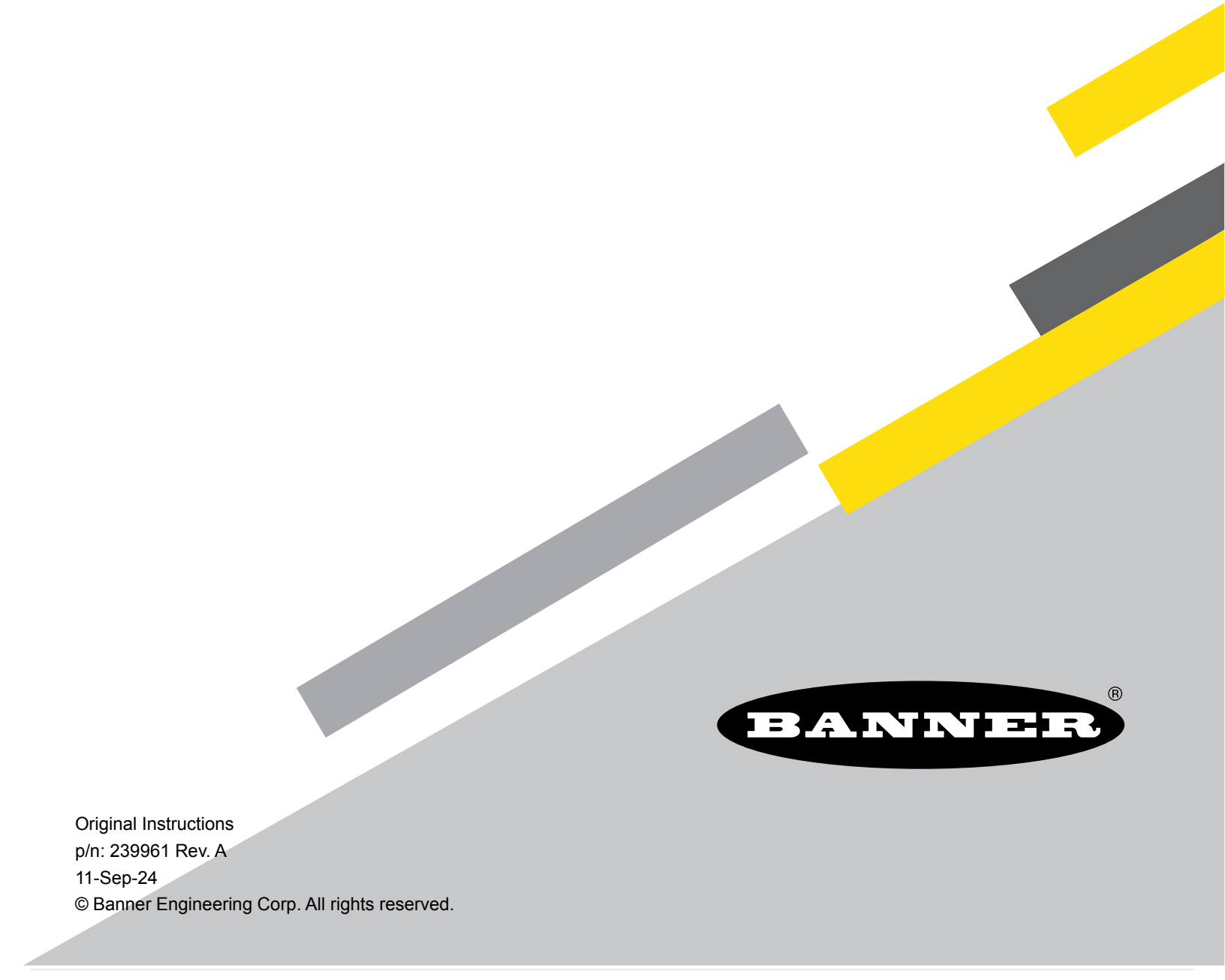
LCA130T Andon Control Box IO-Link Data Reference Guide



Original Instructions
p/n: 239961 Rev. A
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ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

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Communication Parameters 3

Chapter 1 IO-Link Data Map

This document refers to the following IODD file: Banner_Engineering-LCA130T-20240425-IODD1.1.xml. The IODD file and support files can be found on www.bannerengineering.com under the download section of the product family page.

