OPERATING MANUAL

Before attempting to connect or operate this product, please read these instructions completely

Digital Color CCD Camera

OKIUSA Standard Camera
1/3” SONY Super HAD CCD

Model	SST-6420	12V DC
Model	SST-6420D	12V DC + 24V AC
Model	SST-6420P	85 ~ 265V AC

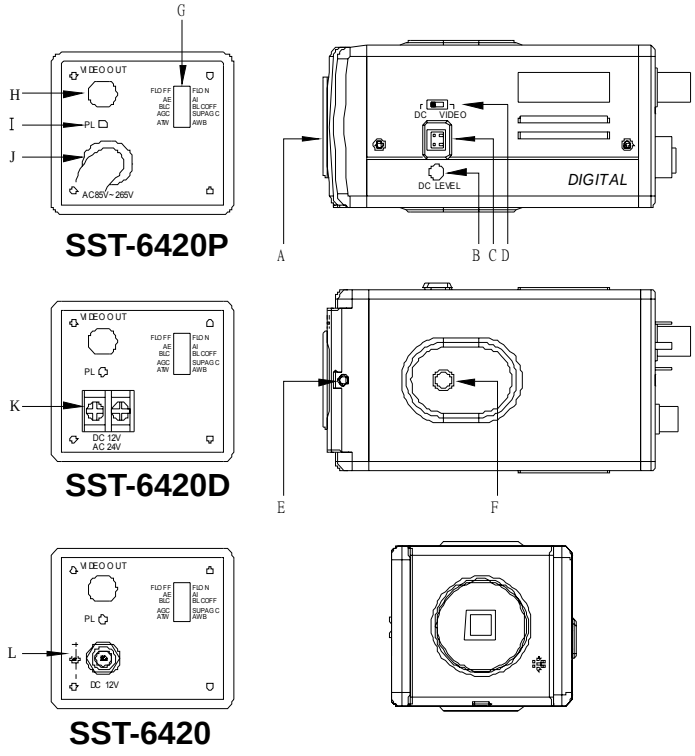
1. General

This color video camera employs 1/3 inch charge coupled imaging device with 310/270 k picture elements and equipped with Digital Signal Processor for video signal processing, to provide high quality stable picture.

2. Features

1. Resolution: 420 TV lines of horizontal resolution.
2. Low Lux: BY employing high sensitivity image sensor and low noise circuit design produces 0.8 Lux and signal-to-noise ratio of 48 dB.
3. White Balance: The wide range of Auto Wide Balance (AWB) and Auto Tracing White Balance (ATW) allow the camera to adjust automatically the tone according to the color temperature of the light source illuminating the subject.
4. Back Light Compensation: Smart digital control Auto BLC, ensure for use against any unusual lighting conditions.
5. Auto Gain Control: Advanced Super AGC and auto gain control function built-in.
6. Internal sync.

3. Name of parts and functions



A. C（CS）mount adapter

If a CS mount lens is to be used, remove the C mount ring.

B. DC lever Adjuster（VR）

For DC drive auto iris lens driving level adjustment; in order to obtain correct exposure light.

C. Auto iris lens connector（MINI JACK） See 3-1 auto-iris connector.

D. Video/DC auto-iris lens selector

DC—For DC Drive lens

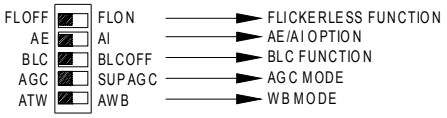
Video—For Video drive lens

E. Flange focal lock screw

F. Holder screw hole

Standard photographic pan-head screw size（1/4”-20）

G. Dip Switch



H. Video output terminal（BNC）

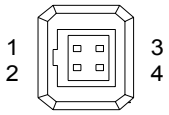
This connector is used to connect with the VIDEO IN connector of monitor.

I. Power pilot LED
J. AC85V~265V Power Cord
K. DC 12V or AC24V/DC 12V Block Terminal
L. DC 12V power input terminal

3.1 Auto Iris Lens Connector

- Use the accompanying auto iris lens control connector plug.

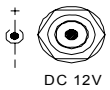
For auto iris lens with built-in EE amp.（VIDEO Type）
Set the lens selector switch to “Video” position.



Connector cable leads
1.Red----power 2.NC
3.White----video 4.Black----shielded

For auto iris lens without EE amp.（DC Type）
This is the view from external of camera
Set the lens selector switch to “DC” position.
Connector cable leads
1.Damping coil（－） 2.Dampling coil（＋）
3.Driving coil（＋） 4.Driving coil（－）
Connect the leads as shown above; refer to the instructions of the lens.

3.2 Power Terminal



3.2.1 DC 12V **SST-6420** model
Connect the power supply to the power-input terminal as shown is the figure right
1.Power for the camera is 12VCD±10％, connector “DC 12V” as positive and the “G” is common ground.
2.Vψ terminal for external Vertical phase input as Line lock
3.Connector’s center as positive and the outside being common ground.

