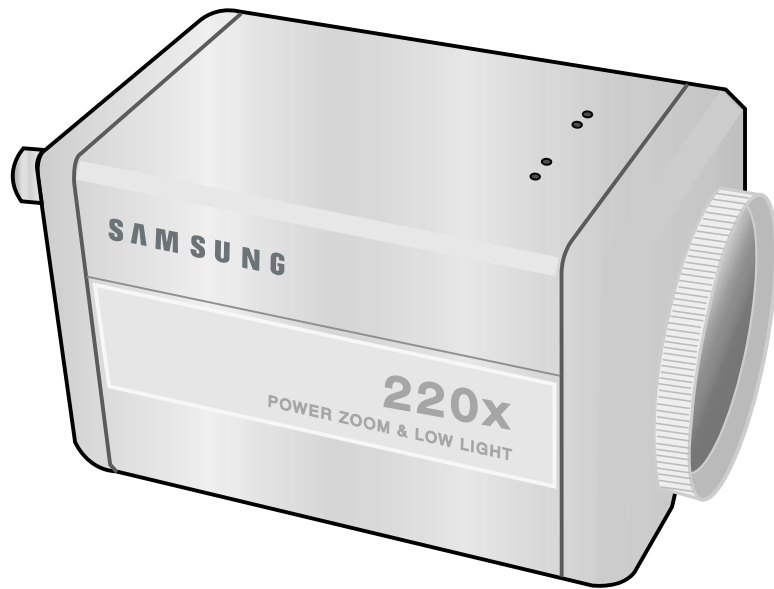




220X POWER ZOOM CAMERA

SCC-421(P)

INSTRUCTION MANUAL



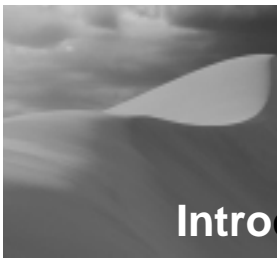


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Chapter 1. About SCC-421(P)

This chapter includes brief introduction of SCC-421(P), its features, parts name and functions.



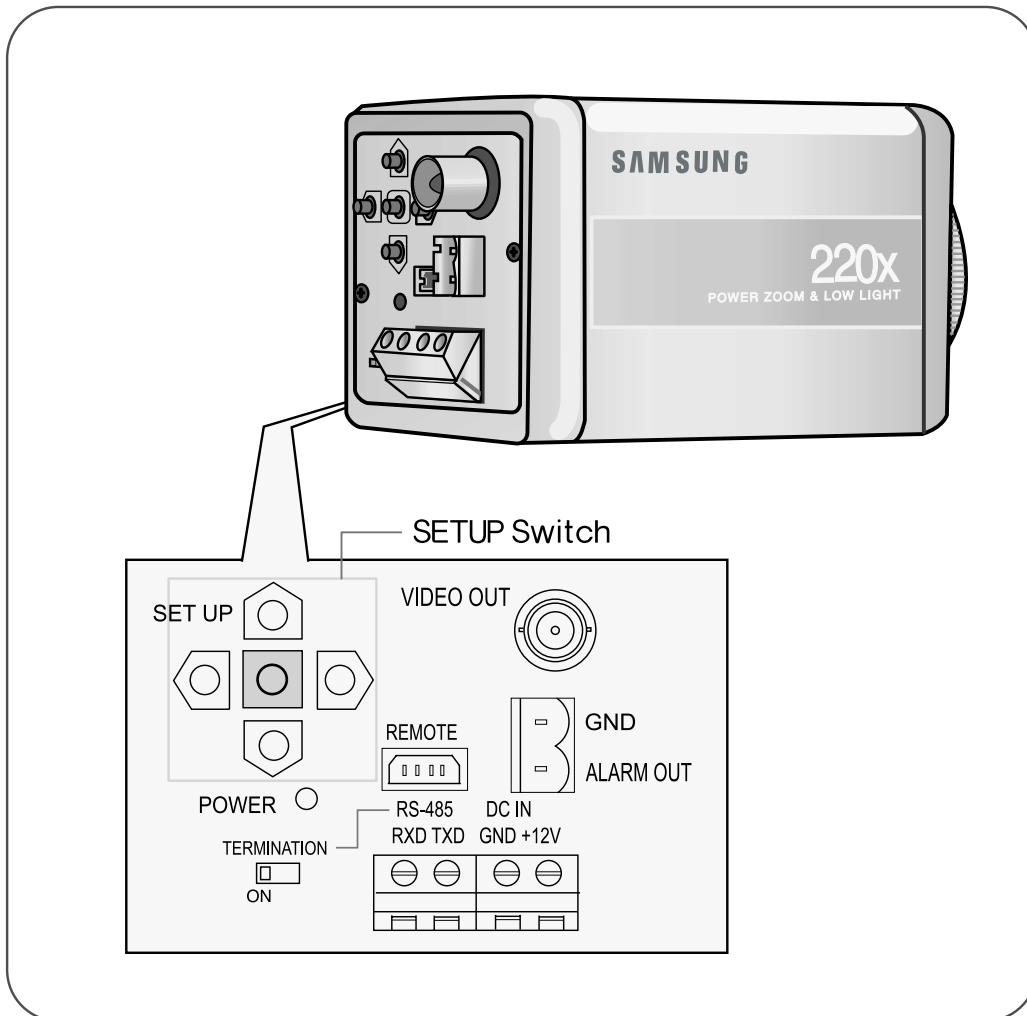
Introduction of SCC-421(P)

SCC-421(P) is a high-performance monitoring camera capable of maximum 220 times monitoring by selecting 22x zoom lens and digital zoom IC.

