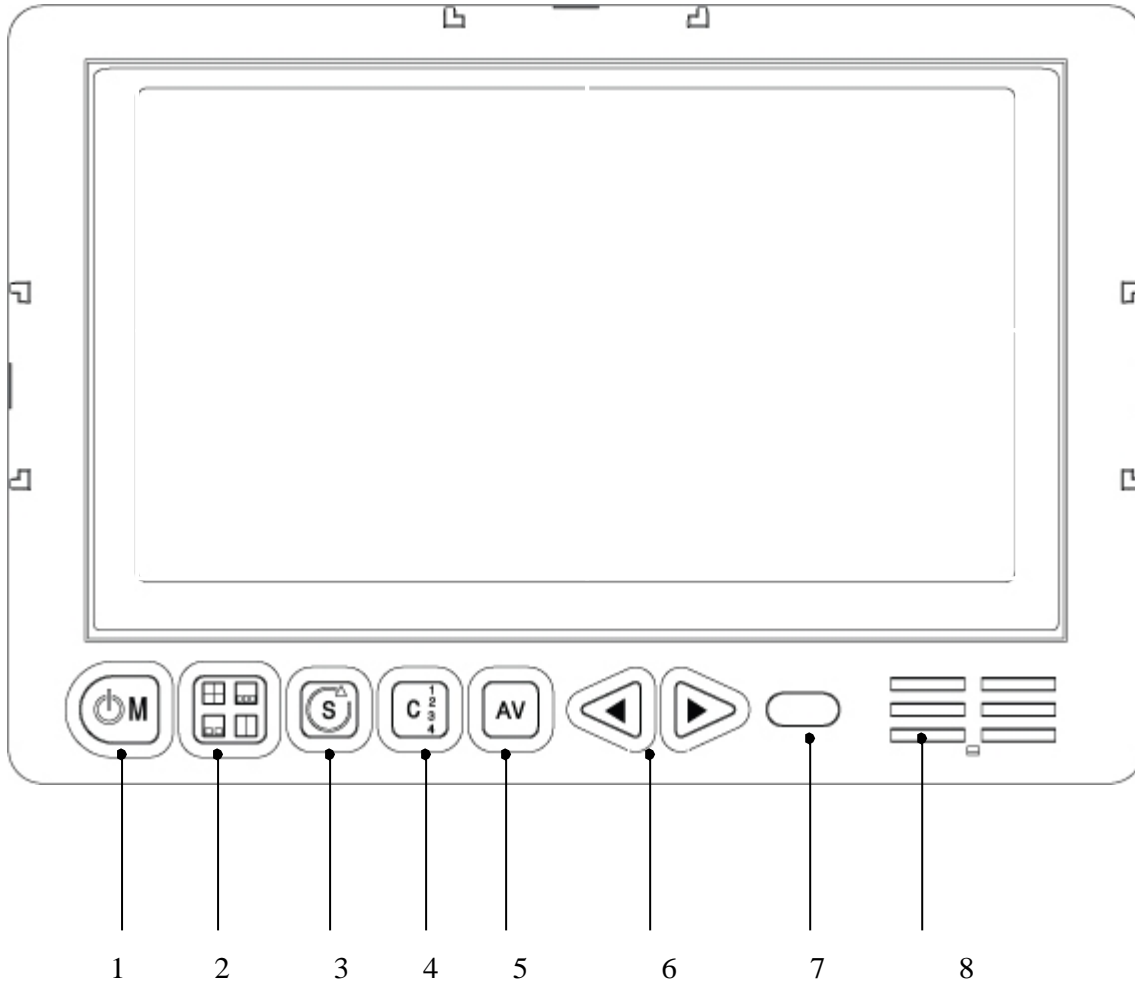


AST-70S4

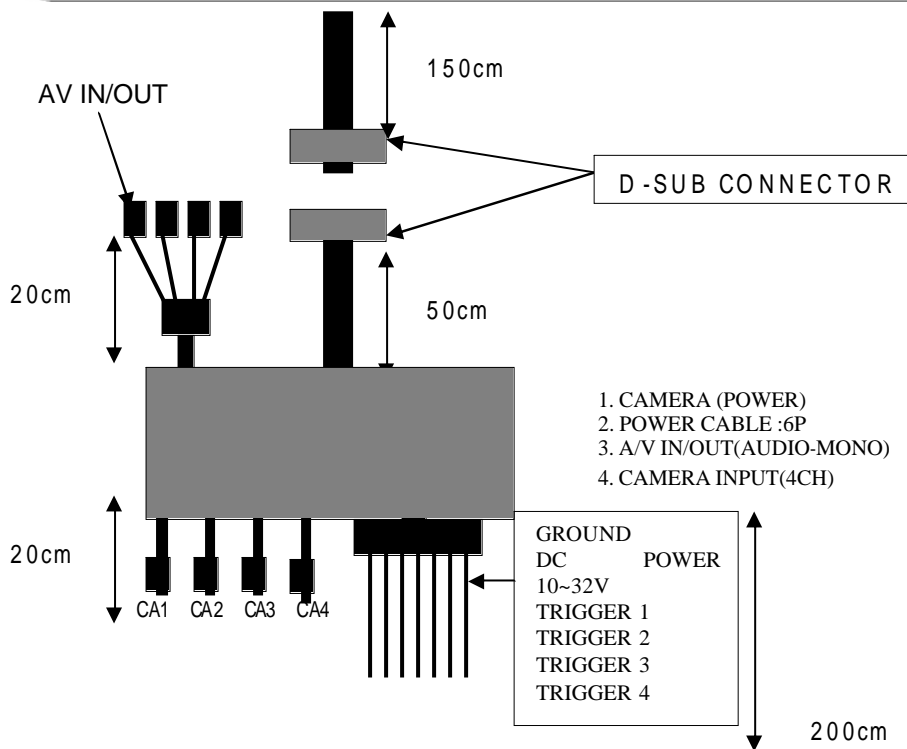
1. Rendering (Monitor Part)



[Name]

- 1: POWER/MENU
- 2: QUAD
- 3: AUTO SCAN CAMERA
- 4: CAM(CAMERA)
- 5: A/V
- 6: VOLUME(,)
- 7: DAY/NIGHT SENSOR / REMOTE CONTROL SENSOR (OPTION)
- 8: SPEAKER

2. Block Diagram



- TRIGGER 1 : CA1(REAR CAMERA)
- TRIGGER 2/3 : CA2/CA3(SIDE CAMERA, DELAY TIME)
- TRIGGER 4 : CA4(INDOOR OR OUTDOOR CAMERA)

3.Specifications.

Model No.	AST-70S4
Power Input Power Cons.	DC 10V ~ 32V DC Max 24 Watt.
Video System Sync. System	NTSC/PAL Format Internal
LCD Panel Size Field of View Screen Size Resolution LCD Brightness Display Mode	7.0 Inch Wide Diagonal, Color Top:60 °, Bottom:40 °, Left: 60°, Right:60° 188 (W) ×139 (H)mm 336,960 Pixels (1,440 (w) × 234 (h))mm 500cd/m ² 4:3, 16:9
Color Configuration Con./Bright. O.S.D Control	R.G.B AUTO Day & Night Bright, Contrast, Color, Tint, Input setup, Auto scan, Distance maker(CH1), QUAD ETC.
Power Connector	Red : Positive DC 10V~ DC 32V Black : Ground Green : Trigger 1 (CA1) White : Trigger 2 (CA2) BLUE : Trigger 3 (CA3) BROWN : Trigger 4 (CA4)
