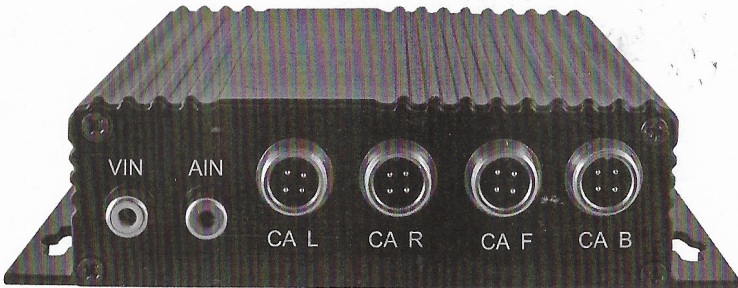


# **R**Rostra Accessories

## Operating Instructions



**Part Number 250-8532**

**Image Processor-Multiplexer**

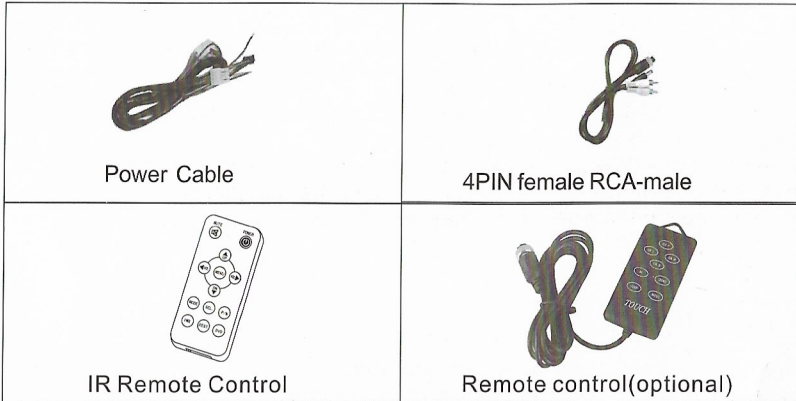
Please read this manual thoroughly before operating the device,  
and keep it for future reference.


V1.3

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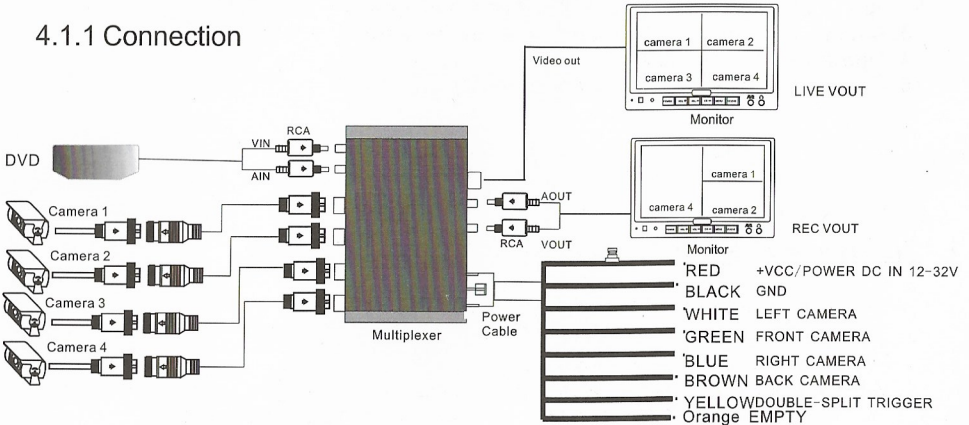
## 4. Accessories




**Special Notice**  
 Accessories may vary due to different applications.

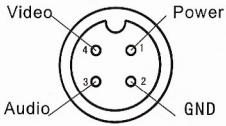
### 4. 1 .System connection

#### 4.1.1 Connection

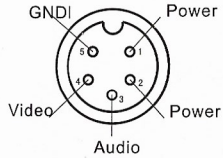


1. VCC (red wire)  
Connecting to the anode of power
2. GND (black wire)  
Connecting to the cathode of power
3. CAMERA L TRIGGER(white wire)  
Left-turn trigger wire, connecting to the positive wire of left-turn light
4. CAMERA F TRIGGER (green wire)  
Front trigger wire, connecting to the positive wire of brake
5. CAMERA R TRIGGER (blue wire)  
Right-turn trigger wire, connecting to the positive wire of right-turn light
6. CAMERA B TRIGGER (brown wire)  
Back-up trigger wire, connecting to the positive wire of back-up light
7. SPLIT (yellow wire)  
Trigger wire for dual picture, connecting to the positive wire of gate control
8. EMPTY (orange Wire)

