AX PRO

Version: V1.2.7

Release Note

(2022-06-13)

1. Firmware Basic Information

Firmware Basic Information	Firmware Version	V1.2.7_build220804
	Device Type	DS-PWA64-L-WE/WB DS-PWA96-M-WE/WB DS-PWA96-M2-WE/WB DS-PWA96-M2H-WE/WB

Notes:

1. Please update firmware to the latest version to ensure the perfect user experience.
2. For installers, it is recommended to install and maintain devices via Hik-ProConnect.

2. V1.2.7 Upgrade Note

2.1 Added Function:

#### 1) Added SIM card cellular query and network detection functions

The currently used SIM card can perform cellular query and network detection.

2) APP new functions

(a) Notification by Email function is extended to two mailboxes, which can be the main mailbox at the same time, and can be configured as the main and backup mailbox. The configuration method is the same as WEB interface.
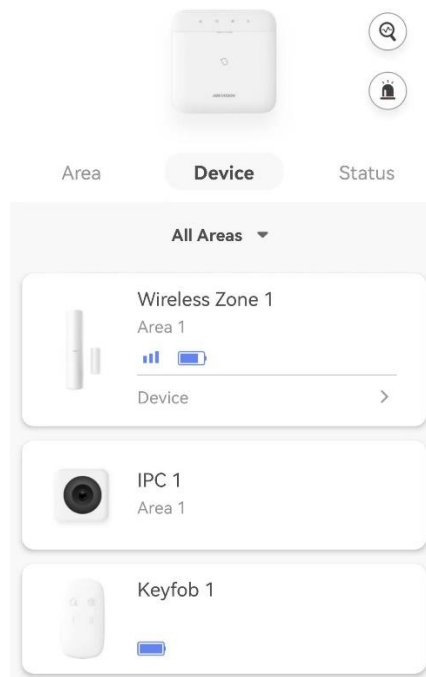
(b) Added IPC status display: (1)The APP displays the added IPC and its status in the device list, including online or offline status, alarm trigger status, and associated areas, zone type logos are consistent with detectors. (2) After the IPC occurs an alarm, the device list and the area card will display the alarm icon, which is consistent with the detector alarm display.

(c) Support SADP scanning to add the IPC, the configuration method is consistent with the WEB interface.

(d) Supports import a custom common voice: HC/HPC supports import common voice and delete common voice. Supports users to record their own voice as common voice. When the user receives an alarm call, the voice broadcast sequence is Common Voice + the original alarm broadcast voice.
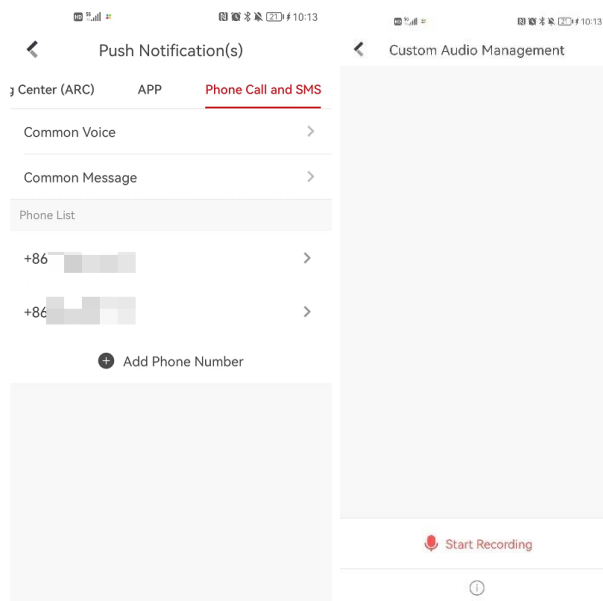
(e) The homepage of Hik-Connect device display adds a shortcut key for stay arm, which can quickly operate stay arm.

### 3) Multi Transmitter supports dual-zone tampering function

After the Dual-zone function is enabled, the circuit breakage of the entire zone is determined as a tamper trigger. After the tamper is triggered, push the tamper alarm notifications of the two zones and record the logs.

