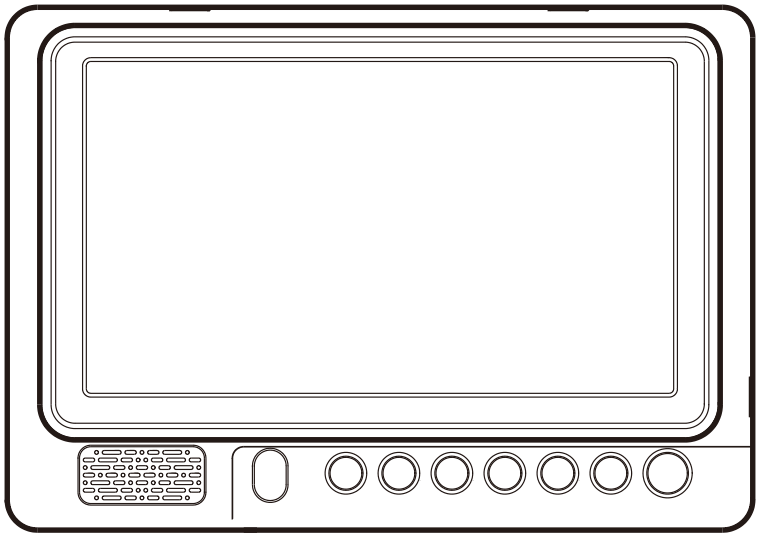
OWNER'S MANUAL

PLEASE READ CAREFULLY BEFORE
USING AND KEEP IN A SAFE PLACE.

7" DIGITAL TFT LCD COLOR ALL ROUND VISION MONITOR

(MULTIPLE DISPLAY MODE)



Model: SV-LCD70A

Design and Specifications are subject to change without notice.

OWNER'S RECORD

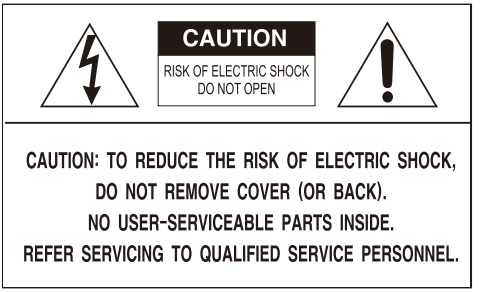
The model and serial numbers are located on the rear of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your dealer regarding this product.

Model No. SV-LCD70A

Serial No. _____

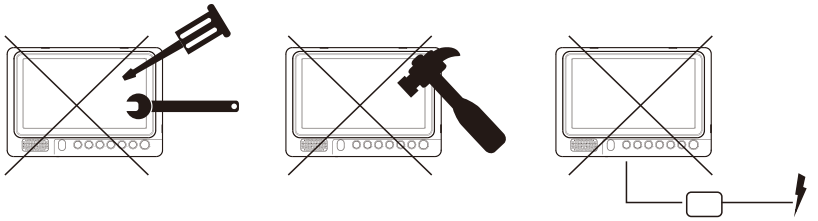
WARNING

To avoid electric shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.



You are cautioned that any changes or modifications which is not expressed or approved in this manual could void your warranty and cause the equipment to malfunction.

SUGGESTIONS

7" DIGITAL TFT LCD COLOR ALL ROUND VISION MONITOR

1 Safety

Use only DC 10V ~ DC 32V.
If liquid or dust leaks into the case, turn off power to the unit and consult an experienced technician before using.

2 Installation

Do not install the units 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. If your vehicle has been parked in direct sun light resulting in a considerable rise in temperature inside the vehicle, allow the unit to cool off before operating.

3 General cleaning information

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.

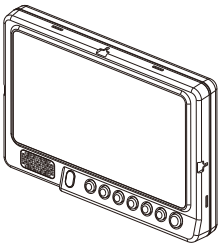
FEATURES

SV-LCD70A (7" Digital TFT LCD Monitor)is especially designed as automotive all round vision system.

