

Think Controls

FOTEK

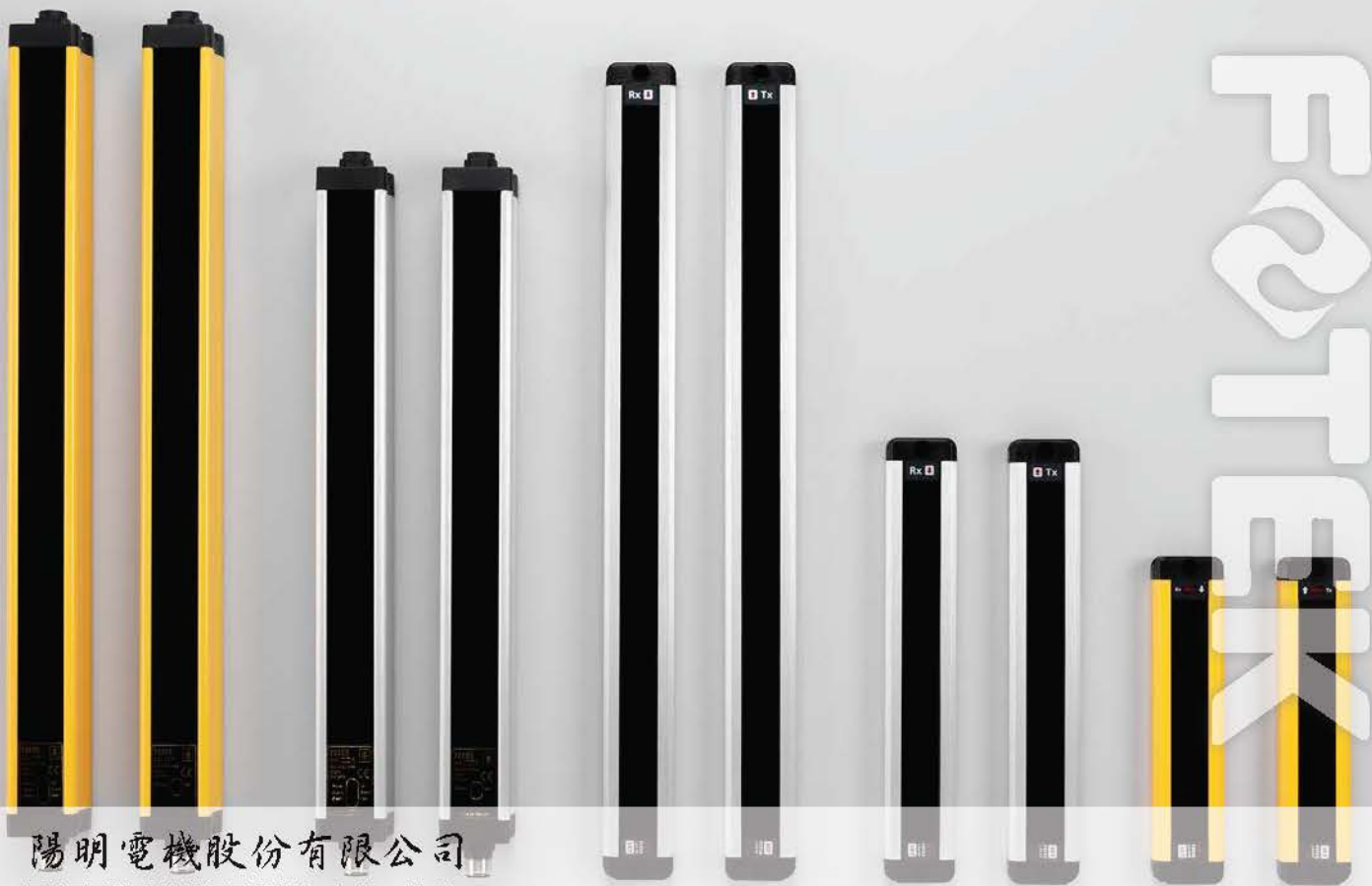
General Use

Light Curtain

汎用型

光幕

CE RoHS



www.fotek.com.tw

陽明電機股份有限公司
FOTEK CONTROLS CO., LTD.