4) Supports RDC and IDS protocols to access ARC

(a) Added RDC Module and IDS Module protocols to the ARC protocol options on the APP and WEB interface. When selecting the RDC protocol doesn't display any parameters. When selecting the IDS protocol, need configure the Account Code, which is 4 bytes long and is empty by default.

(b) If the configuration reporting protocol is RDC Module or IDS Module, the panel communicates with the third-party module through the reserved serial port. (FSK/RDC/IDS can only be configured in ARC1 or ARC2, can't be at the same time, and RDC/IDS only can be used as the main channel.)

Notice: After the main channel selects FSK/RDC/IDS, the configuration of the backup channel is allowed, but it will not take effect in practice.
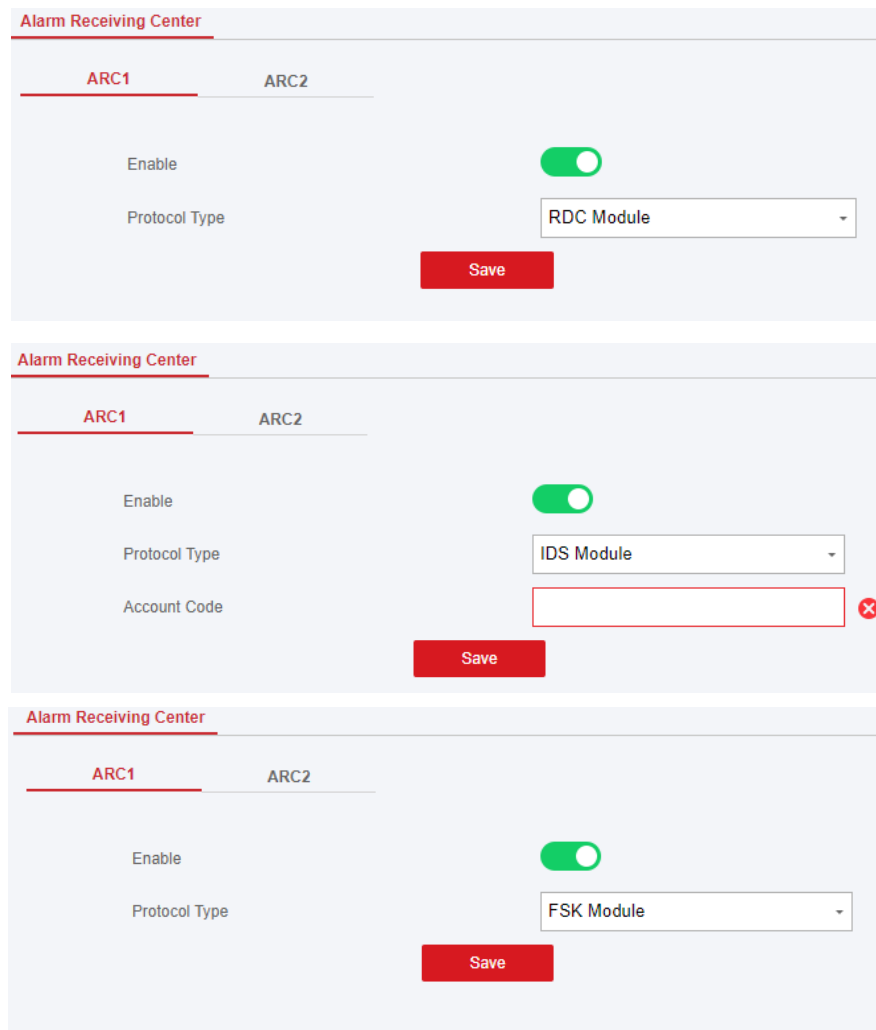
5) Added sensor fault report

When the panel receives the sensor fault uploaded by the detector, it immediately uploads the fault event. (Whether the panel is armed or disarmed, report it directly)

Notice: Sensor fault CID code: Hik-Code 380, STD code 380

6) LCD wireless keypad new functions

(a) Added area configuration permission in the user configuration interface

(b) LCD wireless keypad new added languages: Czech, Slovak, Greek, Polish, Hungarian, Croatian, Serbian, Romanian, Hebrew, Turkish, Dutch

7) Added detector logging and acquisition

(a) Add custom debug commands for remote log collection. After issuing commands to the panel through the platform tool, the panel obtains statistical log information from the specified detectors and peripherals and then generates a file and reports it to the log server.

