

## 07/22/2022 Changes in Release v1000357

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100357.100
- ZN-AIBOX4 - 72111.1.100357.100
- ZN-AIBOX8 - 72210.1.100357.100
- ZN-AIBOX16 - 72310.1.100357.100

### Features Add

- Multilingual support to the Action Handler Email Subject
- Russian license plate recognition
  - The Russian license plate is added onto the European EU license
  - Considering the case of crossing the border between Europe and Russia

### Changed

- Added exception handling when the video from the camera is not updated (CBC-948)
- Occupancy reporting function Minimum cycle changed
  - From 2 sec to 1 sec

### Bug Fixes

- N/A

## 06/23/2022 Changes in Release v1000352

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100352.100
- ZN-AIBOX8 - 72210.1.100352.100
- ZN-AIBOX16 - 72310.1.100352.100

### Features Add

- N/A

### Changed

- Selectable occupancy reporting period from 2 seconds
- RTSP - Add URL Move action (CBC-1136)
- Improved the phenomenon that STOP is maintained when the vehicle moves slowly after setting the STOP trigger

### Bug Fixes

- Exception handling for RTSP standard violation of IDIS DR2316P (CBC-1189)
- When the Occupancy trigger exceeds or is below the threshold, the event trigger occurs only when the dwell time is maintained over the set time.

## 02/14/2022 Changes in Release v1000342

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100342.100
- ZN-AIBOX8 - 72210.1.100342.100
- ZN-AIBOX16 - 72310.1.100342.100

### Features Add

- Function to turn off the OSD widget
  - Caution: The OSD widget may not display immediately when switched from 'Off' to 'On'
    - It will be redrawn when the widget updates

## Changed

- Improved setting the authentication token when setting the HTTP Action.
- Improved setting some special characters in the custom header when setting the HTTP Action

## Bug Fixes

- N/A

## 01/28/2022 Changes in Release v1000341

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100341.100
- ZN-AIBOX8 - 72210.1.100341.100
- ZN-AIBOX16 - 72310.1.100341.100

## Features Add

- Drone license can be tested with this FW

## Changed

- N/A

## Bug Fixes

- N/A

## 12/17/2021 Changes in Release v1000337

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100337.100
- ZN-AIBOX8 - 72210.1.100337.100
- ZN-AIBOX16 - 72310.1.100337.100

## Features Add

- Enhance network security

## Changed

- Improved the problem that the Action Rule list is not displayed normally depending on the settings when exporting a DB that sets a trigger of "Fence Guard" type in a version before 100098 and importing it in a later version

## Bug Fixes

- Fixed a problem that could not be linked when inputting with VSource UDP
- Fixed an issue that could cause sets to reboot when there are many objects detected
  - Mainly when in NVR companion mode

## 11/19/2021 Changes in Release v1000333

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100333.100
- ZN-AIBOX8 - 72210.1.100333.100
- ZN-AIBOX16 - 72310.1.100333.100

## Features Add

- Europe (Milan) region to the AWS S3 Action handler
- File transfer feature via Secure channel (SFTP)
  - AI SECURITY - Event Action - FTP menu - SFTP selectable.

## Changed

- N/A

## Bug Fixes

- N/A

## 10/29/2021 Changes in Release v1000331

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100331.100
- ZN-AIBOX8 - 72210.1.100331.100
- ZN-AIBOX16 - 72310.1.100331.100

### Features Add

- N/A

## Changed

- Improved white object bounding box visible when the Abandon event is not displayed
  - Changed the white object bounding box to be visible only when an event occurs

## Bug Fixes

- Fixed an issue where tracking objects could not be detected in rare cases

## 10/01/2021 Changes in Release v1000329

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100329.100
- ZN-AIBOX8 - 72210.1.100329.100
- ZN-AIBOX16 - 72310.1.100329.100

### Features Add

- Copy AI detector/tracker settings to other channels
- AI SOURCES - driven by the "Copy to..." button on the AI Detector page
- Virtual trigger as a condition in Action Rule

## Changed

- N/A

## Bug Fixes

- Fixed a bug that would not show the logo image

## 09/17/2021 Changes in Release v1000328

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100328.100
- ZN-AIBOX8 - 72210.1.100328.100
- ZN-AIBOX16 - 72310.1.100328.100

### Features Add

- BOR Logo applied
- Hotkey added

## Changed

- Improved Abandon algorithm
  - Changed object name

## Bug Fixes

- Fixed related Abandon algorithm bug

## 09/03/2021 Changes in Release v1000326

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100326.100
- ZN-AIBOX8 - 72210.1.100326.100
- ZN-AIBOX16 - 72310.1.100326.100

### Features Add

- Added Abandon AI algorithm
- Added API to change Arm/Disarm with HTTP GET method
  - Disarming - GET URL: /api/rule/es/state/disarm/
  - Arming - GET URL: /api/rule/es/state/arm/

## Changed

- Updated Czech translation

## Bug Fixes

- N/A

## 08/05/2021 Changes in Release v1000324

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100324.100
- ZN-AIBOX8 - 72210.1.100324.100
- ZN-AIBOX16 - 72310.1.100324.100

### Features Add

- N/A

## Changed

- Event log and system log are saved up to 50,000 and overwritten. No overwriting over time.
- Improved AI Marketing - AI Counter Statistics save and Overwriting feature
  - Optimize Statistics DB
  - Reduced the overall storage period of the statistics DB
    - 5 minutes stats up to 2 months
    - 1-hour stats up to 4 months
    - Before FW update: Factory default and manual reconfiguration is required, to run statistics DB optimization, and applied reduction.
      - (Recommended when performance degradation is felt during long-term use of AI Counter.)
      - Without factory default, FW updating does not delete all the saved statistics DB

