

3-AXIS DOME CAMERA SK-D300 SERIES MANUAL



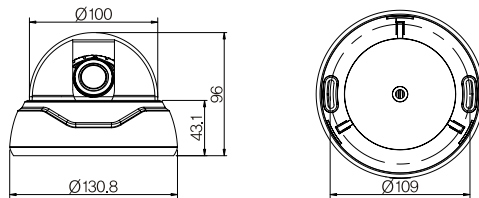
FEATURES

This camera is incredibly flexible to install with its 3-axis camera construction, which makes the camera ceiling, wall or slope mountable.

PRECAUTION

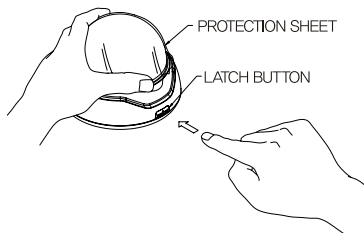
1. Do not install the camera outdoors.
2. Choose an ideal location for the camera, since a camera unit must be protected against moisture and vibration.
3. Be careful not to scratch the camera unit, especially lens or dome cover.
4. Use the camera within the temperature(-10°C ~ +50°C).
5. Handle with care. Dropping it can cause serious damage to the camera.
6. Avoid any direct sun light toward the lens.
7. Use the AC adaptor 12V DC 300mA regulated.

DIMENSION

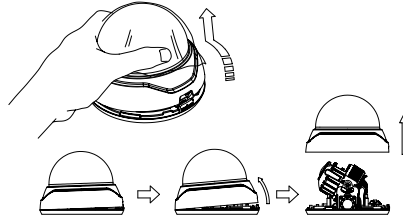


HOW TO INSTALL

1. Opening the dome : Pushing the latch button.
- ※ Caution : Remove the protection sheet after installing.

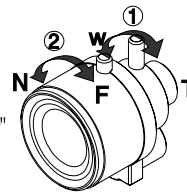


2. Removing the dome : Lift the dome. When you push the latch button, it is unlocked and you can lift the dome.

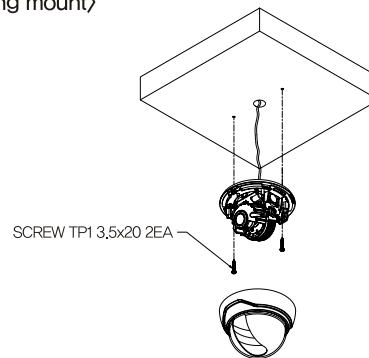


3. Camera installation :

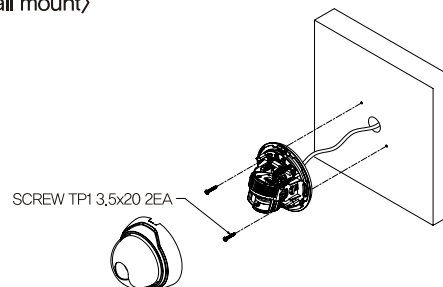
- (1) Fix the camera set with the supplied screws on ceiling or wall mount. If you don't use supplied screws, the camera may fall off.
- (2) Please refer to '4. Camera angle adjustment' regarding adjust camera angle.
- (3) Lens adjustment(Vari-focal Lens only)
 - ① By turning the "Tele-Wide" knob, you can access a range of focal lengths within specified limits.
 - ② Since then, by turning the "Near-Far" knob, you can set the focus toward the wanted object.
- (4) Re-assemble the camera.



<Ceiling mount>



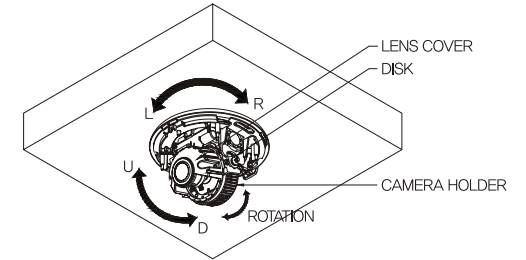
<Wall mount>



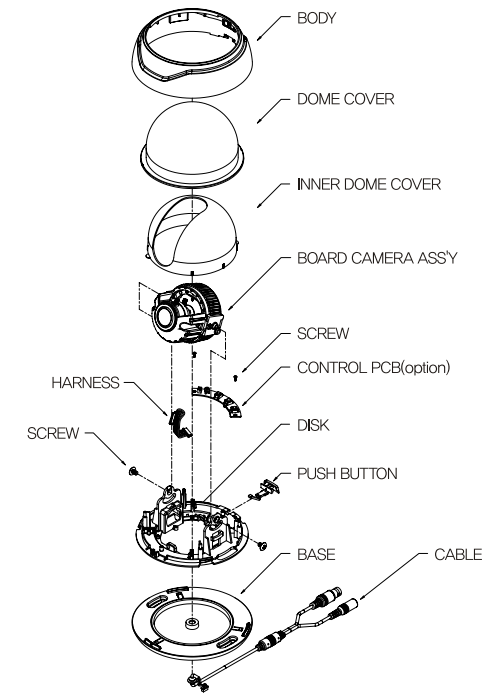
4. Camera angle adjustment :