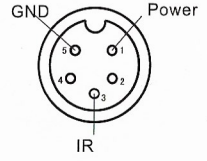
## 4.2 Camera pin-out definition



4PIN

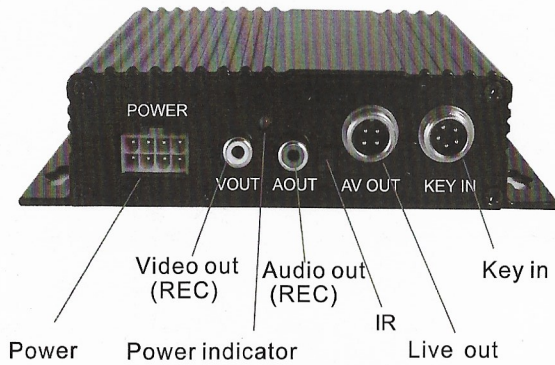


5PIN

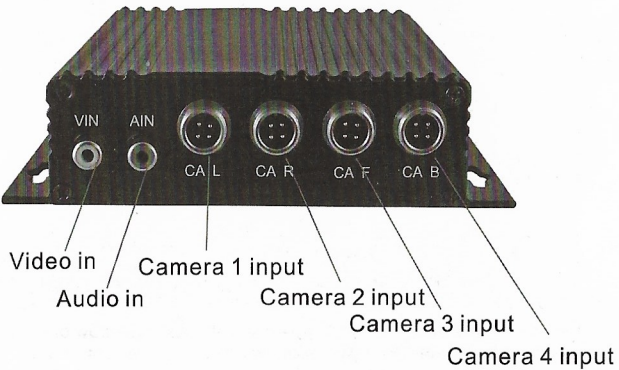


KEY IN

## 5. Parts Identification



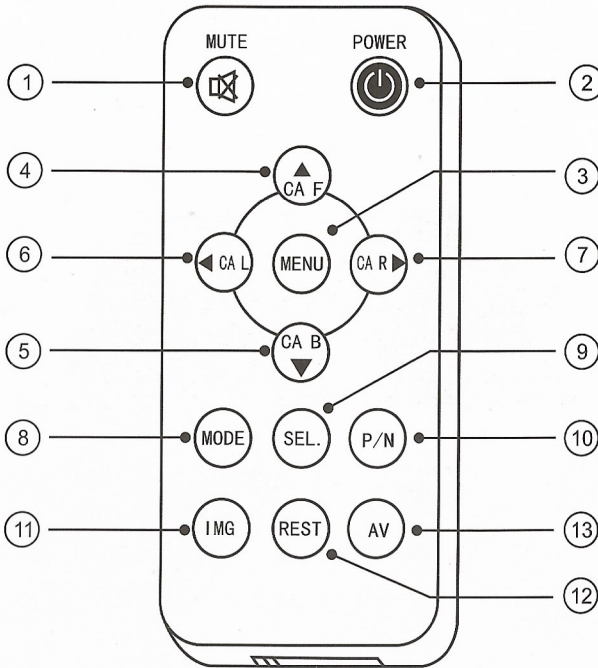
Front



Back

## 6. Control Operation

### 6.1 Remote control operation

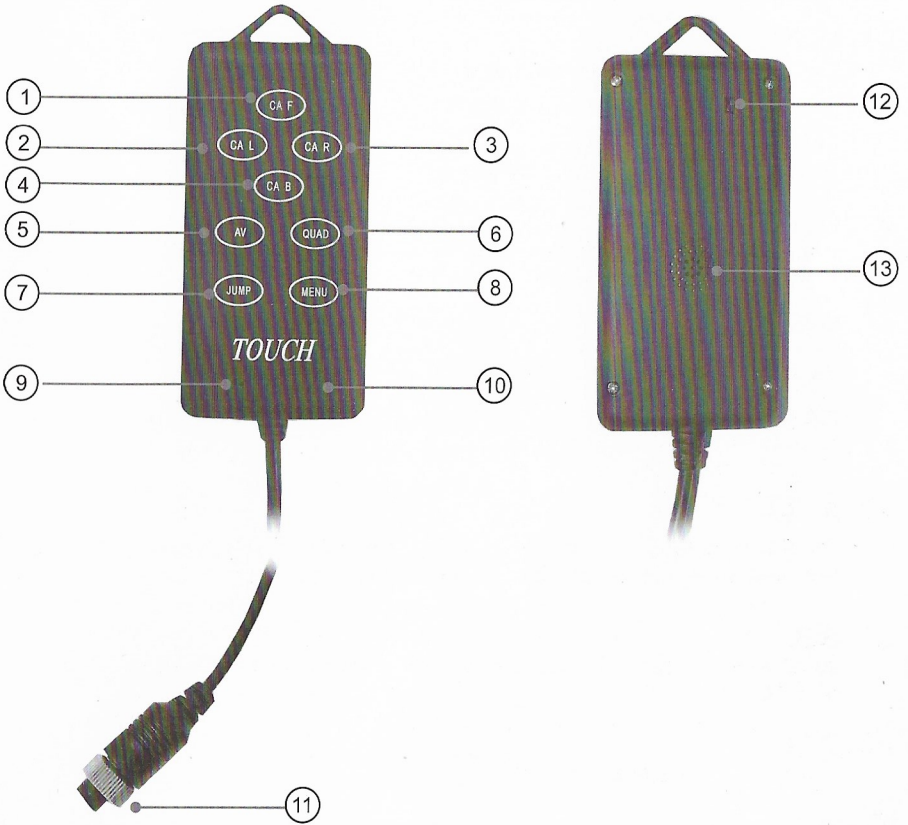


#### Special Notice

1. Please align the remote control with remote control sensor window on monitor when operating.
2. Never disassemble the remote control or allow it to drop, or become wet.

- ① **MUTE**  
Reserve
  
- ② **POWER**  
Press to turn on/off the camera power  
Auto switches to AV mode after 4 seconds when the cameras are turned off.
  
- ③ **MENU**  
Press to show menu or exit menu
  
- ④ **CAF**  
Item on menu selection up  
Press to select the front view camera
  
- ⑤ **CAB**  
Item on menu selection down  
Press to select the back view camera
  
- ⑥ **CAL**  
Item on menu selection left  
Press to select the left view camera
  
- ⑦ **CAR**  
Item on menu selection right  
Press to select the right view camera
  
- ⑧ **MODE**  
Display mode (dual, triple, quad, PIP) selection. Short press to compile the next character when changing the name of camera
  
- ⑨ **SEL.**  
Jump key selector. Short press makes entry into JUMP KEY setup in SYSTEM SETUP
  
- ⑩ **P/N**  