## Bug Fixes

- N/A

## 06/21/2021 Changes in Release v1000316

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100316.100
- ZN-AIBOX8 - 72210.1.100316.100
- ZN-AIBOX16 - 72310.1.100316.100

### Features Add

- Added Austria (AT) - LPR Support

### Changed

- Improved EU LPR: Improvement of misrecognition between similar characters

### Bug Fixes

- Fixed an issue where the Bearer token header could not be set in HTTP Action
- Fixed the problem that the resolution value of AI SOURCES -> VSource -> Status is randomly displayed as 0x0
- Fixed the problem that the event does not occur even when the trigger event occurs according to the change in occupancy when occupancy bias is specified in AI Trigger - Advanced - AI Counter trigger

## 06/11/2021 Changes in Release v1000315

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100315.100
- ZN-AIBOX8 - 72210.1.100315.100
- ZN-AIBOX16 - 72310.1.100315.100

### Features Add

- Updated German multilingual translation

### Changed

- N/A

### Bug Fixes

- Fixed a bug that constantly requests Root DNS Query

## 06/04/2021 Changes in Release v1000314

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100314.100
- ZN-AIBOX8 - 72210.1.100314.100
- ZN-AIBOX16 - 72310.1.100314.100

### Features Add

- Updated Polish multilingual translation
- The dwell time of the Loitering Trigger can be set up to 7200 seconds.
- The dwell time of the stopping trigger can be set up to 7200 seconds.

### Changed

- N/A

### Bug Fixes

- N/A

## 05/28/2021 Changes in Release v1000312

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100312.100
- ZN-AIBOX8 - 72210.1.100312.100
- ZN-AIBOX16 - 72310.1.100312.100

### Features Add

- Safety Jacket algorithm added
- Report type trigger can be set in AI Counter Trigger.
  - When setting AI Counter Trigger, it can be used as a bias value by designating a specific Occupancy trigger.
  - This function can be used in AI Trigger - Advanced - Counter by registering a license key (AI Counter - Counter combined zone).
  - When specifying bias, it can be specified as + or -;
    - + When specified, the counter's count value plus the number of objects of the specified occupancy trigger is calculated as the counter's count value.
    - -When specified, the counter's count value becomes the counter's count value minus the number of specified occupancy objects.
  - If the Occupancy trigger is specified as the bias value, the event of the counter trigger occurs based on the value that reflects the bias value, and event tokens such as COMBIND COUNT are also set to the value that reflects the bias value.
  - Statistical data produced by AI Counter independent of Counter Trigger is generated as the counter's value without bias

### Changed

- N/A

### Bug Fixes

- N/A

## 05/25/2021 Changes in Release v1000309

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100309.100
- ZN-AIBOX8 - 72210.1.100309.100
- ZN-AIBOX16 - 72310.1.100309.100

### Features Add

- Special characters '.' can be entered when setting the query string of the HTTP action setting

### Changed

- Improved the problem of intermittently mixing multiple channel images when setting the FR algorithm
- Improved a problem in which system performance is degraded by repeatedly changing the FR algorithm settings
- Lowered the criterion for determining Static Object for Person (changed so that it is judged as Non-Static Object by moving more)

### Bug Fixes

- Fixed the problem that the Intrusion / Loitering event occurred in the same Track ID
- Fixed a problem that could not be set because some object classes (Bus, Truck, Motorbike, Bicycle, Fallen) are not displayed when setting Zone in AI Counter

## 04/30/2021 Changes in Release v1000307

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100307.100
- ZN-AIBOX8 - 72210.1.100307.100
- ZN-AIBOX16 - 72310.1.100307.100

### Features Add

- Query API to search current trigger count value by zone set for each counter in AI MARKETING>AI Counter
- Adding a counter in AI MARKETING > AI, zones are assigned an ID that can be checked in the UI Counter
- After confirming the ID, you can specify the API that can search the zone count by referring to the Count API URI.

### Changed

- Tuned the sensitivity of static object judgment to be more sensitive
- Changed to allow editing of label names in AI MARKETING

### Bug Fixes

- Improved a problem that an error message appears when failing to LPR bulk upload
- Improved a problem that the date cannot be selected when trying to change the time

## 04/09/2021 Changes in Release v1000303

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100303.100
- ZN-AIBOX8 - 72210.1.100303.100
- ZN-AIBOX16 - 72310.1.100303.100

### Features Add

- LPR: Support Germany LPR
- Add Tamper Detect trigger in Action Rules

### Changed

- N/A

### Bug Fixes

- When LP\_NUMBER\_ONLY event meta tokens are not normally replaced in action messages when linked with NVR

## 03/23/2021 Changes in Release v1000301

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100301.100
- ZN-AIBOX8 - 72210.1.100301.100
- ZN-AIBOX16 - 72310.1.100301.100

### Features Add

- N/A

### Changed

- N/A

### Bug Fixes

- Optimized system slowdown when accumulated DB data increased in AI Marketing - AI Counter CBC-932
- VSource-Improved the accuracy of the vertical value of the resolution information of some cameras

## 03/12/2021 Changes in Release v1000260

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100260.100
- ZN-AIBOX8 - 72210.1.100260.100
- ZN-AIBOX16 - 72310.1.100260.100

### Features Add

- [AICAM] Add Onvif AI meta send option
- Add Sureview, Sentinel email SMTP server settings template CBC-860

### Changed

- N/A

### Bug Fixes

- Fixed the problem of vanishing points at the end of the coordinate system in the Area-based AI trigger setting when connected with NVR

