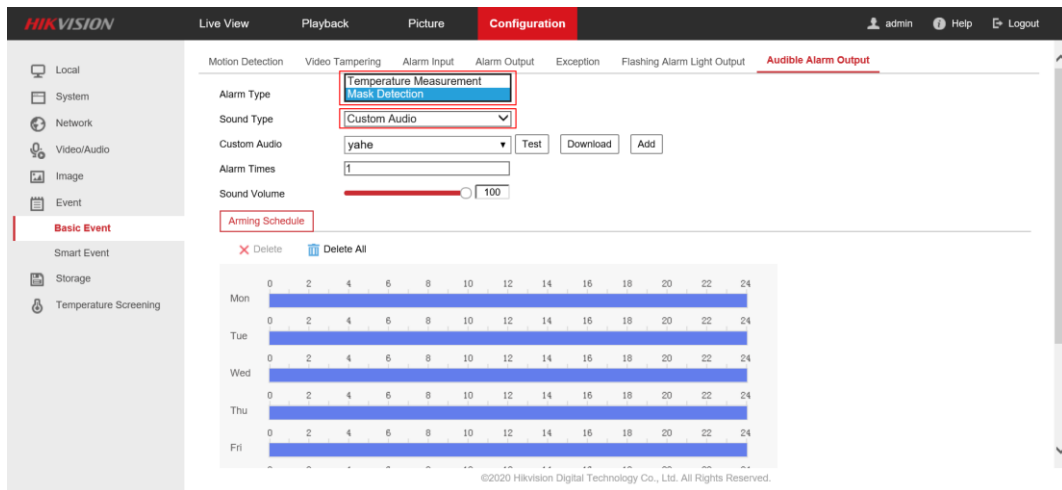


Hello everyone. We have upgraded our Thermal Camera firmware to V5.5.26 build200608 which is the latest one so far. The followings are some highlighted upgrade points since V5.5.26 build200507:

1. Add **custom alarm audio output** function for devices with /PA, temperature abnormal alarm and mask detection alarm can be set separately.



Please note: The uploaded audio file shall meet the following requirements:

General format	.wav
Size	Less than 512 KB
Encoding format	PCM
Sampling rate	8 KHz
Bit Depth	16 bits
Channel	Mono (1 channel)
Bit rate	No specific requirement

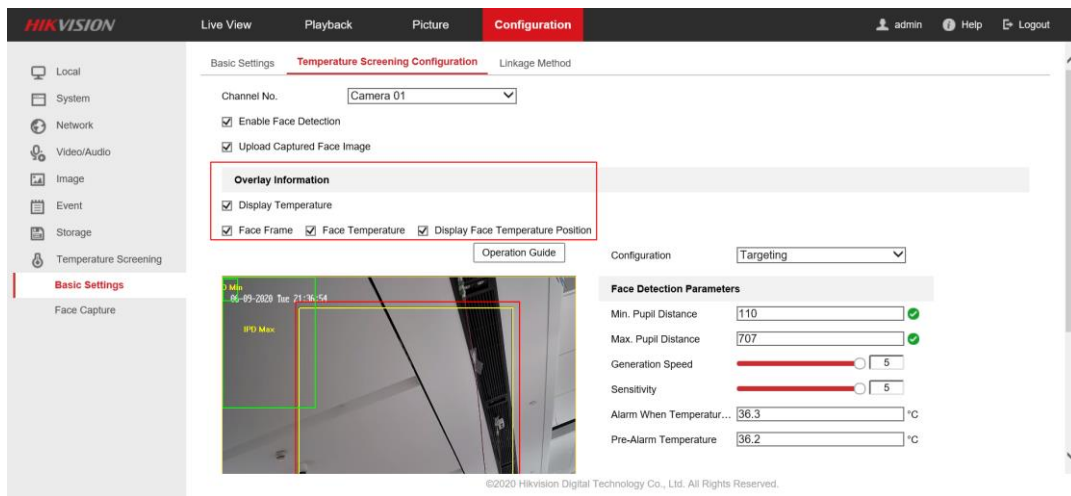
Upload Custom Audio

* Custom Audio

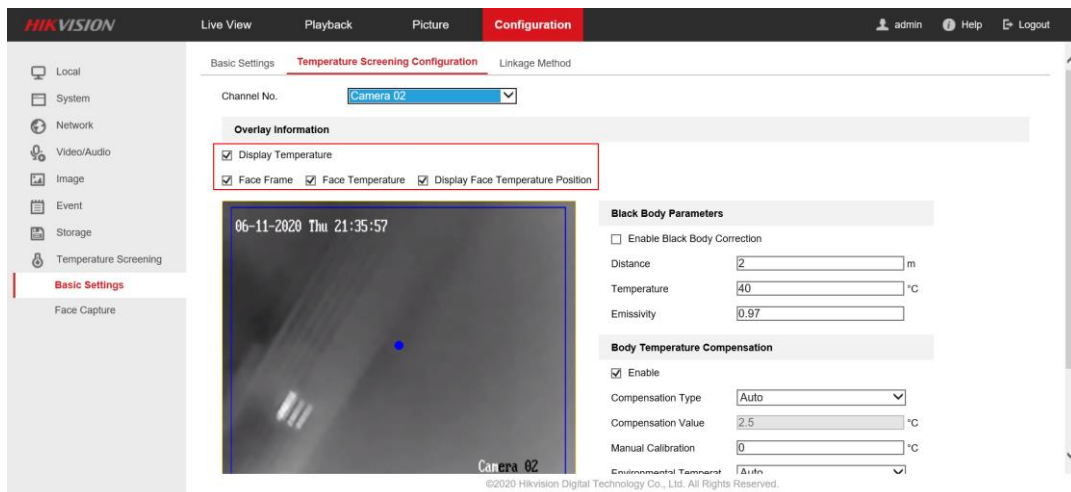
Upload a .wav mono sound audio file with the size smaller than 512 KB and sampling rate as 8 KHz.