PAL/NTSC TV system selector
  
- ⑪ **IMG**  
Reserve
  
- ⑫ **REST**  
System reset. Press to resume factory setup default
  
- ⑬ **AV**  
Press to select or exit AV

## 6. 2 Operation of wired control panel(touch buttons)



### Special Notice

This device is optional as per requirement.

- ① **CAF**  
Item on menu selection up  
Press to select the front view camera
- ② **CAL**  
Item on menu selection left  
Press to select the left view camera
- ③ **CAR**  
Item on menu selection right  
Press to select the right view camera
- ④ **CAB**  
Item on menu selection down  
Press to select the back view camera
- ⑤ **AV**  
Press to select or exit AV
- ⑥ **QUAD**  
Displaymode (dual, triple, quad, PIP) selection. Short press to compile the next character when changing the name of camera
- ⑦ **JUMP**  
Jump key selector. Short press makes entry into JUMP KEY setup in SYSTEM SETUP
- ⑧ **MENU**  
Press to show menu or exit menu
- ⑨ **AUTO LIGHT CONTROL**  
Backlighting indicator lights up when it is getting dark.
- ⑩ **IR**  
Align the remote control with this position for remote operation
- ⑪ **CONNECTOR OF TOUCH-BUTTON CONTROL**  
Connects to the 5PIN port "KEY IN" on the device
- ⑫ **SPEAKER SWITCH**  
Push up to cancel the warning tone; push down to turn on the "BEEP BEEP" warning tone.
- ⑬ **SPEAKER**  
" BEEP BEEP" sound window