(b) When an abnormality such as high power consumption protection restart occurs in the detector, the abnormal log is uploaded to the panel. After receiving the abnormal log information, the panel generates a log file to store and record the web log. Obtain the detector exception log file through the custom debug command collected by the remote log.

(c) The maximum time for the abnormal log of the panel cache detector is 72 hours, and it will not be saved when the power is lost. Logs are automatically deleted after being retrieved through the remote log collection function.

Notice: detectors and versions that support this function are as follows:

Cam-X Protocol:

①DS-PDPC12P-EG2-WE(B)/WB(B)，DS-PDPC12PF-EG2-WE(B)/WB(B) V1.0.0
②DS-PDTT15AM-LM-WE/WB V1.2.0

Tri-X Protocol：

<1> DS-PDMCS-EG2-WE/WB V1.2.0
<2> DS-PDWL-E-WE/WB V1.2.0
<3> DS-PDCL12-EG2-WE/WB V1.2.0
<4> DS-PDBG8-EG2-WE/WB，DS-PDPG12P-EG2-WE/WB V1.2.0
<5> DS-PDMC-EG2-WE/WB V1.2.0
<6> DS-PDEB1-EG2-WE/WB，DS-PDEB2-EG2-WE/WB V1.2.0
<7> DS-PDEBP1-EG2-WE/WB，DS-PDEBP2-EG2-WE/WB V1.2.0
<8> DS-PDP15P-EG2-WE/WB，DS-PDC15-EG2-WE/WB V1.2.0
<9> DS-PDC10AM-EG2-WE/WB，DS-PDC10DM-EG2-WE/WB V1.2.3

Notice: This function is supported only if the detector version is at least the version listed

8) Add New multiple language

Support more multiple languages: Lithuanian, British English

9) Added manual snapshot timeout event

After the user operates the manual snapshot, the panel can't get the image data within 120s or fails to capture the image, panel will uploads a manual snapshot timeout event, indicating that the operation failed to capture the image. The upload method is EZVIZ (non-CID) notification. (The content of the EZVIZ report message is: Manual Snapshot Timeout).

10) Added default connection scheme for SIP intercom

Intercom setup and intercom switching self-adaptation supports multiple methods

(a) Intercom establish: ①Supports the ARC platform to initiate SIP calls directly, without the need for alarm timestamps. The intercom session duration is calculated at the current time and lasts for the configured duration. (Max 15mins); ②Support the ARC platform to send intercom review request through SIP MESSAGE, and send the alarm occurrence time to the device. If the device judges that it is within the alarm review time, it will return to allow intercom, and the platform will initiate an intercom call. The intercom session duration is calculated from the timestamp published by the ARC and lasts for the configured duration. (Max 15mins)

(b) Intercom switching: ①Support RFC2833 method to switch listening and speaking mode. By parsing the DTMF data carried by the RTP data packet (the PT value is 101 by default), the listening and speaking switching instructions are obtained, and the mode switching is performed; ②Support to obtain switching instructions and perform mode switching by parsing the DTMF data carried in the signal field in the SIP INFO data packet.
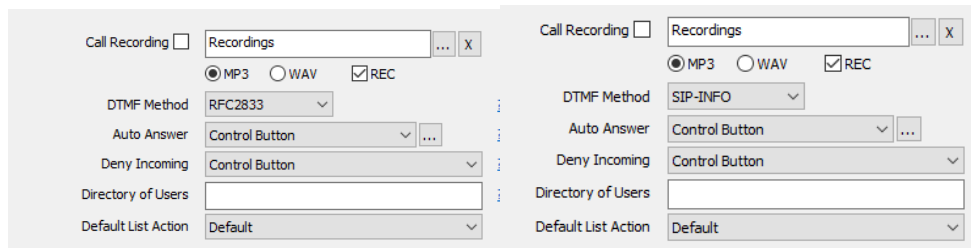
Notice： The above methods of intercom set up and intercom switching are supported at the same time, and no additional configuration is required. The third-party can establish an intercom with the panel and successfully switch the listening and speaking mode according to any one of them.

