

FAIRLIGHT

COMPUTER MUSICAL INSTRUMENT

FILM MUSIC PROCESSOR

Fairlight Film Music Processor

Operators Manual

May 1984

by Michael Carlos and Tom Stewart

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FILM MUSIC PROCESSOR

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FILM MUSIC PROCESSOR - Film Industry Procedures

We would like to thank **Bruce Smeaton**, film music composer, for his helpful suggestions and the following information.

DISPLAYED TIME CODE

The film production company usually supplies the music writer with a video cassette copy of the film with **time display code**. The cassette can be 3/4 inch U-Matic, or 1/2 inch Beta or VHS format.

New generation KEM flatbeds are equipped with a video splitter and a video tape can be struck directly at either 24 fps (frames per second) or 25 fps. As a result of this, the production of specially marked musician's copies of films has never been simpler or less expensive.

The **time display code** supplied reads, from left to right:

HOURS MINUTES SECONDS FRAMES

The video replay may be stopped at any point and the timing noted.

The HOURS readout can sometimes be substituted with REEL number.

Displayed time code is never zeroed with the start of the image, or with various music cues, so the **OFFSET** command is of great practical value.

MARKING UP OF THE FILM

A **music cue** is an area in the film to which music will be added.

A **sync point** is a moment in time in the film where the beat of the music will need to coincide with the action. For example, music in time with footsteps.

The start and finish of each music cue is usually marked on the film by either punching a hole through the appropriate frame with a boot punch, or scratching a cross onto the emulsion side of the appropriate frame.

Leading up to the start mark, and the finish mark of each music cue should be a five foot, diagonal, warning streamer, scratched onto the emulsion side of the film. When the lower, and leading, edge hits the right-hand corner of the screen, the next frame is the one marked up as the start, or finish mark of the cue.

FILM MUSIC PROCESSOR - Film Industry Procedures

IDENTIFYING MUSIC CUES

The correct international system for identifying music cues on film reels is as follows ...

LETTER NUMBER NUMBER

or

LETTER NUMBER HYPHEN NUMBER

The LETTER identifies the type of cue - M for music
- D for dialogue etc.

The letter is very helpful to a film editor, dubbing editor or music editor as he has a lot more than music tracks to worry about. Thus every bit of sprocketed tape with an "M" identification can only be music. We need only be concerned with music cues.

The first NUMBER identifies the reel of film in which the music cue occurs.

The second NUMBER refers to the position of the music cue, in relation to other music cues, in that reel.

The hyphen is used by super-fussy people to make sure that there is no confusion between the first number (or numbers), and the second number (or numbers).

So, M11 (or M1-1) means that this piece of music is the first music cue in reel one.

POST PRODUCTION MNEMONICS

Standard abbreviations -

FX	means EFFECTS	- sound effects
CU	means CLOSE-UP	- camera distance
MCU	means MEDIUM CLOSE-UP	- camera distance
LS	means LONG SHOT	- camera distance
X	means dissolve	- scene fades out
EOL	means END OF LINE	- end of a line of dialogue

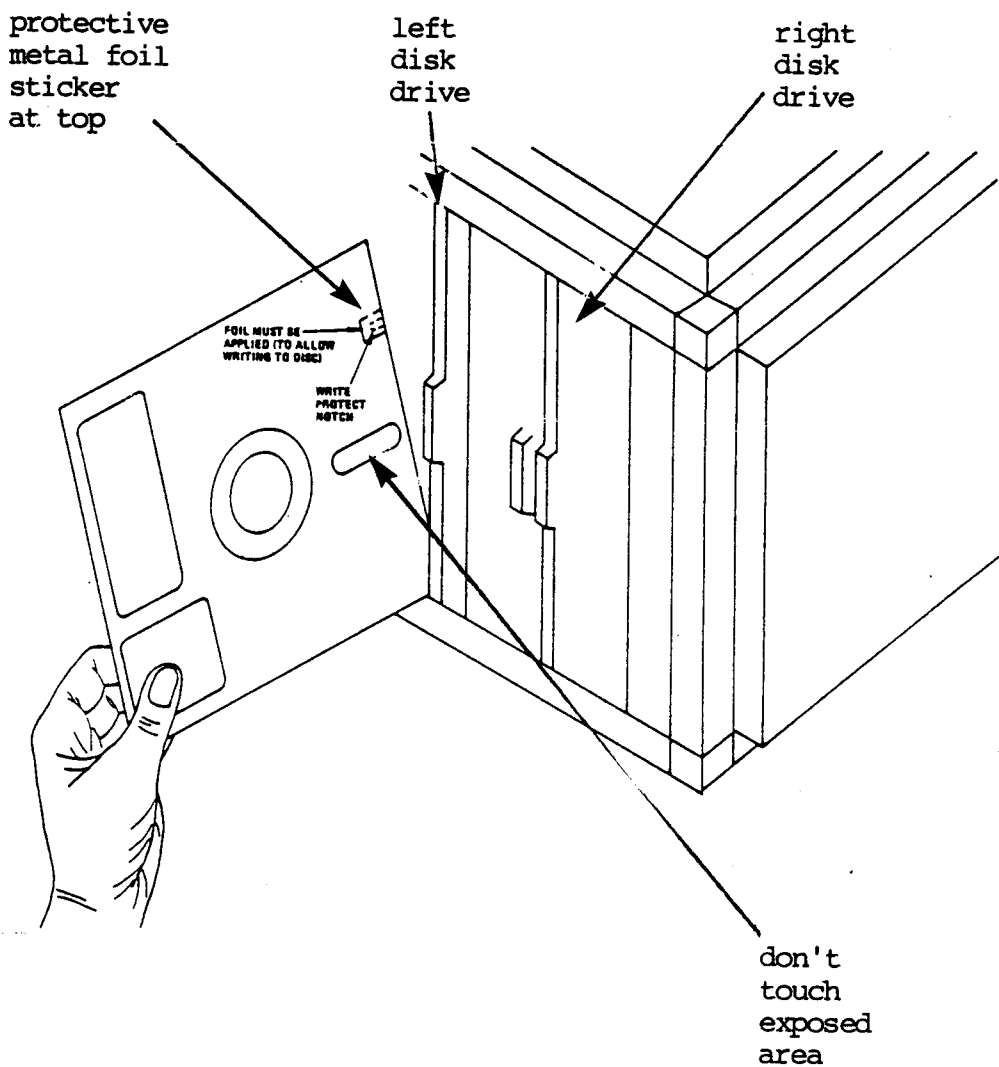
FILM MUSIC PROCESSOR - An introduction

Introductory Examples

The following examples will take you through the major features of the Film Music Processor. If you duplicate these examples on your Fairlight CMI, type the commands **exactly** as shown.

