

Title:	RN IPC Firmware Release Notes	Version:	v5.5.0	Date:	103117
Product:	Hikvision IP Cameras	Build:		Page:	1 of 6
Action Required:	None, Information Only				

■ **Summary**

Firmware Basic Information	Firmware Version:	v5.5.0
	SDK Version:	v5.2.7.45 build 20170612_win32
	Play Library (PlayCtrl.dll)	v7.3.3.61
	Encapsulation Library (SystemTransform.dll)	v2.5.2.5
	RTSP Communication Library (StreamTransClient.dll)	v1.1.3.6
	Voice intercom library (AudiolIntercom.dll)	v1.4.0.3
	iVMS-4200	Version 4200 v2.5.13.2 build 20170709
	IE Client version	v4.0.1 build170711

■ **All IPC Platforms**

• **New Features**

- The protocols supported for third-party integration are: ONVIF, ISAPI, and SDK.
- ONVIF function is disabled by default. The path of ONVIF configuration in Web component is Configuration->Network->Advanced Settings->Integration Protocol. ONVIF user accounts need to be created for application of ONVIF. Three ONVIF user levels of Administrator, User, and Operator are selectable, with up to 32 user accounts. Web component, iVMS-4200, and Batch Configuration tool are available for ONVIF configuration.
- Default mode of RTSP authentication is Digest in V5.5.0. RTSP authentication would turn to digest when camera is upgraded to v5.5.0. RSTP Authentication should be set to digest/basic to integrate with the platforms that don't support digest.
- WEB authentication is added to Configuration->System->Security->Authentication. Digest and digest/basic options are available. Digest is the default mode.
- Variable Bitrate type is supported in H.264+/H.265+ mode. The max. average bitrate is half of the maximum bitrate by default.

NOTE: Variable mode indicates that the average bitrate rate in a long period would be smaller than max. average bitrate. Constant mode indicates that the average bitrate rate in a long period would be maintained at max. average bitrate.

- Security question verification is supported in LAN. The password can be reset from Web or iVMS-4200 Client by three frequently used questions created during device activation or configuration.

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- Media2.0 is supported in ONVIF integration. H.265 and TCP/UDP/HTTP Two-way Audio are supported in ONVIF integration.
- Public Key length of 2048 is supported in HTTPS certificate creation.

• **Improved Features**

- Connection via Hik-Connect is improved. The latency to get stream is shorten. Time zone, time format and DST configuration are available in Hik-Connect.
- Day/Night switch is decided by software instead of photoresistance. Box cameras with housing & white light/IR are still using photoresistance for day/night switch.
- The configuration rules of behavior analysis detections are improved. Max. and Min. size of target to trigger events can be configured. The meaning of sensitivity is redefined.
- Max. Size: The maximum size of a valid target. Targets with larger sizes would not trigger detection.
- Min. Size: The minimum size of a valid target. Targets with smaller sizes would not trigger detection.
- Sensitivity: Range [1-100]. Sensitivity stands for the percentage of the body part of an acceptable target that goes across the pre-defined line or enters/leaves the pre-defined region.

$$\text{Sensitivity} = 100 - S_1/S_T * 100$$

S₁ stands for the target body part that enters the pre-defined region.

S_T stands for the complete target body.

NOTE: For detailed configuration instructions, refer to the network camera’s user manual or Online Help.

- ISAPI alarm interfaces are improved. AlertSream, subscribeEvent and httpHosts are supported in basic events and smart events. Region ID of expert mode of motion detection and behavior analysis in smart events is supported. Picture upload is not supported. Configuration in web or iVMS 4200 are not supported.
- New “Fluent” option is added to the Play performance modes (Configuration->Local->Live View Parameters->Play Performance) in Web component and client. Original “Auto” option is changed to “Balanced.”
- The filtering time of Day/Night switch is increased from 5s to 10s.

NOTE: During Day/Night switch filtering time, no events will be triggered to avoid false alarms.

