

<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
<b>Product:</b>	Video Intercom: Door Station and Indoor Station	<b>Build:</b>	Door Station: 200102 Indoor Station: 191231	<b>Page:</b>	1 of 25
<b>Action Required:</b>	None, Information Only				

## ■ General Information

Second generation video intercom firmware has been updated and released.

## ■ Summary

Firmware Version	Door Station Main Module Firmware: v2.0.8 build 200102 Door Station Sub Module Firmware: v1.0.0 build 191010 Door Station Display Module Firmware: v1.0.1 build 190814 Indoor Station Device Firmware: v2.1.2 build 191231
iVMS-4200 Version	v3.2.10 build 20191216

## ■ Affected Products

- Second Generation IP Indoor Station

Name	Model
Indoor Station	DS-KH8350-WT1
Indoor Station	DS-KH6320-WT1

- Second Generation Modular IP Door Station

Name	Model
Main Unit	DS-KD8003-IME1
Nametag Module	DS-KD-KK
Keypad Module	DS-KD-KP
Mifare Card Reader Module	DS-KD-M
Display Module	DS-KD-DIS

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<b>Action Required:</b>	None, Information Only				

- Second Generation IP Kit

Name	Model
Kit	DS-KIS602

- Second Generation 2-Wire Device

Name	Model
Indoor Station	DS-KH6320-WT2
Main Unit	DS-KD8003-IME2

- Second Generation 2-Wire Kit

Name	Model
Kit	DS-KIS702-P

## ■ New Functions

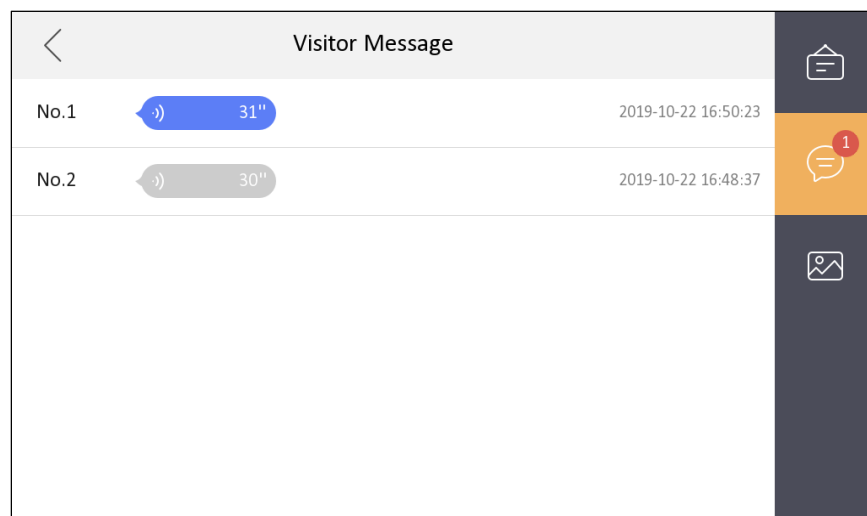
- Indoor Station
  - Allows the indoor station to capture images, leave messages, and receive iVMS-4200 client messages without an SD card, but restarting will cause this information to be lost.

**NOTE:** When the device has saved data, insert an SD card. Stored information will be cleared. If the memory is full, new data will overwrite the old data.

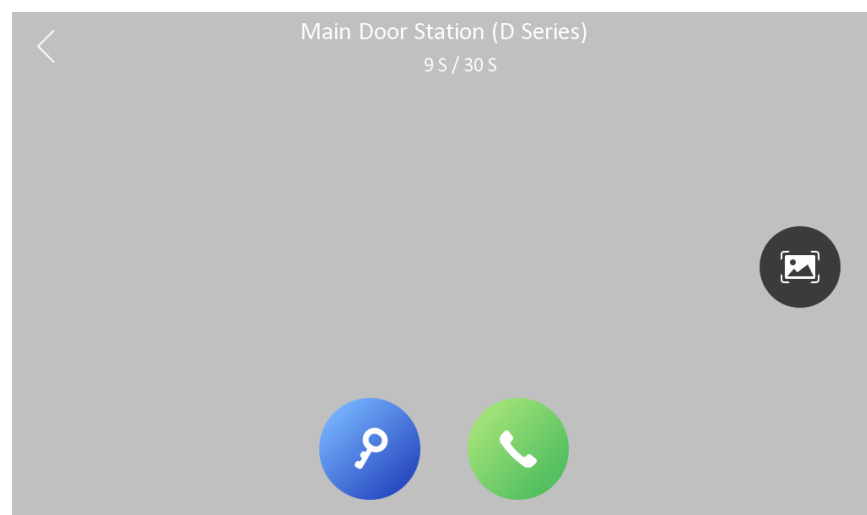
Total Device Memory Capacity	2 MB
Capturing Image	200 KB
Leaving Message	~50 KB to 300 KB
Client Message	~100 KB to 400 KB

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<b>Action Required:</b>	None, Information Only				

- Playing a visitor message on the indoor station causes the message interface to display an animation effect.

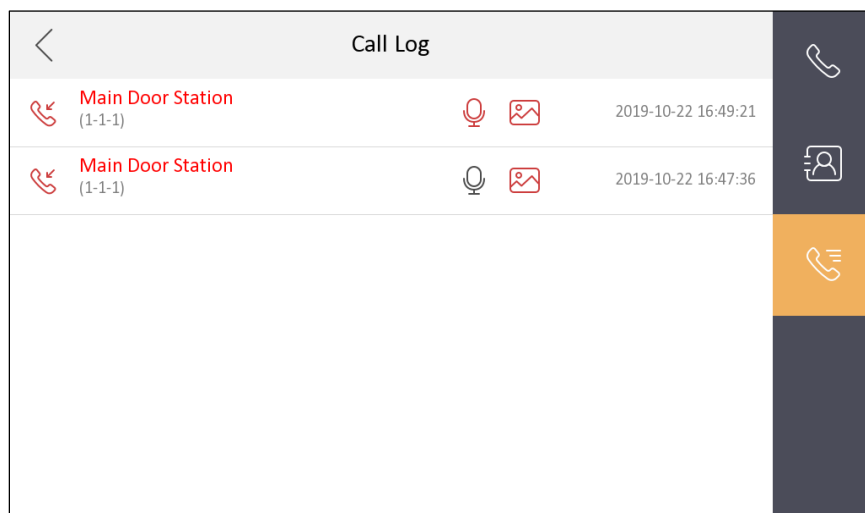


- Added door station and IPC capture function in the preview interface.

