

# AX PRO

## Version: V1.2.8

### Release Note

### (2023-01-14)

## 1. Firmware Basic Information

|   |                  |   |
|---|------------------|---|
| <b>Firmware<br/>Basic<br/>Information</b> | Firmware Version | V1.2.8_build230110  |
|   | Device Type      | DS-PWA64-L-WE/WB<br>DS-PWA96-M-WE/WB<br>DS-PWA96-M2-WE/WB<br>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-Partnerpro.

## 2. V1.2.8 Upgrade Note

### 2.1 Added Function:

#### 1) Add New multiple language

Support more multiple languages: **Estonian**.

#### 2) Cellular data optimization

When the device uses the mobile network to communicate, the system adds a firewall to block external programs from accessing the device ports, thus reducing cellular data consumption.

#### 3) New Double PIR Detector

Supports new double pir detector DS-PDP18-HM-WE/WB

- (a) Supports three ways to add to the panel through the enrollment mode, scanning code and adding by serial number

- (b) Supports following operations: Find Me, signal test, zone test, bypass.
- (c) Supports following functions: Alarm and tamper detection, support offline and heartbeat time-out detection, low battery detection, support healthy detection.
- (d) Supports wireless upgrade the firmware.

#### **4) New 180° PIRCAM detector**

- (a) Supports three ways to add to the panel through the enrollment mode, scanning code and adding by serial number.
- (b) Supports following operations: Find Me, signal test, zone test, bypass.
- (c) Supports following functions: Alarm and tamper detection, support offline and heartbeat time-out detection, low battery detection, support healthy detection.
- (d) Supports wireless upgrade the firmware.
- (e) Support alarm capture uploading: alarm capture, tamper alarm capture, manual capture, linkage capture, anti-masking alarm capture, these captures will uploading to the platform by the panel.
- (f) There are three types of power supply: external DC source, rechargeable lithium battery, CR123A dry battery, the detector will report to the panel which power supply method is currently in use. If powered by DC power, the APP displays the plug icon; if powered by lithium batteries, the APP displays the battery pack icon and the percentage of power to the right of the icon; if powered by CR123A dry batteries, the battery icon is aligned with that of the outdoor detector. The zone status page on the webpage distinguishes between the battery supply methods and shows the charge level of the different batteries.

**Notice:** (1) When an alarm occurs on the left or right side of the detector, and when reporting pictures related to the panel, it is necessary to distinguish between alarms generated on the left or right side, and when displaying alarm pictures on the client and the server, it is also necessary to distinguish between left and right alarms.