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- The compatibility of adding camera to Hik-Connect is improved.
- UPnP is disabled by default. Hik-Connect platform would enable UPnP when camera is added and disable UPnP when camera is deleted from Hik-Connect platform. Upgrading would not change the UPnP configuration.
- Wi-Fi and WLAN parameters would be maintained when camera is restored.
- Diagnose information can be exported to provide log, system information and hardware information for maintenance. The path on web component is Configuration-> Maintenance-> Upgrade&Maintenance->Information Export->Diagnose Information.
- Old password must be input when password is changed.
- RTCP on/off command is added to ISAPI/SDK.
- RS-485 and RS-232 transparent transmission is supported by ISAPI protocol.
- The Auxiliary Focus and automatic focus after zooming performances are improved on 2 line camera.
- Unattended baggage detection threshold duration is changed from 5-3600s to 5-100s.
- Auto mode is added to true WDR configuration. DWDR don't support auto mode.
- WDR level 0-40 is DWDR (default level is 20). WDR level 41-100 is true WDR (default level is 50). The change solves the stripes in high light scenes.

■ **2xx2(F)WD, 2x52(F), 64x4, xM66x2 Network Cameras (v5.5.0 build 170725)**

• **New Features**

- The models of DS-2CD2xx2(F)WD and DS-2CD2x52(F) support Face Detection. The linkage actions include sending notifications, emails and triggering recording.

• **Improved Features**

- DS-2CD64xx Covert Camera is able to start without lens or with mismatched lens.

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■ 2xx5 Network Cameras (v5.5.0 build 170725)

- **New Features**

- 3072 x 2048 resolution is available for DS-2CD2*55FWD cameras. The maximum frame rate for 3072 x 2048 is 20 fps. Rotate is not available for 3072 x 2048 resolution.

■ Compatibility Update

- **ISAPI version: v2.4**

- **ONVIF version: v1612, official test tool version: v1701**

- **Milestone:**

- Milestone Enterprise 8.1a (10.2a), Milestone drive version (Driver 9.1)
- Milestone software version (Milestone Corporate 11.1a), Milestone drive version (Driver 9.1)

- **Avigilon:**

- Control Center: V5.10.12.2;
- Test ONVIF.

- **Excaqvision:**

- Version: 8.4.2
- Protocol: ONVIF

- **NAS (Only test for Brainaire):**

- DS-A2016R, DS-A1016RS V2.2.0-7

- **Tested Keyboards**

- DS-1600K V2.0.0
- DS-1006K V1.0

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■ 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 Products List (2xx2(F)WD, 2x52(F), 64x4, XM66x2)**

Product Category	Model Name	Product Description
Mini IR Bullet	DS-2CD2012WD-I	1.3 MP, IR, WDR
Mini IR Bullet	DS-2CD2022WD-I	2 MP, IR, WDR
Mini IR Bullet	DS-2CD2042WD-I	4 MP, IR, WDR
Mini IR Bullet	DS-2CD2052-I	5 MP, IR
IR Fixed Dome	DS-2CD2112FWD-I(W)(S)	1.3 MP, IR, Wi-Fi, WDR
IR Fixed Dome	DS-2CD2122FWD-I(W)(S)	2 MP, IR, Wi-Fi, WDR
IR Fixed Dome	DS-2CD2142FWD-I(W)(S)	4 MP, IR, Wi-Fi, WDR
IR Fixed Dome	DS-2CD2152F-I(W)(S)	5 MP, IR, Wi-Fi
EXIR Turret	DS-2CD2312WD-I	1.3 MP, IR, WDR
EXIR Turret	DS-2CD2322WD-I	2 MP, IR, WDR
EXIR Turret	DS-2CD2342WD-I	4 MP, IR, WDR
EXIR Turret	DS-2CD2352-I	5 MP, IR
IR Cube	DS-2CD2422FWD-IW	2 MP, IR, WDR
IR Mini Dome	DS-2CD2522FWD-I(W)(S)	2 MP, IR, WDR, Wi-Fi/Audio/Alarm optional
IR Mini Dome	DS-2CD2542FWD-I(W)	4 MP, IR, WDR, Wi-Fi optional
IR Mini Dome	DS-2CD2552FWD-I(W)	5 MP, IR, Wi-Fi optional
VF IR Bullet	DS-2CD2622FWD-I(Z)(S)	2 MP, VF lens, IR, Audio/Alarm optional
VF IR Bullet	DS-2CD2642FWD-I(Z)(S)	4 MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2712FWD-I(Z)(S)	1.3 MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2722FWD-I(Z)(S)	2 MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2742FWD-I(Z)(S)	4 MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2752F-I(Z)(S)	5 MP, VF lens, IR, Audio/Alarm optional
EXIR Bullet	DS-2CD2T22WD-I3/I5/I8	2 MP, IR, WDR
EXIR Bullet	DS-2CD2T42WD-I3/I5/I8	4 MP, IR, WDR
EXIR Bullet	DS-2CD2T52-I3/I5/I8	5 MP, IR
Separated	DS-2CD6414FWD(-10, -20, -30)	1.3 MP
Separated	DS-2CD6424FWD(-10, -20, -30)	2 MP

