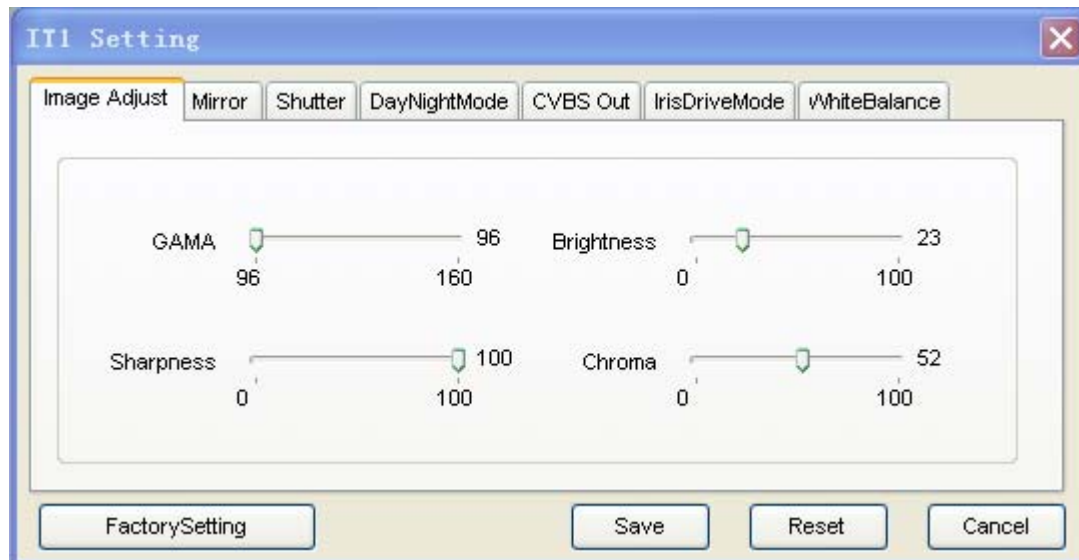


## Instruction of Sensor Configure of IT1 (megapixel CCD cameras)

### 1. Image adjust



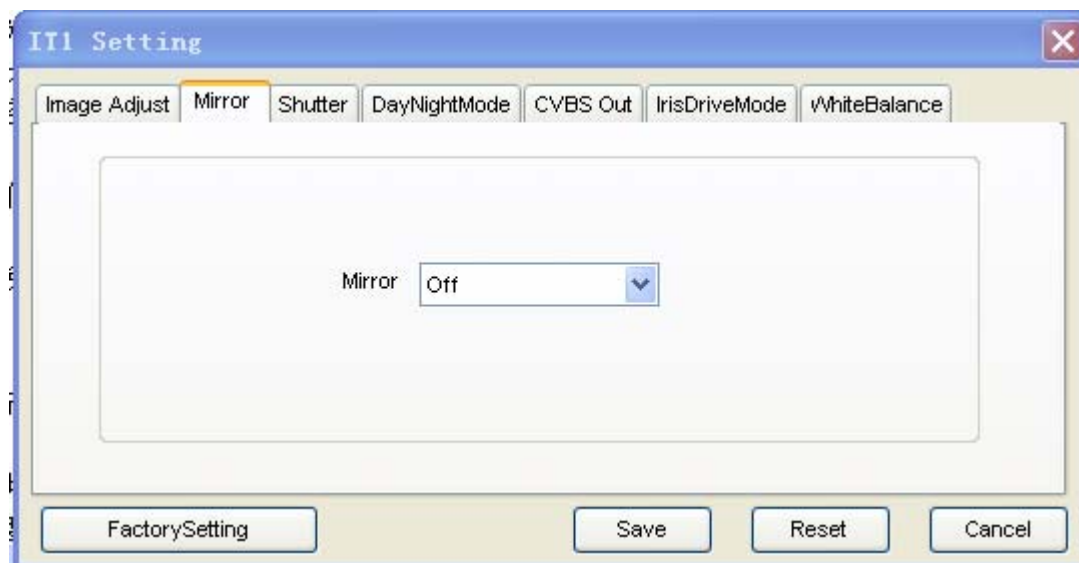
1).GAMA: adjust GAMA of dark area on the image to increase or decrease the brightness of dark area with a micro-range adjustment, recommended value is 96,

2). Brightness: adjust the brightness of image, general setting is 23.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.