## 03/04/2021 Changes in Release v1000259

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100259.100
- ZN-AIBOX8 - 72210.1.100259.100
- ZN-AIBOX16 - 72310.1.100259.100

### Features Add

- Add User Security - Prevent brute force attacks
  - If user authentication fails 3 times in a row, the account will be locked for 5 minutes and will not be able to log in

### Changed

- N/A

### Bug Fixes

- Fixed an issue that the Remind Event was not sent when the Ignore Duplicate Event option was activated in the Intrusion Trigger

## 02/18/2021 Changes in Release v1000257

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100257.100
- ZN-AIBOX8 - 72210.1.100257.100
- ZN-AIBOX16 - 72310.1.100257.100

### Features Add

- Add limit condition in the report num objects type of the Occurrence trigger.
  - Can set more than, feeder than with the Report cycle.
  - Ex1) more than 1, fewer than 3 - Trigger only if the number of objects in the zone is 2.
  - Ex2) more than 3, fewer than 1 - Trigger if the number of objects in the zone is exceed 3 or less than 1

### Changed

- N/A



## Bug Fixes

- Reduced the bounding box margin size of face object in FR algorithm
- Can set delays for HTTP actions up to 10 seconds CBC-852
  - When the delay setting is triggered, the action is performed after the delay time

## 02/09/2021 Changes in Release v1000256

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100256.100
- ZN-AIBOX8 - 72210.1.100256.100
- ZN-AIBOX16 - 72310.1.100256.100

### Features Add

- N/A

### Changed

- N/A

## Bug Fixes

- Video issue when H265 video related to a particular camera.

## 01/29/2021 Changes in Release v1000254

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100254.100
- ZN-AIBOX8 - 72210.1.100254.100
- ZN-AIBOX16 - 72310.1.100254.100

### Features Add

- N/A

### Changed

- N/A

## Bug Fixes

- Problem where only Trigger> Alarm IN 1 is displayed in Action Rule
- Parsing error when setting JSON or JSON pretty template in Action Message

## 01/26/2021 Changes in Release v1000252

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100252.100
- ZN-AIBOX8 - 72210.1.100252.100
- ZN-AIBOX16 - 72310.1.100252.100

### Features Add

- CORTROL External Service Timeout exception handling code
- FR event token. When configuring an action message, the following event metadata can be used.
  - Registration id, note
- LPR event token. When configuring an action message, the following event metadata can be used.
  - Country code, group name, registration ID, matching number, owner name, phone number, note

## Changed

- Attach object crop image to Email and HTTP action.
  - Available only for FR or LPR events

## Bug Fixes

- Basic Notification Event: Send Sunglass/Mask Event to AI-Box Metadata stream
- Issue where AI Security-Statistics-Counting function was only processed for up to 3 days.

## 01/15/2021 Changes in Release v1000250

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100250.100
- ZN-AIBOX8 - 72210.1.100250.100
- ZN-AIBOX16 - 72310.1.100250.100

### Features Add

- N/A

## Changed

- Set the reporting cycle of Occupancy trigger reporting type to seconds.
  - The minimum period is 5 seconds.

## Bug Fixes

- Italian multilingual translation update
- Fixed an issue where LP add API returned a different value from the document

## 12/30/2020 Changes in Release v1000248

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100248.100
- ZN-AIBOX8 - 72210.1.100248.100
- ZN-AIBOX16 - 72310.1.100248.100

### Features Add

- N/A

## Changed

- AI Sources behavior of continuously trying to connect audio to all channels set in the Video Source menu.
  - Only the channel for which the Audio Backchannel action is set will try to connect.

## Bug Fixes

- Polish and Czech multilingual translation updates

## 12/18/2020 Changes in Release v1000247

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100247.100
- ZN-AIBOX8 - 72210.1.100247.100
- ZN-AIBOX16 - 72310.1.100247.100

### Features Add

- Add retransmission scenario when HTTP Action transmission fails
- Add CH NAME token to the action message so that you can set the channel name set in the video source
- Added system trigger type
  - Action Rule can be configured using Video Recovered trigger
  - Action Rule can be configured by using the Admin Login trigger

### Changed

- Video Loss trigger can be used to designate all channels when setting Action Rule.
  - Set only one Rule to associate events from all channels with actions
- Video Recovered trigger can be used to designate all channels when setting Action Rule.
  - Set only one Rule to associate events from all channels with actions

### Bug Fixes

- Fixed bug where Genetec connection failure
- Fixed an issue where the time zone of AI Counter statistics was displayed incorrectly after changing the time zone

## 12/12/2020 Changes in Release v1000246

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100246.100
- ZN-AIBOX8 - 72210.1.100246.100
- ZN-AIBOX16 - 72310.1.100246.100

### Features Add

- Added Immix, Sentinel integration Action Message template

### Changed

- Changed the default setting of RS485 to Tx mode

### Bug Fixes

- Problem of not driving audio back-channel action
- Alarm output action malfunction
- Problem of not searching in ODM

## 11/25/2020 Changes in Release v1000244

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100244.100
- ZN-AIBOX8 - 72210.1.100244.100
- ZN-AIBOX16 - 72310.1.100244.100

### Features Add

- N/A

### Changed

- Changes the RS485 basic state to Rx mode (operates in Tx mode only when sending a message)

### Bug Fixes

- N/A

## 09/28/2020 Changes in Release v1000230

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100230.100
- ZN-AIBOX8 - 72210.1.100230.100
- ZN-AIBOX16 - 72310.1.100230.100

