



SMARTRUCK
smart...for a reason **HD**

M474QHD

7" AHD Quad Monitor

Installation & User Manual



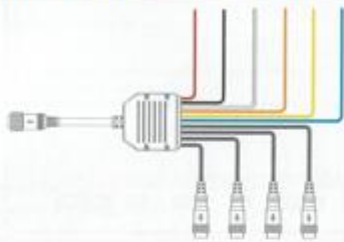
FEATURES

- 7" AHD Quad Monitor with 4CH camera
- High Res: 1024(RGB) x 600 pixels/500cd/m²
- AHD/TVI/CVBS & 1080P/720P/960H@NTSC/PAL Compatibility
- Various Screen Modes (Full/Dual/Triple/Quad/Mirror/Flip)
- Auto detection for AHD/TVI/CVBS & All Shutter Cameras
- Zoom function to magnify the camera image
- 12-60V Free Voltage in Input Power
- Automatic Bright Control by CDS Sensor
- Al. Die Casting Housing (IP69K)

MONITOR SPECIFICATIONS

Panel Size	7" LED Digital Panel
Video System	HD-TVI & AHD@1080P, 720P / CVBS <NTSC/PAL> Auto Detection
Resolution	1024 x (RGB) 600 Pixels
Brightness	500cd/m ²
Field of View	Top 60° / Bottom 70° / Left 80° / Right 80°
Parking Line	Automatic Display by R gear or Off / Parking Line Width Adjustable
Dimmer	Automatic by CDS sensor or Manual Adjustment
Camera Input	4CH
Audio Input	4CH
Trigger	4
Audio Output	1W mono speaker (8 Ohm)
Waterproof	Al. Die Casting Housing (IP69K)
Camera Connector	6P screw lock or 4p screw lock
OSD	Multi-language (English, Deutsche, Japanese, Italiano, Franiais, Espanol, etc.)
Power Input	DC12 ~ 60V (Automatic Power On/Off by ACC)
Operating Temperature	-20°C ~ +70° C / -4° F ~ +158° F
Storage Temperature	-30°C ~ +80° C / -22° F ~ +176° F
Size	181(W) x 130(L) x 29(H) mm / 7.13(W) x 5.12(L) x 1.14(H) inches
Weight	712g / 1.57lb

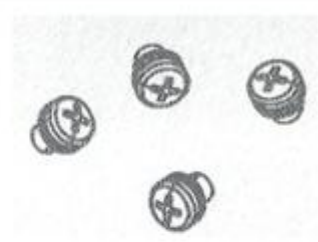
SUPPLIED ACCESSORIES



Power & Camera Input Cable



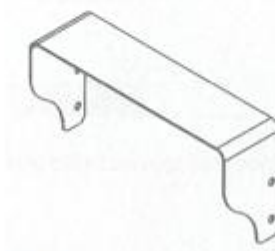
Cradle Bracket Kit



Vesa Bracket Screw



T-Slot bracket Kit (Option)