CH Input Terminal(4) Video/Audio Input Video/Audio Output Speaker-Out	Mini DIN Plug With Waterproof Connector . RCA Plug RCA Plug Approx. 40×20mm, Impedance : 8 Ω , 1 Watt Max
Finish	ABS
Operating Temp. Storage Temp. Ambient Condition	-30°C ~ 85°C -40°C ~ 95°C Rainproof for Outdoor use as well as Indoor use for wide range of applications
Vibration Dimension Weight Supplied Acc'y	5.0 G 200(W) X 137(H) X33 (D)mm (8(W) X5.4(H)X 1.3(D)inch) Approx. 650g Power Cable 2m (1), Instruction Manual (1) Sun Shield REMOTE CONTROL (OPTION)

4. Main spec of **AST-70S4**

A.Framework

1. Monitor Without Control box
2. LCD Panel : INNOLUX
3. Waterproof
4. CABLE BOX for Power
5. Button : Silicon

B.CIRCUIT AND PROGRAM

1. Lamp Control Knob for night time.
>> **DAY/NIGHT ON QUAD / CAMERA / A/V / / (GREEN LED)**
2. POWER LED
3. AUDIO ADJUST Function in Rear position
4. **Blinking red light when vehicle is placed in reverse with on/off**
⇒ (CA1 (
5. **On screen distance markers with on/off**
6. Customer can choose the name of each camera in menu mode.