SCC-421(P) is equipped with various functions, including all the important functions of monitoring camera such as monitoring function under low illumination, white balance function to create a natural image according to lighting, back light compensation function to improve an image that is darkened due to back lighting under spot light or bright illumination, and auto focus function to focus automatically depending on the object's movement.







Parts name and functions of SCC-421(P)






SETUP SWITCH

The functions of SETUP switches are different depending on SCC-421(P) conditions operating or SETUP

 For general operation state

-  - UP/DOWN Switch : Used each as ZOOM Tele / ZOOM Wide switch.
-  - RIGHT/LEFT Switch : Used each as Focus Far / Focus Near switch.
-  - [ENTER] Key : Used to enter SETUP menu.

☞ For SETUP menu state

-  - UP/DOWN Switch: Used to move the cursor up and down.
-  - RIGHT/LEFT Switch: Used to move the cursor right and left or view the values selectable in SETUP menu in order.
-  - [ENTER] Key: Used to select and enter SETUP menu with an additional menu or set the current value.

 - **Camera adjustment terminal (Remote)**

Only for product adjustment at factory.

 - **Alarm output terminal**

Used in activating MOTION DET mode.
(Open Collector)

 - **Video output terminal**

Terminal connected with video input terminal of monitor.
Video image is sent to the monitor through this terminal.

 - **RS485 Termination**

RS485 termination resistance ON/OFF switch used
in controlling several cameras with RS485.

 - **RS485 Terminal**

RS485 remote control terminal (TXD : DATA+, RXD : DATA-)

 - **Power display LED**

ON when power is supplied normally to the camera.

 - **Power input terminal**

Terminal connected with power adapter cable.

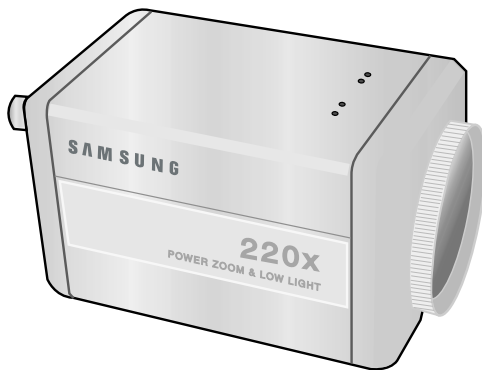
Chapter 2. Installation of SCC-421(P)

This chapter explains the items to be checked before installation of SCC-421(P), how to select the installing environment and precautions at installation. Then, it looks into actual installation of SCC-421(P) and connection of cable.

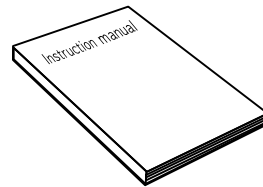
Before installation

Check the contents in package.

Be sure to check the followings in unpacking this product.

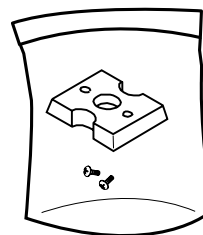


SCC-421(P)



Instruction Manual

Mount Adapter
Screw 2





Cautions at installing and using

Do not attempt to disassemble the camera yourself.

Be cautious in handling the camera. Avoid striking or shaking the camera. Make sure to avoid damage on the camera caused by improper storage or operation.

Do not expose the camera to rain or moisture.

Do not operate the camera on a wet place.

Do not use strong or abrasive detergents when cleaning the camera body. Use a dry cloth to clean the camera.

Keep the camera at a cool place away from the direct sunlight. Leaving the camera under the direct sunlight may result in a malfunction of the unit.

Install and use this product in the below environments where regular temperature and humidity are always kept.

- Temperature : -10°C~+50°C (14°F~122°F)
- Humidity : Below 90%

Use proper power supply system as follows.

- Power consumption : 6W
- Voltage : DC 12V, 600mA

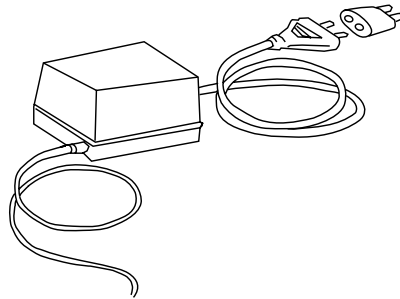


Preparing cable

Prepare the following cables before installing SCC-421(P).

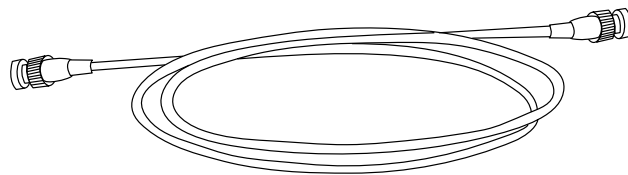
Power adapter cable

When connecting an adapter to the SCC-421(P) power Input jack, use the adapter with a rated voltage DV12V, 600mA.