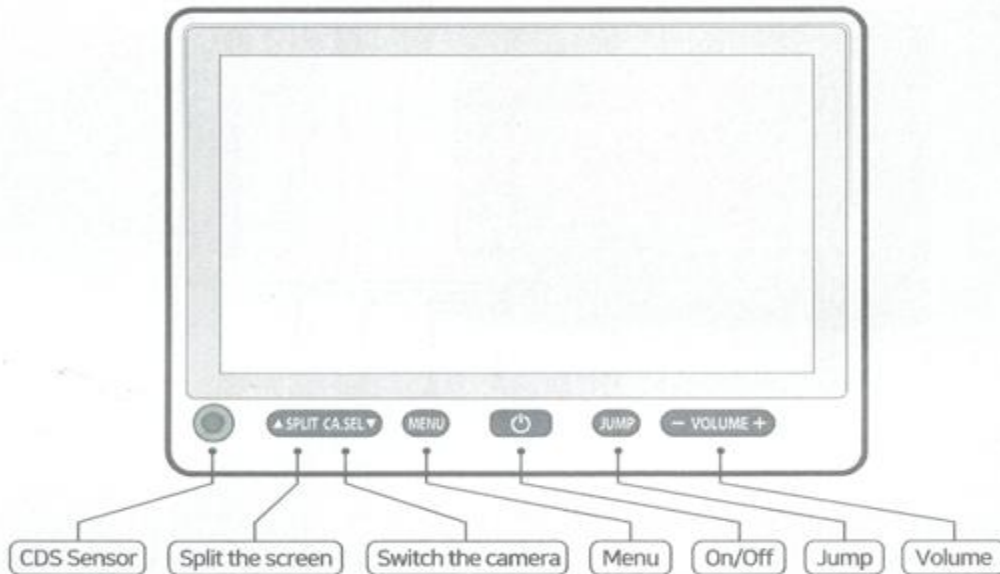


Sunvisor



User Manual

FUNCTIONS



1. Power Button (Switches the monitor on and off)

- Power OFF: Red (The monitor is standby)
- Power ON: Green (The monitor is switched on)



2. Menu Button for following setting

- FUNCTION → CAM R → CAM A → CAM B → CAM C → SPLIT → TRIGGER



- * To display OSD menu. To select OSD menu at OSD window
- Switch to standby or in the menu, select or activate the chosen option
- After 10 seconds without button operation, each setting is maintained and returned to the original screen

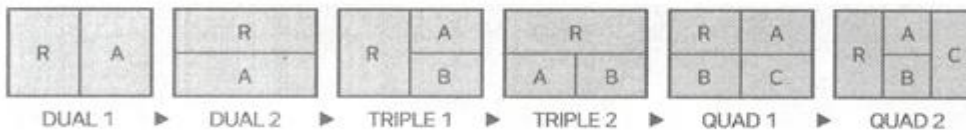
3. JUMP Button

- To return to the previous menu at OSD menu
- OSD Lock
 - Protection when an unauthorized person tries to access the OSD settings. (Default is OFF)
 - OSD Lock: Press JUMP button for over 5 seconds.
 - OSD Lock: Both the volume and JUMP functional, the other button do not work.



4. SPLIT Button

- Press SPLIT button to select the display mode



* The button functions as an "UP" button on the menu screen

5. CA.SEL Button (Switching the camera)

- Press CA.SEL to switch CAM R → CAM A → CAM B → CAM C
- * The button functions as an "DOWN" button on the menu screen



6. VOLUME +/- (Adjust the volume: 10 ~ 100%)

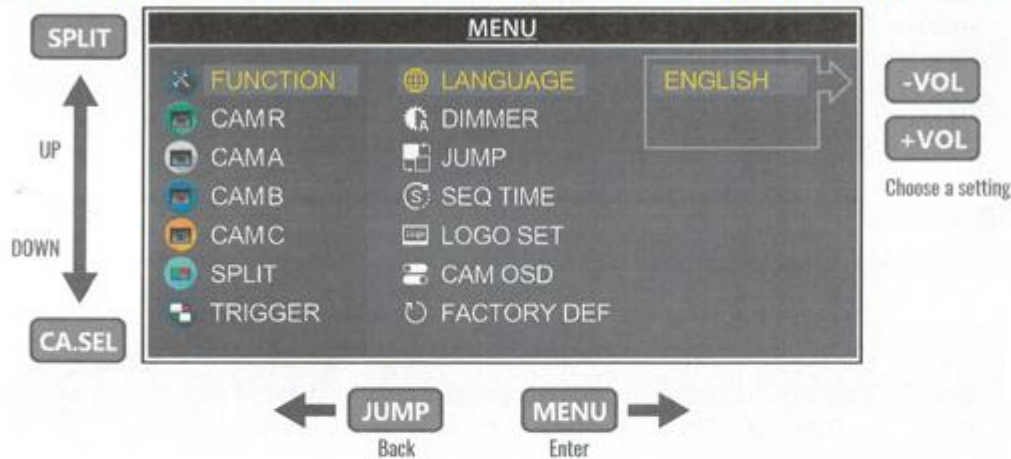
- Volume Adjustment Key
- * Press this button to change the OSD setting during system setting



