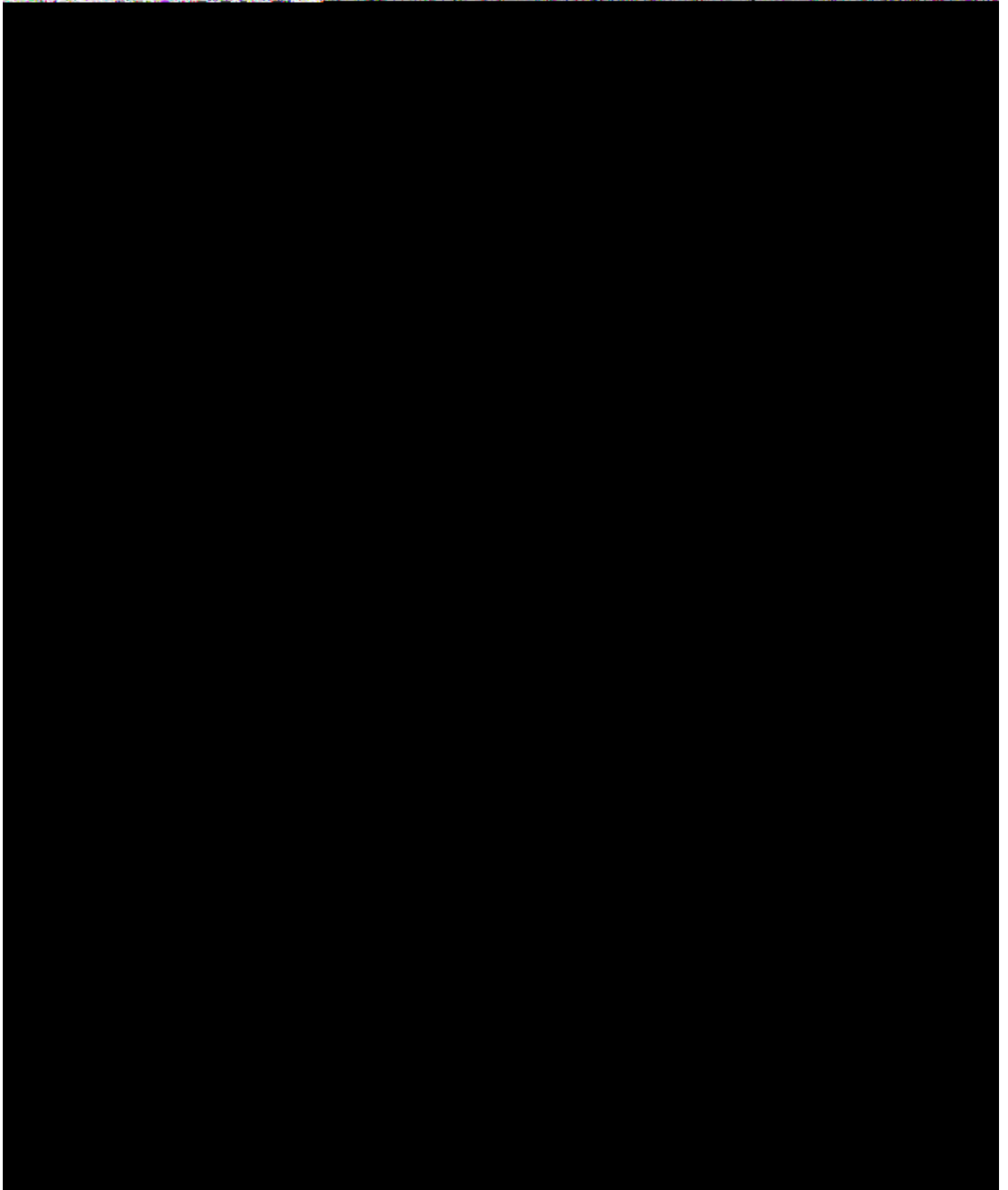


DEAFTECH



-
- | Day of the week | Number of people |
|-----------------|------------------|
| Sunday | 2 |
| Monday | 3 |
| Tuesday | 4 |
| Wednesday | 5 |
| Thursday | 6 |
| Friday | 7 |
| Saturday | 8 |

Contents

1. Introduction

1.1 Changes from the Original Series

1.1.1 New Model Line Up

		Same as H model		
		Same as H model		

1.1.2 Difference of Specifications

-
-
-
-

SW No.	Function	OFF	ON
1	White Balance	Auto	Manual
2	AGC	ON	OFF
3	Shutter Speed Setting		
4			
5			
6	Shutter Mode Setting		
7			
8	Negative / Positive Mode	Positive	Negative

SW 3	SW 4	SW 5	Fixed Shutter Speed	
			High Speed	Low Speed
OFF	OFF	OFF	1/60	2Field
ON	OFF	OFF	1/125	4Field
OFF	ON	OFF	1/250	6Field
ON	ON	OFF	1/500	8Field
OFF	OFF	ON	1/1000	10Field
ON	OFF	ON	1/2000	12Field
OFF	ON	ON	1/4000	14Field
ON	ON	ON	1/10000	16Field

SW 6	SW 7	Shutter Mode
OFF	OFF	High Speed Shutter Mode
OFF	ON	Flicker Less Shutter Mode (1/100 【/120PAL】sec Fixed)
ON	OFF	Low Speed Shutter Mode
ON	ON	Electrical Iris Mode (1/60 【/50PAL】~1/10,000)

SW	No.	Function	OFF	ON
SW201	1	Shutter Mode	Electrical IRIS	Fixed Shutter
	2	Shutter Speed (SW201-1-ON: Available)		
	3			
	4			
	5	Flicker Compensation Mode (SW201-1-OFF: Available)	OFF	ON
	6			
	7	Back Light Compensation (SW201-1-ON: Available)	OFF	ON
	8	Back Light Correction Mode (SW201-7-ON: Available)	Auto Weight	Fixed Weight
SW202	1	Low Luminance Control (SW201-1-OFF: Available)	Note: AGC is available SW201-1 ON and OFF	
	2			
	3			
	4	WB	Auto	Push to Set
	5	Image Flip		
	6			
	7	Gamma	0.45 (Preset)	1.0 (Manual)
	8			

SW 2	SW 3	SW 4	Shutter Speed
OFF	OFF	OFF	1/60
ON	OFF	OFF	1/125
OFF	ON	OFF	1/250
ON	ON	OFF	1/500
OFF	OFF	ON	1/1000
ON	OFF	ON	1/2000
OFF	ON	ON	1/4000
ON	ON	ON	1/10000

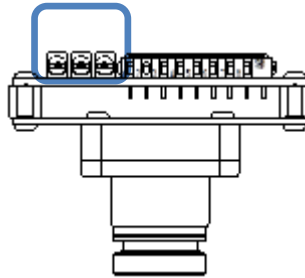
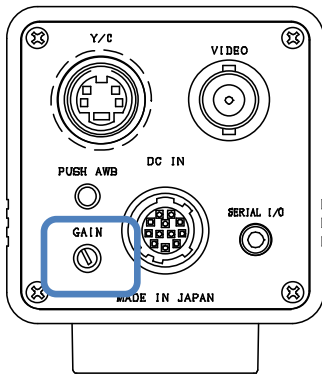
SW 5	SW 6	Flicker Compensation Mode
OFF	OFF	OFF
ON	OFF	Flicker Less
OFF	ON	Gain Modification
ON	ON	-

SW 9	SW 10	SW 11	Low Luminance Control
OFF	OFF	OFF	AGC, Sbw Shutter OFF
ON	OFF	OFF	AGC
OFF	ON	OFF	Sbw Shutter ON
ON	ON	OFF	AGC -> Sbw Shutter
OFF	OFF	ON	Sbw Shutter -> AGC
ON	OFF	ON	AGC -> Sbw Shutter -> AGC
OFF	ON	ON	-
ON	ON	ON	-