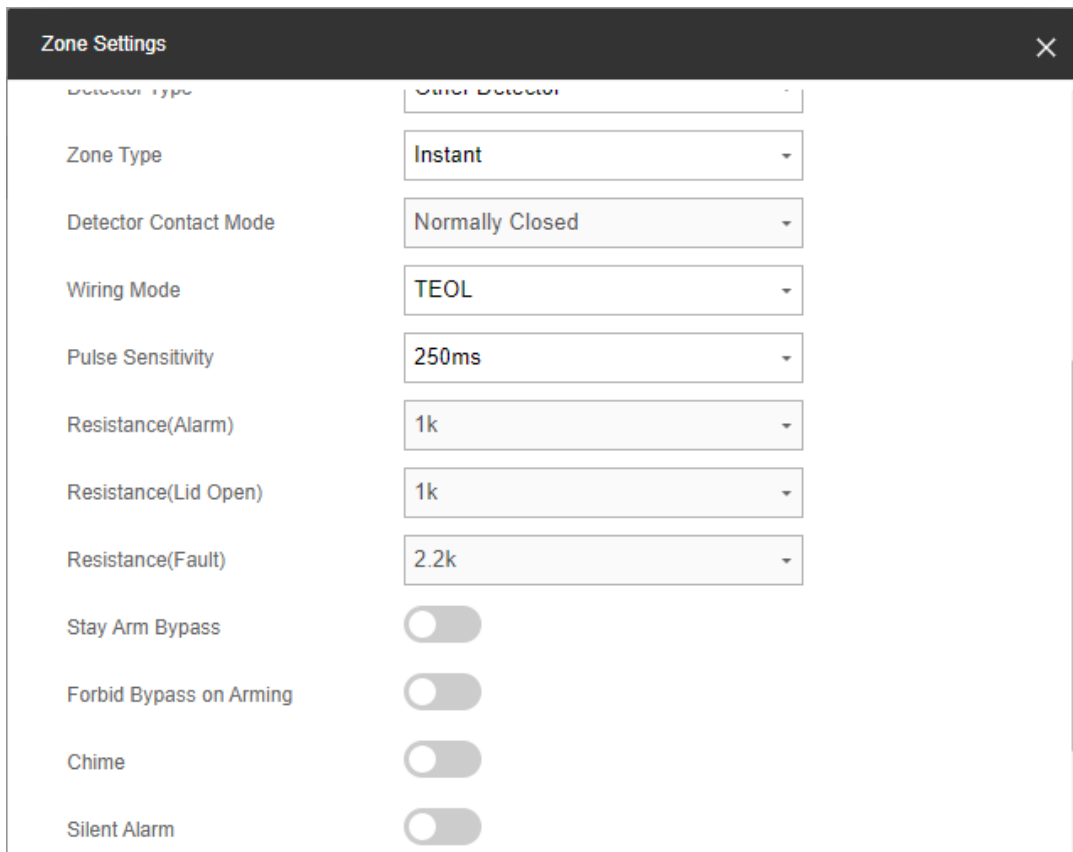
(2) The images reported by the detector are processed in two channels, left and right, but the images or video will be associated to an alarm message pushed to each server. After the alarm message is reported to the cloud and FTP Server, two URLs will be returned and both URLs will be attached to ARC messages for ARC to review the video.

(3) When the Hik-Connect client displays the composite video on the alarm message page,

the playback screen plays both the left and right alarm videos simultaneously.

### 5) Multi Transmitter and M2H panel wired zone support TEOL function

Multi Transmitter and M2H panel wired zone support TEOL function.



- (a) Alarm resistance value is 1k, Lid Open resistance value is 1k, Fault resistance value is 2.2k
- (b) Supports through 3EOL way to connected the wired detector;
- (c) Supports following types of alarms: alarm, lid open, anti-masking /fault.
- (d) When choose the TEOL, the zone supports configured Anti-Masking, AM mode, AM Delay Time.

### 6) Increased number of the IPC accesses

(a) The number of IPC that can be accessed by the panel has been increased to 16 channels. Each channel can upload intelligent alarm events, but only up to 4 channels can upload video verification video. (The L and E models support up to 2 channels, the M model supports up to 4 channels)

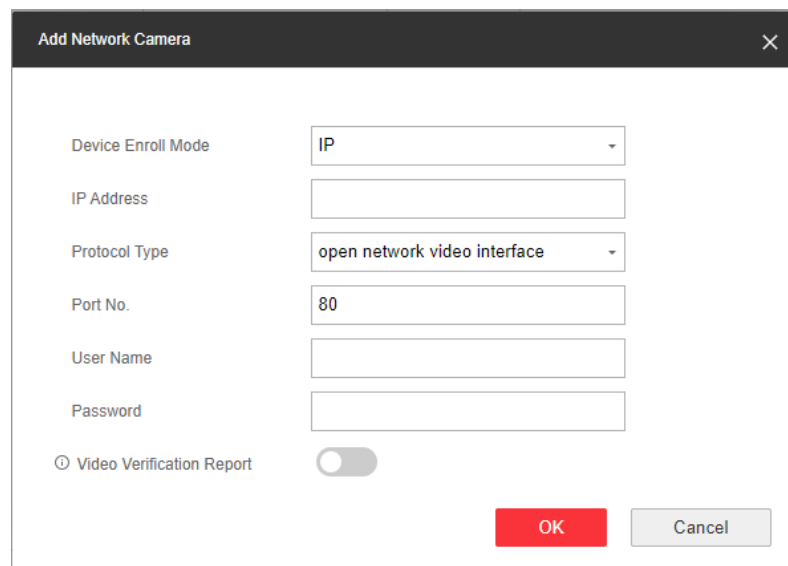
(b) When adding an IPC, you can choose whether to enable video verification reporting, if enabled, it will reported video when the alarm is generated or the IPC is disconnected,

otherwise it will not. The default is enabled.