MENU STRUCTURE

▶ Button Explanations

- OSD Color Explanation
 - White (Normal), Yellow (Selected Menu)
 - Red (When "Tachometer / Split 1 ~ 6 / Cam 1 ~ 4" mode setup off, the green OSD is changed to Red)



▶ Menu Setting

1. FUNCTION: Change the following setting below

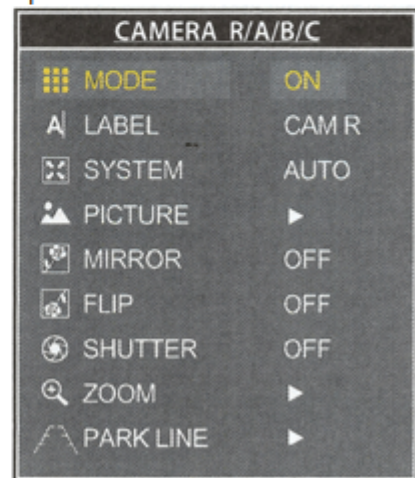
- LANGUAGE: Language Selection (Default: English)
 - English, Deutsche, Japanese, Italiano, Franiais, Espanol, Nederlands, Suomi, Svensk, Portugues
- DIMMER: LCD Backlight Control (Default: 5)
 - 1-5: Adjust the desired brightness level 1-5
 - OFF: Monitor adjusts the brightness according to the environment
- JUMP: Display the image selected under this setting (Default: QUAD 1)
 - QUAD1 / SEQ / CAM R / CAM A / CAM B / CAM C / DUAL 1 / DUAL 2 / TRIPLE 1 / TRIPLE 2 / QUAD 2 / OFF
- SEQ TIME: Select CAMR/A/B/C switching time setting value from 1-10sec (Default: 4)
- LOGO SET
 - LOGO: Splash screen on/off (Default: ON)
 - TIME: Splash screen display time 2-20 sec (Default: 2)
 - TYPE: SmarTruck / Envirolink (Default: SmarTruck)
 - * When Smartruck setup on LOGO set menu, camera label: CAM R, CAM A, CAM B, CAM C, REAR, LEFT, RIGHT, FRONT, HOPPER, CURBSIDE, STREET SIDE, ARM
 - * When Envirolink setup on LOGO set menu, camera label: CAM R, CAM A, CAM B, CAM C, REAR, LEFT, RIGHT, FRONT, REAR RV, REAR TR, KINGPIN, FIFTH WH, INSIDE T, CARGO, STERN, BOW ENGINE R, SWING, FR WINCH, RR WINCH, WINCH, NO CAMERA, TRAILER
- CAM OSD
 - ON: CAM OSD always stay
 - OFF: CAM OSD disappear after 3 seconds (Default)
- FACTORY DEF: Press "+Vol" button to reset to factory mode
 - * When you find video error or abnormal operation, please execute "FACTORY DEF"