3.2.2 AC 24V/DC 12V **SST-6420D** model
This terminal accepts both AC 24V and DC 12V non-polarity
3.2.3 AC 85V~265V **SST-6420P** model
This camera equipped with a universal switching power supply, it can accept power source input from 85VAC to 265VAC

4. DIP SW function

4.1 Flickerless mode

If you use flickerless function, in this mode, the shutter speed is fixed to 1/100 sec for NTSC system and 1/120 sec for PAL system to reduce the flicker of fluorescent lights. Better for Japan

FLOFF  FLON

FLOFF  FLON

4.2 AE/AI mode

If you use a fixed or manual iris lens, please select the AE mode to control the exposure with electronic shutter, the range of shutter speed is from 1/60(1/50) sec to 1/100,000 sec.

If you use an auto iris lens, please set the AI mode, in this mode, the shutter speed is fixed to 1/60 sec. during NTSC and 1/50 sec. on PAL

AE  AI

AE  AI

4.3 BLC mode

As you take a picture with strong light behind the subject, the subject only a slight darker luminance than the overall screen, please set BLC ”on” to perform through exposure compensation operation by apply the appropriate luminance intensity to the dark areas.

In normal light condition, please set the DIP SW to BLC “off”.

BLC  BLCOFF

BLC  BLCOFF

4.4 AGC mode

Set the DIP switch to SUPAGC, the gain is up to 34 dB. In normal AGC the gain is at 28dB

AGC  SUPAGC

AGC  SUPAGC

4.5 ATW mode/AWB mode

4.5.1 ATW mode --Set the DIP SW to ATW position, the color temperature is monitoring continuous and the white balance is set automatically by internal microcontroller, the operating color temperature range is from 2500°k to 18000°k.

4.5.2 AWB mode-- Conventional auto white balance set the DIP SW to AWB position. In this case, operation is performed at a faster operating speed than ATW mode.

5. Cautions:

5.1. Never point the camera toward the sun

Do not epose the lens directly to the sun or to strong light as this may damage the pick-ip device.

5.2. Handle this camera with care

Avoid any shock or bumping of the camera. Improper handling could damage the camera.

5.3. Requires a proper operating environment

This camera is designed for indoor use. The alloable temperature range for operation of this camra is between -10ºC ~ 50ºC and the allowable humidity is 85%RH maximum.

5.4. Clean the front face to the pick-up device

It is recommended that the pick-up device surface be cleaned before lens installation or whenever the lens is changed. Cleaning should be done by using a chamois, a very find soft cloth, lens tissue or cotton tipped applicator and ethanol to carefully remove any fingerprint or dust.

5.5. Check the power source voltage

The power source voltage should be within the specified range. (Camera must meet the specifications).

5.6. Objects and liquid entry

Never push objects of any kind into this camra sa this may touch dangerous boltage points of short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the video product.

5.7. Servicing

Do not attempt to service this video product by yourself as opening or removing covers may epost you to dangerous voltage or othe rhazards. Refer all service to qualified servicing personnel.

5.8. Damage requiring service

Unplug thi svideo product from the all outlet and refer service to qualified servicing personnel under the following conditions:

1) When the power supply cord or plug is damaged.
2) If liquid has been spilled, or objects has fallen into the video product.
3) If the video product has been exposed to rain or water.
4) If the video product has been dropped or the cabinet has been damaged.
5) When the video product exhibits a distince change in performance.

5.9. Installation

Installation should confrom to all local codes.

5.10. Power Supply

OKIUSA does not carry any responsibilities for any problem caused by defective power suuplies or power transformers. Bad power suuplied and power transformer will also reduce the lifetime of the camera and lower the image quality. We strongly suggedt our customers to use power supplies and power transformers in good quality which have UL certified and regulator.

6. Specifications

Model Number	**SST-6420**	**SST-6420D**	**SST-6420P**
Power Requirements	12V DC	12V DC+ 24V AC	85 ~ 265V AC
Synchronization	Internal		
Horizontal Resolution	420 TV Lines		
Image Device	1/3” SONY Super HAD CCD		
Picture Elements	PAL: 500 x 582, NTSC: 512 x 492		
Scanning System	PAL: 625 lines, NTSC: 525 lines, 2:1 interlace		
Min. Illumination	0.8 Lux @F1.2		
Aperture Correction	Horizontal & Vertical 2H enhancer		
Signal to Noise Ratio	Better than 48 dB		
Flicker Less	ON/OFF		
Auto Gain Control	YES		
Auto Iris Shutter	Auto iris mode: PAL:1/50 sec, NTSC: 1/60 sec.		
Auto Electronic Shutter	AES: 1/50(60) ~1/100,000 sec.		
Auto White Balance	0.8 Lux		
BL Compensation	Auto detect, Histogram & Central window weighted		
Gamma Correction	0.45		
Video Output	1Vp-p, 75Ω composite, BNC connector		
Auto Iris Lens	Accept DC/video servo iris lens		
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)		
Weight	0.8g		
Dimensions	60 x 53 x 110mm (W x H x D)		

To prevent electric shock, do not remove screws or covers.
There are no user serviceable parts inside. Ask a qualified service person for servicing.