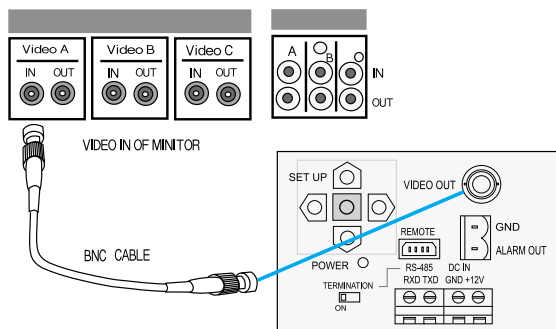
Video cable

The below BNC cable is linked between video output terminal and monitor.

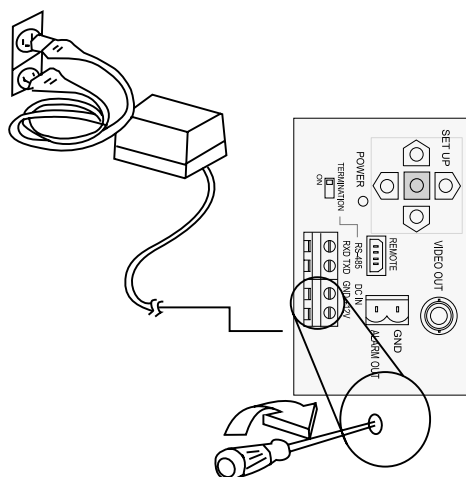


Connecting cable and checking operation

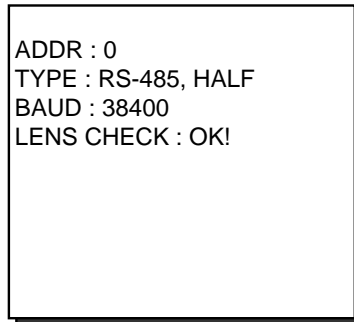
1. connect one connector of BNC cable to VIDEO OUT.
2. connect the other connector of BNC cable to VIDEO IN of monitor.



3. Connect the power adapter. Link one side of power adapter composed of two lines to power input terminal of SCC-421(P) by using a driver.



5. The below screen appears for 5 sec. and disappears when the camera runs normally.



```
ADDR : 0
TYPE : RS-485, HALF
BAUD : 38400
LENS CHECK : OK!
```