- Beam pitch: 20 mm or 40 mm
- Ultra slim: 12.0 mm
- Output status NO or NC tow output
- Two different distance selectable
- Two different frequency settable



■ Specification / 規格 【 LA-2/LA-4 】

LA2 series Standard distance type

Model	型號	LA2-08	LA2-12	LA2-16	LA2-20	LA2-24	LA2-28	LA2-32
Beams	光軸數	8	12	16	20	24	28	32
Protection high(mm)	保護高度	140	220	300	380	460	540	620
Beam pitch	光軸間距	20 mm						
Setting distance	安裝距離	Standard range: 0.1m ~ 1.6m or Long range: 0.2m ~ 3.2m selectable						
Sensible object	最小檢測物	Opaque object 25Φ min.						

LA2-L series Long distance type

Model	型號	LA2-08L	LA2-12L	LA2-16L	LA2-20L	LA2-24L	LA2-28L	LA2-32L
Beams	光軸數	8	12	16	20	24	28	32
Protection high(mm)	保護高度	140	220	300	380	460	540	620
Beam pitch	光軸間距	20 mm						
Setting distance	安裝距離	Standard range: 0.2m ~ 6.0m or Long range: 0.5m ~ 12.0m selectable						
Sensible object	最小檢測物	Opaque object 25Φ min.						

LA4 series Standard distance type

Model	型號	LA4-04	LA4-06	LA4-08	LA4-12	LA4-16	LA4-20	LA4-24	LA4-28
Beams	光軸數	4	6	8	12	16	20	24	28
Protection high(mm)	保護高度	120	200	280	440	600	760	920	1080
Beam pitch	光軸間距	40 mm							
Setting distance	安裝距離	Standard range: 0.1m ~ 1.6m or Long range: 0.2m ~ 3.2m selectable							
Sensible object	最小檢測物	Opaque object 45Φ min.							

LA4-L series Standard distance type

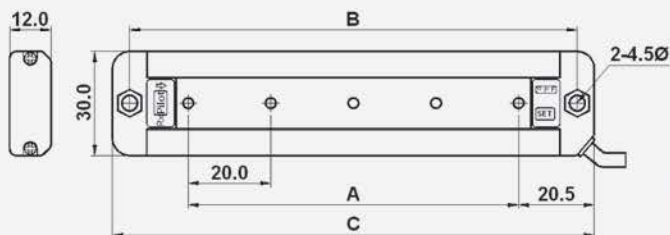
Model	型號	LA4-04L	LA4-06L	LA4-08L	LA4-12L	LA4-16L	LA4-20L	LA4-24L	LA4-28L
Beams	光軸數	4	6	8	12	16	20	24	28
Protection high(mm)	保護高度	120	200	280	440	600	760	920	1080
Beam pitch	光軸間距	40 mm							
Setting distance	安裝距離	Standard range: 0.2m ~ 6.0m or Long range: 0.5m ~ 12.0m selectable							
Sensible object	最小檢測物	Opaque object 45Φ min.							