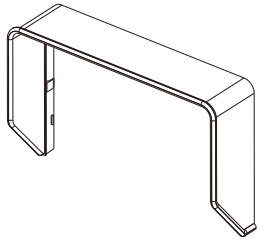
- High Resolution 7"Digital TFT LCD Panel
- Free Input Voltage (DC 10V~DC 32V)
- NTSC / PAL Compatibility
- 4 Camera Inputs (4-pin mini DIN)
- 1 A/V Input (RCA, For optional navigation or other external device)
- 1 A/V Output(RCA, For recording purpose or a second monitor)
- Multiple Display Mode (SPLIT2), Triple(SPLIT3), Quad(SPLIT4)
- Automatic Picture Display (5Triggering Functions)
- Day/Night sensor (CDS) for automatic day/night settings
- Individual settings of AUX-channel and camera channels
- OSD(On Screen Display)
- Auto Scanning Function
- Built-in Speaker

PACKAGE CONTENTS

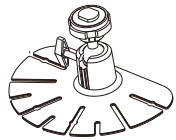
Please check that you have the correct contents before using this product. If any items are missing, please contact your dealer.



SV-70A MONITOR

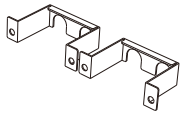


SUN VISOR



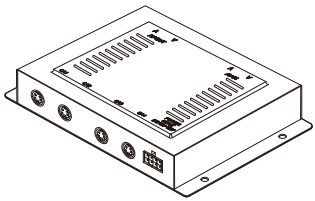
STAND BRACKET

SCREW KITS

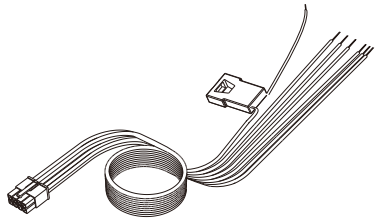


CABLE REINFORCEMENT

INSTRUCTION MANUAL

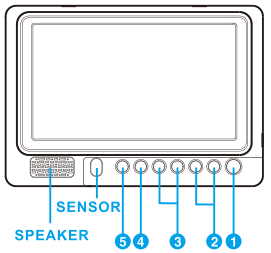


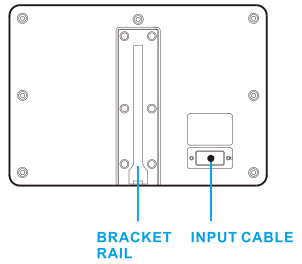
CONTROL BOX



POWER CORD

OPERATIONS





1. POWER
2. - / +
3. UP / DOWN
4. SOURCE
5. MENU
6. DAY/NIGHT SENSOR

1 POWER (ON/OFF)

- **STAND-BY mode**

1. When RED LED is turned on, it indicates the power is applied and it is on stand/by mode.
2. The monitor is not turned off until the ignition key is at off position.

- **POWER-ON mode**

1. Press to turn the monitor on.
2. Press to turn the monitor into stand-by.

NOTE The monitor can also be switched on automatically using a TRIGGER signal; For more information, see TRIGGER setting in the MAIN MENU.

2 - / +

- **Use to adjust speaker volume.**

1. Press to decrease speaker volume.
2. Press to decrease speaker volume.

- **Use to select the content in menu setting mode.**

3 UP/DOWN

- **Use to adjust TILT camera position.**

1. Press to adjust TILT camera position upward.
2. Press to adjust TILT camera position downward.

* Available only when TILT camera is connected with TILT.MT setting on menu.

- **Use to search the lists in menu setting mode.**

4 SOURCE

- **Use to select the display image.**
  (CAM1→CAM2→CAM3→CAM4→AUX→SPLIT2→SPLIT3→SPLIT4)
  The OSD indicates which image is displayed on the screen.

5 MENU

1. Press the to enter the Display Menu, press and hold the to enter the Main Menu.
2. Press once to enter menu mode. Press again to exit from menu mode.