FUNCTION	
LANGUAGE	ENGLISH
DIMMER	5
JUMP	QUAD 1
SEQ TIME	4
LOGO SET	▶
CAM OSD	OFF
FACTORY DEF	▶

MENU STRUCTURE CONTINUED

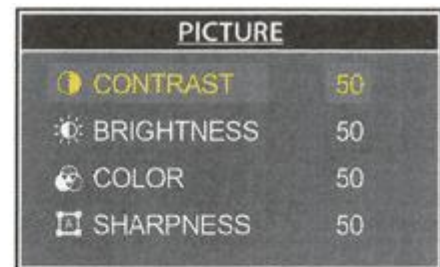
2. CAMERA R/A/B/C: Camera Setting

- MODE: ON / OFF
- LABEL: Camera label will show according to logo set menu; either SmarTruck or Envirolink
 - ON: CAM OSD always stay
 - Smartruck Label: CAM R, CAM A, CAM B, CAM C, REAR, LEFT, RIGHT, FRONT, HOPPER, CURBSIDE, STREET SIDE, ARM
 - Envirolink Label: CAM R, CAM A, CAM B, CAM C, REAR, LEFT, RIGHT, FRONT, REAR RV, REAR TR, KINGPIN, FIFTH WH, INSIDE T, CARGO, STERN, BOW ENGINE R, SWING, FR WINCH, RR WINCH, WINCH, NO CAMERA, TRAILER
- SYSTEM: AUTO / 1080P (NTSC/PAL) 720P (NTSC/PAL) / TVI (NTSC/PAL) / CVBS (NTSC/PAL)
 - Adjust the required camera system at system mode. If the camera is not adjusted correctly, the image is not properly displayed
 - When you select "Auto", each camera system is automatically setup and it will take some time to display proper camera image
 - AHD and TVI marked with initial as (AHD → A & TVI → T)
 - **If the monitor (screen) is in black and white or abnormal, adjust individually**
 - **Do not connect both NTSC and PAL Camera at the same time.**
Ex: CAM A (PAL) and CAM B (NTSC) do not display properly.
- PICTURE: Adjust "Brightness, Contrast, Color & Sharpness"
- MIRROR: Enable this option to mirror the image (left/right)
- FLIP: This option flips the image (upside down)
- SHUTTER: Shutter Camera Selection
- ZOOM: Zoom in/out
- PARK.LINE: Distance Maker Adjustment



3. PICTURE (Default: 50)

- CONTRAST: 0-99
- BRIGHTNESS: 0-99
- COLOR: 0-99
- SHARPNESS: 0-99



4. ZOOM: Function

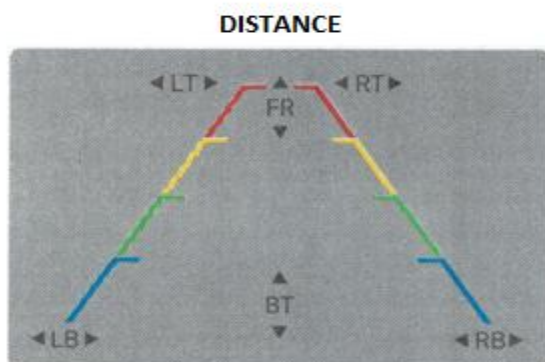
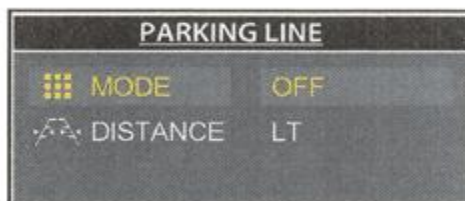
- Go to Zoom menu:
 - Press Menu key, the zone will appear
 - Move the box to the desired area
 - Press Menu key to magnify the image
- SPLIT: Move Up; CA SEL: Move Down
- -VOL: Move Left; +VOL: Move Right
 - After setting the desired zone, press the menu button to enlarge it.
 - * Press "JUMP" button to return to the previous menu



MENU STRUCTURE CONTINUED

5. PARKING LINE

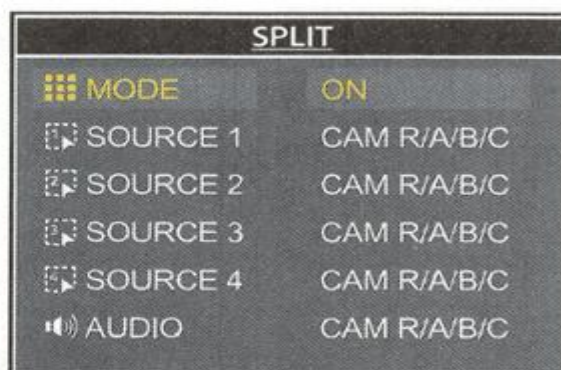
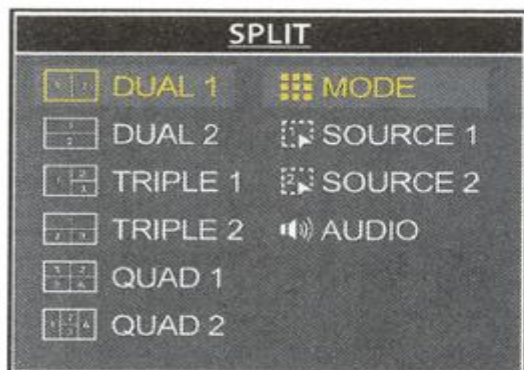
- **MODE:** On / Off / Trig
 - ON: Always display the parking line
 - OFF: Do not have the parking line
 - TRIG: Display the parking line when the trigger is activated
- **DISTANCE:** TH/TP/BT/RT/RB/FR/LT/LB
 - Please go to "Distance" to adjust parking lines
 - Press CA SEL button to select "TH, TP, BT, RT, RB, FR, LT, LB"
 - Then you can adjust the parking line with +Vol/-Vol button



