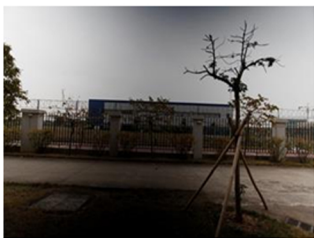


TECHNICAL GUIDELINES



VARIABLE NEUTRAL DENSITY FILTER ND32-1000



An example of the "Maltese cross" shape.

The variable neutral density filters are made of two polarizing elements mounted one above the other. The rotation of the mount changes the angle made by the two polarization planes, and the resulting density of the filter by doing so. When this angle is equal to 90°, the light transmitted by the filter reaches a minimum. The maximal density is then reached but the filter shows a typical optical phenomenon in the shape of a "Maltese cross".

This optical phenomenon does not mean a defective filter.

The bigger the angle of view is, the faster this phenomenon appears, even if the ND1000 maximal density is not reached yet.

Conclusion: the shorter the focal length is, the earlier this phenomenon occurs.



Consequently, the effective **MAX** position without the "cross" effect varies according to the focal length used by the photographer.

FOCAL LENGTHS

24mm (full frame 24x36)
16mm (APS-C / super 35)
12mm (Micro 4/3)

35mm (full frame 24x36)
22mm (APS-C / super 35)
17.5mm (Micro 4/3)

45mm (full frame 24x36)
30mm (APS-C / super 35)
22.5mm (Micro 4/3)

EFFECTIVE DENSITY RANGE (MIN/MAX)

MIN MAX

ND32

ND225
7 3/4 f.stops

ND32

ND600
9 1/4 f.stops

ND32

ND1024
10 f.stops

The use of focal lengths shorter than 24mm (24x36) is **not recommended**.