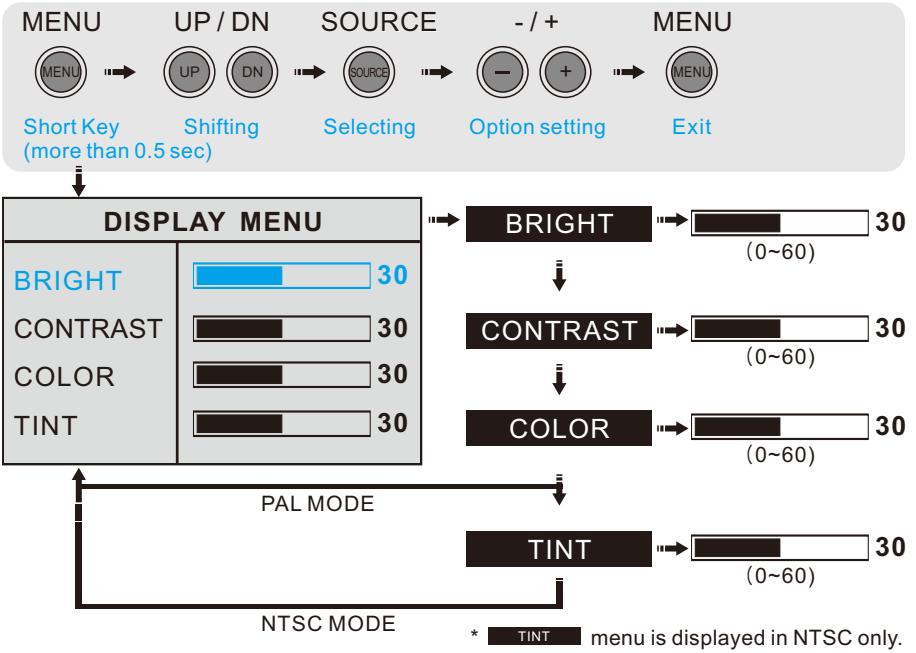
6 DAY/NIGHT SENSOR

- **Automatic Brightness Setting**

Automatically adjusts the brightness of the image to the lighting conditions in the immediate vicinity of the monitor.
The built-in Day/Night sensor on the front of the SV-LCD70A monitor captures the light and activates the day/night mode.
The sensitivity of the Day/Night sensor is adjustable.
For more information, see " DAY/NIGHT SETTING" in MAIN MENU.

OPERATIONS

1. DISPLAY MENU



NOTE *User can set up an individual display mode for CAM channel and AUX channel using "DISPLAY MENU".

a. CAM Display setting:

Activate "DISPLAY MENU" on CAM Channel by pressing (MENU) and set up Display menu.

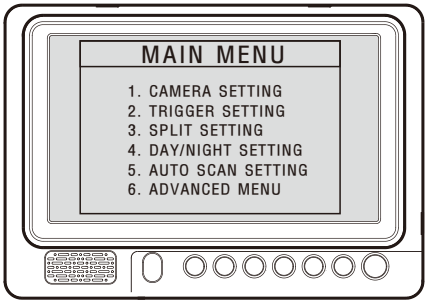
*If you set up the display mode of CAM Channel, CAM1~CAM4 will be displayed as same display mode.

b. AUX Display setting:

Activate " DISPLAY MENU" by pressing (MENU) on AUX Channel and set up Display menu.

2. MAIN MENU

Press and hold (MENU) (over 2 seconds) to enter the MAIN MENU. Selectable OSD MENU disappears within 7sec if there is no new button pressed.



1 CAMERA SETTING

1. CAMERA SETTING	
CAM1 CAM2 CAM3 CAM4	NOR/MIR: [MIRROR;NORMAL] NAME:[CAM1_ _ _ _] SORT: [NORMAL;SHUTTER; TILT.MT; TILT.AT]

NOTE 1. CAM4 is only available with NORMAL CAMERA.

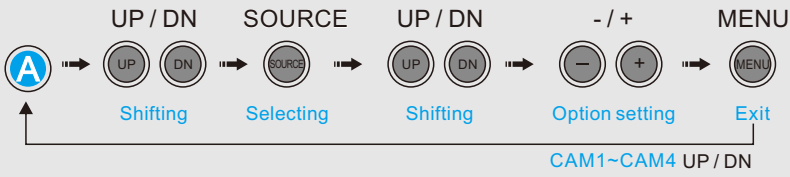
2. Tilt.AT (Automatic Tilt): When trigger is activated, Tilt CAM automatically turns to downward(-40˚). When trigger is off ,Tilt CAM automatically turns to upward(0˚).