- TH: Thickness
- TP: Transparency
- BT: Both Bottoms
- RT: Right Top
- RB: Right Bottom
- FR: Front
- LT: Left Top
- LB: Left Bottom

6. SPLIT: Display the camera video at the set position on the SPLIT screen

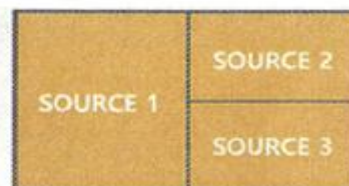
- **MODE:** On / Off
- **SOURCE 1-4:** Display the camera video at the set position
- **AUDIO:** The selected camera audio
 - * Same Camera Channel cannot be setup at SPLIT



DUAL 1



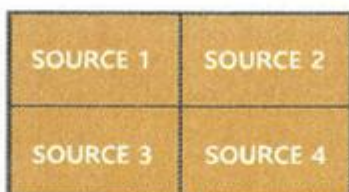
DUAL 2



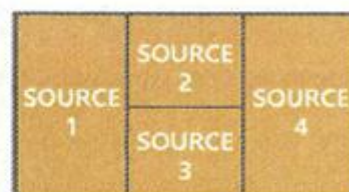
TRIPLE 1



TRIPLE 2



QUAD 1



QUAD 2

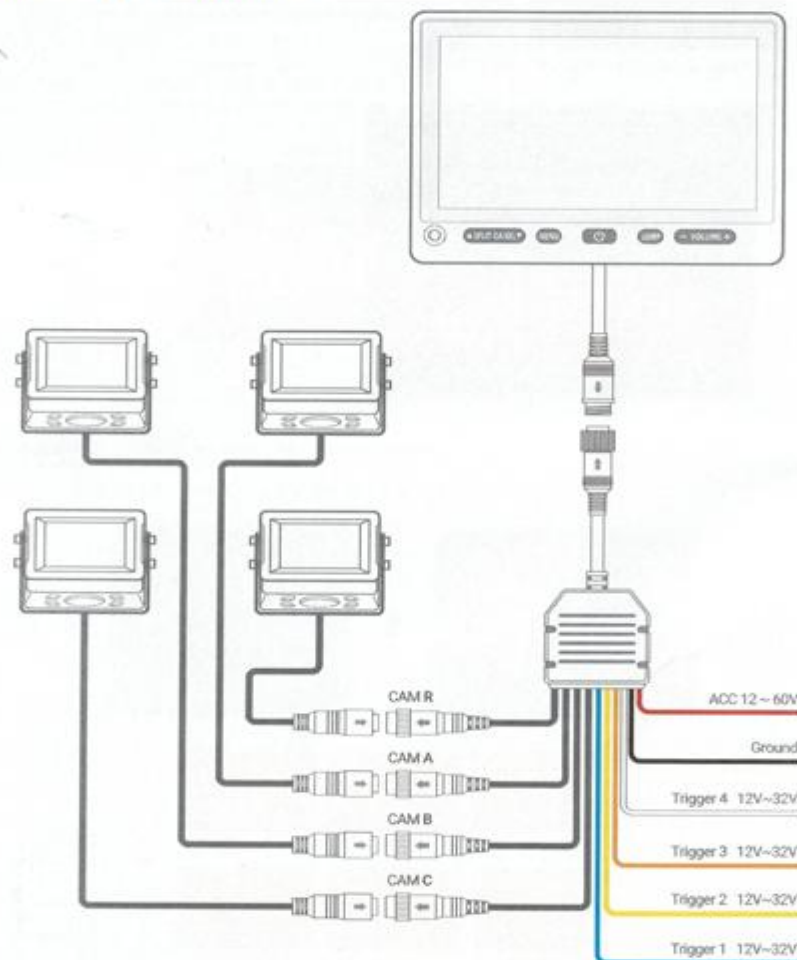
MENU STRUCTURE CONTINUED

7. PRI TRIGGER: Settings related to display a camera based on trigger signal