CA1	REAR	RIGHT	LEFT	FRONT	REAR	RV	REAR Trailer
CA2	REAR	RIGHT	LEFT	FRONT	REAR	RV	REAR Trailer
CA3	REAR	RIGHT	LEFT	FRONT	REAR	RV	REAR Trailer
CA4	REAR	RIGHT	LEFT	FRONT	REAR	RV	REAR Trailer
7. Moving "NO-SIGNAL" OSD
8. 4Trigger (CA1,2,3,4)/ Each Trigger has ON/OFF function in Menu
Priority : CA1>CA2
9. NTSC/PAL Compatible
10. Auto dimmer for night viewing (ADJUSTABLE THE LEVEL IN MENU
11. SCREEN : 4 : 3 / 16:9)
12. UP/DOWN(MAIN MENU), NOR/MIR(FACTORY MENU)
>> Normal/Mirror mode control built in menu for each camera
13. AUTO-SCAN FUNCTION : CH1,CH2,CH3,CA4,A/V

(NO SIGNAL : SKIP)

-ADJUSTABLE AUTOSCAN DELAY TIME , ONE TIME ATUO SCAN / REPEAT AUTO SCAN / DELETE

14. SCREEN SHOWS CAMERA CHANNEL / NTSC OR PAL AND DISAPPEAR

- IN NORMAL CAMERA , OSD IS NOT SHOWING IN TRIGGER FUNCTION .

15. REMOTE-CONTROL (OPTION)

16. QUAD FUNCTION (QUAD MODE, 3PIP MODE, 2PIP MODE, 1/4CH MODE, 2/3CH MODE, 1CH MODE DISPLAY)

IC : NVC1001(QUAD,FULL,PIP,POP), NVP1000A(DECODER), 16M SDRAM ETC...
QUAD FUNCTION CAN BE ON/OFF IN MENU

17.. SEPARATE A/V BUTTON

18. A/V IN FOR NAVIGATION, DMB(DIGITAL MULTIMEDIA BROADCASTING), DVD

19. KEY : POWER/MENU, QUAD, AUTO SCAN, CAMERA, A/V, VOLUME(), VOLUME()

20. USE D-SUB PLUG(29P) FOR MONITOR AND POWER CONNECTION.

21. CABLE BOX Monitor cable : 200Cm, Camera Cable : 20Cm, AV IN/OUT CABLE : 20Cm
Power Jack : 6P Power Cable: 6P Cable..
> WIDE CABLE STOPPER

Function.

[Key OPERATING]

1. POWER(MENU) KEY

SHORT KEY (WITHIN 1.2 SECOND) : POWER ON : MENU ON/OFF KEY FOR OPERATION,
POWER OFF : POWER ON KEY FOR OPERATION.

2. QUAD KEY

POWER ON : QUAD KEY FOR OPERATING.

QUAD > 3PIP(CH1 LARGE, CH2/CH3/CH4 SMALL) > 2PIP(CH1 LARGE, CH2/CH3 SMALL) > 1/2 CH SCALE
> 3/4 CH SCALE > REPEAT

3. AUTO SCAN KEY

AUTO-SCAN FUNCTION : CH1, CH2, CH3, CA4, A/V
(NO SIGNAL : SKIP)

-ADJUSTABLE AUTO SCAN DELAY TIME , ONE TIME AUTO SCAN / REPEAT AUTO SCAN / DELETE

4. CAMERA KEY

**POWER ON , MENU ON, FIRST FUNCTION SELECT Or UP KEY FOR OPERATION ,
POWER ON , MENU OFF, CAMERA CH UP KEY FOR OPERATION.**

