

Film Scoring Information

Basic Terminology:

- What is a cue? A cue is an individual music segment in a movie.
- What are Timing Notes? Timing Notes is a document listing significant events in a movie along with its corresponding timings.
- What is a cue sheet? A cue sheet is a document listing the different cues in a movie in numerical order. It contains the length of the cue and the composer of the cue.
- What is an SMPTE Time Code? The SMPTE stands for “Society of Motion Pictures and Television Engineers”; it is an industry standard for computers, synthesizers, and video machines to talk to each other. The time code may be imbedded in video, which runs at 30 frames per second, and appears in the following format:

HH:MM:SS;FR (Hours, Minutes, Seconds, Frames)

Spotting Notes:

Before preparing a cue sheet, you must study the film several times and decide where it would be a good place to put music. Once you decide where to put the music you will notate the information on a sheet called Spotting Notes.

Spotting Notes				
<u>Project Title:</u> Butterflies		<u>Composer:</u> G Stark		
<u>Cue No.</u>	<u>SMPTE In</u>	<u>SMPTE Out</u>	<u>Length</u>	<u>Use</u>
M-1	:01:1:35:03	:01:02:39:23	1:04.67	Title Music
Title: Butterflies				
Description: (Explain what goes on in the film segment. Note directives such as CUT, FADE OUT, PAN LEFT or RIGHT, ZOOM.)				
M-2				
Title				
Description:				
M-3				
Title				
Description:				

SMPTE In is where the cue begins, and SMPTE Out is where the cue ends. Note the length is 1 minute, four seconds and 67 milliseconds.

The Cue No has a standard notation such as 3M1. The first number represents the reel and the last number represents the cue number for that reel. For television, the first number can also represent an act. The letter “M” stands for music. If there are no act or reels, you can write the cue number as M-1, M-2 and so on.

Once the spotting notes are completed, you can begin working on a cue. The Timing Sheet is used to break down the film segment into finer detail. This will allow for more precise synchronization of music with film. You may choose to score your cue this way or use free timing instead. Free timing allows for more flexibility in the flow of your music without the specific details of a timing sheet.

Timing Sheet:

If you choose to create a timing sheet, fill out the Timing Sheet by marking specific time codes for any change that occur in the film segment. Example: If the first time code is the start of the cue, mark it with MX... and a short description. If the second time code marks the beginning of an action, write the description of the action. Capture as much detail as necessary so that you can plan a better design for your music to fit with the actions of the movie.

Timing Sheet		
<u>Cue Number:</u> M-1	<u>Cue Title:</u> Butterflies	<u>Name:</u> G Stark
SMPTE	Relative Time	Description
1:1:35;3	0:00.00	MX IN... Butterfly launches
1:1:39;15	0:04.40	Butterfly Slow Motion with sponsor name
1:1:51;7	0:16.13	FULL IN - Butterflies Title Card
1:1:59;19	0:22.53	CUT - Rapid wings
1:2:20;9	0:45.20	Butterfly Still CUT
1:2:25;8	0:50.17	Butterfly CUT - ZOOM
1:2:39;23	1:04.67	Butterfly MX OUT

To calculate the relative time, use the following formula:

$$TC2(HH \times 3600 + MM \times 60 + SS + FR/30) - TC1(HH \times 3600 + MM \times 60 + SS + FR/30)$$

Subtract the SMPTE Time Codes for each:

$$(1 \times 3600 + 1 \times 60 + 39 + 15/30) - (1 \times 3600 + 1 \times 60 + 35 + 3/30) = 4.4$$

$$(1 \times 3600 + 1 \times 60 + 51 + 7/30) - (1 \times 3600 + 1 \times 60 + 35 + 3/30) = 16.13$$

...

Beat Synch Calculator:

A special calculator called a Beat Synch Calculator can be used to measure exactly what beat a particular moment of time will occur. Enter the relative time from the time sheet into the Beat Synch Calculator. Select a desired tempo for you cue. Automatically, the calculator will show you where the beats will appear for each specific moment in time.

	SP1	SP2	SP3	SP4	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16
Tempo:	88															
Frame Click:	16.3															
Exact Seconds:	4.40	16.13	22.53	45.20	50.17	64.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Frames:	105.60	387.12	540.72	1084.80	1204.08	1552.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beat Choice:	7.5	24.5	34	67	74.5	96	1	1	1	1	1	1	1	1	1	1
Early (-) or Late:	0.84	-2.31	-0.35	-4.05	-0.52	3.55	0	0	0	0	0	0	0	0	0	0
							SP17	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	
							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							1	1	1	1	1	1	1	1	1	1
							0	0	0	0	0	0	0	0	0	0
On the Beat:	3															
Against the Beat:	3															

The goal is to have the beats fall within a range of -3 to 3 latency (Early (-) or Late). Latency is the exactness in which the moment in time falls on the beat. On beat 7.5, the event at synch point 4.4 is against the beat and start with an eighth note. At beat 24.5, the synch point 16.13 also starts with an eighth note. The total number of beats equals 96. In 4/4 time, that will give you 24 measures of music.