Communication Parameters

The following communication parameters are used.

Parameter	Value	Parameter	Value
IO-Link revision	V1.1	Port class	A
Process data in length	2 bytes	SIO mode	No
Process data out length	20 bytes	Smart sensor profile	Yes
Bit rate	38400 bps	Block parameterization	Yes
Minimum cycle time	5 ms	Data storage	Yes
Device ID	0×060012		

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Chapter 2 Process Data

Process Data: State

ProcessData id=V_Pd_State (condition V_OperationMode == 0)

IO-Link Process Data In (Device to Master)

ProcessDataIn id=V_Pd_InState

- Bit Length: 16
- Data Type: 16-bit Record (subindex access not supported)

Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
1	8	2-bit UInteger	0 = Reserved, 1 = Off, 2 = On, 3 = Hold	Output 1 State	Output State. Related parameters are defined in output and touch settings parameter data.
2	10	2-bit UInteger	0 = Reserved, 1 = Off, 2 = On, 3 = Hold	Output 2 State	Output State. Related parameters are defined in output and touch settings parameter data.
3	12	2-bit UInteger	0 = Reserved, 1 = Off, 2 = On, 3 = Hold	Output 3 State	Output State. Related parameters are defined in output and touch settings parameter data.
4	14	2-bit UInteger	0 = Reserved, 1 = Off, 2 = On, 3 = Hold	Output 4 State	Output State. Related parameters are defined in output and touch settings parameter data.
5	0	2-bit UInteger	0 = Reserved, 1 = Off, 2 = On, 3 = Hold	Output 5 State	Output State. Related parameters are defined in output and touch settings parameter data.

Octet 0								
Bit offset	15	14	13	12	11	10	9	8
Subindex	4		3		2		1	
Element bit	1	0	1	0	1	0	1	0
Value	0	1	1	1	1	0	0	1
Example	Output 4 Off		Output 3 Hold		Output 2 On		Output 1 Off	

Octet 1								
Bit offset	7	6	5	4	3	2	1	0
Subindex	-	-	-	-	-	-	5	
Element bit							1	0
Value							0	1
Example							Output 5 Off	

IO-Link Process Data Out (Master to Device)

ProcessDataOut id=V_Pd_OutState

- Bit Length: 160
- Data Type: 160-bit Record (subindex access not supported)

Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
1	152	2-bit UInteger	0 = No Override, 1 = Off, 2 = On, 3 = Hold	Output 1 State	Output State. Related parameters are defined in output and touch settings parameter data.

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Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
2	144	2-bit UInteger	0 = No Override, 1 = Off, 2 = On, 3 = Hold	Output 2 State	Output State. Related parameters are defined in output and touch settings parameter data.
3	136	2-bit UInteger	0 = No Override, 1 = Off, 2 = On, 3 = Hold	Output 3 State	Output State. Related parameters are defined in output and touch settings parameter data.
4	128	2-bit UInteger	0 = No Override, 1 = Off, 2 = On, 3 = Hold	Output 4 State	Output State. Related parameters are defined in output and touch settings parameter data.
5	120	2-bit UInteger	0 = No Override, 1 = Off, 2 = On, 3 = Hold	Output 5 State	Output State. Related parameters are defined in output and touch settings parameter data.