CA1 > CA2 > CA3 > CA4 > REPEAT

5. A/V KEY

**POWER ON ,MENU ON, SECONDFUNCTION SELECT OR UP KEY FOR OPERATION,
POWER ON ,MENU OFF, A/V CH KEY FOR OPERATION.**

6. VOLUME(/) KEY

**POWER ON , MENU ON, THE LEVEL OF EACH FUNCTION OR ON/OFF KEY FOR
OPERATION**

POWER ON , MENU OFF, VOLUME UP/DOWN KEY FOR OPERATION

7. FACTORY MODE KEY

**POWER OFF , PRESS THE POWER(MENU) KEY FOR FIVE SECONDS TO ENTER THE FACTORY
MODE .**

DISPLAY THE SETUP .

FACTORY MODE


BUYER LOGO ON / OFF

Astral Electronics

Disply the logo for 3seconds ,
when Power is on)

RESET

8. DISPLAY THE MENU

PICTURE	CONTRAST	25(0-50)		
	BRIGHT	25(0-50)		
	COLOR	25(0-50)		
			in NTSC System	
FUNCTION	ZOOM		16:9 / 4:3	
	AUTO SCAN		ONE / FULL / OFF	
	SCAN TIME	CA1		03 - 10(SEC)
		CA2		03 - 10(SEC)
		CA3		03 - 10(SEC)
		CA4		03 - 10(SEC)
	REAR SCALE		ON/OFF	
	SPLIT	1/2 SCALE		ON/OFF
		QUAD		ON/OFF
		3PIP		ON/OFF
		2PIP		ON/OFF
	AUTO POWER		ON / OFF	
TRIGGER	CA1		OFF / CA1 / 2PIP	
	CA2		OFF / CA2 / (CA2/3)	
	CA3		OFF / CA3 / (CA2/3)	
	CA4		OFF / CA4	
VIDEO	CAM1	UP/DOWN	NOR/MIR	
	CAM2	UP/DOWN	NOR/MIR	
	CAM3	UP/DOWN	NOR/MIR	
	CAM4	UP/DOWN	NOR/MIR	
	A/V	UP/DOWN	NOR/MIR	
	ALL	UP/DOWN	NOR/MIR	
CAMERA NAME	CA1	REAR	RIGHT LEFT FRONT REAR RV REAR Trailer	
	CA2	REAR	RIGHT LEFT FRONT REAR RV REAR Trailer	
	CA3	REAR	RIGHT LEFT FRONT REAR RV REAR Trailer	
	CA4	REAR	RIGHT LEFT FRONT REAR RV REAR Trailer	
Blinking red light (CAM1)				
ON / OFF				

SPLIT

CA 1	CA 4	
CA 2	CA 3	
CA 1	CA 2	
CA 3	CA 4	
2	3	4
CA 1		
2	3	
CA 1		
CA 2	CA 3	
CA 2	CA 3	

SELECT THE FIRST AND SECOND FUNCTION IN FUNCTION MENU.

- **FIRST FUNCTION()SELECT: CURSOR IS GOING DOWN BY PRESSING CAM BUTTON AND SELECT THE FUNCTION . PRESS A/V BUTTON TO ENTER THE SECOND FUNCTION() MENU .**
- **SECOND FUNCTION()SELECT : FIRST MENU IS SELECTED AND PRESS A/V BUTTON TO ENTER THE SECOND FUNCTION MENU .**
 SETUP TIME AND ON/OFF BY PRESSING VOLUME,) /

ABOUT SPILT

- 1/2 SCALE : DISPALY CH1 AND CH2 IN HALF, ALSO DISPLAY CH3 AND CH4 IN HALF .
- QUAD : DISPLAY 4PICTURES, CH1/CH2/CH3/CH4 AT ONE TIME.
- 3PIP : DISPLAY MAIN PICTURE ,CH1 ON SCREEN , AND DISPLAY SMALL PICTURES CH2/CH3/CH4 AT THE TOP OF SCREEN
- 2PIP : DISPLAY MAIN PICTURE, CH1 ON SCREEN , AND DISPLAY SMALL PICTURES CH2/CH3 AT THE TOP OF SCREEN