(c) In the IPC configuration page of the app or webpage, add the enablement item for video verification report.

(d) Add icons for video verification report function enabled IPCs in the device list screen of the app and on the overview page of the web site

(e) The selection list of zone linked IPCs shows only those IPCs with video verification report enabled, If the zone is already associated with an IPC, after disabled the video verification function of that IPC, the IPC that the zone is already associated with remains unchanged, except that the video review function of the IPC is disabled when the zone triggers an alarm.



**Notice:** (1) ONVIF protocol changed to "Open Network Video Interface";

(2) Panel isn't support the IPC to report smart alarm events via ONVIF protocol, in the smart event report configuration page, if enabled, add the notice "This push is only valid for IPC using the Hikvision protocol".

## 7) Supports for displaying the status of wired inputs

(a) Multi Transmitter, single transmitter and standard MC wired input is triggered and restored, the panel reports the trigger and restore status to the Cloud

(b) The APP receives the message and uses the open and close door icon to represent the triggered and restored states.

## 8) Hik-Partnerpro supports manual capture

- (a) After the HPP adds the panel, if only the HPP account exists in the device, the HPC can manually capture through the HPP; if the HC account exists in the device through transfer or authorization, the HPP can't manually capture.
- (b) The PIRCAM configuration page on the HPC adds a field of view correction operation option, which jumps to a new manual capture page when clicked, When manually capturing a picture on this page, the action prompt is presented together with the picture

## **9) Keypad supports chime function**

- (a) Chime Indication configuration item added to LED/LCD keypad configuration page.
- (b) If enabled, the keypad will prompt a ding-dong doorbell sound when the chime zone is triggered. If disabled, there is no alert. Default is disabled.
- (c) LED keypad version 1.6.0 above (not included 1.6.0), LCD keypad version 1.0.2 above (not included 1.0.2) support this function.

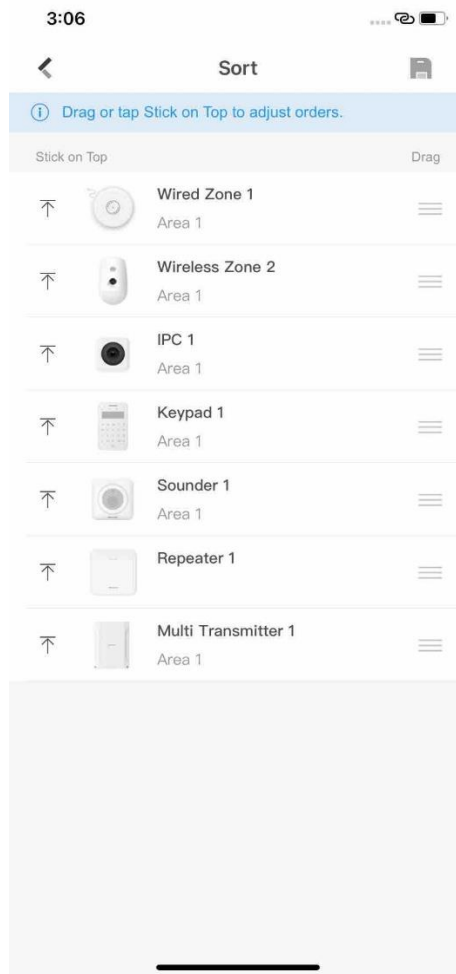
**Notice:** (1) The keypad chime has a long doorbell and a short doorbell, which is determined by the configuration of the linked zone to determine whether the long or short doorbell is triggered. (The logic is the same for sounder);

(2) The chime function is linked in the same way as the alarm linkage, only the sound is different.