3. Tilt.MT (Manual Tilt): When trigger is activated, Tilt cam turns to the last set position.

4. User can adjust tilt angle manually only in TILT.MT mode (UP)(DN).

- NOR/MIR: [MIRROR;NORMAL]

Each camera's Normal/Mirror view can be selected.



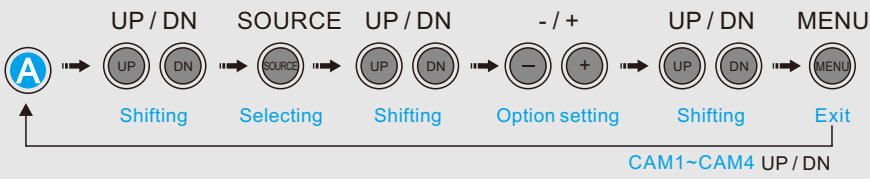
- NAME:[CAM1_ _ _ _]

Camera name can be set.

- SORT:[NORMAL;SHUTTER;TILT.MT;TILT.AT]

A sort of camera can be selected.
(NORMAL;SHUTTER;TILT.MT;TILT.AT).

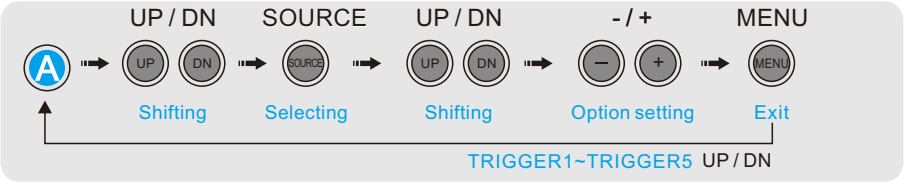
NOTE A wrong selection can cause damage to a camera or to the SV-LCD70A.



❷ TRIGGER SETTING

2. TRIGGER SETTING	
TRIGGER1 TRIGGER2 TRIGGER3 TRIGGER4 TRIGGER5	SOURCE: [CAM1~4;AUX; SPLIT2~4] DELAY : [0~20sec] MARKER : [ON;OFF] MARKER SETTING

- SOURCE: [CAM1~4;AUX;SPLIT2~4]



1. User can use 5 triggers and each trigger source(CAM1~SPLIT4) can be selected.
2. When the trigger is activated, the selected source's image is displayed.
3. The Triggers have a priority difference according to the following order:
   Trigger1 -> Trigger2 -> Trigger3 -> Trigger4 -> Trigger5 -> Speed switch
   Trigger1 has highest priority; Speed switch has lowest priority.

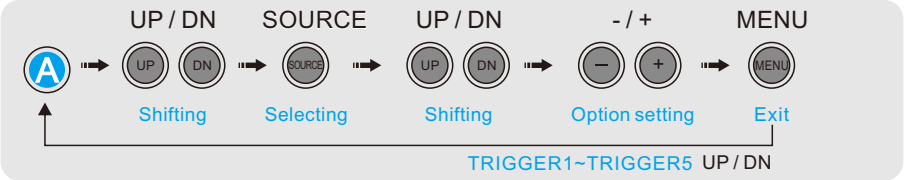
- DELAY: [0~20 sec]

Each trigger's delay time is adjustable from 0 sec to 20 sec.

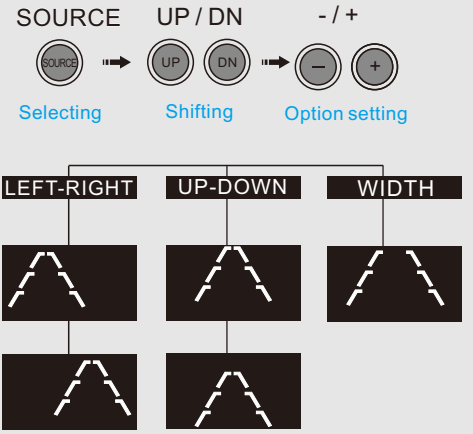
NOTE If one camera is activated by an intermittent 12/24VDC signal (e.g. from an indicator light) it must be delayed to prevent the picture from flickering.