### Features Add

- US LPR State display
- Added Slack Action Handler
  - Handler that Event Action msg can be sent to Slack

### Changed

- Multilingual (Polish, Czech) change request applied
- JP LPR performance improved
- Maximum export number of the event log increased from 5000 to 10000
- API added
  - Alarm in status search
  - Alarm In idle status search/change

### Bug Fixes

- Fixed an issue where the channel number was displayed as 1 even though the trigger was independent of the channel in the event log of some system trigger type.
- Fixed an issue where the event time was intermittently displayed as 1970 when the Securinet handler and other action handlers were used together in one action rule.
- Fixed an intermittent web server shutdown when entering the license key
- Fixed a bug in which an event was sent to the NVR only when connecting to the first preset in the event action sequence when connecting to the NVR
- AI Surveillance-Statistics-Reporting operation error improvement
  - Fixed problem that reporting created by designating the corresponding trigger does not work when modifying/deleting the AI trigger
  - Fixed the sometimes issue reporting did not work when using multiple languages other than English
  - Upgrading to the current version and future firmware, the previously set reporting function will not work
    - If necessary, delete the existing settings and re-register

## 08/28/2020 Changes in Release v1000227

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100227.100
- ZN-AIBOX8 - 72210.1.100227.100
- ZN-AIBOX16 - 72310.1.100227.100

### Features Add

- System Trigger-Added, Virtual Trigger type
- Virtual trigger event can be generated by using a button in the web UI
- Virtual trigger event can be generated by calling the HTTP API
- Bulk upload added using the FR CSV function
- AI Counter Statistics Report function added

### Changed

- Improved detection related to a stationary object being rarely detected as a non-static object at night
- Fixed a problem where the date could not be selected in the calendar when changing the time manually

### Bug Fixes

- N/A

## 07/30/2020 Changes in Release v1000225

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100225.100
- ZN-AIBOX8 - 72210.1.100225.100
- ZN-AIBOX16 - 72310.1.100225.100

### Features Add

- System Trigger - Tamper Detection trigger type added
- AI Trigger / System Trigger / Action Rule (Copying a pre-configured action rule)

### Changed

- N/A

### Bug Fixes

- N/A

## 07/21/2020 Changes in Release v1000224

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100224.100
- ZN-AIBOX8 - 72210.1.100224.100
- ZN-AIBOX16 - 72310.1.100224.100

### Features Add

- [AI Counter] Added option to set the initial value of Reset Count after Auto-Correction
- Adjust the sensitivity of the static object filter to the vehicle
- Improved HTTP action handler function
- Added the ability to set custom headers by combining event tokens with the GET / POST method
- Added the feature to set the query string by combining the event token with the GET method
- Occupancy dwell time setting. Counting only when the object in the area stays for more than the dwell time

## Changed

- N/A

## Bug Fixes

- RTSP SDP parsing exception handling added
- Rolling automatically moves to the top of the API Document page
- Fixed issue where external trigger list in UI corrupted when switching between General Trigger and Advanced Trigger
- Fixed an issue where when turning on the static object filter and Ignore Duplicate Event in the intrusion at the same time, turning on the headlights at night and entering vehicles were not detected

## 07/03/2020 Changes in Release v1000221

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100221.100
- ZN-AIBOX8 - 72210.1.100221.100
- ZN-AIBOX16 - 72310.1.100221.100

### Features Add

- Gender count information to AI Counter statistics information (requires attribute parameter setting when calling API)
- AI-BOX Cortrol VMS Integration support
- Change the scenario so that the target object occurs as an event of the external service
- Added function to search by Keyword and Target Object on the Search screen
- Added FR max blur recognition filter (AI Sources-Face Recognition-Setting) Option to not recognize when the blur level of the detected face is higher (more blurred) than the set threshold
- Option recognizes the same face multiple times in FR (AI Sources-Face Recognition-Setting-Repeat recognition attempts)
- Added Dwell time setting option of Social Distance to Trigger to 1 second, 2 seconds, or 3 seconds.
- Improved the problem where the event occurred once with the same ID with a time interval in the middle

## Changed

- N/A

## Bug Fixes

- Fixed an issue where uploading new audio data to the Audio back-channel action does not work with the Action Rule until rebooting

## 06/26/2020 Changes in Release v1000220

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100220.100
- ZN-AIBOX8 - 72210.1.100220.100
- ZN-AIBOX16 - 72310.1.100220.100

### Features Add

- Modified to use more Than / Fewer Than settings of Counter trigger other than the trigger that triggered the event with the token of the action message
- (Example of use: When using the More Than limit value of another Counter trigger as the maximum occupancy value displayed on the digital signage)
- Added Limits & Every N option to Counter trigger.
- Option to trigger every N only in the range above/below the counter limit.
- Changed to show only the filter set among Mask/Sunglass/Liveliness when setting the Mask/Sunglass trigger.
- Adjusted "static object" judgment criteria

## Changed

- N/A

## Bug Fixes

- Fixed audio back-channel action not being linked to Action Rule
- Fixed the problem that the time synchronization of the face recognition event snapshot does not match well
- Fixed an issue where email is not sent when using the SMTP server using SSL for Trigger Statistics Email Report
- Fixed an issue where "Ignore duplicate event" on v100219 did not work

## 06/23/2020 Changes in Release v1000219

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100219.100
- ZN-AIBOX8 - 72210.1.100219.100
- ZN-AIBOX16 - 72310.1.100219.100

### Features Add

- A distant object is immediately converted to a white bounding box by changing the color duration of the purple bounding box indicating the close object in the social distance trigger from 5 seconds to 1 second.
- All types of cameras are supported to use of a social distance trigger. (Fisheye camera requires an additional license)
- Cortrol External Service Integration - LPR supported
- AI Security - Action - VMS - Cortrol External Service

