LCD REAR VISION MONITOR

SV-LCD70RP User Guide





Important Notices

SV-LCD70RP User Guide Version 2.0

Safety Vision attempts to provide information contained in this manual based on the latest product information available at the time of publication. However, because of Safety Vision's policy of continual product improvement, Safety Vision reserves the right to amend the information in this document at any time without prior notice.

This material is confidential and the property of Safety Vision. It is shared with your company for the sole purpose of helping you with the operation of the described equipment.

Safety Vision makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Safety Vision shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

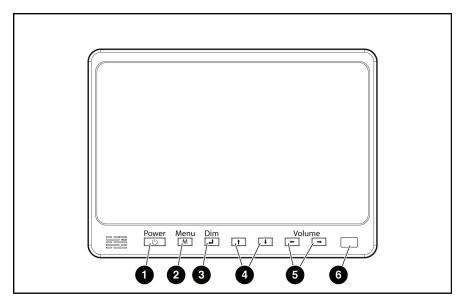
Safety Vision expressly disclaims all responsibility and liability for the installation, use, performance, maintenance, and support of third-party products. Customers are advised to make their independent evaluation of such products.

No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Safety Vision.

Safety Vision® is a registered trademark of Safety Vision, LP. All other products or name brands mentioned in this document are trademarks of their respective owners. For more information about Safety Vision and its products, go to www.safetyvision.com or call 800-880-8855.

Table of Contents

Front Panel Components	4
Rear Panel Components	5
Menu Navigation	6
Function Menu	6
Picture Menu	7
Installation Location	8
Installation Procedure	9
Cleaning	9
Appendix A	10
Appendix B	11
Appendix C	12
Appendix D	12
Returning the Unit for Service	14
FCC Compliance Statement	15



Front Panel Components

1. Power Button and Standby Light

A red light indicates that the monitor is ON and in Standby mode. (Monitor power remains on until the vehicle ignition key is on the OFF position.)

2. Menu Button

This button initiates display of the main menu. After setting options in the menu, press the MENU button again to go back.

3. Dim Button

This button manually dims or brightens the screen.

4. Up and Down Buttons

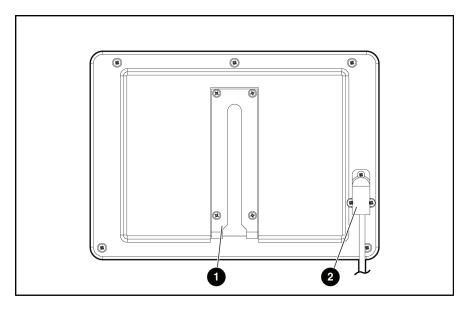
These buttons move the cursor up or down to make selections in MENU mode.

5. Volume Buttons

These buttons control the volume of the integrated speaker. Also, these buttons are used as LEFT and RIGHT buttons in MENU mode.

6. Light Sensor

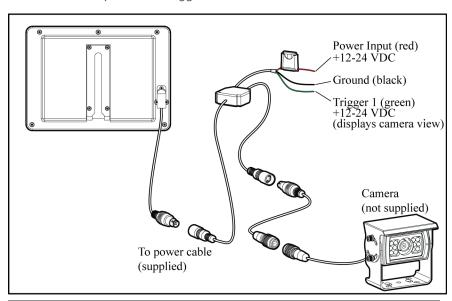
This sensor detects the available light and automatically adjusts the display's brightness level accordingly with 5 seconds of delay time. The delay time helps to avoid flickering in cases where the illumination changes frequently in a short period of time.



Rear Panel Components

- Bracket Slot
 This slot accepts the adjustable mounting bracket.
- **2.** Input Cable

 Cameras and power and trigger wires are connected to this cable



NOTE: Connect the camera(s) to the monitor before supplying power.

Menu Navigation

To navigate through the menu, press the MENU button. Press the MENU button once to display the FUNCTION menu, and press it once more to display the PICTURE menu. Press the MENU button while the PICTURE menu is displayed to exit the menu.

Use the UP and DOWN buttons to select menu options, and use the LEFT and RIGHT buttons (the VOLUME buttons) to change menu option values.

Function Menu

Press the MENU button once to display the FUNCTION menu.

Dimmer

This menu item controls the automatic dimming function. Select AUTO to automatically dim the monitor when the light sensor senses darkness. Select OFF to disable the automatic dimming function and operate the monitor at full brightness full time until the DIM button is pressed.

