

IMJE-FXLINDEXV1EN 09/2018

IO-Link setting file (IODD) can be downloaded from our website (<http://panasonic.net/id/pidsx/global>).

1 PHYSICAL LAYER

Model No.	FX-551L3-P-C2	FX-551L3-P-J
Baud rate	COM3 (230.4kbit/s)	
Minimum cycle time	1ms	
Process data length	4byte	
Vendor ID	834	
Device ID	0x030000	

2 PROCESS DATA (PD)

		bit							
		7	6	5	4	3	2	1	0
PD0	Upper byte of incident light intensity data								
PD1	Lower byte of incident light intensity data								
PD2	Fixed 0								

		bit								Assignment	Remarks
		7	6	5	4	3	2	1	0		
										Control Output (DO)	0 : OFF 1 : ON
										Fixed	0
										Emission State	0 : Emission halt 1 : Emission
										Fixed	0
										Information Notification	0 : No notification 1 : Notified
										Error Level	0 : Normal 1 : Caution 2 : Fault

3 SERVICE DATA (SD)

Index	Sub index	Name	R/W	Back up target	Format	Data length	Default data	Description of settings
2	0	System-Command	W		UInteger	1byte		0x43 : Execution of 2-point teaching (first time) 0x44 : Execution of 2-point teaching (second time) 0x47 : Start of auto teaching 0x48 : End of auto teaching 0x4B : Limit teaching (UP Key) 0x4C : Limit teaching (DOWN Key) 0x4F : Cancellation of teaching 0x82 : Reset setting 0xA0 : Display adjustment setting 0xA2 : Cancellation of display adjustment
12	0	Device Access Locks	R/W		Record	2byte	0	Local User Interface 0 : Unlock , 8 : Lock Main unit: Linked with key lock
16	0	Vendor Name	R		String	64byte		
17	0	Vendor Text	R		String	64byte		
18	0	Product Name	R		String	64byte		
19	0	Product ID	R		String	64byte		
20	0	Product Text	R		String	64byte		
21	0	Serial Number	R		String	16byte		
22	0	Hardware Version	R		String	8byte		
23	0	Firmware Version	R		String	8byte		
24	0	Application Specific Tag	R/W	o	String	32byte		
37	0	Detailed Device Status	R		UInteger	12byte		
40	0	Process-Data Input	R		UInteger	4byte		
60	1	Threshold Value Setting	R/W	o	Integer	2byte	40	Std : 10 to 4000 (0x000A to 0x0FA0) Long : 10 to 8000 (0x000A to 0x1F40) U-Lg : 10 to 9999 (0x000A to 0x270F) HyPr : 20 to 9999 (0x0014 to 0x270F)
61	1	Output Operation Setting of C/Q Output	R/W	o	UInteger	1byte	0	0 : L-ON 1 : D-ON
63	1	Output Operation Setting of DO Output	R	o	UInteger	1byte	0	Linkage with Index61_1
64	1	Timer type	R/W	o	UInteger	1byte	0	0 : No timer 1 : OFF-Delay timer 2 : ON-Delay timer 4 : One-Shot-Delay timer
	2	Timer Period	R/W	o	UInteger	2byte	50	Setting range : 1 to 9999 (0x0001 to 0x270F) 1 : 0.1ms , 9999 : 999.9ms
66	0	Response Time	R/W	o	UInteger	1byte	0	0 : Std (250µsec or less) 1 : Long (2msec or less) 2 : U-Lg (4msec or less) 3 : HyPr (24msec or less)
70	0	Emission Halt	R/W		UInteger	1byte	0	0 : Emission 1 : Emission halt