Bar/Beat Breakdown:

Now you can measure out your music according to the beats indicated by the beat synch calculator. Start with a Bar/Beat breakdown of how the music will synchronize with the film.

Bar/Beat breakdown

Butterflies

Bar/beat Breakdown 16/3 (mm88)

Glen Stark

$\text{♩} = 88$

1 MX IN... 2 Butterfly launches 3 4 5 CUT Butterfly Slow Motion 6 7 Callaway Gardens 8 9 FULL 10 11

7.5

12 FULL IN - Butterflies Title Card 13 14 15 16 17 CUT - Rapid Wings 18 19 20 21

24 34

22 CUT MS - Yellow Buterfly 23 24 25 CUT Butterfly and Bees 26 27 28 CUT Black Butterfly 29 30 31 32

33 CUT Butterfly Still 34 35 36 CUT MS - But'fly Hang 37 Begin Zoom 38 CUT Butterfly - ZOOM 39 40 41

67 74

42 CAM Holds 43 44 Freeze 45 46 47 Butterfly MX OUT

96

Public Domain

Using the Bar/Beat breakdown as a guide, you can begin composing the music for the film segment.

Cue Sheet:

From the spotting notes, you can create a Cue Sheet in the following format:

<u>Cue Number</u>	<u>Cue Title</u>	<u>Length</u>	<u>Composer</u>
M-1	Butterflies	1:04.67	G Stark
M-2	2 nd title	0:00.00	name
...			

Always remember, keep the cues short (not more than a minute and a half long) and use several cues as necessary. A cue can be as short as a few seconds long.

Analyzing a scene:

When you study a scene, look for any information that will determine what kind of music you will compose. Ask yourself the following questions as you prepare your spotting notes:

- What is the location of the movie?
- What culture or country?
- What time period?
- What is the time of day?
- What is the weather like?
- Any action?
- Is it comedic action, like a cartoon? (This is called mickeymousing)
- What is the mood of the film?
- Does the scene ending need any special musical support for more dramatic conclusion?
- Can the music help in what a person is thinking?
- Should the music prepare the audience for the unforeseen?
- Can the music prepare for an unexpected surprise?
- Can the music present an image of the characters in the movie?
- Should the music simply support a scene or should it trick the audience?
- Does the sequence have to do with dreams or fantasies?
- Should the music make a statement other than what is presented in the movie?
- Can the music be used to connect one scene to another?

Orchestration Considerations:

When you compose for a scene, there are many things to take in consideration.

- What is the tempo for this scene?
- What is the dynamic range?
- How many instruments should there be?
- What kind of instruments should be used?
- What range should the instruments fall under?
- How will the timbre of an instrument affect the scene?
- Is there dialogue?

Creating the music with your favorite music editor:

However you decide to create your film score, you will need to generate a digital audio file that can be imported into the movie using QuickTime Pro. If you have other movie editing software, you may feel free to use them as well. Keep in mind that the movie editing software needs to support the .MOV format.

QuickTime Pro supports most audio file types. For example, you may import .wav and .mp3 files.

To insert an audio file into the movie using QuickTime Pro, follow these steps:

1. Open the movie you want to add music to. (Remember to save often so not to lose your work.)
2. To open an audio file, click the File | Open File menu.
3. Select from the drop down list, Files of Type, and click Audio Files.
4. Click on the audio file you want to add to the movie, and then click the Open button.
5. Adjust the grab handles on the movie window for where you want the music to go in, and then click on the first grab handle to select. (The movie screen should show the correct SMPTE Time Code where you want the audio file to begin.)
6. Click Edit | Select All menu from the audio file window.
7. Click Edit | Copy menu from the audio file window.
8. Click Edit | Add To Movie menu from the movie window.
9. Save different versions of your work as the file may have a tendency to get damaged.
10. Play your example and make sure everything sounds the way you like it. If the music doesn't fit, or you need to make changes, rework the audio file and repeat the steps listed above.

Once you have completed your film scoring project, play though it one more time to make sure everything works fine, then save your file in a location so you don't lose your hard work. You may copy the file on CD or DVD for viewing.