

# 使用說明書


Instruction Sheet

## 壹、注意事項：

- 〔1〕 LCD 螢幕禁止用尖銳物刮傷和重壓。
- 〔2〕 不得分解或改造，以避免不當改造而造成本機冒煙、起火的危險。
- 〔3〕 螢幕清潔切勿使用會有侵蝕作用及具有機溶劑之清潔劑。
- 〔4〕 電源為 ACC 12V
- 〔5〕 配件：螢幕、camera X2、天線 X2、說明書、螢幕固定架

## 貳、按鍵功能說明



1.  POWER 鍵：電源開／關功能

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2. MOD 鍵：選擇 CH1／CH2 輸入
3.  $\leftarrow$  (function) 鍵：選擇 Volume、Brightness、Contrast、Color、Line、Default
4. >：配合 function 功能操作增加；取消車幅線
5. <：配合 function 功能操作減少；顯示車幅線
6. 電源指示燈

## 參. 操作說明

### 1、本機功能：

- 〔1〕 連結二組 camera 影像
- 〔2〕 7 吋 monitor 影像無限輸入
- 〔3〕 Acc on(LED 亮) 螢幕自動開啟在關機前模式，CCD 同時開啟。

### 2、按鍵功能操作：

- 〔1〕  $\text{⏻}$  Power：

按一次螢幕開啟在關機前模式，CCD 會開啟；再按一次螢幕關閉，CCD 關閉。

- 〔2〕 MOD：即 MODE

按 MODE 鍵為 CH1、CH2 循環切換。

CH1 為倒車(車幅線)；CH2 為掛休旅車箱(橫線條)。

註：只有 CH1 時，MODE key 無作用。

- 〔3〕  $\leftarrow$  + < / >：function + down / up

A. 無倒車線顯示

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按  $\leftarrow$  鍵可選擇 Volume(NC)、Brightness、Contrast、Color、Line(NC)、Default 等功能，並配合  $<$ 、 $>$  鍵可作各功能的增加／減少作用(max(30)、min(0))。

- (1) Volume：音量大小聲調整。
- (2) Brightness：畫面亮度調整。
- (3) Contrast：畫面對比度調整。
- (4) Color：顏色濃度調整。
- (5) Line：車幅線顯示或不顯示。
- (6) Default：重新設定為出廠設定值(出廠值 15)。
- (7) 正常模式下按 $<$ 鈕 顯示車幅線。  
按 $>$ 鈕 不顯示車幅線。

### B. 有倒車線顯示

倒車線有 3 種高低可選擇，按 $\leftarrow$ 鍵會變化；按 $<$ 鍵車幅線的左右線會左右移動調整。

### 3、對頻設定操作：

顯示” Wait TX signal” 是沒有對頻，需要按下列步驟進行對頻：

步驟 1、在開機模式下，螢幕背板按鈕壓住 5 秒後，螢幕會顯示“PARITING START”，開始進行配對，時間為 60 秒。

步驟 2、在螢幕顯示 60 秒對頻時間內，camera 機上對頻鈕壓下後，螢幕對頻成功後，會顯示” SAVE DATA”，螢幕會顯示 camera 的畫面。

註：兩個 camera 的對頻步驟是相同的，無需分先後，螢幕上有顯示 CH1 倒車線通道的,配車後倒車要用 camera。

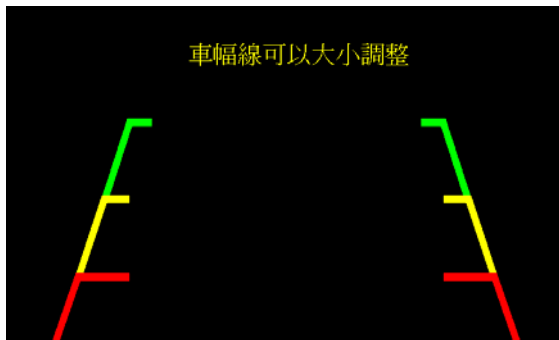
### 4、出現相關信息時的處置措施：

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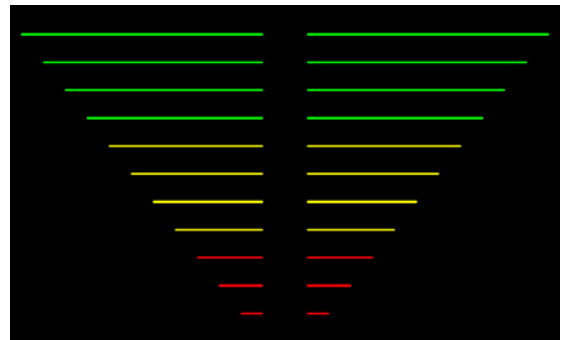
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- (1) NO SIGNAL：沒有收到 camera video signal  
檢查 camera 是否有開啟。
- (2) Wait CH1 signal：與倒車 camera 沒有對頻  
按第 3 項的對頻設定操作。
- (3) Wait CH2 signal：與休旅車箱 camera 沒有對頻  
按第 3 項的對頻設定操作。

## 5、車幅線



CH1 倒車線



CH2 橫線條

## 6、配線圖

- (1) 小 CCD 配線

電源線：紅色線+12V 黑色線：12V 地線



(2)