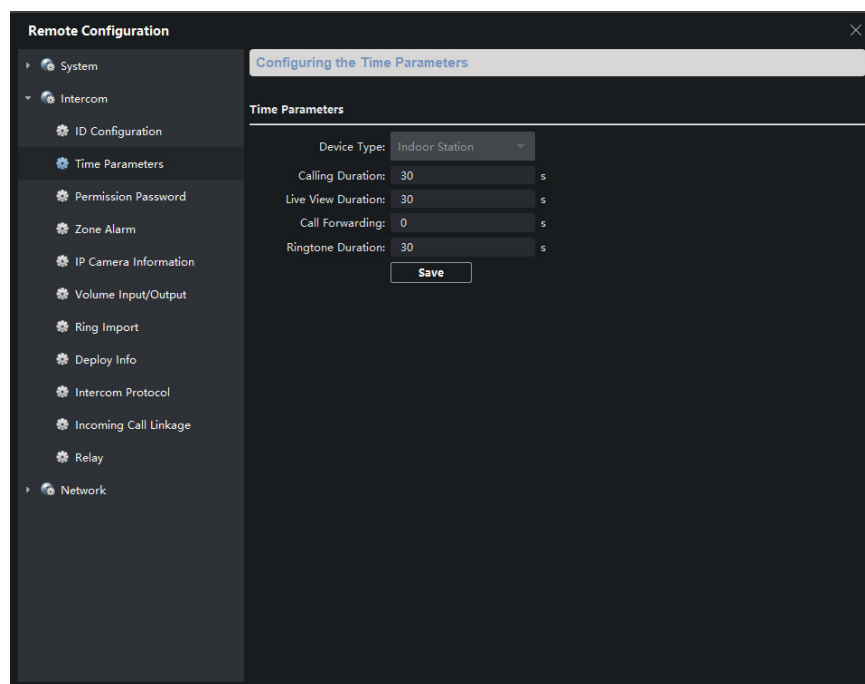


- Added automatic hang up; clicking unlock button will exit the current interface after 5s.
- Added call log associate leaving message and capturing picture function.

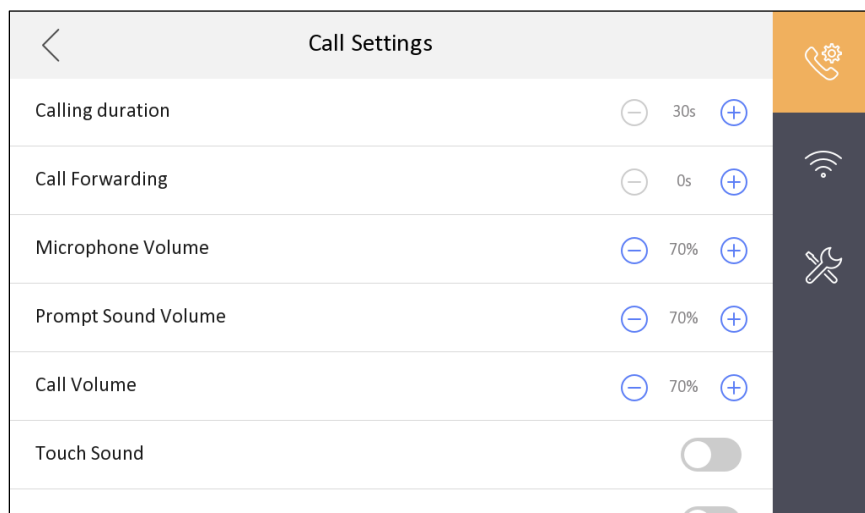
<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
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<b>Action Required:</b>	None, Information Only				



- Added indoor station "Ringtone Duration" support configuration; the maximum does not exceed the current "Calling Duration" maximum.

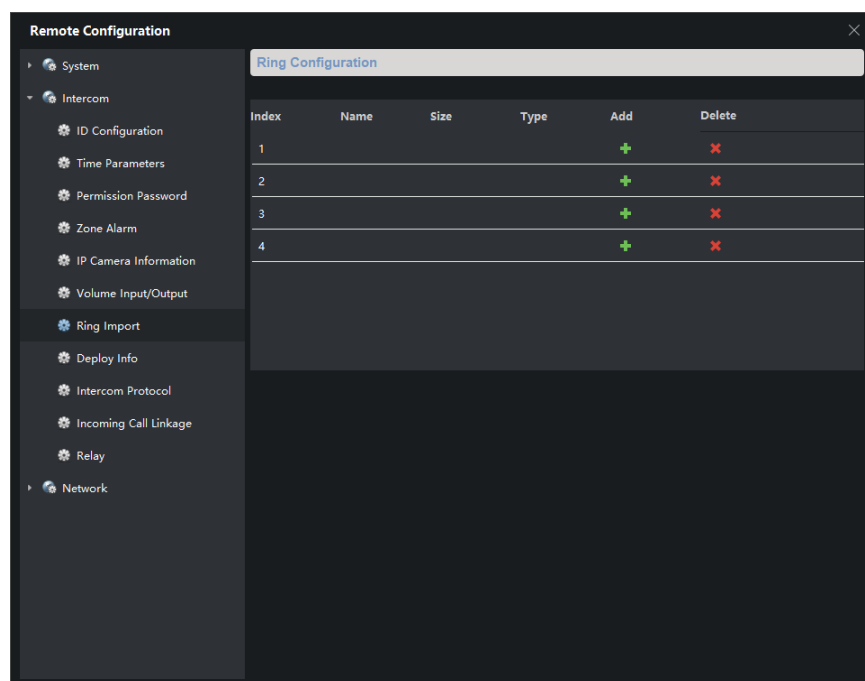


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<b>Action Required:</b>	None, Information Only				

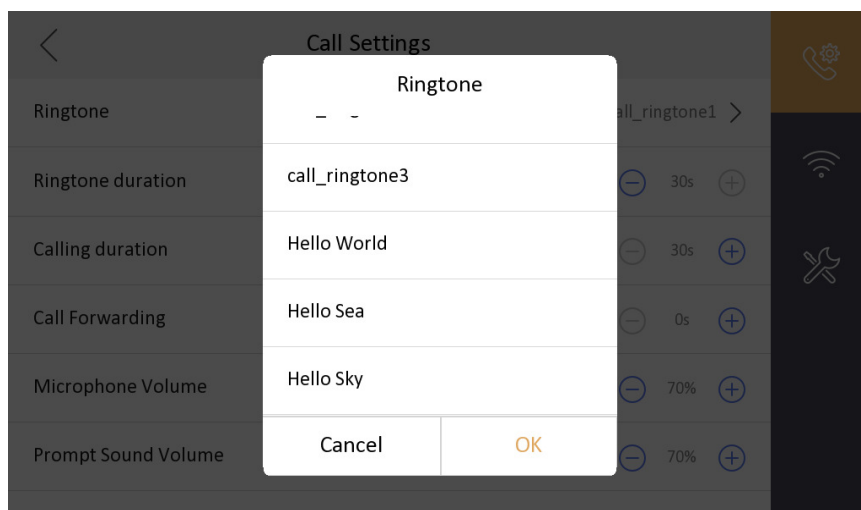


- Added function for iVMS-4200 client to import ringtones to indoor station (up to four ringtones can be imported, three by default, for a total of seven for customers to choose)

**NOTE:** Format Rules: .wav ≤300 KB



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<b>Action Required:</b>	None, Information Only				