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■ **Supported Products List (2xx5)**

Product Category	Model Name	Product Description
Mini EXIR Bullet	DS-2CD2025FWD-I	2 MP, IR, WDR
Mini EXIR Bullet	DS-2CD2035FWD-I	3 MP, IR, WDR
Mini EXIR Bullet	DS-2CD2055FWD-I	5 MP, IR, WDR
Mini EXIR Bullet	DS-2CD2085FWD-I	8 MP, IR, WDR
EXIR Fixed Dome	DS-2CD2125FWD-I(S)	2 MP, IR, WDR
EXIR Fixed Dome	DS-2CD2125FWD-IM	2 MP, IR, WDR, HDMI output
EXIR Fixed Dome	DS-2CD2135FWD-I(S)	3 MP, IR, WDR
EXIR Fixed Dome	DS-2CD2155FWD-I(S)	5 MP, IR, WDR
EXIR Fixed Dome	DS-2CD2185FWD-I	8 MP, IR, WDR
EXIR Turret	DS-2CD2325FWD-I	2 MP, IR, WDR
EXIR Turret	DS-2CD2335FWD-I	3 MP, IR, WDR
EXIR Turret	DS-2CD2355FWD-I	5 MP, IR, WDR
EXIR Turret	DS-2CD2385FWD-I	8 MP, IR, WDR
EXIR Bullet	DS-2CD2T25FWD-I	2 MP, IR, WDR
EXIR Bullet	DS-2CD2T35FWD-I5/18	3 MP, IR, WDR
EXIR Bullet	DS-2CD2T55FWD-I5/18	5 MP, IR, WDR
EXIR Bullet	DS-2CD2T85FWD-I5/18	8 MP, IR, WDR
EXIR VF Bullet	DS-2CD2625FWD-IZS	2 MP, IR, WDR, Motorized lens
EXIR VF Bullet	DS-2CD2635FWD-IZS	3 MP, IR, WDR, Motorized lens
EXIR VF Bullet	DS-2CD2655FWD-IZS	5 MP, IR, WDR, Motorized lens
EXIR VF Bullet	DS-2CD2685FWD-IZS	8 MP, IR, WDR, Motorized lens
EXIR VF Dome	DS-2CD2725FWD-IZS	2 MP, IR, WDR, Motorized lens
EXIR VF Dome	DS-2CD2735FWD-IZS	3 MP, IR, WDR, Motorized lens
EXIR VF Dome	DS-2CD2755FWD-IZS	5 MP, IR, WDR, Motorized lens
EXIR VF Dome	DS-2CD2785FWD-IZS	8 MP, IR, WDR, Motorized lens
EXIR VF Turret	DS-2CD2H25FWD-IZS	2 MP, IR, WDR, Motorized lens
EXIR VF Turret	DS-2CD2H35FWD-IZS	3 MP, IR, WDR, Motorized lens
EXIR VF Turret	DS-2CD2H55FWD-IZS	5 MP, IR, WDR, Motorized lens
EXIR VF Turret	DS-2CD2H85FWD-IZS	8 MP, IR, WDR, Motorized lens

■ **Supported Product List (4xx6, Mobile, Anti-Corrosion, Explosion-Proof, 20x)**

Product Category	Model Name	Product Description
Anti-Corrosion	DS-2CD6626B-IZHS(R)	2 MP, Wiper optional
Anti-Corrosion	DS-2XC6122FWD-IS	2 MP
Outdoor Bullet	DS-2CD4A24FWD-IZ(H)(S)(T) (4.7-94 mm)	2 MP, 20x Long focal distance