

# SPECIFICATION FOR APPROVAL

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ITEM :

**COLOR CCD MODULE**

MODEL NO :

**SCM510H^OSD**

**CUSTOMER :**

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616-15, GANSUK4-DONG, NAMDONG-GU, INCHON 405-810, KOREA

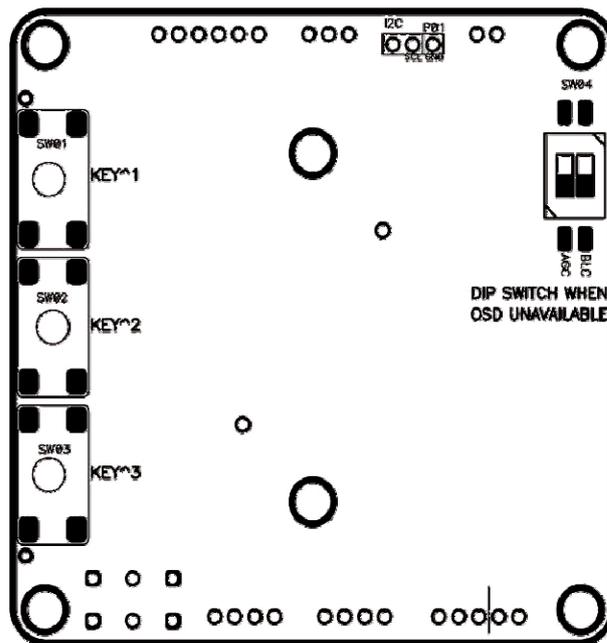
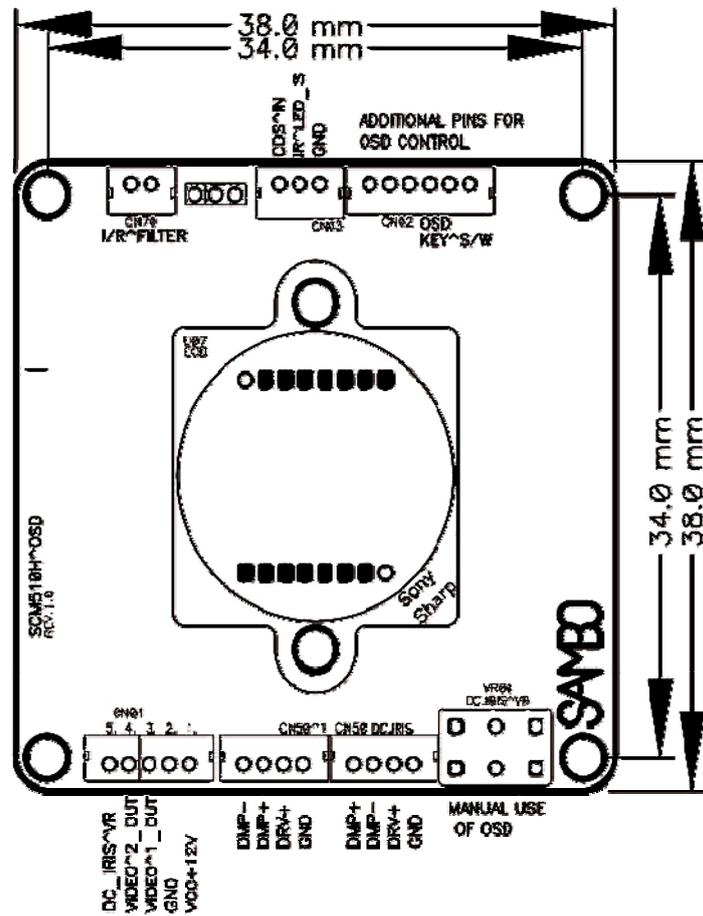
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**SAMBO**

