

Model IO-Link Signal Tower
Type LB6-IL

Communication

Vendor ID	763d (0x2FB)
Vendor Name	PATLITE Corporation
Device ID	524290d (0x80002)
Vendor Url	www.patlite.com
Device Name	LB6-IL

IO-Link Revision	1.1
Bit rate	COM2 (38.4 kbps)
Minimum cycle time	2.7 ms
SIO mode	Yes
ISDU	Yes
Block parameterization	Yes
Data Storage	Yes
Data length	PDout 2 byte PDin -

Standard Parameters

Parameter	Index	subindex	Data Type	Byte Length	Access	Default Value	Remarks
Standard command	2d (0x2)	0	UIntegerT	1	Wo	-	129 - Application Reset 130 - Back-to-box
Vendor name	16d (0x10)	0	StringT	19	Ro	PATLITE Corporation	
Vendor text	17d (0x11)	0	StringT	15	Ro	www.patlite.com	
Product name	18d (0x12)	0	StringT	16	Ro	LB6-20ILWCNW	Model : LB6-20ILWCNW
				16		LB6-20ILWCBW	Model : LB6-20ILWCBW
Product ID	19d (0x13)	0	StringT	16	Ro	LB6-20ILWCNW	Model : LB6-20ILWCNW
				16		LB6-20ILWCBW	Model : LB6-20ILWCBW
Product Text	20d (0x14)	0	StringT	32	Ro	IO-Link Signal Tower	Model : LB6-20ILWCNW
				32		IO-Link Signal Tower, Buzzer	Model : LB6-20ILWCBW
Serial Number	21d (0x15)	0	StringT	16	Ro	-	
Hardware Version	22d (0x16)	0	StringT	4	Ro	1.00	Hardware latest version
Firmware Version	23d (0x17)	0	StringT	4	Ro	1.00	Software latest version
Application Specific Tag	24d (0x18)	0	StringT	32	R / W	***	
Function Tag	25d (0x19)	0	StringT	32	R / W	***	
Location Tag	26d (0x1A)	0	StringT	32	R / W	***	
Device Status	36d (0x24)	0	UIntegerT	1	Ro	0	0 - Device OK 1 - Maintenance required 2 - Out of specification 3 - Functional check 4 - Failure 5 - 255 - Reserved
Detailed Device Status	37d (0x25)	0	Array	6 (3*2)	Ro	-	
		1	StringT	3		0x00, 0x00, 0x00	
		2	StringT	3		0x00, 0x00, 0x00	
Process Data Output	41d (0x29)	0	UIntegerT	2	Ro	-	

Vendor Parameters

Parameter	Index	subindex	Data Type	Byte Length	Access	Default Value	Data Storage	Remarks
Operating Mode	810d (0x32A)	0	UIntegerT	1	R / W	4	Yes	1 - Level Mode 4 - Simple-mode 7 - Animation Mode
LED Intensity	2000d (0x7D0)	0	UIntegerT	1	R / W	0x64	Yes	0x00 - 0x64 (0.. 100%)
Buzzer Sound Level	2001d (0x7D1)	0	UIntegerT	1	R / W	0x64	Yes	0x00 - 0x64 (0.. 100%)
Tier LED Pattern	2015d (0x7DF)	0	Record	5	R / W	-	Yes	0 - Continuous 1 - Blinking Slow 2 - Blinking Mid 3 - Blinking Fast 9 - Flashing Slow 10 - Flashing Middle 11 - Flashing Fast 12 - Gradation blinking Slow 13 - Gradation blinking Middle 14 - Gradation blinking Fast
		1	UIntegerT	1		0		
		2	UIntegerT	1		0		
		3	UIntegerT	1		0		
		4	UIntegerT	1		0		
		5	UIntegerT	1		0		
Select User Color	2017d (0x7E1)	0	UIntegerT	1	R / W	7	Yes	0 - Off 1 - Red 2 3 4 5 - Amber 6 7 8 9 - Green 10 11 - Cyan 12 13 - Blue 14 15 16 - Purple 17 18 19 20 21 - White
Tier Color	2018d (0x7E2)	0	Record	5	R / W	-	Yes	0 - Off 1 - Red 2 - Green 3 - Yellow 4 - Blue 5 - Purple 6 - Cyan 7 - White 8 - User Color
		1	UIntegerT	1		1		
		2	UIntegerT	1		3		
		3	UIntegerT	1		2		
		4	UIntegerT	1		4		
		5	UIntegerT	1		7		
Size of Tiers	2019d (0x7E3)	0	Record	5	R / W	-	Yes	0x00 - 0x14 (0.. 20)
		1	UIntegerT	1		4		
		2	UIntegerT	1		4		
		3	UIntegerT	1		4		
		4	UIntegerT	1		4		
		5	UIntegerT	1		4		
Blank between Tiers	2020d (0x7E4)	0	Boolean	1	R / W	false	Yes	false - Disable true - Enable
Direction of Flow	2021d (0x7E5)	0	UIntegerT	1	R / W	0	Yes	0 - Bottom up 1 - Top down

