

FILTERS

Planetary filters :- are simply optical-quality glass, possibly with an anti-reflection coating, mounted in a ring that threads into the back of your eyepiece, and come in both 1.25" and 2" sizes .

Each filter is designed to pass a certain color of visible light whilst blocking any others, and are specified in the same way as photographic filters.

EG. Light yellow filters are specified as No.8 – same as Kodak Wratten No.8 photographic filter. The numbering system has no specific scientific, or chromatic value, but has become an historic standard by default.

For most amateurs, three or four filters should cover most viewing needs to improve the contrast on brighter planets.



No.23A or 25 light red filter brings out contrast between the light and dark areas on Mars, and will darkens a blue sky background to make it easier to see Venus during the day.

No.56 or 58 light-green filter will enhance the view of Jupiter's Great Red Spot as well as the cloud bands.

No.80A blue filter should make high cloud near the limb of Mars more visible, as well as adding contrast to the belts and oval clouds of Jupiter. In larger 'scopes, details in the clouds of Venus should be visible at high magnification.

A fourth filter - called a neutral density filter – is used for viewing the moon to reduce the intensity of light, especially in larger telescopes in between first and last quarter phases. NO. 12 or No.15 deep yellow filters are also useful, but eliminating a major proportion of broadband light reflected by the moon by using neutral density filters is far more effective..

Variable polarization filters are also effective for lunar observing in all phases of the moon, by altering the amount of light reaching your eye as the filter is rotated.

Achromatic Refractors may display blue-ish fringes when viewing the moon, or other bright object like Venus, or Jupiter. Using a light yellow No 8 or No.11 filter will help to reduce the unwanted color.

Its usually difficult to detect any difference when using color filters for the first time, but with time much more detail on Mars and Jupiter will be revealed , especially on high magnification.



With & without a Polarisation filter