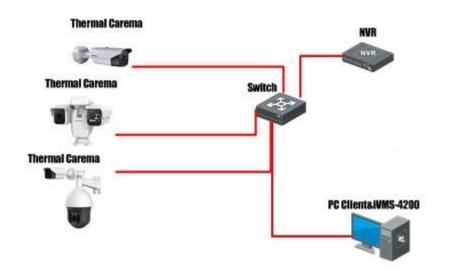
## **1** Function introduction

At present, NVR supports four alarm types of thermal camera: **Perimeter Fire Source detection**, **Temperature measurement alarm and Temperature difference alarm.** The topology diagram of the general thermal camera application in the field is shown as the following figure, which mainly consists of the thermal camera, transmission network, and center management.



After the thermal camera is connected to NVR, it will provide the alarm code stream of VCA and pictures for NVR to display. After checking the Upload Center on the alarm configuration interface of the thermal camera, the device will upload the corresponding alarm information to the NVR. If the device continues to alarm for a period of time, the thermal camera can send up to 4 alarm messages to the NVR within 1S.

### 2 NVR supported models and versions

NVR	NVR version	Firmware of NVR path						
I series NVR	Latest firmware	/00	Oversea	Products/01	IP/03	NVR/04		
		Firmware & Release Note/04 I/[76 77 96 NI-						

# **3** This section describes the functions of the thermal camera connected to the I series NVR

1. Preview, playback, remote simple configuration, receive VCA alarm information.

2. smart detection on the NVR local preview interface after V4.40 supports real-time temperature detection.

3. The alarm picture (including intelligent rule information display) can be found locally in VCA Search.

4. PTZ can be configured for alarm deployment linkage. The NVR version is later than V4.1.50.

5. VCA alarm information can be viewed by accessing 4200.

## **4 NVR alarm configuration**

### 4.1 Fire Source detection

To enable this alarm, ensure that this function is enabled on the WEB side of the thermal imaging camera. Configure the function according to the following figure:

HI	<b>KVISION</b>	Live View Playb	ack Picture	Configuration
₽ □ ₽	Local System Network Video/Audio	/	Dynamic Fire Source Detector	×
	Image Event Basic Event	Dynamic Fire Source ✓ Enable Dynamic Fire Fire Source Detection ✓ Display Fire Source II	Source Detection Dynamic Fire	~
1 1 1 1	Smart Event Storage Temperature Measurement	✓ Display Fire Source In Sensitivity Version	V3.0.1build20200619	100
		P Save		

After the thermal camera is added to the back-end NVR, the NVR cannot configure related alarm rules for fire point detection, but can only configure related defense linkage for its alarm, as shown in the figure below:



After the Fire Detection alarm is triggered, the alarm type received by the NVR local end is Fire Source Detection, as shown in the figure below:

<b>NVR</b> 4.0							۵ 🖧 🔟	a   U
Channel Target Detection	10	Alarm Information			;	×		
fre		Exception Basic Event	Smart Event loT Event					
Camera 02		Time to Alarm	Alarm/Exception	Play	Information(Camera No., Alarm Input			
Camera 01		2020-10-14 17:08:17	Temperature Measurement Alarm	•	D30 10.9.96.181	and the second		
thermal		2020-10-14 17:08:15	Line Crossing		D21 10.9.96.8	All PROPERTY.		
IPCamera 05		2020-10-14 17:08:07	Face (Face Capture)		D8 10.9.96.186			
1124		2020-10-14 17:08:07	Fire Source Detection	•	D2 10.9.96.20	Contract of the		
1111		2020-10-14 17:07:59	Intrusion	•	D38 10.9.96.78	Contraction of the local division of the loc		
		2020-10-14 17:07:58	Face (Face Capture)		D8 10.9.96.186			
ANPR CAMERA		2020-10-14 17:07:53	Temperature Measurement Alarm	•	D30 10.9.96.181			
IPCamera 10		2020-10-14 17:07:49	Face (Face Capture)		D30 10.9.96.181			
•		2020-10-14 17:07:47	Temperature Measurement Alarm	•	D30 10.9.96.181			
Camera 01		2020-10-14 17:07:30	Intrusion	•	D38 10.9.96.78	and the second se		
IPCamera 13		2020-10-14 17:07:30	Face (Face Capture)	•	D8 10.9.96.186	and the second se		
Camera 01		2020-10-14 17:07:29	Temperature Measurement Alarm		D30 10.9.96.181	and the second second		
ANPR		2020-10-14 17:07:22	Face (Face Capture)		D8 10.9.96.186	And in case of the local division of the loc		
IPCamera 16		_		-				
IPCamera 17								
Camera 01						<b>1</b>		
IPCamera 19		The second se			1. 1. 1. 1.	Camer	a 02	
IPCamera 02			0 3 2 0	<b>⊏</b> ]©	Հ 8 ტ 0 ဩ 6 <b>0</b>			
IPPT7							and the second second	