Octet 0								
Bit offset	159	158	157	156	155	154	153	152
Subindex	-	-	-	-	-	-	1	
Element bit							1	0
Value							0	0
Example							Output 1 No Override	

Octet 1								
Bit offset	151	150	149	148	147	146	145	144
Subindex	-	-	-	-	-	-	2	
Element bit							1	0
Value							1	0
Example							Output 2 On	

Octet 2								
Bit offset	143	142	141	140	139	138	137	136
Subindex	-	-	-	-	-	-	3	
Element bit							1	0
Value							1	1
Example							Output 3 Hold	

Octet 3								
Bit offset	135	134	133	132	131	130	129	128
Subindex	-	-	-	-	-	-	4	
Element bit							1	0
Value							0	1
Example							Output 4 Off	

Octet 4								
Bit offset	127	126	125	124	123	122	121	120
Subindex	-	-	-	-	-	-	5	
Element bit							1	0
Value							0	0
Example							Output 5 No Override	

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Octet 5								
Bit offset	119	118	117	116	115	114	113	112
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 6								
Bit offset	111	110	109	108	107	106	105	104
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 7								
Bit offset	103	102	101	100	99	98	97	96
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 8								
Bit offset	95	94	93	92	91	90	89	88
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 9								
Bit offset	87	86	85	84	83	82	81	80
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 10								
Bit offset	79	78	77	76	75	74	73	72
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 11								
Bit offset	71	70	69	68	67	66	65	64
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 12								
Bit offset	63	62	61	60	59	58	57	56
Subindex	-	-	-	-	-	-	-	-

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Octet 12								
Value								
Example								

Octet 13								
Bit offset	55	54	53	52	51	50	49	48
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 14								
Bit offset	47	46	45	44	43	42	41	40
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 15								
Bit offset	39	38	37	36	35	34	33	32
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 16								
Bit offset	31	30	29	28	27	26	25	24
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 17								
Bit offset	23	22	21	20	19	18	17	16
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 18								
Bit offset	15	14	13	12	11	10	9	8
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

Octet 19								
Bit offset	7	6	5	4	3	2	1	0
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

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Process Data: Advanced

ProcessData id=V_Pd_Advanced (condition V_OperationMode == 1)

IO-Link Process Data In (Device to Master)

ProcessDataIn id=V_Pd_InAdvanced

- Bit Length: 16
- Data Type: 16-bit Record (subindex access not supported)

Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
1	8	Boolean	false = Off, true = On	Output 1 State	Output State. Related parameters are defined in output and touch settings parameter data.
2	9	Boolean	false = Off, true = On	Output 2 State	Output State. Related parameters are defined in output and touch settings parameter data.
3	10	Boolean	false = Off, true = On	Output 3 State	Output State. Related parameters are defined in output and touch settings parameter data.
4	11	Boolean	false = Off, true = On	Output 4 State	Output State. Related parameters are defined in output and touch settings parameter data.
5	12	Boolean	false = Off, true = On	Output 5 State	Output State. Related parameters are defined in output and touch settings parameter data.

Octet 0								
Bit offset	15	14	13	12	11	10	9	8
Subindex	-	-	-	5	4	3	2	1
Value				0	1	1	0	0
Example				Output 5 Off	Output 4 On	Output 3 On	Output 2 Off	Output 1 Off

Octet 1								
Bit offset	7	6	5	4	3	2	1	0
Subindex	-	-	-	-	-	-	-	-
Value								
Example								

IO-Link Process Data Out (Master to Device)

ProcessDataOut id=V_Pd_OutAdvanced

- Bit Length: 160
- Data Type: 160-bit Record (subindex access not supported)

Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
1	152	4-bit UInteger	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	Button 1 Animation Type	The animation type
2	156	2-bit UInteger	0 = Off, 1 = On, 2 = Pattern	Button 1 Output	The output state
3	144	3-bit UInteger	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	Button 1 Animation Pattern	The pattern of animation/haptic feedback
4	147	2-bit UInteger	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	Button 1 Animation Speed	The speed of the animation/haptic feedback
5	136	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 1 Color 1	The main color of the Animation. Custom Colors are defined in Parameter Data
6	141	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 1 Color 1 Intensity	The intensity of Color 1. Custom Intensity is defined in Parameter Data