General Specification / 共同規格

Operating voltage	工作電壓	24 ± 20%VDC ; Ripple ±20% P-P max.
Current consumption	消耗電流	8.0 mA/beam max.
Output method	輸出方式	NPN & PNP two way output
Output current	最大輸出電流	100 mA max.
Output status	輸出狀態	All light channel light NO (NO/NC changeable)
Protection circuit	保護電路	Short circuit & polarity reversed protection
Residual voltage	殘留電壓	0.8 V max.
Leakage current	洩漏電流	0.8 mA max.
Response time	反應時間	10 ms max.
Reset time	復歸時間	Output reset time < 200 ms
Illumination	耐外亂光	Lamp < 10,000 LUX ; Sunlight < 20,000 LUX
Protection class	保護等級	IP - 65
Connection method	接線方式	Tx: 2c-4 μ -3m; Rx: 4c-4 μ -3m
Housing method	外殼材質	Housing: Aluminum ; END CAP: PBT; Front cover: ACRYLIC
Circumstance	使用環境	0°C ~ 50°C ; 25% ~ 85% RH
Vibration resistance	抗震動	10 ~ 55 HZ/1.5 mm , 2 小時/ X . Y . Z 方向
Classification	認證標準	CE MARK
EMC Standard	EMC 標準	ESD: 8 KV Air charge (level 3)/EN-61000-4-2 ; Burst test: 2 KV/EN61000-4-4 RF Interference: 10 V/M /ENV50140

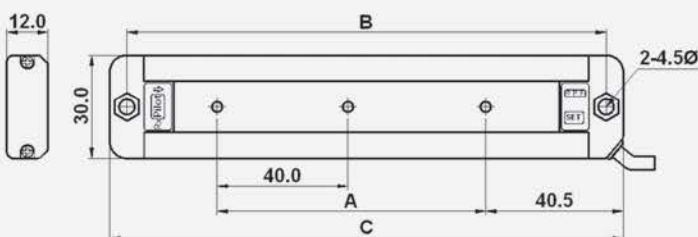
Dimension / 安裝尺寸圖

LA2-xxx Pitch = 20.0mm



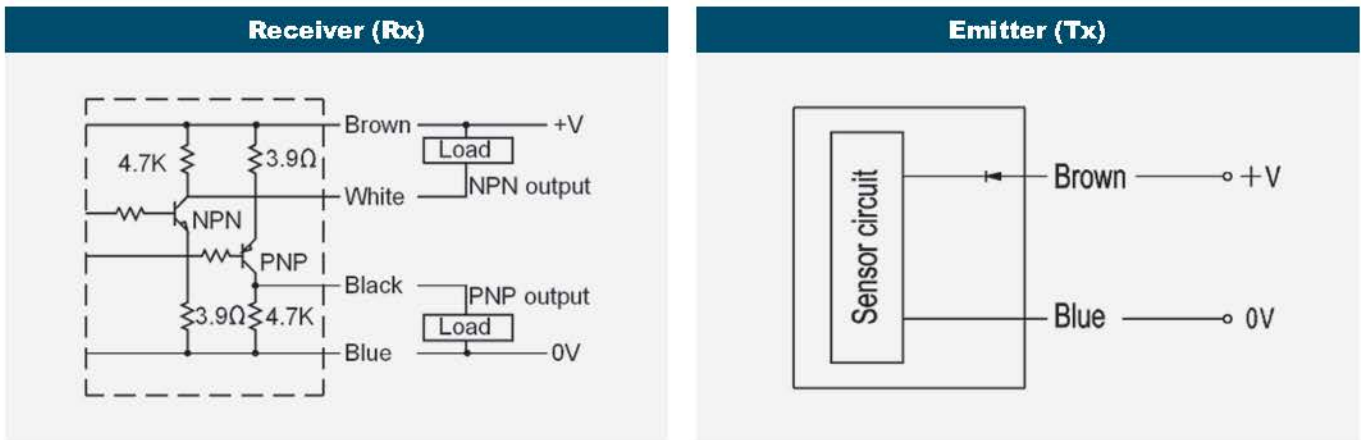
Type	LA2-08	LA2-12	LA2-16	LA2-20	LA2-24	LA2-28	LA2-32
A(mm)	140	220	300	380	460	540	620
B(mm)	180	260	340	420	500	580	660
C(mm)	190	270	350	430	510	590	670

LA-4 series Pitch = 40.0mm



Type	LA4-04	LA4-06	LA4-08	LA4-12	LA4-16	LA4-20	LA4-24	LA4-28
A(mm)	120	200	280	440	600	760	920	1080
B(mm)	180	260	340	500	660	820	980	1140
C(mm)	190	270	350	510	670	830	990	1150