Level Meter Thresholds	2022d (0x7E6)	0	Record	20	R / W	-	Yes	0x00 - 0x64 (0.. 100)
		1	UIntegerT	1		0		
		2	UIntegerT	1		5		
		3	UIntegerT	1		10		
		4	UIntegerT	1		15		
		5	UIntegerT	1		20		
		6	UIntegerT	1		25		
		7	UIntegerT	1		30		
		8	UIntegerT	1		35		
		9	UIntegerT	1		40		
		10	UIntegerT	1		45		
		11	UIntegerT	1		50		
		12	UIntegerT	1		55		
		13	UIntegerT	1		60		
		14	UIntegerT	1		65		
		15	UIntegerT	1		70		
		16	UIntegerT	1		75		
		17	UIntegerT	1		80		
		18	UIntegerT	1		85		
		19	UIntegerT	1		90		
		20	UIntegerT	1		95		
Segment Colors	2023d (0x7E7)	0	Record	20	R / W	-	Yes	0 - Off
		1	UIntegerT	1		13		1 - Red
		2	UIntegerT	1		13		2
		3	UIntegerT	1		13		3
		4	UIntegerT	1		13		4
		5	UIntegerT	1		11		5 - Amber
		6	UIntegerT	1		11		6
		7	UIntegerT	1		11		7 - Lemmon
		8	UIntegerT	1		11		8
		9	UIntegerT	1		9		9 - Green
		10	UIntegerT	1		9		10
		11	UIntegerT	1		9		11 - Cyan
		12	UIntegerT	1		9		12
		13	UIntegerT	1		5		13 - Blue
		14	UIntegerT	1		5		14
		15	UIntegerT	1		5		15
		16	UIntegerT	1		5		16 - Purple
		17	UIntegerT	1		1		17
		18	UIntegerT	1		1		18
		19	UIntegerT	1		1		19
		20	UIntegerT	1		1		20
								21 - White
Segment LED Pattern	2024d (0x7E8)	0	Record	20	R / W	-	Yes	0 - Continuous
		1	UIntegerT	1		0		1 - Blinking Slow
		2	UIntegerT	1		0		2 - Blinking Mid
		3	UIntegerT	1		0		3 - Blinking Fast
		4	UIntegerT	1		0		9 - Flashing Slow
		5	UIntegerT	1		1		10 - Flashing Middle
		6	UIntegerT	1		1		11 - Flashing Fast
		7	UIntegerT	1		1		12 - Gradation blinking Slow
		8	UIntegerT	1		1		13 - Gradation blinking Middle
		9	UIntegerT	1		3		14 - Gradation blinking Fast
		10	UIntegerT	1		3		
		11	UIntegerT	1		3		
		12	UIntegerT	1		3		
		13	UIntegerT	1		10		
		14	UIntegerT	1		10		
		15	UIntegerT	1		10		
		16	UIntegerT	1		10		
		17	UIntegerT	1		11		
		18	UIntegerT	1		11		
		19	UIntegerT	1		11		
		20	UIntegerT	1		11		