2. Feature Optimization:

1) **Optimization the translation of the USSD query function in the mobile network configuration interface**

2) **Detect Network Camera Disconnection function optimization:**

(a) When the panel isn't connected to the IPC, the detection items related to the IPC in the system fault check page and the arm options page will be hidden.

(b) When the panel is connected to the IPC, the detection items related to the IPC in

the system fault check page and the arm options page will be display.

3) APP function optimization

(a) Admin configuration permission optimization: Open the panel volume and (indoor/outdoor/intercom) sounder volume configuration permissions to the Admin. Whether the admin is managed or not has this configuration permission.

(b) Optimization of the panel cloud upgrade:

(1) For AX PRO-L devices, when the device upgrade is triggered on the APP/Portal, first query the cloud network type used on the device. If it is a 2G network, a pop-up box will prompt "Cellular the upgrade is unstable and takes a long time. It is recommended to switch the device to Wi-Fi or wired network to upgrade." Users can choose to cancel the upgrade or continue the upgrade according to the prompts.

(2) During the upgrade of the APP/Portal device, after the device is disconnected and reconnected from EZVIZ, the upgrade status will be displayed correctly.

Notice: For AX PRO-L devices included DS-PWA64-L-WE/DS-PWA64-L-WB

(c) The name of the LCD keyboard swipe authorization configuration item is changed to Authority

4) Anti-Masking alarm configuration and logic optimization

(a) The Anti-Masking function supports the following configurations:

Anti-Masking switch configuration, ON/OFF, the default is ON,

If it is turned on, the following parameters can be configured: ① AM Mode, optional parameters Alarm Only When ARM/Alarm When ARM or DISARM, the default is Alarm Only When ARM. ② AM Pulse Interval, the optional parameter is 5s/30s/60s/120s, and the default is 120s. (Single-channel transmitter does not include this configuration item) ③ AM Delay Time, optional parameter 5/10/15/20/25/30/35/40/45/50/55/60s, default 60s . ④ AM Sensitivity optional parameter Low/Normal/High, the default is Low. (Single-channel transmitter doesn't include this configuration item).

(b) After the Anti-Masking function is enabled, the Anti-Masking alarm will be triggered only if the following two conditions are met: (1) the device arming and disarming status conforms to the AM Mode configuration. (2) After the masking is triggered, it doesn't recover within the Delay Time (notice：① The Anti-Masking alarm is also limited by the Swinger Limit Activations configuration (but the Anti-Masking alarm will not count the Swinger Limit Activations). When the number of triggers numbers the value configured by the Swinger Limit Activations, after the system disarmed, the detector will decide according to its own AM Mode configuration. Whether the AM alarm can be uploaded. ②The detector detects whether there is a masking according to the AM Pulse Interval time interval. When the masking is detected, and the arm and disarm status of the device conforms to the AM Mode configuration, and doesn't recover within the AM Delay Time, an Anti-Masking alarm will be triggered. Otherwise, Anti-Masking alarm will not be triggered.

5) Local users logic optimization

(a) The device comes with a local admin and installer accounts by default. You can search for and activate the local admin account through the SADP.

(b) After the panel is activated, the local admin has all web configuration permissions by

default. If the admin doesn't enable the installer, the admin always retains the configuration authority; if the local installer is enabled and the web is logged in through the installer, the local admin loses the configuration authority, and the configuration authority is transferred to the local installer. (After the local installer is disabled, the local admin regains configuration permissions)

(c) If the panel isn't added to the cloud account, the local admin and installer accounts can always be used. If you use Hik-Connect or Hik-Proconnect to add a panel, the cloud account will overwrite the local account, but the configuration permissions will remain unchanged, only account changes.

(d) Cloud users and local users share user capability sets

(e) The content of the prompt on the web login page is changed to "Log in with your local account or APP account."

(f) Local admin and installer can create new operators through the web/LCD keypad, add cards, key fobs and configure permissions.

(g) The APP doesn't display the information of the local admin and local installer, but can display the local operators information.