We will assume that you have a Fairlight CMI sitting in front of you with the power switched ON.

The first step is to insert the disk marked **Film Music Processor** in the **left** disk drive as shown below, and then a blank work disk in the **right** disk drive.



Disk Insertion

FILM MUSIC PROCESSOR - An introduction (continued)

The Film Music Processor program will **load** and the display will change to this ...

```
FILM MUSIC PROCESSOR    V/5.22
Copyright (c)-1981    M. Carlos
FAIRLIGHT INSTRUMENTS,AUSTRALIA

(printer down)

time (00:00 AM): 
date (00-00-00):

tempo format (3):      1 = frames per beat
                       2 = seconds per beat
                       3 = beats per minute

For NO CHANGE, just press <return>.
```

If desired, set **time** as **hours:minutes AM or PM<return>**
date as **day:month:year<return>**
and **tempo** as **1, 2 or 3<return>**.

Display will then change to this ...

```
title:
page(0) 00-00 00:00 AM mm:ss.dd    0.0    0.0    0.0 :bpm
>
```

page 0
blank

This is where a new scenefile is created.

FILM MUSIC PROCESSOR - An introduction (continued)

Now, type **NEW INTRO**<return>

Display will show ...

```
title: INTRO          35mm 24fps      @1    @2    @3
page(0) 00-00 00:01 AM mm:ss.dd    0.0  0.0  0.0 :bpm
0. □
```

scene file
name is
INTRO

Now type **FILM START**<return>

This is the start sync point.

Display shows ...

```
title: INTRO          35mm 24fps      @1    @2    @3
page(0) 00-00 00:02 AM mm:ss.dd    0.0  0.0  0.0 :bpm
0. FILM START
1. □
```

start
sync
point

cursor ready for
next sync point

Now type **FIRST LIGHT;5.50**<return>

This will be sync point 1 at 5.50 seconds

Display ...

```
title: INTRO          35mm 24fps      @1    @2    @3
page(0) 00-00 00:03 AM mm:ss.dd    0.0  0.0  0.0 :bpm
0. FILM START
1. FIRST LIGHT;5.50
```

sync
point 1

5.50 seconds

sync
point
ID

Continue to add sync points with timings.

FILM MUSIC PROCESSOR - An introduction (continued)

To **finish** the sync point list, type **END<return>** as the final sync point. The scenefile will be automatically saved ...

```

title: INTRO          35mm 24fps      @1    @2    @3
page(0) 00-00 00:09 AM mm:ss.dd    0.0   0.0   0.0 :bpm
-----
0. FILM START
1. FIRST LIGHT;5.50
2. MAXIMUM BUILD;12.95
3. FIRST TITLES;15.08
4. END TITLES;25.83
5. VOICE IN;30.58
6. VOICE OUT;1:02.75
7. END 
saving  INTRO.FA:1
    
```

type END<return>
as last
sync point

more sync
points
have been
added

file is
being
saved

After saving, the Film Music Processor will re-display the sync points and their timings to nearest 1/100th second ...

```

title: INTRO          35mm 24fps      @1    @2    @3
page(0) 00-00 00:10 AM mm:ss.dd    0.0   0.0   0.0 :bpm
-----
0. FILM START . . . 0: 0.00        0     0     0
1. FIRST LIGHT . . . 0: 5.50        0     0     0
2. MAXIMUM BUILD . . . 0:12.95       0     0     0
3. FIRST TITLES . . . 0:15.08       0     0     0
4. END TITLES . . . 0:25.83       0     0     0
5. VOICE IN . . . 0:30.58        0     0     0
6. VOICE OUT . . . 1: 2.75        0     0     0
    
```

To see how the sync point timings compare against various tempi, put a tempo in a click column.

Type **@1,120<return>**

This means - put a tempo of 120 beat per minute into click column 1.

Then type **L<return>**

This means - **list** the current page to screen. In fact, anytime you want to see the current page updated, type **L<return>**.

FILM MUSIC PROCESSOR - An introduction (continued)

title: INTRO	35mm	24fps	@1	@2	@3	
page(0) 00-00	00:12	AM mm:ss.dd	120.0	0.0	0.0	:bpm
0. FILM START . . .	0: 0.00		1.00	0	0	
1. FIRST LIGHT. . .	0: 5.50		12.00	0	0	
2. MAXIMUM BUILD . . .	0:12.95		26.90	0	0	
3. FIRST TITLES . . .	0:15.08		31.16	0	0	
4. END TITLES . . .	0:25.83		52.66	0	0	
5. VOICE IN. . . .	0:30.58		62.16	0	0	
6. VOICE OUT	1: 2.75		126.50	0	0	

type 126.50 tempo click
@1,120<return> beats 120 column 1
then type up to beats/minute
L<return> sync point 6

We can let the Film Music Processor choose a tempo by supplying the number of clicks desired between any two sync points.

What would the tempo be if there were 100 clicks between the start (sync point 0) and the end (start point 6) ? Put the result in click column 3.

Type @3,0-6,100<return>
click 100 clicks
column 3 between sync point 0 and sync point 3

Redisplay click tempos ...

title: INTRO	35mm	24fps	@1	@2	@3	
page(0) 00-00	00:13	AM mm:ss.dd	120.0	0.0	95.6	:bpm
0. FILM START . . .	0: 0.00		1.00	0	1.00	← sync point 0 on beat 1
1. FIRST LIGHT. . .	0: 5.50		12.00	0	9.76	
2. MAXIMUM BUILD . . .	0:12.95		26.90	0	21.63	
3. FIRST TITLES . . .	0:15.08		31.16	0	25.02	
4. END TITLES . . .	0:25.83		52.66	0	42.15	
5. VOICE IN. . . .	0:30.58		62.16	0	49.72	
6. VOICE OUT	1: 2.75		126.50	0	100.98	← sync point 6

tempo 99.98 beats later
95.6 bpm

FILM MUSIC PROCESSOR - An introduction (continued)

Now type `Q<return>`

This **quits** (leaves) the graphics mode. Whenever the `G` command is used, the Film Music Processor is locked into graphics mode until the `Q` command is used.

We will put `111.7` beats per minute tempo in click column 2.

Type `@2,111.7<return>`

then type `L;C<return>`

to clear the screen and display the sync points/click columns.