6. Check the followings at RS485 control.

- Baudrate : 38400 bps
- Data bit : 8bits
- Stop bit : 1bit
- Parity : None



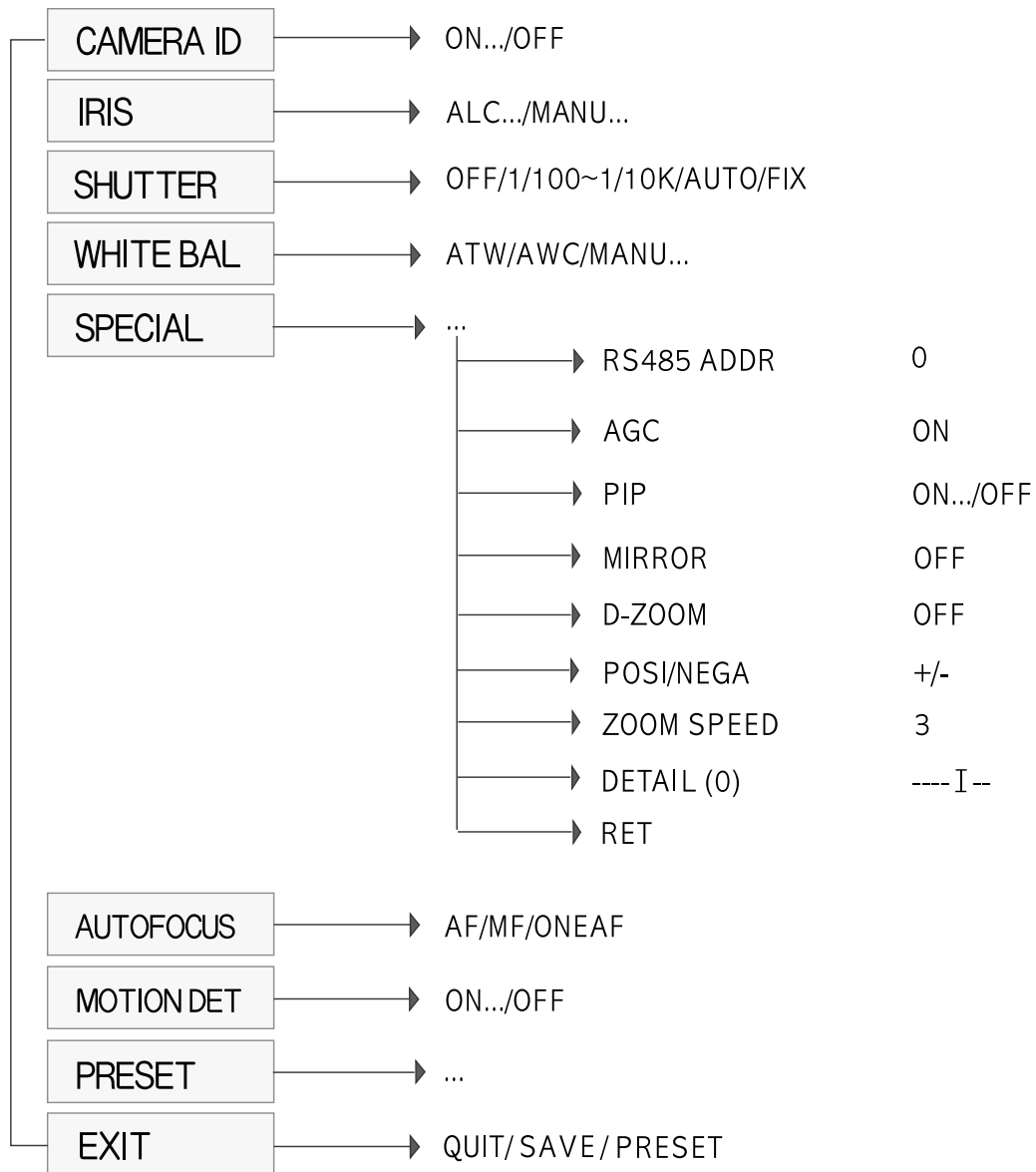
MEMO

Chapter 3. About setup menu

This chapter explains about SETUP menu of SCC-421(P), General configuration of SETUP menu and functions of each SETUP menu.



Configuration of setup menu





Configuration of camera menu

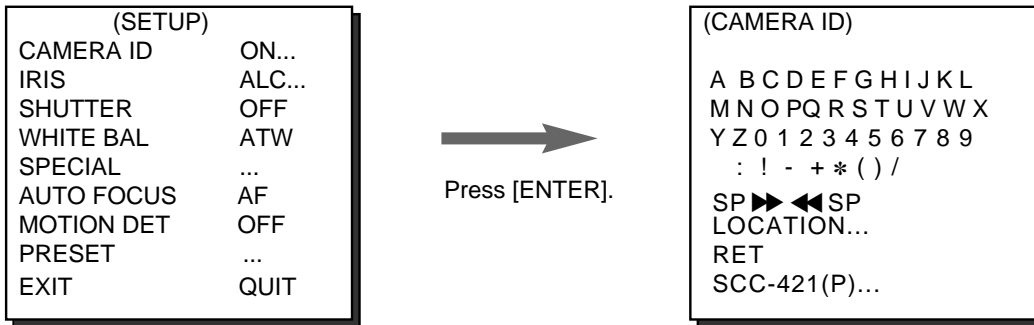
- CAMERA ID

In CAMERA ID menu, you can designate the ID of SCC-421(P) displayed on monitor screen connected with SCC-421(P).

When setting CAMERA ID to ON in SETUP menu screen and pressing [ENTER] key, an additional screen appears to designate the ID of SCC-421(P).

The CAMERA ID can be specified up to 12 letters, using alphabets, numbers and some special characters displayed on the additional screen.

The specified CAMERA ID can be located at a desirable place on the monitor by using LOCATION menu.



* " ... " means there are sub menus.

- IRIS

The video output level can be controlled by IRIS.

SCC-421(P) is equipped with an auto IRIS lens.

Video output level can be set automatically (ALC) or manually (MANU).

- BLC (Sub menu of ALC)

In case of using a general camera under strong lighting such as spotlight, the object is darkened due to back lighting. SCC-421(P) can provide clear image even in bad illumination by adjusting BLC, sub menu of ALC.

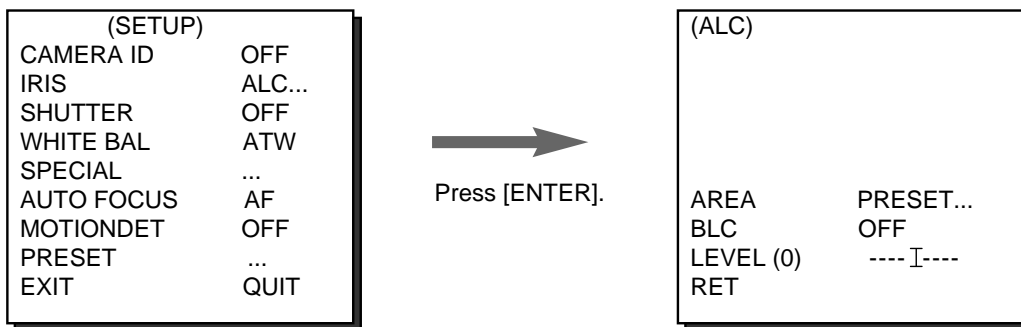
- ALC

When selecting IRIS item as ALC and pressing [ENTER] key, the additional screen appears for setting the video output level and BLC.

Video output level can be selected by using [RIGHT/LEFT] key in LEVEL item.