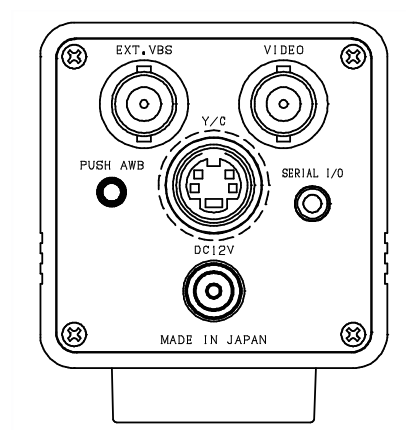
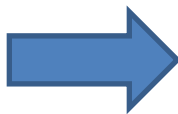
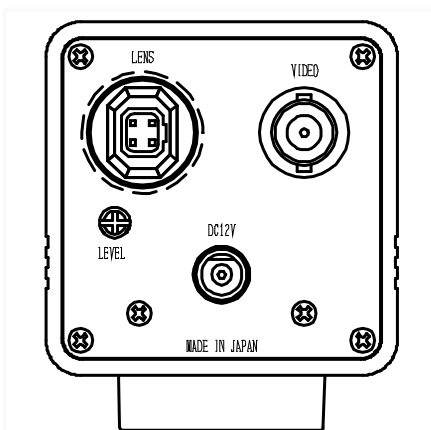
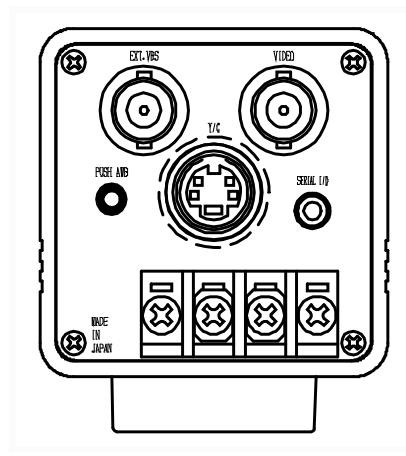
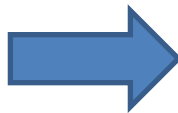
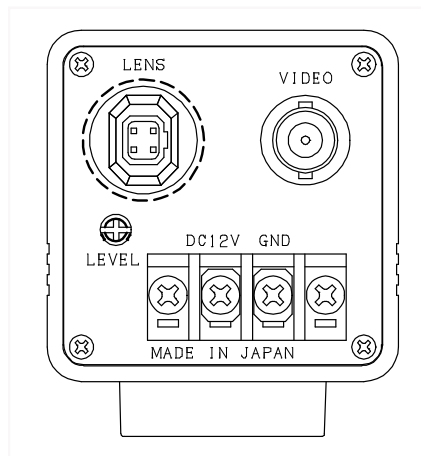
SW 13	SW 14	Image Flip
OFF	OFF	OFF (Normal)
ON	OFF	Vertical
OFF	ON	Horizontal
ON	ON	Horizontal/Vertical

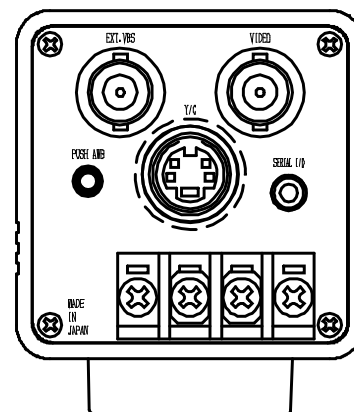
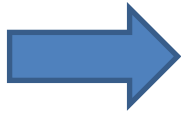
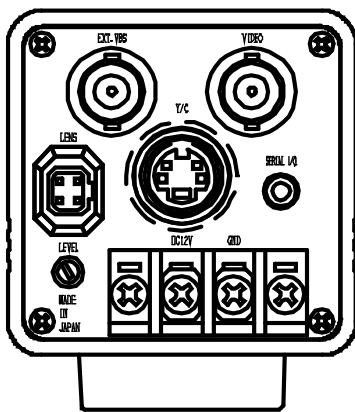
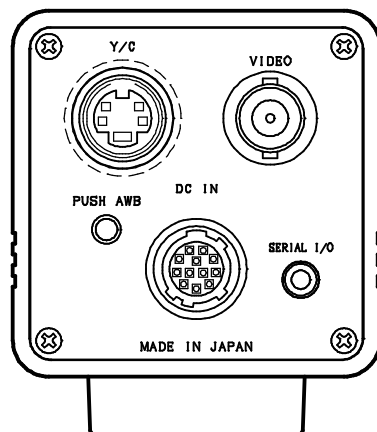
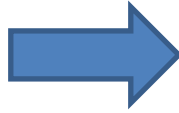
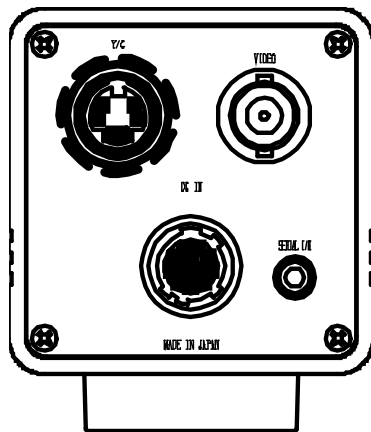
SW	No.	OFF	ON
SW201	1		●
	2	●	
	3	●	
	4	●	
	5	●	
	6	●	
	7	●	
	8	●	
SW202	1		●
	2	●	
	3	●	
	4	●	
	5	●	
	6	●	
	7	●	
	8	●	

Example:



- □





1.1.3 Control Software

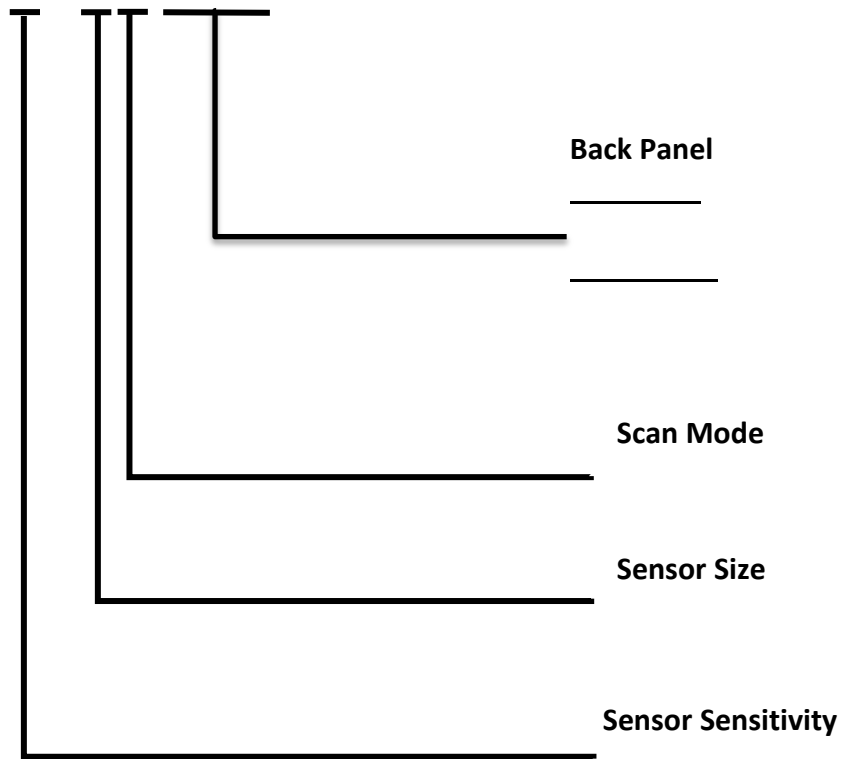
1.1.4 Communication Equipment

1.1.5 New Functions

-
-
-

1.2 Video Signal Comparison

1.3 Naming Method



2. Electronic Specifications

2.1 STC-620 / 625

Model Number	STC-620(NTSC)	STC-625(PAL)
	Ω、	
	[Dip Switch]	
	[Auto/Control Software]	
	~	
	- °C °C	
	°C °C	
	※※	

2.2 STC-H620 / H625

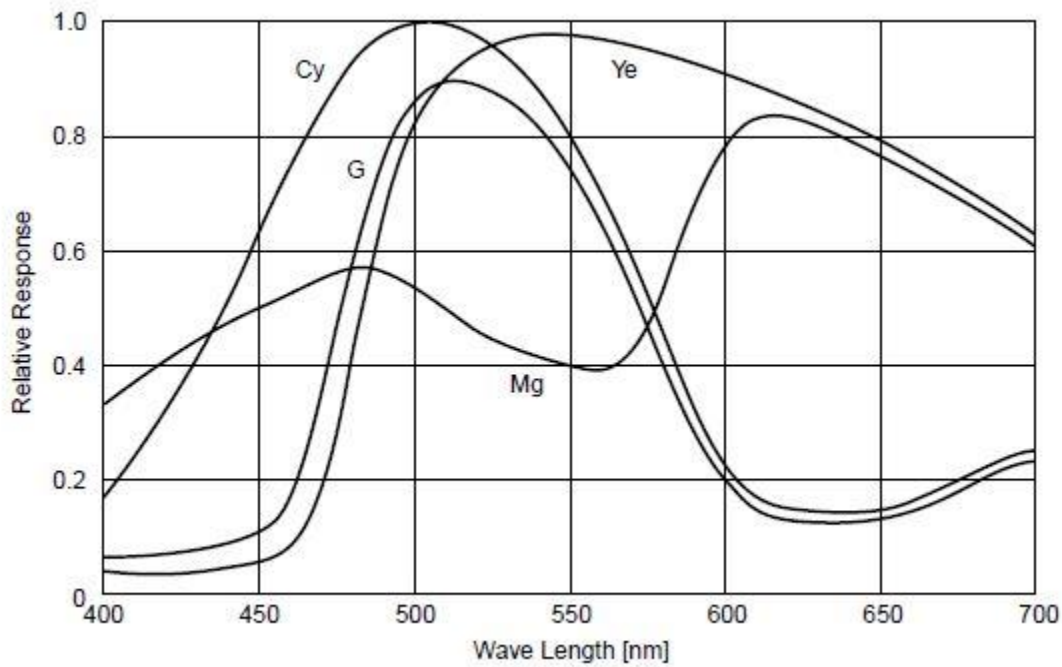
	STC-H620(NTSC)	STC-H625(PAL)
		Ω、
	[Dip Switch]	
	[Auto/Control Software]	
		~
		°C — °C
		°C °C
		※
		※