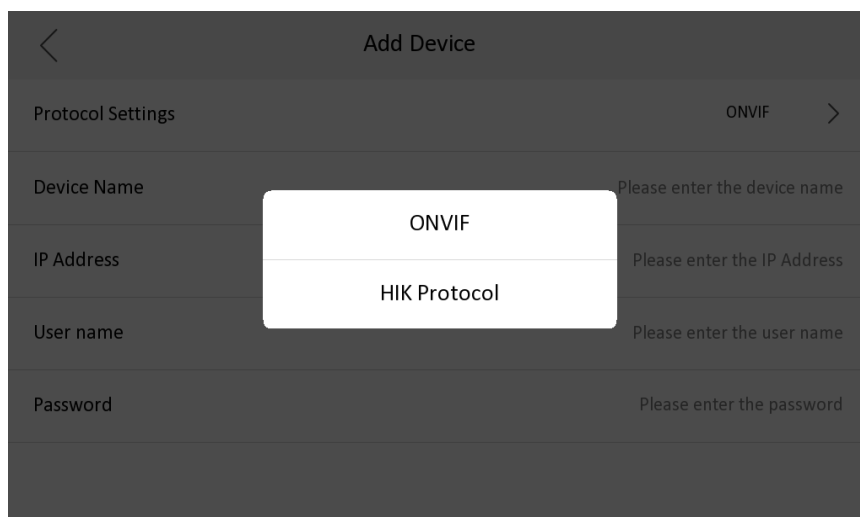
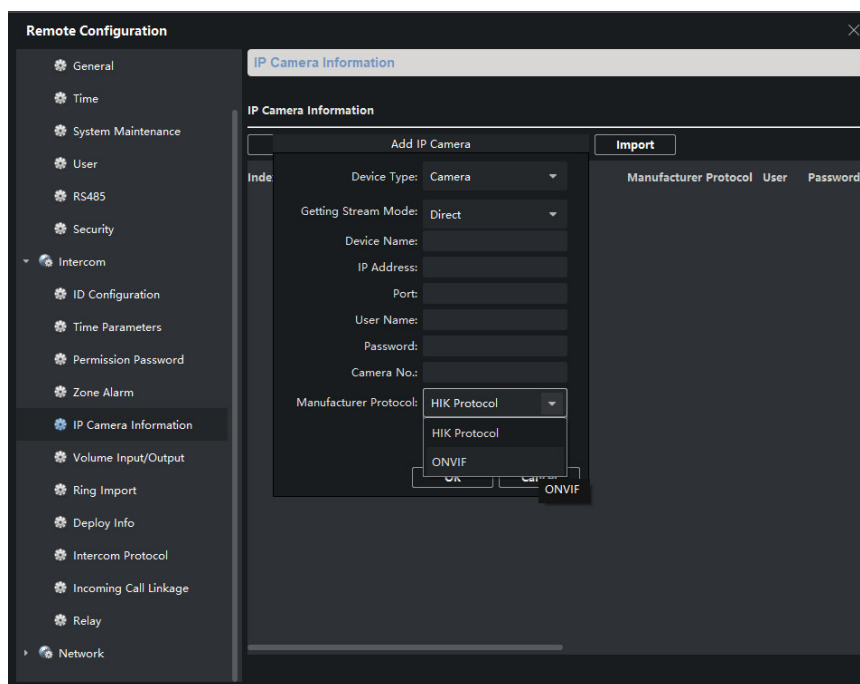


- Added function to switch preview screen to IPC when the indoor station is called



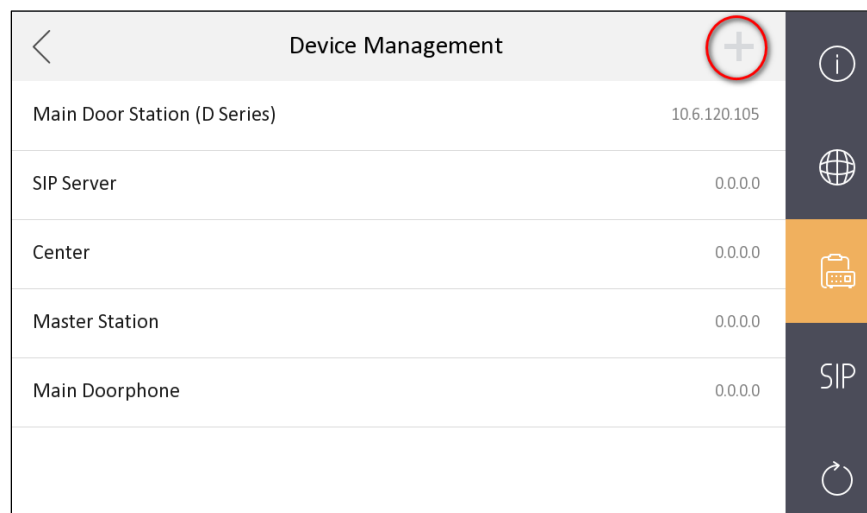
- Added ability of indoor station to add third-party IPC through ONVIF protocol

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<b>Action Required:</b>	None, Information Only				



- Added ability to select multiple online IPCs from the NVR once the NVR IP address is added at the indoor station

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<b>Action Required:</b>	None, Information Only				

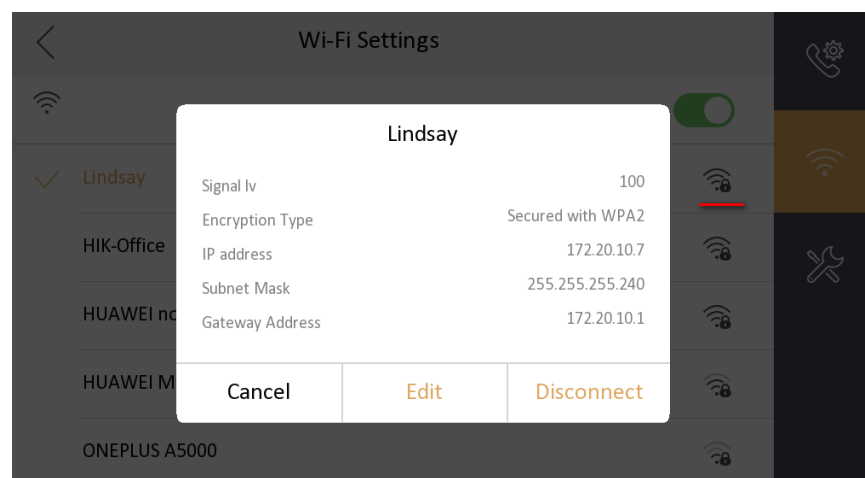
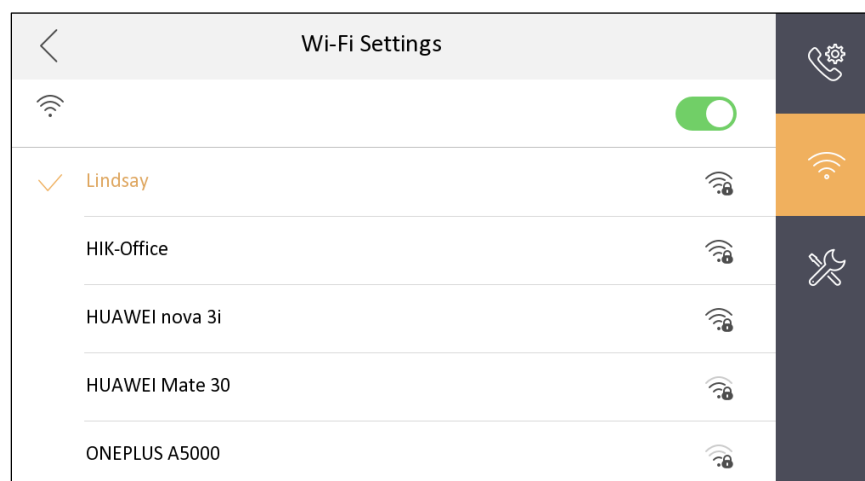


Add Device	
Protocol Settings	HIK Protocol >
Device Name	Please enter the device name
IP Address	Please enter the IP Address
Port No.	554
Channel No.	1 >
User name	Please enter the user name

- Added support to search and show the whole door station model in the 4-Step Wizard (model list: DS-KB8112-IM, DS-K1T671, DS-K1T501SF, DS-KV8102-IM)
- Added support for static Wi-Fi configuration



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<b>Action Required:</b>	None, Information Only				



- Added support to modify the main indoor station name

**EXAMPLE:** After configuring the main indoor and indoor extension room name on the Wizard setting menu, when the main indoor station calls an indoor extension, the indoor extension shows the main indoor room name and the main indoor room shows the indoor extension room name.