## Changed

- Improved the trigger UI so that the license trigger can be seen separately from the normal trigger
- Added ignore duplicate event setting to Loitering trigger
- Improved the default setting of Zone in the social distance trigger to be similar to the Fisheye area.
- Changed to enter up to 20 licenses.
- [Important] Changed to detect static objects more carefully
  - The static object is judged as a non-static object due to changes in lighting, etc., and is changed to reduce the occurrence of an event.
  - Reduced the occurrence of an event by misrecognizing it as a non-static object (due to static object changes such as lighting brightness)
  - When the Static Object in OSD is "Display Off", the bounding box may be drawn less than the existing object compared with the previous FW version. If the motion is not larger than the previous one, it is recognized as a static object (When the Static Object is "displayed on", it can be confirmed as a normal gray box)
- Added Action message token in the social distance trigger, the zone setting default value is changed to occur in a rectangular shape.
  - FR / LPR trigger recognition mode setting
- Improvement of social distance trigger setting method Improved to display the cause of the problem when audio upload fails in Audio Back Channel Action.
  - Delete Segment setting
  - Provide help on how to set each item
  - Improved to set social distance directly on the screen without measuring distance
- Add Action message token
  - Set value of Occupancy / Counter trigger (more than / fewer than / count N)
  - Mask/Sunglass condition

## Bug Fixes

- Fixed the problem that the audio file cannot be uploaded when the Audio Back Channel Action is set.
- Improved Fallen Person detection
- Fixed an issue where Intrusion / Loitering events frequently occur  
-Fixed an issue where the event occurred once again even if the object is the same ID
- Fixed the issue that cannot use: OBJ[SCORE] in the Action message
- Fixed an issue where an individual Annotated Video Stream was not transmitted
- LPR: Fixed an issue where the same license plate event occurred consecutively
- LPR: Fixed the problem of SKIP randomly recognizing license plates
- Fixed an issue where audio back-channel upload and social distance setting space could not be set when backing up the system DB

## 06/08/2020 Changes in Release v1000213

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100213.100
- ZN-AIBOX8 - 72210.1.100213.100
- ZN-AIBOX16 - 72310.1.100213.100

## Features Add

- Added helmet detection function
- Added French LPR
- Added Social Distance trigger
  - Required with a Fisheye license (the normal camera will be supported soon)
  - Social Distance trigger: Trigger when a person stays for a certain period within a certain distance
- Added audio back-channel action (AI Surveillance-Event Action-System-Audio Back Channel)
  - Audio back-channel action: it allows voice data to be transmitted to the camera speaker using the ONVIF audio back-channel specification.
  - Channels can be assigned and transmitted to connected cameras.
- Added sunglasses/mask recognition trigger
  - Required FR license to activate the detection (sunglasses/mask)

## Changed

- Improved to select the entire area by double-clicking the area when setting the AI trigger
- Gender detection improvements
  - Re-learn more data with higher-performance algorithms
  - Increased gender discrimination performance and changed to judge conservatively

## Bug Fixes

- Fixed Poland LPR performance



## 05/21/2020 Changes in Release v1000209

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100209.100
- ZN-AIBOX8 - 72210.1.100209.100
- ZN-AIBOX16 - 72310.1.100209.100

### Features Add

- Added Confidence (Score) Threshold setting function for each channel (AI Sources-AI Detector)
- Improved to maintain license key when importing DB Bug fixes
- Fixed the issue that the normal priority relay command was not delivered to the device.
- AI Algorithm added
  - Privacy Masking
  - Human Detector for Thermal Camera

### Changed

- AI Security - Counter Trigger license added
- AI Counter-Loss Rate Auto Correction license added
- AI Counter - Manual Count can be used during Loss Rate Auto-Correction
- UK LPR detection improved
- Changed to go to the live page upon login
- Improved False Alarm for "Human / Vehicle-Far" and "Human -Far" algorithms
  - In particular, the phenomenon of erroneous recognition of animals as humans is intensively improved
  - [White Paper] AI Box\_ AI Camera - How to reduce false alarms.docx
- Schedule feature improvement
  - Improved to set the schedule for Weekly, Monthly, and Yearly repetition.
  - Improved to set a schedule for specifying a specific day. (Currently, only Day designation is supported)
  - Improved to be set as exclusion schedule.
  - If an exclusion schedule is registered in a rule, the action will not run even if the period is included in another schedule.
- Alarm out function improvement
  - Added a type that keeps OFF for a certain duration.
  - Priority classification according to Alarm out type
    - ex. A certain duration alarm out is changed to operate at a higher priority than the general ON / OFF type.
- AI Counter Statistics API improvement
  - If the counter name parameter is omitted when calling the API, statistical information of the entire counter can be viewed.
  - Added Increased / Decreased / Occupancy Count information to statistical information
  - If the Date Time parameter is omitted when calling the API, statistical information of the entire recorded period can be searched.

### Bug Fixes

- Fixed a bug that was not discovered after changing ONVIF Port in Network> Service Port
- Fixed time or time zone
- URL length limit set changed when setting the HTTP action (64-> 255)
- Fixes an issue where the Auto-correction function does not work if the device's time is before the AI Counter-Loss Rate Auto Correction start
- Fixed the problem that the number of widgets does not update immediately after count reset
- Fixed an issue where a modification screen of an unselected item was opened when trying to modify another item after deleting the AI Trigger, System Trigger, and Action Preset items

## 04/21/2020 Changes in Release v1000206

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100206.100
- ZN-AIBOX8 - 72210.1.100206.100
- ZN-AIBOX16 - 72310.1.100206.100

### Features Add

- Added Counter Reset Action.
  - AI SECURITY-Event Action-System-Counter Reset
  - Use in Action Rule after preset setting.

