Mega Pixel IP Camera Configuration Guide

- 1. Download and install latest version HVR Server software.
- 2. Setup IP camera connection "Stream Type" as Double Stream (see below picture). Double stream means record at main-stream and preview at sub-stream but full screen preview (1 split) still uses main-stream. This is best setting to save system resources.

Server name MP20	V Device	type INC-MP&D1 Series ▼	Choose Double Stream
TCP Port 8000	DNS su	oport No	
Login ID admin Password	DNS IP ad	Port 7071	
	OK Car	cel	

- 3. Set I-frame interval number equal to or less than Frame Rate number, this setting means DVR Server can get at least one I- frame every second. If I-frame loss too much, it will buffer a lot of B fame and P frame. Then the system memory usage will expand continuously until the system crash. Please refer to IP camera specification to understand the relationship between Resolution and Frame Rate. Default settings don't mean the best performance setting. For some models of IP camera or old version HVR Server software, there is no I Frame setting in IP Device Setup interface, please enter IE Setup interface (Video Setting) to configure the I Frame Interval.
- 4. Please don't forget to configure sub-stream video resolution and quality to get best preview video.

	Device Chann	el Serial	Alarm	PTZ User	IP D	evice Setup
	Channel Camer	a1 🔹	Channel Name	INC-MP20V (Miami w	rarehouse)	
			Compress Pa	ra. Setup		
	Stream Type Main Stream -					
	Image Best	👻 Video Ty	rpe Video 🔹	Resolution	JXGA(16(- Bit Rate	VBR 🔻
	Frame Rate 12	▼ Max	Bit Custom 💌 4096	kbps I Frame	12 BP Frame	S-P-F 🔻
	Compression 64	4 👻 Audio Ty	/pe OggVorbis 🔻			
-			Description			I Frame Interval
Fr	came Interval	up.	Prerecord Time 5 s	rara. Record	Delay 5 s	
			,			
			Picture Par	ameter		
	🔽 Hide Area	Setup		Motion Detect	Setup	
	🗆 Video Lost	Setup				
	E Charle OCD	× a	C Show Weak	090		
	SHOW OSD	^ U			Not Clarity-Not Glitte	
		Y 32	Hour Type 24	OSD Type	XX-XX-XXXX (MDY)	▼
	🔽 Channel Name	× 240	Y 448	String		
				Copy To Cha	nnel All 💌	Сору
						Save
		Refresh	Manage.	•	Exit	

5. Please setup reasonable Pre-alarm record time and Post-alarm record time according your computer performance, specially refer to memory usage.

✓ Individual Setup Select Camera Type PAL Name Camera NC-MP20V (Miemi Sub-stream Work Status Eneble Frame Rate 25 Motion 3552*288 Netsend Image Quality Better Image Quality Best Record Resolution 7704*576 Netsend Frame Rate 25 Select Camera Group Group01 Record Sub-stream Disable Pre-alarm record and Post-alar Group Camera Continuous Motion Apr 18,2012 PM 02:34.10 Motion Record Select Camera Group Group01 Record Sub-stream Disable Pre-alarm record and Post-alar Record No Recor	Camera Setup	
Select Camera OmeraOl Camera Type Work Status Enable Frame Rate 25 Bitrate Type Varmable Aarm Adjust FPS Disable Image Quality Best Bitrate Type Video Archiving Days Auto Save I-frame only Disable Pre-alarm record and Post-alar Group Camera Secord Pre-alarm Record Secord Pre-alarm Record Secord Record Mairm in Record Save I-frame Time No No Record Record Becord Record Secord Record Secord Record Becord Record Becord Record Secord Record Secord Record Secord	▼ Individual Setup	
Work Status Enable Frame Rate 25 Bitrate Type Veriable Alarm Adjust FPS Disable Image Quality Best Image Quality Best Image Quality Best <td>Select Camera Camera01 Camera Type PAL</td> <td>Name Camera INC-MP20V (Miami Apr 18.2012</td>	Select Camera Camera01 Camera Type PAL	Name Camera INC-MP20V (Miami Apr 18.2012
Bitrate Type Variable Alarm Adjust FPS Disable Alarm Adjust FPS Disable Alarm Adjust FPS Disable Alarm Record Resolution 704*576 Alarm Record Resolution 704*576 Alarm Record Resolution 704*576 Alarm Record Sole Alar Alarm In OSD Gray Scale Auto Alarm In Copy to All Operation Pre-alarm record and Post-alar record Pre-alarm Record Sole Post-alarm Record Sole Alarm In	Work Status Enable Frame Rate 25 Netser	nd Image Quality Better
Image Quality Best Image Quality Image Quality Image Quality Im	Bitrate Type Variable Alarm Adjust FPS Disable Ne	etsend Resolution 352 * 288 💌
OSD Support YES Video Archiving Days Auto Save I-frame only Disable Mask Logo Path OSD Gray Scale Auto Copy to ALL COPY Group Setup Select Camera Group Group01 Record Sub-stream Disable Pre-alarm record and Post-alar record Pre-alarm Record 5 Sec Post-alarm Record 5 Sec Stream Type Video Pre-alarm Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Sub Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Motion Record Stream Type Video Sub Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Alarm in Record 5 Sec Stream Type Video Continuous Motion Record Stream Type Video Continuous Motion Record Alarm in Record 5 Sec Stream Type Video Continuous Motion Record Stream T	Image Quality Best Record Resolution 704*576 Net:	send Frame Rate 25
Mask Logo Path OSD Gray Scale Auto _ Copy to ALL _ CDPY	OSD Support YES 🔹 Video Archiving Days Auto 🔹 Sa	ave I-frame only Disable 💌
▼ Group Setup Select Camera Group Group 01	Mask Logo Path OSD Gray Scale Auto	Copy to ALL COPY
Pre-alarm Record 5 Sec Pre-alarm Record Sun MON TUE WED TUE WED THU FRI SAT Pre-alarm Record Post-alarm Record Sum Moxion Alarm in Record Alarm in Record Alarm in Record Sun MON TUE WED THU FRI SAT Continuous Pre-alarm Record Post-alarm Record Post-alarm Record Post-alarm Record Post-alarm Record Post-alarm Record Post-alarm In Post-alarm In <	Select Camera Group Group01 💌 Reco	ord Sub-stream Disable Pre-alarm record and Post-a record
Continuous Record Alarm in Record Alarm in Rec Continuous Motion record Motion record No Record <th>Pre-alarm Record 5 Sec 🔹 Post-alarm Record 5 Sec 🔹</th> <th>Stream Type Video 💌</th>	Pre-alarm Record 5 Sec 🔹 Post-alarm Record 5 Sec 🔹	Stream Type Video 💌
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 15 20 21 22 23 SUN MON	Continuous Motion Alarm in Motion or Record Record Alarm in Rec	Continuous No Record
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 SUN MON Image: Sunder Structure Image: SunderStructure </th <th></th>	
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6. If you setup Video Analytics, please open Windows Task Manager to track the system resources. If the Memory usage of DvrMain.exe exceed 1.5GB (1,500,000K) for long time, the system is easy to crash because other operation might increase memory usage such as Live Center connection.