R&D Department  
Choi young Hak

**\*.DIMENSIONS(mm)**



# 1 . SPECIFICATIONS

SPECIFICATION	SCM510H (NTSC)	SCM510H (PAL)
Type	BOARD TYPE COLOR CAMERA	
Image Sensor	1/3" SONY COLOR CCD 410K	1/3" SONY COLOR CCD 410K
Effective Pixel	753(H) × 582(V)	
Cell Size	6.6um(H) × 6.3um(V)	
Horizontal Resolution	560(H)TV Line	
TV Line	NTSC	PAL
Sync. Type	Internal	
Scanning System	2:1 Interace	
Scanning Frequency (Hor)	15.735KHz	15.625KHz
Scanning Frequency (Ver)	60Hz	50Hz
Video Output	Composite 1.0Vp-p 75ohm unbalanced	
Gamma Characteristic	0.45 typ.	
Min Illumination	0.1Lux @F:1.2	
S/N Ratio	More Than 48dB	
Gain Control	Automatic	
Electronic Shutter	1/60-1/100,000 sec	1/50-1/100,000 sec
Power Supply	Regulated DC 12.0V (9V-15V)	
Power Consumption	100mA	
Lens Mount	Fixed Lens Mount	
Operation Temp	-10-50°C	
Preservation Temp	-30-80°C	
Dimension (mm)	38(H) × 38(W)	
Weight	Approx. 26g	
Lens Options	Board	F3.6mm (Standard), 2.2mm, 2.9mm, 4.3mm, 6mm, 8mm, 12mm
	Pinhole	Flat & Cone Pinhole : 2.8mm, 3.7mm, 4.3mm
	Varifocal	Manual Varifocal lens : 4-9mm, 2.8-12mm

## 1. General Characteristic on SCM500 series

### << Overview >>

- New line, SCM500 series offer exterior-easy setting of camera functions what users want, as it no requires extra MCU to command the DSP of the CCD module.

### << Direction >>

- With Video Signal into the monitor, *KEY^2\_S/W* brings up the menu, picture 0.
- Use *KEY^1\_S/W* to select the each item downward.
- Selected item High-Lighted in darker.
- Use *KEY^3\_S/W* to make changes on the selected item.
- To make the changes permanet, must "Exit" the "SET UP" menu.
- Once changes made, it stays regardless of power ON/OFF.

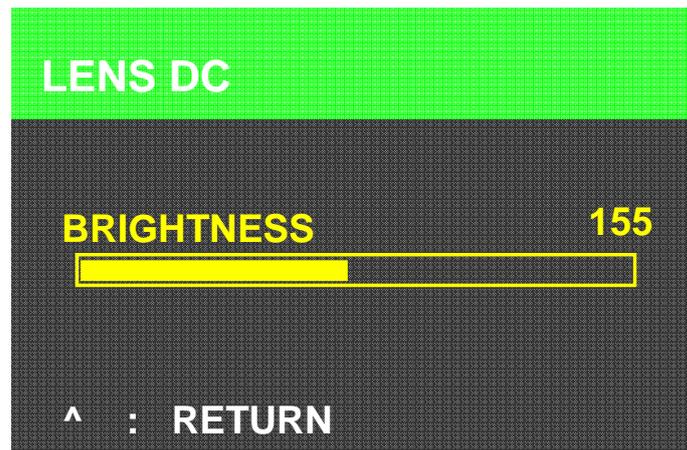
SETUP	
LENS	MANUAL
SHUTTER	AUTO^
ADJUST	^
DAY NIGHT	AUTO^
WHITE BAL.	ATW
BLC	OFF
MIRROR	OFF
AGC	ON^
GAMMA	0.45
RESET	^
EXIT	

