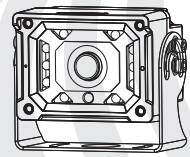
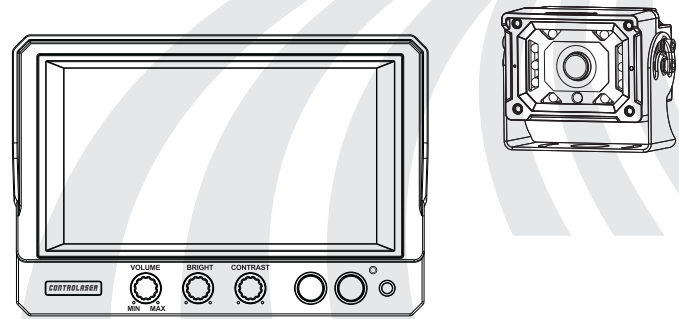


CONTROLASER



Professional Safety Video Owner's Manual

FEATURES

Monitor

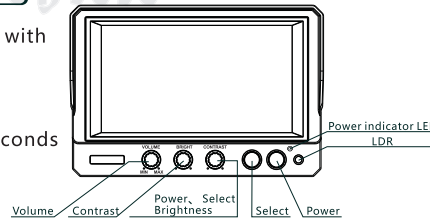
- The new 7.0" digital monitor is designed for heavy-duty vehicle rear view system
- Maximum support 4 camera inputs.
- The monitor is automatically turned on when the reversing gear is engaged.
- Auto-luminescence button provide a convenient operation when in dark environment.
- With built-in speaker.
- Use the "SEL" button to manually select the display image on the monitor.
- Rotating the "VOLUME" , " BRIGHT" , " CONTRAST" button to adjust the volume, brightness and contrast of monitor.
- Built-in control box function.
- Mirror/Normal image can be set in the MENU for each camera separately.
- With sun-visor.
- With high-low voltage and short-circuit protection.

Camera

- The heating camera is designed for heavy-duty vehicle rear view system in a cold environment.
- Build-in high heating power function (6W), it will automatically turn on when the environment temperature below zero degeed.
- With working indicator LED to show the camera status clearly.
- 10pcs IR LEDs provide brilliant night vision within 5 Meters.
- Provide three kinds of lens to choose: 70°、110°、150°(Diagonal)
- Mir/Nor function can be selected by removing the magnetic screws on the backside of the camera
- Aluminum die-casting body for durability and withstands water and dust environment.
- Water resistant housing.
- Operates over a wide temperature range.

MONITOR CONTROLS

- 1) POWER: This button is combined with power on/off and OSD menu. Press the button lightly to power on/off the system. Press the button longer than 2 seconds to enter the OSD menu.



Remark: The indicator LED turns green when power on, it will flash when there are no cameras connect to the monitor.

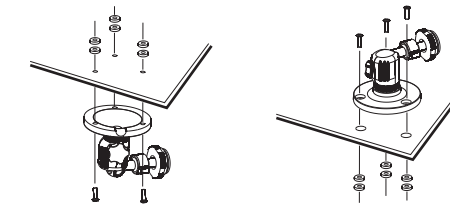
2) OSD Menu:

- COLOR: Adjust the color of the monitor.
 - TINT: Adjust the TINT of the monitor.
 - VDBRIGHT: Adjust the brightness of the monitor.
 - VDCONTRAST: Adjust the contrast of the monitor.
 - VDCOLOUR: Adjust the contrast of the monitor.
 - SHARPNESS: Adjust the sharpness of the monitor.
 - BLACKLEVEL: Adjust the black level of the monitor.
 - P_BURST: Adjust the p-pulse of the monitor.
 - NEXT PAGE: Press this button to enter the next page.
 - PREV PAGE: Press this button to return the previous page.
 - FREQOFFSET: Frequency offset of monitor.
 - ROTATING KNOBS ON/OFF: Shut off or turn on the function of rotating knobs.
 - CONNECT CAMS: Channel setting, Choose 01 means only CAM1 could be selected; Choose 02 means CAM1/CAM2 could be selected; Choose 03 means CAM1/CAM2/CAM3 could be selected; Choose 04 means CAM1/CAM2/CAM3/CAM4 could be selected.
 - LANGUAGE: hree languages for selection.
 - MIRROR: Set mirror/normal image.
 - VERSION: Software version.
 - EXIT: Press this button to exit the OSD menu.
- 3) SEL: This button is used to select the display camera between CAM1/CAM2/ CAM3/CAM4.
 - 4) Contrast: Adjust the contrast of the monitor.
 - 5) Bright: Adjust the brightness of the monitor.
 - 6) Volume: Adjust the volume of the monitor.
 - 7) Up(+): In OSD menu, press "power" to add the specification of this items;
 - 8) Down(-): In OSD menu, press "select" to decrease the specification of this items

MONITOR INSTALLATION

- Install the monitor on a surface which will support more than 4Kg(9Lbs) of weight
- Install the monitor away from a speaker mounted in the vehicle so the picture is not distorted by the speaker' s magnetic filed.

- Don' t install the unit in an extremely hot or humid place (radiator, air duct, etc.)Or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock)
- The monitor is not designed for waterproof.



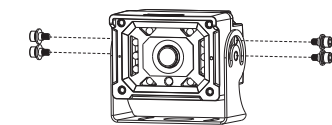
Tapping screw or machine screw with nut.