- MARKER:[ON;OFF]

1. ON/OFF setting for distance marker when any trigger is engaged.



MARKER SETTING



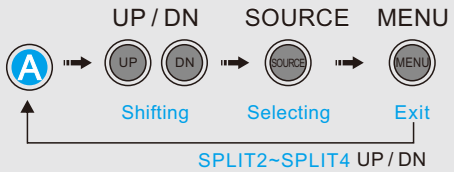
1. POSITION & WIDTH setting for distance marker when any trigger is engaged.

❸ SPLIT SETTING

3. SPLIT SETTING
SPLIT2 SPLIT3 SPLIT4

NOTE

- Various images can be displayed at the same time; the sources for shared images can be assigned to SPLIT2, SPLIT3 and SPLIT4.
-SPLIT2 (DUAL SCREEN DISPLAY)
-SPLIT3 (TRIPLE SCREEN DISPLAY)
-SPLIT4 (QUAD SCREEN DISPLAY)
* Only one audio function can be used.



SPLIT2

SPLIT2
SOURCE1:[CAM1~CAM4] SOURCE2:[CAM1~CAM4] AUDIO:[CAM1~CAM4]

SPLIT3

SPLIT3
SOURCE1:[CAM1~CAM4] SOURCE2:[CAM1~CAM4] SOURCE3:[CAM1~CAM4;OFF] AUDIO:[CAM1~CAM4]

- SPLIT4

SPLIT4
SOURCE1:[CAM1~CAM4]
SOURCE2:[CAM1~CAM4]
SOURCE3:[CAM1~CAM4;OFF]
SOURCE4:[CAM1~CAM4;OFF]
AUDIO:[CAM1~CAM4]

4 DAY/NIGHT SETTING

User can adjust the sensitivity of DAY/NIGHT SENSOR.

4. DAY/NIGHT SETTING
SENSOR:[ON;OFF]
SENSITIVITY:[0~60]
NIGHT BRIGHT:[0~60]

- SENSOR:[ON;OFF]

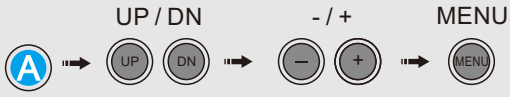
Select Sensor ON/OFF.

- SENSITIVITY:[0~60]

Adjust the sensitivity of DAY/NIGHT LEVEL; the higher value expedites the night mode activation.

- NIGHT BRIGHT:[0~60]

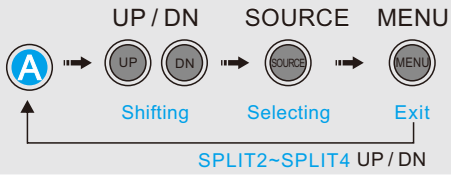
Adjust the BRIGHTNESS LEVEL.



❺ AUTO SCAN SETTING

5. AUTO SCAN SETTING
AUTO SCAN:[ON;OFF] AUTO SCAN DELAY

- AUTO SCAN:[ON;OFF]
  ON/OFF setting for auto scan function.



- AUTO SCAN DELAY
  The auto scanning time of each camera can be adjusted(0~30sec).

AUTO SCAN DELAY	
CAM1	2(0~30)
CAM2	2(0~30)
CAM3	2(0~30)
CAM4	2(0~30)
AUX	2(0~30)
SPLIT2	2(0~30)
SPLIT3	2(0~30)
SPLIT4	2(0~30)

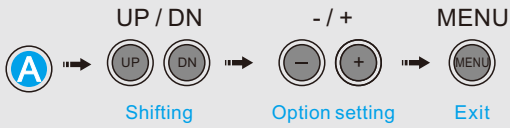
⑥ ADVANCED MENU

6. ADVANCED MENU

UP/DOWN:[UP;DOWN]
LEFT/RIGHT:[LEFT;RIGHT]
VIDEO FORMAT:[NTSC;PAL;AUTO]
AUTO POWER:[ON;OFF;AUTO]
FACTORY RESET

- UP/DOWN:[UP;DOWN]
  Converted image display (top and bottom).
- LEFT/RIGHT:[LEFT;RIGHT]
  Converted image display (right and left).
- VIDEO FORMAT:[NTSC;PAL;AUTO]
  NTSC or PAL system can be selectable.
- AUTO POWER : [ON;OFF;AUTO]

* OFF setting: Monitor keeps "Stand-by" setting regardless of the last mode before the ignition key is turned off.
* ON Setting: Monitor is turned on automatically when the ignition key is switched on regardless of the last mode the monitor was in the last time it was turned off.
* AUTO setting: Monitor starts up to the mode it was in before the ignition key was turned off.
Power-on mode or " Stand- by " mode according to its last mode before the ignition key off.