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Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
7	128	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 1 Color 2	The secondary color of the Animation. Custom Colors are defined in Parameter Data
8	133	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 1 Color 2 Intensity	The intensity of Color 2. Custom Intensity is defined in Parameter Data
10	120	4-bit UInteger	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	Button 2 Animation Type	The animation type
11	124	2-bit UInteger	0 = Off, 1 = On, 2 = Pattern	Button 2 Output	The output state
12	112	3-bit UInteger	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	Button 2 Animation Pattern	The pattern of animation/haptic feedback
13	115	2-bit UInteger	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	Button 2 Animation Speed	The speed of the animation/haptic feedback
14	104	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 2 Color 1	The main color of the Animation. Custom Colors are defined in Parameter Data
15	109	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 2 Color 1 Intensity	The intensity of Color 1. Custom Intensity is defined in Parameter Data
16	96	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 2 Color 2	The secondary color of the Animation. Custom Colors are defined in Parameter Data
17	101	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 2 Color 2 Intensity	The intensity of Color 2. Custom Intensity is defined in Parameter Data
18	88	4-bit UInteger	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	Button 3 Animation Type	The animation type
19	92	2-bit UInteger	0 = Off, 1 = On, 2 = Pattern	Button 3 Output	The output state
20	80	3-bit UInteger	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	Button 3 Animation Pattern	The pattern of animation/haptic feedback
21	83	2-bit UInteger	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	Button 3 Animation Speed	The speed of the animation/haptic feedback
22	72	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 3 Color 1	The main color of the Animation. Custom Colors are defined in Parameter Data
23	77	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 3 Color 1 Intensity	The intensity of Color 1. Custom Intensity is defined in Parameter Data
24	64	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 3 Color 2	The secondary color of the Animation. Custom Colors are defined in Parameter Data
25	69	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 3 Color 2 Intensity	The intensity of Color 2. Custom Intensity is defined in Parameter Data
26	56	4-bit UInteger	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	Button 4 Animation Type	The animation type
27	60	2-bit UInteger	0 = Off, 1 = On, 2 = Pattern	Button 4 Output	The output state
28	48	3-bit UInteger	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	Button 4 Animation Pattern	The pattern of animation/haptic feedback
29	51	2-bit UInteger	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	Button 4 Animation Speed	The speed of the animation/haptic feedback

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Subindex	Bit Offset	Data Type	Allowed Values	Name	Description
30	40	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 4 Color 1	The main color of the Animation. Custom Colors are defined in Parameter Data
31	45	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 4 Color 1 Intensity	The intensity of Color 1. Custom Intensity is defined in Parameter Data
32	32	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 4 Color 2	The secondary color of the Animation. Custom Colors are defined in Parameter Data
33	37	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 4 Color 2 Intensity	The intensity of Color 2. Custom Intensity is defined in Parameter Data
34	24	4-bit UInteger	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	Button 5 Animation Type	The animation type
35	28	2-bit UInteger	0 = Off, 1 = On, 2 = Pattern	Button 5 Output	The output state
36	16	3-bit UInteger	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	Button 5 Animation Pattern	The pattern of animation/haptic feedback
38	19	2-bit UInteger	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	Button 5 Animation Speed	The speed of the animation/haptic feedback
38	8	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 5 Color 1	The main color of the Animation. Custom Colors are defined in Parameter Data
39	13	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 5 Color 1 Intensity	The intensity of Color 1. Custom Intensity is defined in Parameter Data
40	0	5-bit UInteger	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	Button 5 Color 2	The secondary color of the Animation. Custom Colors are defined in Parameter Data
41	5	3-bit UInteger	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	Button 5 Color 2 Intensity	The intensity of Color 2. Custom Intensity is defined in Parameter Data

Octet 0								
Bit offset	159	158	157	156	155	154	153	152
Subindex	-	-	2		1			
Element bit			1	0	3	2	1	0
Value			1	0	0	0	1	1
Example			Button 1 Output - Pattern		Button 1 Animation - Two Color Flash			