Notice:① The default Installer account name and some admin account names will change with the panel language version.

```
English     admin     installer
Russian     admin     монтажник
Italian     asmministratore   installatore
French      admin     installateur
Portuguese  admin     instalator
Spanish     admin     instalador
German      admin     errichter
Polish      admin     instalador
Czech       admin     εγκαταστάτης
Greek       admin     kurulumcu
Turkish     admin     technik
Hungarian   rendszergazda   telepítő
Slovak      správca   inštalátor
Dutch       Administrator   installateur
Romanian    admin     instalator
Danish      administrator installatør
Swedish     admin     installatör
```

Norwegian Admin　installatør
Croatian　admin　instalacijski program
Slovenian　administrator vzdrževalec
Serbian　administrator instalater
Lithuanian administratorius　įrengėjas
Brazilian Portuguese　admin　instalador
Ukrainian admin　установник
Bulgarian　админ　Инсталатор
Hebrew　מערכת מנהל　מתקין

② Only one admin and installer are allowed on the device, and cloud and local accounts aren't allowed to exist at the same time.

6) Holiday Exception function optimization

Increased the number of Holiday Exceptions to 12.

7) DS-PDTPH-E-WB/WE function optimization

When a zone alarm is triggered (excluding tamper alarm), according to the configuration of the detector, it records whether it is an above temperature alarm or a below temperature alarm, the notification uploaded to the APP and ARC includes the temperature value that triggered the alarm, and the temperature value that triggers the alarm is also recorded in the web log.

8) System Fault Check function optimization

(a) On the APP/WEB, the System Fault Check configuration items is optimized to detect only panel faults, excluding peripherals and detectors. The specific adjustments are as follows: (1) Detect Network Camera Disconnection, add configuration item ON/OFF, default ON; (2) Panel Battery Lost, add configuration item ON/OFF, default ON; (3) Panel Low Battery, add configuration item ON/OFF, default ON; (4) LAN Lost, add configuration item ON/OFF, default ON; LAN Lost

Delay, parameter is 0-600s, default 180s; (5) WiFi Lost, add configuration item ON/OFF, default ON; WiFi Lost Delay , the parameter is 0-600s, the default is 180s; (6) Cellular Lost, add the configuration item ON/OFF, the default is ON; Cellular Lost Delay, the parameter is 0-600s, the default is 180s; (7) Panel Mains Power Lost, add the configuration item ON/OFF, the default is ON; (8) Panel Mains Power Loss Delay, the parameter is 0-43200s, the default is 10s.

(b) Panel Mains Power Lost only detects the main power of the panel, not the main power of the Multi-Transmitter, repeater, and outdoor sounder.

(c) Added LAN Lost Delay/Wi-Fi Lost Delay/Cellular Lost Delay configuration items. When a wired, Wi-Fi, or cellular disconnect is detected, the report will be delayed according to the configured delay time. If the corresponding network returns to normal within the delay period, the network failure will not be reported. (Notice:(1) During the delay period after the network is disconnected, it will be treated as the network is connected. When the network disconnection is confirmed and recorded after the delay is over, it will be regarded as a fault and then presented. Other similar (delayed confirmation) situations are handled in the same way. (2) The IPC disconnection detection delay is reported, and the detection delay time of the wired network disconnection is reused.)

(d) On the APP/WEB, the configuration items on the Arm Options page are modified to be the same as those on the System Fault Check page. The specific adjustments are as follows: （1）Device Lid Opened；（2）Zone/Peripherals Poll Failure/Offline；（3）Zone/Peripherals Low Battery；（4）Zone Triggered/Fault；（5）Detect Network Camera Disconnection；（6）Panel Battery Lost；（7）Panel Low Battery；（8）LAN Lost；（9）Wi-Fi Lost；（10）Cellular Lost；（11）Panel Mains Power Lost；（12）Peripherals Mains Power Lost；（13）ARC Connection Fault；（14）Jamming Check.

(e) Added the Peripherals Mains Power Lost configuration item, a prompt is added below the configuration item, indicating that this configuration item is only for repeater, Multi-Transmitter. (Notice: The repeater and the multi-transmitter battery are disconnected, and the configuration item of Peripherals Mains Power Lost is

reused.)

