SLIDE

	2 hr
	90 min
	1 hr
	45 min
	30 min
	20 min
	15 min
	10 min
	8 min
	6 min
	4 min
	3 min
	2 min
	90 s
	60 s
6	45 s
	30 s
12	20 s
	15 s
25	10 s
	8 s
50	6 s
	4 s
100	3 s
	2 s
200	1.5 s
	1 s
400	1/1.5
	1/2
800	1/3
	1/4
1600	1/6
	1/8
3200	1/10
	1/15
6400	1/20
	1/30
	1/45
	1/60
	1/90
	1/125
	1/180
	1/250
	1/350
	1/500
	1/750
	1/1000
	1/1500
	1/2000
	1/3000
	1/4000

In the original JIFFY CALCULATOR the film speeds were listed in full and 1/3 stops (but not 2/3) stops, but the aperture values and shutter speeds were listed in full and half stops.

SLIDE

THE NEW JIFFY CALCULATOR

Based on THE JIFFY CALCULATOR by S. P. Martin
Data from the ULTIMATE EXPOSURE COMPUTER by Fred Parker
Converted and modified by M. Zomborszki

HOW TO USE THE CALCULATOR

Line up film speed with the scene number in the left window. Equivalent exposures appear in the right window. In the left window the EV can be found on the row matching the film speed 100.
You can also align the EV with the film speed in the right window instead of scene number.
You must adjust exposure to compensate for reciprocity failure. Check your films datasheet.

EV @ISO100	SCENE NUMBER	FILM SPEED
17		
16		
15		
14		
13		
12		
11	1	
	2	
10	3	
	4	
9	5	
	6	
8	7	
	8	
7	9	
	10	
6	11	
	12	
5	13	
	14	
4	15	
	16	
3	17	
	18	
2	19	
	20	
1	21	
	22	
0	23	
	24	
–1	25	
	26	

SHUTTER SPEED or EXPOSURE TIME	f/STOP
	f/32
	f/27
	f/22
	f/19
	f/16
	f/13
	f/11
	f/9.5
	f/8
	f/6.7
	f/5.6
	f/4.8
	f/4
	f/3.4
	f/2.8
	f/2.4
	f/2
	f/1.7
	f/1.4
	f/1.2
	f/1

MOON SHOTS

For pictures of moon only (not scenes), find exposure as follows: Set film speed at Scene 1. For "full–moon" close lens down one stop, for "half–moon" use exposure on calculator and for "crescent moon" open up lens one stop. Note: Shutter speed must be 1/25 (or faster) or moon will be blurred in picture.

STAR TRAILS

Line up film speed at Scene 26, and then convert shutter speeds to time exposures as follows: seconds become minutes and minutes become hours. Use long exposures!

GENERAL INSTRUCTIONS

For night photography, use fastest film possible. With black–and–white films, use tungsten indexes. Flash–type and tungsten–type color films tend to give more normal renditions in "mazda" light. Daylight–type color film render much warmer results, but are quite satisfactory.
It may be advisable at first, and especially with slower films, to bracket all exposures at least one stop over and one stop under, until light values and special effects of various "night scenes" are more easily predetermined with use of the Jiffy Calculator.
NOTE: If exposures are less than 1/25 second, USE TRIPOD.

SCENE NUMBERS

1 Ice shows, in multiple white spotlights. If spotlights are colored, use Scene 4

2 Burning buildings, fires. For detail in surrounding areas, use Scene 5.

3 •Brightly lighted stage–theater acts. If lights are colored or subdued in "mood" situations, use Scene 6.
•Brightly lighted boxing, wrestling rings. For spectator shots in close proximity of ring, use Scene 5.

4 Neon–electric signs, theater marquees. To capture some detail in surrounding area, use Scene 7.

5 •Campfire groups. (Keep subjects close, but safe from heat and flames.)
•Bright TV and movie screen pictures, at 1/25 or 1/30 sec only. If in color, use Scene 8.
•Brightly spotlighted aerial circus performances. For acts on ground level or spectators in lower seats, use Scene 7.

6 •Brightly illuminated store display windows.
•Brightly lighted gas stations.

7 •Indoor lighted Xmas tree. For detail in tree decorations, gifts, etc. (or if people are in picture), a double exposure may be necessary. Use long exposure, sufficient to include flash fill–in. However, if room is brightly lighted, flash will not be needed.
•Brightly lighted interiors of homes, offices, restaurants and stores.
•Portraits, by brightly illuminated store display windows and theater marquees.

