

# Digital Four Channel Frequency Infrared Fence Detector

## USER MANUAL

### 1.Overview

This product is a universal indoor and outdoor digital frequency infrared fence detector. The main chip, sensor and other key components adopt imported, wide voltage, wiring without screwdriver, new design mounting base, make the product easier installation and more stable.

### 2.Working principle

This product adopt digital frequency modulation and demodulation technology, use infrared to transmit digital signal. With auto focus circuit design, sound and light calibration prompts, during installation no need to adjust focus.

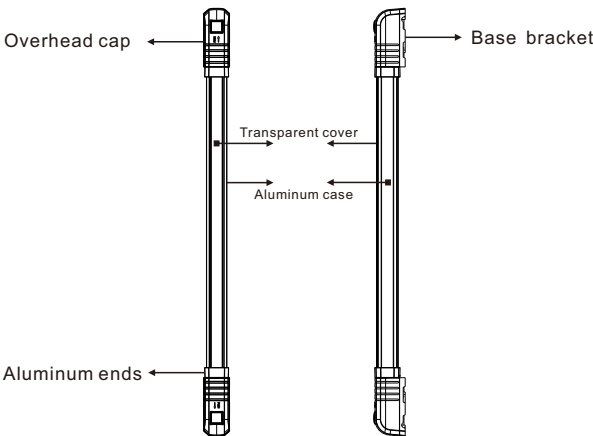
After installation, when someone or other intruder block the adjacent two or more beams, the infrared fence detector is triggered with alarm output. Intelligent detection technology can identify small animals pass through and will not alarm.

The product also have intrusion alarm function such as anti tamper, anti cut wire, anti infrared interference and so on.

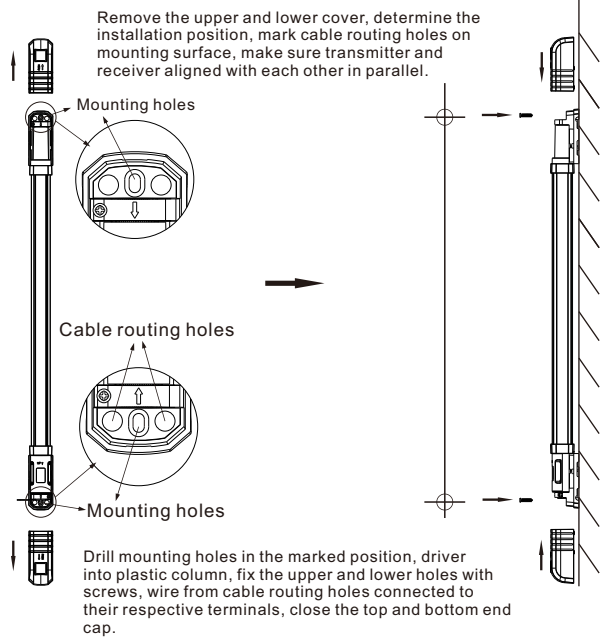
### 3.Technical Specifications

Product name	Digital frequency adjusted infrared fence detector			
Beams number	4 beams	6 beams	8 beams	10 beams
Detecting distance	5m to 120m			
Working voltage	8-33VDC			
Working current	Transmitter: $I \leq 35\text{mA}$ Receiver: $I \leq 45\text{mA}$			
Response speed	$\leq 80\text{ms}$			
Response time	$\geq 1.5\text{sec}$			
Feature	4 channel frequency PWM			
Alarm output	NC/NO relay output			
Resistive rated load	3A 125VAC/24VDC			
Alarm way	Wired or wireless(wireless optional,315MHz or 433MHz)			
Optical axis adjustment	Horizontal 180°			
Auxiliary function	POWER indicator, ALARM indicator, RT heat indicator, buzzer			
Other function	Heater optional			
Size (mm)	750*32*33	1100*32*33	1380*32*33	1730*32*33