## 7. Menu

Press MENU to display the master menu:

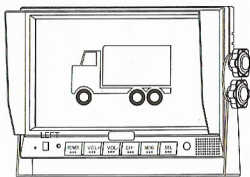
MAIN MENU	
CAMERA	SETUP
CAMERA	NAME
OSD	SETUP
SYSTEM	SETUP
TRIGGER	SETUP
TRIGGER	PRIORITY
RESET	ALL

### 7.1 CAMERA SETUP

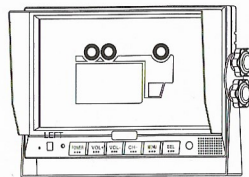
- ① Press CA F / CA B / SEL to select CAMERA LEFT, and then press CA L / CA R to enter into CAMERA SETUP:

CAMERA SETUP	
CAMERA	LEFT
BRIGHTNESS	56
CONTRAST	75
COLOR	50
HUE	50
MIRROR	OFF
MOTO-CAM	OFF

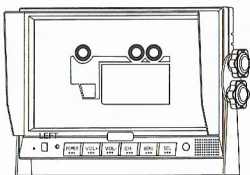
- ② Press CA L / CA R to select the camera to be set (LEFT, RIGHT, FRONT or BACK)
- ③ Press CA F / CAB / SEL to select BRIGHTNESS, and then press CAL / CAR to adjust the brightness level (0~100).
- ④ Press CAF / CAB / SEL to select CONTRAST, and then press CAL / CAR to adjust the contrast level (0~100).
- ⑤ Press CAF / CAB / SEL to select COLOR, and then press CAL / CAR to adjust the color level (0~100).
- ⑥ Press CAF / CAB / SEL to select HUE, and then press CAL / CAR to adjust the hue level (0~100).
- ⑦ Press CAF / CAB / SEL to select MIRROR, and then press CAL / CAR to select image display (OFF, H-V, V and H are optional as illustrated below:)



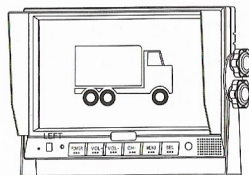
OFF



H-V



V

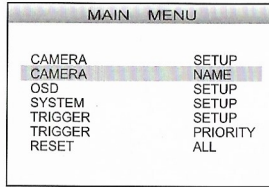


H

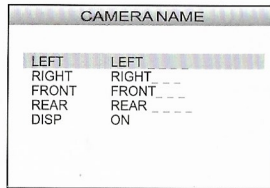
⑧ Press **CAF / CAB / SEL** to select **MOTO-CAM** , and then press **CAL / CAR** to select **ON** or **OFF**. When it is **ON**, the motorized lens cover is open all the time; otherwise, the lens cover only opens when reversing trigger wire is activated.

## 7.2 CAMERA NAMING

Press **MENU** to go back to master menu, and then press **CAF / CAB / SEL** to select **CAMERA NAME**.

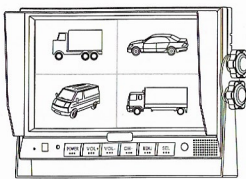


① press **CAL / CAR** to enter **CAMERA NAME**:

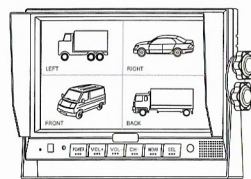


② Press **CAF / CAB / SEL** to select **LEFT**, **RIGHT**, **FRONT** or **BACK** (default name of each camera is also "LEFT", "RIGHT", "FRONT" and "BACK").If you want to rename cameras, the letters can be revised by pressing **CAL/CAR**. Pressing **CH-** is to select the next letter in one word. There are totally 62 characters available.

③ Press **CAF / CAB / SEL** to select **DISP**, and then press **CAL / CAR** to select **ON** or **OFF** (default is **ON**.) When it is **ON**, title of each camera is displayed; otherwise, it is not.



