

REMOT ALARM_OUT PEERING WITH GXV3500 DECODER

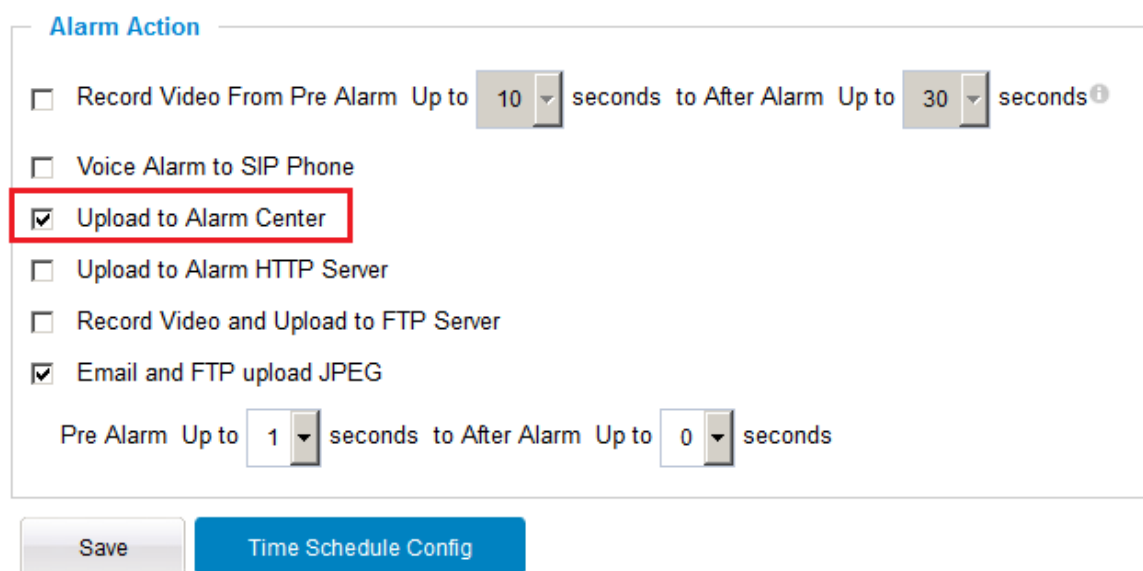
The IP66 weather-proof IP cameras GXV3672, GXV3674 and GXV3610 series do not have built-in Alarm_Out interface, but when peering with Grandstream GXV3500 encoder/decoder, the GXV3500's built-in Alarm_Out interface (**running at decoder mode**) can behave as remote Alarm_Out for those IP Cameras.

The benefit of such peering is the Alarm_Out circuit is not physically wired into the IP Camera anymore, with the Ethernet network behaving as wiring, the Alarm_Out circuit can now be located to convenient places where GXV3500 located. This means IP Camera can be in location A, while the Alarm_Out can be in location B (A and B can be in the same or different places as long as A and B can reach each other via network/internet). This will help a lot of users to monitor site remotely and take appropriate action, because there are situations where location A with cameras but actions have to be taken from location B. With Grandstream's solution, traditional A and B limitation by the cable length is now disappear.

The configuration of such remote Alarm_Out is very simple:

GXV3672/GXV3674/GXV3610 Side:

Same configuration as previous Motion Dection configuration, just make sure "Upload to Alarm Center" checked and selected:



