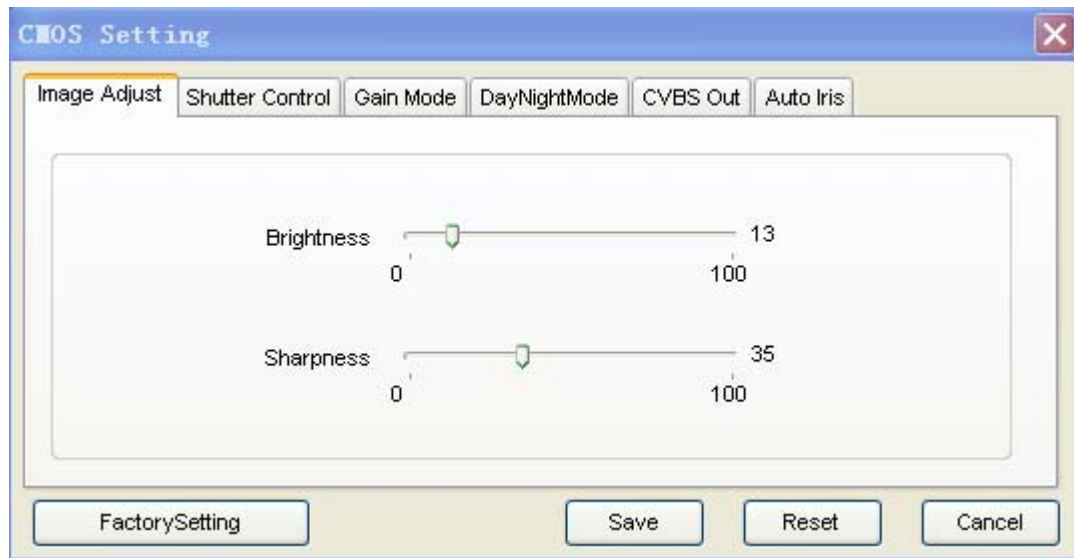


## Instruction of Sensor Configure of CMOS (HD CMOS cameras)

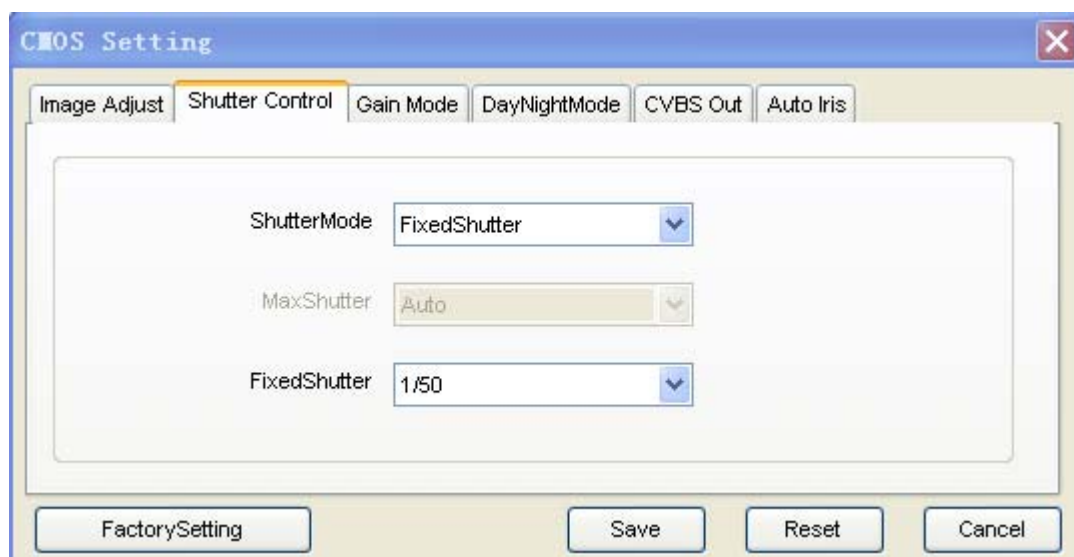
### 1. Image adjust



1). Brightness: adjust the brightness of image, general setting is 13. brightness depends on shutter, iris and gain, all these 3 values are set automatically according to the external light to reach the brightness value set. The priority among these 3 parameters is: shutter, iris, gain. When light is sufficient, shutter works to reach the set brightness, when shutter decrease to the minimum, image still couldn't reach the brightness, iris will work. (Iris mode must be on while "off", iris is always work at max value, doesn't adjust automatically.) if brightness is still not enough, gain will work, increase gain to change brightness. If all the 3 parameters works max, it will not make image bright even if set the brightness higher.. e.g. don't set the brightness higher to increase brightness during night as image will overexposure at day time.