Language

This menu item sets the menu language. The languages names are displayed in their native spelling. Select from the following options:

- · FNGLISH
- · GFRMAN
- · ITALIAN
- · FRFNCH
- · SPANISH

Direction

This menu item controls the orientation of the picture. Select 0° to display the picture right-side up, or select 180° to display the picture upside down.

Reset

This menu item resets all settings of the monitor with default factory values. With the RESET menu option selected, press the RIGHT button. The monitor will reset and power off. Press the POWER button to turn the monitor on again.

CAM DIST

This menu item controls the on-screen distance markers. Select ON to automatically display distance markers when 12V is applied to Trigger 1 (the green wire), typically connected to the back-up lights.

Power

This menu item controls the automatic power on function. Select AUTO to turn the monitor on whenever the vehicle's ignition is set to ON (12V is applied to the red wire). Select OFF for the monitor to remain in Standby mode until the POWER button is pressed or 12V is applied to the trigger (green) wire.

Picture Menu

Press the MENU button while the FUNCTION menu is displayed to display the PICTURE menu.

The PICTURE menu controls the following image quality adjustments:

- CONTRAST
- BRIGHTNESS
- COLOR
- TINT

All adjustments can be set to values between 0 and 100. The factory default value for all adjustments is 50.

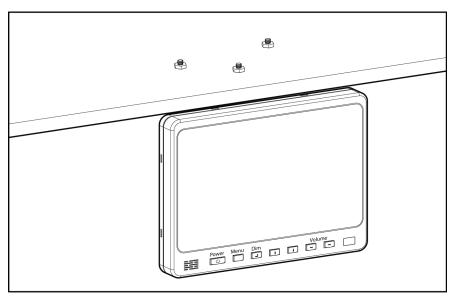
Supplied Accessories

The following accessories are supplied with the SV-LCD70RP monitor:

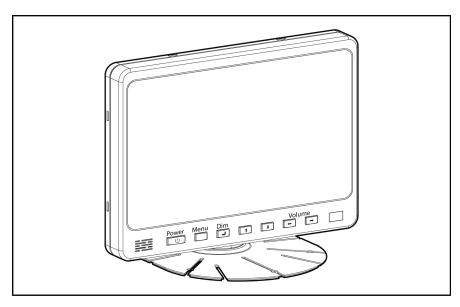
- · Adjustable mounting bracket
- Screw kit
- One (1) camera input power cable
- Sun visor

Installation Location

The SV-LCD70RP monitor can be mounted on the ceiling or on the dashboard or console.



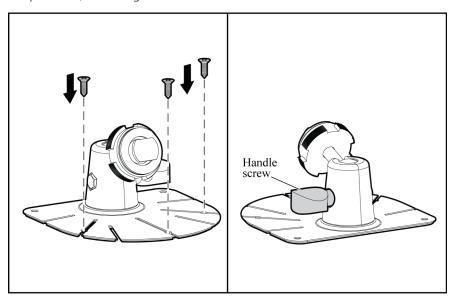
↑ Ceiling mount



↑ Console or dashboard mount

Installation Procedure

- 1. Select a suitable installation surface in a protected location that is within easy line-of-sight and easy reach of the operator. (For example, select a location that does not obstruct the operator's view through the windshield, or of side- or rear-view mirrors.)
- 2. Clean the installation surface thoroughly.
- 3. Remove the protective paper from the bottom of the mounting bracket.
- **4.** Attach the mounting bracket on the installation surface with the screws provided, for ceiling mount or for dash- or console-mount.



↑ Screw and handle screw locations

Cleaning

Clean the unit with a slightly damp, soft cloth, using a mild household detergent. To prevent damage to the finish, do not use strong solvents (such as thinner or benzene).

Appendix A

Abbreviations, Acronyms, and Symbols

Abbreviation, Acronym, or Symbol	Definition
ABS	Acrylonitrile-butadiene-styrene
BRIGHT	Brightness
С	Celsius
CA. SEL	Camera Select
CA1	Camera 1
CA2	Camera 2
AV	Audio / Video
F	Fahrenheit
LCD	Liquid crystal display
mm	Millimeter
NTSC	National television Standards Committee
RGB	Red, green, blue
RMA	Return material autorization
SV	Safety Vision L.P.
TFT	Thin-film transistor
TRIG.	Trigger
V	Volt
VDC	Volts direct current
VOL	Volume