Alarm Action

Record Video From Pre Alarm Up to 10 seconds to After Alarm Up to 30 seconds ⓘ

Voice Alarm to SIP Phone

Upload to Alarm Center

Upload to Alarm HTTP Server

Record Video and Upload to FTP Server

Email and FTP upload JPEG

Pre Alarm Up to 1 seconds to After Alarm Up to 0 seconds

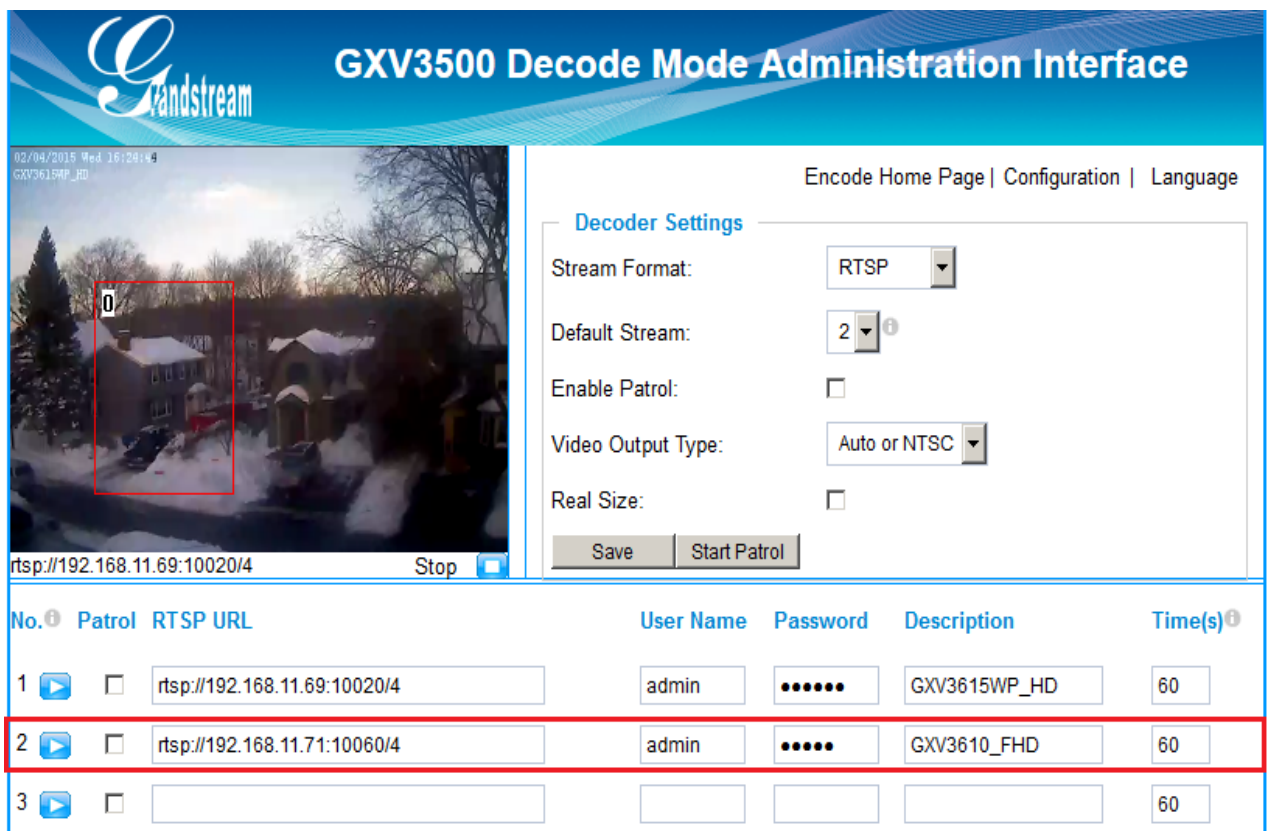
Save Time Schedule Config

Figure 1: Remote Alarm_Out IP Camera Configuration

GXV3500 (Decode Mode) Side:

GXV3500 has to be running as **Decode Mode** when functioning as remote Alarm_Out of the peering IP Camera. The configuration is as below:

- 1) Input the **2nd stream** (*H.264 Only, MJPEG NOT supported*) as the RTSP URL, with correct credentials, as shown below.
- 2) Only ONE stream (currently decoding stream) the Motion Detection can use the GXV3500 built-in Alarm_Out interface if there are multiple RTSP URL configured in the GXV3500.



GXV3500 Decode Mode Administration Interface

02/04/2015 Wed 16:28:44
GXV3615WP_HD

Encode Home Page | Configuration | Language

Decoder Settings

Stream Format: RTSP

Default Stream: 2

Enable Patrol:

Video Output Type: Auto or NTSC

Real Size:

Save Start Patrol

No.	Patrol	RTSP URL	User Name	Password	Description	Time(s)
1	<input type="checkbox"/>	rtsp://192.168.11.69:10020/4	admin	•••••	GXV3615WP_HD	60
2	<input type="checkbox"/>	rtsp://192.168.11.71:10060/4	admin	•••••	GXV3610_FHD	60
3	<input type="checkbox"/>					60