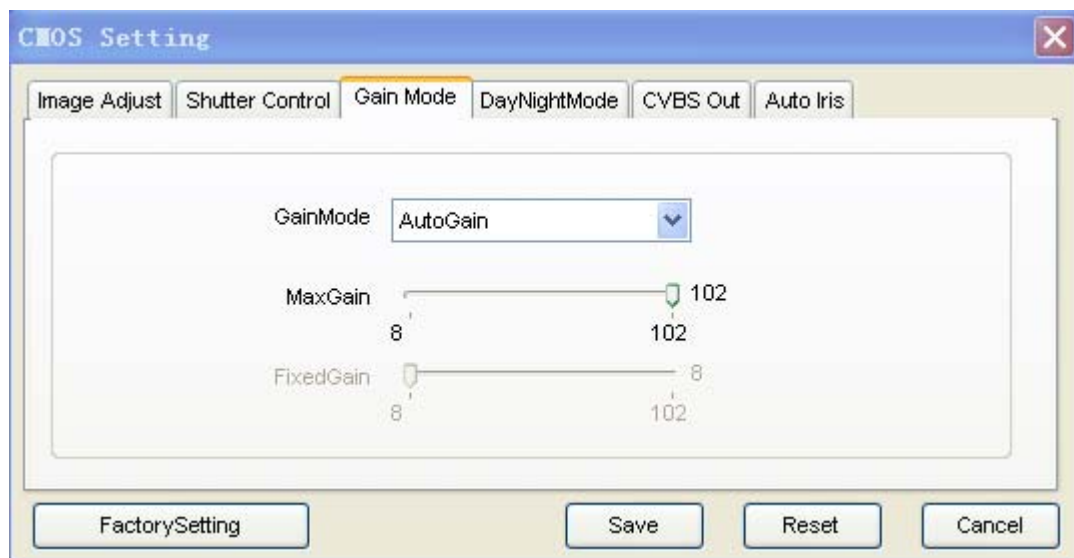
2). Sharpness: adjust the sharpness value of image, the recommended value is 35.

### 2. Shutter



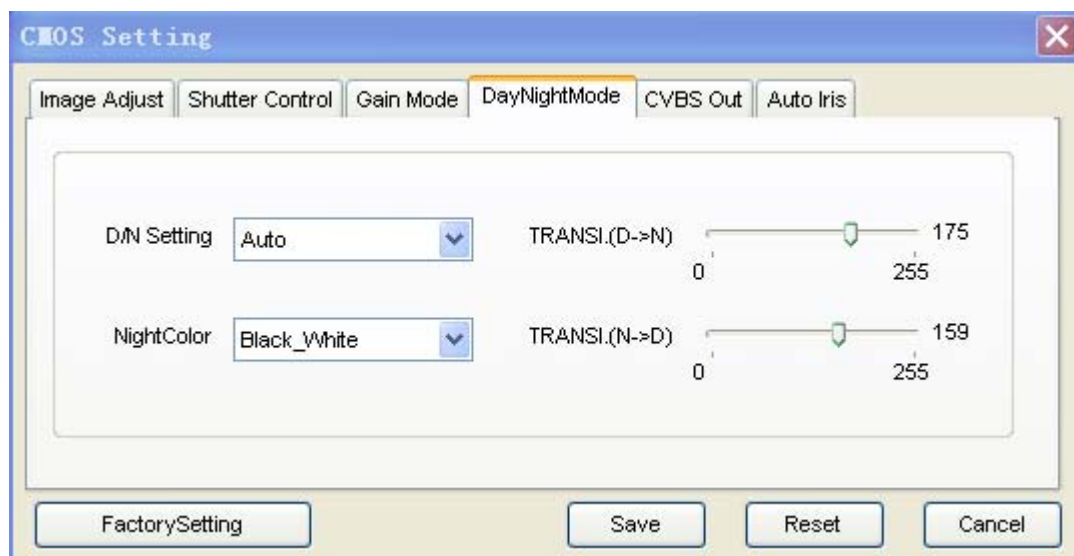
Shutter mode includes 2 modes: fixed and auto shutter. choose "on", shutter adjusts automatically during the max and min; choose "off", fixed shutter is available to be adjusted.