大

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CCD

電源線：紅色線+12V 黑色線：12V 地線



(3)螢幕



7. 電源：

車充線頭 12V

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### 8、規格

Parameter	Specifications	Unit
Monitor Scene Size	7 inch digital LCD monitor	inch
Supply Voltage	DC+9.0~16V	V
Operation Temperature	-30 ~ +85	°C
Storage Temperature	-40 ~ +85	°C
Luminance	320~400	cd/ m <sup>2</sup>
Contrast Ratio (CR)	400~500	
Video type	Auto : NTSC/PAL 1Vp-p/75	Ω
Work Current	5	A
RF operation frequency	2.402~2.495	GHz
Ratio protocol	Proprietary FHSS	
TX RF output power	+ 18	dBm
RX sensitivity	- 86	dBm
Video decoder	H.263	
CCD Operation Temperature	-20 ~ +70	°C
CCD Storage Temperature	-30 ~ +80	°C
CCD Resolution	600 TV lines	
CCD Sensor	CMOS Image Sensor	
CCD Lens Angle	100°(H) 70°(V)	
CCD Exposure Control	AES(auto electric shutter), 1/60 ~ 1/100,000 sec.	
CCD White Balance	Auto	
CCD Gain Control	Auto	

#### 8.1 Features :

1> Long RF range : Line of sight distance up to 100 m .
2>Best RF interference elimination : Hopping TX freq. in 80 channels dynamically.
3>Outstanding RF interference elimination.
4>Very low latency : 130ms~190ms.
5>Digital RF camera : IP 67 rate

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### **A. Important Notice**

1. Do not scratch LCD screen with sharp object or apply pressure on it.
2. Do not decompose or reform the product to avoid smoke or fire.
3. Do not clean the screen with erosive or organic solvent detergent.
4. Power source: AC 12V;
5. Accessories: screen, camera x 2, antenna x 2, instruction sheet and screen holder.

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## B. Function Keys



1. Power: on/off
2. MOD: to choose CH1/CH2 to input
3.  $\leftarrow$  (function): to choose Volume 、 Brightness 、 Contrast 、 Color 、 Line 、 Default
4.  $>$  : to use with  $\leftarrow$  to close car width lines
5.  $<$  : to use with  $\leftarrow$  to open car width lines
6. Power indicator



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## C. Instructions

### 1. Product (CCD) functions


- [1] to connect images from 2 cameras
- [2] to transmit video to 7" monitor wirelessly
- [3] Acc on (LED on), screen on with previous mode, CCD on as well

### 2. Operations of function keys

- [1]  Power :  
Press one time, screen on with previous mode, CCD on;  
press again, screen off, CCD off.
- [2] MOD: MODE  
Press MOD to switch between CH1 and CH2.  
CH1: backup (car width lines); CH2: with trailer (lines)  
Note: MODE is functionless if there is CH1 only.

[ 3 ]  + < / > : function + down / up

#### A. Without backup lines

Press  key to choose from Volume (NC) 、Brightness 、Contrast 、Color 、Line (NC) 、Default functions, and use < , > key to increase or decrease them (max 30, min 0).

- (1) Volume: to adjust volume;
- (2) Brightness: to adjust screen brightness
- (3) Contrast: to adjust screen contrast
- (4) Color: to adjust color thickness

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(5) Line: to show or not to show car width lines

(6) Default: reset as default value 15

(7) Under normal mode,

Press < key to show car width lines;

Press > key not to show car width lines;

### B. With backup lines

There are 3 heights to choose by pressing ↵ key;

Press < to adjust left or right of car width lines

## 3. Pair frequency set-up

There is no pair frequency if the screen shows “wait TX signal”.

Use the following steps to set up pair frequency:

1. Turn on the power, press screen back plate for 5 seconds, the screen will show “pairing start”. It begins to pair frequency for 60 seconds.
2. Within 60 seconds, press pair frequency button on camera, and it will show “saved data” if pair frequency is successful. The screen will show camera.

Note: The pair frequency steps for two cameras are the same without difference of priority. Use camera when backing up if screen shows CH1 with car width lines after pair frequency set-up.

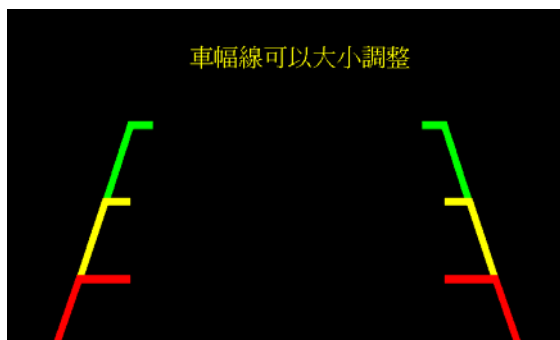
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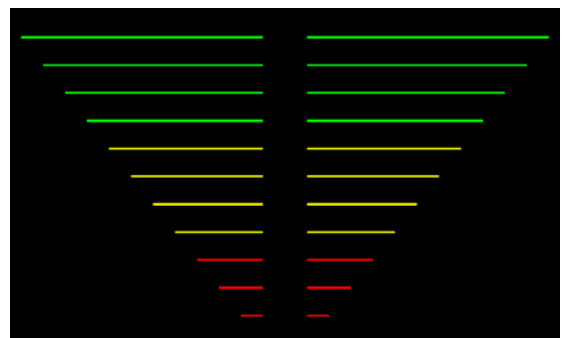
4. In case of the following message:

- (1) No Signal: without receiving camera video signal, check if camera is on.
- (2) Wait CH1 signal: there is no pair frequency with back up camera. Follow 3. Pair frequency set-up
- (3) Wait CH2 signal: there is no pair frequency with trailer camera. Follow 3. Pair frequency set-up

## 5、Car width Lines



CH1 Backup lines



CH2 Lines

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### 6. Harness

#### (1) Small CCD harness

Power: red wire, 12V

Grounding: black wire, 12V



#### (2) Large CCD

Power: red wire, 12V

Grounding: black wire, 12V



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## (3) Screen



## 7. Power:

Car charge 12V

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### **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.