

# MATCHING FRAME RATE TO TEMPO

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FPS = Frames per Second

BPM = Beats per Minute

FPB = Frames per beat

TEMPO = The speed at which a passage of music is or should be played.

$$FPS \div (BPM / 60) = FPB$$

$$(FPS \div FPB) \cdot 60 = BPM$$

$$FPB \div FPS = \text{Duration in Seconds}$$

YOU CAN CALCULATE THESE IN REAL-TIME WITHIN AFTER EFFECTS (2:20)

Common Time Measure

## MAGIC TEMPO TABLE

DOWNBEAT: FIRST BEAT OF EACH MEASURE

FPB BPM BPM BPM BPM

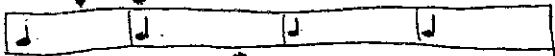
DOWNBEAT: FIRST BEAT OF EACH MEASURE

| FPB | BPM    | BPM    | BPM    | BPM   |
|-----|--------|--------|--------|-------|
| 30  | 60.00  | 59.94  | 50.00  | 48.00 |
| 29  | 62.07  | 62.01  | 51.72  | 49.66 |
| 28  | 64.29  | 64.22  | 53.57  | 51.43 |
| 27  | 66.67  | 66.60  | 55.56  | 53.33 |
| 26  | 69.23  | 69.16  | 57.69  | 55.38 |
| 25  | 72.00  | 71.93  | 60.00  | 57.60 |
| 24  | 75.00  | 74.73  | 62.50  | 60.00 |
| 23  | 78.26  | 78.18  | 65.22  | 62.61 |
| 22  | 81.82  | 81.74  | 68.18  | 65.45 |
| 21  | 85.71  | 85.63  | 71.43  | 68.57 |
| 20  | 90.00  | 89.71  | 75.00  | 72.00 |
| 19  | 94.74  | 94.64  | 78.95  | 75.77 |
| 18  | 100.00 | 99.70  | 83.33  | 80.00 |
| 17  | 105.88 | 105.78 | 88.24  | 84.71 |
| 16  | 112.50 | 112.39 | 93.75  | 90.00 |
| 15  | 120.00 | 117.88 | 100.00 | 96.00 |

## Time Measure

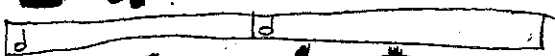
4 Four beats per Measure

1/4 Quarter note beat



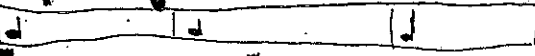
2 Two beats per Measure

1/2 Half note beat



3 Three beats per Measure

1/4 Quarter note beat



6 Six beats per Measure

1/8 Eighth note beat



THESE ARE ALL ONE MEASURE

BPM / TEMPO WILL NOT CHANGE MEASURE SIZE ONLY THE RATE THEY ARE PLAYED

TEMPO = The speed at which a passage of music is or should be played.

|                  |  |
|------------------|--|
| o Whole note     | (3:51)<br>Duration is equivalent of 2 bars to the next downbeat. |
| d Half note      |  |
| ♪ Quarter note   |  |
| ♩ Eighth note    |  |
| ♫ Sixteenth note |  |

POWERS OF 2

2

Megan and Wesley

Timing & Text Animation



SEE SAFE ZONE FOR ITEM PLACEMENT SUCH AS TEXT (TV SCREEN)



=

PLACEMARKERS ON LAYER @ CTI (USE ALT + \* FOR COMMENTS)

CAN HOLD CTRL + Click ON MARKER TO DELETE IT.

CAN USE OPEN PARENS ON ON MARKER AND CLOSED PARENS ON ANOTHER TO SIGNAL ENTER & EXIT OF INSTRUMENTAL

In that window, you can give the MARKERS a duration. - comment window -

Use ( and ) to mark start and end of the duration of a musical or audio event.

NULL = USE AS EXTRA LAYER FOR

NULL LAYERS Do Not Render OUT

MORE MARKERS

- Open with "("
- Close with ")"

LAYER MARKERS FOLLOW LAYER I.E YOU CAN SLIDE IT

LL = SHOW WAVE FORM WHEN LAYER SELECTED

SLIDE LAYER, layer MARKERS FOLLOW IT, Comp? markers do NOT.

- Key on numeric keypad will play just the audio (to spot hard-to-find downbeats, check the prior tempo!)

spacebar for just playing the video (no sound)

# Staccato Cuts

Jacob  
+  
Shawn

- syncing beats in music to

to video.

- Identifying beats by looking at the waveform (LL)
- place markers on the down beats to make cutting easier, (\*)
- place markers on the video when important scenes happen.
- if you have phrases in your audio you can add a duration to a layer marker. (double click)
- cut the video to match the audio.

- Helpful keyboard shortcuts for audio

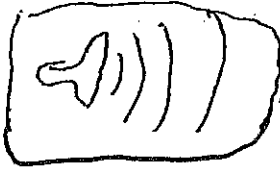
- LL to view waveform
- ; to zoom in on waveform

- audio waveform is part of audio layer, has audio levels of waveform. A layer has a volume icon is present.

- ; to zoom in on waveform
- \* (on numeric keypad) to place markers on beats
- Alt + [ ] to help cut layer length

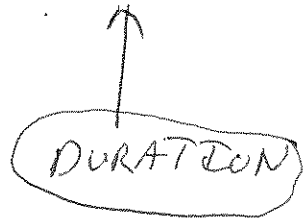
- audio waveform is part of an audio layer, has audio levels & wave form. A layer has volume if a volume icon is present

LL to view the AUDIO WAVEFORM



- Identifying beats by looking at the waveform (LL)
- place markers on the down beats to make cutting easier, (\*)
- place markers on the video when important scenes happen.

- If you have phrases in your audio you can add a duration to a layer marker. (double click layer marker)



- cut the video to match the audio.