- (1) Pan adjustment : Grasp the disk of camera and then adjust direction to the right or left(-180° ~ 180°)
- (2) Tilt adjustment : Grasp the lens cover of camera and then adjust direction to the up or down(6° ~ 90°)
- (3) Roll adjustment : Grasp the camera holder and then rotate (-178° ~ 178°)

※ Caution : If you try to adjust the camera out of limited angle, it might cause troubles and damage to camera.



ASSEMBLY



If the product is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.

● SPECIFICATION

· Standard resolution color camera

Model No.	SK-D300/M503	SK-D300/M503AI
Image Sensor	1/3" COLOR SONY SUPER HAD CCD II	
Effective Pixel	510(H) X 492(V) PIXEL(NTSC), 500(H) X 582(V) PIXEL(PAL)	
Cell Size	9.6 μ m(H) X 7.5 μ m(V)(NTSC), 9.8 μ m(H) X 6.3 μ m(V)(PAL)	
Resolution	380 TV-Line	
TV Type	NTSC / PAL	
Sync. Type	Internal	
Scanning System	2 : 1 Interlace	
Video Output	1.0 Vp-p(Sync. Negative)	
Gamma Characteristic	$\gamma = 0.45$ typ.	
Min. Illumination	0.05Lux(F/1.2)	
S/N Ratio	48dB or More(AGC OFF)	
Gain Control	Automatic(HIGH / LOW)	
Shutter	1/60 ~ 1/100,000sec(NTSC), 1/50 ~ 1/100,000sec(PAL)	
Test Illuminance Area	Average test illuminance by front view	
Audio Gain(option)	40dB \pm 10%	
Max Output(option)	600 Ω Max 3Vpp \pm 10%	
Freq. Response(option)	300Hz ~ 20KHz	
Audio S/N Ratio(option)	-45dB \pm 10%	
White Balance	ATW	
BLC	-	ON/OFF
Mirror	-	ON/OFF
Flickerless	-	ON/OFF
AGC	ON	HIGH/LOW
Power Supply	Regulated 12V DC	
Current Consumption	Max. 150mA(1.8W) (at 12V DC)	
Reverse Polarity Protection	Yes	
Lens	Fixed focal board lens	Vari-focal auto Iris lens
Operation Temp.	-10 ~ 50°C	
Preservation Temp.	-20 ~ 60°C	
Dimension	\varnothing 130.8 X 96(H) mm	
Weight	Approx. 400g	

· Advanced high resolution color camera – SONY HQ1

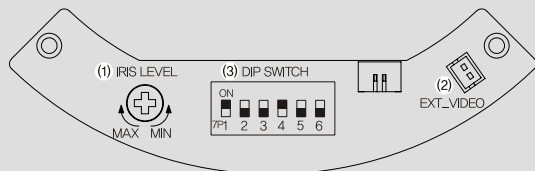
Model No.	SK-D300/M410(AI)	SK-D300/M410(X)(AI)
Image Sensor	1/3" COLOR SONY SUPER HAD CCD II	1/3" COLOR SONY EXview HAD CCD
Effective Pixel	768(H) X 494(V) PIXEL(NTSC), 752(H) X 582(V) PIXEL(PAL)	
Cell Size	6.35 μ m(H) X 7.4 μ m(V)(NTSC), 6.5 μ m(H) X 6.25 μ m(V)(PAL)	
Resolution	550 TV-Line	
TV Type	NTSC / PAL	
Sync. Type	Internal	
Scanning System	2 : 1 Interlace	
Video Output	1.0 Vp-p(Sync. Negative)	
Gamma Characteristic	$\gamma = 0.45$ typ.	
Min. Illumination	0.1Lux(F/1.2)	0.01Lux(F/1.2)
S/N Ratio	48dB or More(AGC OFF)	
Gain Control	Automatic(HIGH / LOW)	
Shutter	1/60 ~ 1/100,000sec(NTSC), 1/50 ~ 1/100,000sec(PAL)	
Test Illuminance Area	Average test illuminance by front view	
Audio Gain(option)	40dB \pm 10%	
Max Output(option)	600 Ω Max 3Vpp \pm 10%	
Freq. Response(option)	300Hz ~ 20KHz	
Audio S/N Ratio(option)	-45dB \pm 10%	
Anti Color Rolling	Built-in(NTSC)	
White Balance	ATW	
BLC	ON/OFF	ON/OFF
Mirror	ON/OFF	ON/OFF
Flickerless	ON/OFF	ON/OFF
AGC	HIGH/LOW	HIGH/LOW
White Spots Compensation	Automatic	
Power Supply	Regulated 12V DC	
Current Consumption	Max. 160mA	
Reverse Polarity Protection	Yes	
Lens	Fixed focal board lens or Vari-focal auto Iris lens	
Operation Temp.	-10 ~ 50°C	
Preservation Temp.	-20 ~ 60°C	
Dimension	\varnothing 130.8 X 96(H) mm	
Weight	Approx. 400g	