## **10)The display order of the device list in the Hik-Connect can be customized**

- (a) HC can customize the order of devices in the device list page, allowing free adjustment.
- (b) After the adjustment is complete, HC sends the adjusted order of the user to the device, which stores the list order according to the user information and saves it when power is off. Subsequently the user logs into the device via HC will load the device and display it to the list in the order of the stored memory.

**Notice:** Only admin and operator users are supported to reorder the device list on HC, installer users don't have this permission.



### 11) Page load failed, add retry button

- (a) When loading a page failed, the Retry button is displayed, prompting the user to try again.
- (b) After clicking the retry button, the app re-executes the page load action and gets the information.

### 12) Multi-language switch mechanism optimization

Reduces firmware packages during app upgrades or when switching devices languages, improving upgrade efficiency.

## 2. Feature Optimization:

### 1) Dual zone tamper-proof function

- (a) Dual zone wiring mode adjusts to only support series NO, NC connection.

The corresponding alarm resistance values are as follows:

<1> NC connection:

Normal —— 0  
Zone1 Alarm —— 2.2 K  
Zone2 Alarm —— 8.2 K  
Zone1 Alarm, Zone2 Alarm —— 10.4 K  
Tamper —— ∞  
<2> NO connection:  
Normal —— 10.4 K  
Zone1 Alarm —— 8.2 K  
Zone2 Alarm —— 2.2 K  
Zone1 Alarm, Zone2 Alarm —— 0  
Tamper —— ∞

(b) As the old version of Multi-Transmitter (V1.0.1 and before) supports parallel connection, the new version of Multi-Transmitter (V1.0.2) does not support parallel connection, so when updating Multi-Transmitter, Web/App should prompt the user to change the wiring mode to avoid false alarms directly after the update.

**Notice:** The new version of the Multi-Transmitter (V1.0.2) and the baseline historical version of the M2H panel on-board Multi-Transmitter do not support parallel connection, users need to change the wiring mode to series before updating to avoid false alarms.

## 2) System Fault Check configuration optimization:

Add IP Camera Lost Delay configuration, the parameters are 0~600 s, default 180 s, the delay time is no longer multiplexed with LAN lost Delay.

## 3) Statistical collection of critical logs information for detectors and peripherals:

The device extracts critical information from heartbeats/alarms etc events or operations, and at 00:00 each day, counts the number of critical messages collected throughout the day. Critical information include: average voltage value, peak voltage value, peak temperature value, average signal strength value, peak signal strength value, number of anti-tamper triggers, number of faults, number of remote operation Find Me/Signal Test/Zone Test, number of alarms (push

button/swipe), number of linkages (picture capture), number of received messages, rolling code change value, etc.

#### **4) Peripherals update abnormal prompt:**

(a) In the condition restrictions for peripherals update, the restriction of battery low voltage on updates is removed and updates are allowed when the battery power level is above 50%.

(b) The updates are only allowed when the signal strength is not lower than 80, below 80 the prompt "When updating, please place the device as close to the panel as possible to ensure signal stability".

#### **5) Optimization of the keypad to display company and phone number**

On the App/Web/LCD keypad, the company name and phone number configuration options have been changed to Text 1 and Text 2 configuration options, which are not must be filled in (the LCD keypad needs to be updated to version 1.0.3).

**Notice:** Text 1, Text 2 configuration options can be filled with company name, company contact information or other information.

#### **6) Tag reader and LCD keypad optimization ( the LCD keypad needs to be updated to version 1.0.3 ):**

(a) The LCD keypad in Simple Mode can be Forced Arming by password and swipe card.

(b) The LCD keypad in Simple Mode, enter the password and # to display the areas list and support select areas.

(c) Tag readers tamper alarm, normal linkage alarm, swipe the invalid card are to flash orange light, and issued a "di" sound, after the end of the prompt continue to sound the alarm

#### **7) IPC Arming and Disarming control optimization:**

The alarms generated by the connected IPC or NVR channels are filtered, and only the alarm messages of the channels connected by the panel are reported, while the alarm messages generated by the channels not connected are not reported.