2.3 STC-630 / 635

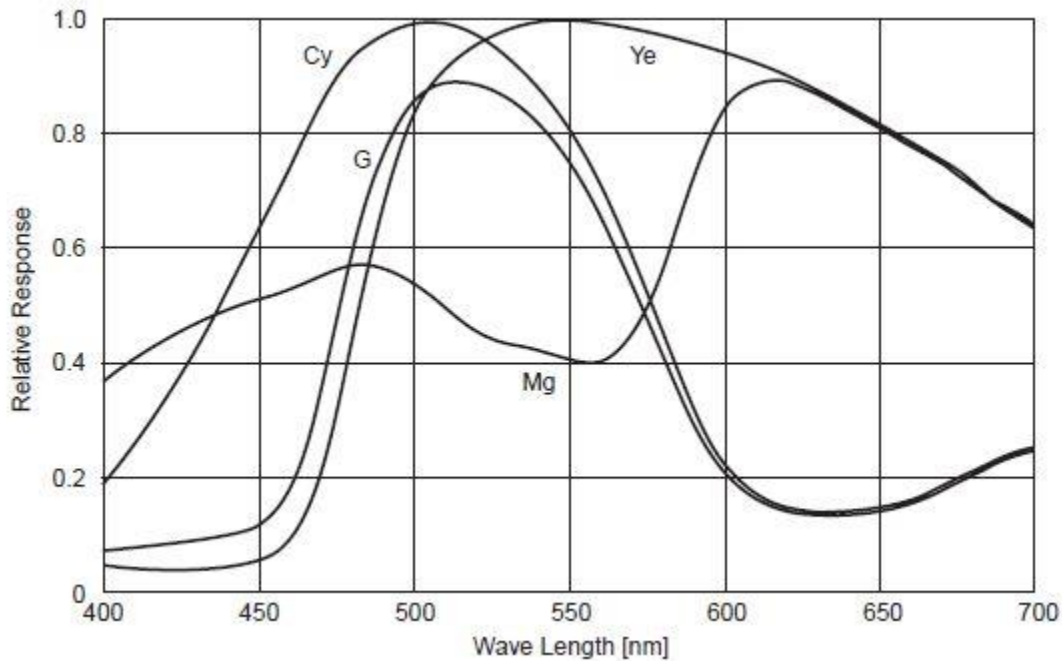
	STC-630(NTSC)	STC-635(PAL)
		Ω、
	[Dip Switch]	
	[Auto/Control Software]	
		~
		-
		℃℃
		℃℃
		※※
		※

3. Spectral Sensitivity Characteristics

3.1 STC-620 / 625 (ICX418AKL)



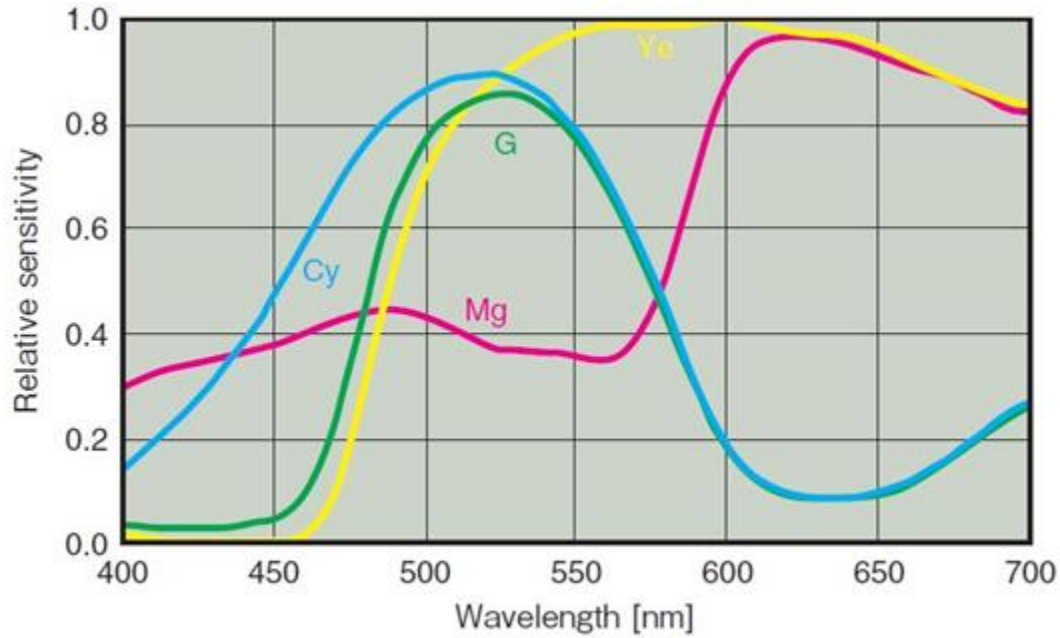
3.2 STC-625 (ICX419AKL)



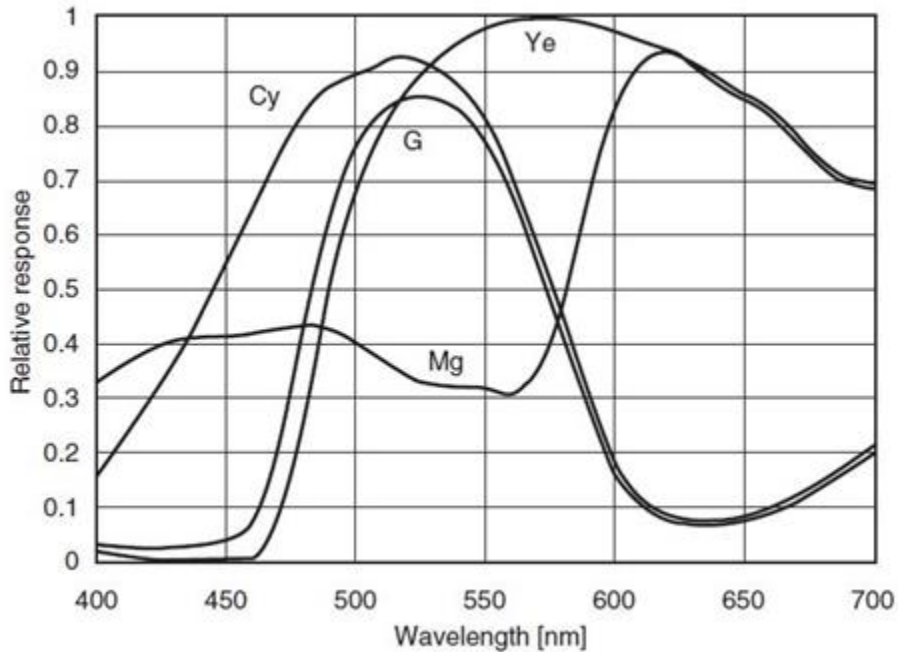
3.3 STC-H620 (ICX828AK)

TBD

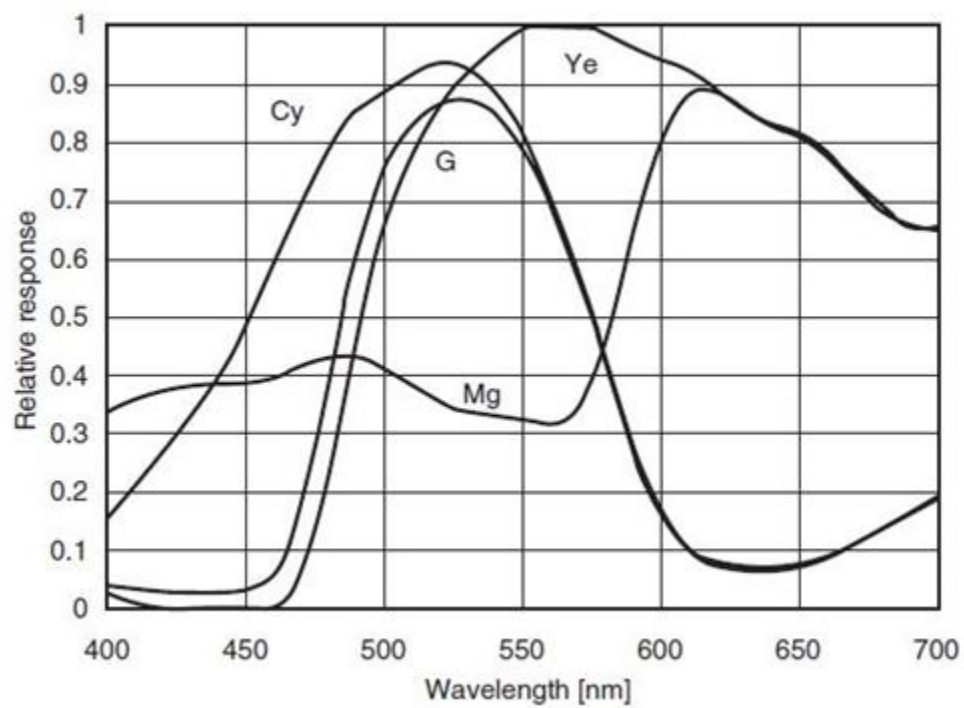
3.4 STC-H625 (ICX829AKA(TBD))



