selected will be the lowest used:- e
e.g. if track 5 is selected and chords are being entered over
tracks, notes will be placed in tracks 5 , 6 & 7.

TRANSPOSE (T### ##) or (T###-##)   PARA 24

The pitch of notes can be raised or lowered in semitones.
Position to the note or bar. Key "T" followed by the last bar
number to be transposed , then a "space" for up (or a "-" for
down) then two digits for the number of semi-tones offset , and
then enter.
   E.g. If you position to the start of bar 015 and key
"T017 12" all the notes in bars 015 , 016 & 017 will be raised
by 12 semi-tones. Or "T017-12" for down.
   NOTE that if the note cannot be displayed, they will not be
transposed.

WRAP   (w)   PARA 25

The wrap command is used to make the played back sequence
loop.
   To enable wrap, position the music to where you want it to
repeat, and key "w" followed by enter.
   To cancel wrap, position to bar 001 before keying "w".
   DO NOT position halfway through a note.
   Control information is not repeated i.e. if there are patch
changes during the sequence ; set-up the required patch change
also at the start of bar 001.

        ***   NOTE FOR TAKING MICRODRIVE COPY   ***
        ***   READ NOTES ON PARAS 10 and 18   ***