Octet 1								
Bit offset	151	150	149	148	147	146	145	144
Subindex	-	-	-	4		3		
Element bit				1	0	2	1	0
Value				0	0	0	0	0
Example				Button 1 Animation Speed - Slow		Button 1 Flash Pattern - Flash		

Octet 2								
Bit offset	143	142	141	140	139	138	137	136
Subindex	6			5				

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Octet 2								
Element bit	2	1	0	4	3	2	1	0
Value	0	0	1	0	1	0	1	0
Example	Button 1 Color 1 Intensity - Medium			Button 1 Color 1 - Violet				

Octet 3								
Bit offset	135	134	133	132	131	130	129	128
Subindex	8			7				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	0	0	1	1
Example	Button 1 Color 2 Intensity - High			Button 1 Color 2 - Amber				

Octet 4								
Bit offset	127	126	125	124	123	122	121	120
Subindex	-	-	11		10			
Element bit			1	0	3	2	1	0
Value			0	1	0	0	0	1
Example			Button 2 Output - On		Button 2 Animation Type 2 - Steady			

Octet 5								
Bit offset	119	118	117	116	115	114	113	112
Subindex	-	-	-	13		12		
Element bit				1	0	2	1	0
Value				0	0	0	0	0
Example				Button 2 Animation Speed - Slow		Button 2 Animation Pattern - Flash		

Octet 6								
Bit offset	111	110	109	108	107	106	105	104
Subindex	15			14				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	1	0	1	1
Example	Button 2 Color 1 Intensity - High			Button 2 Color 1 - Magenta				

Octet 7								
Bit offset	103	102	101	100	99	98	97	96
Subindex	17			16				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	0	0	0	0
Example	Button 2 Color 2 Intensity - High			Button 2 Color 2 - Green				

Octet 8								
Bit offset	95	94	93	92	91	90	89	88
Subindex	-	-	19		18			
Element bit			1	0	3	2	1	0

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Octet 8								
Value			0	0	0	0	0	0
Example			Button 3 Output - Off		Button 3 Animation Type - Off			

Octet 9								
Bit offset	87	86	85	84	83	82	81	80
Subindex	-	-	-	21		20		
Element bit				1	0	2	1	0
Value				0	1	0	0	1
Example				Button 3 Animation Speed - Medium		Button 3 Animation Pattern - Strobe		

Octet 10								
Bit offset	79	78	77	76	75	74	73	72
Subindex	23			22				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	0	0	0	0
Example	Button 3 Color 1 Intensity - High			Button 3 Color 1 - Green				

Octet 11								
Bit offset	71	70	69	68	67	66	65	64
Subindex	25			24				
Element bit	2	1	0	4	3	2	1	0
Value	0	1	0	0	0	0	1	0
Example	Button 3 Color 2 Intensity - Low			Button 3 Color 2 - Orange				

Octet 12								
Bit offset	63	62	61	60	59	58	57	56
Subindex	-	-	27		26			
Element bit			1	0	3	2	1	0
Value			0	1	0	1	0	0
Example			Button 4 Output State - On		Button 4 Animation Type - Intensity Sweep			

Octet 13								
Bit offset	55	54	53	52	51	50	49	48
Subindex	-	-	-	29		28		
Element bit				1	0	2	1	0
Value				1	0	0	0	0
Example				Button 4 Animation Speed - Fast		Button 4 Animation Pattern - Flash		

Octet 14								
Bit offset	47	46	45	44	43	42	41	40
Subindex	31			30				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	1	0	1	0	0	0

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Octet 14								
Example	Button 4 Color 1 Intensity - Medium			Button 4 Color 1 - Sky Blue				

Octet 15								
Bit offset	39	38	37	36	35	34	33	32
Subindex	33			32				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	0	0	0	0
Example	Button 4 Color 2 Intensity - High			Button 4 Color 2 - Green				