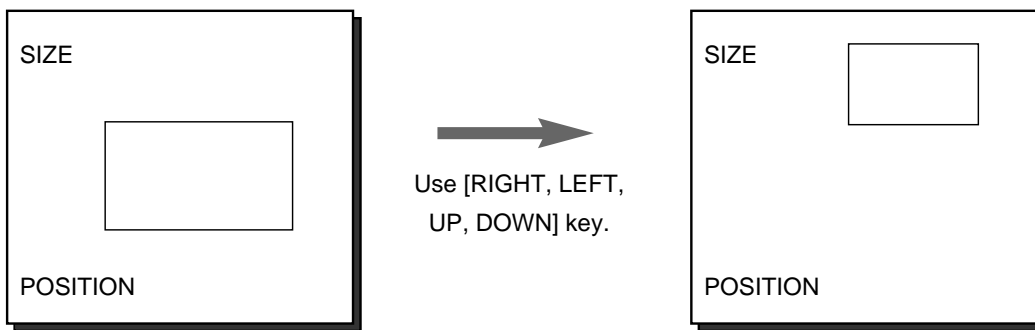
When BLC menu is ON, back light compensation function is applied on the screen area specified in AREA menu, which can be set to PRESET or USER.

For PRESET, BLC is applied to a center of display set in a factory. For USER, you can directly specify size and position of BLC area.



In case of user BLC area setting, the size and position of BLC area can be set by use of [ENTER] and [RIGHT, LEFT, UP, DOWN] keys. While no area blinks, you can select the area size by pressing [RIGHT, LEFT, UP, DOWN] keys.

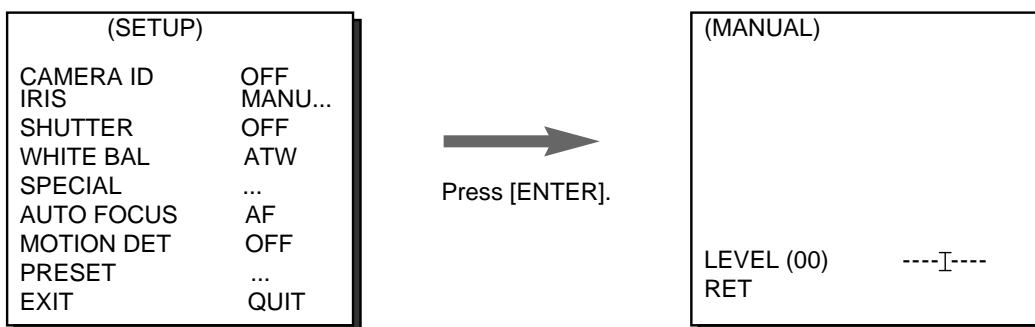
After setting the size of BLC area, press [ENTER] to set the position of BLC area. While the area blinks, you can select the position of the BLC area by pressing [RIGHT, LEFT, UP, DOWN] keys. After setting the position of the BLC area, press [ENTER] to exit the "AREA" setup.



- MANU

When selecting the IRIS item as MANU and pressing [ENTER] key, the additional screen appears for setting the manual opening/closing of IRIS.

You can set the manual opening/closing of IRIS by using [RIGHT/LEFT] key in LEVEL item.



- SHUTTER

In SHUTTER menu, you can select high-speed electronic shutter, AUTO low-speed shutter and FIX low-speed shutter of SCC-421(P).

High-speed electronic shutter supports 7 types of shutter speeds from 1/100 sec to 1/10K sec. AUTO low-speed shutter and FIX low-speed shutter support 12 types of speeds from X2 to X128.

Low-speed shutter can specify the shutter speed as low speed to output a clearer image in photographing under dark lighting. Select AUTO low-speed shutter to sense the lighting level and make the shutter speed slow automatically according to darkness of light, and FIX to specify the shutter speed directly.

The numbers following the AUTO and FIX items indicate the number of accumulated fields. The shutter speed gets slow as the number of fields increase. So, When a subject is motionless, you can obtain a vivid picture.

For moving object, the image is not expressed clearly.

(SETUP)	
CAMERA ID	OFF
IRIS	ALC...
SHUTTER	OFF
WHITE BAL	ATW
SPECIAL	...
AUTO FOCUS	AF
MOTION DET	OFF
PRESET	...
EXIT	QUIT

Continue to press [RIGHT/LEFT] key in SHUTTER menu to display the following speeds in order.

- NTSC

→ OFF → 1/120 → 1/250 → 1/500 → 1/1000 → 1/2000 → 1/4000 → 1/10K → OFF → AUTOX2 → AUTOX4 → AUTOX6 → AUTOX8 → AUTOX12 → AUTOX16 → AUTOX24 → AUTOX32 → AUTOX48 → AUTOX64 → AUTOX96 → AUTOX128 → OFF → FIX X2-FIX X4 → FIX X6 → FIX X8 → FIX X12 → FIX X16 → FIX X24 → FIX X32 → FIX X48 → FIX X64 → FIX X96 → FIX X128

- PAL

→ OFF → 1/120 → 1/250 → 1/500 → 1/1000 → 1/2000 → 1/4000 → 1/10K → OFF → AUTOX2 → AUTOX4 → AUTOX6 → AUTOX8 → AUTOX12 → AUTOX16 → AUTOX24 → AUTOX32 → AUTOX48 → AUTOX64 → AUTOX96 → AUTOX128 → OFF → FIX X2-FIX X4 → FIX X6 → FIX X8 → FIX X12 → FIX X16 → FIX X24 → FIX X32 → FIX X48 → FIX X64 → FIX X96 → FIX X128

- WHITE BAL

In WHITE BAL menu, you can set WHITE BALANCE function so that white can be expressed normally in any environment.

