BEST KEPT SECRET PHOTOGRAPHY

Neutral Density (ND) Reference Chart

(#) indicates number of stops in reduction of light

Bare Meter Reading =	1/8000	1/4000	1/2000	1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s
ND2 (1)	1/4000	1/2000	1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m
CPL (1 2/3)*	1/2500	1/1250	1/640	1/320	1/160	1/80	1/40	1/20	1/10	1/5	2.5	1.3	1.6s	3s	6s	13s	25s	50s	1.66m
ND4 (2)	1/2000	1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m
ND8 (3)	1/1000	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m
2X ND4 or **ND2 + ND3** (4)	1/500	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m
(5)	1/250	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m
2X ND8 or ND64 (6)	1/125	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m
ND100 (6 2/3)	1/80	1/40	1/20	1/10	1/5	2.5	1.3	1.6s	3s	6s	13s	25s	50s	1m 40s	3m 20s	6m 40s	13m 20s	26m 40s	53m 20s
(7)	1/60	1/30	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	64m
ND4 + ND64 (8)	1/30	1/8	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	64m	128m
ND400 (8 2/3)	1/40	1/20	1/10	1/2.5	1/1.3	1.6s	3s	6s	13s	25s	50s	1m 40s	3m 20s	6m 40s	13m 20s	26m 40s	53m 20s	1 hr 47m	3h 33m
(9)	1/15	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m
(10)	1/8	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m
(11)	1/4	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m
2X ND64 (12)	1/2	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m
ND10000 (13)	1s	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m
(14)	2s	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m
(15)	4s	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m	11d 9h 4m
(16)	8s	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m	11d 9h 4m	22d 18h 8m
(17)	15s	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m	11d 9h 4m	22d 18h 8m	45d12h16m
(18)	30s	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m	11d 9h 4m	22d 18h 8m	45d12h16m	91d 32m
(19)	1m	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m	11d 9h 4m	22d 18h 8m	45d12h16m	91d 32m	182d 1h 4m
ND1000000 (20)	2m	4m	8m	16m	32m	1h 4m	2h 8m	4h 16m	8h 32m	17h 4m	1d 10h 8m	2d 20h 16m	5d 16h 32m	11d 9h 4m	22d 18h 8m	45d12h16m	91d 32m	182d 1h 4m	1 year

* approximate maximum value of a polarizing filter

So, who wants to be first to try a 1 year exposure?

= meter reading at your target aperture with no polarizer or ND attached
= full stops
BOLD = stacking