### 4.2 Temperature Mesurement alarm

After the Temperature Mesurement Alarm is triggered, the GUI receives a Temperature Mesurement Alarm, as shown in the following figure.

<b>NVR</b> 4.	0	,	) ﴿				
Channel	Target Detection	-		-12-383 Nov 23-06-25			2
			Alarm Information				$\times$
	D14 2020-10-16 11:29:29		Exception Basic Even	t Smart Event IoT Event			NO LINK
50		-	Time to Alarm	Alarm/Exception	Play	Information(Camera No., Alarm Inpl	
	1		2020-10-16 11:28:02	Vehicle	•	D27 10.9.96.233	
Con route			2020-10-16 11:28:02	Vehicle	•	D18 10.9.96.19	
	D14		2020-10-16 11:28:01	Face (Face Capture)	•	D8 10.9.96.186	A
	D14 2020-10-16 11:28:41		2020-10-16 11:27:55	Temperature Measurement	Alarm	D30 10.9.96.181	
			2020-10-16 11:27:55	Face (Face Capture)	•	D30 10.9.96.181	
			2020-10-16 11:27:53	Face (Face Capture)	•	D8 10.9.96.186	Contraction of the second
		10-10-2020	2020-10-16 11:27:45	Face (Face Capture)	•	D8 10.9.96.186	5 31-35-3839 Fri 11:27:46
F			2020-10-16 11:27:42	Vehicle	•	D27 10.9.96.233	
10 10/0120 Tel 11 10:00	D14 2020-10-16 11 28:14	-	2020-10-16 11:27:29	Intrusion	•	D14 10.9.96.219	
	11.28.14	THE ASY	2020-10-16 11:27:22	Vehicle	•	D27 10.9.96.233	
		CIER-I-MARKET	2020-10-16 11:27:22	Face (Face Capture)	•	D8 10.9.96.186	
		SKI KOL	2020-10-16 11:27:14	Face (Face Capture)	1	D8 10.9.96.186	dame di
Alter South			2020-10-16 11:27:12	Vehicle	•	D18 10.9.96.19	
	D14 2020-10-16 112863				-		NO LINK
		6					< 1/3 >马 田 C 過 23

#### 4.2.1 General Temperature Mesurement alarm

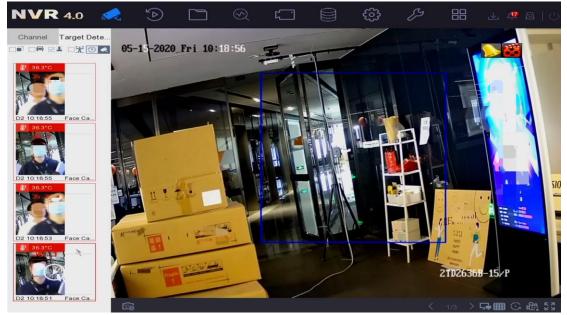
Since version V4.40, the GUI target detection interface and 4200 Epidemic Prevention and control interface can display temperature alarm, and each alarm can be sent to the platform with two visible and thermal images.

