How to Configure Video Quality Diagnosis Function

Introduction:

The newly added Video Quality Diagnosis function in Basic Event supports 15 kinds of video quality detection functions which are Brightness Exception, Color Cast, Snow Interference, Stripe Interference, Image Freeze, Signal Loss, Clarity Exception, Image Flutter, Video Tampering, Blurred Screen, Image Noise, Light Spot, Image Purple Edge, ICR Exception, Protective Film Unremoved detection.
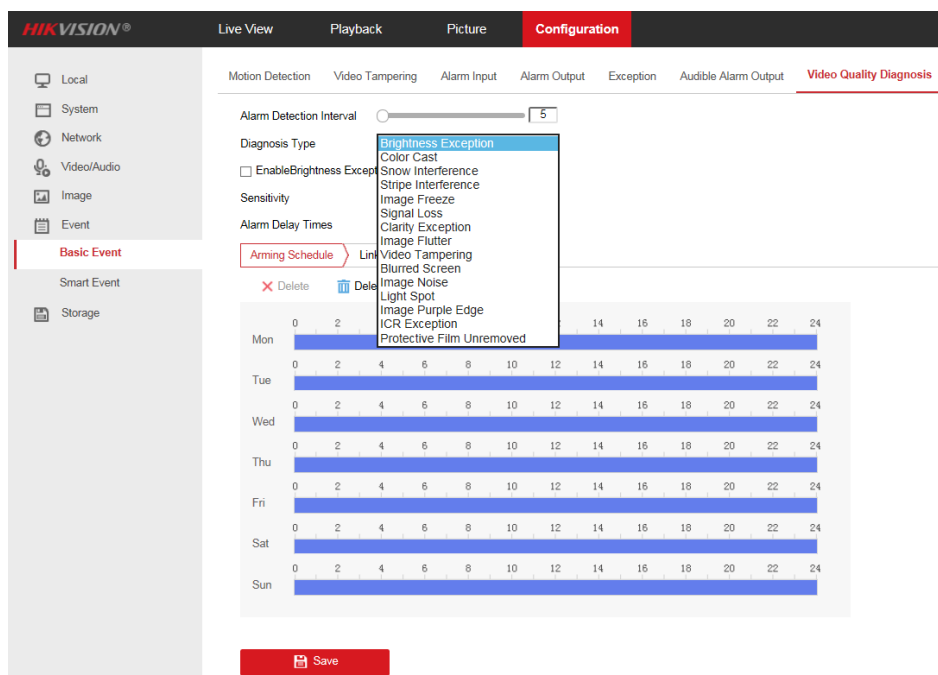
Each diagnosis function separately supports the setting of rules, linkage method and arming schedule.

1. Rule Settings
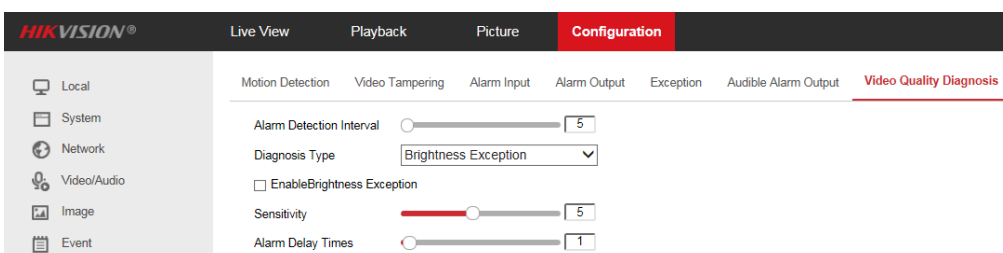
Alarm Detection Interval: the range is 5-300 seconds, the default value is 5 seconds.

Note:

1) It applicable to all types of video quality diagnosis function.

2) After the algorithm detects an alarm(generally it takes 2-3s), the next alarm detection will be performed after the alarm detection interval has elapsed. Therefore, the time interval for alarm upload includes the Alarm Detection Interval + the algorithm detection time.

Enable: Check the checkbox to enable and disable the function, and disable as default.

Sensitivity: the range is 1-10, the default value is 1.

Alarm Delay Times: the range is 0-100 times and the default value is 1. It refers to how many alarms are generated before the device reports an alarm.

2. Arming Schedule

The arming schedule supports 7*24h setting, armed all day by default.