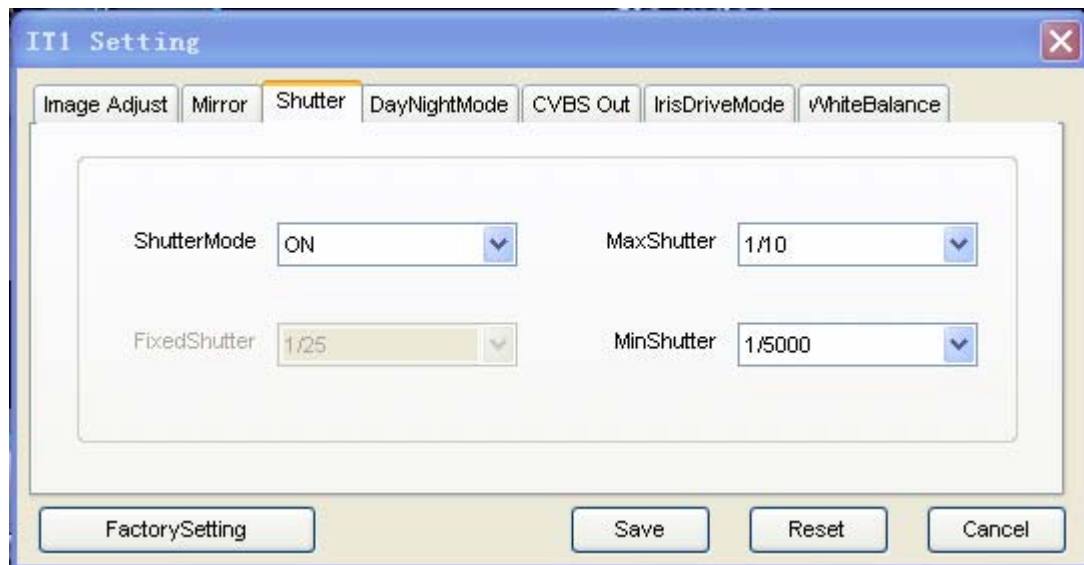
3).Sharpness: adjust the sharpness value of image, the recommended value is 100.

4).Chroma: adjust the chroma of the image, the recommended value is 50.

### 2. Mirror: To adjust the mirror function of cameras.

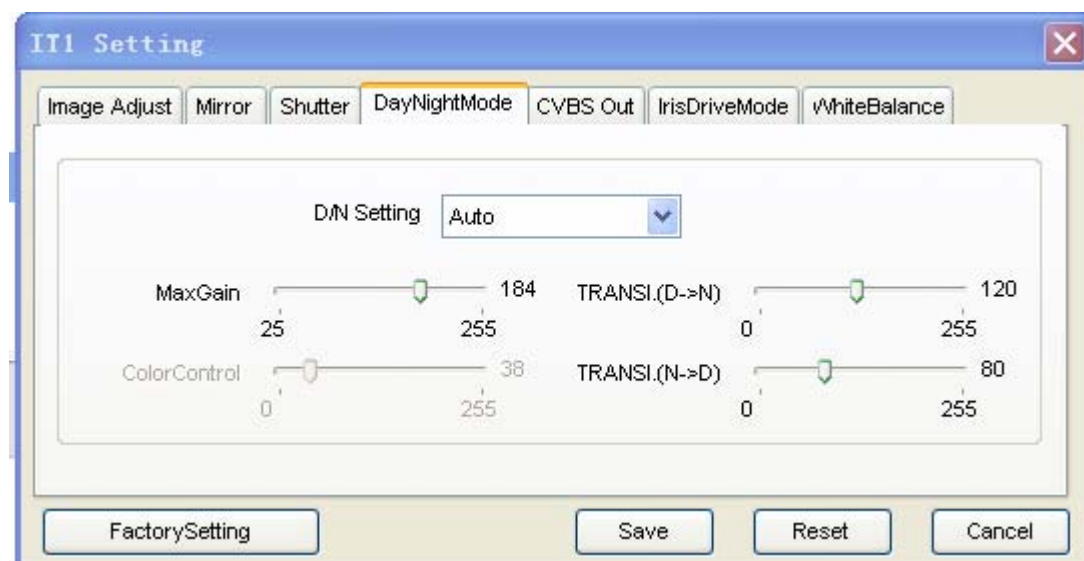


### 3. Shutter



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.