9) Tag reader and keypad operation optimization

(a) Use the card reader or LCD keypad to swipe the card to arm and disarm, clear the alarm, and patrol. The CID message reported by the panel to the APP and ARC will include the device name of the card reader or LCD keypad, and the device information of the card swiped will be displayed in the APP notification.

(b) When using the keypad arm and disarm the system, the panel reports CID messages of APP and ARC with the device name of the keypad.

(c) When swiping the card in the panel, the CID message reported to the APP and ARC will have the panel information, and the APP will also display it.

10) Automation module configuration optimization

On the Automation configuration page, after selecting Alarm and Zone Alarm & Lid Opened in the scene setting, and selecting the door sensor type detector zone (excluding the key zone), the disarm linkage configuration item will be displayed. After selecting the disarm linkage configuration item, when the MC detector zone is triggered and restored, the linkage control logic remains unchanged in the armed state, and the MC detector zone is triggered and restored in the disarmed state and is linked to Automation open and close the output.
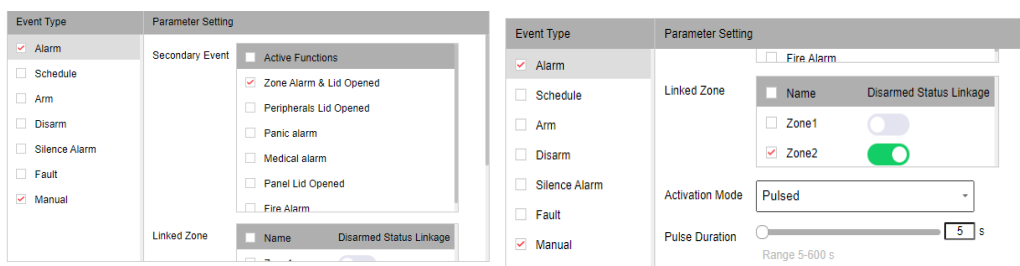
11) Detector power consumption optimization

(1) Optimize the power consumption of motion detectors, mainly including the following detectors:

DS-PDD12P-EG2-WE/WB，DS-PDP15P-EG2-WE/WB，DS-PDPG12P-EG2-WE/WB，

DS-PDC15-EG2-WE/WB，DS-PDPC12P-EG2-WE/WB，DS-PDEBP1-EG2-WE/WB，

DS-PDEBP2-EG2-WE/WB，DS-PDEB1-EG2-WE/WB，DS-PDEB2-EG2-WE/WB，

DS-PDCL12-EG2-WE/WB，DS-PDC10DM-EG2-WE/WB，DS-PDC10AM-EG2-WE/WB

These optimizations don't require upgrade the detector firmware.

⑵ Optimized to reduce power consumption for non-linked output detectors. For Tri-X peripherals and detectors without linkage output function, turn off their Rx-Wake function when arming, and turn it on again when disarming(These optimizations don't require upgrade the detector firmware).

Notice: Since Rx-Wake doesn't take effect immediately and needs heartbeat synchronization, operations such as configuration and control will not respond immediately after it is enabled, and the upgrade operation may time out.

12)Important Alarm Type Extensions

(a) All alarm types supported can be set as important alarms.

(b) The APP report configuration page on the APP/WEB adds important alarm selection configuration items, you can choose to configure the zone alarm, peripheral tamper alarm, panel tamper alarm, emergency alarm, medical alarm, fire alarm, gas leakage alarm, intelligent event alarm. Among them, fire alarm, medical alarm, and emergency alarm are configured as important alarms by default.

13)Detector sensitivity adjustment

APP/WEB interface, BG/PIR BG/MC Shock detector configuration page, the sensitivity configuration item is uniformly adjusted to 8 gears. The available values are 1/2/3/4/5/6/7/8. The larger the value, the higher the sensitivity. The default value is 4.

Notice: this function need upgrade the detector firmware.

14)Optimization of the way to add outdoor detector components

(a) Support automatic registration of Camera components.

(b) Modify the event name (External Probe Disconnected/Connected) of the CID (144) of the probe plugging and unplugging to External Module Disconnected/Connected, so that the plugging and unplugging of Camera components and the plugging and unplugging of temperature and humidity detector probes can reuse this event.