When WHITE BAL menu is set to ATW mode, White Balance is selected automatically by monitoring the color temperature of SCC-421(P) continuously.

When WHITE BAL menu is set to AWC mode and a white paper is placed ahead of camera, Auto White Balance Control function works only once to match the color temperature by pressing [ENTER] key, and then the value is kept.

When WHITE BAL menu is set to MANUAL mode, the user can select White Balance directly, considering the current illumination.

- ☞ 3200°K : Set color temperature to 3200°K
- ☞ 5600°K : Set color temperature to 5600°K
- ☞ USER : Select proper value in RED and BLUE graph to set color temperature.

MANU: Select MANU item and press [ENTER] key to display the MANU additional menu screen for selection of Manual White Balance.

You can select 3200°K, 5600°K or USER by pressing RIGHT/LEFT key in PRESET menu.



- SPECIAL

In SPECIAL menu, you can adjust RS485 ADDR, AGC, PIP, D-ZOOM, POSI/NEGA, ZOOM SPEED and Horizontal/Vertical Clearness

- ☞ RS485: Set address of RS485.

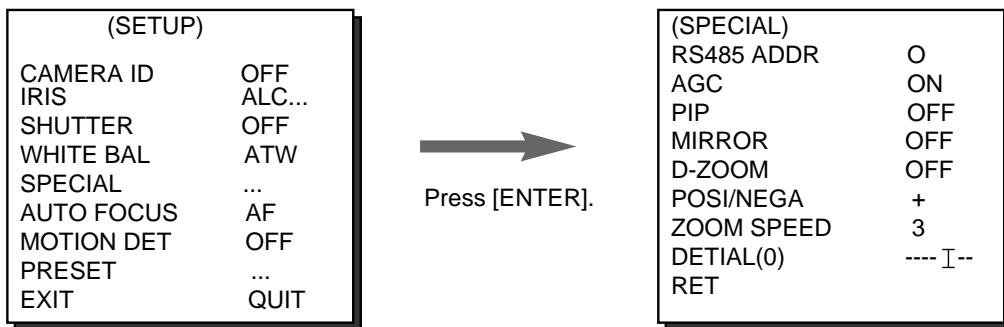
* Note: In case of connecting several cameras set to same address, communication error may occur.

- ☞ AGC : Make AGC(Auto Gain Control) function ON/OFF.
- ☞ PIP : Display 1/16 reduction screen at Digital Zoom ON .

- ☞ Mirror : Reverse the video output signal horizontally.
- ☞ D-ZOOM : Set the magnification of Digital Zoom. Selectable up to 10 times.
- ☞ POSI/NEGA : Positive-output or Negative-output the video output signal.
- ☞ ZOOM SPEED : Set the speed in the below order by using RIGHT/LEFT key in ZOOM SPEED menu.

- 1: Takes about 17 sec. from magnification X1 to X22.(The lowest speed)
- 2: Takes about 10 sec. from magnification X1 to X22.(Low speed)
- 3: Takes about 6 sec. from magnification X1 to X22.(High speed)
- 4: Takes about 3 sec. from magnification X1 to X22.(The highest speed)

- ☞ DETAIL: Adjust the horizontal and vertical clearness.
Press [ENTER] key in ... state to display the "SPECIAL" additional menu, screen for setting the special function.

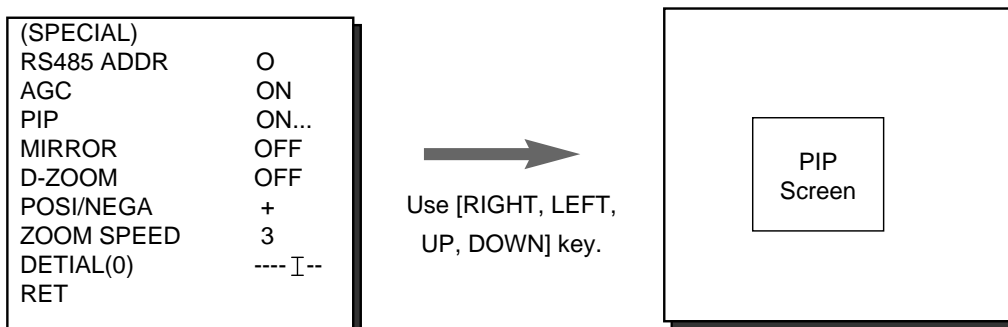


Each item can be set by use of RIGHT/LEFT keys.

Select PIP menu ON and press [ENTER] key to set PIP position by using [RIGHT, LEFT, UP, DOWN] key.

* PIP function doesn't work in low-speed shutter mode.

Mirror function doesn't work in PIP window.



- AUTO FOCUS

☞ AF : Auto Focus.

When AF is set, the NEAR/FAR functions are not available.

☞ MF : Manual Focus.

