

## Network PTZ Dome Camera Firmware

### Version: V5.4.0

### Release Note

<b>Firmware Basic Information</b>	Firmware Version:	V5.4.0
	SDK Version:	V5.1.6.21_build20160401
	Play Library (PlayCtrl.dll)	V7.3.0.74_Build20160321 ( Client Software )
		V7.3.0.80_Build20160413 ( Web Component )
	Encapsulation Library (SystemTransform.dll)	2.5.1.7_Build20160308
	Voice intercom library	1.3.0.3_build.2016.3.22
	Smart configuration library	v3.3.9.8_build20160401
	iVMS-4200	Version 4200 v2.4.6.13 build20160418
	IE Client version	V4.0.1build160405

### Hikvision Firmware V5.4.0 Features

- **1, New features**

*\*for R3, R4, R7 platforms*

- **Support h.264+ function. When enable H.264+, there'll shows notes. And optimize the average**

#### bitrate.

Stream Type	Main Stream(Normal)
Video Type	Video Stream
Resolution	2048*1536
Bitrate Type	Variable
Video Quality	Medium
Frame Rate	25 fps
Max. Bitrate	6144 Kbps
Video Encoding	H.264
H.264+	OFF
Profile	OFF
I Frame Interval	50
SVC	OFF

**Note** ✕

Compared to H.264, H.264+ reduces storage by up to 50% with the same maximum bitrate in most scenes.

Notes:

1. Upgrade your video player to the latest version if live view or playback does not work properly due to compatibility.
2. When H.264+ is enabled, functions such as, ROI, SVC, Face Detection, Main Stream Smoothing, and High Frame Rate are not supported.

Reboot now?

OK Cancel

- **Two conditions have to meet to resume after alarm linkage preset: 1, The PTZ camera has been to**

**the preset position; 2, the alarm is over.**

- **HIK SD card has a longer lifespan than normal SD card. Support detect health status and remaining lifespan. Support lock SD card and send notification when the memory card is detected abnormal.**
- **Support create sub folder by date for FTP storage. Support custom prefix the picture name. The default name is IP Channel Time Type.jpg.**
- **Support open the directory folder for saving video files, clips and pictures.**

### Record File Settings

Record File Size     256M     512M     1G

Save record files to           

Save downloaded files to           

### Picture and Clip Settings

Save snapshots in live view to           

Save snapshots when playback to           

Save clips to

- **Support image parameters switch. Indoor, outdoor, night, morning, nightfall, street, low illumination, custom1, and custom 2 are selectable.**