■ Connection diagram & Output circuit / 輸出回路及接線圖



■ Setting of function / 功能設定

How to select the operating frequency / 如何選擇發射頻率

防止互相干擾，可選擇發射頻率及接收頻率

投光器「Tx」或接收器「Rx」按「SET」3秒放開後可切換發射頻率，

「Fre」(黃燈)亮著：頻率(A)；「Fre」LED(黃燈)熄掉：頻率(B)

*務必選擇一樣的投光器「Tx」或接收器「Rx」頻率否則會無法正常工作！

Interrupt muting

After pressing the 「SET」 key of Emitter or Receiver 3 seconds to change the operating frequency,

「Fre」 yellow pilot ON: frequency (A); (Fre) yellow pilot OFF: frequency (B)

* The operating frequency of Emitter and Receiver must be same! otherwise it may be malfunction!

How to select the operating distance / 如何設定安裝距離

投光器「Tx」按「SET」10秒放開後可切換設定距離

標準距離型：

藍燈亮著：Sd (A) = 0.2m ~ 3.2m；藍燈熄掉：Sd (B) = 0.1 ~ 1.6m

長距離型：

藍燈亮著：Sd (A) = 0.5m ~ 12.0m；藍燈熄掉：Sd (B) = 0.2m ~ 6.0m

After pressing the 「SET」 key of Emitter 10 second to change the operating distance,

Standar distance type:

Blue pilot ON: Sd(A)= 0.2m ~ 3.2m ; Blue pilot OFF: Sd(B)= 0.1 ~ 1.6m

Long distance type:

Blue pilot ON: Sd(A)= 0.5m ~ 12.0m ; Blue pilot OFF: Sd(B)= 0.2m ~ 6.0m

How to select the output status / 如何選擇輸出狀態

接收器「Rx」按「SET」10秒放開後可切換輸出狀態，OP燈顯示輸出狀態。

正常狀況：OP燈熄掉/輸出ON；遮光狀況：OP燈亮著/輸出OFF

After pressing the 「SET」 key of Receiver 10 seconds to change the output status.

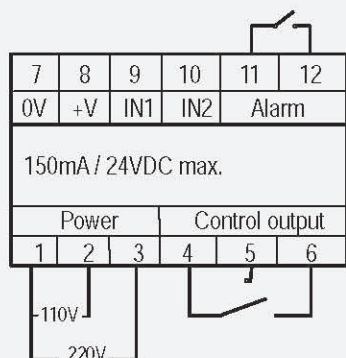
Clean status: OP pilot OFF / Output ON ; Break status: OP pilot On / Output OFF

- To detect output malfunction of light curtain
 - Output broke wire detection
 - Output short circuit detection
- Malfunction detection with latching function
- 光幕異常偵測
 - 輸出斷線偵測
 - 輸出短路偵測
- 異常偵測附鎖住功能

Specification / 規格

Product	產品	Light curtain controller 光幕安全控制器			Power supply 24V電源供應器	
Model	型號	C-1-LCK			C-1-24V	
Control method	控制方式	OSSD1 & OSSD2 Interlock control			Non	
Control output	控制輸出	Relay 1c ; 5A/250VAC			Non	
Alarm output	警報輸出	Relay 1a ; 5A/250VAC			Non	
Latching function	保持功能	Error latching			Non	
Power supply	工作電壓	110V / 220VAC 50/60Hz				
Current consumption	耗電流	3VA Max.				
DC power output	直流輸出	150mA / 24V Max.				
Alarm reset	警報復歸	Manual reset				
Output current	工作環境	-20°C ~ +80°C ; 35% ~ 85% RH				
Operating circumstance	功能	Status	OSSD1	OSSD2	Run	Alarm
		Clear	L	H	ON	OFF
		Brake	H	L	OFF	OFF
		Error	H	H	OFF	ON
		Error	L	L	OFF	ON

Connection diagram 接線圖



Outline dimension 外形尺寸