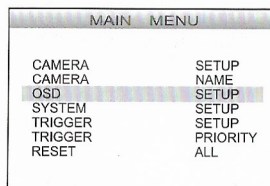
OFF



ON

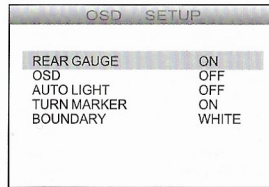
## 7.3 OSD SETUP

Press **MENU** to go back to master menu, and then press **CAF / CAB / SEL** to select **OSD SETUP**.

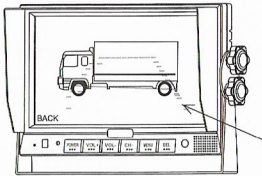


### 7.3.1 Rear gauge

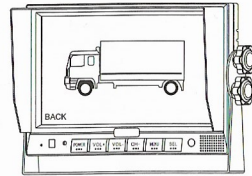
① Press CAL / CAR to enter OSD SETUP.:



② Press CAF / CAB / SEL to select REAR GAUGE, and then press CAL / CAR to select ON or OFF. When it is ON, there is distance grid displayed; otherwise there is not.



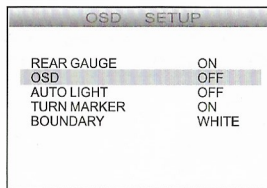
ON



OFF

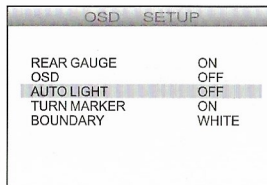
### 7.3.2 OSD lock

Reserve



### 7.3.3 Auto brightness setup

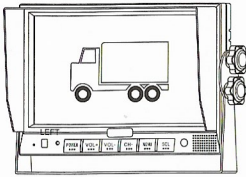
Reserve



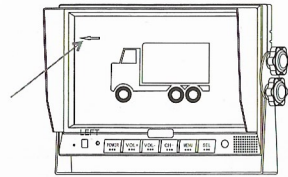
### 7.3.4 Arrow setup

Press CA F / CA B / SEL to select TURN MARKER, and then press CAL / CAR to select ON or OFF. ON is applied when the monitor is for reversing, while OFF is applied for regular security.

OSD SETUP	
REAR GAUGE	ON
OSD	OFF
AUTO LIGHT	OFF
TURN MARKER	ON
BOUNDARY	WHITE



OFF



ON

### 7.3.5 Boundary color

Press CA F / CA B / SEL to select BOUNDARY, and then press CAL / CAR to select color of the boundary. WHITE, BLACK and GRAY are available.

OSD SETUP	
REAR GAUGE	ON
OSD	OFF
AUTO LIGHT	OFF
TURN MARKER	ON
BOUNDARY	WHITE

### 7.4 System setup

Press MENU to go back to master menu, and then press CA F / CA B / SEL to select SYSTEM SETUP as below:

MAIN MENU	
CAMERA	SETUP
CAMERA	NAME
OSD	SETUP
SYSTEM	SETUP
TRIGGER	SETUP
TRIGGER	PRIORITY
RESET	ALL

## 7.4.1 Record video output

- ① Press CAL / CAR to enter SYSTEM SETUP:

SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

- ② Press CAF / CAB / SEL to select REC-V OUT, and then press CAL /CAR to select LEFT, RIGHT, FRONT, BACK or QUAD. Thus the output image will be left, right, front, back or quad accordingly.

## 7.4.2 Auto Scan

- ① Press CAF / CAB / SEL to select SCAN as below:

SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

- ② Press CAL /CAR to select ON or OFF. When it is ON, cameras will be auto switched in the sequence of LEFT, RIGHT, FRONT, BACK, QUAD, LEFT, RIGHT... If there is no video input in any channel, the channel will be automatically skipped.

## 7.4.3 Auto switch time

- ① Press CAF / CAB / SEL to select SCAN DELAY:

SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

- ② Press CAL /CAR to set up auto switch time (1~60 seconds).

## 7.4.4 Jump key

Press CAF / CAB / SEL to select JUMP KEY, and then press CAL /CAR to set up display mode from "LEFT", "RIGHT", "FRONT", "BACK", "QUAD", "L'R", "F'B", "L+R'F" and "B+L'R". In this case, when monitor is out of "MENU", pressing SEL will switch directly to the JUMP KEY image.