Display Settings    OSD Settings    **Image Parameters Switch**

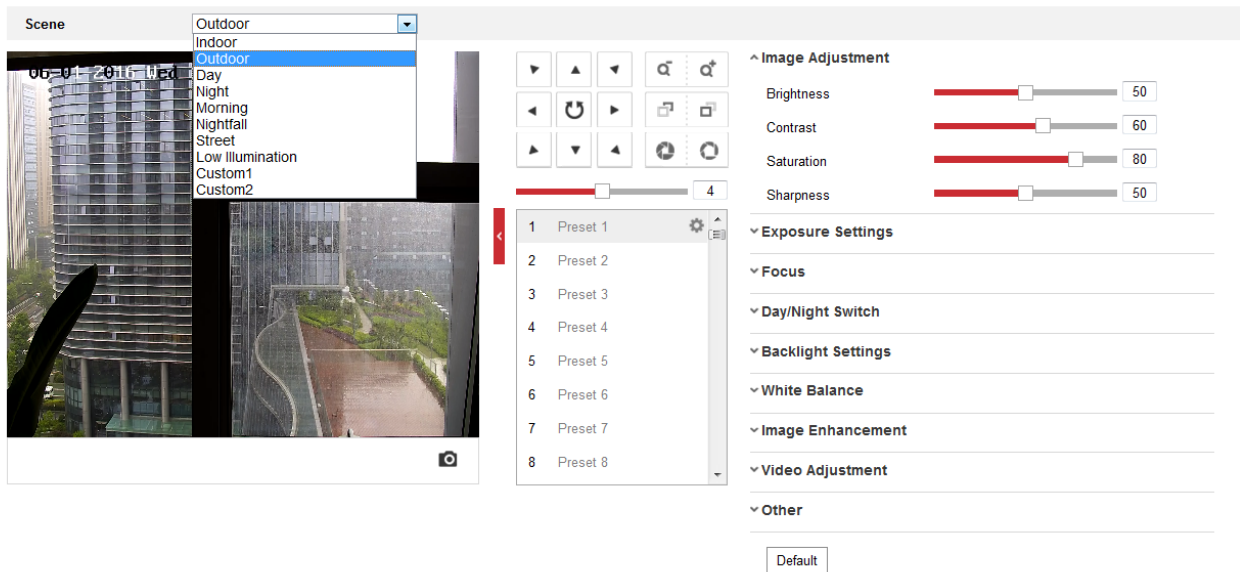
Link to Preset

Preset   

<input type="checkbox"/> Period1	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>
<input type="checkbox"/> Period2	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>
<input type="checkbox"/> Period3	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>
<input type="checkbox"/> Period4	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>

Scheduled-Switch

<input type="checkbox"/> Period1	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>
<input type="checkbox"/> Period2	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>
<input type="checkbox"/> Period3	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>
<input type="checkbox"/> Period4	<input type="text" value="00:00:00"/>	<input type="text" value="00:00:00"/>	Linked Scene	<input type="text" value="Indoor"/>



- HIKCGI and ONVIF support 3D positioning function.
- Add domain and region configuration for DDNS. After enable DDNS, the device will connect the default hiddns server first and upload the region and country to the server. The default server will return the address of the nearest server. And update the server address of the device.
- Support sub stream image capture.
- Change the default patrol time to 15s. And the least patrol time is 15s. The longest patrol time is 3600s.

### *\*for R7 platforms*

- Add PTZ Control switch for 2.5", 3" mini PTZ dome camera and DY3 positioner. And PTZ function is enabled as default.

### *\*for R4 platforms*

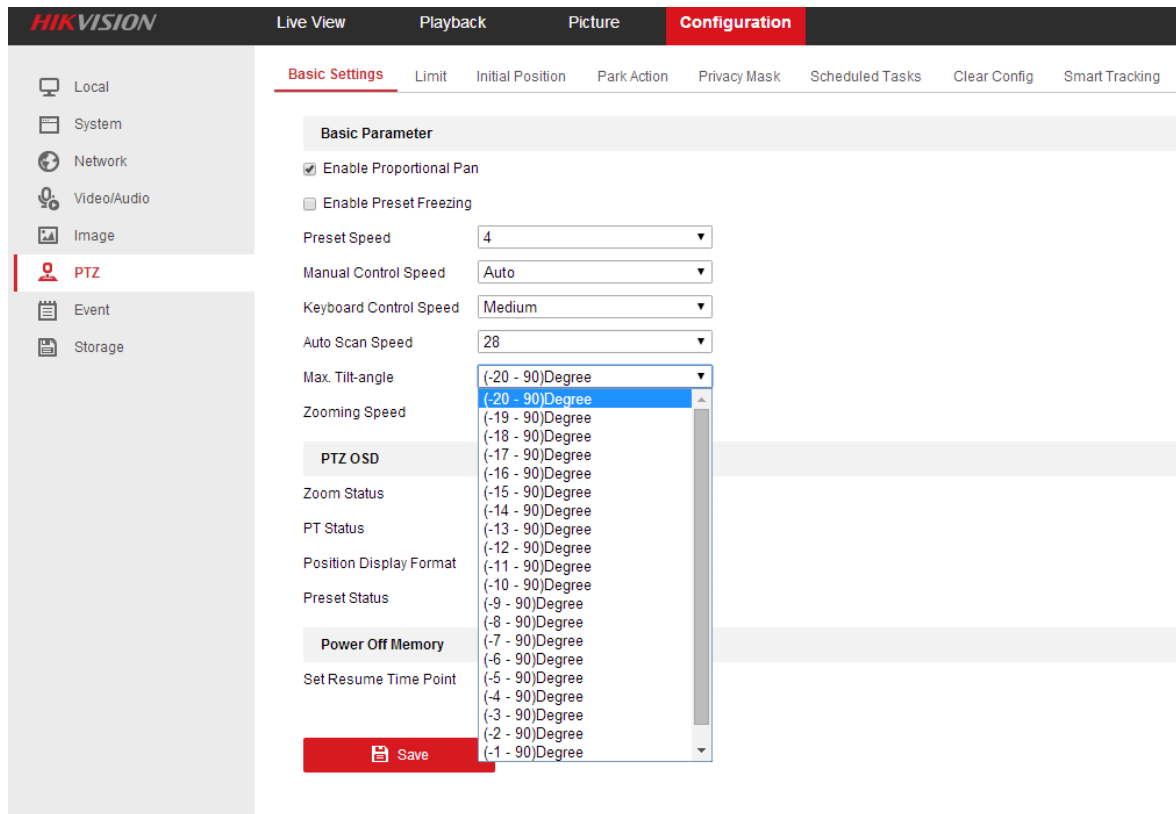
- Add 96\*96 OSD size for 8MP products.
- Note: When select 96\*96 OSD size, users can input less than 40 bytes, which means 40 English characters. When select auto, the default size for 8MP products is 96\*96.