* Audio Name

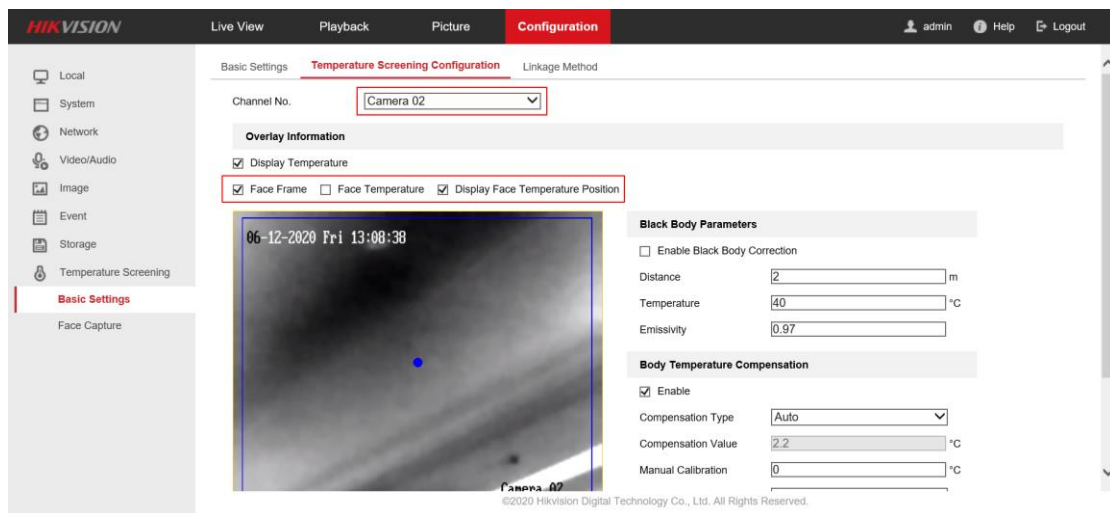
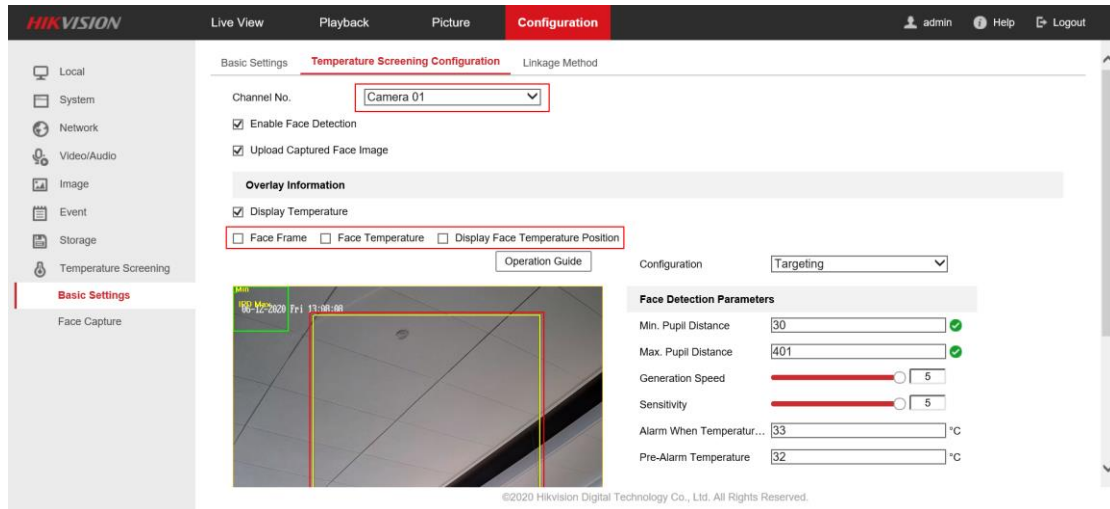
2. Add options to the **Temperature Screening Configuration** page to set whether to display the face frame, face temperature and temperature measurement position respectively.



The same configuration can also be applied to the thermography channel and can be set independently.



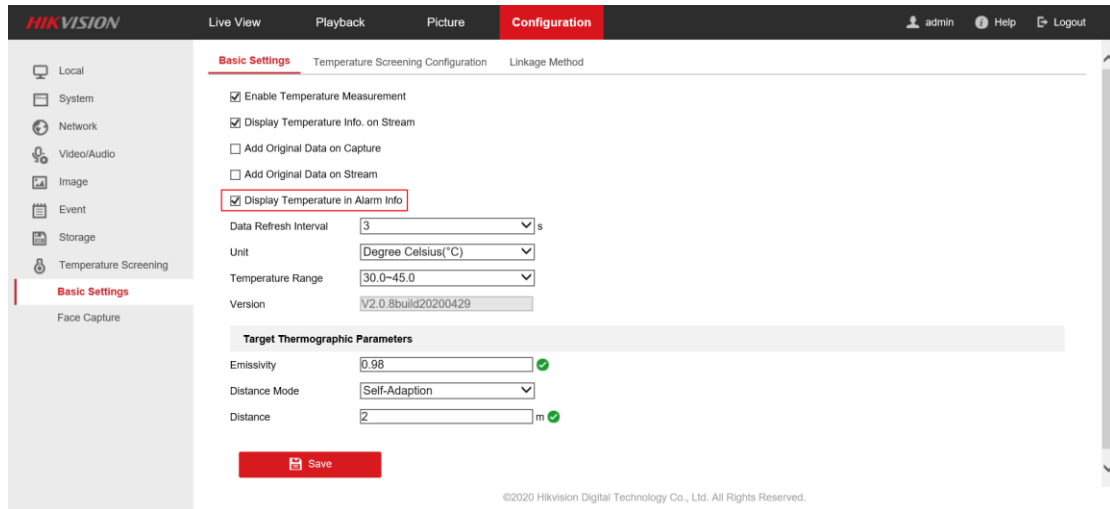
The above configuration is effective for **LiveView** and **face capture**. For example, if the customer does not need to display any information in the visible light channel, but only needs to display the face detection frame and the actual temperature measurement position in the thermography channel, the following configuration can be set:



