

Relay Trigger via IVA Event and ATSL

Step by Step



7 May 2019

Relay Trigger via IVA Event and Alarm Task Scripting



Overview

Purpose of this technical brief is to provide step-by-step instructions on how to configure a "Relay Trigger" on a Bosch IP camera based on any given IVA event. This configuration provides integration into 3rd party devices and systems that may have limited, or no, Video SDK integration to Bosch video devices. To accomplish this, the camera's Alarm Task Editor and the sample script provided in this paper must be utilized.

Applying the Script:

To successfully cause the device's relay to fire on an IVA event, the following script must be applied to the device's Alarm Task Editor:

```
OperationMode modeRel1:={Idle(closed)};
Relay(1):=modeRel1;
Relay(1):=Motion(1);
OperationMode monostable := { High(50) };
if( !Motion(1) ) then TempState(1) := monostable;
if (TempState(1)) then Relay(1):=true;
```

If utilizing "Aggregation Time" as outlined later in this document, then only the following script needs to be added into the Alarm Task Editor:

```
Relay(1):=Motion(1);
```

The *Alarm Task Editor* can be accessed from the device's Web Browser and Configuration page.

From the left hand side of the Configuration Page, select the "Alarm" menu and the "Alarm Task Editor" sub menu



Once selected, you should see the "Alarm Task Editor" menu page. Copy and paste the supplied script into the script portion of the menu.

Alarm Task Editor

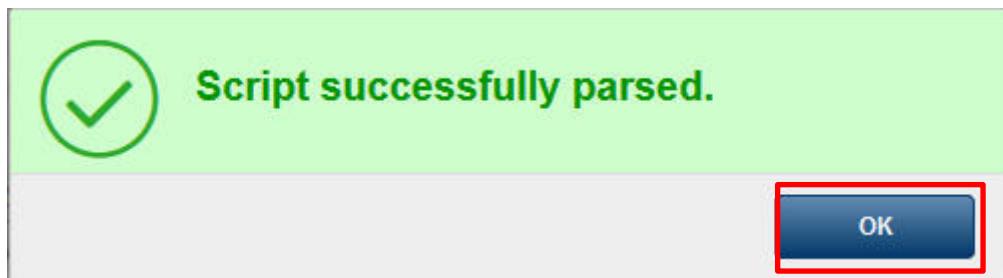
```
OperationMode modeRel1:={Idle(closed)};  
Relay(1):=modeRel1;  
Relay(1):=Motion(1);  
  
OperationMode monostable := { High(50) };  
  
if( !Motion(1) ) then TempState(1) := monostable;  
if (TempState(1)) then Relay(1):=true;
```

Examples

Set

After the script has been pasted into the editor, select the "Set" tab. This should produce a message menu that states "Script successfully parsed" as shown below.

- Select the "OK" tab



IVA Configuration:

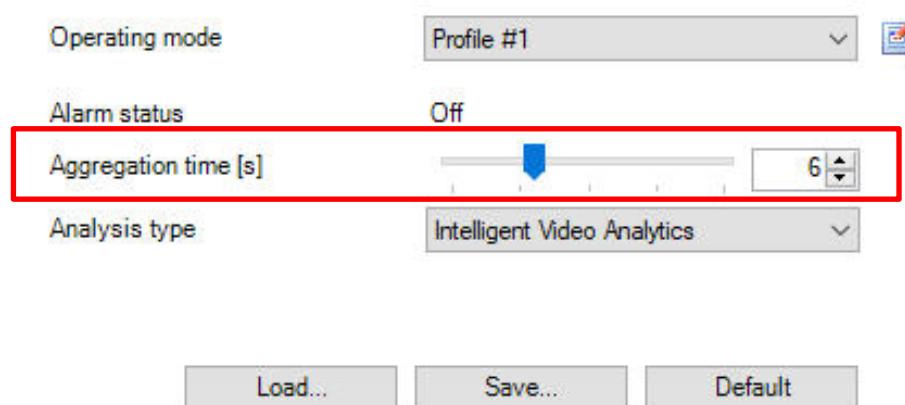
This supplied script will be active when any Motion+ or Intelligent Video Analytic (IVA) event is active. If there is a desired time that the relay needs to stay activated, the key setting that must be configured is "Aggregation" time.

From Bosch Configuration Manager, select the device's "VCA" menu and "Main Operation" sub menu.



Aggregation time is an important tool to combat continual nuisance events from a video device. This setting is based on seconds (s), and once a "motion" is detected and the "Alarm status" is on:

- The device will stay in Alarm status until all motion has stopped
- The device will not change alarm status until after the motion has stopped and the aggregation time has expired



If it is desired that the relay stay "active" for 3 seconds after an IVA event, this setting should be set to (3) seconds.

To validate the relay configuration, the relay state can be observed from the device's "Live" page, Digital I/O menu