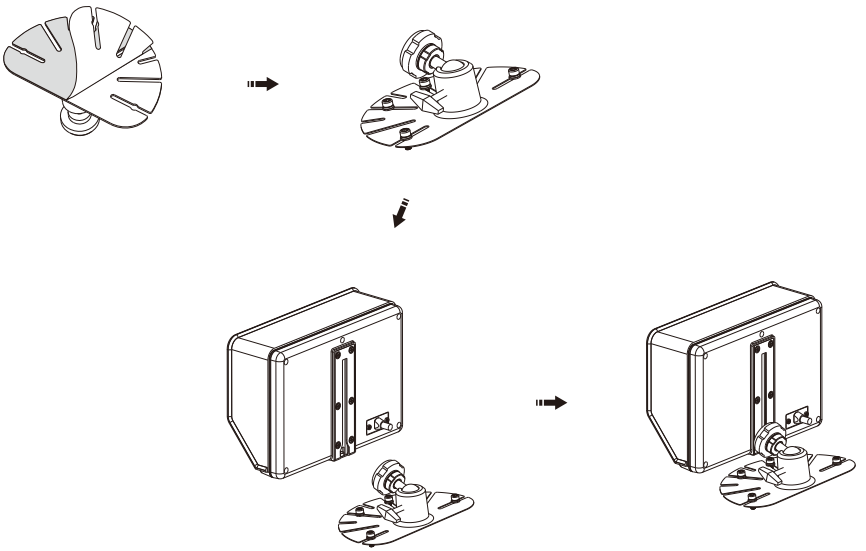
- FACTORY RESET

NOTE Reset the monitor to return to the factory settings; personal setting will be initialized.