### 4. DayNight Mode



1).D/N setting includes 3 modes, off: image keeps color both day and night time; auto: cameras switch color or B&W according to again; EXT: external signal trigger change from color to B&W. e.g. megapixel IR bullet camera (SN-IPR5450 series works with EXT mode. 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).MaxGain: adjust the maximum of gain. When outside light is not adequate, increase Gain to increase brightness, but noise will be also more, decrease MaxGain will decrease noise, brightness will be also down.

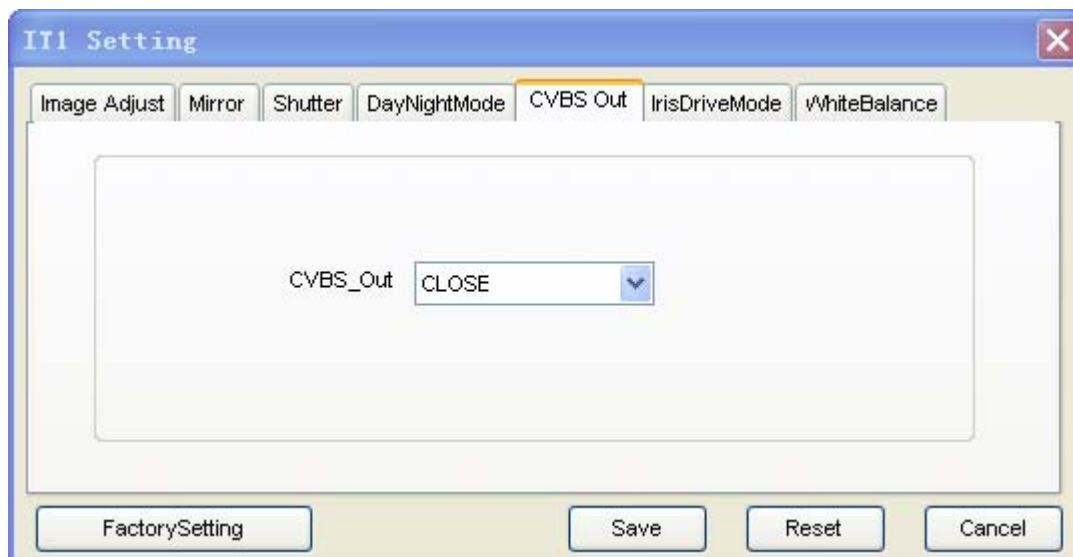
3).TRANS (D->N). the gain value that color change to B&W. when D/NSetting set as auto, cameras' gain is more than the set value of TRANS(D->N), cameras will switch to B&W.

4).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.