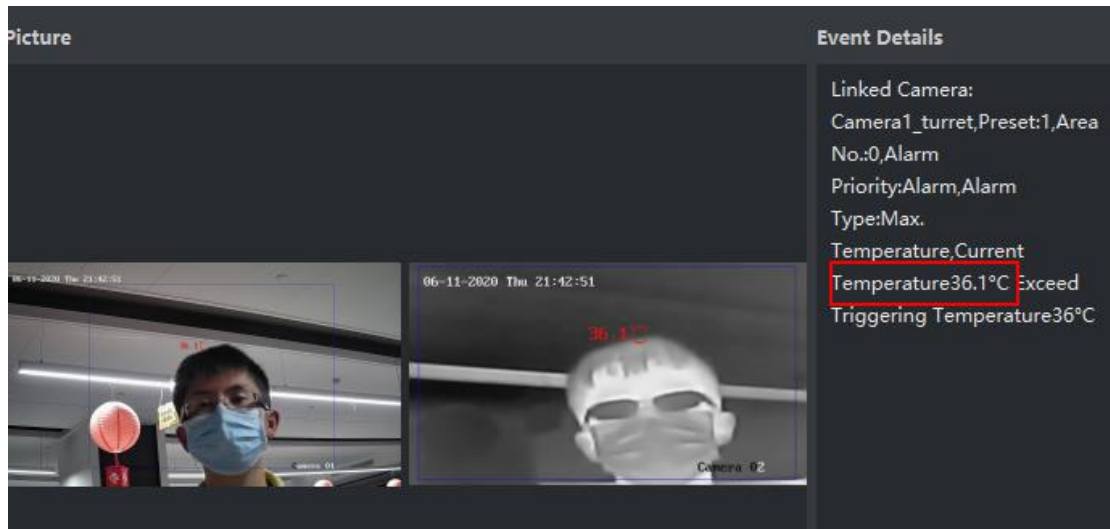
The actual effect after configuration is as follows:



3. Add an option of whether to display the temperature value in the event details:

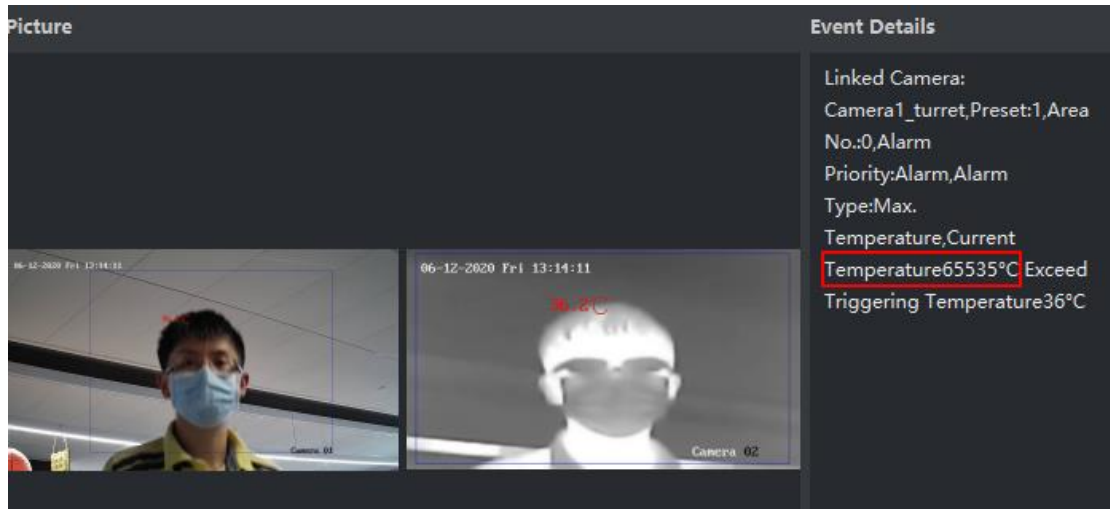


If **Display Temperature in Alarm Info** is checked, the temperature information will be displayed in the event details, as shown below:



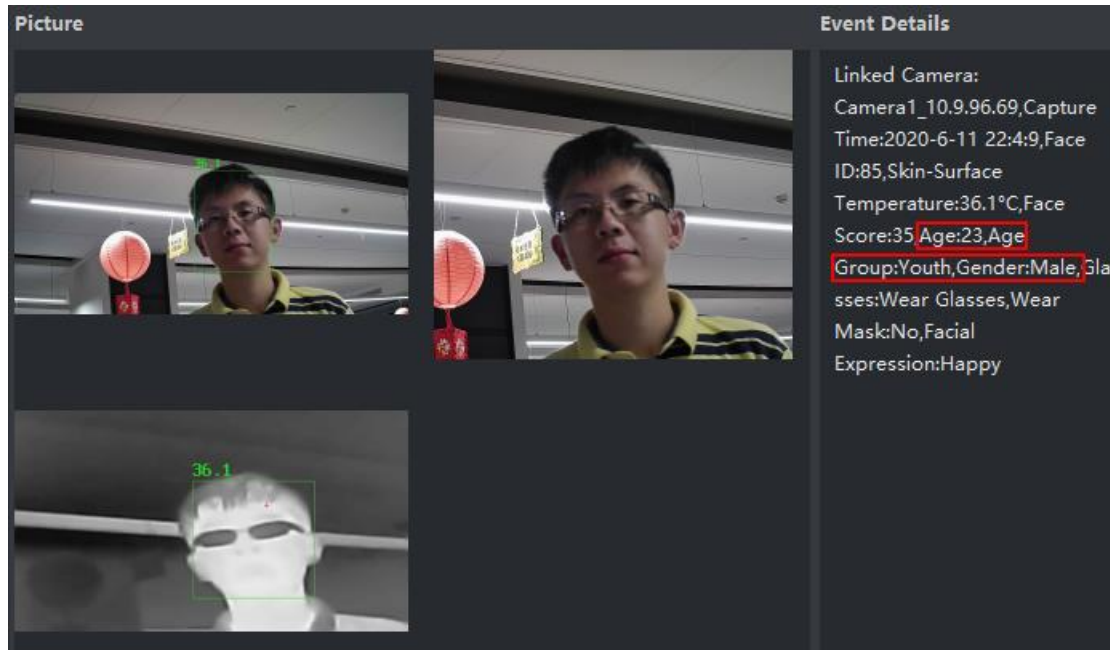
Otherwise, the temperature information will not be displayed in the event details, as shown below:

