



## Installation Instructions 7 Inch Color Camera System

Comprising a feature packed 7.0" LCD high resolution color monitor and color infrared camera the K7000B delivers excellent picture quality even in low light conditions. The compact monitor allows for unobtrusive installation without compromising viewable screen area. Kit is expandable up to 2 cameras (C2013B only).



**IMPORTANT!** Read all instructions before installing and using. Installer: This manual must be delivered to the end user.



### **WARNING!**

Failure to install or use this product according to manufacturers recommendations may result in property damage, serious bodily/personal injury, and/or death to you and those you are seeking to protect!



**Do not install and/or operate this safety product unless you have read and understand the safety information contained in this manual.**

1. Proper installation combined with operator training in the use, care, and maintenance of safety products are essential to ensure the safety of you and those you are trying to protect.
2. Exercise caution when working with live electrical connections.
3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4. Proper placement and installation are vital to the performance of this safety product. Install this product so that the performance of the system is maximized and the controls are placed within convenient reach of the operator so that s/he can operate the system without losing eye contact with the roadway.
5. It is the responsibility of the vehicle operator to ensure during use that all features of this product work correctly. In use, the vehicle operator should ensure the field-of-view of the camera/monitor is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles, or other obstructions.
6. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, walking on or around traffic lanes.
7. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding safety products. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this safety product.

## Specifications:

CAMERA	C2013B
Image	CMOS
Voltage Requirement	12V
Effective Pixels	725 x 488
Power Consumption	1W
Lens Size	1/4"
Lens Angle	120°
Audio	No
Light Sensor	Auto Switch B&W
Infrared LEDs	18
Pigtail Connection: CAM	Male 4 Pin Threaded
Housing	Aluminum Alloy
Mech. Vibration	8g
Mounting	Rear/Front
Weight	0.58 lbs
Dimensions (WxHxD)	2.92"x3.01"x2.62"
Operating Temp.	-4°F to 158°F
IP Rating	IP69K
Approvals	FCC,CE,RoHS
Current Consumption	175mA Max

MONITOR	M7000B
Screen Size	7" (4:3) and (16:9)
Controller	2 Camera
Voltage	12-24 VDC
Power	Approximate: 5W
Mirror Imaging	Yes (via Camera and Monitor Switch)
Resolution	800(W)XRGBX480(H)
System	PAL/NTSC
Viewing Angle	L/R/U/D: 60°/60°/40°/60°
Visible Area	154X86mm
Contrast	400:1
Split Screen Feature	No
AV Compatible	Yes
DVR Compatible	No
Audio	No
Brightness	400cd/m2
Light Sensor	Auto Dim
Camera Selection	1-2 Via Trigger Wires
Connection: CAM	Female 4 Pin Threaded
Connection (Monitor Pigtail)	Male 9 Pin
Connection: CB	N/A
Housing	Plastic
Mounting	Pedestal
Mech. Vibration	Pedestal Bracket - 3G
Weight	0.88 lbs
Dimensions (WxHxD)	6.85" x 4.49" x 0.94"
Operating Temp	-4°F to 158°F
Remote Control	Yes
Approvals	FCC,CE,RoHS



**Caution!** When drilling into any vehicle surface, make sure that the area is free from any electrical wires, fuel lines, vehicle upholstery, etc. that could be damaged.

### Notes:

1. Larger wires and tight connections will provide longer service life for components. For high current wires it is recommended that terminal blocks or soldered connections be used with shrink tubing to protect the connections. Do not use insulation displacement connectors (e.g., 3M Scotchlock type connectors)
2. Route wiring using grommets and sealant when passing through compartment walls. Minimize the number of splices to reduce voltage drop. High ambient temperatures (e.g., under-hood) will significantly reduce the current carrying capacity of wires, fuses, and circuit breakers. All wiring should conform to the minimum wire size and other recommendations of the manufacturer and be protected from moving parts and hot surfaces. Looms, grommets, cable ties, and similar installation hardware should be used to anchor and protect all wiring.
3. Fuses or circuit breakers should be located as close to the power takeoff points as possible and properly sized to protect the wiring and devices.
4. Particular attention should be paid to the location and method of making electrical connections and splices to protect these points from corrosion and loss of conductivity.
5. Ground termination should be only be made to substantial chassis components, preferably directly to the vehicle battery.
6. Circuit breakers are very sensitive to high temperatures and will "false trip" when mounted in hot environments or operated close to their capacity.