· High resolution B/W camera

Model No.	SK-D300/1043	SK-D300/1043AI	SK-D300/1043X	SK-D300/1043X(AI)
Image Sensor	1/3" B/W SONY SUPER HAD CCD		1/3" B/W SONY EXview HAD CCD	
Effective Pixel	768(H) X 494(V) PIXEL(EIA), 752(H) X 582(V) PIXEL(CCCIR)			
Cell Size	6.35 μ m(H) X 7.4 μ m(V)(EIA), 6.5 μ m(H) X 6.25 μ m(V)(CCIR)			
Resolution	570 TV-Line			
TV Type	EIA / CCIR			
Sync. type	Internal			
Scanning System	2 : 1 Interlace			
Video Output	1.0 Vp-p(Sync. Negative)			
Gamma Characteristic	$\gamma = 0.45$ typ.			
Min. Illumination	0.09Lux(F/1.2)		0.003Lux(F/1.2)	
S/N Ratio	45dB or More(AGC OFF)			
Gain Control	Automatic			
Shutter	1/60 ~ 1/100,000sec(EIA), 1/50 ~ 1/100,000sec(CCCIR)			
Test Illuminance Area	Average test illuminance by front view			
Audio Gain(option)	40dB \pm 10%			
Max Output(option)	600 Ω Max 3Vpp \pm 10%			
Freq. Responses(option)	300Hz ~ 20KHz			
Audio S/N Ratio(option)	-45dB \pm 10%			
Power Supply	Regulated 12V DC			
Current Consumption	Max. 130mA(at 12V DC)			
Reverse Polarity Protection	Yes			
Lens	Board Lens	Vari-focal Auto Iris Lens	Board Lens	Vari-focal Auto Iris Lens
Operation Temp.	-10 ~ 50°C			
Preservation Temp.	-20 ~ 60°C			
Dimension	\varnothing 130.8 X 96(H) mm			
Weight	Approx. 400g			

● SETUP FOR CAMERA FUNCTIONS

· Function setting combination



(1) IRIS LEVEL : DC Level adjustment

(2) EXT_VIDEO : Extra video output connector

(3) DIP SWITCH : H(ON)



· Dip switch combination

SK-D300/M503AI, SK-D300/M410(X)(AI)

	H(ON)	L(OFF)
AGC(1)	High	Low
BLC(2)	BLC ON	BLC OFF
FLK(3)	Flickerless ON	Flickerless OFF
ALC/ELC(4)	ALC	ELC
MIRROR(5)	Mirror ON	Mirror OFF
P/G*(6)	ON	OFF
	SK-D300/M410(X)(AI)	
AE/ME*(6)	ME	AE
	SK-D300/M503AI	

*P/G : Pattern Generator

By displaying the test image, this Pattern Generator can check a defect of camera.(SK-D300/M410(X)(AI) only)

*ME : Manual Exposure[AE/ME Switch "H(ON)"]

User can change the shutter speed by mixing a number of switch 2(BLC), 3(FLK) and 4(ALC/ELC) as below.(SK-D300/M503AI only)

BLC(2)	FLK(3)	ALC/ELC(4)	SHUTTER SPEED
OFF	OFF	OFF	1/60(1/50)
OFF	ON	OFF	1/100(1/120)
ON	OFF	OFF	1/250
ON	ON	OFF	1/500
OFF	OFF	ON	1/1,000
OFF	ON	ON	1/2,000
ON	OFF	ON	1/4,000
ON	ON	ON	1/10,000