Display should look like ...

title: INTRO	35mm 24fps	@1	@2	@3
page(0) 00-00 00:20 AM mm:ss.dd		120.0	111.7	0.0 :bpm
0. FILM START . . .	0: 0.00	1.00	1.00	0
1. FIRST LIGHT . . .	0: 5.50	12.00	11.23	0
2. MAXIMUM BUILD . . .	0:12.95	26.90	25.10	0
3. FIRST TITLES . . .	0:15.08	31.16	29.07	0
4. END TITLES . . .	0:25.83	52.66	49.08	0
5. VOICE IN. . . .	0:30.58	62.16	57.92	0
6. VOICE OUT	1: 2.75	126.50	117.81	0

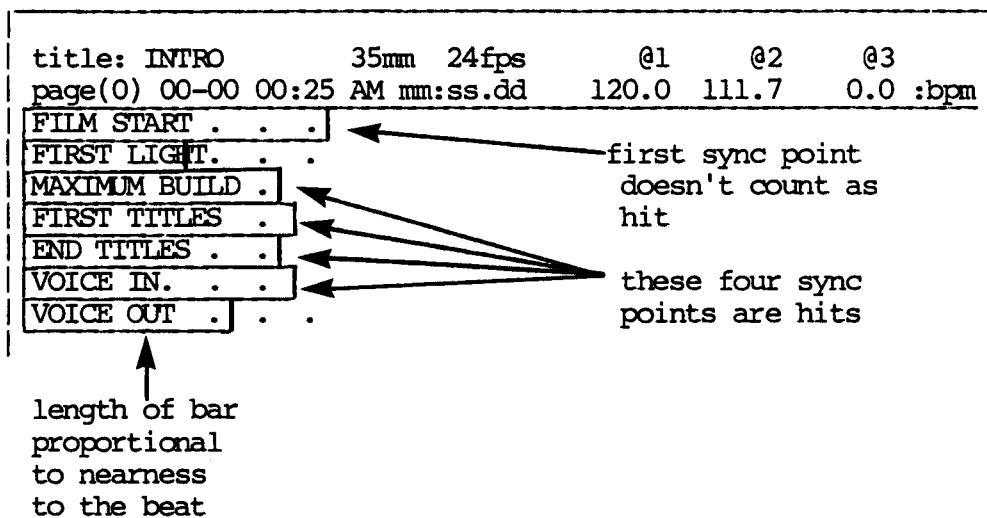
most sync points
are close to the
beat (hits)

FILM MUSIC PROCESSOR - An introduction (continued)

To see more explicitly which sync points are hits (within +/- 1.5 frames), use the V command on click column 2.

Type V,2<return>

Display will show ...



These examples show briefly the major workings of the Film Music Program. There are many other time saving commands available for your convenience. These are described in the following pages.

FAIRLIGHT FILM MUSIC PROCESSOR

Please read the introductory example before reading this section.

Here's a typical display after loading the system disk ...

```
FILM MUSIC PROCESSOR      V/5.22
-----
Copyright (c)-1981      M. Carlos
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(printer down)

time (00:00 AM): 12:15 PM ← optional
date (00-00-00): 6/4/84   time and
                           date
                           already
                           entered

tempo format (1): 1      1 = frames per beat
                        2 = seconds per beat
                        3 = beats per minute

For NO CHANGE, just press <return>.

tempo format 1
selected
(frames/beat)
```

After setting time and date, the cursor moves to tempo format.

The Film Music Processor provides three different tempo formats. These formats are provided for convenience in using whichever tempo happens to be applicable at the time.

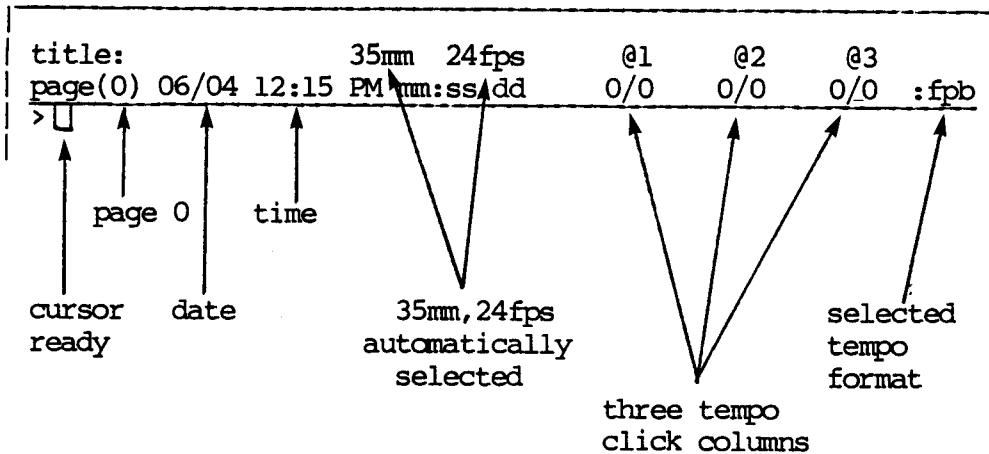
Frames per beat - at usual cinema 24 frame/second display,
a rate of 24 frames/beat = 60 beats/minute
a rate of 12 frames/beat = 120 beats/minute

Seconds per beat - the inverse of beats per minute,
1 second/beat = 60 beats/minute
.5 second/beat = 120 beats/minute

Beats per minute - standard metronome marking

FAIRLIGHT FILM MUSIC PROCESSOR

When the final <return> is typed in the preceding example, the screen display will change to this...



COMMAND SUMMARY

DEL	- delete a scene file from disk
DIR	- directory of all scene files
LOAD	- load a scene file from disk
NAME	- change name of current scene
NEW	- create a new scene file
SAVE	- save current scene to disk
#	- edit sync point data
@	- set a click tempo
B	- set beats per bar
D	- delete a sync point from current scene
FPS	- set frames per second
G	- graphic display of tempo search
I	- insert a sync point in current scene
L	- list sync points to screen or printer
MM	- film millimeter setting
O	- offset starting point
P	- page change
Q	- QUIT graphics display, exit to sync point display
S	- search a tempo or range of tempi
V	- view sync point/tempo on a bar graph
W	- stopwatch function

FAIRLIGHT FILM MUSIC PROCESSOR

To create a new scenefile:

Type **NEW** <scenename><return>

where <scenename> is a descriptive alphanumeric name,
up to 8 characters in length
first character must be alphabetic

Creating a new scene file is the first step in using the Film Music Processor. The new scene file will occupy one of four pages - see **P** command, and will initially be blank waiting for you to enter sync point ID and timing.

If file already exists an overwrite option is given.

System prompts with 0.

Type in an identifying start sync point.

This can be a maximum of any 18 characters including spaces.

The **start** sync point will be the start of the list of sync points and will be shown as starting at zero time.