## Installation, Wiring and Function

### Installation:

#### Camera Model C2013B

**Important!** Mount the camera at a location that provides the best view of the area immediately behind the vehicle. Generally, mounting locations toward the top of the vehicle provide the best field of view. Lower mounting locations reduce the field of view and increase the likelihood of damage from road spray.

1. Find an appropriate location for installation.
2. Drill holes according to the size of U-bracket and fix the U-bracket.
3. Drill a 3/4" (19mm) hole next to U-bracket.
4. Install the camera on U-bracket.
5. Connect the camera tail with the extension cable from inside the vehicle.
6. Loosen the hex head screws and adjust the camera's position to get the best view angle in the monitor.

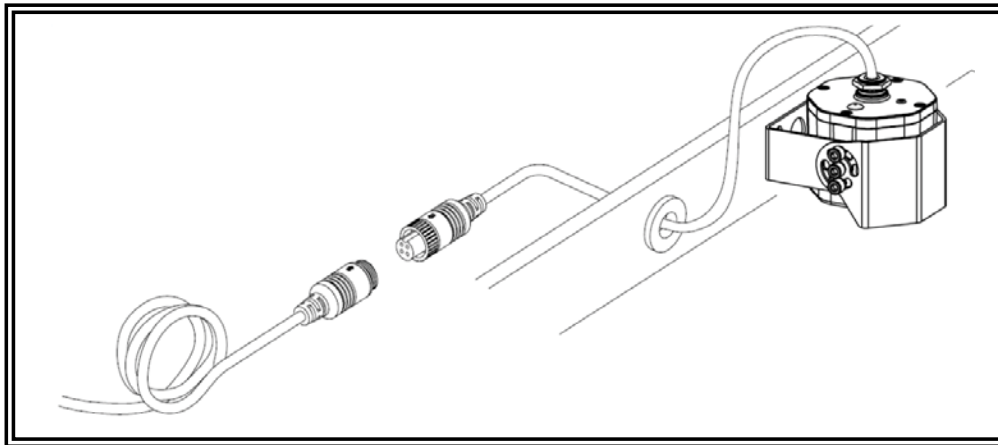


**Figure 1**

Picture depicted is for reference only.

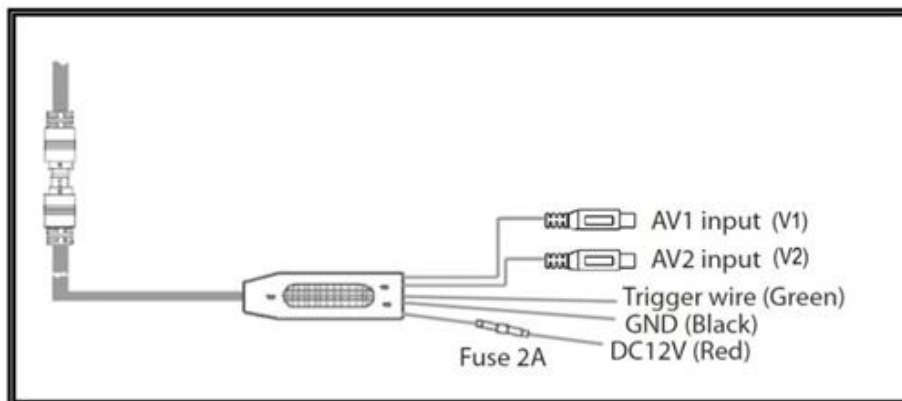
### Wiring:

**Important!** Waterproof all connections whether inside or outside the vehicle by using sealant and wrapping with insulation tape. Wrap tape tightly, overlapping by one-half widths so there are no gaps.



**Figure 2**

Picture depicted is for reference only.