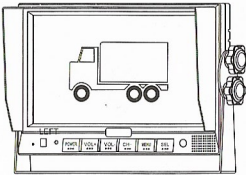
SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

### 7.4.5 Switch-on mode

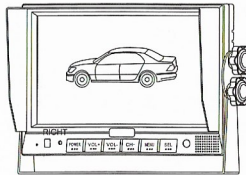
Press CA F / CA B / SEL to select P-ON MODE, and then press CA L / CA R to set up display from "LEFT", "RIGHT", "FRONT", "BACK", "QUAD", "L'R", "F'B", "L+R'F", "B+L'R" and AV when monitor is switched on.

SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

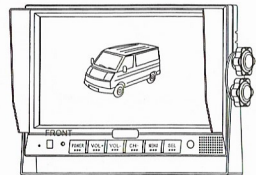
Different display modes are as illustrated below:



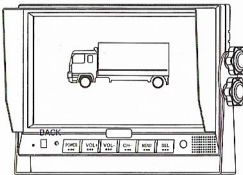
LEFT



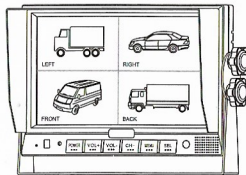
RIGHT



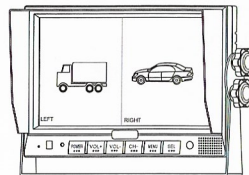
FRONT



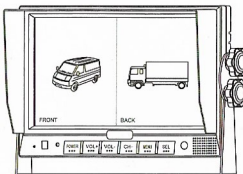
BACK



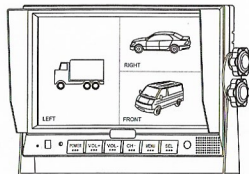
QUAD



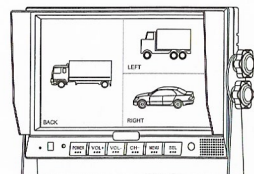
L' R



F' B



L+R' F



B+L' R

## 7.4.6 DVD IMAGE

Press CA F / CAB / SEL to select DVD IMAGE, and then press CA L / CAR to select from "STA" (standard), "BRI" (bright) and "SOF" (soft). When the monitor is operated by remote control, on the screen will display "STANDARD", "BRIGHT", or "SOFT".

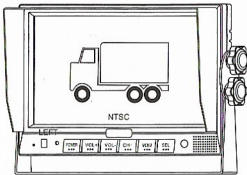
SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

## 7.4.7 TV system

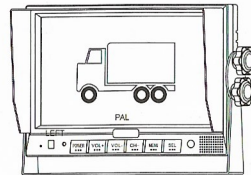
Press CA F / CAB / SEL to select SYSTEM, and then press CA L / CAR to select "NTSC" or "PAL".

SYSTEM SETUP		
REC-V	OUT	QUAD
SCAN		OFF
SCAN	DELAY	01_SEC
JUMP	KEY	LEFT
P-ON	MODE	QUAD
DVD	IMAGE	STA
SYSTEM		PAL

E.G.:



NTSC



PAL

## 7.5 Trigger wire setup

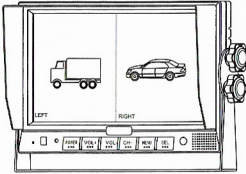
Press MENU to go back to master menu, and then press CA F / CAB / SEL to select TRIGGER SETUP as illustrated below:

MAIN MENU	
CAMERA	SETUP
CAMERA	NAME
OSD	SETUP
SYSTEM	SETUP
TRIGGER	SETUP
TRIGGER	PRIORITY
RESET	ALL

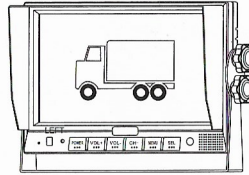
### 7.5.1 TURN IMAGE

Press CA F / CAB / SEL to select TURN IMAGE, and then press CA L / CAR to select the display mode at turning. When it is set to be DUAL, the images of left and right -side cameras will be displayed; when it is SINGLE, it shows Image from either left or right-side camera.