3. Linkage Method

Support **Notify Surveillance Center** and **Trigger Alarm Output**, neither of them is enabled by default. The size of the background picture uploaded by the alarm is 1920*1080.
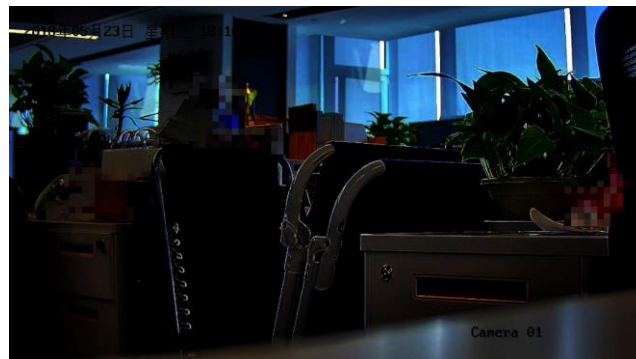
4. Alarm Trigger

4.1 Brightness Exception

When the overall image of the device is bright or dark, it will trigger an brightness exception alarm. For example:

(Normal)

(Dark)

(Brighter)

4.2 Color Cast

Due to problems such as light and angle, the overall color of the collected image is not displayed normally, and a color cast alarm will be performed.
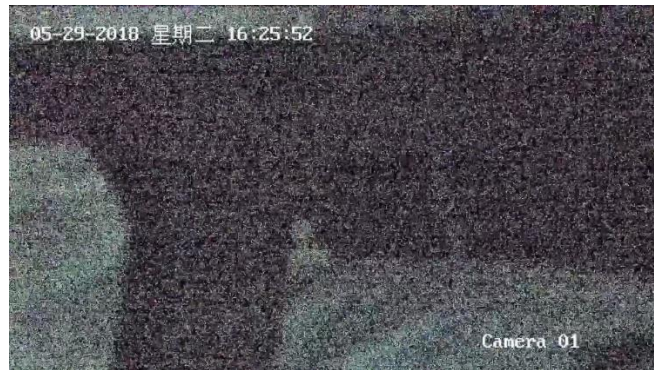

(Normal)

（Color Cast）

（Color Cast）

4.3 Snow Interference

It is visually manifested as a lot of snowflake-like noise distributed on the image. In the past, when there was no signal on the old TV, there would often be full-screen snowflakes.

(Snow Interference)

4.4 Stripe Interference

It is reflected in the large difference between the channel values of the pixels in the directional stripe area and the surrounding pixels.
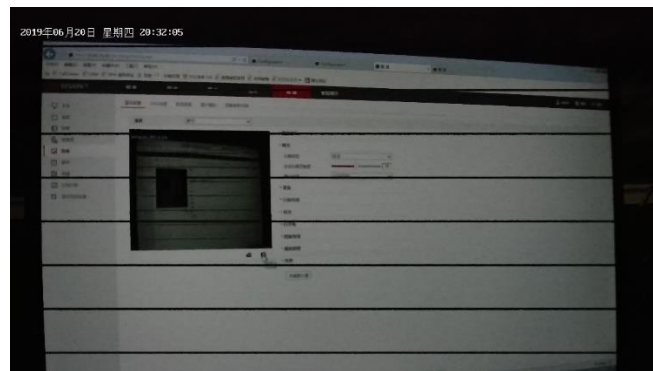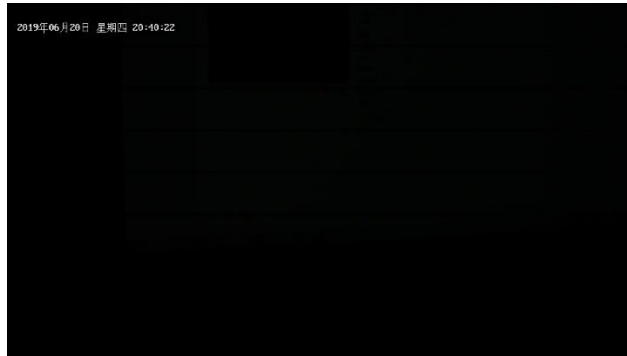

(Stripe Interference)

4.5 Image Freeze

It is suitable for situations where the scene in the screen does not change, but only the OSD changes. This phenomenon requires multiple frames of images to be detected.

4.6 Signal Loss

When the device lens fails and the image appears completely black, a video loss alarm will be triggered.

(Signal Loss)

4.7 Clarity Exception

When the image is blurred, a clarity exception alarm will performed.

