# 16_Channel DVR Alarm (Relay) Output Installation Guide
# Version: 1.00

## Introduction

16 channel DVR series support 16 sensors triggered input and 6 alarms (relays) output.

Each alarms (relays) output can be associated with any one or multiple sensors triggered input. That is, any one or multiple sensors input can trigger one or multiple alarms (relays) output if it is setup properly.

The DVR system itself doesn't provide the necessary power source to relay, you need to provide an external power supply to strobe light or sirens.

## Installation

The installation will be different according to the different user's requirement and devices
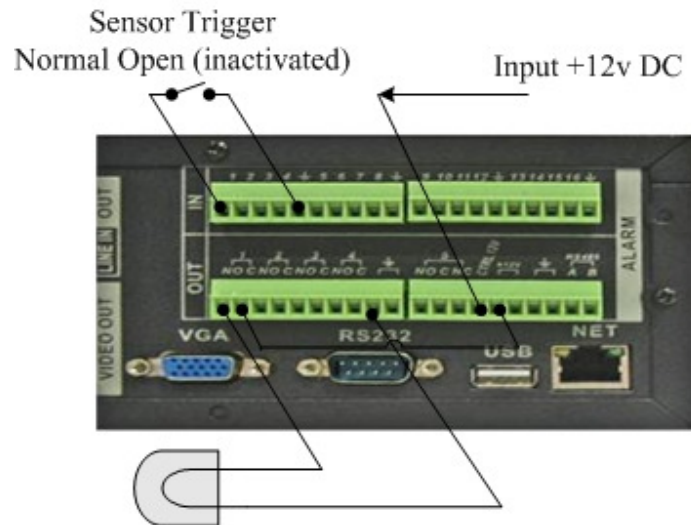
The following installation guide is showing the example:
- One sensor input from "Alarm IN" port 1
- One strobe light output from "Alarm OUT" port 1
- Strobe light requires a +12 V DC power supply
- The sensor has a normal state "Open" and triggered state "Close", switches like door bell button, microphone, lamp switch or alert buzz button.
- If the sensor switch turns to "close" state, it will trigger the strobe light flashing

### 1. Hardware Installation

The picture 1.1 is showing a physical connection illustration.
- Connect two wires of the sensor switch to "Alarm IN" pin 1 and "Ground"
- Connect a +12V DC power supply wire to "CTRL 12V" pin
- Connect one wire of strobe light to the first pin of "Alarm OUT" port 1
- Connect the second wire of strobe light to the "Ground" port
- Connect the second pin of "Alarm OUT" port 1 to one pin of the "+12V DC" port with a short wire

**Picture 1.1 Normal Open - inactivated state (open)**


## 2. Configuration on DVR

- Logon to the 16 channel DVR, follow the step "main menu" -> "Advanced Set Up" -> "Alarm In"
  In "Alarm In" menu, check the box 1 and click "OK", exit.
  See picture 2.1



**Picture 2.1 Alarm In Enable Menu**

- Follow the step "Main Menu" -> "DVR Set Up" -> "Alarm"
  In "Alarm In" drop-down menu, select "1" to select "Alarm In" port 1;
  In "Source of Alarm" drop-down menu, select "Local Input";
  In "Record Channel", check the box "1";
  In "Latch" input box, enter "10" to "300". This is the time that the output will latch in unit second;
  In "Alarm Out", check box "1" to select "Alarm Out" port 1;
  In "Period 1", enter the time from "00:00" to "24:00", and check the box under "Alarm Out" to apply this time schedule for alarm device.
  Check the box under "Show Message" if you want to see a pop up dialog box when the alarm sensor is triggered.
  See picture 2.2
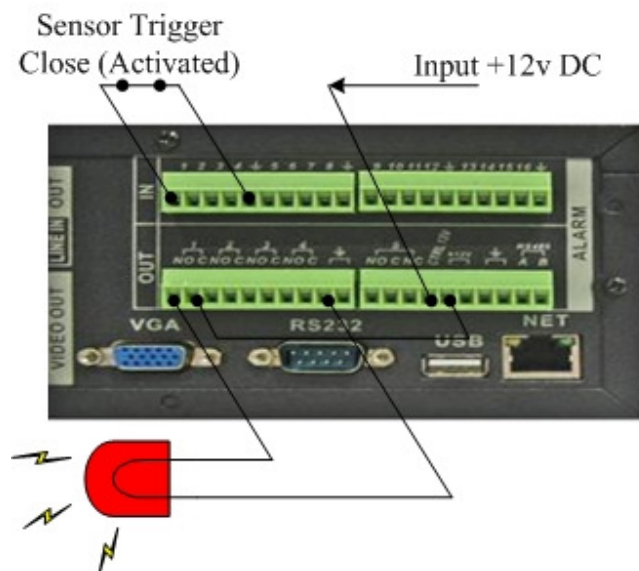
**Picture 2.2 Alarm Schedule Configuration Menu**

- If you want the DVR start recording when sensor is triggered, you also need to set up the recording schedule in "Main Menu" -> "DVR Set Up" -> "Schedule" menu.

## 3. Test
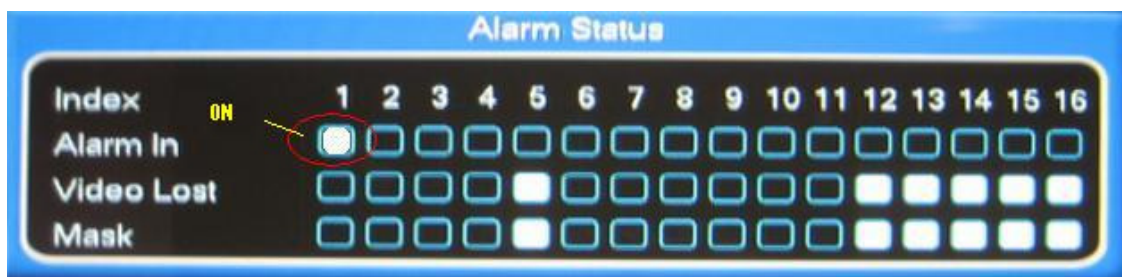
Press the button of sensor. You will see the strobe light flashing and pop up message box.

The strobe light will remain flashing approximately 10 seconds, regarding to the setting above: Latch 10 Seconds.


**Picture 3.1 Normal Open – activated state (close)**

Also, you will see in the pop up message box, "Alarm In" 1 is high lighted to indicate that the sensor in Alarm In port 1 has been detected.

**Picture 3.2 Alarm Status Message Pop Up**