**Notice:** <1> NVR model for I series: DS-7608NI-I2/8P. (New model added in V1.2.8. Based on this model achieve audible and visual alarm control); <2> The historical version supports access to NVR models have I series, K series, all of Q series, currently only support DS-7708NI-Q4/8P, DS-7708NI-K4, DS-7732NI-I4/24P.

## **8) Keyfob area configuration:**

(a) Add areas configuration option to the keyfob configuration interface. The configurable range is all areas managed by the user of this keyfob, and one or more areas can be configured.

(b) After the areas have been configured, the scope of the keyfob operation controls are specific to those areas which be configured.

**Notice:** When deleting the user associated with keyfob, the areas with which the keyfob is associated is also deleted

## **9) Wi-Fi configuration optimization**

Wi-Fi configuration on the APP, currently there is only one way to enter the verification code; need to change to be able to directly jump to Scan QR code, no need to enter the verification code, the default scan QR code.

## **10) Hik-Partnerpro support manual capture**

The HPP adds the device and before transfers it to the HC, the installer had permission to capture the picture through PIRCAM and can see the effect of the pictures; after transfers to the HC, the HPP has no permission to capture the pictures, only the HC has.

## **11) CID code optimization**

(a) Supports the Hik Code and the Standard Code + Supplementary Code are matched one to one, mechanically eliminates Hik Code and Standard Code many-to-one and one-to-many situations.

(b) When reporting a CID event, ensure the uniqueness of the event tag, i.e. if the Hik Code and standard Code are many-to-one situations, report the standard Code with a supplementary code (with the Hik Code); if there are one-to-many situations, add the relevant Hik Code.

(c) Supplementary Hik Code: [1114: Fire Alarm]、[3114:Fire Alarm Restored]、 [1154: Water Leakage Alarm]、 [3154: Water Leakage Alarm Restored]

**Notice:** The corresponding optimization can only be implemented on the SIA-DC09 and ISUP protocols, other protocols cannot be implemented due to the lack of extension fields.

## **12)ISUP push delayed reporting**

(a) Add configuration options to the APP notification configuration interface on the APP/WEB: <1> add “ARC Disconnection Report Delay” option, can be configured ON/OFF, the default value is OFF. add a note next to this enablement option: “This feature is only available for ARC report protocols as ISUP”. <2> add “Delay Time” option, can be configured 1~3600 s, the default value is 600 s. Show this configuration option when ARC Disconnection Report Delay is enabled, hide it when disabled.

(b) When “ARC Disconnection Report Delay” is enabled, the panel does a delayed record push based on the configured delay time. If the offline is recovered during the delay time, the offline information will not be recorded nor pushed, otherwise the offline information will be recorded and pushed.

## **13)Relay output optimization:**

Pulse output time configuration for Relay Module and Wall Switch, previously starting from 5 s, are optimized to start from 1s on the APP and WEB.

## **14)Device unbinding optimization:**

When you double click the reset button to enter unbind mode, the voice prompts "Entering unbind mode". The unbinding mode lasts for a maximum of three minutes, after which the unbinding mode will be exited with a voice prompt "Exit unbinding mode".

## **15)Heartbeat configuration optimization:**

(a) When the Polling Option is enabled on the portable emergency button configuration interface in the APP/WEB, the prompt "The emergency button needs to be triggered to take effect" is displayed.

(b) The heartbeat of portable emergency button can be configured: 1min,

2min, 3min...30min, 60min, 90min, 120min...360min. Before 30 min the value increases by 1 min, after 30 min by 30 min. Default values is 5 min.

### **16)Intercom optimization:**

(a) In the Intercom Service configuration interface on the APP/WEB, add alarm review priority mode option, can be configured picture review priority mode or voice review priority mode, default is picture review priority.