1. Start the setup Wizard.

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<b>Action Required:</b>	None, Information Only				

2. Use the **Indoor Station** pull-out menu to select **Indoor Station**.
3. Enter a name for the main door in the **Room Name > main indoor** field.

Wizard-Settings 3/4

Indoor Station Type

Indoor Station

>

Floor

1

Room No.

1

Room Name.

main indoor

Previous

Next

Skip

4. Use the **Indoor Station** pull-out menu to select **Indoor Extension**.
5. Enter a name for the **Indoor Extension** in the **Room Name > indoor extension** field.

Wizard-Settings 3/4

Indoor Station Type

Indoor Extension

>

No. (1 - 5)

1

Room Name.

indoor extension

Previous

Next

Skip

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<b>Action Required:</b>	None, Information Only				

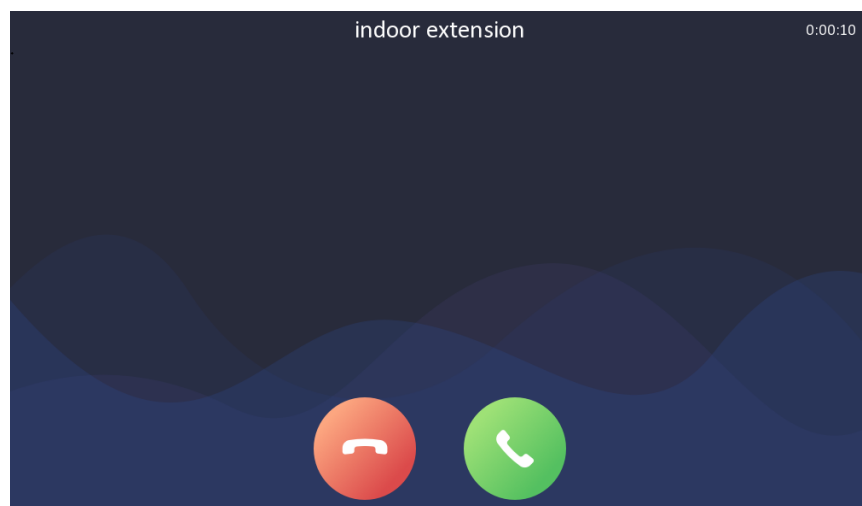


Figure 1, Main Indoor Station

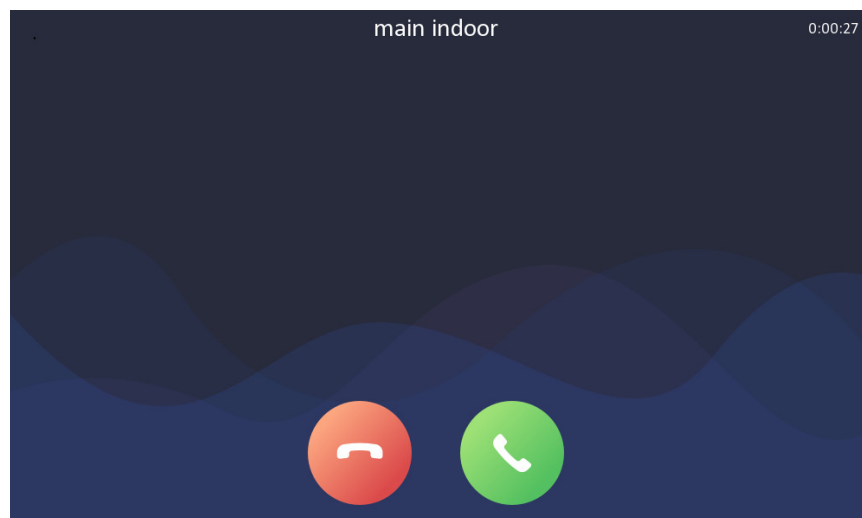
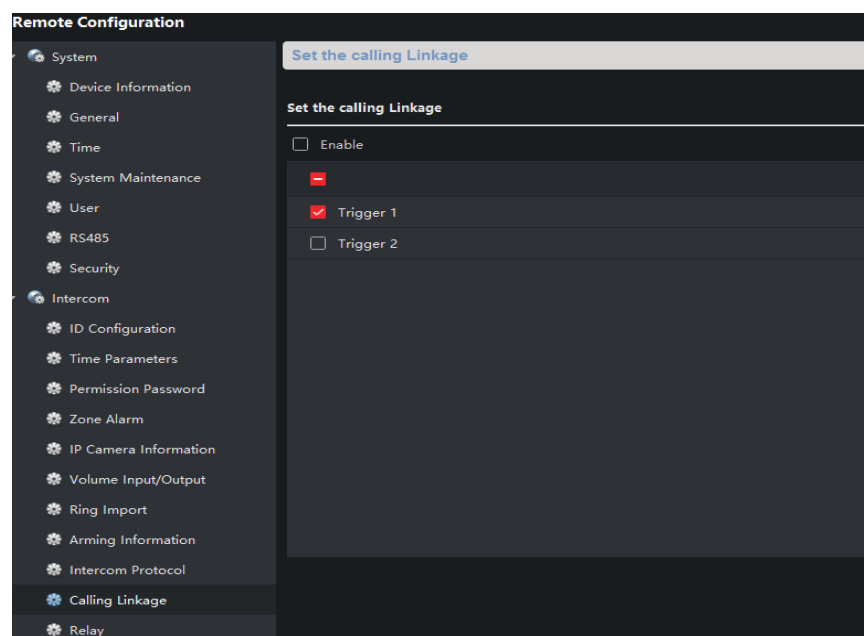


Figure 2, Indoor Extension

- When pressing the call button, the alarm output signal will trigger until unlocking the door, cancelling the call, or calling time out.

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<b>Action Required:</b>	None, Information Only				



- Modified the following default values:

- > Hik-Connect function is disabled by default
- > DST obeys the American transfer time rule by default.

**NOTE:** The default bias will be 60 minutes. Start date: March second week Sunday 2:00 A.M. End date: November first week Sunday 2:00 A.M.

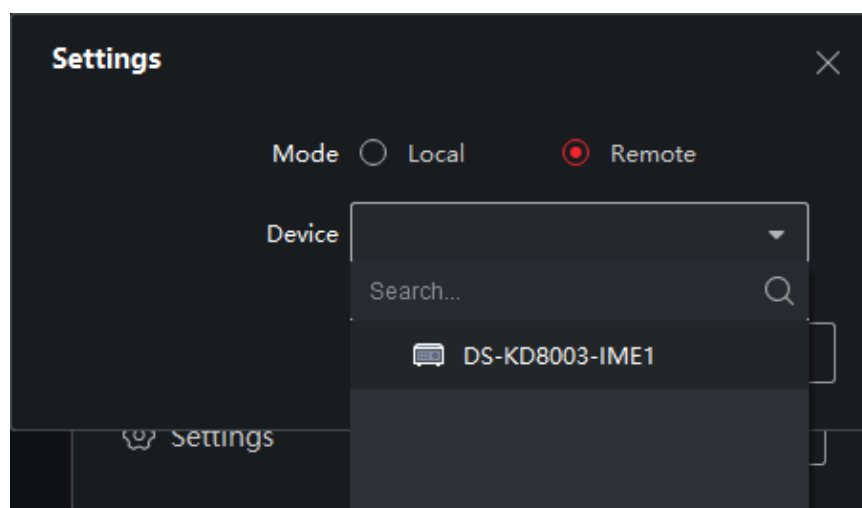
- > NTP is enabled by default.