TRIGGER SETUP	
TURN IMAGE	SINGLE
REAR IMAGE	BACK
DELAY	01SEC
DOUBLE SPLIT:	
LEFT WARD	LEFT
RIGHT WARD	RIGHT
AUDIO	LEFT



DUAL



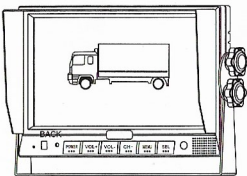
SINGLE

### 7.5.2 Backup display

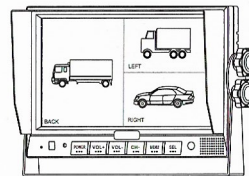
Press CA F / CAB / SEL to select REAR IMAGE, and then press CAL / CAR to select the display mode when backing up. If it is BACK, the monitor shows image from backup camera when reversing trigger is activated; if it is B+L'R, it shows images from back-up, left-side and right-side cameras on one screen when reversing.

TRIGGER SETUP	
TURN IMAGE	SINGLE
REAR IMAGE	BACK
DELAY	01SEC
DOUBLE SPLIT:	
LEFT WARD	LEFT
RIGHT WARD	RIGHT
AUDIO	LEFT

E.G.: Images of BACK and B+L'R:



BACK



B+L' R

### 7.5.3 Trigger off delay

Press CA F / CAB / SEL to select DELAY, and then press CAL / CAR to set up the delay time (from 0~60 seconds) as illustrated below:

TRIGGER SETUP	
TURN IMAGE	SINGLE
REAR IMAGE	BACK
DELAY	01SEC
DOUBLE SPLIT:	
LEFT WARD	LEFT
RIGHT WARD	RIGHT
AUDIO	LEFT

E.G.: If delay time is 5 seconds, the image will still be displayed for 5 seconds after the trigger wire is cut off.



## 7.5.4 Duplex split display

Press CAF / CAB / SEL to select LEFT, and then press CAL / CAR to select the camera to be displayed on the LEFT WARD. So does RIGHT.

TRIGGER SETUP	
TURN IMAGE	SINGLE
REAR IMAGE	BACK
DELAY	01SEC
DOUBLE SPLIT:	
LEFT WARD	LEFT
RIGHT WARD	RIGHT
AUDIO	LEFT

- ① Left, right, front or back-up camera could be either displayed on right ward or left ward on the screen. However, one camera could not be shown on both right ward and left ward. It could be only "RIGHT-LEFT", "RIGHT-BACKUP", "RIGHT-FRONT" etc.
- ② Audio setup. The audio output is selectable from left, right, front and back camera.

## 7.6 Trigger Priority

Press MENU to go back to master menu, and then press CAF / CAB / SEL to select TRIGGER PRIORITY as illustrated below:

MAIN MENU	
CAMERA	SETUP
CAMERA	NAME
OSD	SETUP
SYSTEM	SETUP
TRIGGER	SETUP
TRIGGER	PRIORITY
RESET	ALL

- ① Press CAL / CAR to enter TRIGGER PRIORITY:

TRIGGER PRIORITY		
1ST PRIORITY	BACK	BACK
2ND PRIORITY	LEFT	LEFT
3RD PRIORITY	RIGHT	RIGHT
4TH PRIORITY	FRONT	FRONT
5TH PRIORITY	DUAL	DUAL

- ② Press CAF / CAB / SEL to select 1<sup>st</sup> TRIGGER PRIORITY, and then press CAL / CAR to set up which camera would be 1<sup>st</sup> trigger priority. Every priority level can be set up as LFET, RIGHT, FRONT, BACK or DUAL. Default priority settings are BACK, LEFT, RIGHT, FRONT and DUAL respectively from the first to the fifth.

## 7.7 Reset

Press MENU to go back to master menu, and then press CAF / CAB / SEL or RES on the remote control to select REST ALL. Any press on CAL / CAR will go back to default setting.

MAIN MENU	
CAMERA	SETUP
CAMERA	NAME
OSD	SETUP
SYSTEM	SETUP
TRIGGER	SETUP
TRIGGER	PRIORITY
RESET	ALL