## 2, Optimization

### *\*for R3, R4, R7 platforms*

- Two conditions have to meet to resume when set alarm linkage preset: 1, The PTZ camera has been to the preset position; 2, the alarm is over.
- Change SD card partition number to one, up to 128G.

- **Optimize audio performance. When set the input volume or output volume to 0, the device should output no sound.**
- **Optimize IP conflict detection. 1, when set two devices' IP address to the same, the devices would detect conflict in 5 seconds. 2, when set the two devices' IP address to different, the conflict would cancel in 5 seconds.**
- **Add tilt-angle configuration.**



### ***\*for R7 platforms***

- **Optimize the performance of the image with IR on at night. Improve the brightness, contrast and permeability. But the noise will raise.**
- **Optimize the focus effect at night. Mainly reduce the shock near the clear point, to improve the accuracy of focus.**
- **For E series 5" IR and 7" IR PTZ dome camera, optimize the control response and reduce the vibration when control by 485 keyboard.**
- **Solve the issue that the pan speed of 3" PTZ dome camera can't reach to 60° /s.**

### ***\*for R4 platforms***

- **Support up to 4 text overlays configurable, every text overlay position can be adjusted as will.**
- **Change the resolution of 8MP models:**

- **1, Capture mode is 4096\*2160@25,30.**

**Main stream resolution: 720p, 1080p, 2560\*1440, 3072\*1728, 4096\*2160. Default is 4096\*2160. When use the main stream alone, the max framerate at NTSC is 24fps, the max framerate at PAL is 25fps. When set the resolution of main stream to 4096\*2160, and enable sub stream or third stream, the max framerate of main stream at NTSC will be 22fps, and 20fps at PAL.**  
**Note: Because of the coding ability, it may cause capture failure when use the main stream alone with 4096\*2160@25.**

- **2, Capture mode is 3840\*2160@25,30.**

**Main stream resolution: 720p, 1080p, 2560\*1440, 3072\*1728. Default is 3840\*2160. When use the main stream alone, the max framerate at NTSC is 30fps, the max framerate at PAL is 25fps.**  
**When set the resolution of main stream to 3840\*2160, and enable sub stream or third stream, the max framerate of main stream at NTSC will be 22fps, and 20fps at PAL.**

- **8MP models only support sub stream capture.**

***\*for R3 platforms***

- **For 36X darkfighter PTZ dome camera, optimize the color image at WDR mode. With this optimization, the image at WDR mode has a better performance and brighter color than before.**

## Compatibility Update

- **HIKCGI version: V2.0;**
- **PSIA version: V1.1;**
- **ONVIF version: V2.6;**
- **NUUO: Version: V6.1.1, drive version: V4.7 ;**
- **Milestone:**
  - 1) Milestone Enterprise 8.1a(10.0a), Milestone drive version (Driver Pack 8.3),
  - 2) Milestone software version (Milestone Corporate 10.0d), Milestone drive version (Driver 8.3),
- **Avigilon Control Center: V5.6.2.18;**
- **Excaqvision: V7.2.3.88532**
- **Genetec Omnicast: 4.8 SR8**

## Customer Impact and Recommended Action

This update refers to function/compatibility improvement and will take effect automatically after the Date of Change. We are very sorry for any inconvenience of use-habit changes caused by this action. For any questions and request for this firmware, please contact our local technical support team.