**NOTE:** Default NTP server is time.windows.com. Time is synchronized automatically when the indoor station is started; the time sync will be 24 hours.

- > Default time zone is GMT-8
- > Default time format is 12

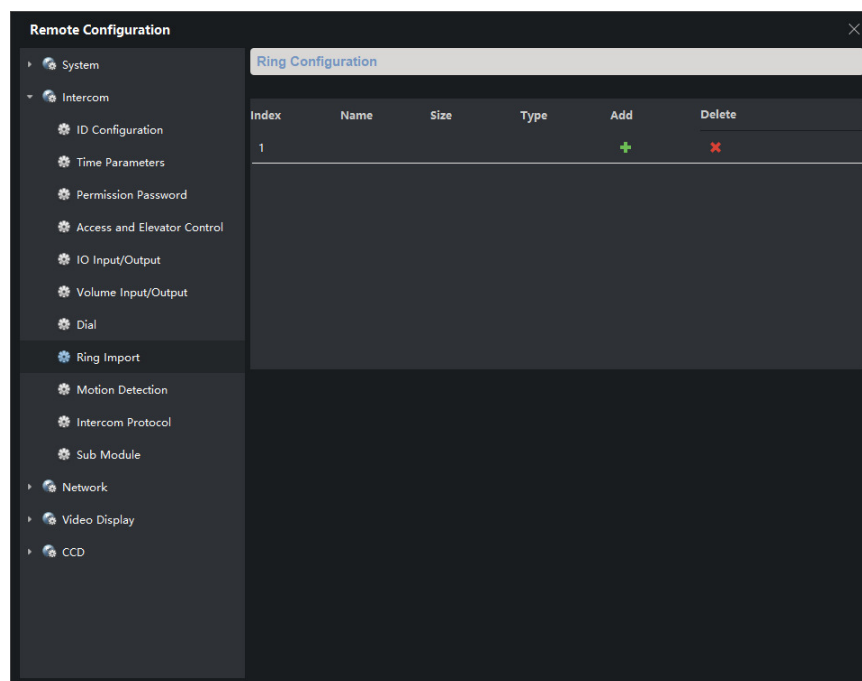
<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
<b>Product:</b>	Video Intercom: Door Station and Indoor Station	<b>Build:</b>	Door Station: 200102 Indoor Station: 191231	<b>Page:</b>	13 of 25
<b>Action Required:</b>	None, Information Only				

- > Removed the time zone option from the NTP menu
- Modular Door Station
  - Added module door station IP address voice broadcast function. Within 10 seconds of the device starting, pressing the main module button five times will cause the device to broadcast the current IP address in English.
  - Module door station now supports card issuing via iVMS-4200.



- Added iVMS-4200 client to import "waiting ringtone" to module door station (up to one can be imported).

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<b>Action Required:</b>	None, Information Only				



- Module door station now supports external card reader, which supports swiping card and password unlocking.

**NOTE:** Supported models: DS-1102M/K, DS-1104M/K, DS-1107M/K

- Module door station now supports a security module. Currently, the module door station supports only connecting the security module to the second lock.

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<b>Action Required:</b>	None, Information Only				

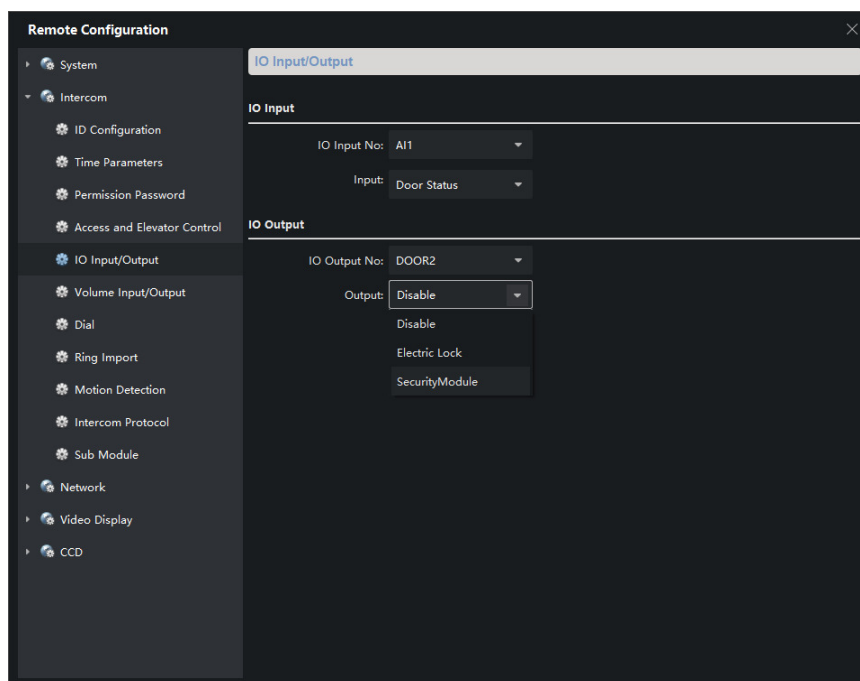
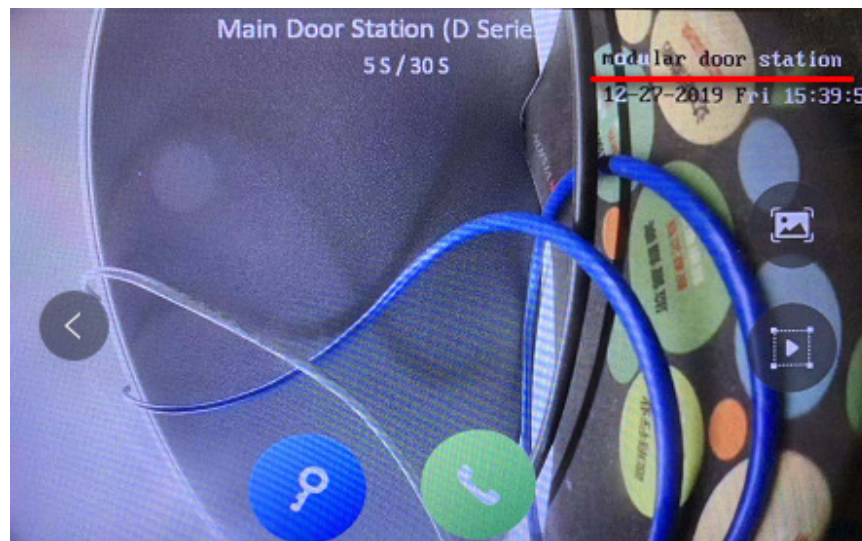
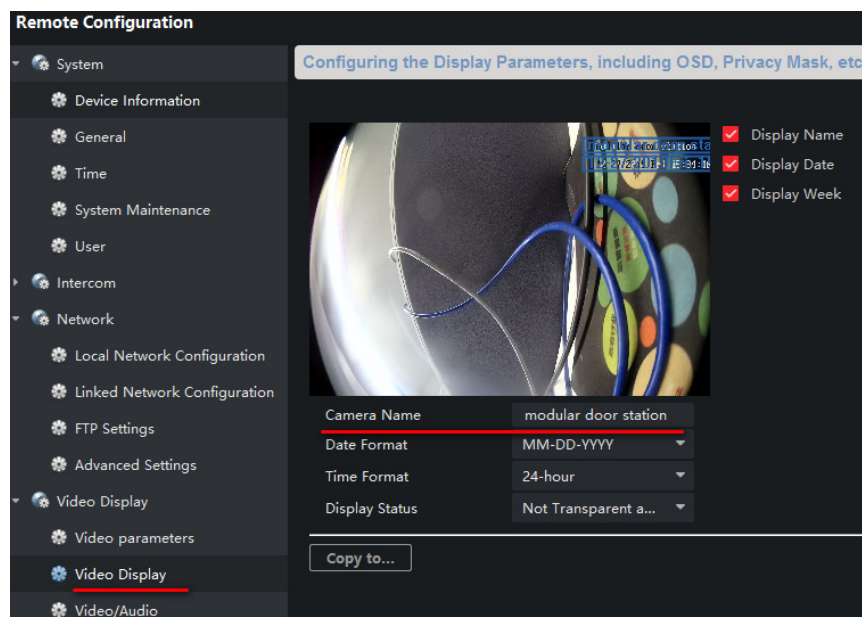