Please note: The temperature shown below is 65535 °C, which is the 4200 bug of current version. A new version (expected June 20) will be issued later to fix this problem. After that, the temperature value will not be displayed.



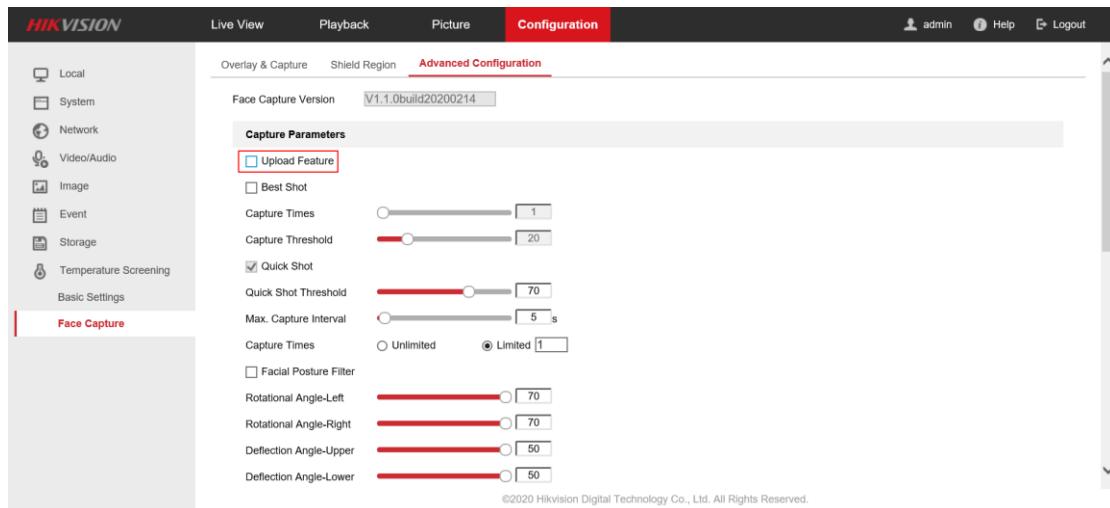
4. Optimization of face capture information display:

In addition to mask detection information, age and gender will also be displayed.



If the customer does not need to display the above feature information, do not check **Upload Feature**:

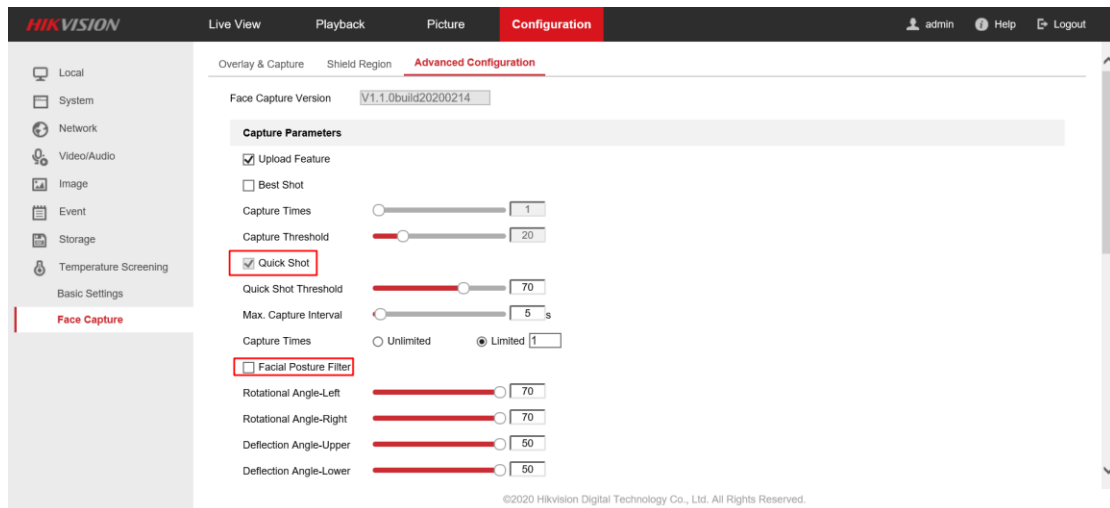
Please note: Mask detection information also belongs to facial features. If **Upload Feature** is not checked, mask detection information will not be uploaded.