(b) Configuration is picture review priority mode, when the intercom is initiated, if it encounters a panel that is capturing a picture for upload, the intercom will fail and the corresponding error code is returned. If configure for voice review priority mode, the panel will be forcibly interrupted to pause the capture and upload pictures, giving priority to establishing a voice intercom channel and continuing the capture and upload after the intercom has finished.

Notice: In the case of intercom priority, long intercom times may lead to lost images and delays in the transmission of subsequent alarms.

(c) When the intercom is established, turn off the alarm linkage sounding devices (e.g. alarm sounder, panel, keypad, tag reader, etc.) and resume the linkage sounding after the intercom is finished. If the intercom is not yet finished, the alarm linkage will continue, otherwise the alarm will no longer sound.

(d) When the device generates an alarm and reports it to the IPRP via the cloud link and the local link, it needs to carry information on whether the device is intercom-ready or not. the IPRP displays the status of the intercom icon based on the information.

**Notice:** High/low temperature alarms from the temperature detectors and IPC intelligent alarms can also be reviewed by voice intercom after they have been generated.

### **17)User Name Display:**

(a) After an HC user logs in to the panel via WEB, WEB determines that it is a non-installer user and the priority of the displayed username is: nickname > email > phone > random code.

(b) When an HPP user logs in to the panel via WEB, WEB determines that

it is the installer user and displays the username: email.

(c) The translation of local admin for national languages has been changed to "admin"

### **18)Local installer user management:**

(a) The HC User Management interface can display local installer users and HC admin user can configure the enabling and disabling of local installer users.

(b) When the local installer user is enabled, HC admin loses parameter configuration permissions and regains them if disabled.

### **19)RF update optimization:**

Update and optimization of RX peripherals: domestic pircam, intercom sounder, repeater (1.0.3 and previous versions only support 8-channel update, 1.0.4 and later versions support panel specified channel update), support switching channel update.

### **20)Device on cloud communication mode optimization:**

(a) On the Cloud Service configuration interface of the APP/WEB, the cloud network Communication Mode for the device is modified to Auto, Wired & Wi-Fi, and Cellular Network. The default is Auto mode.

(b) When a mode is selected, a brief description of that mode is displayed next to the configuration option.

(c) Select Auto to be prompted: Network priority order is LAN > WIFI > Mobile network.

(d) Select Wired & Wi-Fi to be prompted: Network priority order is LAN > WIFI.

(e) Select Cellular Data Network to be prompted: the panel in the current mode only communicates with the external via the mobile network and will consume mobile network traffic.

### **21)LCD keypad optimization (LCD keypad needs to be updated to version 1.0.3):**

(a) Date and time configuration and display: the main interface of the LCD keypad supports the display of the date and time

(b) Arming and disarming status queries optimization: in the LCD keypad arming status, can directly access the interface of arming and disarming status for the areas via the password/card/password and card + query keys (If have fault, priority show the fault interface).

(c) <1> On exit delay/entry delay, LCD keypad displays for exit/entry delay countdown time; <2> The exit delay time is displayed with the maximum delay time (in line with the APP) and the entry delay time is also displayed with the maximum delay time. (If more than one zone alarm is triggered, enter the delayed countdown and take the longest one to present, after end of countdown, all triggered zones generate alarm and cid push recorded)

**Notice:** When trigger multiple delay zones, refresh the countdown display, display according to the maximum countdown, allows time jump for switching countdowns.

(d) Prompt dialog extension: The LCD keypad allows the password to be inputted When the prompt interface be displayed, the panel needs to cancel the previous process. (Only for status checking and setting operations on the keypad, the arming and disarming process does not support cancellation)

(e) Alphabetic input restrictions: LCD keypad alphabetic input restrictions. <1> Alphabetic input is only supported on the edit name interface; <2> Other interfaces only support inputting numbers, both fast/slow presses are numbers.