2.Adjust the angle of the monitor and fasten the screws firmly.



CAMERA INSTALLATION

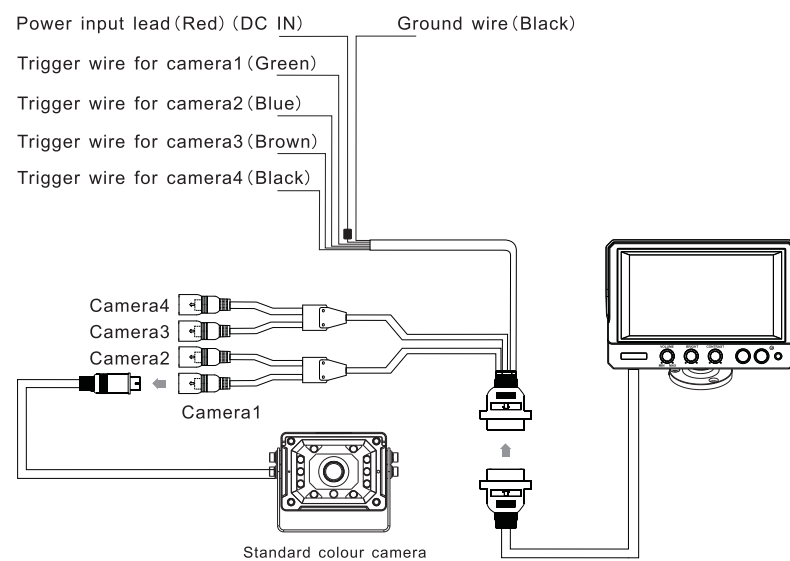
- Attach the supplied mounting bracket to the vehicle.
- Adjust the lens of the camera to a prefect angle and fasten the screw firmly.



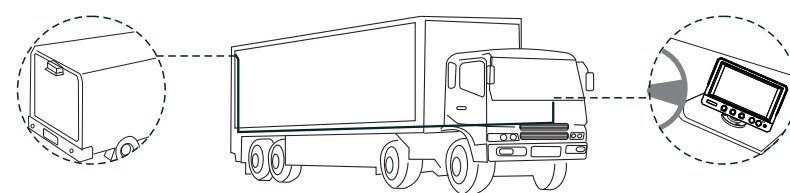
CONNECTION

- Connect the RED wire to the positive (12V or 24V DC) power terminal which is energized with ignition key in the accessory position.
- Connect the BLACK wire to the negative connection point on the vehicle.
- Connect the GREEN wire(video 1 trigger) to the switched power output terminal of the "R" (reverse) gear. Trigger is always in priority.

WIRING DIAGRAM (1)



WIRING DIAGRAM (2)



OPERATION INSTRUCTIONS

When you turn the ignition key to the accessory or on position, the power is supplied. no image will be displayed on the monitor.press" POWER" button to power up the system or make the reversing gear engaged to power up the system.

CLEANING AND GENERAL MAINTENANCE

- If your vehicle has been parked under direct sunlight, result a considerable rise in temperature inside the vehicle. Allow the unit to cool off before operating.
- Clean the unit with a slightly damp soft cloth. Use a mild household detergent.
- Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

CLEANING

Unplug or power off mode before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

VENTILATION

Holes in the cabinet and of the back or bottom are provided for ventilation, and to ensure reliable operation of the monitor equipment by protecting form overheating. these holes must not be blocked or covered.

OBJECT AND LIQUID ENTRY

Never push objects of any kind into this monitor equipment through holes as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind of product.

SERVICING

Do not attempt to service this system by yourself as opening of removing covers may expose you to dangerous voltage or other hazards.Referall servicing to qualified service personnel.

FCC COMPLIANCE & E-MARK STATEMENT

NOTE

This equipment has been tested and found to comply with the limits for a class A digital device. Pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference at this own expense.

CAUTION

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could violate the user's authority to operate the equipment.

SPECIFICATIONS

MONITOR

LCD profile wide screen ratio(Digital)	16:9 (7")
Wide view angle (CR > 10)	50/70(up/ down) 70/70 (left/right)
Resolution	1152000(pixels)
Brightness(cd/㎡)	400
Contrast ratio	500
Color system	PAL/NTSC(AUTO)
Response time(ms)(at 25°C)	20
Power requirement	12/24V DC
Power consumption	≤ 5W
Operating temperature range	-20°C to +70°C
Storage temperature range	-30°C to +80°C
Dimension	206 (L) x 139 (W) x 38 (H)mm
Weight approx	520±10g (with bracket)

CAMERA

Image type	1/4 Color SONY CCD
Resolution	PAL:500(H)*582(V) ,NTSC:510(H)*492(V)
Image size	1/4 Inch
Lens	2.6mm/F4.6; 2.35mm/F2.0
Lens angle	120°/150° (Diagonal)
Synchronization	Internal
Horizontal resolution	420 TV Lines
Power supply	DC12V± 10%
Power consumption	≤ 8W
Signal to noise ratio	≥ 48dB

Video signal output	1Vp-p, 75Ω
Waterproof & dust resistance grade	IP68
Operating temperature range	-30°Cto +70°C
Storage temperature range	-40°Cto +80°C
Dimension	78(L)*64.5(W)*73.5(H) mm
Weight	450g±10g

ACCESSORY

Monitor Bracket*1pc Sun Visor*1pc Y-cable*1pc Camera Bracket*1pc Fitting Bags