5. Solve the problem of missing detection when a large number of faces (more than 20 faces) appear at the same time in the previous version.
6. Solve the problem of ghosting in face capture when WDR is turned on in previous version as shown below:

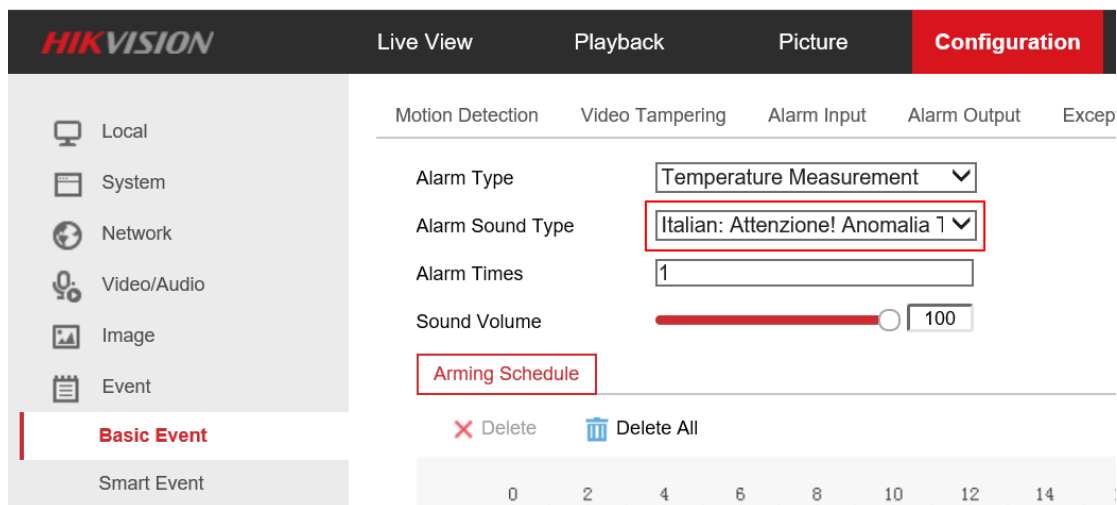


7. Solve the problem of ineffectiveness of **Facial Posture Filter** in the previous version of Quick Shot mode (Even in Quick Shot mode, if the face does not meet the threshold value set by **Facial Posture Filter** at any time, the capture will not be performed; In previous versions, only Best Shot mode does this).



The upgraded contents in the last version V5.5.26_200507 are as follows.

1. We updated **English** audio files of **Temperature Measurement** and **No Wearing Mask** alarm for devices with /PA. The pronunciation is more standard and accurate.
2. We now offer an option of **Italian** for **Temperature Measurement** alarm sound.

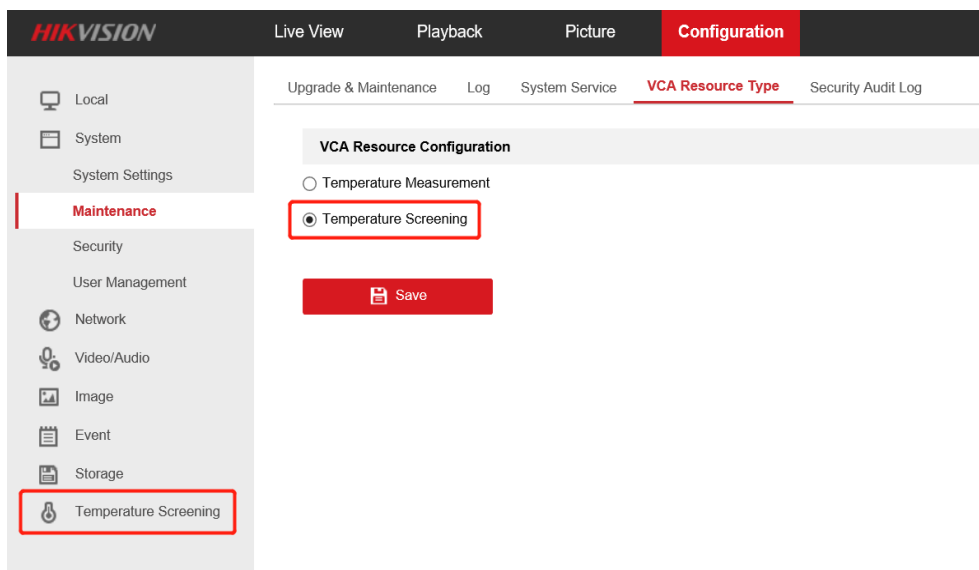


Note:

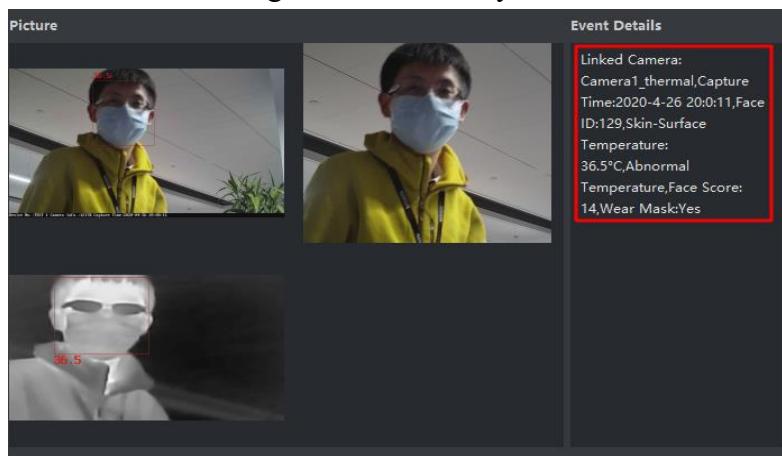
You can choose different alarm sound other than English for **Temperature Measurement**. But English is the only choice for **No Wearing Mask** alarm sound.