System then prompts with successive sync point numbers
- "1.", ... "2.", ... etc.

For each sync point,

type sync point ID;time

where sync point ID can be a maximum of any 18
characters including spaces

time can be entered in **four** different ways

MINS & SECS & 1/100th SECS
in the form MM:SS.DD

OR

MINS & SECS & FRAMES
in the form MM:SS.DDF
type **F** after the time

OR

FEET & FRAMES
in the form FEET\FR
To get \ type <shift>L

OR

W - the stopwatch function

FAIRLIGHT FILM MUSIC PROCESSOR

Sync point timings may be typed into a scenefile in any mixed combination of feet and frames, seconds and frames and so on.

All timings are converted to minutes, seconds and 1/100's of seconds.

It is better to stay with the one timing format to avoid later confusion.

EXAMPLE

```

title:          35mm 24fps      @1   @2   @3
page(0) 03-12 01:31 PM mm:ss.dd 0.0 0.0 0.0 :bpm
NEW MORNING
    
```

↑ create a new scenefile called MORNING

↙ type <return> here

Screen display changes to this ...

```

title: MORNING      35mm 24fps      @1   @2   @3
page(0) 03-12 01:31 PM mm:ss.dd 0.0 0.0 0.0 :bpm
0. □
    
```

↑ waiting for start sync point to be typed in

↙ scenename is MORNING

Type **ONE MORNING<return>** as the start sync-point ID

Display will show ...

```

title: MORNING      35mm 24fps      @1   @2   @3
page(0) 03-12 01:31 PM mm:ss.dd 0.0 0.0 0.0 :bpm
0. ONE MORNING
1. □
    
```

↑ cursor ready for sync-point 1 ID and timing

↙ start sync point ID doesn't need a timing as it always starts at zero

FAIRLIGHT FILM MUSIC PROCESSOR

Here's the display after a few more sync-points have been added ...

title: MORNING	35mm 24fps	@1	@2	@3
page(0) 03-12 01:31 PM mm:ss.dd		0.0	0.0	0.0 :bpm
0. ONE MORNING				
1. TITLE 1 (WOLF FX);3.88		←	←	3.88 seconds
2. MAIN TITLE (ALARM);17		←	←	17.00 seconds
3. DISSOLVE TO BED;1:12.50		←	←	1 minute 12.50 seconds
4. CU: CLOCK FACE;2:15		←	←	2 minutes 15.00 seconds
5. END				

↑
END<return>
 terminates
 sync point
 input and
 automatically
 saves file

↑
 up to 18
 characters
 for sync
 point ID

↑
 semicolon
 between
 sync ID
 and time

A maximum of 100 sync points may be entered on any one page.
 There are **four** pages.

After saving, by typing **END<return>**, the scenefile from the previous example is re-displayed thus ...

title: MORNING	35mm 24fps	@1	@2	@3
page(0) 03-12 01:45 PM mm:ss.dd		0.0	0.0	0.0 :bpm
0. ONE MORNING.	. . 0: 0.00	0	0	0
1. TITLE 1 (WOLF FX).	0: 3.88	0	0	0
2. MAIN TITLE (ALARM)	0:17.84	0	0	0
3. DISSOLVE TO BED	. 1:12.50	0	0	0
4. CU: CLOCK FACE.	. 2:15.00	0	0	0

↑
 all sync point
 timings moved
 into **mm:ss.dd**
 column

FAIRLIGHT FILM MUSIC PROCESSOR

TIMING in SECONDS and FRAMES

Frame numbers may be used instead of 1/100th seconds for timing purposes, and many video machines display time readout in this manner.

Check for correct frames/second setting first. See **FPS** command.

```

title: MORNING      35mm 24fps      @1      @2      @3
page(0) 03-12 01:45 PM mm:ss.dd    0.0    0.0    0.0 :bpm
    
```

In this example, sync point timings have been entered in minutes, seconds and **frames** ...

```

title: NEWFILM      35mm 24fps      @1      @2      @3
page(0) 00-00 03:27 AM mm:ss.dd    0.0    0.0    0.0 :bpm
0. FILM START
1. FIRST LIGHT;5.12F ←———— 5 seconds, 12 frames
2. MAXIMUM BUILD;12.23F
3. FIRST TITLES;15.02F
4. END TITLES;25.20F
5. VOICE IN;30.14F
6. VOICE OUT;1:02.18F ←———— 1 minute, 2 seconds
7. END □———— 18 frames

type      type F      for 24 fps setting,
END<return> for FRAMES  frame number must
to finish  after time   be between 0 and 23
sync point
list
    
```

Here's how the Film Music Processor changes **FRAME** timings from the previous example to nearest 1/100th second ...

```

title: NEWFILM      35mm 24fps      @1      @2      @3
page(0) 00-00 03:27 AM mm:ss.dd    0.0    0.0    0.0 :bpm
0. FILM START . . . 0: 0.00      0      0      0
1. FIRST LIGHT. . . 0: 5.50      0      0      0
2. MAXIMUM BUILD . . . 0:12.95 ←————
3. FIRST TITLES . . . 0:15.08      0      0      0
4. END TITLES . . . 0:25.83      0      0      0
5. VOICE IN. . . . 0:30.58      0      0      0
6. VOICE OUT . . . 1: 2.75      0      0      0

5 seconds 12 frames
becomes 5.5 seconds
    
```

FAIRLIGHT FILM MUSIC PROCESSOR

TIMING in FEET and FRAMES

In some video machines, timings are only available in feet and frames. To use these timings, first ensure that you are working with the correct **millimeter** setting, that is 35mm or 16mm. All footage based computations are affected by choice of millimeter. So select correct millimeter **before** typing a new sync point list in feet and frames. See **MM** command.