Figure 2: Remote Alarm_Out peering GXV3500 Configuration

NOTE:

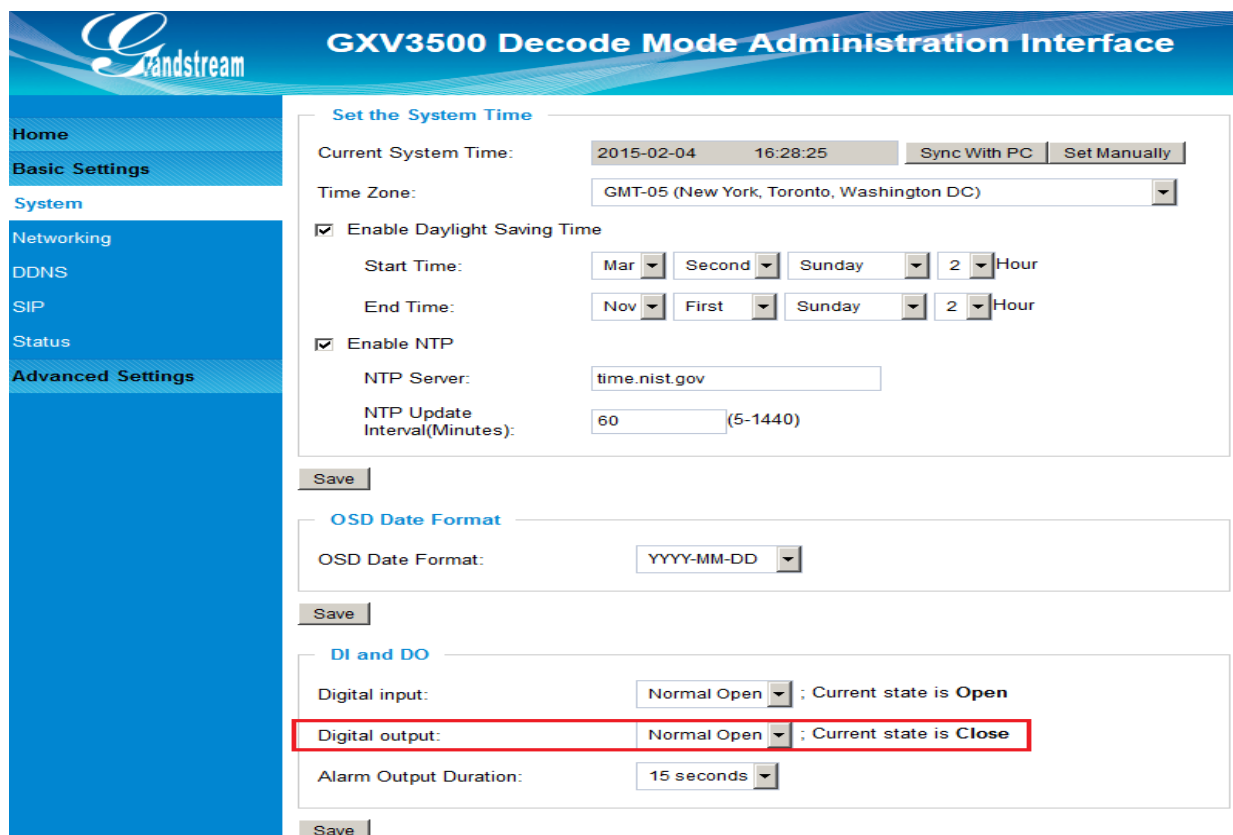
- GXV3500 is designed to work with **analogue camera**, with **maximum decode resolution 704x576**, this is why 2nd stream decoding used as peering for remote Alarm_Out. The RSTP setting will be:

rtsp://IPCamera:Port/4 (4 is 2nd stream of GXV3672/GXV3674/GXV3610)

- 2nd stream also consume less bandwidth therefore good for internet transmission.
- H.264 video codec has to be selected because Motion Detection not supported via MJPEG.
- All Grandstream IP Cameras without built-in Alarm_Out interface can peer with GXV3500 (Decoder Mode) built-in Alarm_Out interface for Motion Detection Remote Alarm_Out.

Alarm_Out duration can be configured at “System” setting page of GXV3500 Decoder. See below the figure. When Alarm_Out taking action, the webpage will show the related action.