Scope of Appearance	2025d (0x7E9)	0	UIntegerT	1	R / W	0	Yes	0 - All of segments 1 - Separate segments 2 - Only top segment
Animation Ending	2026d (0x7EA)	0	UIntegerT	1	R / W	1	Yes	0 - One way 1 - One round
User Preference Color Bank 1	2027d (0x7EB)	0	Record	20	R / W	-	Yes	0 - Off
		1	UIntegerT	1		0		1 - Red
		2	UIntegerT	1		0		2
		3	UIntegerT	1		0		3
		4	UIntegerT	1		0		4
		5	UIntegerT	1		0		5 - Amber
		6	UIntegerT	1		0		6
		7	UIntegerT	1		0		7 - Lemmon
		8	UIntegerT	1		0		8
		9	UIntegerT	1		0		9 - Green
		10	UIntegerT	1		0		10
		11	UIntegerT	1		0		11 - Cyan
		12	UIntegerT	1		0		12
		13	UIntegerT	1		0		13 - Blue
		14	UIntegerT	1		0		14
		15	UIntegerT	1		0		15
		16	UIntegerT	1		0		16 - Purple
		17	UIntegerT	1		0		17
		18	UIntegerT	1		0		18
		19	UIntegerT	1		0		19
		20	UIntegerT	1		0		20
								21 - White
User Preference Color Bank 2	2028d (0x7EC)	0	Record	20	R / W	-	Yes	0 - Off
		1	UIntegerT	1		0		1 - Red
		2	UIntegerT	1		0		2
		3	UIntegerT	1		0		3
		4	UIntegerT	1		0		4
		5	UIntegerT	1		0		5 - Amber
		6	UIntegerT	1		0		6
		7	UIntegerT	1		0		7 - Lemmon
		8	UIntegerT	1		0		8
		9	UIntegerT	1		0		9 - Green
		10	UIntegerT	1		0		10
		11	UIntegerT	1		0		11 - Cyan
		12	UIntegerT	1		0		12
		13	UIntegerT	1		0		13 - Blue
		14	UIntegerT	1		0		14
		15	UIntegerT	1		0		15
		16	UIntegerT	1		0		16 - Purple
		17	UIntegerT	1		0		17
		18	UIntegerT	1		0		18
		19	UIntegerT	1		0		19
		20	UIntegerT	1		0		20
								21 - White
User Preference Color Bank 3	2029d (0x7ED)	0	Record	20	R / W	-	Yes	0 - Off
		1	UIntegerT	1		0		1 - Red
		2	UIntegerT	1		0		2
		3	UIntegerT	1		0		3
		4	UIntegerT	1		0		4
		5	UIntegerT	1		0		5 - Amber
		6	UIntegerT	1		0		6
		7	UIntegerT	1		0		7 - Lemmon
		8	UIntegerT	1		0		8
		9	UIntegerT	1		0		9 - Green
		10	UIntegerT	1		0		10
		11	UIntegerT	1		0		11 - Cyan
		12	UIntegerT	1		0		12
		13	UIntegerT	1		0		13 - Blue
		14	UIntegerT	1		0		14
		15	UIntegerT	1		0		15
		16	UIntegerT	1		0		16 - Purple
		17	UIntegerT	1		0		17
		18	UIntegerT	1		0		18
		19	UIntegerT	1		0		19
		20	UIntegerT	1		0		20
								21 - White
Buzzer Pattern	2030d (0x7EE)	0	UIntegerT	1	R / W	0	Yes	0 - Buzzer Style 1 1 - Buzzer Style 2 2 - Buzzer Style 3 3 - Buzzer Style 4 4 - Buzzer Style 5 5 - Buzzer Style 6 6 - Buzzer Style 7 7 - Buzzer Style 8 8 - Buzzer Style 9

Events

Code	Name	Type	Description
0x0000	No error	Notification	No error
0x5000	Hardware error in the unit	Error	Replace the unit
0x6320	Parameter error	Error	Check the data sheet and the value

Error Types

Error	Name	Description
0x8000	Device application error - no	There is no detailed information available
0x8011	Index not available	Access to a non-existent index
0x8012	Subindex not available	Access to a non-existent subindex
0x8020	Service temporarily not available	On the parameters just cannot be accessed.
0x8023	Access denied	The device does not allow this in the current state
0x8030	Parameter value out of range	Write access to a read-only parameter
0x8033	Parameter length overrun	Written parameter value is out of range
0x8034	Parameter length underrun	Written parameter length is greater than allowed
0x8035	Function not available	Written parameter length is smaller than allowed
0x8036	Function temporarily unavailable	Written command is not supported by the device
0x8040	Invalid parameter set	Written command is not supported by the device in its current state
0x8041	Inconsistent parameter set	Typed single parameter value collides with the other parameter settings
0x8082	Application not ready	At the end of the block parameter transfer inconsistencies were detected.

Process Data

PDout : Simple-mode (Index 810)

	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
Byte 1	N/N	N/N	N/N	N/N	N/N	N/N	N/N	N/N
Byte 0	User Preference Select	Buzzer On/Off	5th Tier On/Off	4th Tier On/Off	3rd Tier On/Off	2nd Tier On/Off	1st Tier On/Off	

PDout : Level Mode (Index 810)

	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
Byte 1	N/N	Level Value						
Byte 0	User Preference Select	Buzzer On/Off	N/N	N/N	N/N	N/N	N/N	N/N

PDout : Animation Mode (Index 810)

	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
Byte 1	N/N	N/N	N/N	N/N	N/N	N/N	Animation Speed	
Byte 0	User Preference Select	Buzzer On/Off	N/N	N/N	N/N	Animation Reset	Animation Enable	

*1 On = true, Off = false

*2 User Preference Select

Value	Configuration
0	Not use
1	Bank 1 use
2	Bank 2 use
3	Bank 3 use

*3 Level Value = 0x00 - 0x64 (0.. 100)

*4 Animation Enable

Value	Configuration
false	Disable Animation
true	Enable Animation

*5 Animation Reset

Value	Configuration
false	No Animation Reset
true	Animation Reset

*6 Animation Speed

Value	Configuration
0	Slow
1	Middle
2	Fast

Revision History

Revision	Date	Details
-	09.Mar.'23	New