(f) Areas and relays quick selection: <1> Quick filtering of the Arming and Disarming areas selection list has been optimized, so that areas can be selected quickly by pressing the number of the corresponding area to arming. <2> Optimization of the relay batch control selection list for quick filtering and support for selecting the corresponding numbered relays in the relay control interface. <3> Quick select operation is also supported for zone bypass and bypass recovery.

(g) Relay operation display optimization: Only relays that can be operated by the currently logged in user are displayed on the LCD keypad, relays that are not authorised to operate are not displayed.

(h) Keypad swipe to add a card: After clicking add card on the APP/WEB

interface, can swipe the card on the LCD keypad to complete the addition.

(i) Historical alarm enquiry: Add an alarm history record (Log) to the status query interface of the LCD keypad, supporting the query of historical alarm records (all alarms and alarm recovery records, including tamper, fire, soft zone alarms, etc.), displaying only the last 20 entries, showing the zone + time (year, month, day, hour, minute and second)

(j) Configuration display optimization: In the LCD keypad configuration, only the configuration options for which the user has rights are displayed, not the configuration options for which the user does not have rights.

(k) Dual authorization: Supports PIN + swipe card and swipe card + PIN dual authorization. Optimization of the existing operating logic and prompts. <1> Normal operation 1: swipe card - keypad reports panel card number (card number has permission) - keypad prompts "please input password again" - user inputs password - user presses action key - keypad reports panel password value - response action by permission. <2> Normal operation 2: User inputs password - Press # or other function key - Keypad prompts "Please swipe again" - User swipes card - Keypad reports panel password and card number (permission OK) - Response operation by permission. <3> this mode mutually exclusive with keypad simple mode.

## **22)RF jamming sensitivity adjustment:**

The Jamming Sensitivity Settings configuration option can be selected High/Low/Disable, with the default value modified to Low.

## **23)Cellular Date Network auto reset reconnect:**

When using only cellular date network communication, or when both wired and Wi-Fi cannot communicate properly, the cellular date network communication will re-initialize the connection once every 10 min when there is a persistent inability to connect to the network, and no more than 3 reboots per day (00:00-24:00).

## **24)Translation optimization:**

Italian ECOSCANDAGLIO (internal sounder), to be changed to "SIRENA INTERNA".

## **25)Arming and disarming Optimization:**

- (a) Arming, disarming and clearing alarm operations are prohibited while the panel is being updated.
- (b) Arming, disarming and clearing alarm operations are prohibited for panel while the detectors/peripherals are during updated process.( (does not distinguish between areas to which detectors/peripherals belong)

## **26)Detector tamper-proof optimization:**

CO/Heat/Smoke detectors generate a baseboard communication disconnection fault and report it to the panel, which converts the fault into a tamper event, generating an alarm and pushing a tamper alarm event.

**Notice:** <1> CO/Heat/Smoke detectors don't have a tamper switch and are only dependent on whether or not they are disconnected from the baseboard communication to indicate whether or not they are dismantled. <2> Failure to communicate with the baseboard requires periodic detection by the detector and cannot be reported to the panel in a timely manner, with tamper-proof delays. <3> A power drain will also generate a disconnected communication fault with the baseboard, which will also be reported as tamper-proof.

## **27)Optimization of reporting mechanism in case of abnormal ATP detection**

The ATP detection mechanism will only generate an ATP network fault and report it to other platforms when the alarm event is continuously sent unsuccessfully. The duration is set in the LAN Lost Delay/Wi-Fi Lost Delay/Cellular Lost Delay configuration screen, depending on which network the device starts sending the failure report from. For example: the device is communicating with ARC using LAN normally, disconnects from the LAN and reports a failure to send. If the switch to another network doesn't work, the ATP network fault is generated after the LAN Lost Delay is continuously reported as a failure time, but if the report is successful within that time, no ATP network fault is generated. An ATP network fault event will also be generated if the device is continually unable to establish a communication link with the ARC.

## **28)Optimize the problem that the panel switching network causes the cloud indicator to go off**

The cloud indicator will only go off when the device has been disconnected from the cloud for 80s, and the indicator will not go off when it is back online within that time.

### **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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