### 4.Part Name

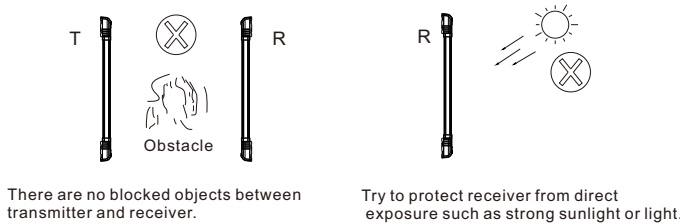


### 5.Installation Way

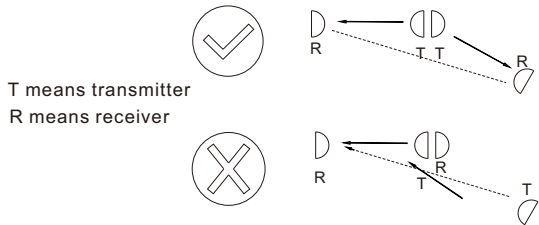


### 6.Installation Requirements and Considerations

- A. Choose the right height and distance of infrared fence according to detection area.
- B. Fix mounting height firmly to prevent false alarm caused by loose or fall off.
- C. There are no blocked or flapping objects between transmitter and receiver.
- D. Try to protect receiver from direct exposure such as strong sunlight or light.
- E. The wiring should be concealed as much as possible, use line pipe for protection according to installation environment, prevent unlawful destruction or rodent snapped line.
- F. When install a plurality of infrared fence, each one should set different frequency.
- G. Connect terminals with 8 ~ 33V DC voltage, reverse polarity can not be used.
- H. The infrared fence has been designed with an exemption of synchronous line, you can connect synchronous line under strong interference or a complex environment, but the transmitter and receiver must be connected to the negative.

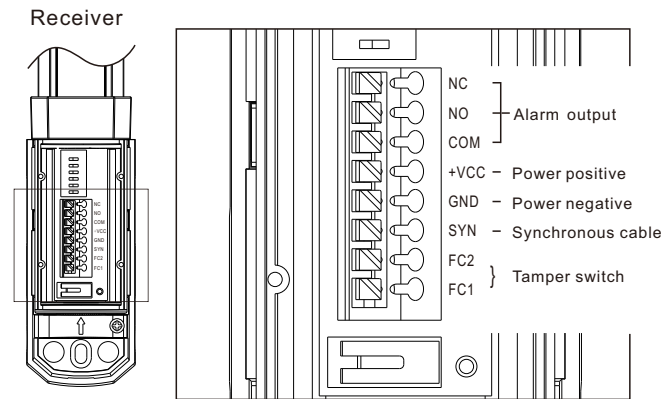
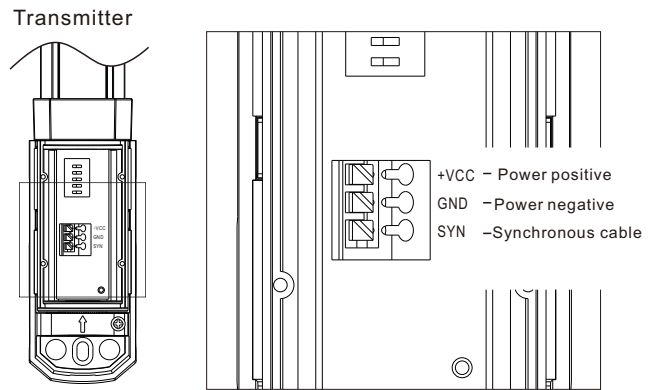


When install a plurality, please install as below to avoid beams mutual interference.

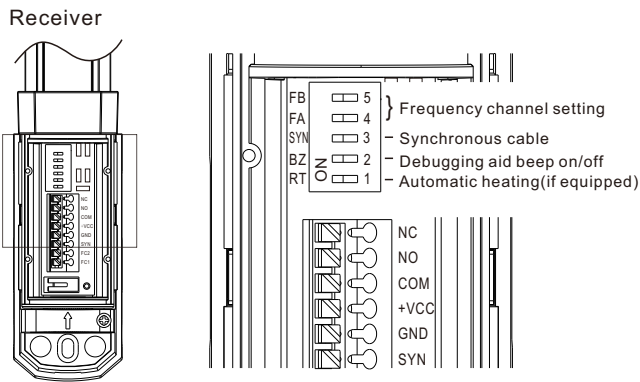
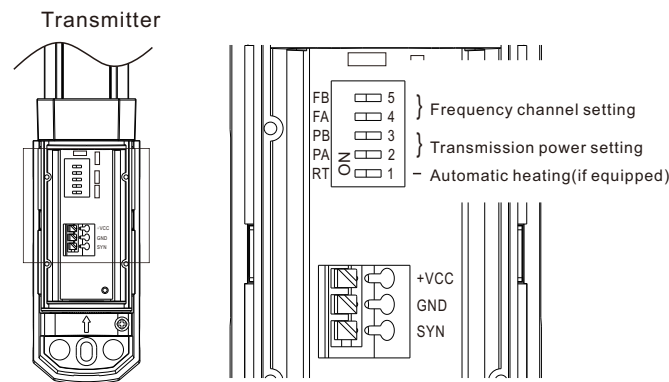


Thanks for choosing our product, please read the manual carefully before installation and use. It is apply to villas, community,factory, school and so on.

