AI Temperature Screening Configuration Guide

1. Introduction

With the combination of DeepinMind NVR and thermal camera, it can realize face recognition, abnormal temperature detection and mask detection. The DeepinMind NVR and thermal cameras must be upgraded to the special version, and need be restored after upgrading.

Product Showcase:

<table>
<thead>
<tr>
<th>Product</th>
<th>Product Model</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal camera</td>
<td>DS-2TD2617B-3/6PA</td>
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<tr>
<td></td>
<td>DS-2TD2636B-15/P</td>
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<td></td>
<td>DS-2TD2636B-13/P</td>
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<td></td>
<td>DS-2TD2637B-10/P</td>
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<td></td>
<td>DS-2TD1217B-3/6PA</td>
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<tr>
<td>DeepinMind NVR</td>
<td>iDS-9616/(32/64)NXI-18/X(B)(T)</td>
<td>Please updated to the special firmware version</td>
</tr>
<tr>
<td></td>
<td>iDS-7716/(32)NXI-14/X(B)(T)</td>
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<tr>
<td></td>
<td>iDS-6708-1/8F(B)(T)</td>
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</table>

Firmware download:

For DeepinMind NVR:
ftp://hikftp.hikvision.com:400/01 All Materials of Temperature Screening Solution/02 DeepinMind NVR/05 Firmware/DeepinMind NVR/

For Thermal Camera:
ftp://hikftp.hikvision.com:400/01 All Materials of Temperature Screening Solution/02 DeepinMind NVR/05 Firmware/Thermal Camera/
2. **Solution**

![Diagram showing the setup of Thermal Cameras and DeepinMind NVR with a monitor and tripod]

Configure face capture on thermal camera, add the camera to DeepinMind NVR and configure face comparison on NVR, can realize face recognition, abnormal temperature linkage, no mask alarm linkage.

3. **Configuration Steps**

3.1 **Face capture configuration**

Step 1: log in the website of thermal camera, upgrade to firmware supported face capture and restore or default the device.

Step 2: Go to Video/Audio page, set display VCA info by video.
Step 3: Body Thermometry setting

- **Tick to enable** the Enable Temperature Measurement and Enable Color-Temperature options.
- **Emissivity:** 0.98
- **Distance:** The monitor distance

Enable face detection and upload face image. If needed, enable display temperature and face temperature position.
Step 4: Complete the camera configuration, add camera to NVR.

3.2 Face comparison configuration

3.2.1 Add face picture library

Go to NVR’s Website, create database and add face pictures in the database(The database also can be created via GUI or iVMS). Here are the requirements for face picture in database:

40 < Min. Pupil Distance < 300 (recommend 60) pixels.
20KB < Photo Size < 4MB
Format: JPG, JPEG
3.2.2 Configure face comparison

Step 1: Go to NVR’s local GUI, Smart analysis—Smart event settings —Face recognition, tick ‘Enable Face Picture Comparison’ and select library that you want to compare with. Similarity is suggested to be set as 70 for mask face comparison. Do not tick enable non-real-time comparison.

Step 2: Tick notify surveillance center in both linkage succeeded and linkage failed. Configure other linkage based on actual situation.

4. Application & Data retrieval

4.1 GUI application

4.1.1 Target detection
Connect the display screen to device, go to GUI interface. Tick Live view-Target Detection. Tick ☑ , if there are face capture alarm and face comparison alarm, these alarm will be showed in the left side.

### 4.1.2 Fever screening

Click ☟ button on left bottom of live view, go to fever screening interface. Show abnormal temperature target by red, no mask target by yellow, normal target by green.
4.2 Data Retrieval

4.2.1 Search by abnormal temperature

Step 1: Go to smart analysis-Smart search-Face search, enter the temperature range, and start search.

![Image of temperature search interface]

Step 2: The result will be shown like below.

![Image of temperature search results]

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E-Mail: support@hikvision.com • www.hikvision.com
Step 3: Double click to show the detail and related record video.

4.2.2 Search by mask status

Step 1: Go to smart analysis-Smart search-Face search, choose no mask and start search.

Step 2: The result will showed like below.
Step 3: Double click to show the detail and related record video.
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<tr>
<th>Title:</th>
<th>AI Temperature screening configuration guide</th>
<th>Version:</th>
<th>v1.0</th>
<th>Date:</th>
<th>26/3/2020</th>
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<td>Product:</td>
<td>Thermal Cameras, DeepinMind NVR</td>
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See Far, Go Further

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