Picture 0. SAMBO' Basic Menu

## 2. Functions on the menu and details

### 2-1:LENS

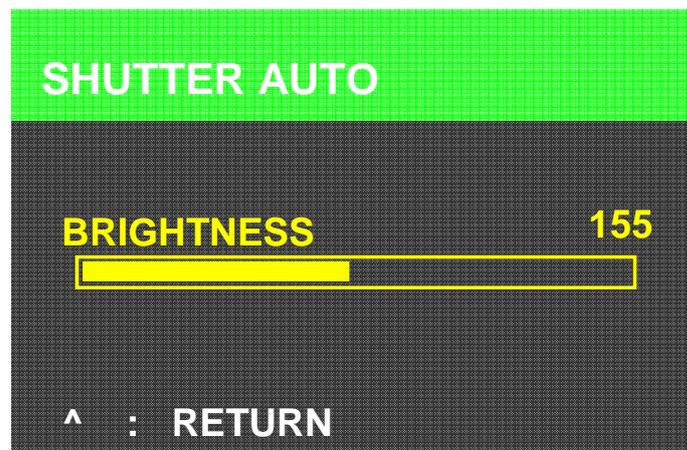
- Select "LENS," prss  $KEY^3\_S/W$  to move to "MANUAL" - "VIDEO" - "DC" in order.  
On the "DC", press  $KEY^2\_S/W$  brings up the Picture 2  
 $KEY^1\_S/W$  &  $KEY^3\_S/W$  use to increase & decrease " Brghtness" of the DC IRIS .  
Press  $KEY^2\_S/W$  to go back to the "Set Up Menu."



Picture 1. LENS : MANUEL\_ DC IRIS

### 2-2:SHUTTER

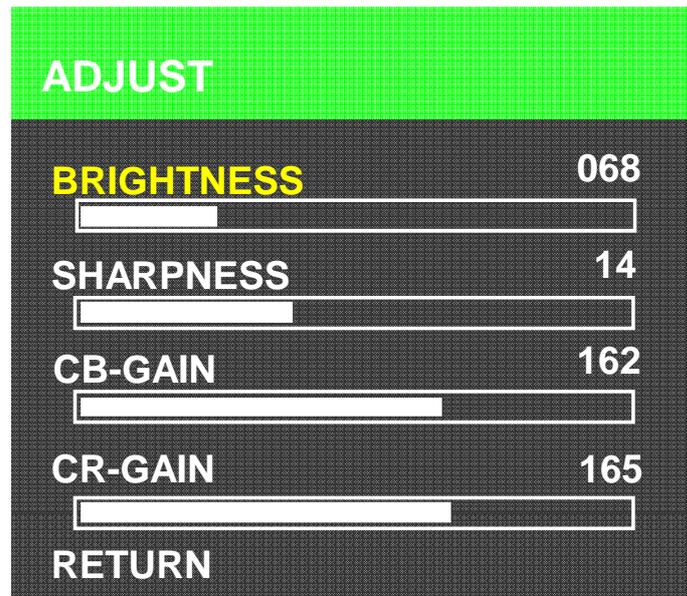
- Select "SHUTTER," prss  $KEY^3\_S/W$  to move to "AUTO" - " FLK " - "FIXED" - " MENUAL " in order.  
On the "AUTO", press  $KEY^2\_S/W$  brings up the Picture 3  
 $KEY^1\_S/W$  &  $KEY^3\_S/W$  use to increase & decrease shutter speed.  
Press  $KEY^2\_S/W$  to go back to the "Set Up Menu."



Picture 2. Shutter speed

**2-3:ADJUST**

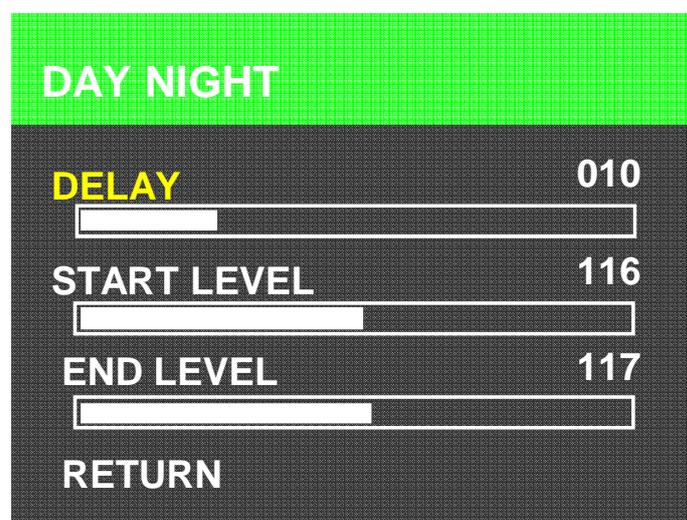
- Select "ADJUST" and prss *KEY^3\_S/W* to activate the list like Picture 4.
- Use *KEY^1\_S/W* to selcet a list to change the setting as user wants.
- Press *KEY^2\_S/W* and ues *KEY^1\_S/W* & *KEY^3\_S/W* to increase & decrease the volume.
- Again press *KEY^2\_S/W* to move to the next item and select "RETURN."
- Press *KEY^2\_S/W* to go back to the "Set Up Menu."