8 •Broadway–type, brightly lighted Main streets. For emphasis on reflections of rain–wet streets, use Scene 6.
•Baseball and football night games, and other sportevents on floodlighted fields and stadiums.
•Race tracks.

9 •Fireworks, lightning bolts. Use f/stop calculated at one–second exposure (or set camera at OPEN) for each bust or streak. Try double exposures for pleasing results.
•Brightly lighted amusement parks, fairs, carnivals and shopping centers.
•Intricate pattern designs of vehicular headlights, ferris wheels and other illuminated amusement rides, etc. Use extra–long exposure, sufficient to include several elliptical, circular and straight movements of lights.

10 •Gymnasiums, auditoriums, arenas and average bright artificially lighted indoor expositions (basketball games, flower shows, boat shows, etc.)
•Portraits by 150–watt table lamp.

11 •Floodlighted water fountains, monuments and buildings at close distances. At 25– to 50–ft distances, use Scene 13. If lights are colored or subdued, open up lens from one to two full stops depending on density of lighting effect.
•Dimly lighted gas stations.

12 Medium–bright artificially lighted interiors of homes offices and stores; hotel and theater lobbies, hospital rooms; and airport, bus and train terminals.

13 •Outdoor lighted Xmax trees, home and building decorations. If taken after dark, to capture some outlines of surroundings, use long exposure sufficient to include underexposed flash fill–in (at one–half recom–mended guide number). However, if taken at dusk, no flash will be needed.
•Match–/candlelight or cigarette lighter close–ups. (Use white reflector fill–in for detail in shadowed area.)

14 Medium bright, artificially lighted interiors of subway trains, pullman coaches, busses and airliners.

15 •Medium bright street–lamp corners and side streets.
•Big city, Manhattan–type "night" moonscapes at DUSK only! Try double exposure effect, combining Scene 15 at dusk and Scenes 21 or 25 at night. Moon may be included if exposure is 1/25 sec or faster. Otherwise, superimpose moon with a separate exposure. (See: MOON SHOTS)

16 Niagara Falls, in white lights.

17 Dimly lighted subway satations, platforms and stairways.

18 Dimly lighted night–clubs, ballrooms, etc.

19 Railroad stations (outdoors), freight yards and dimly lighted industrial plants with scattering of window lights, bulbs and pole–lamps. On rainy or foggy nights, use Scene 17. If snow on ground, use Scene 21.

20 Niagara Falls, in colored lights.

21 Manhattan–type "skylines" of buildings, bridges, etc. with scattering of window lights and other minute illuminations. Try double exposure with a superimposed moon!

22 Dimly lighted boat yards, docks and wharfs. On rainy or foggy nights, use Scene 24.

23 Dimly lighted small towns, villages, hamlets, etc. with a scattering of faint window lights and street lamps.

24 Full–moon snow–scapes and icescape.

25 Full–moon seascapes and sandscape.

26 Full–moon landscape.

EXPOSURE VALUES (EV)

17 Rarely encountered in nature. Some man made lighting.

16 Subjects in bright daylight on sand or snow.

15 Subjects in bright or hazy sun (Sunny 16–rule).

14 Full moon (long lens). Subjects in weak hazy sun.

13 Gibbous moon (long lens). Subjects in cloudy–bright light (no shadows).

12 Half moon (long lens). Subjects in heavy overcast.

11 Sunsets. Subjects in open shade.

10 Landscapes and skylines immediately after sunset. Crescent moon (long lens).

9 Landscapes and skylines 10 minutes after sunset. Neon lights. Spotlighted subjects.

8 Las Vegas or Times Square at night. Store windows. Campfires, bonfires, burning buildings. Ice shows, football, baseball etc at night. Interiors with bright florescent lights.

7 Bottom of rainforest canopy. Brightly lighted nighttime streets. Indoor sports. Stage shows, circuses.

6 Brightly lit home interiors at night. Fairs, amusement parks.

5 Night home interiors, average light. School or church auditoriums. Subjects lite by campfires or bonfires.

4 Candlelit close–ups. Christmas lights, floodlit buildings, fountains and monuments. Subjects under bright street lamps.

3 Fireworks (with time exposure).

2 Lightning (with time exposure).

1 Distant view of lighted skyline.

0 Subjects lit by dim ambient artificial light.

-1 Subjects lit by dim ambient artificial light.