↓

title: MORNING	35mm	24fps	@1	@2	@3	
page(0) 03-12 01:45 PM	mm:ss.dd	0.0	0.0	0.0	:bpm	

Here's a sync point list entered in feet and frames ...

title: CHASE	35mm	24fps	@1	@2	@3	
page(0) 03-12 01:45 PM	mm:ss.dd	0.0	0.0	0.0	:bpm	

0. CAR CHASE
1. START CAR;5\12 ←———— 5 feet 12 frames
2. THRU THE RED LIGHTS;15\04 ←———— 15 feet 4 frames
3. MISS A PEDESTRIAN;16\15
4. HELICOPTER SHOT;20\06
5. ROAD BLOCK SEEN;25\00
6. CHASE ENDS;27\08
7. END □

↑
type
END<return>
to finish
sync point
list

↑ \
type
that is **<shift>L**
between foot
number and
frame

↑
for 35mm setting,
frame number must
be between 0 and 15
(16 frames per foot)

↑
for 16mm setting,
frame number must
be between 0 and 39
(40 frames per foot)

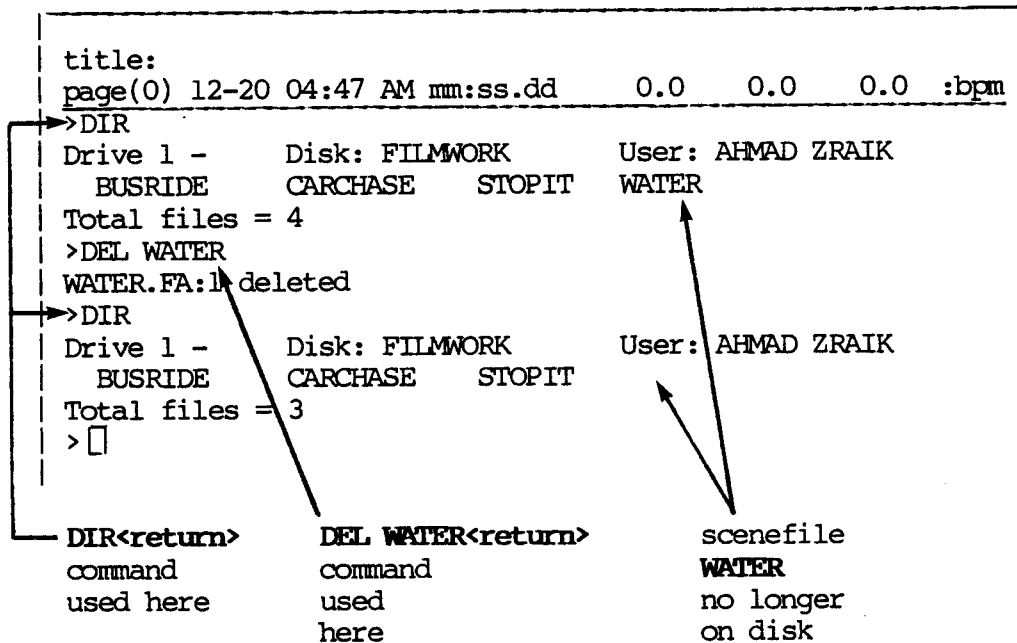
FAIRLIGHT FILM MUSIC PROCESSOR

DEL SCENENAME<return>

File called SCENENAME is deleted from disk in right hand drive. This command is useful for getting rid of redundant scenefiles. Once a scenefile has been deleted there is no way to retrieve it, other than re-typing it all.

To actually see the names of scenefiles before deleting, use the DIR command.

A typical dialogue between you and computer may be ...



DIR<return>

This command shows all scene files in the right hand disk drive. These files would have been previously **CREATED** and **SAVED**. See description of **NEW** command.

SAVE SCENENAME<return>

Currently displayed page is saved to disk. If not specified, the SCENENAME shown on current page is used. There are four "pages" in the Film Music Processor.

An overwrite option is given if file already exists.

When a **NEW** scenefile is created, it will be automatically **saved** when **END<return>** is typed as the final sync point in the list of sync points.

Therefore, the **SAVE SCENENAME** command does not have to be typed after creating a new scenefile.

If you want to retain both the original scenefile and the updated version, then save the new scenefile with a different filename.

FAIRLIGHT FILM MUSIC PROCESSOR

title: INTRO	35mm 24fps	@1	@2	@3	
page(0) 00-00 03:30 AM mm:ss.dd		0.0	0.0	0.0	:bpm
0. FILM START . . .	0: 0.00	0	0	0	
1. FIRST LIGHT . . .	0: 5.50	0	0	0	
2. MAXIMUM BUILD . . .	0:12.95	0	0	0	
3. FIRST TITLES . . .	0:15.08	0	0	0	
4. END TITLES . . .	0:25.83	0	0	0	
>SAVE INTRONEW					

you type
SAVE INTRONEW<return>

original scenefile
 name is **INTRO**

LOAD SCENENAME<return>

Current page is loaded from disk file SCENENAME.
 If not specified, the scene name shown on current page is used. Previous contents of page are overwritten. Message given if SCENENAME not found.
 If necessary, use the **DIR** command to see scenefile names on disk before **LOADING**.

NAME SCENE<return>

Set name shown on current page to SCENENAME.

This command is useful to rename a scenefile, usually to be more descriptive. Another use would be to have two identical copies of a scenefile but with different names.

Note that the scenefile would have to be **SAVED** with the new name.

FPS,NN;N<return>

where NN = 24 or 25 or 30

Set frames per second. Affects all frame based computations. When the Film Music Processor is first used, the frames per second setting will be **24fps**.

The frames per second setting will depend on your time code readout.

If desired, entering the option **;N** will cause the FPS variable to change without affecting any current time values. This option should only be used if sync point times were originally entered in wrong FPS setting.

FAIRLIGHT FILM MUSIC PROCESSOR

```
*****
*
* Note that frames per second setting is not related to
* frames per beat.
*
* Frames per second is the replay speed of the video
* machine being used and can be one of three values:
*
*           24 frames per second
*           25 frames per second or
*           30 frames per second
*
* Frames per beat is a variable tempo used to measure
* time in frames, rather than beats per minute.
*
*****
```

If a sync point list was originally typed in the wrong frames per second setting, but all the timings are correct, use the ;N for NO option to save having to re-type the timings again.

MM,NN<return>

where NN = Millimeters - 35 or 16

Sets frames per foot for 35mm or 16mm film.
Default value is 35mm.
Affects only footage based computations.

This command is only relevant if sync point timings are measured in feet and frames, as used with some video machines. If it is possible to obtain sync point timings in minutes and seconds, do that.

The Film Music Processor does all computations, however for your information, the following applies:

35mm film physically occupies 16 frames per foot.
35mm film runs at 90 feet per minute.

16mm film physically occupies 40 frames per foot.
16mm film runs at 36 feet per minute.

FAIRLIGHT FILM MUSIC PROCESSOR

PN;OPTIONS<return>

where N = page number 0 to 3
OPTIONS = M for MERGE or
F for FILL

Switch to Page N.

Page 0 is the default page.

Merge option, if used, causes current page to be merged with page N.

Fill option causes Page N to be filled from current page, thus making a duplicate page.

There are **four** pages in the Film Music Processor's memory. Each page can hold up to **100** sync points (0 to 99) and 3 click tempo columns. One page may be **filled** with the contents of another page so that changes can be made to the duplicate page without affecting the original. Two or more pages may be **merged** together, with sync points re-assembled in correct timing order.

