

Instructions manual for Optilia HD Camera Control Software

Main Window

Camera Controls

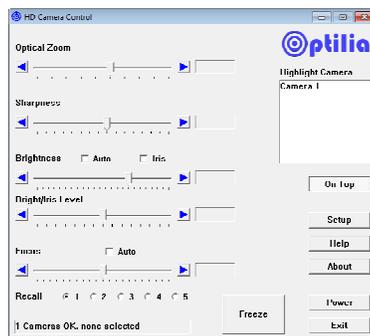
Control	Description
Optical Zoom	1-10x optical zoom for W10x-HD, HD10 and 1-20x for W20x-HD and HD20.
Sharpness	Adjusts enhancement of edges of the objects in the picture.
Brightness / Exposure	Gain (electronic amplification of the video signal) and iris (aperture size of the lens system) is adjusted using an internal algorithm. Exposure time of the camera is controlled by adding Gain when the object is dark or its illumination level is low and by decreasing the aperture of iris when object is bright or illumination intensity is high. When Auto is selected, Gain and iris of the camera are automatically adjusted. When Iris is selected, Gain will be set to 3dB. Exposure time can be adjusted to increase or decrease the brightness of the image in Iris mode. To selecting Auto mode will deselect Iris .
Exposure/Iris Level	Exposure Level: Offsets the internal reference brightness level +/- 7 steps with 1 step resolution. Each step corresponds to increase/decrease of the Gain by 1.5dB. Iris Level: Aperture of camera can be controlled from F1.8 to F26 for W10x-HD and F1.6 to F14 for the W20x-HD. Higher F-number will increase depth of focus. Lower F-number will increase light sensitivity.
Focus	When Auto is selected, focus position is automatically adjusted to the high frequency content of the picture in a centre measurement area, taking into consideration the high luminance and strong contrast components. If camera cannot focus automatically user should focus manually or readjust Brightness.
Night Vision	Manual ON button enables/disables the Night Vision mode and sets the picture to black and white. At Night Vision mode the built-in near infrared cut-off filter is removed from optical system of the camera. The camera becomes therefore sensitive to near infrared light (λ : 680-980 nm).
Freeze	Freezes the live picture
Setup	Opens adjust window
Recall	Recalls the saved preset by selecting the preset number
On-top	Keeps the Control window always on-top of the other program windows
Power	Turns on/off power of the camera

Setup Window

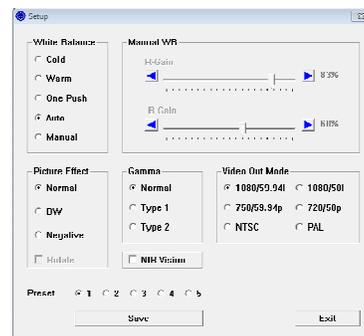
Control	Description
White Balance	<p>Cold: White balance is fixed at 3200K</p> <p>Warm: White balance is fixed at 5800K</p> <p>One Push: White balance is automatically readjusted once when user selects One Push: The One Push White Balance mode is a fixed white balanced mode that is automatically readjusted only when this trigger (button) is pushed. Put a white object in correct lighting condition and occupying more than 50% of the image when you set the white balance at this mode.</p> <p>Auto: This mode computes the white balance output using colour from the entire screen</p> <p>Manual: Manual Control of R- and B-gain</p>
Picture Effect	<p>Sets the picture to Normal, Black & White or Negative</p> <p>Rotate: Rotates the picture 180 degrees</p>
Gamma	<p>Normal: Produces images with the standard video gamma curve</p> <p>Type 1: Reproduces images with more dept</p> <p>Type 2: Reproduces images with deeper contrast</p>
NIR Vision	<p>Enables the Near Infra Red mode. Camera will be sensitive to light wavelengths from 400nm (blue) to 980nm (NIR).</p>
Video Out Mode	<p>Sets the video output system to 1080/59.94i (Interlaced), 1080/50i (Interlaced), 720/59.94p (Progressive), 720/50p (Progressive), NTSC (Corp) or PAL (corp).</p> <p>Hardware restart is required in order to apply the video out mode changes.</p>
Save	Saves current settings of the camera to the selected preset.

Keyboard Hotkeys

Keys	Action
Arrow Up/Down	Move cursor between controls
Arrow Left/Right	Adjust controls
Tab	Move cursor between all
Enter	Run buttons
Spacebar	Freeze/Unfreeze picture
F1-F12	Select cameras
1-5	Select preset



Camera Control interface



Camera Setup interface

Note: Interface and controls may appear slightly different depending on with camera is used.