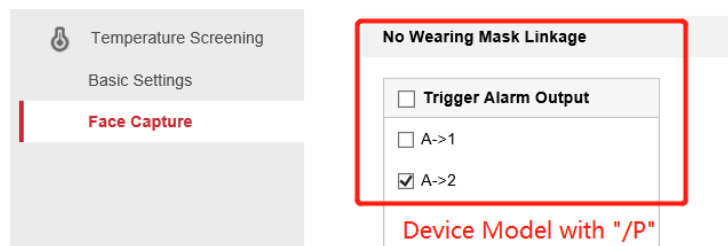
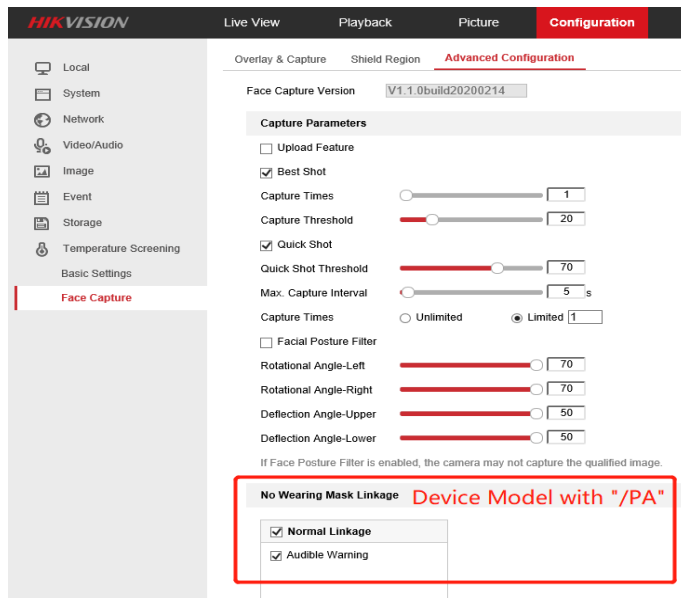
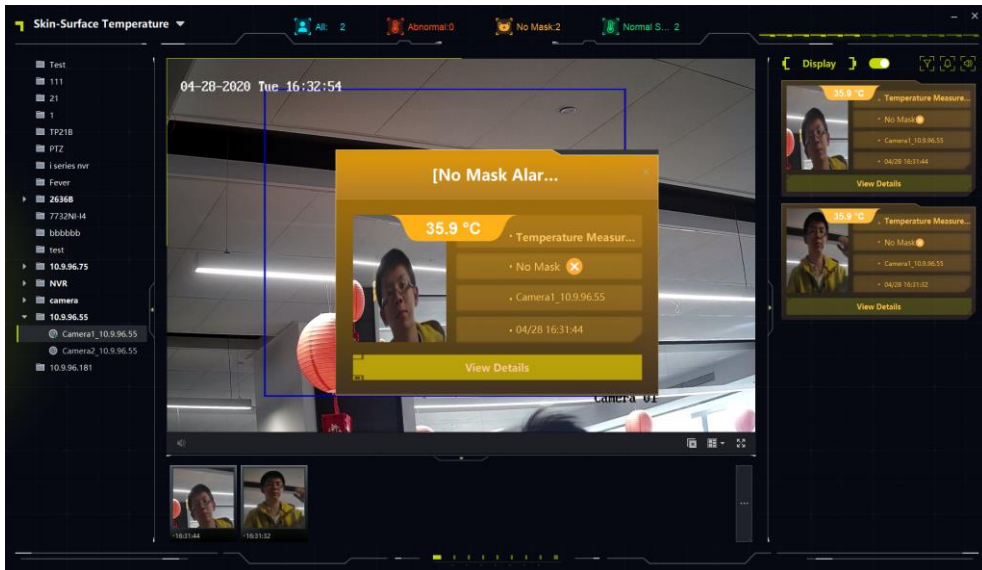
The upgraded contents in the last version V5.5.26_200427 are as follows.

1. We updated some descriptive words of the Web interface. For example, we will use **Temperature Screening** instead of **Body Thermography**.



2. Optimization of temperature measurement algorithm, specifically reflected in:
 - ① Sharp temperature variations caused by side faces or low temperature is fixed
 - ② The issues that measured temperature is lower than expected, caused by background compensation algorithm embedded in the last version, is now fixed
3. Support Mask detection, Pay attention that as for device with “/PA” module, audio warning is supported; for device with “/P” module, alarm out linkage is supported. In addition, all the alarm linkages are disabled by default.





- The Logic of face capture is optimized, and add **Best Shot** Mode additionally. The Program logic are set as following:

Quick Shot:

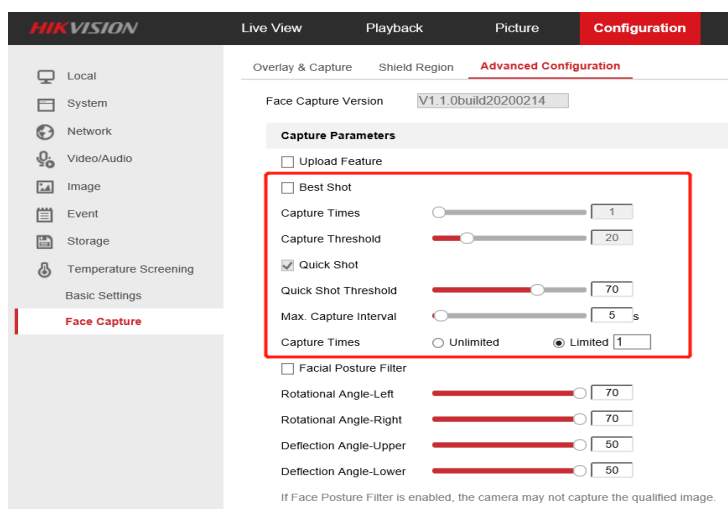
When one of the following conditions is met, face picture will be captured and uploaded immediately:

- ① when people enter into the detection area, meanwhile, the captured image quality meets the threshold, and the snapshot which meets the conditions will be uploaded immediately;
- ② when people enter into the detection area, if the duration exceeds the maximum capture time, during which the face image does not reach the capture threshold, the image with the highest quality will be uploaded;
- ③ The time from entering to leaving the detection frame is shorter than the maximum capture time. If the face image does not reach the capture threshold during this period, the image with the highest quality will be uploaded;
- ④ When the temperature trigger the alarm, face picture will be captured and uploaded immediately.