A page is **empty** until

- 1) a new scenefile is created,
- 2) a previously saved scenefile is loaded from disk or,
- 3) the **fill** option is used to copy from one page to another.

EXAMPLES

P3<return>	Select Page 3
P1;F<return>	Fill Page 1 with contents of currently displayed page. Previous contents are overwritten.
P2;M<return>	Merge currently displayed page with Page 2. Result is in Page 2. Sync points will be interweaved and re-numbered in timing order. Be careful not to exceed 100 sync points.

FAIRLIGHT FILM MUSIC PROCESSOR

#NN, sync ID; TIME<return>

NN = sync point number, from 0 to 99

Sync point ID = maximum of 18 characters ID

TIME = minutes and seconds - MM:SS.DD

OR

minutes, seconds and frames - MM:SS.DDF

OR

feet and frames - FEET\FR

- frame number must have 2 digits

- to get \ , type <shift>L

Edit or alter a selected sync point's ID or time.
 Either or both ID and time may be specified.
 Note that the sync point's position in the scene will not be altered, so a new time should be greater than the previous sync point and less than or equal to the following sync point.

To move a cue, use the D for delete and I for insert command.

Sync point ID and time formats are described in the NEW command.

EXAMPLE

Sync point number 4 will have it's ID and time altered ...

title:	CHASE	35mm 24fps	@1	@2	@3	
page(3)	04-12 11:27 AM	mm:ss.dd	0.0	0.0	0.0	:bpm
0.	CAR CHASE . . .	0: 0.00	0	0	0	
1.	START CAR . . .	0: 3.06	0	0	0	
2.	THRU THE RED LIGHTS	0: 8.13	0	0	0	
3.	MISS A PEDESTRIAN	0: 9.03	0	0	0	
4.	HELICOPTER SHOT .	0:10.86	0	0	0	
>#4,AERIAL VIEW;10.13F						
>L						
0.	CAR CHASE . . .	0: 0.00	0	0	0	
1.	START CAR . . .	0: 3.06	0	0	0	
2.	THRU THE RED LIGHTS	0: 8.13	0	0	0	
3.	MISS A PEDESTRIAN	0: 9.03	0	0	0	
4.	AERIAL VIEW . .	0:10.43	0	0	0	

type L<return> to see change

new ID

10 seconds
13 frames
converted to
10.43 seconds

FAIRLIGHT FILM MUSIC PROCESSOR

I, sync point ID; TIME<return>

where sync point ID = maximum of 18 characters ID

TIME = minutes and seconds - MM:SS.DD

OR

minutes, seconds and frames - MM:SS.DDF

OR

feet and frames - FEET\FR

- frame number must have 2 digits

- to get \ , type <shift>L

This command inserts another sync point in sync point list. Time must be specified. New sync point will be inserted in the list according to it's time value.

The I command has the opposite effect to the D for delete command.

Sync point ID and time formats are described in the NEW command.

D,N<return>

where N = list of sync point numbers or a range of sync point numbers, N-N.

Delete sync point(s) from current page.

The D command has the opposite effect to the I for INSERT command.

EXAMPLE

D,3-12<return> Delete sync points 3 to 12.

FAIRLIGHT FILM MUSIC PROCESSOR

LP,N;OPTIONS<return>

where P = page number 0-3
N = sync point number 0 to 99 or a range
of numbers - NN to NN

OPTIONS C - clear the screen display
P - print onto paper
(if printer connected)

List current page to screen or printer.
List command also switches pages like the P command.
If listing to screen (no ;P option), C may be
entered as the last character in the command and will
clear the screen before displaying the page.

EXAMPLES

L<return> - list current page to screen
L;C<return> - list current page to screen,
clear screen first
L2;P<return> - list page 2 to printer
L,10-20<return> - list current page to screen,
sync points 10-20
L0,99;P<return> - List last sync point in Page 0 to
printer, sync point 99 is always
last sync point on page. Handy
when you're not sure how many sync
points there are.

FAIRLIGHT FILM MUSIC PROCESSOR

O,new sync point ID;+/-TIME<return>

where new sync point ID is new starting point name

TIME = minutes and seconds - MM:SS.DD

OR

minutes, seconds and frames - MM:SS.DDF

OR

feet and frames - FEET\FR
to get \ type <shift>L

OR

sync point number - #NN

Offset page start point time. A negative offset is an earlier start, positive is later, as is offsetting to a sync point number.

If sync point ID is not specified, and #NN is not used for time, a sync point ID will be generated containing the offset in minutes and seconds. If #NN is used, that sync point's ID will be retained for the start ID.

Displayed time code is almost never zeroed with the image or with various music cues, so the OFFSET command is of the greatest practical value for all those who are not arithmetic freaks.

To offset from a sync point, type O;#NN<return>

where NN is sync point number

This is useful to use a sync point as a new starting point.

FAIRLIGHT FILM MUSIC PROCESSOR

title: STRETCH	35mm 24fps	@1	@2	@3
page(1) 12-24 04:28 PM mm:ss.dd		100.0	110.0	120.0 :bpm
0. OPENING. . . .	0: 0.00	1.00	1.00	1.00
1. CREDITS START. . . .	0:10.00	17.66	19.33	21.00
2. CREDITS END	0:35.41	60.02	65.93	71.83
3. CLOSE UP - DAVE	0:40.23	68.05	74.75	81.46
4. HIS HAND	0:50.11	84.51	92.86	101.22
5. OUTSIDE. . . .	1: 1.83	104.05	114.36	124.66
6. DAVES VOICE	1:11.50	120.16	132.08	144.00

>O;#3				
>L				
0. CLOSE UP - DAVE	0: 0.00	1.00	1.00	1.00
1. HIS HAND	0: 9.88	17.46	19.11	20.76
2. OUTSIDE. . . .	0:21.60	37.00	40.60	44.20
6. DAVES VOICE	0:31.27	53.11	58.32	63.54

offset to sync point 3 new start sync point new timings

If you create a file, OFFSET it and SAVE it, it is very difficult, timing-wise, to go back later to the video tape and enter any further sync points. Therefore, have two files. One file would be the "HEAD" file with raw time code settings straight from the video. The other file would be a duplicate of the HEAD file but with corrected time code, that is, starting from zero. Thus you can always load the HEAD file, add more sync points, rename the file and OFFSET to a sync point.