Appendix B Specifications

LCD System	7-inch
Video System	NTSC/PAL
Auto Dimmer	Selectable auto/manual
OSD Controls	Bright, Contrast, Color, Tint, CAM Distance, Dimmer, Language, Direction, Reset, Power
Resolution	1440 (RGB) x 234
Impact Rating	4G
Sync System	Internal
Power Input	12 - 24 VDC
Power Consumption	8 Watt Max.
Operating Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Dimensions (w x h x d)	7 in. x 5 in. x 1 in. (177 mm x 127.5 mm x 25 mm)
Weight	0.99 lb. (.45 kg)

Appendix C

Troubleshooting

This section provides troubleshooting guidelines for certain operational problems you might encounter using the SV-LCD70RP monitor. Before requesting service, check the following.

- Ensure that the power supply and ground wires are connected properly.
- Ensure that the video extension cable and video input cable are connected properly to the inline control box.
- Confirm all buttons are illuminating. (A red POWER light indicates that
 the monitor is on or standby but other buttons are green when camera
 signals are detected. If the buttons are not illuminating, it means the
 monitor is not receiving a signal from any connected cameras.)

For additional troubleshooting guidelines, contact Safety Vision Technical Support at 713.896.6600 or 800.880.8855. Additional technical support is available on the Safety Vision website: www.safetyvision.com.

Appendix D

Troubleshooting

Safety Vision, L.P. ("SV") makes the following limited warranty, which is effective at the time of the original end-user purchase.

NOTE: Optional warranty products are available for all SV products and may be purchased at the time of the original end-user purchase or any time during the original Limited One-Year New Product Warranty period. Contact the Safety Vision Warranty department at 800.880.8855, or visit the Safety Vision website at www.safetyvision.com for more information.

SV warrants this product against defects in materials for a period of one year after the date of purchase. During this period, SV will repair or replace a defective product or part without charge to the customer. The customer must send the defective product or part to SV or an authorized SV dealer. The customer must pay for all transportation and insurance charges for sending the unit to be repaired. SV's total liability is limited to the original product cost.

Customer's Responsibility

The above warranty is subject to the following conditions:

- Customer must notify SV within 10 days of discovering the defective product or part and provide a description of the defect and complete information about the manner of its discovery.
- All warranty servicing of this product must be performed by SV or an authorized servicing agent.
- Warranty extends only to defects in materials as limited above. Warranty
 does not extend to any product or part that has been lost or discarded
 by the customer; to damage to products or parts caused by misuse,
 accident, improper installation, improper maintenance, or use in violation
 of instructions furnished with the product; to units that have been altered
 or modified without authorization of SV; to damage to products or parts
 thereof that have had the serial number removed, altered, defaced, or
 rendered illegible; or to any failure of the product to function caused by
 burglary, fire, flood, war, riot, civil commotion, Acts of God, or any other
 condition beyond the control of SV.

Obtaining Warranty Service

To obtain warranty service, the customer must contact the SV Service and Warranty Manager at 713.896.6600 or 800.880.8855 to report a defective product. (The customer must report the model number and serial number if available.) The Service and Warranty Manager will assist in troubleshooting the problem and, if necessary, issue a return material authorization (RMA) number. The customer must include this number on the outside of each package shipped to SV.

IMPORTANT: Packing and Shipping Instructions

When a product requires service, only the affected component must be returned. The customer must use proper packing material to ensure against damage during shipping. Any shipping damage caused by improper packing is not covered under this warranty. In addition, the customer must include a return material authorization (RMA) number on the outside of each package shipped to SV and a letter explaining the defect with the product.

Returning the Unit for Service

To return the SV-LCD70RP unit for service:

- 1. Call Technical Support at 800-880-8855.
- 2. Speak to a Technical Support Representative.
- 3. Obtain an RMA Number and any additional special instructions.
- **4.** Carefully pack the unit, including all defective parts and a note that includes the RMA Number and a detailed description of the issue experienced.
- 5. Ship to:

Safety Vision
Technical Support RMA#
6100 West Sam Houston Parkway North
Houston, TX 77041-5113

FCC Compliance Statement

NOTE

This device 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 in which case the user will be required to correct the interference at his own expense.

CAUTION

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

CORPORATE HEADQUARTERS

6100 W. Sam Houston Pkwy. N. Houston, TX 77041-5113 Main: 713.896.6600 Toll Free: 800.880.8855 Fax: 713.896.6640

www.safetyvision.com



Mobile video solutions for enhanced safety