### Changed

- Bug fixed- Column separation when exporting CSV.

### Bug Fixes

- N/A

## 04/16/2020 Changes in Release v1000204

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100204.100
- ZN-AIBOX8 - 72210.1.100204.100
- ZN-AIBOX16 - 72310.1.100204.100

### Features Add

- Added Poland LPR

### Changed

- Added counter trigger reset function.
- Event Log System Log Change the sort order so that recent entries appear first.
- FR face recognition history logging function added.
- Menu is displayed when FR license is activated. (SEARCH-FR Log)
  - Up to 20000 recognition data can be stored.
  - Up to 5000 recognition data can be searched at one time.
  - CSV export function.
- Providing how to delete Counting / Statistics / Event Log / System Log / FR Log.
  - It is possible to select whether to reset the corresponding item at factory reset.

### Bug Fixes

- Fixed an issue that caused a Syntax error when downloading an API Document and using it with an external UI.

## 03/17/2020 Changes in Release v1000105

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100105.100
- ZN-AIBOX8 - 72210.1.100105.100
- ZN-AIBOX16 - 72310.1.100105.100

### Features Add

- Added some ways to improve false alarm
- Number of consecutive frames for classification option added
  - Added option to filter Min and Max Object Size in Detector setting (if it is out of size, it will not support drawing a box on the screen)
  - When it is 1, it is judged as one image (same as before), but the higher the number, the more it is judged carefully as multiple consecutive images.

### Changed

- Added Tracking Reference Point selection option -Allowed to select Mid of Top, Bottom, Left, and Right points.
- Human / Vehicle to reduce Animal False Alarm-Re-learning after adding normal AI algorithm data
- To determine whether the object is in the Zone, the user can select whether to judge when the tracking point is inside or when the bounding box is inside.
- Human / Vehicle to reduce Animal False Alarm-Re-learning after adding normal AI algorithm data
- Added option to set min object size and max object size for each zone when setting trigger (it supports to draw box even if it is out of size, but does not generate an event)
  - It can be used by tall and short people to separately generate events

### Bug Fixes

- Fixed an issue where Panasonic cameras were not discovered
- Fixed an issue where the IP of the PC was displayed intermittently in the Discovery result
- Fixed an issue where the video loss action rule did not work when registered in bulk
- Improved the symptoms of the existing vendor's logo when changing the sub-vendor

## 03/06/2020 Changes in Release v1000103

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100103.100
- ZN-AIBOX8 - 72210.1.100103.100
- ZN-AIBOX16 - 72310.1.100103.100

### Features Add

- Added S3 Action CBC-392
- Added tracking reference point selection option CBC-307
- Added option to determine whether the object is in the zone by tracking a point or using all four points of the bounding box.
- Added object size filter to trigger
- Added option to set min object size and max object size for each zone (If the bounding box is out of size while drawn, no event occurs.)
- It is also used to generate an event by distinguishing between tall and short people, and big and small cars.

### Changed

- Changed to display FPS of the connected stream to one decimal place
- Rename Email Attachment Snapshot File CBC-384
- Added UI to filter items that do not belong to a group in FR, LPR list
- Added milliseconds to Action message token FTP Action CBC-331

- FTP Action improvement
  - Changed File Path default template
  - Non-English Language Available for File Path
  - 2 or more directory paths can be set in File Path.
  - Warning if File Path contains: \*? "<> |
  - Used URI-encoded characters when the substituted File Path contains: \*? "<> |
  - Tokens can be selected and added in batches
  - Token can be inserted at the current cursor position
  - Recently registered FTP server can be selected from the list

## Bug Fixes

- Fixed a problem where ONVIF cannot retrieve Panasonic Camera Stream URI
- Fixed a problem where ports 5555 and 5556 cannot be set as service ports
- Reboot schedule does not work during the firmware upgrade.
- Fixed FPS display bug
- Fixed bug where RTSP was not randomly reconnecting
- RTSP stream error with Uniview CBC-434

## 02/13/2020 Changes in Release v1000101

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100101.100
- ZN-AIBOX8 - 72210.1.100101.100
- ZN-AIBOX16 - 72310.1.100101.100

## Features Add

- Added HTTPS / RTSP / ONVIF port setting option (Network> Service Port) CBC-330
- Added function to change the FR head pose limitation default value (AI Source> Face Recognition> Setting)
- Added 3 types of LPR Trigger Rule: all license plate, license plate comparison, unregistered license plate
- Added Fisheye Human Detector Trial Algorithm: Requires camera stream resolution set to 8M or less
- Added Car / Bus / Truck / Bicycle / Motorbike / Human detection detector Trial algorithm
- Added reboot schedule function (System> System Management)
- Added option to set snapshot resolution (Display > Snapshot)
- Added Safe star action msg template CBC-368
- Added Exception when port forwarded video source sends RTSP response to internal IP CBC-385

## Changed

- When deleting an FR group, can choose the option to delete the face data included only in the group
- Improved snapshot attachment ranges from -10 to 10 seconds in action settings.
- LPR: Improved Korean license plate recognition performance
- Event Action> Network> ONVIF: Change ONVIF Event Transmission UI and function (AI Event + Motion / Motion Only)
- Improved the ability to add short notes to face or group information from the FR face source.
- Improved detection and progress of decoding overload conditions when setting video sources
- Display decoding cost and limit of connected stream numerically
- Display resolution, FPS of connected stream
- Auto renew connection status
- Resolution, maximum FPS display during ONVIF discovery CBC-356