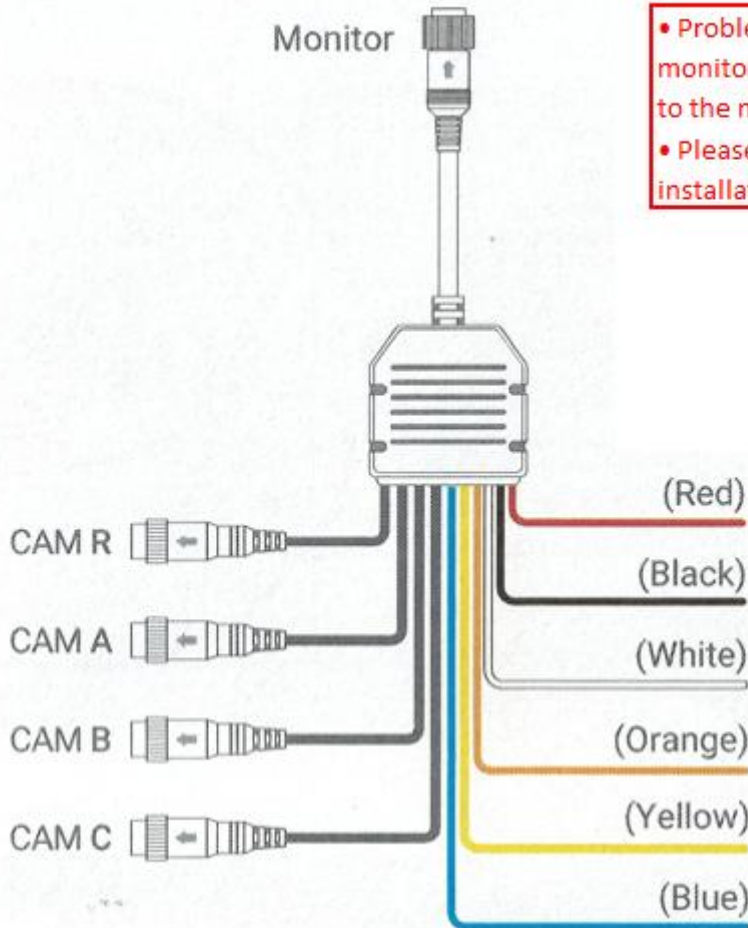
- Mode (Trigger 1-4 / Hazard)
 - User can select 5 different triggers and each trigger source can be selected
 - CAM R / CAM A / CAM B / CAM C / DUAL 1 / DUAL 2 / TRIPLE 1 / TRIPLE 2 / QUAD 1 / QUAD 2 / OFF
 - Time (0-9 seconds)
 - Time that takes to return to the previous menu after triggers
- * Trigger Priority: T1 > Hazard (T2+T3) > T2 > T3 > T4

TRIGGER		
PRI TRIGGER 1	MODE	CAM R
	TIME	0
PRI TRIGGER 2	MODE	CAM A
	TIME	0
PRI TRIGGER 3	MODE	CAM B
	TIME	0
PRI TRIGGER 4	MODE	CAM C
	TIME	0
PRI HAZARD	MODE	DUAL 1
	TIME	0

INSTALLATION and CONNECTIONS

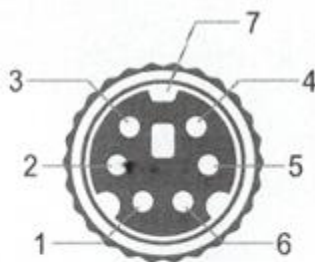


INSTALLATION and CONNECTIONS CONTINUED...