Best Shot:

When one of the following conditions is met, face picture will be captured and uploaded immediately:

- ① If the image quality reaches the Capture Threshold, when the object leaves the detection region, face picture with highest face quality score (it should reach the Capture Threshold, otherwise no picture would be uploaded) will be uploaded immediately;
- ② When the temperature trigger the alarm, face picture will be captured and uploaded immediately.

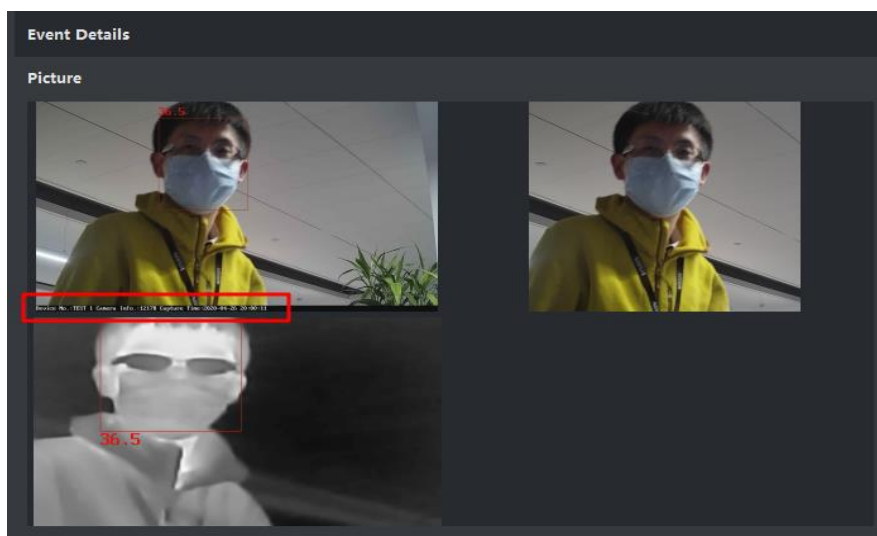
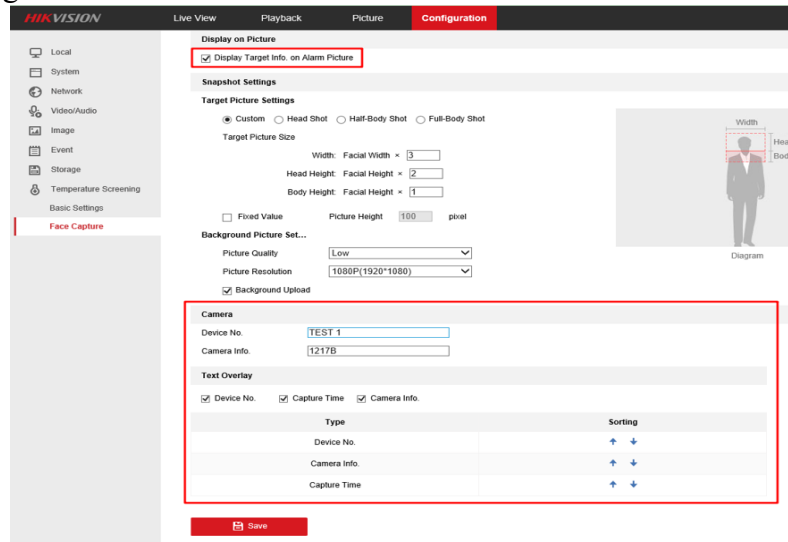


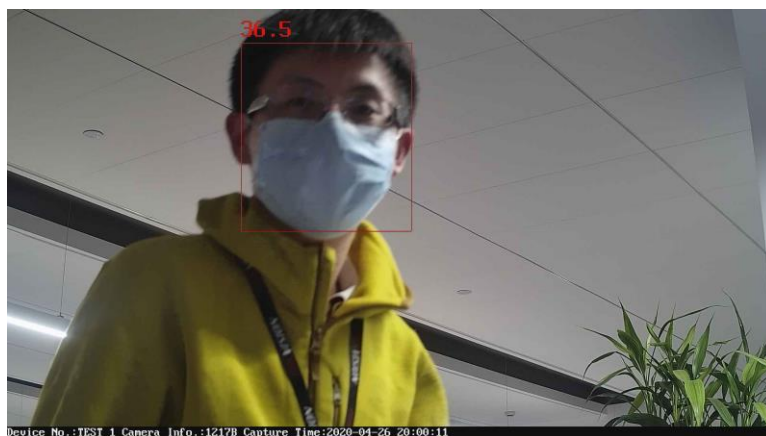
Notes:

- ① As for some situations like someone comes into the detection area with normal temp. for some reasons, while, as long as his temp. is abnormal before he leaves the detection area. Alarm will also be triggered. Hence, in this situation two pictures

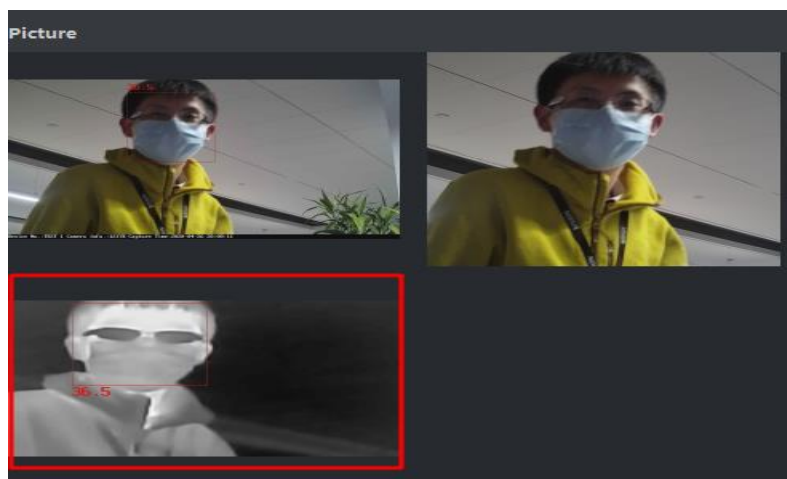
will be uploaded, one for normal, another for abnormal, to reduce the missing alarms.