## Bug Fixes

- Fixed event to be displayed normally in ONVIF Device Manager Events.
- Fixed the problem where the password is not hidden when the video source password contains " @"

- [TRIAL] Fixed the problem that trigger is not shown when setting 'fallen' classification for Fallen Person Detection algorithm.
- Fixed bug not working with Genetec Event (Test button works normally but the event is not received when set in Action Rules)
- Fixed to not disconnect when UDP RTP is received even if the port for RTCP is not open CBC-379

## 01/24/2020 Changes in Release v100099

### Firmware: Official

- ZN-AIBOX4 - 72110.1.100099.100
- ZN-AIBOX8 - 72210.1.100099.100
- ZN-AIBOX16 - 72310.1.100099.100

### Features Add

- Added Trial Algorithm-can be used for testing before license purchase
- Added LPR (Korea, Japan, UK) Trial algorithm
- Added Gender Detector Trial algorithm
- Improved remote support scenario
- Added Sureview email SMTP template
- Added NVR / DVR Action integration (Event Action> NVR / DVR> "Sequirinet")
- Add human fallen person detection algorithm
- Added License Plate Recognition Source setting function
- Added bulk upload function using CSV in LP group setting, LP number setting,
- Added snapshot inquiry API for each channel (see API Document)

### Changed

- Added option to enable trial algorithm (AI Sources> Video Sources)
- Improved remote support scenario
- Added agreement procedure while activating Remote Assistance
- Improved security by remote code issuance
- Improved to allow SMTP authentication when setting email preset
- Improved the account name to remain in the system log when adding / modifying/deleting users
- Improved installation convenience: when the AI source is selected, the trigger name is automatically input.
- UI layout improvements for mobile devices
- Reduce the number of FR channels and increase the FPS to improve the performance of the existing 16-channel FR-free sample F / W.
- 16-Channel FR License will not for sale until further Announcement

### Bug Fixes

- Fixed node location during ONVIF GetProfiles API response (fixed partial parsing error in client)
- Fixed a problem where the rule did not work when setting the line crossing trigger rule.
- Fixed Occupancy label setting UI error
- Fixed UI error where the advanced checkbox is not marked when entering advanced mode after saving and setting advanced setup in Trigger setup
- VMS> Genetec Integration-Fixed an authentication issue (Updated Auth information with Certification Number issued by Partner Number)
- Sureview msg template added according to customer request (SALESQNA-4022)
- Fixes a problem where the ONVIF server does not respond to Discovery requests intermittently

## 12/24/2019 Changes in Release v100095

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100095.100
- ZN-AIBOX8 - 72210.1.100095.100
- ZN-AIBOX16 - 72310.1.100095.100

### Feature Added

- Enhanced ID, PW function added (Default OFF)
- Added automatic logout function
- Added System Reboot trigger event
- Added multi-language German, Italian, Russian, Czech, Polish
- AI-Box-Added function for connecting NVR / DVR with AI-Box (Event Action - NVR/DVR – add Securinet)
- Function of sending the event to NVR / DVR generated by the rule set in AI-Box (Generic Event)
- Implements function to leave as Pos (Text in Device) Log
- (UPDATE) Added Gender Detector function
- Algorithm will be activated after purchasing a full license, and it is necessary to upgrade to improve performance in the early stage of learning.

### Changed

- Added Channel0 Stream to Onvif Stream (16 channel model supports a total 17 channel Stream Profile)
- Improved to reuse zone settings of other AI triggers (which had been used in the past)
- Improved face Recognition Basic Performance and Recognition Rate
- face management in Face Recognition
- Improved loading of face list when paging / unbinding face on the list
- Improved unbinding multiple items by selecting multiple groups
- Improved the symptom of slow upload speed when registering a large number of faces
- Dwell time of Stopping Trigger can be set up to 30 minutes (1800 seconds)
- When modifying or deleting Trigger / Schedule / Action presets, the Action Rule containing “preset” is also can be modified or deleted. [CBC-300]
- Improved User Management UI
- Improved convenience when registering / deleting / editing for users
- ID / PW rules are displayed when registering/editing users
- Improved Alarm Out Action handler to be linked in three ways: ON / OFF / ON for duration
- Improved using face name to search for a registered face in the FR face list
- Improved to edit after registering FR Face, Group information
- Fixed Hikvision NVR ONVIF integration (integrate with Channel0 Encoding Motion Event)
- Improved trigger menu to appear automatically when entering the LPR license key
- Possible to set Action Rule even when the system is in the Disarm state.
- Fixed the problem of AI Marketing Zone not being removed in Live View [CBC-318]
- CBC - Fixed Onvif integration issue with Dahua NVR [CBC-179]
- CBC – Added KRONOS HTTP, KRONOS TCP template [CBC-273]

### Bug Fixes

- Modified to reflect changed group information in the event when FR Face-Group binding / unbinding
- Where Action message is not sent when Action message contains token related to Face
- Where "Every-N" of Trigger Method in Occupancy Trigger is triggered even if 1 is changed regardless of the value
- Login fails if no password is entered after ONVIF Discovery
- Problem where an error alert appears when exporting a DB
- Automatic connection even though ID / PASSWORD is blank while connecting to RTSP client such as VLC [CBC-332]

## 11/29/2019 Changes in Release v100092

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100092.100
- ZN-AIBOX8 - 72210.1.100092.100
- ZN-AIBOX16 - 72310.1.100092.100