3.5 STC-630 (ICX638BKA)

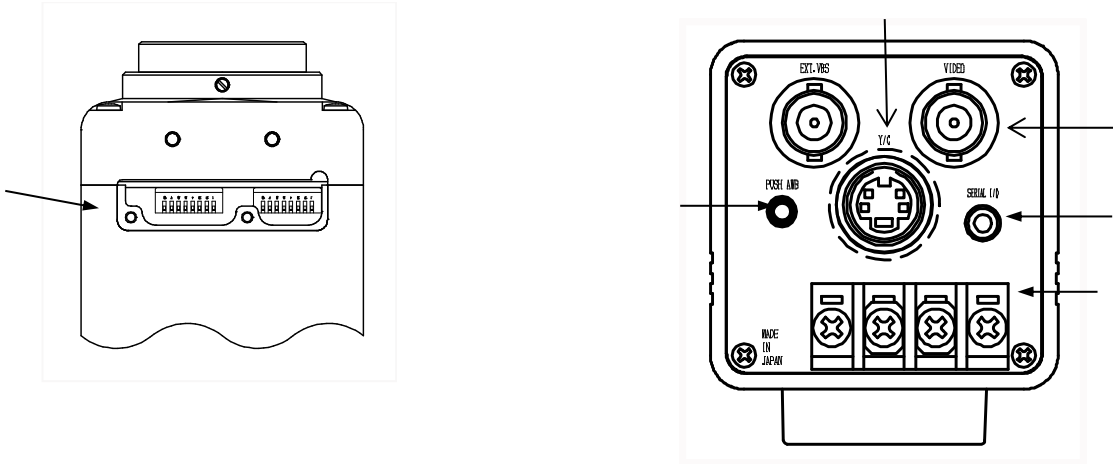


3.6 STC-635 (ICX639BKA)



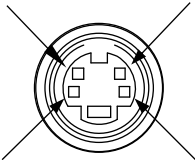
4. Description of the Back Panel

4.1 Cased: PWT Model

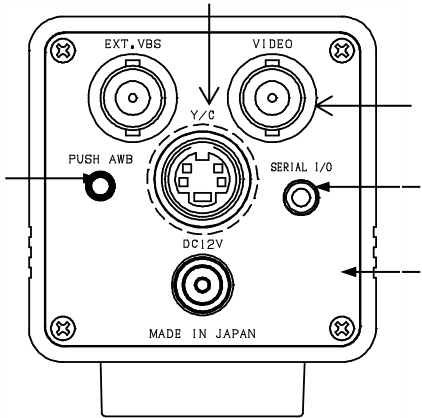
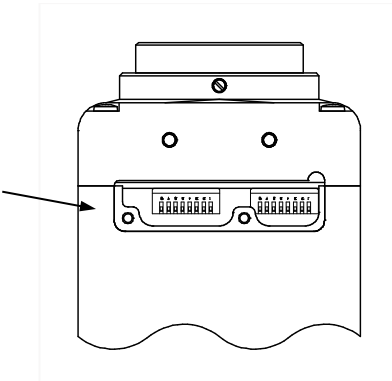


:

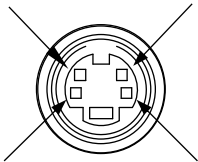
	Y OUT(1Vp-p 75Ω)
	C OUT(300mVp-p 75Ω)



4.2 Cased: PWJ Model

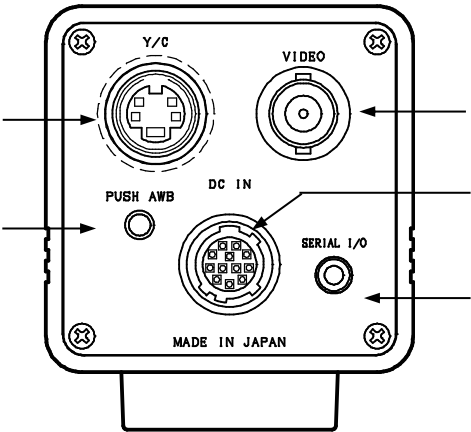
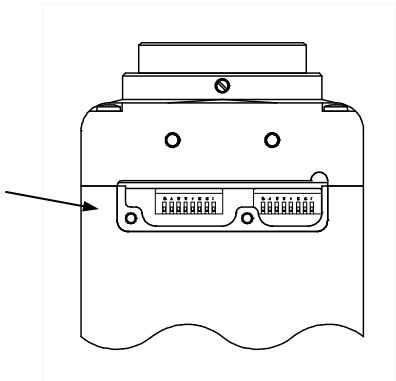


	Y OUT(1Vp-p 75Ω)
	C OUT(300mVp-p 75Ω)

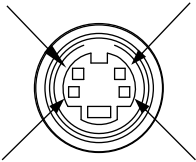


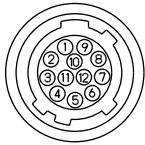
:

4.3 Cased: PWC Model



	Y OUT(1Vp-p 75Ω)
	C OUT(300mVp-p 75Ω)

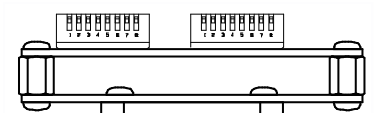




:

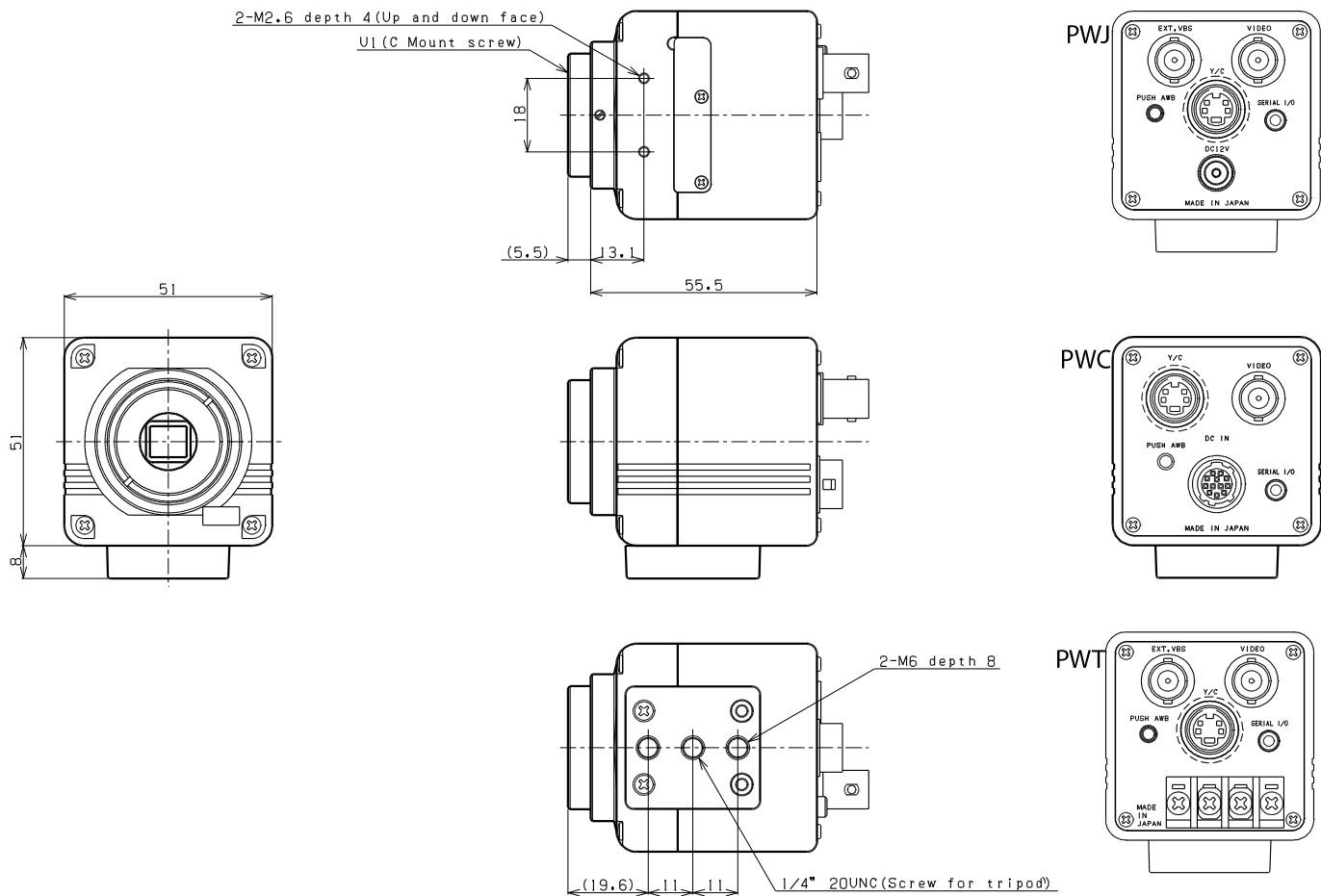
:

4.4 Board: P2,L2,CS2 Common Specifications



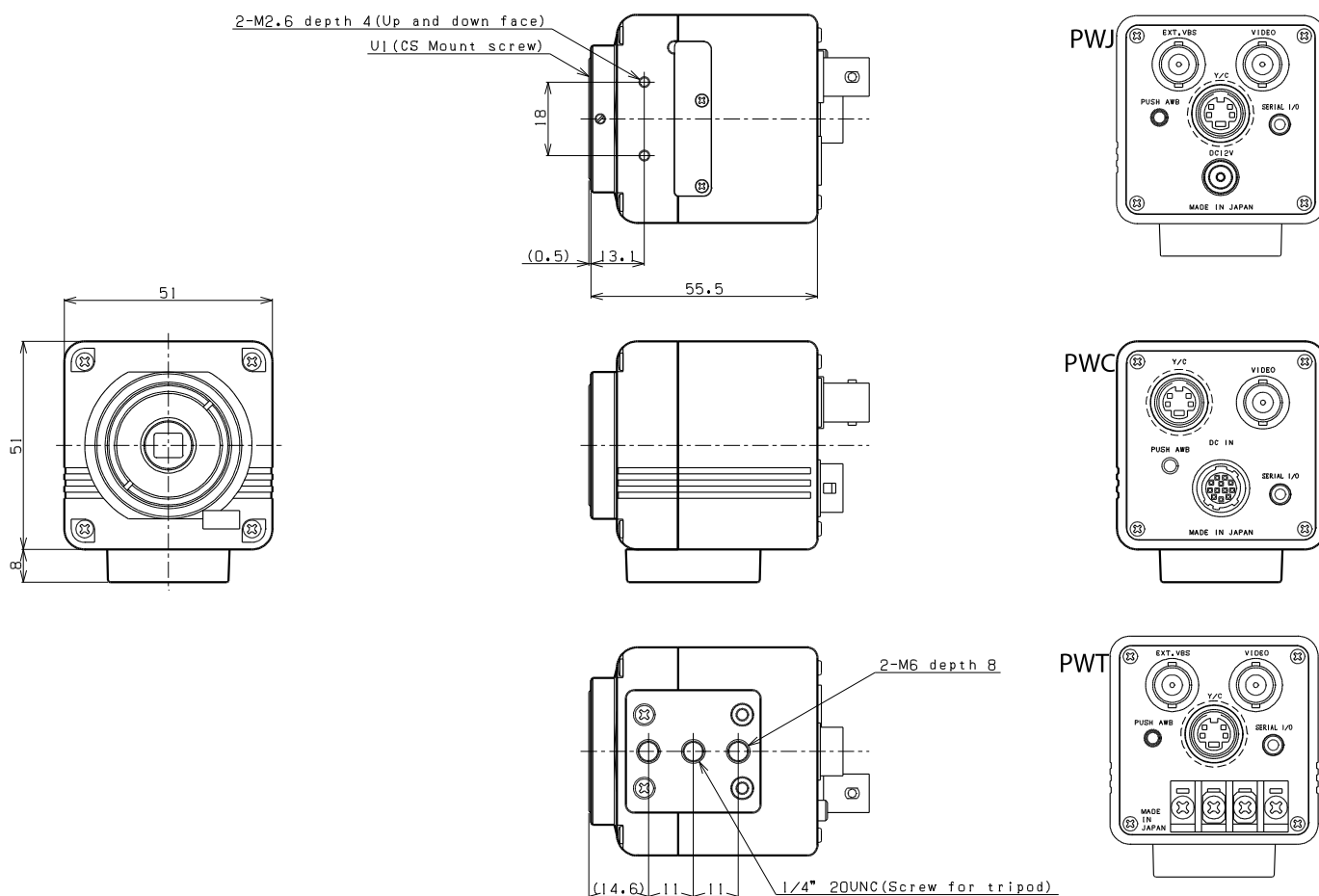
5. Dimensions

5.1 Cased (C-Mount): PWT, PWJ, PWC



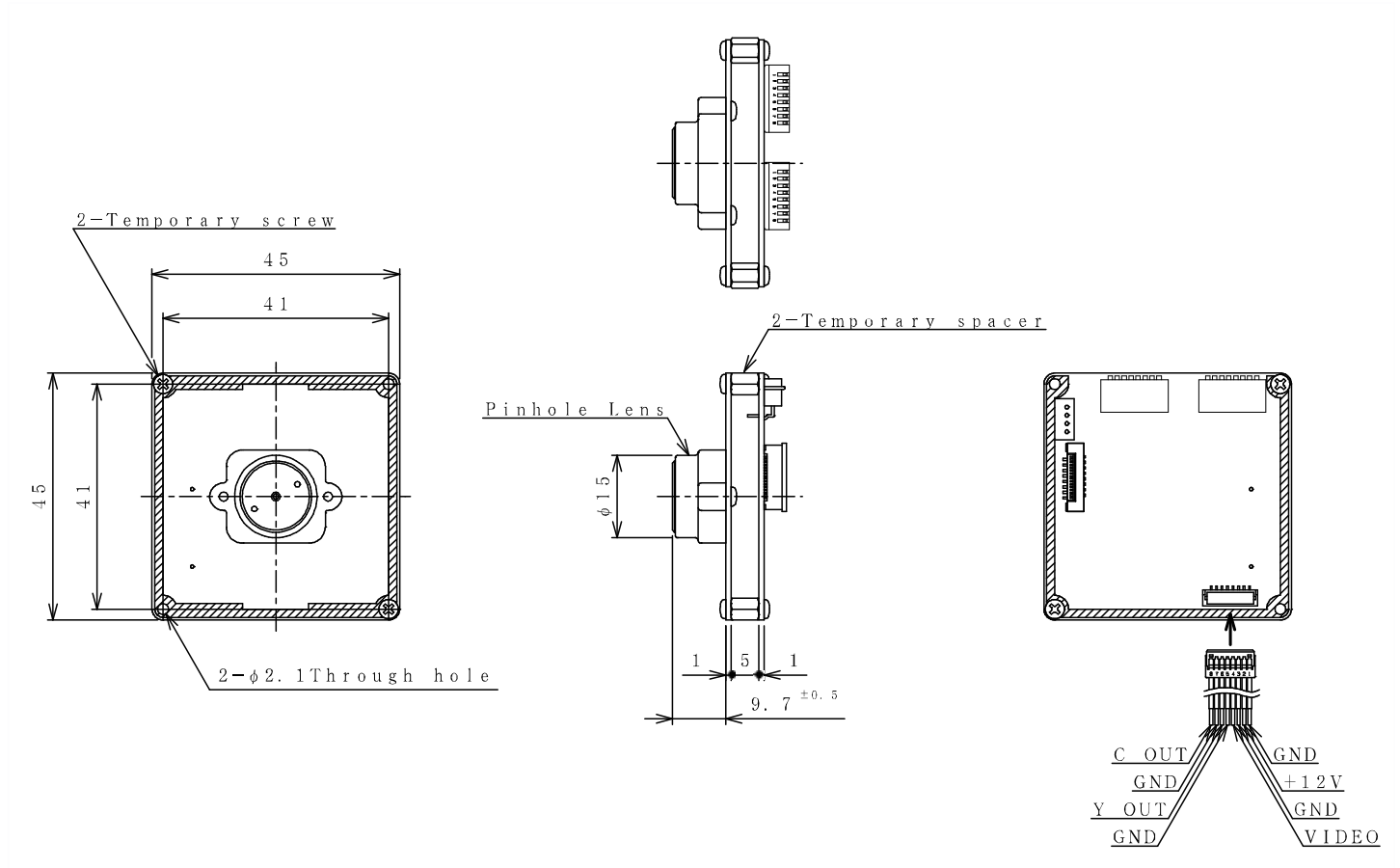
Unit: mm

5.2 Cased (CS-Mount): PWT, PWJ, PWC



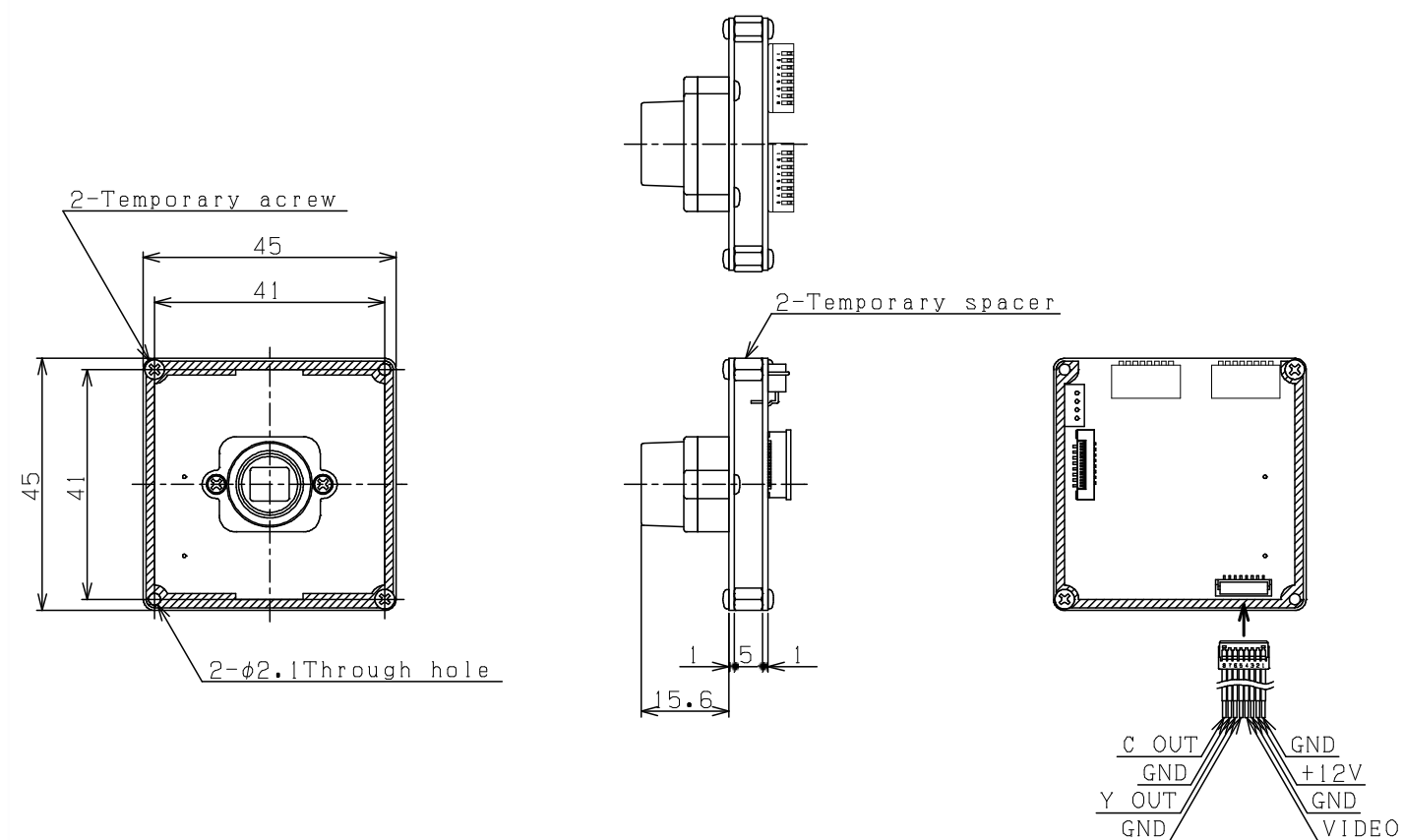