Picture 3. Adjustment menu

**2-4:DAY NIGHT**

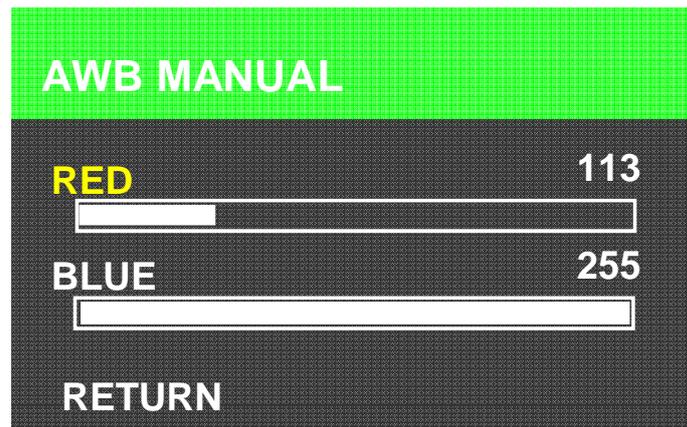
- Select "DAYNIGHT" and prss *KEY^3\_S/W* to move "AUTO" - " B/W " - "COLOR" in order.
- Use *KEY^1\_S/W* to selcet a list to change the setting as user wants.
- Press *KEY^2\_S/W* to select the menu and ues *KEY^1\_S/W* & *KEY^3\_S/W* to increase & decrease the volume.
- Again press *KEY^2\_S/W* to move to the next item and select "RETURN."
- Press *KEY^2\_S/W* to go back to the "Set Up Menu."



Picture 4. DAY NIGHT OPTION

**2-5:WHITE BAL.**

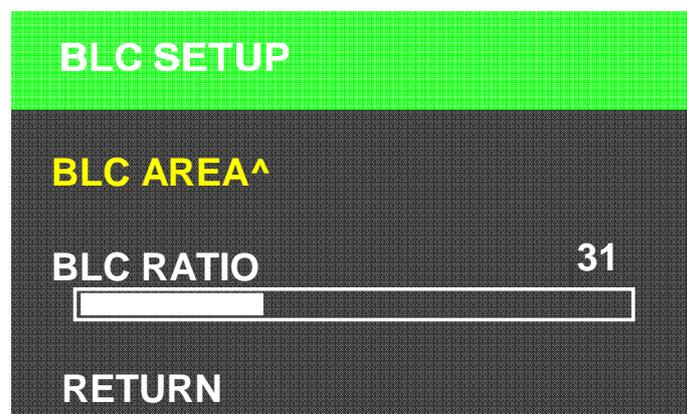
- Select "WHITE BALANCE" and press *KEY^3\_S/W* to move "ATW" - "AWB" - "FIXED" - "MANUAL" in order.  
Press *KEY^2\_S/W* to activate "AWB MANUL" like Picture 6.  
Use *KEY^1\_S/W* to selcet a list to change the setting as user wants.  
Ues *KEY^1\_S/W* & *KEY^3\_S/W* to increase & decrease the volume.  
Again press *KEY^2\_S/W* to move to the next item and select "RETURN."  
Press *KEY^2\_S/W* to go back to the "Set Up Menu."



