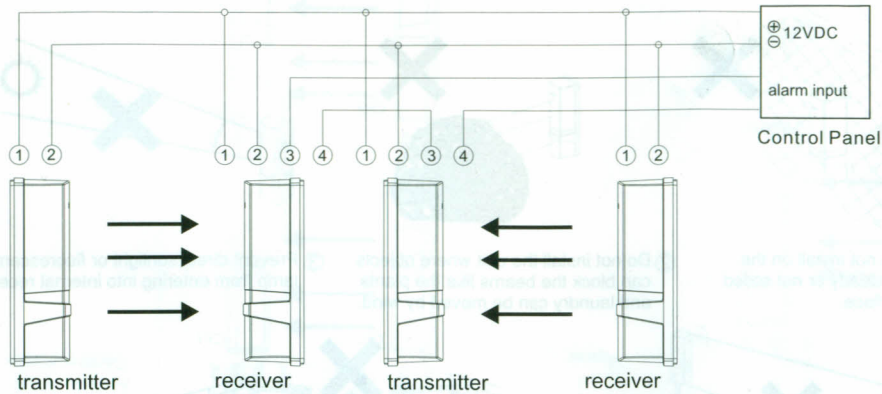


Figure3: 2 pairs install in series

Connect transmitter and receiver in series with 12V DC to the control panel.

Alarm output is N.C As below:



- Wiring distance between the power supply and the detector should not exceed the following length;

Wire diameter	Length	Voltage	DC12V	DC24V
0.5mm ² (Diameter 0.8)			100m	500m
0.75mm ² (Diameter 1.0)			150m	750m
1.0mm ² (Diameter 1.2)			200m	1000m
1.5mm ² (Diameter 1.4)			250m	1250m

Warning

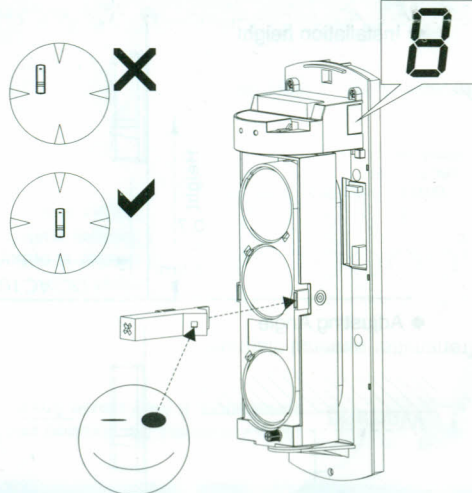
- Power wires can't exceed the length in the list.
- when connecting a plurality of detector, the required length for the column length divided by the corresponding number.
- Do not exceed the voltage or current rating specified for any of the terminals during installation, It can cause fire or damage to the devices.

7. Beam Alignment-LED Voltage Display

LED display (on the right of receiver)

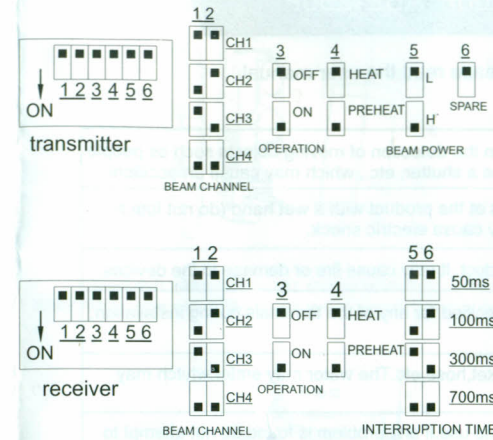
- Adjust the same frequency of the receiver and transmitter. For example transmitter is CH1. The receiver also need CH1.
- Align the transmitter view finder, locate the receiver in the center sight by adjusting vertically and horizontally.
- Align the receiver view finder, locate the transmitter in the center sight by adjusting vertically and horizontally, The LED will display 0-9, 0 means no signal in the alarm situation, relay alarm out put. Alarm led light, If beams align perfectly, LED will show 9.
- After finish the vertical and horizontal adjustment, Please conduct working test to ensure the device work normal.

Signal Strength	0-4 Realign 5-6 Fair 7-8 Good 9 Excellent
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8. DIP Switch Explanations

DIP Switch show on the left side of the main PCB , as shown in Fig.



- DIP switch 1&2 position should be the same on transmitter and receiver.
- DIP switch OPERATION can be set to OFF to save energy after adjustment (The LED will be off always).
- DIP switch PREHEAT helps users to test the heating function of heater. If the user adopts the heater, please keep the DIP switch at HEAT position for energy saving.
- Choose the BEAM POWER L or H on transmitter as to real detecting range need.
- INTERRUPTION TIME on receiver should be set according to installation environment. The setting time is the max interruption time, if the moving speed is faster than it, this object cannot be detected. For birds, leaves, newspaper that may block the beams, please set a longer interruption time. Do test after setting.

9. Channel beam frequency selector

The selectable beam frequencies can be used to avoid unwanted crosstalk that can occur when using multiple photobeams for long distance protection or beam stacking applications. To select between 4 separate beam frequencies, use the switch provided.

IMPORTANT: Make sure the receiver and transmitter that are facing each other are set to the same channel. More than double stacked application is not possible. Always switch the frequencies TWO channels apart when stacking units on top of one another. (See follow example.) The upper unit is set on channel 1 while the lower is on channel 3, channels 2 and 4 could have also been used.