For example, below the “Digital Output Duration” is selected as “15 seconds” so the Alarm_Out will act for 15 seconds before revert back to previous state. In below case, the default is circuit “Open”, when Motion Detection alarm triggered, the circuit state changed to “Close”, as illustrated below for 15 seconds and then switch back to previous “Open” state.



The screenshot displays the 'GXV3500 Decode Mode Administration Interface' with a sidebar on the left containing navigation links: Home, Basic Settings, System, Networking, DDNS, SIP, Status, and Advanced Settings. The main content area is divided into three sections:

- Set the System Time:** Includes fields for Current System Time (2015-02-04 16:28:25), Time Zone (GMT-05), and options to enable Daylight Saving Time and NTP. The NTP Server is set to time.nist.gov and the update interval is 60 minutes.
- OSD Date Format:** The OSD Date Format is set to YYYY-MM-DD.
- DI and DO:** This section shows Digital input and output settings. The Digital output is set to 'Normal Open' with a current state of 'Close'. The Alarm Output Duration is set to '15 seconds'.

Each section has a 'Save' button at the bottom.

Figure 3: Remote Alarm_Out peering GXV3500 Action Output Display

Unlike the Alarm_Out interface of Grandstream IP Camera (e.g.: GXV3611IR_HD or GXV3662_HF/FHD where the related Alarm_Out interfaces are using relay switch), the GXV3500 Alarm_Out is using photocoupler circuit.

If connecting to a multimeter, you will see the Ohm changed from unlimited to several hundred Ohms depending on GXV3500 HW version.

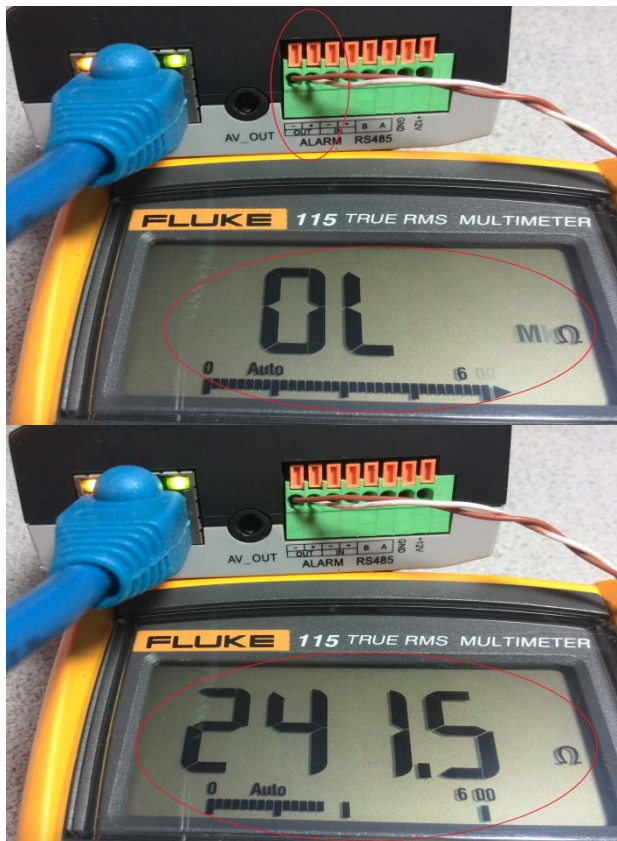
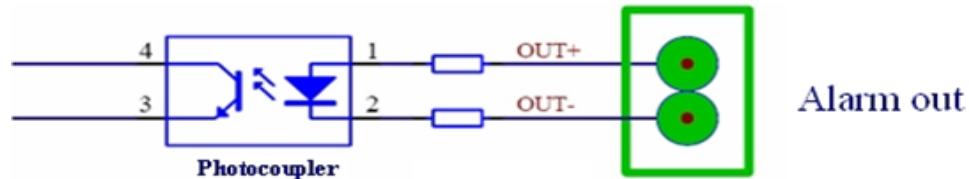


Figure 4: Peering GXV3500 Decoder Alarm_Out Circuit

The above method can be used for installers to check the functionality of this feature at lab or on field before the installation.

With the help of GXV3500 Decoder, customers can now free from the wiring limitation and have the Alarm_Out feature for Grandstream IP66 weather-proof IP cameras.