Figure 3, Door Station and Card Reader, Security Module Cable (101512130 RS-485, PHS4 to 2OPEN, 150 mm, yellow/orange)

- OSD now supports name, location, and time format configuration.

<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
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<b>Action Required:</b>	None, Information Only				

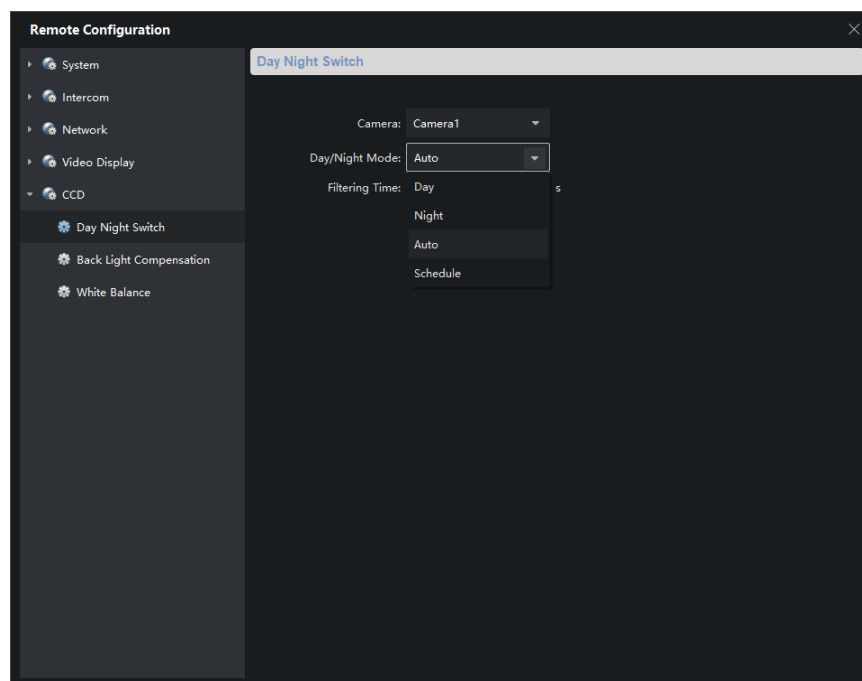


- Modular door station now supports day/night switching.

**NOTE:** Night mode means infrared mode, each module's backlight will be lit.

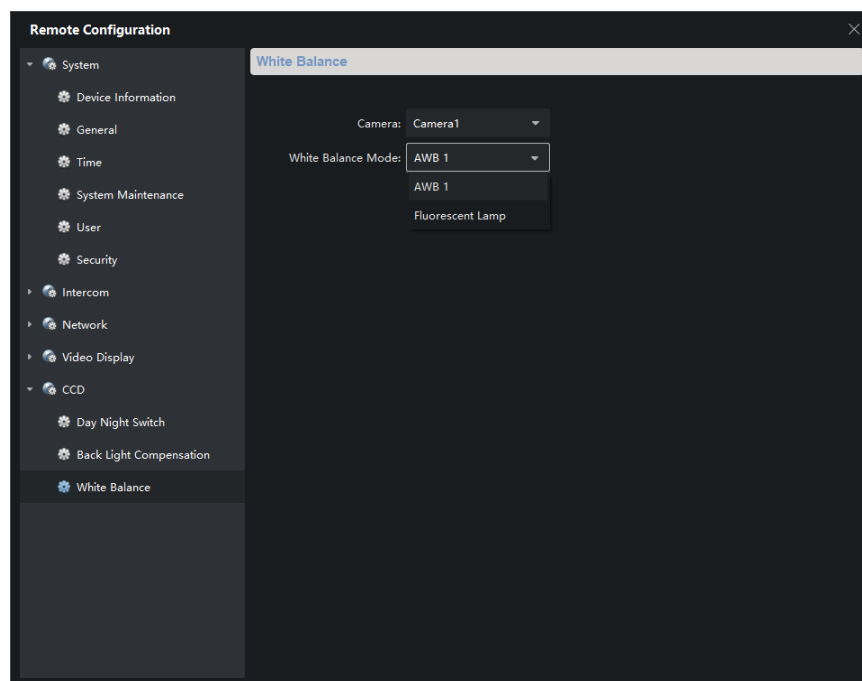


<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
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<b>Action Required:</b>	None, Information Only				

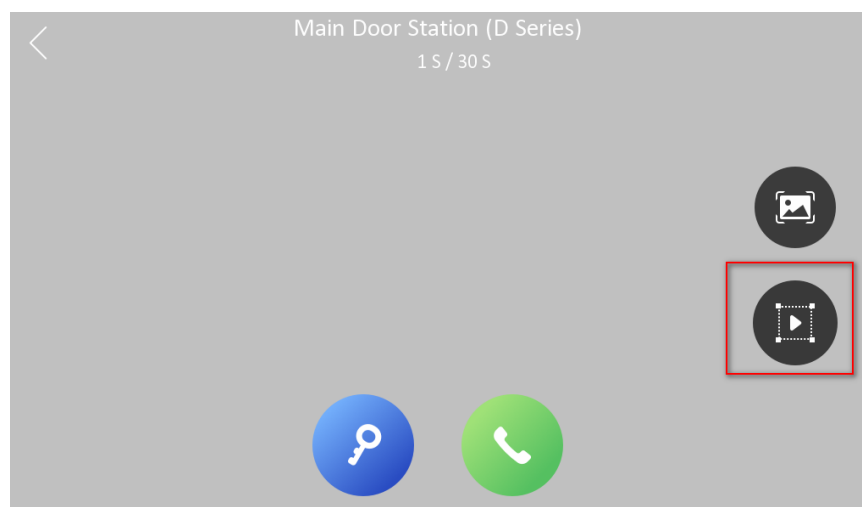


- Added white balance mode configuration.
  - > AWB 1 means auto mode
  - > Fluorescent Lamp is used to solve the purple problem caused by the background being mostly green.