#### 4.2.2 Face temperature alarm (support from version V.4.40)

1. Support the local target detection interface and 4200 epidemic prevention and control interface to display human face temperature alarm, abnormal body temperature display red background, normal body temperature display green background.

NVR 4.0 💰	2 🕑 🗖			
Channel Target Dete	00-10-2020 (ref 19123) 22 000 000 Caregoria		Contro 02	NO LINK
36.1°C D2 10.3346 Tempera Tempera 35.4°C	NO LINK	NO LINK	NO LINK	NO LINK
D2 10 33 45 Tempera Tempera 36.3°C	NO LINK	NO LINK	NO LINK	NO LINK
D2 10:33:12 Tempera	NO LINK	NO LINK	NO LINK	NO LINK
	<b></b>		< 1	/3 > ⋤⊞⊙& 23

 Support body temperature state linkage voice broadcasting function. abnormal temperature and normal temperature have two English pronunciations. Other languages are not supported. Normal body temperature is not associated by default, and abnormal body temperature is not associated by default.



1. Support local and 4200 to retrieve face pictures according to body temperature state and temperature range, and support to display search results in specified temperature units.

NVR 4.0 💰			۲.		က်ပဲ	ES.	88		<u>9</u>	U
> Video	Search by Event	Search by Appear	ance							
Picture	Channel	[All] Camera			•					
🛞 Smart Search 🗸 🗸	Time Segme	Today	-	2020-05-15 00	.00 📖 -	2020-05-15	23:59 🛗			
Face Search	Body Temperatu	re								
Human Body De	Status	All	-	Unit	°C					
Vehicle Search	Enable Filt	ter ≥		(30.0~	45.0°C)					
								Start	Search	

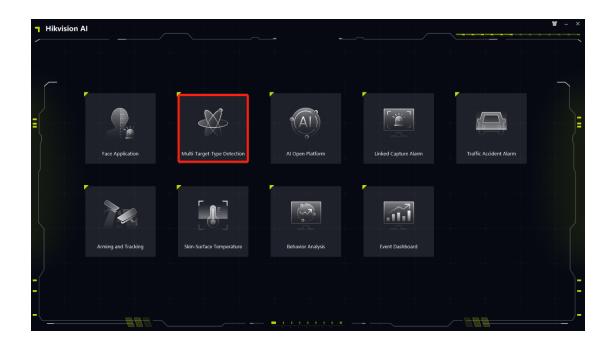
# 5 Human body temperature customized firmware

This firmware is different from the baseline release in that the firmware release is updated FTP: /01 All Materials of Temperature Screening Solution/02 NVR/05 Firmware/I Series NVR/

#### 5.1 Precautions for mask detection

HI	<b>K</b> VISION	Live View Pla	yback	Picture	Configuration
Ţ	Local	Overlay & Capture S	shield Region	Advanced Config	uration
	System	Face Capture Version	V1.1.0buil	ld20200214	
Ð	Network	Capture Paramete	rs		
.Q.	Video/Audio	Upload Feature	1		
1	Image	Best Shot			
圁	Event	Capture Times	0		
	Storage	Capture Threshold	-0		20
6	Temperature Screening	Quick Shot			
	Basic Settings	Quick Shot Thresho	bld	0	70
	Face Capture	Max. Capture Interv	val 🔿		5 s
		Capture Times	<ul> <li>Unlim</li> </ul>	nited	mited 1
		Facial Posture F	filter		
		Rotational Angle-Le	eft 🚽		70
		Rotational Angle-Ri	ght		70
		Deflection Angle-Up	oper		50
		Deflection Angle-Lo	wer		50
		If Face Posture Filte	er is enabled, the	camera may not ca	pture the qualified image.

1. To display the mask detection results in real time on the left side of the NVR preview interface, note that the **upload feature** must be checked on the WEB side of the thermal camera.



2. To display the mask Detection effect on 4200, remember to use the **Multi-Target Type Detection** module in AI dashboard.