### 3. Gain Mode



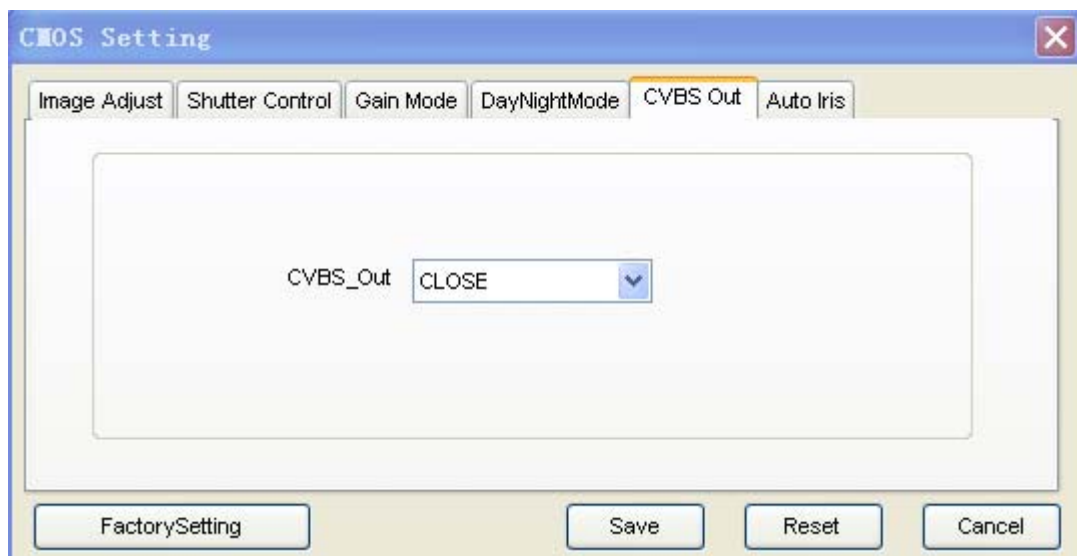
Gain mode includes AutoGain and fixedGain, MaxGain is adjustable to meet different conditions.

### 4. DayNightMode



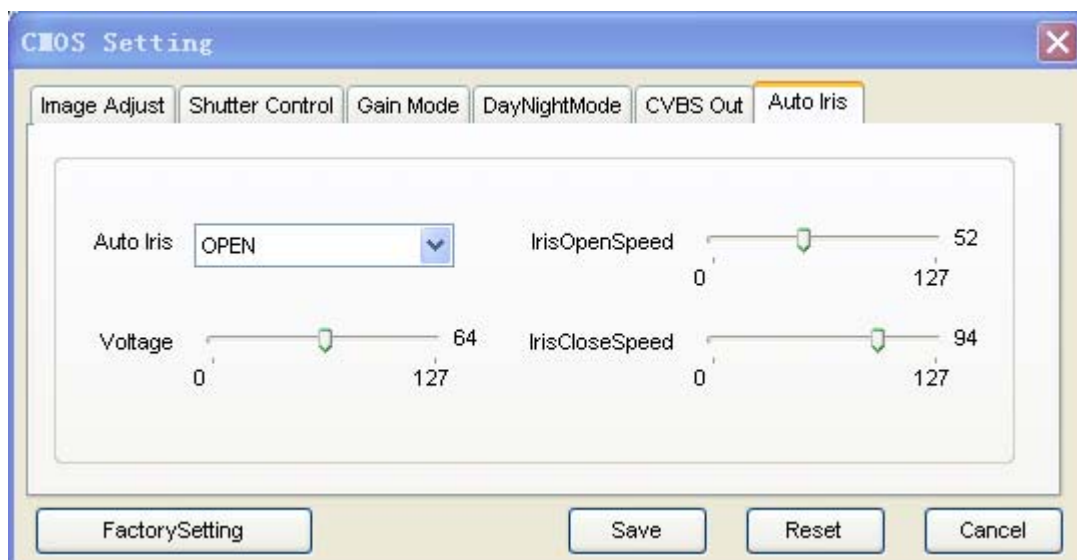
- 1).D/N setting includes 2 modes, off: image keeps color always both day and night time; auto: cameras switch between color and B&W. When set as auto, maxGain value should be set bigger than TRANS (D->N), otherwise it will not switch to B&W; if cameras keep switch between color and B&W modes, enlarge the values between TRANS(D->N) and TRANS(N->D) .
- 2).TRANS (D->N). The gain value that color change to B&W. when D/NSetting set as auto, cameras' gain is more than the set value of TRANS (D->N), cameras will switch to B&W.
- 3).TRANS (N->D): the gain value that color change to color. When D/NSetting set as auto, cameras' gain is less than the set value of TRANS (N->D), cameras will switch to color.

## 5. CVBS Out



When CVBS\_Out open, cameras support analogue BNC output, the default is CLOSED.

## 6. Auto Iris



- 1).when IrisMode off, Iris open max always. When IrisMode on, Iris will work after the priority of shutter.
- 2).Voltage: Voltage is different for different iris. The recommended value is  $64 \pm 8$  micro. If the voltage is too low, image will be dark even flashing while too high, image will be overexposure
- 3) IrisOpenSpeed and IrisCloseSpeed: the speed of iris change, when image flash and it is no use by adjusting voltage, adjust the IrisSpeed, the recommended speed value for IrisOpenSpeed is 52, and IrisCloseSpeed is 94.