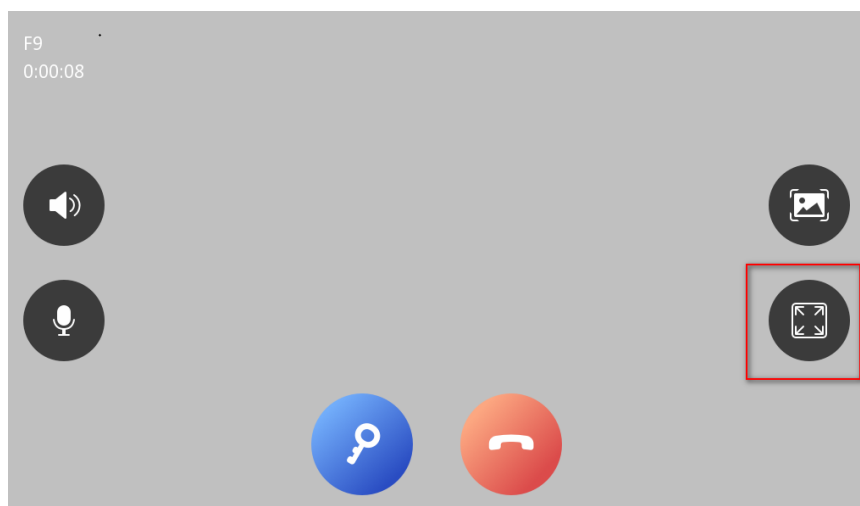
<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
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<b>Action Required:</b>	None, Information Only				



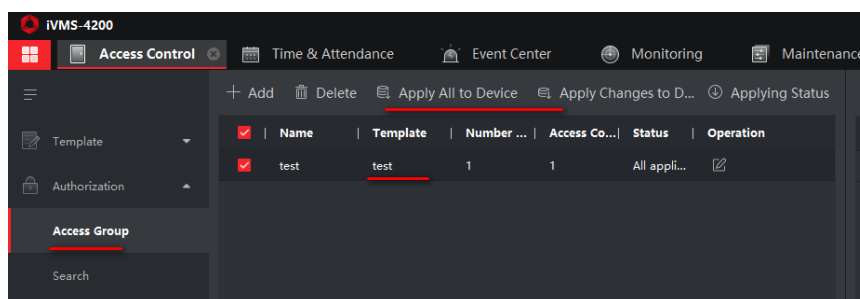
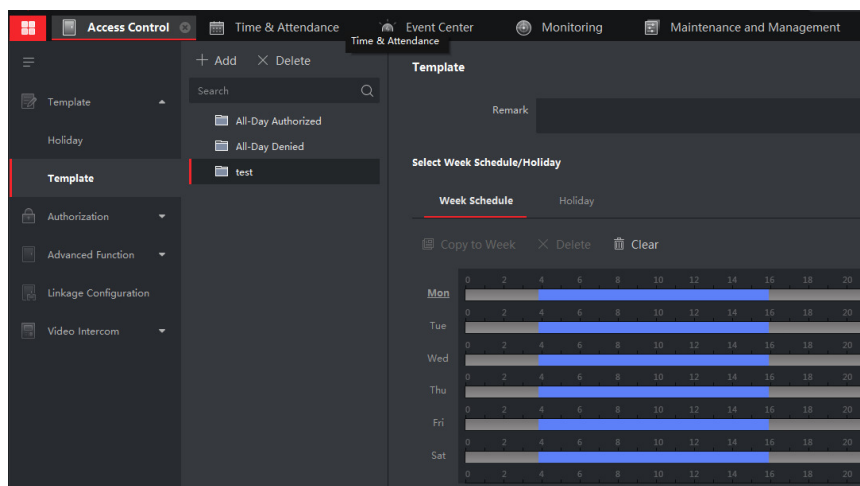
- Added support to amplify or narrow the door station scene when previewing or talking with the door station.



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<b>Action Required:</b>	None, Information Only				

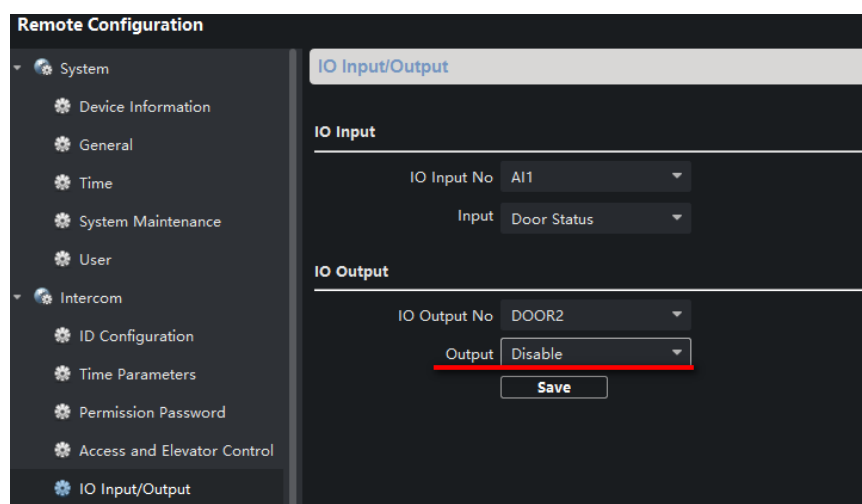


- Added support to create a template and holiday schedule and apply the access group to the door station.



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- Added support for alarm output signal trigger.
- > If I/O output 2 interface is disabled, output 2 can connect to a mechanical doorbell; pushing the door station button on the camera module will trigger a mechanical doorbell.



- Other Modified Parameters
  - N frame type for door station by default
  - DST obeys the North American transfer time by default.

**NOTE:** The default bias is 60 minutes.






Start Date: March second week Sunday 2:00 A.M.

End Date: November first week Sunday 2:00 A.M.

