



Genie Nano GigE 相机

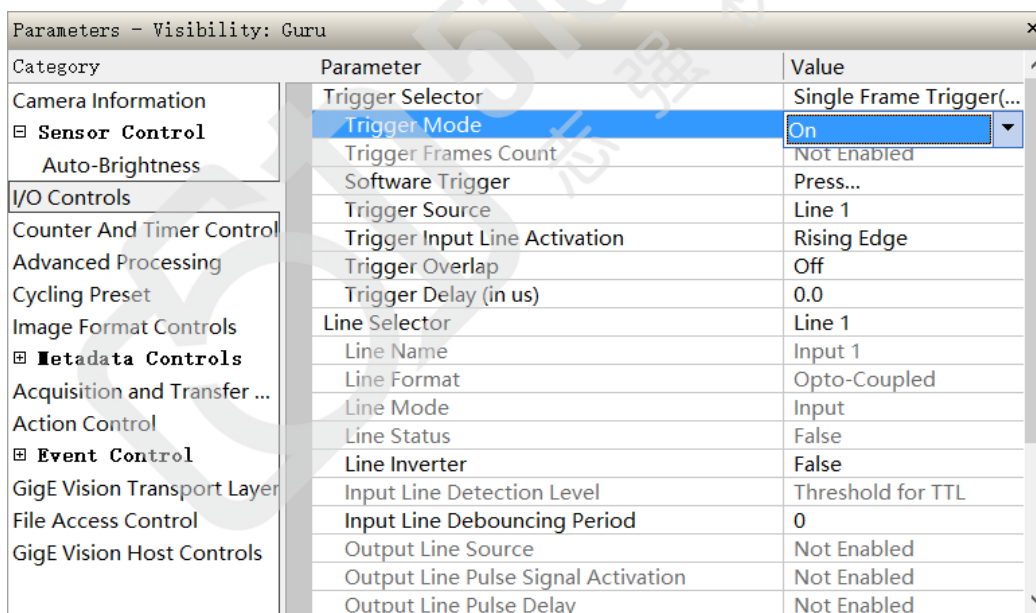
如何在外触发模式下使用 Auto-Brightness 功能?

目录

- 第一步: 设置触发模式 1
- 第二步、设置 Auto-Brightness 模式 2

第一步: 设置触发模式

- 1、打开 Spera CamExpert 软件,将相机属性 I/O Controls 一栏里 Trigger Mode 这一项参数设置为 On 状态, 如下图所示:



- 2、在 Sensor Control 这一栏里, 将参数 Exposure Alignment 曝光队列执行模式设置为 Reset, 如下图所示:

Category	Parameter	Value
Camera Information	Device Scan Type	Areascan
▣ Sensor Control	Sensor Color Type	Monochrome Sensor
Auto-Brightness	Input Pixel Size	12 Bits/Pixel
I/O Controls	Sensor Width	728
Counter And Timer Control	Sensor Height	544
Advanced Processing	Acquisition Frame Rate Control Mode	Not Enabled
Cycling Preset	Acquisition Frame Rate (in Hz)	Not Enabled
Image Format Controls	Exposure Mode	Timed
▣ Metadata Controls	Exposure Alignment	Reset
Acquisition and Transfer ...	Exposure Delay (in us)	11.0
Action Control	Exposure Time (in us)	60002
▣ Event Control	Actual Exposure Time (in us)	60002.7
GigE Vision Transport Layer	Sensor Shutter Mode	Global
File Access Control	Gain Selector	Digital
GigE Vision Host Controls	Gain	1.0
	Gain (Raw)	0
	Black Level Selector	Analog
	Black Level (in DN)	17.0

第二步：设置 Auto-Brightness 模式

1、在 Sensor Control → Auto-Brightness 中将 Auto-Brightness Mode 参数设置为 Active, 如下图所示:

Category	Parameter	Value
Camera Information	Auto-Brightness Mode	Active
▣ Sensor Control	Auto-Brightness Sequence	Off
Auto-Brightness	Auto-Brightness Target Source	Active
I/O Controls	Auto-Brightness Target	128
Counter And Timer Control	Auto-Brightness Target Variation	32
Advanced Processing	Auto-Brightness Algorithm	Average
Cycling Preset	Auto-Brightness Minimum Time Activation (in S)	0.0
Image Format Controls	Auto-Brightness Convergence Time (in S)	2.0
▣ Metadata Controls	Auto-Exposure	Continuous
Acquisition and Transfer ...	Auto-Exposure Time Min Value (in us)	500.0
Action Control	Auto-Exposure Time Max Value (in us)	60000.0
▣ Event Control	Automatic Gain Control	Continuous
GigE Vision Transport Layer	Auto-Gain Source	Sensor
File Access Control	Auto-Gain Max Value	4.0
GigE Vision Host Controls	Auto-Gain Min Value	1.0

2、根据实际需求设置平均灰度值，如下图所示：

Category	Parameter	Value
Camera Information	Auto-Brightness Mode	Active
☐ Sensor Control	Auto-Brightness Sequence	Exposure \ Gain
Auto-Brightness	Auto-Brightness Target Source	Luminance
	Auto-Brightness Target	192
I/O Controls	Auto-Brightness Target Variation	32
Counter And Timer Control	Auto-Brightness Algorithm	Average
Advanced Processing	Auto-Brightness Minimum Time Activation (in S)	0.0
Cycling Preset	Auto-Brightness Convergence Time (in S)	2.0
Image Format Controls	Auto-Exposure	Continuous
☐ Metadata Controls	Auto-Exposure Time Min Value (in us)	500.0
Acquisition and Transfer ...	Auto-Exposure Time Max Value (in us)	60000.0
Action Control	Automatic Gain Control	Continuous
☐ Event Control	Auto-Gain Source	Sensor
GigE Vision Transport Layer	Auto-Gain Max Value	4.0
File Access Control	Auto-Gain Min Value	1.0
GigE Vision Host Controls	<< Less	