### Remarks:

- Hikvision reserves the right to change, alter or withdraw the above notification without prior notice.
- Product design and specifications are subject to change without prior notice.
- The Hikvision firmware may contain defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.
- Hikvision is not liable for any typing or printing errors.

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## Supported Product List(DFXXXX)

Product Category	Model Number	Product Description
PTZ Dome Camera	DS-2DF8236I-AEL(W)	2MP Ultra-low Light Smart PTZ Camera
PTZ Dome Camera	DS-2DF8223I-AEL(W)	2MP Ultra-low Light Smart PTZ Camera
PTZ Dome Camera	DS-2DF7286-A/D/AW/AEL	2MP IR Network Speed Dome
PTZ Dome Camera	DS-2DF7284-A/D/AW/AEL	2MP IR Network Speed Dome
PTZ Dome Camera	DS-2DF7276-A/D/AW/AEL	1.3MP IR Network Speed Dome
PTZ Dome Camera	DS-2DF7274-A/D/AW/AEL	1.3MP IR Network Speed Dome
PTZ Dome Camera	DS-2DF7230I5-AEL	2MP 30X Network Laser PTZ Dome Camera
PTZ Dome Camera	DS-2DF727A-A	1MP IR Network Speed Dome
PTZ Dome Camera	DS-2DF6236I-AEL	2MP Ultra-low Light Smart PTZ Camera
PTZ Dome Camera	DS-2DF6223I-AEL	2MP Ultra-low Light Smart PTZ Camera
PTZ Dome Camera	DS-2DF5286-A/D/AEL	2MP Network Speed Dome
PTZ Dome Camera	DS-2DF5284-A/D/AEL	2MP Network Speed Dome
PTZ Dome Camera	DS-2DF5276-A/D/AEL	1.3MP Network Speed Dome
PTZ Dome Camera	DS-2DF5274-A/D/AEL	1.3MP Network Speed Dome
PTZ Dome Camera	DS-2DF527A-A	1MP Network Speed Dome

## Supported Product List (DFXXXXV)

Product Category	Model Number	Product Description
PTZ Dome Camera	DS-2DF8336IV-AEL(W)	3MP High Frame Rate Smart PTZ Camera
PTZ Dome Camera	DS-2DF6336V-AEL	3MP High Frame Rate Smart PTZ Camera
PTZ Dome Camera	DS-2DF8236IV-AEL(W)	2MP Ultra WDR Smart PTZ Camera
PTZ Dome Camera	DS-2DF6236V-AEL	2MP Ultra WDR Smart PTZ Camera

## Supported Product List (DXXXXXW)

Product Category	Model Number	Product Description
PTZ Dome Camera	DS-2DE4220W-AE/AE3	2MP 20X Network PTZ Dome Camera
PTZ Dome Camera	DS-2DE4220IW-DE	2MP 20X Network IR PTZ Dome Camera
PTZ Dome Camera	DS-2DE3204W-DE	2MP Network Mini PTZ Dome Camera

PTZ Dome Camera	DS-2DE3304W-DE	3MP Network Mini PTZ Dome Camera
PTZ Dome Camera	DS-2DE5220IW-AE	2MP 20X Network IR PTZ Dome Camera
PTZ Dome Camera	DS-2DE5120IW-AE	1.3MP 20X Network IR PTZ Dome Camera
PTZ Dome Camera	DS-2DY3220IW-DE	2MP Network IR PTZ Camera
PTZ Dome Camera	DS-2DY3220IW-DE4	2MP Network IR PTZ Camera
PTZ Dome Camera	DS-2DY3320IW-DE	3MP Network IR PTZ Camera
PTZ Dome Camera	DS-2DY3320IW-DE4	3MP Network IR PTZ Camera