- Default time zone is GMT-8

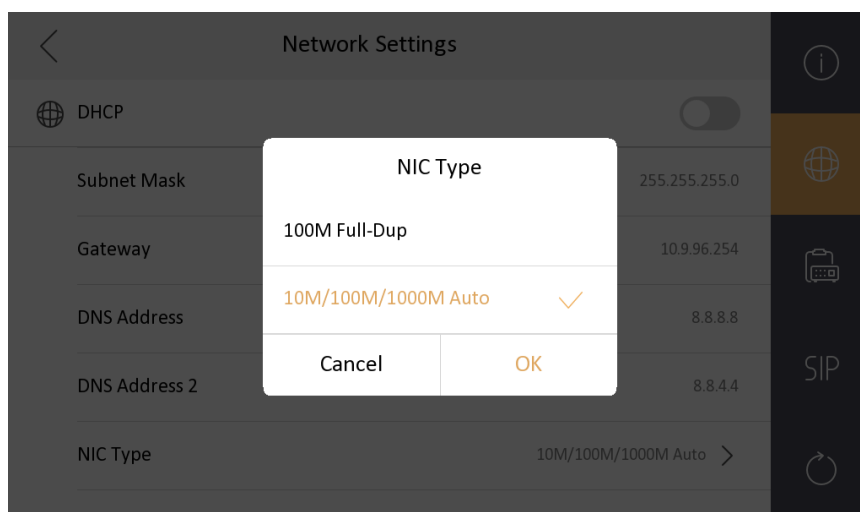
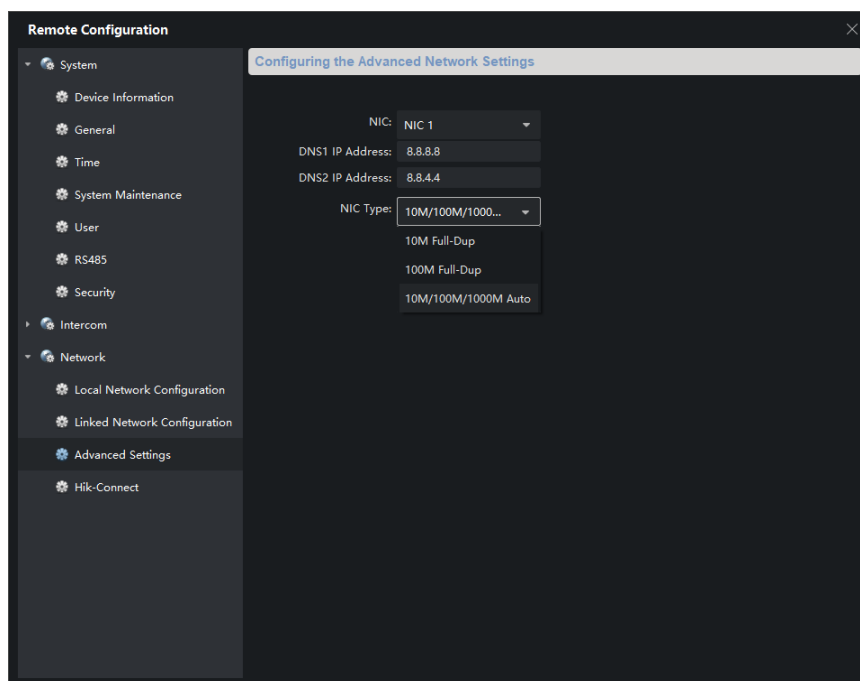
<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
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- NTP is enabled by default. Default NTP server will be time.windows.com. Time is synchronized automatically the door station is turned on. The time sync will be 24 hours.
- Added Support for Below Standard SIP Servers

Company Logo	SIP Server	Version	Interoperability		
			Video	Audio	Alarm Upload
	Asterisk	All	✓	✓	---
	Yeastar	All	✓	✓	---
	Minisip	v34/v36	✓	✓	✓
	Pbxware	v.4.1/v5.2/v5.3	---	✓	✓
	Brekeke	v3.4.9	✓	✓	---

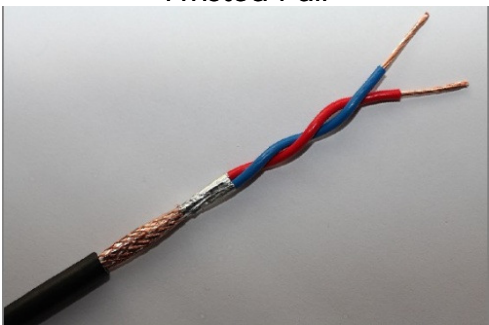
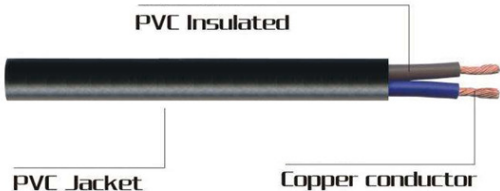
- 2-Wire Device
  - Added 10M, 100M, or AUTO communication in the indoor station network configuration interface or iVMS-4200 client configuration interface. It is used when the distance between two-wire devices is too long, resulting in slow adaptation.

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- Added support for long transmission distance, specifications below:

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Routing Path	Twisted Pair				Parallel Lines			
								
	24 AWG (0.2 mm <sup>2</sup> , 9Ω/100 m)	20 AWG (0.5 mm <sup>2</sup> , 3.5Ω/100 m)	18 AWG (0.8 mm <sup>2</sup> , 2.5Ω/100 m)	16 AWG (1 mm <sup>2</sup> , 1.5Ω/100 m)	24 AWG (0.2 mm <sup>2</sup> , 9Ω/100 m)	20 AWG (0.5 mm <sup>2</sup> , 3.5Ω/100 m)	18 AWG (0.8 mm <sup>2</sup> , 2.5Ω/100 m)	16 AWG (1 mm <sup>2</sup> , 1.5Ω/100 m)
DS-KAD706-S-P->DS-KAD706	Transmission Distance ≤60 m	Transmission Distance ≤60 m	Transmission Distance ≤60 m	Transmission Distance ≤50 m	Transmission Distance ≤35 m			
DS-KAD706-P->DS-KAD706	Transmission Distance ≤60 m	Transmission Distance ≤60 m	Transmission Distance ≤60 m	Transmission Distance ≤50 m	Transmission Distance ≤35 m			
DS-KAD706-P->DS-KD8003-IME2	Transmission Distance ≤35 m	Transmission Distance ≤60 m	Transmission Distance ≤60 m	Transmission Distance ≤50 m	Transmission Distance ≤35 m			
DS-KAD706-P->DS- KH6320-WTE2	Transmission Distance ≤35 m	Transmission Distance ≤100 m	Transmission Distance ≤100 m	Transmission Distance ≤100 m	Transmission Distance ≤50 m	Transmission Distance ≤100 m	Transmission Distance ≤100 m	Transmission Distance ≤100 m

### • Information for 2-wire Cables and Wiring

- When there are multiple cores in one parallel line, use only one pair of closed cores to transmit signal. Do not use multiple core pairs in one cable to transmit signal.
- When using parallel lines, use lines with a shielding layer. If dual core or multiple core parallel lines without shielding layers are routed, signal transmission stability can be affected. Run a test before installation.
- Cable impedance should not be more than the suggested value, or the distributor cannot transmit enough power to the indoor station or door station.
- Do not wire high voltage and low voltage in the same route; they need to be wired separately, with more than 0.5 meter distance between the two.

<b>Title:</b>	RN Intercom 2nd Generation INTERNAL 010720NA	<b>Version:</b>	Door Station: v2.08 Indoor Station: v2.12	<b>Date:</b>	010720
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<b>Action Required:</b>	None, Information Only				

**NOTE: 2-Wire Device Installation**

- Installation environment (temperature, moisture, etc.) needs to follow specification requirements or power output can be affected.
- Power consumption of modular door station (main module and sub modules) should be less than 12 W. Contact local technical support if you are not sure about power consumption of each module. Connect door station to CH6 of the video/audio distributor. If modular door station is connected to any terminal of CH1 to CH5, up to three sub modules can be connected.
- Connect indoor station to any CH1 to CH5 terminal of the video/audio distributor.
- Up to 15 video/audio distributors can be cascaded. If more distributors are needed, cascade a network switch supporting 1000 Mbps. The entire 2-wire system can have up to 500 devices.
- Power supply must be certified by Hikvision.

- **Function Optimization**

- The indoor station Wizard selects the first door station by default. If the door station is in the inactive state and you click **Finish**, activate the door station by using the indoor station password.
- The indoor station's default DNS address value has been corrected to DNS1: 8.8.8.8, DNS2: 8.8.4.4.



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<b>Action Required:</b>	None, Information Only				

- The indoor station local admin password is changed to the activation password, which is no longer the default 888999. The arming and disarming password cancels the default value. If there is no password, the iVMS-4200 and the local interface need to configure the new password.

**NOTE:** If the indoor station device is already activated, after upgrading the firmware the admin password will still be 888999. You must restore factory settings for changes to take effect.

- One system supports a maximum of three **Public PINs**.
- Each residential system supports a maximum of one **Private PIN** per indoor station.

## ■ 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 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.