Unit: mm

5.3 Board: P2 Model



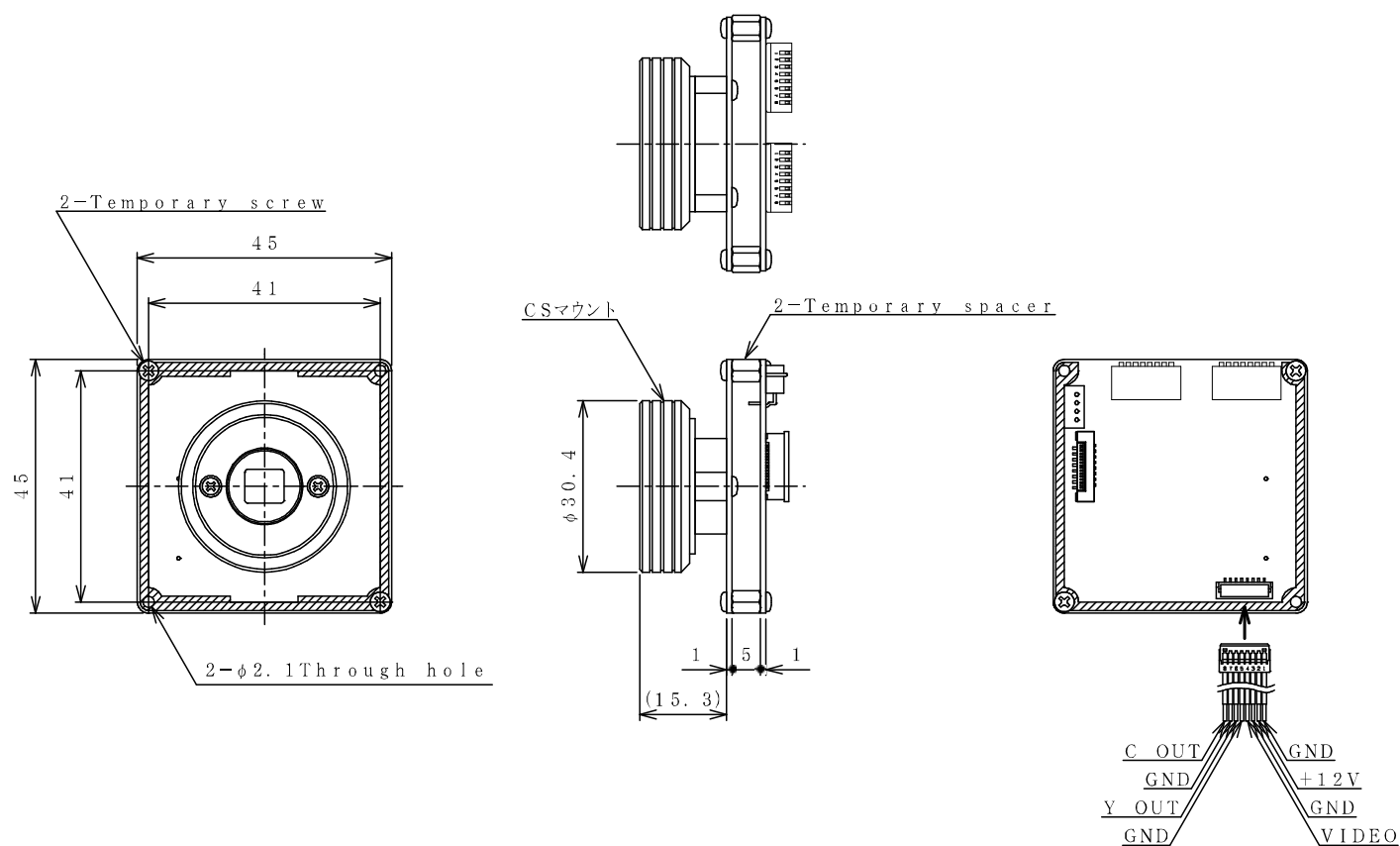
Unit: mm

5.4 Board: L2 Model



Unit: mm

5.5 Board: CS2 Model

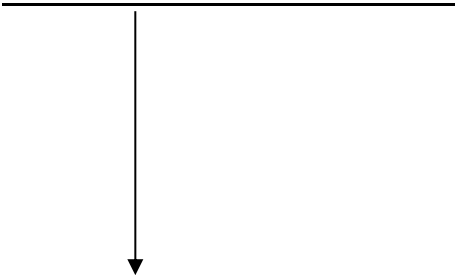


Unit: mm

		Error! Reference source not found.Error! Reference urce not found.