@C,TEMPO<return>

where C = Click column number 1 to 3

TEMPO = Beats per minute - range 1 to 999.9

OR

Seconds per beat - range .001 to 9.999

OR

FF/F where F = frames and 1/8ths of frames per beat range 1 to 99/7

OR

N-N,B where N-N = 2 sync point numbers
B = number of beats desired between them

FAIRLIGHT FILM MUSIC PROCESSOR

Sets tempo for the designated (C) click column as an absolute tempo in beats per minute, seconds per beat or frames and 1/8ths per beat.

An implied tempo can be derived from the number of beats desired between any two sync points. See also the G and S commands to derive a tempo.

Whenever a page is listed, the beat number for each sync point in this tempo will be displayed under the relevant column. The B command allows these beat numbers to be displayed as bars and beats in any meter.

The three click columns per page allow you to choose three different tempi and see how many clicks (beats) result for each tempo. There are four pages with three click columns on each.

EXAMPLE

@1,120<return> Set click column 1 to 120 bpm.

@3,0-6,160<return> Derive a tempo for click column 3 such that there are 160 beats between sync points 0 and 6.

		click column 1	click column 2	click column 3	
title: STRETCH	35mm 24fps	@1	@2	@3	
page(1) 1-06 04:45 PM	mm:ss.dd	120.0	0	134.3	:bpm
0. OPENING.	0: 0.00	1.00	0	1.00	
1. CREDITS START.	0:10.00	21.00	0	23.38	
2. CREDITS END	0:35.41	71.83	0	80.27	
3. CLOSE UP - DAVE	0:40.23	81.46	0	91.04	
4. HIS HAND	0:50.11	101.22	0	113.16	
5. OUTSIDE.	1: 1.83	124.66	0	139.40	
6. DAVES VOICE	1:11.50	144.00	0	161.04	

160 beats
between
0 and 6

tempo
format
beats
per
minute

FAIRLIGHT FILM MUSIC PROCESSOR

B,N<return>

where N - N beats per bar - any meter up to 99

EXAMPLES

B,4 - set the bar count in the click columns to four beats per bar

B,0 - turn OFF the bars and beats display that is, just display beat numbers

Here's a before and after look at the B command ...

title: STRETCH	35mm 24fps	@1	@2	@3	
page(1) 1-06 04:41 PM mm:ss.dd		120.0	130.0	0.0	:bpm
0. OPENING.	0: 0.00	1.00	1.00	0	
1. CREDITS START.	0:10.00	21.00	22.66	0	
2. CREDITS END	0:35.41	71.83	77.73	0	← before
3. CLOSE UP - DAVE	0:40.23	81.46	88.16	0	
4. HIS HAND	0:50.11	101.22	109.57	0	
→B,4					
→L					
0. OPENING.	0: 0.00	1, 1.00	1, 1.00	0	
1. CREDITS START.	0:10.00	6, 1.00	6, 2.66	0	
2. CREDITS END	0:35.41	18, 1.83	20, 1.73	0	← after
3. CLOSE UP - DAVE	0:40.23	21, 1.46	22, 4.16	0	
4. HIS HAND	0:50.11	26, 1.22	28, 1.57	0	

↑ beat number

↑ bar number

type B,4<return>
for four beats to the bar

type L<return>
to see the change

FILM MUSIC PROCESSOR

S,TEMPO,OFFSET;OPTION<return>

where TEMPO = tempo is frames, 1/8 frames per beat

OR

seconds per beat

OR

beats per second

A range of tempi can be chosen as frames and 1/8ths of frames per beat. See examples below.

OFFSET = optional offset expressed as N +/- time

where N = number of times to step

TIME = minutes and seconds - MM:SS.DD

OR

feet and frames - FEET\FR

OR

beats per tempo column - B@C

OPTIONS = P - printer

The current page is scanned at the selected tempo and the number of sync points which are hit within +/- 1.5 frames is displayed. 1.5 frames is about 0.06 seconds, so at a tempo of 60 beats a minute (one beat a second), a sync point would be considered on the beat if it were within 0.06 of a beat.

If a range of tempi is specified, the process is repeated for each 1/8th frame tempo included in the range. This is only applicable for **frames per beat** time format.

If OFFSET is specified, each tempo is additionally scanned N more times, each time varying the start point by TIME. This can be extremely useful since a small change in the starting point can make a seemingly ill-suited tempo take on new possibilities. The number of hits is given.

For graphic inspection of a range of tempi, use the G command and the V command.

FILM MUSIC PROCESSOR

EXAMPLES

S,120.0<return> Search at a tempo of 120 bpm
S,120.0,5<.01> Search 5 times at a tempo of 120 bpm
offset by 0.01 second each time
S,12/0-12/7 Search from a tempo of 12/0 fpb to
12/7 fpb
S,13/5,5<-.25> Search 5 times at a tempo of 13/5 fpb
offset by -.25 seconds
S,10/0-10/4,3<.20> Search 3 times from a tempo of 10/0
to 10/3, offset by .2 seconds each time
S,13/5,4<\20> Search 4 times at a tempo of 13/5 fpb,
offset by 2 frames each time
S,.430-.435 Search from a tempo of .430 spb to .435

W<return>

Stop watch function allows the composer/arranger to time
sync points while watching a video replay. Any previous
timings are wiped out from memory.

System prompts with **confirm CORRECTION FACTOR**
0.00%

Type **<return>** for no change
+ or - **percentage** for video tape recorder
replay speed correction.

To work out correction factor,
time video tape recorder against
the Film Music Processor with no
correction factor.
Derive a percentage from the difference
between the two times.

Do not use the W function to convert
from 25 to 24 frames per second.
Use the **FPS** command instead.

FILM MUSIC PROCESSOR

System prompts with start sync point ID (time zero).

Type <ctrl>T to start stopwatch and take
 successive readings
 <ctrl>C to reset stopwatch
 <ctrl><esc> to halt stopwatch

After starting, system will prompt with each successive sync point ID.

Type <ctrl>T to take each successive timing.
When all the sync points have been timed, the timings appear on the screen.

G, start tempo<return>

This command will search 64 tempi beginning at the specified start tempo and display the number of sync points hit by each tempo as a graph.