(Normal)

(Blurred)

4.8 Image Flutter

It is generally caused by the shaking of the vertical pole or the shaking of the ground caused by the vehicle.

4.9 Video Tampering

The surveillance lens is completely or partly blocked by something, resulting in incomplete image and inability to perform normal surveillance functions.

(Video Tampering)

4.10 Blurred Screen

It is mostly caused by display failures or signal transmission failures that cause the image display to be completely incorrect, which is mostly manifested as large-area stripes, occlusion or color noise, etc.
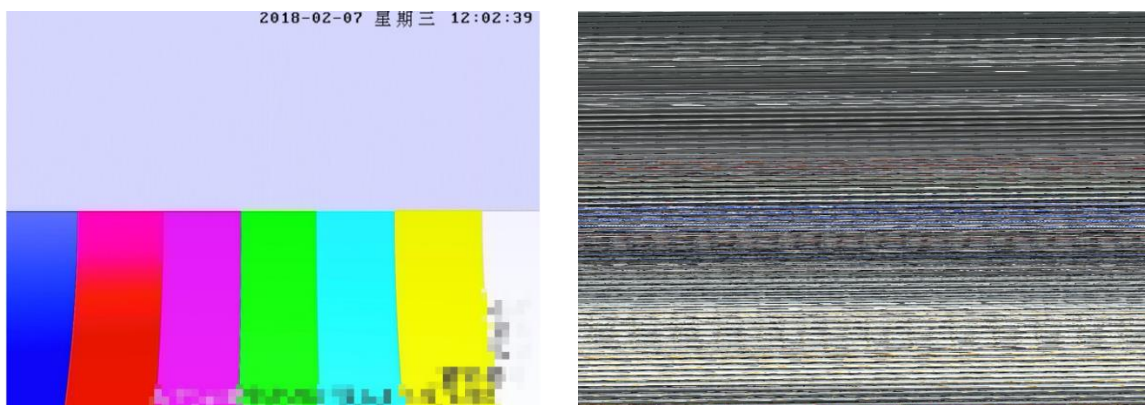
(Blurred Screen)

4.11 Image Noise

Noise is a random change of brightness or color information in an image.

(Noise)

4.12 Light Spot

It often appears in photos, especially when shooting against the light. We call this phenomenon of whitening and halos caused by strong light as "flare". When sunlight or a point light source enters the lens, after multiple reflections, a clear bright spot is formed at the relative position of the light source, which is like a ghost, which is called a ghost. Ghost image is a kind of light spot.

(Ghost)

4.13 Image Purple Edge

A purple edge appears at the junction of the bright and dark parts of the image(in most cases, it is purple, sometimes it may be other colors).
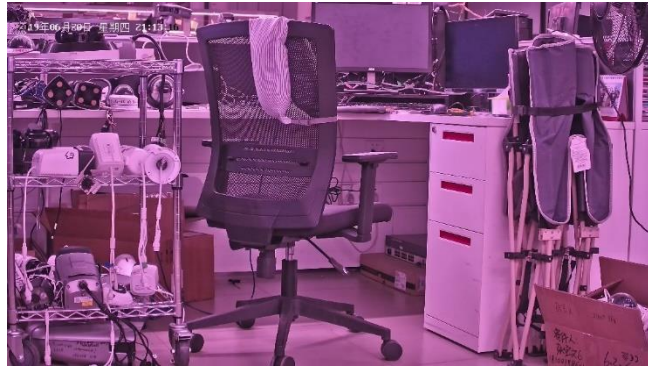

(Normal)

(Purple Edge)

4.14 ICR Exception

The infrared filter is stuck during the switching or the filter moves due to the vibration, the image becomes pink or purple.

(Pink)

(Purple)

4.15 Protective Film Unremoved

This is a phenomenon of image blurring caused by a semi-permeable membrane in front of the lens, which may be caused by:

1) During the installation of the device, due to the error of the installer, the protective film on the front of the lens was forgotten to be removed.

2) There is water vapor and other jelly on the lens.

3) The lens is maliciously pasted with tape, film, white paper, etc.

This kind of obscure imaging will affect the monitoring preview effect, and even cause a lot of details to be blurred and lose the meaning of monitoring.

(Normal)

(Protective film unremoved)

Note:

Since video quality diagnosis events need to be judged based on images, there will be frequent false alarms in night mode, so video quality diagnosis does not supported in night mode and no alarm will be generated when the image is switched to black and white.

See Far, Go Further