7.2.2 Specification of the Data Received

		The result of the sent command Successful completion: Number of bytes received previously Unsuccessful completion: An error code Error codes F1[h]: Category number error F2[h]: Byte number error FE[h]: Check Sum error, Communication byte error



7.3 Camera Control Command and Software Manual

7.3.1 Port Driver Function

Port Driver Function(SW202_4-PWB)	[02H]ON
AWB Mode [C05_001H.0-3]	[00H]ATW

Port Driver Function(SW202_4-PWB)	[02H]ON
AWB Mode [C05_001H.0-3]	[00H]ATW

Port Driver Function : Disable for "ON"

Port Driver Function(SW202_4-PWB)	[00H]OFF
AWB Mode [C05_001H.0-3]	[00H]ATW

Port Driver Function : enable for "OFF"

7.3.2 Shutter / Gain

Auto Exposure

Port Driver Function(SW201_1) [C01_01CH.0-2]

[02H]ON

Select AE Mode [C03_002H.0-2]

[00H]Shutter

AE User Reference Level [C03_003H.0-004H.1]

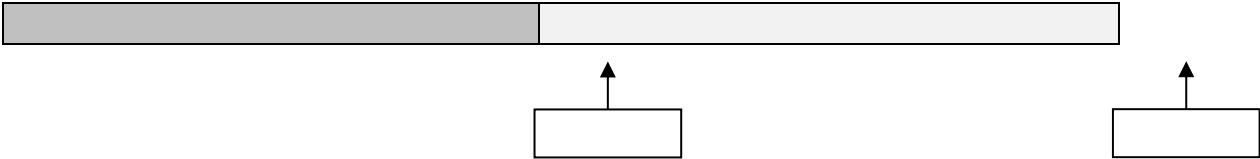
104

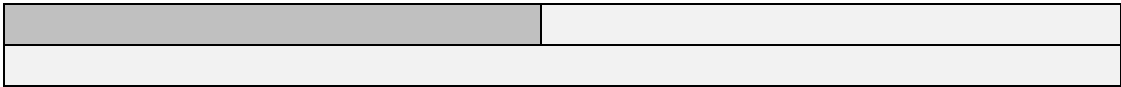
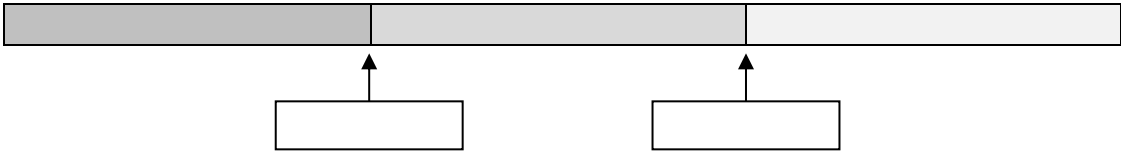
AE Speed [C03_009H]

8

AE Dead Band [C03_00BH]

48





High-Speed Shutter

High-speed shutter MAX value (1/10s Unit) [C03_00DH.0-3]		0
High-speed shutter MAX value (1/100s Unit) [C03_00DH.4-7]		0
High-speed shutter MAX value (1/1000s Unit) [C03_00EH.0-3]		0
High-speed shutter MAX value (1/10000s Unit) [C03_00EH.4-7]		10
		1/100,000[s]
High-speed shutter MIN value (1/10s Unit) [C03_00FH.0-3]		0
High-speed shutter MIN value (1/100s Unit) [C03_00FH.4-7]		0
High-speed shutter MIN value (1/1000s Unit) [C03_010H.0-3]		0
High-speed shutter MIN value (1/10000s Unit) [C03_010H.4-7]		0
		1/60[s]



AGC/Slow Shutter

Port Driver Function(SW202_1-3)

[02H]ON

UnderMinShutter Mode [C03_002H.3-5]

[00H]UMSOFF Mode

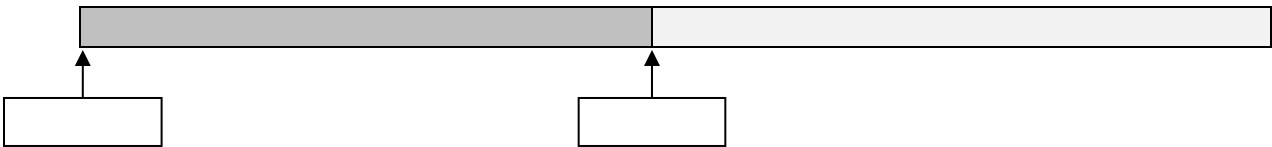
Slow Shutter Max Accumulation Time [C03_015H.1-016H.1]

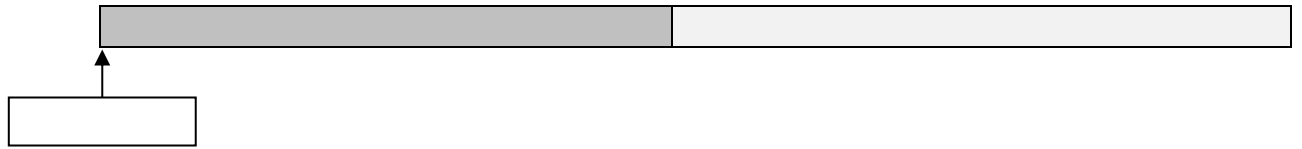
AGC MAX Gain [C03_012H]

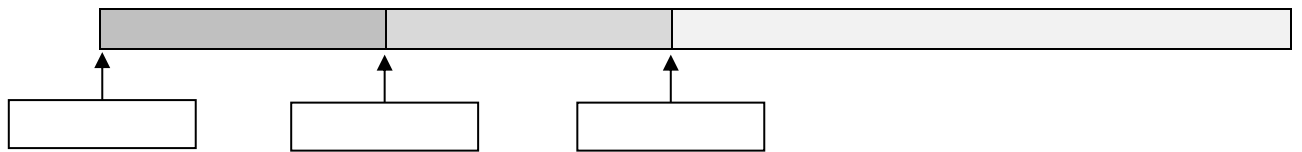
AGC MID Gain [C03_014H]

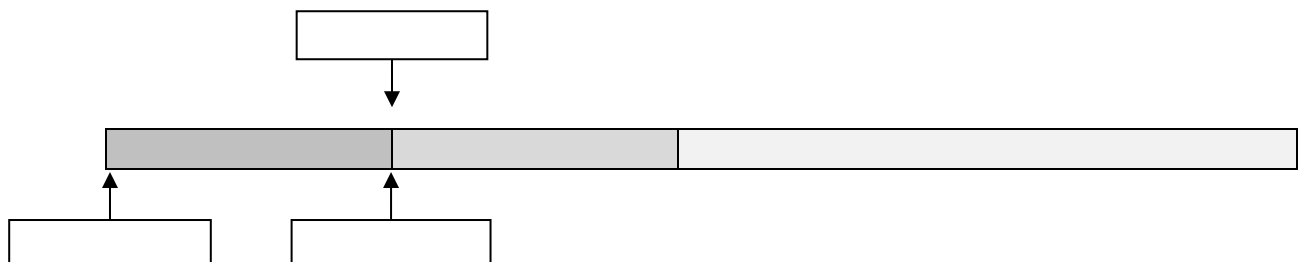
AGC MIN Gain [C09_050H]

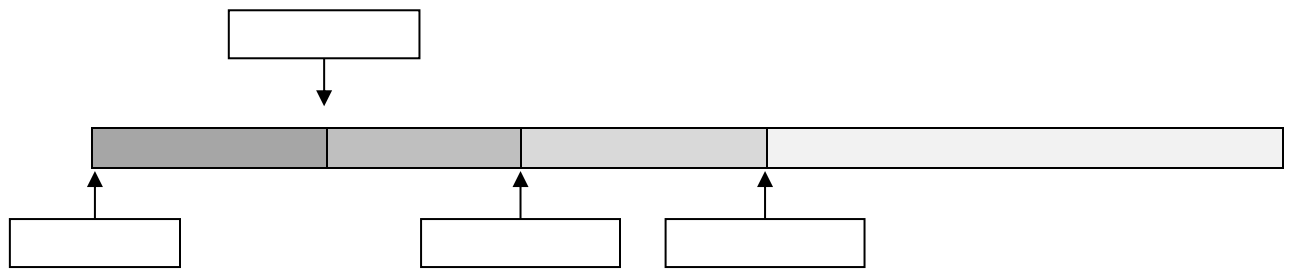












>

>

7.3.3 Chroma

High Luminance Chroma Suppress

High Luminance Chroma Suppress Selection [C02_03DH.2]	[01H]ON	
High Luminance Chroma Suppress Threshold [C02_03DH.3-03EH.4]	<input type="range"/>	544
High Luminance Chroma Suppress Step Width [C02_03EH.5-03FH.0]	<input type="range"/>	1

Low Luminance Chroma Suppress

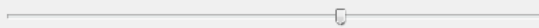
Low Luminance Chroma Suppress Selection [C02_03FH.1]	[01H]ON	
Low Luminance Chroma Suppress Threshold [C02_03FH.2-040H.3]	<input type="range"/>	26
Low Luminance Chroma Suppress Step Width [C02_040H.4-7]	<input type="range"/>	1

Hue/Gain

4Quadrant Setting [C02_035H.0]

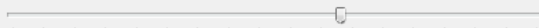
[01H]Separate Setting

R-Y GAIN 1st Quadrant Limit [C02_041H]



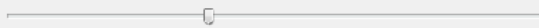
160 0.627

B-Y GAIN 1st Quadrant Limit [C02_045H]



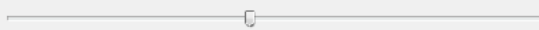
160 0.627

R-Y HUE 1st Quadrant Limit [C02_049H]



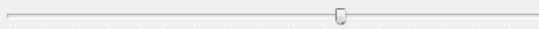
-32 -0.125

B-Y HUE 1st Quadrant Limit [C02_04DH]



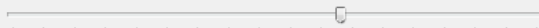
-12 -0.047

R-Y GAIN 2nd Quadrant Limit [C02_042H]



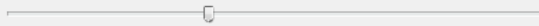
160 0.627

B-Y GAIN 2nd Quadrant Limit [C02_046H]