System prompts with a tempo increment option:

Increment tempo by 0.1 beats per minute :

For no change, type <return>

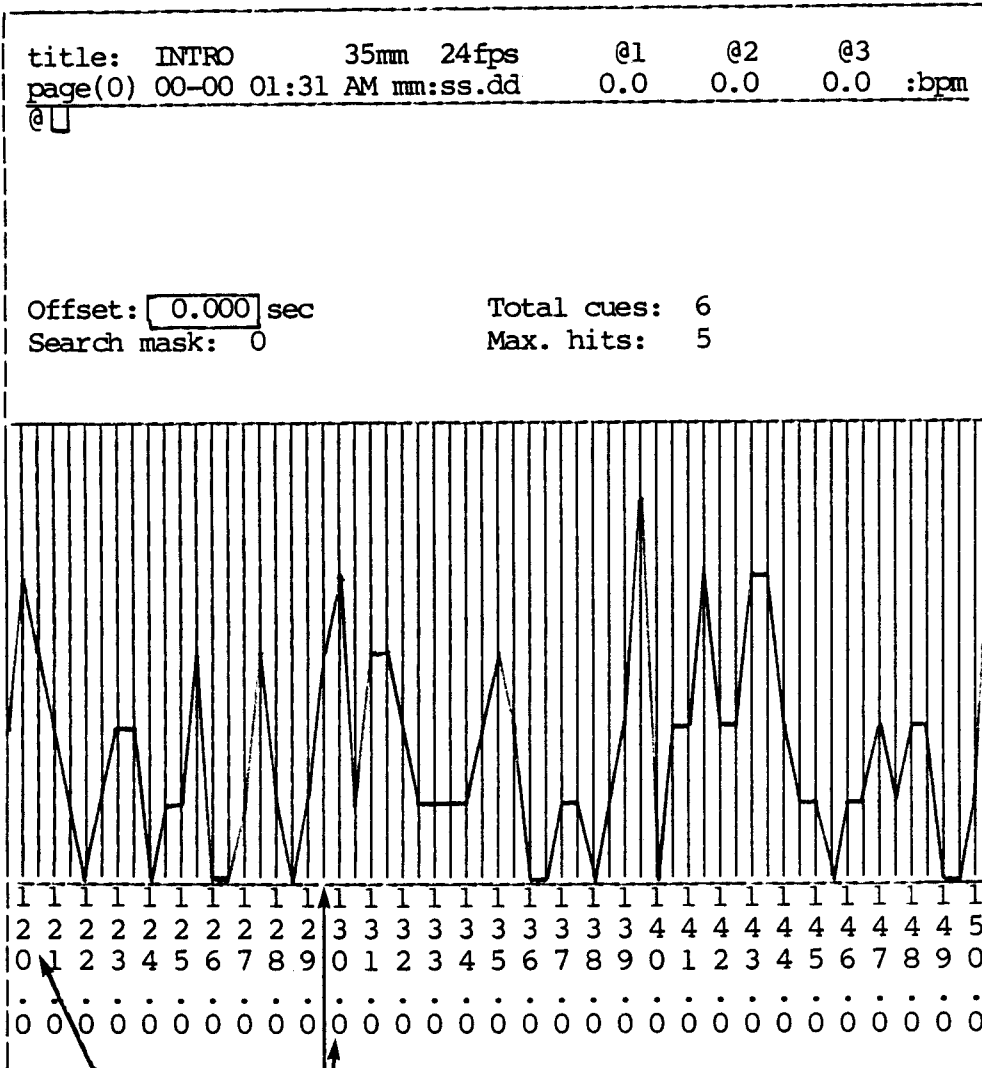
The G command is used as a supplement to the three click tempo columns. To leave the graph display, and get back to page activities, type Q<return> for quit.

Once the search has been completed, the start OFFSET may be adjusted by typing a number (seconds) and pressing the <add>, <sub>, or <set> keys.

Note that for frames or seconds per beat, a graphic tempo-search will move through progressively SLOWER tempi, whereas for beats per minute, the tempi become progressively QUICKER.

FILM MUSIC PROCESSOR

Display changes to ...



tempo
120.0
beats
per
minute

tempo
increments
by .5 beats
per minute

to leave
this display
type
Q<return>

When a suitable tempo has been found from this display, use the @ command to put this tempo in one of the click columns. Then use the V command to display sync point alignment with relevant click column tempo.

Note the OFFSET box which allows a tempo re-search.

FILM MUSIC PROCESSOR

Q<return>

Quit the graphics display. Return to current page.
The Q command is the only way to leave the graphics display.

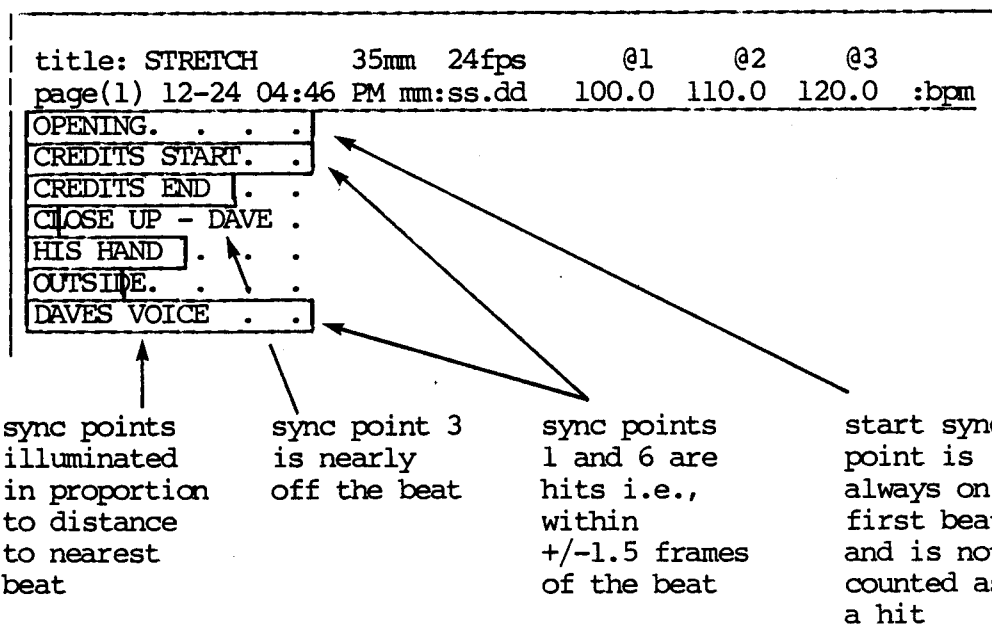
V, tempo click column number 1-3<return>

This command will display the ID of every sync point in the scene file superimposed on a bar-graph showing the accuracy with which each sync point coincides with the nearest beat in the selected tempo.

Each sync point ID is illuminated in proportion to the distance to the nearest beat. If the sync point falls exactly on a beat, then the ID will be completely illuminated. If it falls exactly between two beats then it will not be illuminated at all.

- The usual procedure is to
- 1) use the G command to find a suitable tempo
 - 2) use the @ command to put the suitable tempo in a click column
 - 3) use the V command to see sync point ID hits

Display changes after using the V command ...



FILM MUSIC PROCESSOR

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