Notice: The panel only allows the Camera component to register automatically when it is in the disarmed status (the state that allows enter the enrollment mode). In the mode of walk test, zone test, signal query, device locked, health monitoring, Find Me, repeater pairing, device upgrade, card registration, arming, intercom, keyboard configuration, etc., the automatic registration of camera components is prohibited.

15) LCD keypad optimization

(a) Batch operation optimization: (1) When operating relays in batches, the LCD keypad can display the success or failure of the operation, and show which relays operate successfully and which fail; (2) When arming and disarming areas in batches, the LCD keypad can display the success or failure of arming and disarming, and shows which areas arm and disarm successfully and which fail.

(b) The name of the company and telephone number of the LCD keyboard, the maximum length is adjusted to 30 bytes.

16) Web log information optimization

(a) If the WEB log involves user information and device index information, modify it to be same as the information in the CID message, use a unified device number and present it in the log.

(b) The original index information is retained, and only the device number is recorded in the additional information. Add device numbers to newly added and modified log items.

17) ATP fault check optimization

(a) For SIA and ISUP protocols, use the heartbeat packet in the protocol to periodically communicate with the server to check whether the link is smooth.

(b) For CSV-IP protocol, use periodic network connection to detect whether the network is smooth.

Notice: For SIA and CSV-IP protocols, use the wired or Wi-Fi network for 10 minutes to check whether the connection is smooth, use the mobile network (when the wired or Wi-Fi network is disconnected) to check whether the connection is smooth for 20 minutes, and (when the wired or Wi-Fi network is unblocked) for 60 minutes. The ISUP/SDK heartbeat time is configured by the platform

18) Intercom sounder status optimization

(a) When the main power of the intercom sounder is disconnected/recovered, the information is reported to the panel, and the panel synchronously updates the main power status of the intercom sounder, and uploads CID events and records.

(b) APP/WEB can display the main power disconnection information of the intercom sounder.

Notice: The battery power and battery disconnect/recovery of the intercom sounder are the same as those of the outdoor sounder, and will not be displayed when there is main power supply.

19) Peripheral upgrade failure prompt optimization

The reasons for the failure of the peripheral upgrade are as follows: the peripheral power is low; the signal is unstable and needs to be approached the panel; the device doesn't exist; the network environment is poor, and the upgrade file download fails; the upgrade file format is incorrect; the device is offline; the device is forwarded by the repeater.

20) Ukrainian translation optimization

21) Fixed the problem that the flashing light of the key fob can't be stopped

22) IP-Receiver PRO intercom optimization

(a) It is forbidden to turn on the intercom and add a prompt during the panel uploading pictures. (The detector is uploading pictures. The two-way audio function is unavailable. Please try again later.)

(b) During the intercom, it is forbidden to pass pictures and add a prompt. (Pictures cann't be uploaded by the detector right now because two-way audio is in process.)

23) Reduce APP login time and improve response speed.

24) Peripherals upgrade failure optimization

If the upgrade of peripherals and detectors fails, the panel will mark the device. When the device is deleted, it will remind the user again, "The device can't be used normally, and it can't be registered to the panel after deletion. Please try to upgrade the device again and ensure that update successes"

25) Added description for Final Door Exit Function

On the English version of the web page, a prompt description has been added to the

Final Door Exit function of the MC detector: The final door exit configuration only takes effect when using keypads or tag readers to arm.

26) Tag reader and LCD keypad function optimization

(1) Optimized the flashing light of the tag reader. The A1-A4 indicators on the tag reader are displayed in sequence according to the area associated with the tag reader. If the card reader is associated with area 4 and 6, and the card is associated with 3, 4, 5, and 6, the tag reader will display A1 and A2 indicators.

(2) In the simple mode of the tag reader, the double swipe function is removed to shorten the waiting time of the card swipe operation. The standard mode remains unchanged and still has the dual-swipe function.

(3) In the simple mode of tag reader and LCD keypad, swipe the card once to clear alarm and disarm the panel.

27）Fix sensor failure false alarm problem

28）Fixed the problem of abnormal communication with the RDC module

29）Optimize the repeater forwarding function of domestic PIRCAM and Outdoor

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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.

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