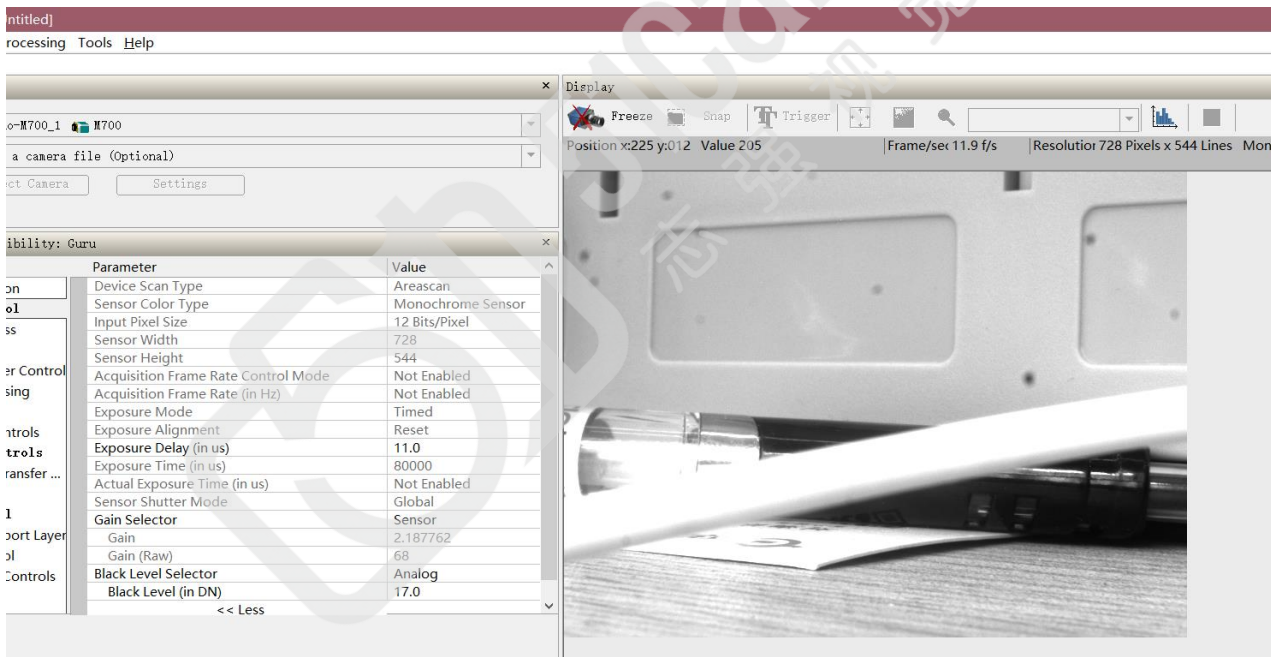
3、将 Auto-Exposure 参数值设置为 Continuous，如下图所示：

Category	Parameter	Value
Camera Information	Auto-Brightness Mode	Active
☐ Sensor Control	Auto-Brightness Sequence	Exposure \ Gain
Auto-Brightness	Auto-Brightness Target Source	Luminance
	Auto-Brightness Target	192
I/O Controls	Auto-Brightness Target Variation	32
Counter And Timer Control	Auto-Brightness Algorithm	Average
Advanced Processing	Auto-Brightness Minimum Time Activation (in S)	0.0
Cycling Preset	Auto-Brightness Convergence Time (in S)	2.0
Image Format Controls	Auto-Exposure	Continuous
☐ Metadata Controls	Auto-Exposure Time Min Value (in us)	Off
Acquisition and Transfer ...	Auto-Exposure Time Max Value (in us)	Continuous
Action Control	Automatic Gain Control	Continuous
☐ Event Control	Auto-Gain Source	Sensor
GigE Vision Transport Layer	Auto-Gain Max Value	4.0
File Access Control	Auto-Gain Min Value	1.0
GigE Vision Host Controls	<< Less	

- 4、根据现场需求设置好自动曝光时间上限值参数 Auto-Exposure Time Max Value(单位 us)。例如触发信号频率为 12Hz，可以将曝光时间上限值设置为 80000us，如下图所示：

Category	Parameter	Value
Camera Information	Auto-Brightness Mode	Active
▣ Sensor Control	Auto-Brightness Sequence	Exposure \ Gain
Auto-Brightness	Auto-Brightness Target Source	Luminance
I/O Controls	Auto-Brightness Target	192
Counter And Timer Control	Auto-Brightness Target Variation	32
Advanced Processing	Auto-Brightness Algorithm	Average
Cycling Preset	Auto-Brightness Minimum Time Activation (in S)	0.0
Image Format Controls	Auto-Brightness Convergence Time (in S)	2.0
▣ Metadata Controls	Auto-Exposure	Continuous
Acquisition and Transfer ...	Auto-Exposure Time Min Value (in us)	500.0
Action Control	Auto-Exposure Time Max Value (in us)	80000.0
▣ Event Control	Automatic Gain Control	Continuous
GigE Vision Transport Layer	Auto-Gain Source	Sensor
File Access Control	Auto-Gain Max Value	4.0
GigE Vision Host Controls	Auto-Gain Min Value	1.0
	<< Less	

- 5、点击 Grab 按钮采集图像。



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