



QUICK REFERENCE SHEET

Manual Iris Lens

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| C70214 | 2.8 mm Manual Iris Lens (Iris Range 1.2 – C) |
| C70409 | 4 mm Manual Iris Lens (Iris Range 1.2 – C) |
| C70807 | 8 mm Manual Iris Lens (Iris Range 1.2 – C) |

Auto Iris Lens

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| C70210HK(FQ) | 2.8 mm Auto Iris Lens (Iris Range 1.2 – 200) |
| C70406HK(FQ) | 4 mm Auto Iris Lens (Iris Range 1.2 – 200) |
| C70804HK(FQ) | 8 mm Auto Iris Lens (Iris Range 1.2 – 200) |

Manual Iris Vari-Focal Lens

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| C70213 | 2.8 – 6 mm Manual Iris Vari-Focal Lens (Iris Range 1.4 – C) |
| C70313 | 3.5 – 8 mm Manual Iris Vari-Focal Lens (Iris Range 1.4 – C) |
| C70612 | 6 – 12 mm Manual Iris Vari-Focal Lens (Iris Range 1.6 – C) |

Auto Iris Vari-Focal Lens

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| C70220DCPS Day/Night | 2.8 – 6 mm Auto Iris Vari-Focal Lens (Iris Range 1.4 – 200) |
| C70315HK/FQDay/Night | 3 – 8 mm Auto Iris Vari-Focal Lens (Iris Range 1.0 - 200) |
| C70319HK | 3.5-8 mm Auto Iris Vari-Focal Lens (Iris Range 1.4 – 200) |
| C60635DCPS Day/Night | 6 – 12 mm Auto Iris Vari-Focal Lens (Iris Range 1.6 – 200) |
| C70223HK | 2.8-12 mm Auto Iris Vari Focal Lens (Iris Range 1.4 – 360) |
| C70509HK | 5-50 mm Auto Iris Vari-Focal Lens (Iris Range 1.8 – 360) |

DCPS = Standard length cable with on Auto iris Lens connector attached

FQ = Short Cable on Auto Iris Lens with connector attached

HK = Long Cable on Auto Iris Lens with connector attached

All lenses in 1/3 Format

Contact Pentax @ (905) 625-4930

www.pentaxcanada.ca

Contact Connsec Products @ (866) 768-6161

www.connsecproducts.com

GLOSSARY OF TERMS

APERTURE – An opening or hole through which light passes. In the optical system it is equal to the diameter of the largest entering beam of light that can travel completely through the system. This may be equal to the front lens of the objective.

MAXIMUM APERTURE – The largest size to which the iris diaphragm of the lens can be opened. (The lowest f-number)

IRIS – The lens “iris” is a mechanical device for controlling the lens aperture (lens opening). A lens may be fixed, manual controlled and / or voltage controlled.

AUTOMATIC IRIS – An iris that automatically adjusts to control the light reaching a sensor to compensate for light level changes.

“C” MOUNT – A television industry standard for lens mounting, which has a 1 – inch diameter, threaded barrel and 32 threads per inch. The sensor is located 0.69 inches behind the mounting surface.

“CS” MOUNT – A television industry standard for lens mounting, which has a 1-inch diameter, threaded barrel and 32 threads per inch. The sensor is located 0.492 inches behind the mounting surface.

BACK FOCUS - A term used to describe the relationship of the distance of the lens iris (aperture) to the imager device (CCD chip). This distance is critical to maintain proper depth of field through changing focal lengths and varying light conditions. The back focus is achieved by adjusting the imager position or lens collar in the camera itself.

F-NUMBER – The f –number indicates the brightness of the image formed by the lens, controlled by the iris. A smaller f-number means a brighter image

F-STOP – A term used to indicate the speed of the lens. The smaller the f-number, the greater is the amount of light passing through the lens.

DEPTH OF FIELD – The front to back zone in a field of view, which is in focus in the televised scene. With a greater depth of field, more of the scene, near to far, is in focus. Increasing the f-stop number increases the depth of field of the lens. Therefore, the lens aperture should be set at the highest f-stop number usable with the available lighting. In other words, the depth of field is the area in front of the camera, which remains in focus. The larger the f- numbers the greater the depth of field.

FIELD OF VIEW – The maximum angle of view that can be seen through the lens of an optical assembly.

FOCAL LENGTH – The distance from the centre of the lens to a plane at which point a sharp image of an object viewed at an infinite distance from the camera is produced. The focal length determines the size of the image and the angle of the view seen by the camera through the lens. That is the distance from the centre of the lens to the pick up device.

FORMAT – Format is a term used to determine the size of the lens to be used with various types and sizes of imagers. A 1” format lens will work on 1”, 2/3”, ½” and, 1/3” format camera. A 2/3” format lens will work on 2/3”, ½” and 1/3” format camera. A ½” format lens will work on ½” and 1/3” format camera. A 1/3” format lens will work on 1/3” format cameras only. Using a smaller format lens on a larger format camera will cause distortions ranging from tunnel –vision to poor back-focus capabilities.

LUX – International system unit of illumination in which the meter is the unit of length. One lux equals one lumen per square meter. 10 lux equals 1 foot-candle

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