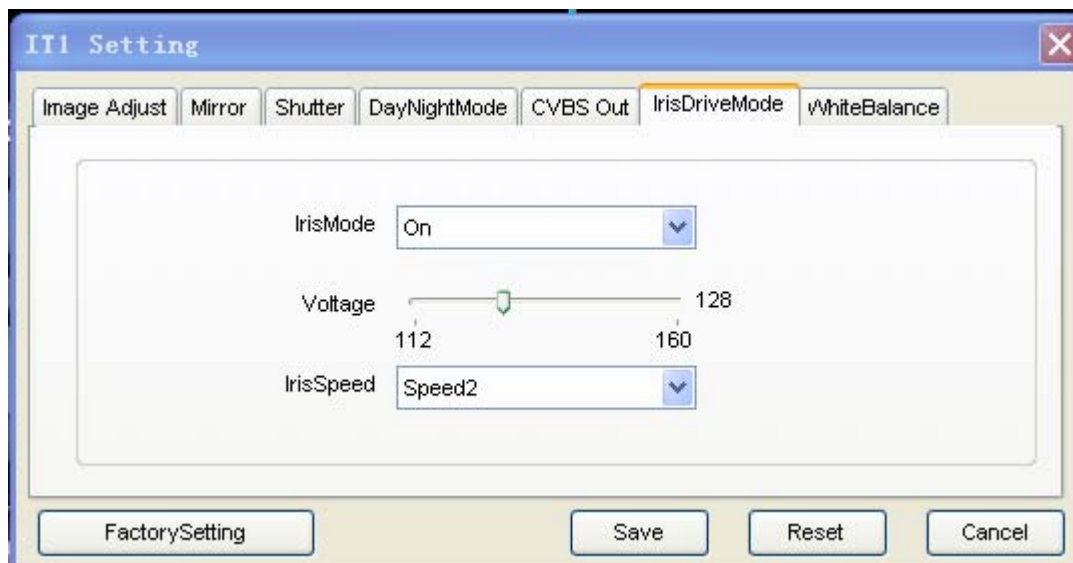
5). Color control: when D/NSetting set as off, cameras keep color always, outside light is not adequate during night time, it will cause color noise, adjust color control to decrease the color noise.

## 5. CVBS



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

## 6. IrisDriveMode

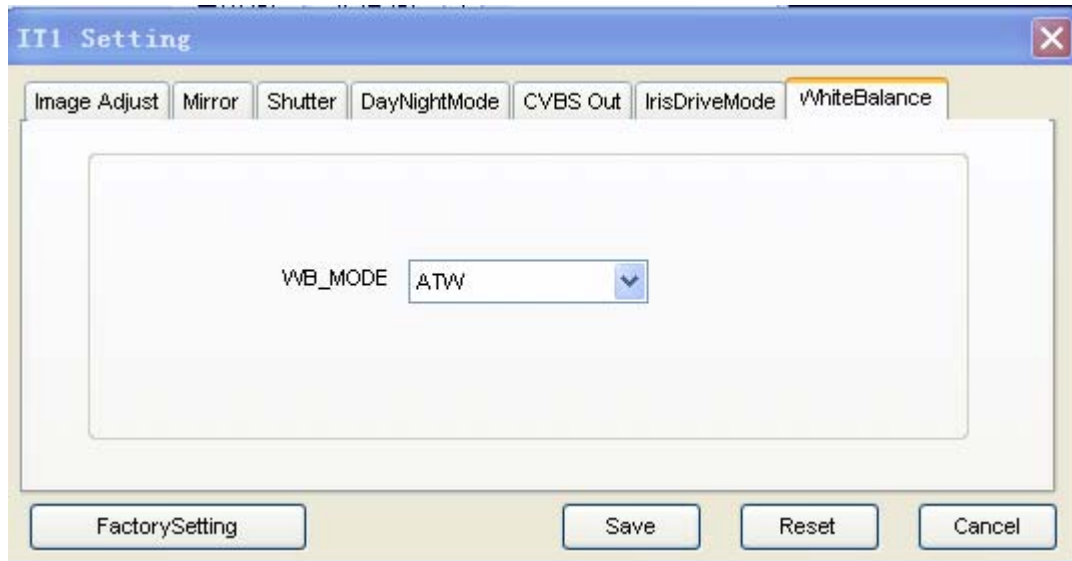


1).when IrisMode off, Iris open max always. When IrisMode on, Iris will work after the priority of shutter.

2).Voltage: Voltage is different for different iris. The recommended value is  $128 \pm 8$  micro. If the voltage is too low, image will be dark even flashing while too high, image will be overexposure

3) IrisSpeed: the speed of iris change, when image flash and it is no use by adjusting voltage, adjust the IrisSpeed, the recommended speed value is Speed2.

## 7. WhiteBalance



White balance includes 2 modes: PUSH and ATW. PUSH is suitable for wide range of color temperature, but it is not so precise as ATW while the range of color temperature of ATW is 2500K-9500K, smaller than PUSH mode.