Picture 5. WHITE BALANCE

**2-6:BLC**

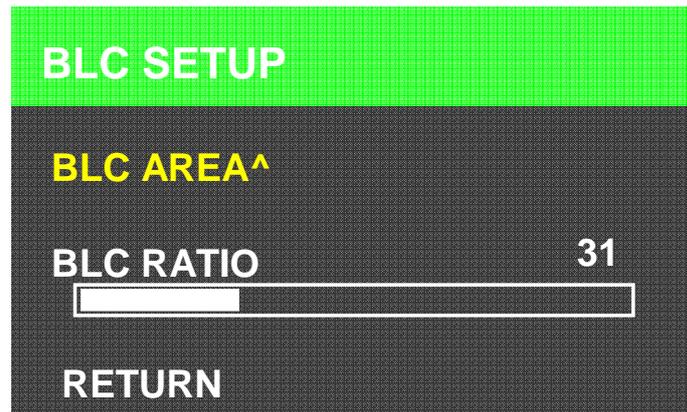
- Select "BLC" and press *KEY^3\_S/W* to set "BLC ON/OFF."  
Press *KEY^2\_S/W* to activate "BLC ON" like Picture 6-1.  
Use *KEY^1\_S/W* to selcet a list to change the setting as user wants.  
Ues *KEY^1\_S/W* & *KEY^3\_S/W* to increase & decrease the volume.  
Again press *KEY^2\_S/W* to move to the next item and select "RETURN."



Picture 6-1. BLC ON/OFF

**2-6-1.BLC AREA**

- Select "BLC ACRA" and press *KEY^1\_S/W* to set BLC area.  
After setting the area, press *KEY^2\_S/W* long brings up the Picture 6-2.  
Use *KEY^1\_S/W* to select a list and press *KEY^2\_S/W* to change the setting as user wants.  
Select "EXIT" using *KEY^1\_S/W* (Picture 6-3) and press *KEY^2\_S/W* to go back to the "BLC SETUP."



Picture 6-2. SETTING BLC RATIO



Picture 6-3. SETTING BLC RATIO

**2-7:MIRROR**

- After select the "MIRROR," set MIRROR ON/OFF by pressing KEY^3\_S/W.

**2-8:AGC**

- Select "AGC" and press KEY^3\_S/W to set "AGC ON/OFF."  
Select "AGC ON" brings up the menu like the Picture 8.  
Press KEY^2\_S/W and use KEY^1\_S/W & KEY^3\_S/W to increase & decrease the volume.  
Press KEY^2\_S/W to go back to the "Set Up Menu."



Picture 8. AGC Control

**2-9:GAMMA**

- Select "GAMMA" and press KEY^3\_S/W to volume "0.05" - "1.0" in order.

**2-10:RESET**

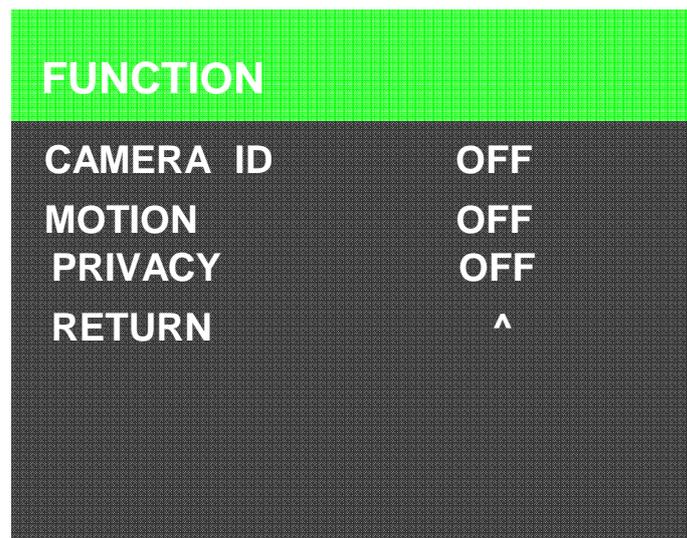
- Select "RESET" and press *KEY^2\_SW* to display the Picture 10.
- Select "YES" and press *KEY^2\_SW* will reset to the default setting.



Picture 10. Reset

**2-11:EXIT**

- Select "EXIT" with *KEY^1\_SW*, press *KEY^2\_SW* to turn off OSD.

**3. Other functions**

Picture 11. Others