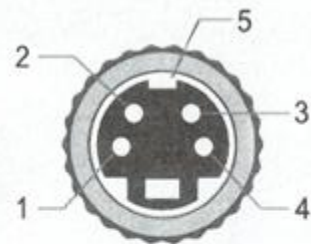
- Problems may occur when connecting monitor and camera after power is supplied to the monitor
- Please supply "Power" to monitor after installation is complete

6P Threaded Connector



PIN NO.	DESCRIPTION
1	NC
2	CAM B+
3	AUDIO
4	SHUTTER
5	VIDEO
6	GND
7	GND

4P Threaded Connector

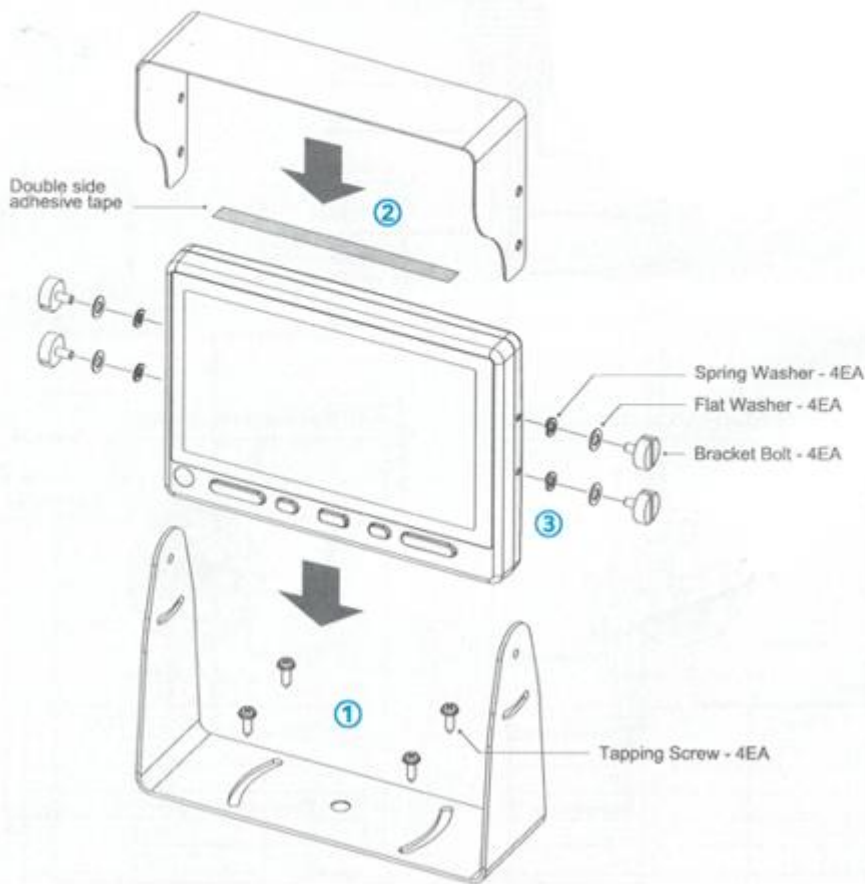


PIN NO.	DESCRIPTION
1	CAM B+
2	AUDIO
3	SHUTTER
4	VIDEO
5	GND

BRACKET INSTALLATION

► How to install monitor bracket

- Be sure to place the monitor away from heat sources
- Install the monitor bracket with the enclosed screws



WARNING



WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN



To reduce the risk of electric shock, do not remove cover (or back).
No user serviceable parts inside. Refer servicing to qualified service

*Design and specification are subject to change without notice.