[FAQ]

How to achieve full frame rate with GeoVision IP cameras?

Release Date: 12/19/2014

Applied to

GeoVision IP camera H.264 Series.

Question

How do I achieve full frame rate as specification indicates using GeoVision IP cameras?

Answer

Please firstly note that not all IP cameras models can achieve 30 fps as shown in the comparison charts below.

Resolution		FPS	F	Resolution		
5MP	2560x1920	10	5MP	2560x1920	10	
4MP	2048x1944	15	4MP	2048x1944	15	
3MP	2048x1536	20	3MP	2048x1536		
2MP	1920x1080	30	2MP	1440x1376		
1MP	1280x1024	30	1MP	1280x1200	1	

Note: For IP Speed dome models, they can support up to 30 fps using 1920x1080 resolution and 60 fps at 1280x720 resolution.

If you notice the IP camera is not streaming the maximum frame rate as specification suggests, it is recommended to verify the followings:

• Shutter Speed:

Under low light environment, IP camera will slow down the shutter speed to obtain as much light as possible. When shutter speed drops down to 1/30 or lower, it will affect the frame rate of the IP camera (e.g: Shutter Speed of 1/15 will produce fps about 15 fps)

In this case, please adjust the slowest shutter speed to 1/30 or 1/15 under Camera Adjustment using IP device utility or web interface of the IP camera.

GV I	IP Device Utility ool	_	_	_	 ∎<	Camera adjustment Default Save White balance Auto
	al settings NVR camera sett	🗰 🔅				Flicker less 60 Hz 💽 Image Orientation
Nam	ne 🔺	Mac Address	IP Address	Firmware Version	1	
	GV-BX2600	0013E2FF1557	192.168.7.95	v1.00 2014-11-21		Normal 🗾
	GV-BX2600	0013E2FF154A	192.168.7.98	v1.00 2014-11-21		Slowest Shutter Speed
	GV-BX2600	0013E2FF1555	192.168.4.251	v1.00 2014-12-12		Auto
	GV-BX2600	0013E2FF0E7B	192.168.6.240	v1.00 2014-12-19		Auto
2	GV-BX2600	0013E2FF1548	192.168.5.205	v1.00 2014-12-12		Auto Auto (High Shutter Speed)
	GV-BX2400	0013E20B7D22	192.168.6.158	v3.00 2014-10-21		1/5
	GV-BX220D/BX220D-E	0013E205B189	192.168.1.120	v2.14 2014-09-30	and the second	1/15
	GV-BX220D/BX220D-E	0013E204E334	192.168.7.25	v2.14 2014-06-20		1/30
	GV-BX220D/BX220D-E	0013E2031A7E	192.168.1.252	v2.14 2014-09-30		Denoise
	GV-BX1500_5_21	0013E2000000	192.168.5.148	v3.00 2014-12-17		Contract
	GV-BX1500	0013E20B6E2F	192.168.3.55	v3.00 2014-11-06		
9	GV-BX1500	0013E20B7B62	192.168.6.173	Web Dage	-	Wide Dynamic Range
	GV-BX130D/BX130D-E	0013E2019B54	192.168.0.66	Web Page	Bellet zon	
	GV-BX1300/BX1300-E	0013E20793BD	192.168.3.56	Live View		Close
	GV-BX120D/BX120D-E	0013E20338C3	192.168.7.56	Camera adjustment		
	GV-BX120D/BX120D-E	0013E2024596	192.168.0.211	Focus Value	100 million (1997)	
	GV-BL5310	0013E2055149	192.168.5.222	Configure		Defog

• IP camera's current connections:

Decrease the number of clients (NVR, Web) connected to the IP camera to decrease the loading of IP camera. This information can be located on the web interface of the IP camera as show located below.

Video and Motion Live View Streaming1 Streaming2	In this section you can see and configure the default camera view. Live View Configuration				
 Video Settings Motion Detection 	14:29:06	Play		Information	
 Privacy Mask Text Overlay Tampering Alarm Visual Automation 	1			 Version v2.14 2014-09-18 Local time 2014/12/18 06:44:49 	
 I/O Control Events and Alerts <u>Monitoring</u> Recording Schedule 				 Host time 2014/12/19 14:29:05 Online count 	
Remote Viewlog Network Management Logout	A.H.			OCX Registration Path C:\WINDOWS\Geo0CX\Simple\2	

• 2nd Stream & Super Low Lux feature:

The use of 2nd stream in CIF or VGA and if Super Low Lux will affect the performance of FPS and below is a reference chart on IP camera's frame rate under single, dual and Super Low Lux features.

Stream	1MP		2	2MP	2MP		
Stream 1			(1920 x 1080)		(1600 x 1200)		
Stream 2	CIF	VGA	CIF	VGA	CIF	VGA	
Stream 2	UII			(448x252)			
	Non-1500 Series: 30			Non-250	0 Series: 30		
	1500 Series		2500 Series:		2500 Series:		
Single	30 (Super Low Lux Off);		30 (Super Low Lux Off);		27 (Super Low Lux Off);		
	29 (Super Low Lux On)		15 (Super Low Lux On)		15 (Super Low Lux On)		
					2400 Series: 20		
	Non-1500 Series: 30		Non-2500 Series: 25		Non-2500	Non-2500 Series:	
					Series: 30	25	
	1500 Series		2500 Series:	2500 Series:	2500 Series:	2500 Series:	
			25 (Super	24 (Super Low	25 (Super	24 (Super Low Lux	
Dual			Low Lux Off);	Lux Off);	Low Lux Off);	Off);	
			15 (Super	15 (Super Low	15 (Super	15 (Super Low Lux	
			Low Lux On)	Lux On)	Low Lux On)	On)	
	Super Low Super Low Lux On: 28 Lux On: 25		2400 Series: 25		2400 Series: 20		
Stream 1	3M P		4MP	5M P			
Stream 2	CIF	VGA	VGA	VGA/CIF			
Single	20	20	15	10			
Dual	19	15	15	8			



For any question on the information provided, please feel free to submit your question to our support window at support@geovision.com.tw