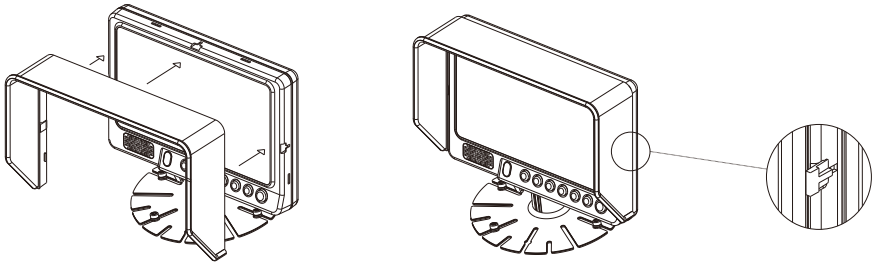
INSTALLATION

❶ DASH BOARD ➟ SCREW ➟ MONITOR

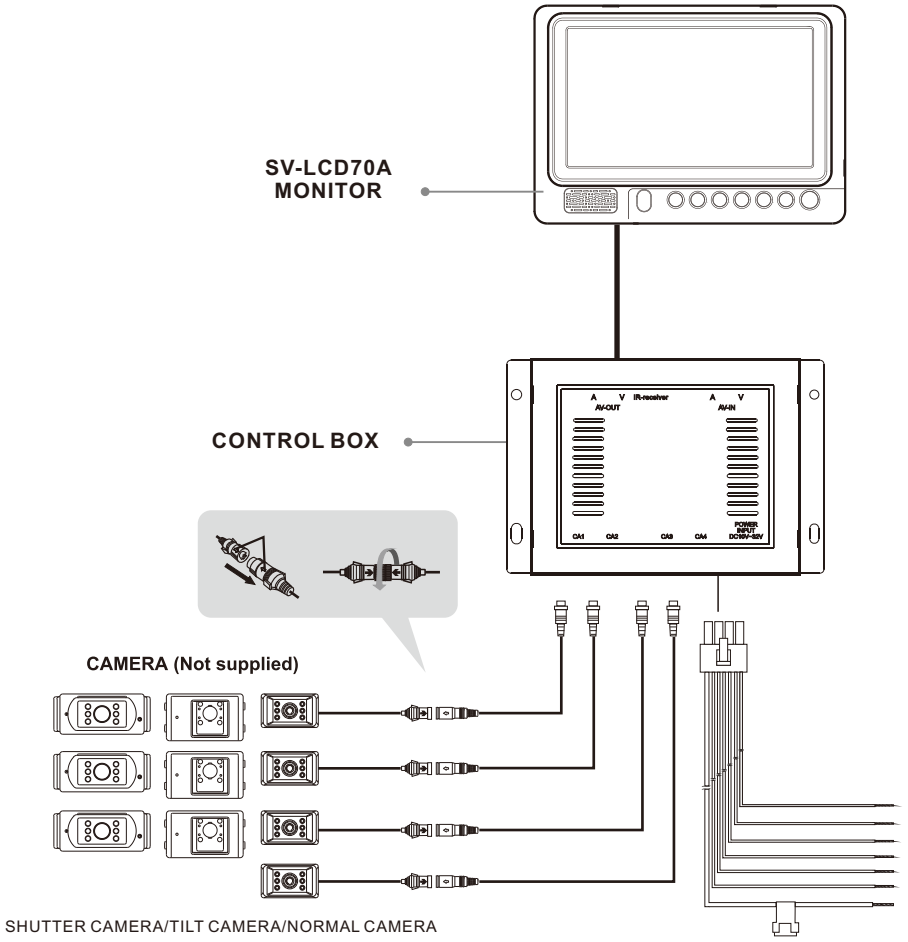
- STAND BRACKET



❷ SUNVISOR ➟ MONITOR



SYSTEM CONNECTIONS



POWER/TRIGGER WIRE FUNCTIONS

REF#	WIRE COLOR	DESCRIPTION
1	RED	POWER IN DC(10 to 32V)
2	BLACK	GROUND
3	GREEN	TRIGGER1
4	WHITE	TRIGGER2
5	BLUE	TRIGGER3
6	YELLOW	TRIGGER4
7	BROWN	TRIGGER5
8		N.C

SPECIFICATIONS

Model: SV-LCD70A

Power Input	DC 12V (from control box)	
Video System	NTSC / PAL compatible	
Panel	7" Digital	
Backlight	LED(400cd/㎡)	
Resolution	800 X 3(RGB) X 480	
Viewing Angle	Top:50 °, Bottom:70 °, Left: 70°, Right:70°	
Format	16:9 wide	
Display Mode	Single/Split/Triple/Quad	
Operating Temp.	-25℃ ~ +75℃ (-13℉ ~ 167℉)	
Storage Temp.	-30℃ ~ +85℃ (-22℉ ~ 185℉)	
Vibration	5 G	
OSD Control	Day & Night Sensor, Bright, Contrast, Color, Tint(NTSC) Mirror/Normal, Day/Night Mode/Parking Guide *Separate setting for CAM and AUX Channel.	
OSD language option	Multilingual	
Dimension	197(W) X 138(H) X 32(D) mm	
	7.8(W) X 5.4(H) X 1.3(D) inch	
Weight	Approx. 0.6 Kg	
Supplied acc'y	Power cable (2M)	(1)
	Sun Visor	(1)
	Mounting bracket	(1)
	Cable Reinforcement	(2)
	Screw kit	(1)
	Instruction Manual	(1)

THIS SYMBOL MEANS DO NOT DISPOSE OF
AS MUNICIPAL WASTE.
RE-USE OR RECYCLE WHEREVER POSSIBLE.
ELECTRICAL / ELECTRONIC COMPONENTS MAY
CONTAIN SUBSTANCES WHICH ARE HARMFUL TO
THE ENVIRONMENT.
FOR ENVIRONMENTALLY SOUND METHODS OF
DISPOSAL, PLEASE CONTACT YOUR LOCAL
GOVERNMENT AUTHORITY.

printed in korea