High Sensitivity Color Camera KP-D590

Hitachi Denshi America Ltd.

High Sensitivity 1/2 Inch Color KP-D590

The **KP-D590** is a DSP camera designed for low light observation, at levels down to 0 .001 lux. Ideal for use in fluorescence and darkfield imaging systems, the camera uses a combination of CCD exposure time and field memory, to improve sensitivity as compared with a conventional single CCD camera. A maximum integration time of 8 seconds is available, allowing use in extremely low light situations. Thermoelectric cooling is used on the CCD to reduce the effects of dark current noise at long exposure times. Digital signal processing is employed, and enables new functions such as digital noise reduction, backlight compensation, automatic sensitivity switching, positive or negative output, and a 2H enhancer for a sharp picture. White balance modes include memory, auto tracking white, and manual, where the user can adjust red and blue gains. A four times electronic zoom with pan and tilt feature is standard, and allows magnification of the picture even when a standard lens is used.

Remote Control Unit RC-C590

The **RC-C590** is a dedicated remote control unit supplied with the **KP-D590** camera. Ideal for use in microscopy systems the **RC-C590** allows remote control of the camera's automatic gain control (AGC), digital noise reduction (DNR), and long term integration functions. Long term integration can be remotely adjusted in 16 steps, allowing the user to control the scene exposure, without going to the menu on the rear of the camera, and possibly disturbing the camera position. When AGC is selected to ON, the cameras gain limit can be adjusted using the camera menu. For use in low light levels the auto mode of integration can be selected. When selected, the camera will integrate up to the maximum amount set by the manual integration switch. In the auto mode the maximum integration time is limited to two seconds. When AGC and the auto mode of integration are both selected, gain is first added to the limit set in the camera. The integration function is then used as required to produce a proper video output signal. In the manual mode of integration, the maximum integration time is eight seconds. A dedicated nine foot remote cable is provided on the **RC-C590** for connection to the **KP-D590** camera. The unit receives its power directly from the camera.

Specifications KP-D590

Imager: 1/2 inch IT CCD with microlens
Pixels: 768 x 494
Cell Size: 8.4 x 9.8
Resolution: 480 TV lines
Illum. Range: 0.001 - 100,000 lux at f1.2
S/N: 50 db
Backlight Correction: Auto / Manual
Integration: Selectable up to 8 seconds
Gain: Manual / AGC
Shutter: 1/60 - 1/10000
Noise Reduction: On / Off
ATW Range: 2500K to 8000K
Electronic Zoom: 4 times with pan / tilt
Signal Process: 9 bit DSP
Power: 12Vdc
Output: VBS, Y/C
Size: (W x H x D) 64 x 68 x 160 mm
Weight: 600 grams
Lens: C / CS mount ES type

Specifications RC-C590

DNR: On / Off
AGC: On / Off
Integration Mode: Auto / Manual
Integration Steps:16 steps, norm (0.16)
0.03, 0.06, 0.12, 0.25, 0.5, 1.0, 1.3, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0 sec.
Cable: Captive, 9 foot

Hitachi Denshi America New York Office 516-682-4404
Los Angeles Office 310-328-6116