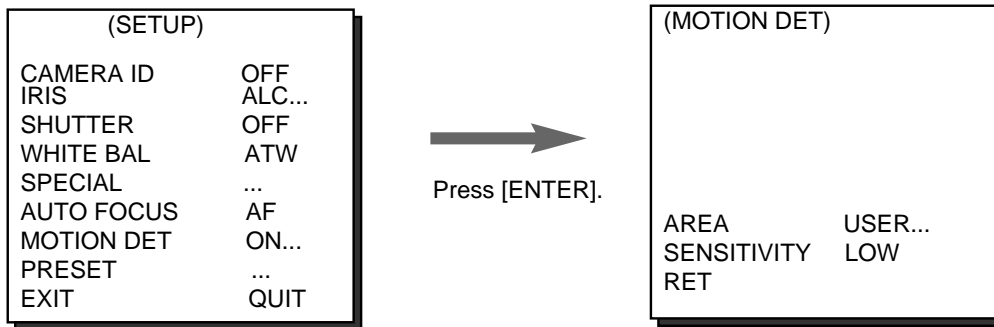
☞ ONEAF : AF operation is performed only once after completion of TELE operation in moving the ZOOM from WIDE to TELE.

MF mode is applied in stopping the SCC-421(P) and AF mode, in moving the ZOOM to TELE.

(SETUP)	
CAMERA ID	OFF
IRIS	ALC...
SHUTTER	OFF
WHITE BAL	ATW
SPECIAL	...
AUTO FOCUS	AF
MOTION DET	OFF
PRESET	...
EXIT	QUIT

- MOTION DET

In MOTION DET menu, you can set motion detection function, motion detection sensitivity and motion detection area. When the motion detection function is set, the camera detects a motion in specified area.



Select ON and press [ENTER] key to display the "MOTION DET " additional menu screen.

You can select PRESET or USER in "AREA" menu to specify the screen area for applying the motion detection function. When setting the "AREA" menu to PRESET, the motion detection function is applied to the area specified basically at factory.

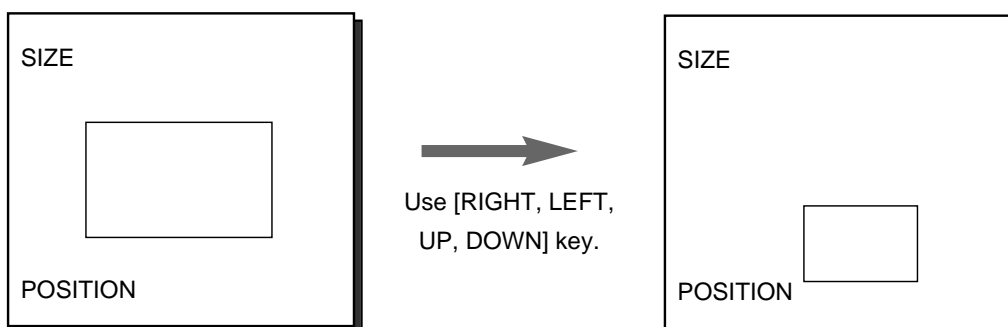
When setting the "AREA" menu to USER and pressing [ENTER] key, you can directly specify the area to apply the motion detection function by changing the area size and position.

In case of user MOTION DET area setting, the size and position of MOTION DET area can be set by use of [ENTER] and [RIGHT, LEFT, UP, DOWN] keys. While no area blinks, you can select the area size by pressing [RIGHT, LEFT, UP, DOWN] keys.

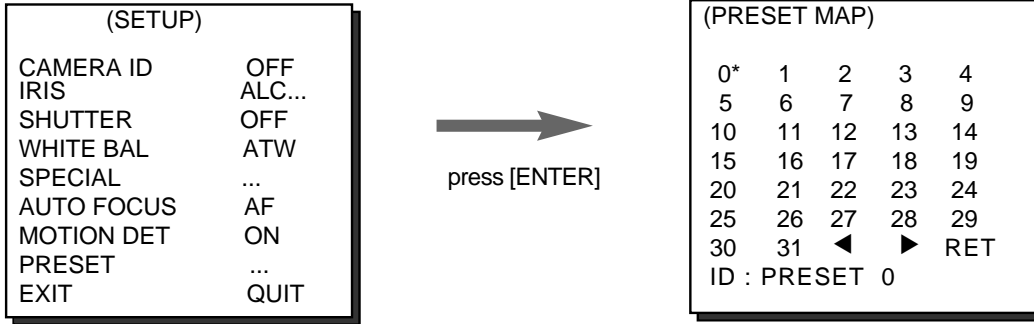
After setting the size of MOTION DET area, press [ENTER] to set the position of MOTION DET area. While the area blinks, you can select the position of the MOTION DET area by pressing [RIGHT, LEFT, UP, DOWN] keys. After setting the position of the MOTION DET area, press [ENTER] to exit the "AREA" setup.

You can set the sensitivity of motion detection by using "SENSITIVITY" menu.

The motion detection runs sensitively in case of setting to HIGH.