Index	Sub index	Name	R/W	Back up target	Format	Data length	Default data	Description of settings
74	1	Shift Amount Setting	R/W	o	UInteger	1byte	1	Selection of unit 0 : Digit display 1 : Percentage display
	2	Threshold Value (Percentage display)	R/W	o	UInteger	2byte	15	Percentage display 1 to 999 (0x0001 to 0x03E7)
	3	Threshold Value (Digit display)	R/W	o	UInteger	2byte	100	Setting of range Std : 1 to 4000 (0x0001 to 0x0FA0) Long : 1 to 8000 (0x0001 to 0x1F40) U-Lg : 1 to 9999 (0x0001 to 0x270F) HyPr : 1 to 9999 (0x0001 to 0x270F)
75	1	Threshold Value Tracking	R/W	o	UInteger	2byte	0	Setting range 0 to 9999 (0x0000 to 0x270F) < 0 : OFF >
	2	Output Operation Setting	R/W	o	UInteger	1byte		0 : Follows threshold value when OFF 1 : Follows threshold value when ON
	3	Storage Cycle Setting	R/W	o	UInteger	1byte	0	Setting range: 0 to 250 (0x0000 to 0x00FA) < 0 : OFF >
	4	Algorithm Setting	R/W	o	UInteger	1byte		0 : Limit teaching 1 : Auto teaching
76	1	Emitting Frequency Setting	R/W	o	UInteger	1byte	0	Setting 0 : Disabled 1 : Emission frequency setting 2 : Ambient environment sesistance setting
	2		R/W	o	UInteger	1byte	0	Frequency setting 0 : F-1 1 : F-2 2 : F-3 3 : F-4 Setting is valid only when "Emission frequency setting" is enabled. (0 in all other cases)
77	0	Light Sensitivity Setting	R/W	o	UInteger	1byte	3	0 : Level 1 1 : Level 2 2 : Level 3 3 : Level 4 (Sensitivity: High)
80	0	ECO Setting	R/W	o	UInteger	1byte	0	0 : OFF 1 : ON 3 : FULL
82	0	Setting of Digital Display Turning	R/W	o	UInteger	1byte	0	0 : Turning OFF 1 : Turning ON
83	1	Setting Items in Digital Display Setting	R/W	o	UInteger	1byte	0	0 : Incident light intensity 1 : Displayed in percentage 2 : Peak / bottom value
	2	Time Period Hold Setting	R/W	o	UInteger	1byte	0	0 : OFF 1 : ON
84	0	Display Adjustment Setting	R		UInteger	1byte		0 : Not executed 1 : In execution
85	0	Teaching Lock	R/W	o	UInteger	1byte	0	Use of main unit for teaching 0 : Enabled 1 : Disabled
160	0	Preventive Maintenance Threshold 1	R/W	o	Integer	1byte	0	0 : 120% of threshold value 1 : 150% of threshold value 2 : 200% of threshold value
161	0	Preventive Maintenance Threshold 2	R/W	o	Integer	1byte	0	0 : 70% of threshold value 1 : 50% of threshold value
162	0	Preventive Maintenance Threshold Value Detection Delay Time	R/W	o	UInteger	1byte	2	0 : None 1 : Fast 2 : Normal 3 : Slow
163	0	Operating Time	R		UInteger	4byte		Operating time per 1-hour unit [h]
164	0	Number of Data Save Operations	R		UInteger	4byte		Increments each time setting data is stored in the nonvolatile memory.
168	0	Notification Flag Setting	R/W	o	UInteger	1byte		0 : Notify 1 : Do not notify
169	0	Notification Event Code	R		UInteger	2byte		Newest event code readout

4 EVENT FUNCTION

Error indication	Event code	Error level	State
	0x7710	Fault	DO output short-circuit
	0x1801	Fault	Non-volatile memory abnormality
	0x1802	Fault	Non-volatile memory write error
Display of measured value	0x8D00	Caution	Operating time exceeded
Display of measured value	0x8D01	Caution	Max. number of the nonvolatile memory save operations exceeded
Display of measured value	0x8CA3	Normal	Incident light unstable/blocked
			Information notification

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