- ② Best Shot and Quick Shot can be enabled at the same time, they will work independently. While as recommended capture times is 1 for 1 person, it will lead to a problem that two pictures will be uploaded to the back-end. Hence, we highly recommend to use one mode at one time.
 - ③ As the default parameters of this part have been changed, do remember to restore the device after upgrading to this version.
5. In order to increase the success rate of comparison in the back-end devices, the quality of the snapshot picture is increased.
 6. **Device No. Capture Time** and **Camera Info.** could be overlaid on the picture according to customer's needs.





7. Thermal alarm images are added in the uploading pictures.



The upgraded contents in the last version V5.5.26_200415 are as follows.

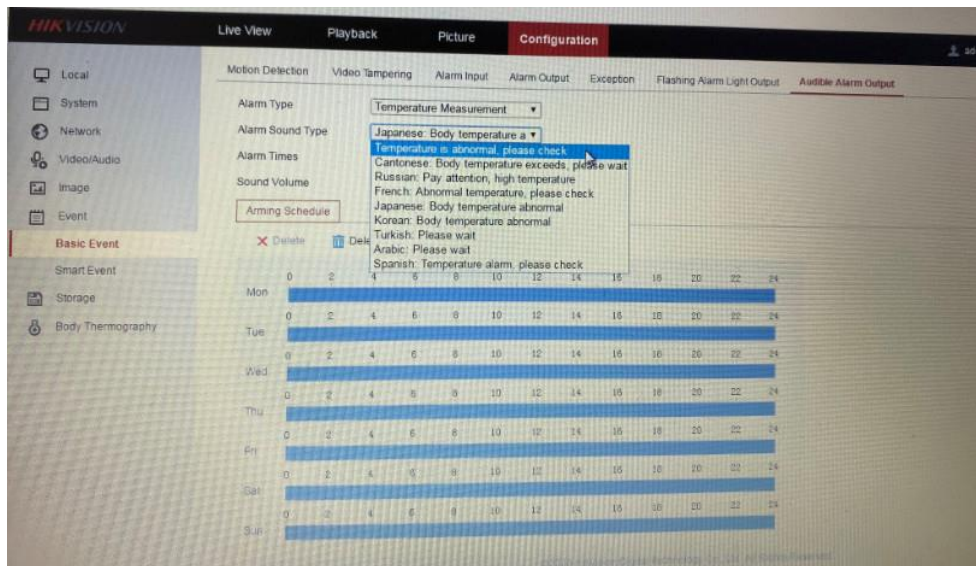
Note:

There are no differences on the UI of 200415 compared with the former version 200330.

1. The forehead-first rule of temperature measurement algorithm is improved to increase the accuracy and stability of the measurement. **The temperature jump phenomenon are reduced thanks to these improvements.**
2. Improved the temperature measurement accuracy when the device is used in environment background with high temperature (like 30°C in a tent) by embedding background temperature compensation algorithm.
3. Some UI display problems of minority languages and linguistic bugs are fixed.

The upgraded contents in the last version V5.5.26_200330 are as follows.

1. Change to forehead thermometer to show the highest temperature on the forehead area acquiescently. Reduce false alarms caused by corners of the eyes, corners of the mouth and hot objects in the background.
2. PA device alarm voice supports the selection of other languages (Japanese, Korean, Arabic, Turkish, Russian, French, Spanish, Italian)



3. Add distance measurement mode: **Self-adaption** and **Fixed Distance**. The **Self-adaption** mode would calculate the temperature compensation according to the pupil distance when a face is detected, and calculate the temperature compensation value according to the fixed distance **when the side face exceeds 1 second**.
Caution: At present, Self-Adaption mode could cause abnormal temperature measurement when a side face appears. Please ensure that the measured people is always faced to the camera, **Otherwise, please use Fixed Distance mode**

The screenshot displays the Hikvision web interface for configuring a camera's body thermography settings. On the left is a navigation menu with categories: Local, System, Network, Video/Audio, Image, Event, Storage, and Body Thermography. Under 'Body Thermography', 'Basic Settings' and 'Face Capture' are listed. The main content area is titled 'Basic Settings' and includes sub-tabs for 'Body Thermography configuration' and 'Linkage Method'. The configuration includes fields for Channel No. (Camera 01), checkboxes for enabling temperature measurement, color-temperature, and stream info, and options for adding original data. It also features a Data Refresh Interval (3s), Unit (Degree Celsius), and Temperature Range (30.0~45.0). A 'Target Thermography Parameters' section contains Emissivity (0.98), Distance Mode (Self-Adaption, highlighted with a red box), and Distance (8m). A red 'Save' button is at the bottom.

Parameter	Value
Channel No.	Camera 01
Enable Temperature Measurement	<input checked="" type="checkbox"/>
Enable Color-Temperature	<input checked="" type="checkbox"/>
Display Temperature Info. on Stream	<input checked="" type="checkbox"/>
Add Original Data on Capture	<input type="checkbox"/>
Add Original Data on Stream	<input type="checkbox"/>
Data Refresh Interval	3 s
Unit	Degree Celsius(°C)
Temperature Range	30.0~45.0
Version	V2.0.8build20200327
Target Thermography Parameters	
Emissivity	0.98
Distance Mode	Self-Adaption
Distance	8 m

Save

4. Face capture function (Upload Captured Face Image) in overseas devices is not enabled as default.