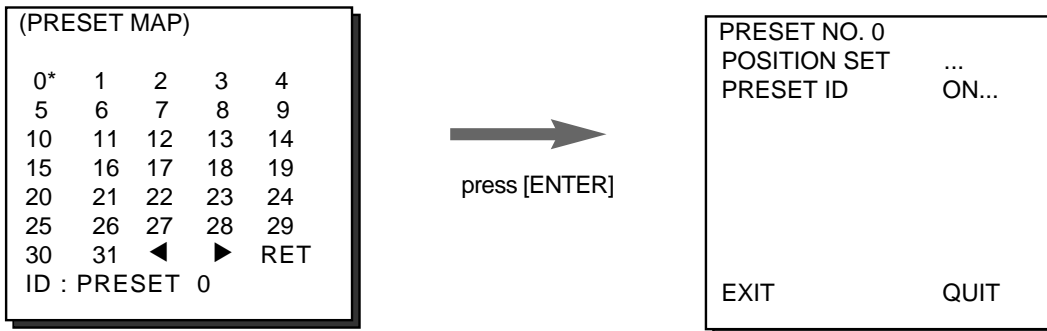


- PRESET



PRESET can memorize 128 positions of ZOOM, FOCUS.

PRESET function can be used in connecting the SCC-1000 and RS-485.



Select the PRESET number and press [ENTER] key to display the above screen.

☞ POSITION SET : Memorize the position of ZOOM and FOCUS.

☞ PRESET ID : Set ID for PRESET position like CAMERA ID.

- EXIT

EXIT menu is used to finish the CAMERA SETUP menu of SCC-421(P) and return to general running state.

- ✎ QUIT : Disregard the changed content and return to the previously stored setup menu.
- ✎ SAVE : Store the setup of menu changed until now.
- ✎ PRESET : Disregard the changed content and return to the initial value of setup menu specified at factory.



SCC-421 Specifications

NO	ITEM	CONTENTS	
1	Model	- Zoom Lens Combined Monitoring Camera	
2	Power Source	- DC 12V± 10%	
3	Power Consumption	- 6W	
4	Editing method	- NTSC STANDARD COLOR SYSTEM	
5	Picturing element	- 1/4 inch IT S-HAD CCD	
6	Effective pixel	- 768(H) x 494(V)	
7	Scanning type	- 525 Line, 2:1 Interlace	
8	Frequency	- Horizontal : 15, 734 Hz (INT) Vertical : 59.94 Hz (INT)	
9	Resolution	- 480 TV LINES	
10	S / N ratio	- Below 50dB (AGC OFF)	
11	Min.Scene illumination	- 0.02 Lux (Sense-up)	
12	Color temperature	- ATW/AWC/MANUAL MODE (3200°K, 5600°K, R/B GAIN Adjustment)	
13	Signal output	- COMPOSITE VIDEO OUT : 1.0 Vp-p 75 ohms/BNC	
14	Lens	- X22 Zoom Lens Combined - Focal length : 3.6 to 79.2 mm - Aperture : F1.6(Wide), F3.8(Tele) - Auto Focus	
15	Operating temperature	- -10°C~ + 50°C	
16	Operating humidity	- ~90%	
17	Dimensions	- 60.5 X 59.5 X 104.5 mm (W X H X D)	
18	Weight	- 350g	
19	Height	- Below 3,000M	



SCC-421P Specifications

NO	ITEM	CONTENTS	
1	Model	- Zoom Lens Combined Monitoring Camera	
2	Power Source	- DC 12V± 10%	
3	Power Consumption	- 6W	
4	Editing method	- PAL STANDARD COLOR SYSTEM	
5	Picturing element	- 1/4 inch IT S-HAD CCD	
6	Effective pixel	- 752(H) x 582(V)	
7	Scanning type	- 625 Line, 2:1 Interlace	
8	Frequency	- Horizontal : 15, 625 Hz (INT) Vertical : 50 Hz (INT)	
9	Resolution	- 480 TV LINES	
10	S / N ratio	- Below 48dB (AGC OFF)	
11	Min.Scene illumination	- 0.02 Lux (Sense-up)	
12	Color temperature	- ATW/AWC/MANUAL MODE (3200°K, 5600°K, R/B GAIN Adjustment)	
13	Signal output	- COMPOSITE VIDEO OUT : 1.0 Vp-p 75 ohms/BNC	
14	Lens	- X22 Zoom Lens Combined - Focal length : 3.6 to 79.2 mm - Aperture : F1.6(Wide), F3.8(Tele) - Auto Focus	
15	Operating temperature	- -10°C~ + 50°C	
16	Operating humidity	- ~90%	
17	Dimensions	- 60.5 X 59.5 X 104.5 mm (W X H X D)	
18	Weight	- 350g	
19	Height	- Below 3,000M	

Cautions

- **SAMSUNG Co., Ltd. holds the copyright of this manual.**
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- **This manual is subject to be altered for improvement of function without notice.**

Quality Warranty

MODEL NO.		
SERIAL NO.		
Purchase Date		
Purchase Place		
Customer	NAME	
	ADD.	

Free repair is provided for malfunction occurring in normal handling state for a year after delivery of product.

Contact the service center for repair. At this time, inform of malfunction state in brief and remember the name of person in charge.

The product model and circuit can be altered without notice for improvement of performance.

Particulars on service

Cause	Content	Service Center	Technician Name



Part : AB68-00153A
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