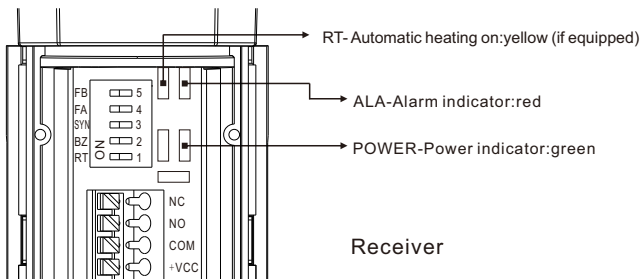
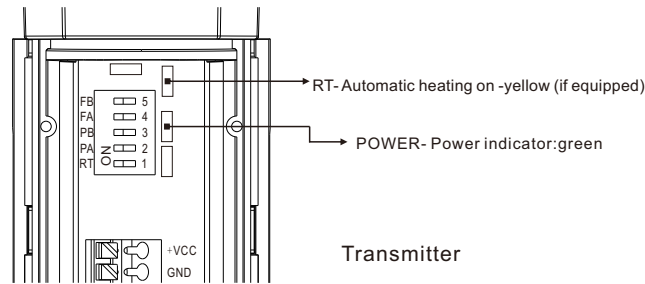
7. Wire Connection  
A. Terminal description



B. DIP switch setting



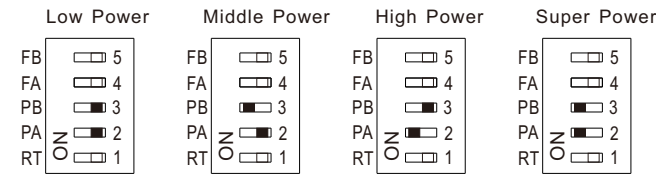
C. Indicator  
POWER: Power indicator- green, ALA :Alarm indicator- red  
RT: Automatic heating on -yellow (if equipped)



8.Debugging power

- A. Connect power cable, alarm cable, sync cable (if required) through terminals, confirm transmitter and receiver with the same frequency(FA, FB same position), BZ of receiver to on position.
- B. When powered, green power indicator is on. If not aligned, the buzzer will always sound, red ALA indicator is on , then rotate the infrared fence until aligned, the buzzer stops after the alignment, ALA red indicator goes out. If a person or object block two or more beams, the receiver will send out alarm signal.
- C. Power and frequency adjustment.

Power	PA	PB	Frequency	FA	FB
Low	0	0	A	0	0
Middle	0	1	B	0	1
High	1		C	1	0
Super	1	1	D	1	1



Transmitter

9. Wireless Setting

- A. Wireless transmission module requires additional matching, according to the control panel to select 2622 or rolling code wireless module.
- B. The same transmission frequency to the control panel (315MHz or 433MHz).
- C. Product with wireless tamper and power failure wireless single alarm function.

10.Common Trouble and Solution

Normal working status		
Transmitter	POWER green indicator on	
Receiver	Alert:POWEW green indicator on,ALA red indicator off,buzzer without sound	
	Alarm:POWER geeen indicator on,ALA red indicator on,buzzer with sound	
Trouble Solution		
Trouble	Possible reason	Solution
Indicator doesn't on after powered	1.Reverse power positive and negative	Connect the power with right polarity
	2. Wrong power voltage	Test access point voltage in the range or not
	3.Power line short or open circuit	Check the circuit
Always alarm or false alarm	1.Optical axis misaligned	Realign the optical axis
	2. Instalation distance more than actual distance	Choose infrared fence according to actual distance
	3. Installation is not stable	Install and fix again
	4. Power voltage not stable	Measuring voltage abnormal fluctuations or not
	5. With different frequency	Reset T and R with the same frequency
Not alarm	1.Same frequency interference	Same frequency transmission in adjacent location or not
	2.Reflection interference	Remove reflector or adjust optical axis direction
	3.Too short installation distance	Adjust transmit power to low
	4.Signal line open circuit	Check signal line