**WIRING DEFINED**

**Monitor:**

**Model M7000B**



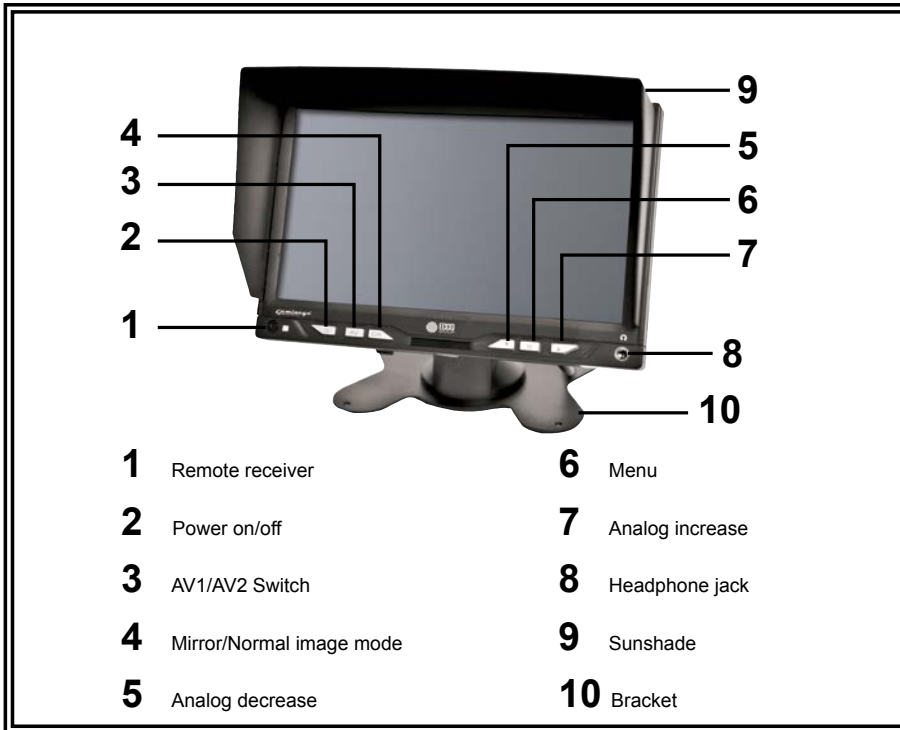
**WARNING!**

To prevent accidental shock, **DO NOT OPEN THE MONITOR CASE**. Opening the monitor case will expose the inside of the monitor to conditions that could adversely affect performance. Any evidence of tampering with sealed components will void the warranty.

**Important!** Do not expose the monitor to water, it is not waterproof. Any water that leaks into the monitor could cause extensive damage.

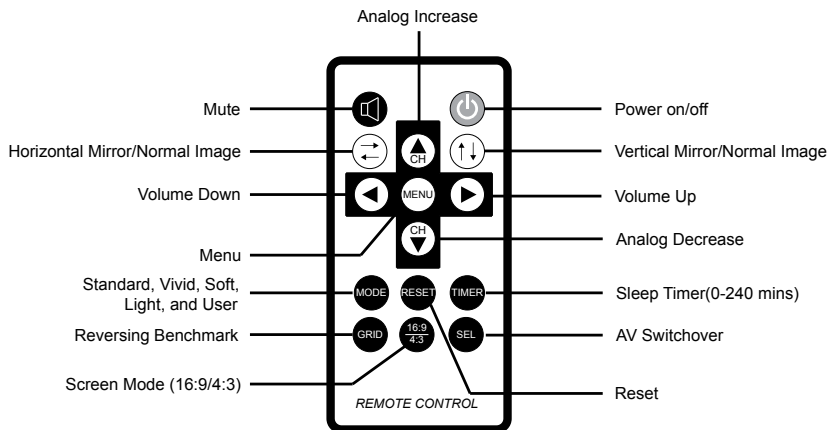
Installation instruction of using pedestal base:

1. Select suitable position on vehicle and fix the base support.
2. Fix the monitor to the base support and adjust the view angle.
3. Put on the sun-visor and connect the monitor with the AV and power supply conversion cable.



**Monitor Parts Identification**

**Remote:**



## Menu Operations:

Press the Menu button on the remote control or the Menu button on the monitor to get to the Menu selection.

Use the CH up & CH down on the remote control or CH button on the monitor to toggle between menus.

Use the Volume Up on the remote control or Analog Increase on the monitor to select highlighted menu. Use Volume Down on the remote control or Analog Decrease on the monitor to back to the previous menu.

Use Select on the remote to close Menu Options.

PICTURE	
Bright Contrast Color Language Reset	Adjust brightness setting. Adjust contrast setting. Adjust color setting. (English, Deutsch, Francais, Español, Portugese, Italiano, Chinese) Reset the device.

OPTION	
Rotate Zoom	To rotate view. (16:9 or 4:3)

SYSTEM	
S-Color ACC1 - Time ACC2 - Time Grid ON/OFF	(Auto, PAL, NTSC) Trigger 1 timer (0-15 seconds) Trigger 2 timer (0-15 seconds)

PRESET	
Sleep	(0-240 mins)

### Manufacturer Limited Warranty and Limitation of Liability:

Manufacturer warrants that on the date of purchase, this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request). This Limited Warranty extends for twelve (12 ) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

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