### Feature Added

- Added API Document page (Setup> System> API Document)
- Arm / Disarm status can be used as a trigger of Action Rule (ex: send an email when Disarm status, etc.)
- Added batch delete function to the action rule list
  - Possible to delete filtered Action rules in bulk or entire Action rules
- Added action rule in the bulk registration function
  - All AI Trigger Action rules can be registered in a batch
  - Action rule can be registered for all AI triggers of a certain type (ex: all intrusion triggers)
  - Action rule for all AI Trigger of a specific channel can be registered collectively (ex: all AI triggers of CH1)
  - Action rule for Video Loss Trigger of all channels can be registered collectively

### Changed

- Improved to filter by trigger type in the action rule list
- Improved UDP Streaming Receive Stability
- AI Marketing> AI Counter statistics minimum time unit: changed from 10 mins to 5 mins
- When the user cannot receive the video for more than 15 seconds while connected with the URI entered in Video Source, it will automatically disconnect and reconnect

### Bug Fixes

- Fixed where count label is displayed even when set to Occupancy trigger method by 'Limits
- Fixed where FR algorithm is selected even if more than 8 different algorithms are set
- Fixed requests to the ONVIF Server from version 100091

## 11/22/2019 Changes in Release v100091

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100091.100
- ZN-AIBOX8 - 72210.1.100091.100
- ZN-AIBOX16 - 72310.1.100091.100

### Feature Added

- Added Liveness Detection to Face Recognition Trigger
  - Setting FR Trigger of Comparison and Unregistered type, abusing is prevented by using Liveness Detection.

### Changed

- N/A

### Bug Fixes

- Changed to redirect to HTTPS when connecting via HTTP
- Improved Face Recognition native performance
  - [Additional Restrictions] FR algorithm is selected in Video Source, non-FR algorithms can up to 8 channels
  - FR 8 channel + Other 8 channel combination is possible. FR 1 channel + Other 9 Channels cannot be selected.



## 11/20/2019 Changes in Release v100089

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100089.100
- ZN-AIBOX8 - 72210.1.100089.100
- ZN-AIBOX16 - 72310.1.100089.100

### Feature Added

- N/A

### Changed

- N/A

### Bug Fixes

- Fixed bug where RTSP connection fails when video source has low FPS

## 11/11/2019 Changes in Release v100087

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100087.100
- ZN-AIBOX8 - 72210.1.100087.100
- ZN-AIBOX16 - 72310.1.100087.100

### Feature Added

- Polish language added
- Failure face registration will pop up the failed reason
- Object direction label in the work message editing UI. (All templates with existing directions added) msg popup.

### Changed

- N/A

### Bug Fixes

- The Kronos template can be displayed in the CBC-action message editing UI

## 10/24/2019 Changes in Release v100083

### Firmware: Update

- ZN-AIBOX4 - 72110.1.100083.100
- ZN-AIBOX8 - 72210.1.100083.100
- ZN-AIBOX16 - 72310.1.100083.100

### Feature Added

- Added Action Handler where CH0(Multiview) Video Pop-up is available when the event has occurred

### Changed

- N/A

### Bug Fixes

- Fixed bug where add button was missing from Event Action page
- Improved Event counting display - Annotated Video count to 9,999,999'
- Fixed bug where DB Import failed when DB file size is huge.
- Fixed bug where Intrusion trigger was not displayed in Rule Condition.



## 10/04/2019 Changes in Release v100080

### Firmware: Update

- ZN-AIBOX8 - 72210.1.100080.100
- ZN-AIBOX16 - 72310.1.100080.100

### Feature Added

- Added TCP / UDP / Multicast option to RTSP protocol type of Video Source (TCP is recommended)
- Added option to filter only system events when searching Event Log
- Added Occupancy trigger label configuration UI
- Added Facial Attribute Filtering mode to FR trigger
- When the arm/disarm, the function is connected to alarm input, it works as a bi-stable mode
- Added Arm / Disarm setting API
- Added counter function for business intelligence
  - Register a new counter from the result counted in multiple triggers
  - Search Counter statistics through REST API
  - Added AI MARKETING menu (formerly named AI RULES changed to AI SECURITY)

### Changed

- N/A

### Bug Fixes

- Improved performance with additional learning of Human / Vehicle Detector
- Improved Static Object Filter Performance
- All the ASCII characters can be used as trigger label names (space, slash, etc.)
- Changed to display maximum 5 seconds for purple box displayed in Annotated Video when Event-Triggered
- Improved the email action handler to set multiple email addresses separated by commas.
- The counter of each trigger will not reset to 0 when rebooting. A restored counter within a maximum of 10 minutes.
- Added Action message template
- Delete Function to switch arm by timer in Disarm state
- Event Log action would be added automatically when setting the action rule
- FR 1/4/8/16 channel license chip support.
- Simplified list of AI algorithms available to NVRs in Companion Mode
- Improved Trigger Statistics Counting
- Added Trigger statistics daily counting function
- Added trigger statistics counting time zone setting function
- Improved Trigger Statistics Reporting
- FTP server can be set as a trigger statistic reporting receiver
- Only triggers that users want can be selected when reporting trigger statistics
- Trigger statistics reporting can be set hourly / daily / weekly / monthly

## 08/29/2019 Changes in Release v100069

### Firmware: Update

- ZN-AIBOX16 - 72310.1.100069.100

### Feature Added

- Added FR face batch registration / deletion function
- Added FR Face List Paging and Group Filter function
- Added Genetec Action Handler

### Changed

- N/A

# AI Box FW Release note

Ver. 1.00357

## Bug Fixes

- Support FR up to 16 channels