♥ Windows Task <u>F</u> ile <u>O</u> ptions <u>V</u>	Manager <u>(</u> iew <u>H</u> elp				
Applications Proc	cesses Servi	ces P	erformance Networking Users		
Image Name	User Name	CPU	Memory (Private Working Set)	Description	A
CCC.exe	arnold	00	6,484 K	Catalyst Control Centre:	
ccSvcHst.exe		00	2,804 K	Symantec Service Frame	
csrss.exe	SYSTEM	00	1, 168 K	Client Server Runtime Pr	
csrss.exe	SYSTEM	00	9,616 K	Client Server Runtime Pr	Monitor system memory
DefWatch		00	964 K	Virus Definition Daemon	
DvrMain.exe	arnold	02	122,100 K	DVR Program] usage
dwm.exe	arnold	00	676 K	Desktop Window Manager	
ehmsas.exe	arnold	00	672 K	Media Center Media Stat	
ehtray.exe	arnold	00	808 K	Media Center Tray Applet	
explorer.exe	arnold	02	14,776 K	Windows Explorer	
ISUSPM.exe	arnold	00	1,472 K	InstallShield Update Ser	
lsass.exe	SYSTEM	00	920 K	Local Security Authority	
lsm.exe	SYSTEM	00	1,004 K	Local Session Manager S	
LSSrvc.exe	SYSTEM	00	524 K	LightScribe Service	
mdm.exe	SYSTEM	00	988 K	Machine Debug Manager	-
Show proces	ses from all us	ers			End Process
Processes: 66	CPU Usage: 7	7%	Physical Memory: 52%		łł.

7. Use dual network interface to accelerate network speed and separate local office working network. If you share your local office network with IP video surveillance, the huge video stream data might slow down the network speed. To avoid this happen, you should build a dedicated network for surveillance and add second network card to your system, use one network interface to connect IP cameras, use another network interface to connect local office working network.

Please refer to following picture to configure second network interface. In order to enable HVR Server to recognize the second IP address, you must use Route Add commander to add a permanent route table.

eral		
u can get IP settings assigned a s capability. Otherwise, you ne the appropriate IP settings.	automatically if your network supports ed to ask your network administrator	
) Obtain an IP address automa	atically	
Use the following IP address		
IP address:	192.168.1.3	Don't input Default gateway
Subnet mask:	255.255.255.0	
Default gateway:		
) O <u>b</u> tain DNS server address a	automatically	
Use the following DNS serve	r addresses:	Add permanent route table
Preferred DNS server:		
Alternate DNS server:		
Validate settings upon exit	Ad <u>v</u> anced	
	OK Cancel	
dministrator: C:\Window	vs\svstem32\cmd.exe	
lsers\64WIN7>Rout	te add 192.168.1.0 mask 255.	255.255.0 192.168.1.1 -p