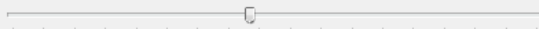
160 0.627

R-Y HUE 2nd Quadrant Limit [C02_04AH]



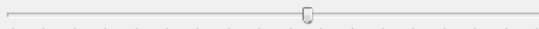
-32 -0.125

B-Y HUE 2nd Quadrant Limit [C02_04EH]



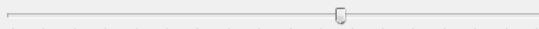
-12 -0.047

R-Y GAIN 3rd Quadrant Limit [C02_043H]



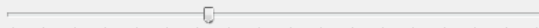
144 0.565

B-Y GAIN 3rd Quadrant Limit [C02_047H]



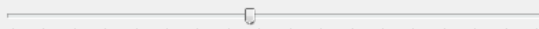
160 0.627

R-Y HUE 3rd Quadrant Limit [C02_04BH]



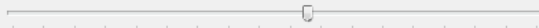
-32 -0.125

B-Y HUE 3rd Quadrant Limit [C02_04FH]



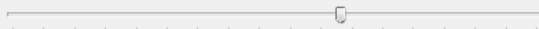
-12 -0.047

R-Y GAIN 4th Quadrant Limit [C02_044H]



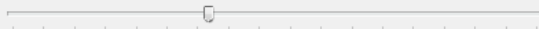
144 0.565

B-Y GAIN 4th Quadrant Limit [C02_048H]



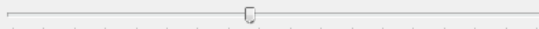
160 0.627

R-Y HUE 4th Quadrant Limit [C02_04CH]

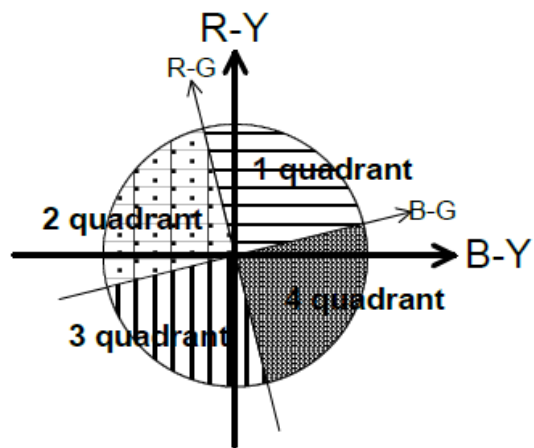


-32 -0.125

B-Y HUE 4th Quadrant Limit [C02_050H]



-12 -0.047



7.3.4 Gamma

Gamma Mode

Gamma Function Mode [C02_00DH.0]

[01H]Preset Mode

Preset Mode Settings

Y Gamma Level [C02_00DH.4~7]

[05H]2.2

Y Knee Level [C02_00EH.0~3]

[05H]114%

Chroma Gamma Level [C02_00EH.4~7]

[02H]1.6

Chroma Knee Level [C02_00FH.0~3]

[05H]114%

7.3.5 BLC (Back Light Compensation)

Back Light Compensation

Port Driver Function(SW201_7) [C01_04CH.0-2]	[02H]ON
Back Light Compensation Switch [C03_01EH.0]	[00H]OFF

Port Driver Function(SW201_8) [C01_054H.0-2]	[02H]ON
Back Light Compensation Function [C03_01EH.1-2]	[01H]Auto Weighted Average

Fixed Weighted Average

1	1	1
1	3	1
1	1	1

0window Weight [C03_06FH]		1
1window Weight [C03_070H]		1
2window Weight [C03_071H]		1
3window Weight [C03_072H]		1
4window Weight [C03_073H]		3
5window Weight [C03_074H]		1
6window Weight [C03_075H]		1
7window Weight [C03_076H]		1
8window Weight [C03_077H]		1

AE Detector Frames

WH1

WV1

WV2

WH2

AED Frames Horizontal 1 [C03_03EH.1-03FH.1]

AED Frames Horizontal 2 [C03_03FH.2-040H.2]

AED Frames Vertical 1 [C03_043H.2-044H.2]

AED Frames Vertical 2 [C03_045H.0-046H.0]

128

256

82

164

	$\leq$ $\leq$	$\leq$ $\leq$

	$\leq$ $\leq$	$\leq$ $\leq$

	$\updownarrow$ AEDWV	
$\leftarrow$ AEDWH	$\updownarrow$ AEDWV	$\rightarrow$ AEDWH

AE Detector Frames

Diagram illustrating the AE Detector Frames configuration. The detector is represented by a 3x3 grid. The horizontal axis is labeled WH1 (top) and WH2 (bottom). The vertical axis is labeled WV1 (left) and WV2 (right).

Configuration parameters for the AE Detector Frames:

- AED Frames Horizontal 1 [C03_03EH.1-03FH.1]: 128
- AED Frames Horizontal 2 [C03_03FH.2-040H.2]: 256
- AED Frames Vertical 1 [C03_043H.2-044H.2]: 82
- AED Frames Vertical 2 [C03_045H.0-046H.0]: 164

Full Pull IN (Push to Set White Balance)

Hold

User

7.3.7 ME

ME Setting

Select AE/ME [C03_001H.0]

[00H]AE

Select ME Mode [C04_001H.0-1]

[00H]Shutter+AGC Manual

Port Driver Function(SW201_2-4)

[02H]ON

Manual Shutter Speed Select [C04_001H.2-4]

[00H]User Setting

Electronic shutter exposure time calculation formula

Manual Slow Shutter

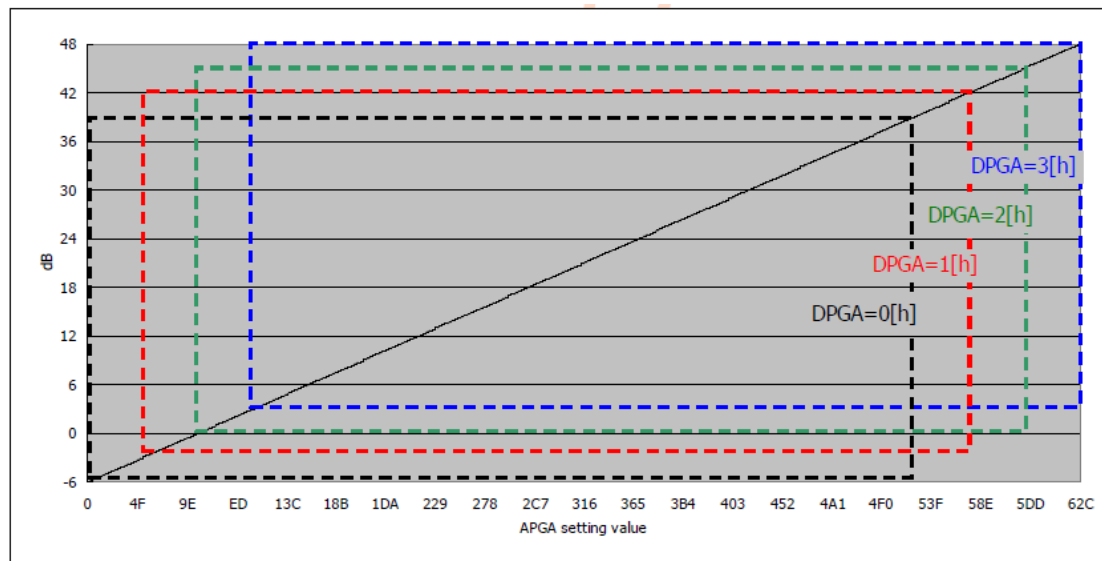
Manual Slow Shutter (SSFLD) [C04_083H]

0

Manual Slow Shutter (SLNSUB) [C04_073H.0~074H.2]

0

33.3[ms] , 1/30.1[s]



7.3.8 Aperture

Horizontal Aperture Compensation

H Aperture Compensation High Frequency Gain [C02_055H.0-1]

[01H]x1

H Aperture Compensation Low Frequency Gain [C02_055H.2-3]

[02H]x1

Vertical Aperture Compensation

V Aperture Compensation Gain [C02_055H.4-7]

8

V Aperture Compensation Slice Level [C02_056H.0-2]

2

V and H Aperture Compensation

V,H Aperture Compensation Gain Level [C02_001H.0-3]		8
V,H Aperture Compensation Slice Level [C02_057H.2-4]		3

7.3.9 Other

Flickerless Function

Port Driver Function(SW201_5-6)	[02H]ON
Flickerless Function Mode [C03_027H.0-1]	[00H]OFF

Shutter Speed Fixed

PGA Gain Control

Flipped Output

Port Driver Function(SW202_5-6)	[02H]ON
Flipped Output Setting [C06_00CH.2-3]	[00H]OFF

Still Function

Port Driver Function(PB) [C01_0BCH.0-2]

[02H]ON ▼

Still Function [C06_00BH.6]

[00H]Normal(through image) ▼

Rev.	Date	Changes	Editor