Octet 16								
Bit offset	31	30	29	28	27	26	25	24
Subindex	-	-	35		34			
Element bit			1	0	3	2	1	0
Value			0	0	0	0	0	0
Example			Button 5 Output - Off		Button 5 Animation Type - Off			

Octet 17								
Bit offset	23	22	21	20	19	18	17	16
Subindex	-	-	-	37		36		
Element bit				1	0	2	1	0
Value				0	0	0	0	0
Example				Button 5 Animation Speed - Slow		Button 5 Animation Pattern - Flash		

Octet 18								
Bit offset	15	14	13	12	11	10	9	8
Subindex	39			38				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	0	0	0	0
Example	Button 5 Color 1 Intensity - High			Button 5 Color 1 - Green				

Octet 19								
Bit offset	7	6	5	4	3	2	1	0
Subindex	41			40				
Element bit	2	1	0	4	3	2	1	0
Value	0	0	0	0	0	0	0	0
Example	Button 5 Color 2 Intensity - High			Button 5 Color 2 - Green				

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Chapter Contents

Chapter 3 Parameters Set Using IO-Link

Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
0	1-16	Direct Parameters 1	128			rw	
1	1-16	Direct Parameters 2	128			rw	
2		Standard Command	8	130 = Restore Factory Settings		wo	
3-11							
12		**Direct Access Locks**	16				
	1	Parameter (write) Access Lock	1	0 = Off, 1 = On	False	rw	y
	2	Data Storage Lock	1	0 = Off, 1 = On	False	rw	y
	3	Local Parameterization Lock	1	0 = Off, 1 = On		rw	y
	4	Local User Interface Lock	1	0 = Off, 1 = On		rw	y
13-15							
16		Vendor Name string	240	Banner Engineering Corporation		ro	
17		Vendor Text string	232	More Sensors. More Solutions.		ro	
18		Product Name string	256	LCA130T		ro	
19		Product ID string	256	LCA130T*KQ		ro	
20		Product Text string	208	LCA130T Andon Control Box with IO-Link		ro	
21		Serial Number	128			ro	
22		Hardware Version	512			ro	
23		Firmware Version	64			ro	
24		App Specific Tag (user defined)	256			rw	y
25-35							
36		Device Status	8	0 = Device is OK 1 = Maintenance required 2 = Out of specification 3 = Functional check 4 = Failure 5–255 = Reserved		ro	
37		Detailed Device Status	Array[6] of 3-octet			ro	
38-79							
80		Operation Mode	3	0 = State, 1 = Advanced	0	rw	y
81		**Setting**	24				
	1	Custom Intensity (0 - 100%)	8	0..100	100	rw	y
	2	Custom Flash Rate (0.5 - 25.5 Hz)	8	5..255	15	rw	y
	3	Restrict To Gamut	8	0 = Off, 1 = On	0	rw	y
82		**Touch Settings**					
	1	Touch Sensitivity	2	0 = Low 1 = Standard 2 = High	1	rw	
	2	Sensor 1 Function	1	false = Momentary, true = Latched	True	rw	
	3	Sensor 2 Function	1	false = Momentary, true = Latched	True	rw	
	4	Sensor 3 Function	1	false = Momentary, true = Latched	True	rw	
	5	Sensor 4 Function	1	false = Momentary, true = Latched	True	rw	
	6	Sensor 5 Function	1	false = Momentary, true = Latched	True	rw	
	7	Sensor 1 Hold	1	false = Disabled, true = Enabled	True	rw	

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
	8	Sensor 2 Hold	1	false = Disabled, true = Enabled	True	rw	
	9	Sensor 3 Hold	1	false = Disabled, true = Enabled	True	rw	
	10	Sensor 4 Hold	1	false = Disabled, true = Enabled	True	rw	
	11	Sensor 5 Hold	1	false = Disabled, true = Enabled	True	rw	
83							
84		**Button 1 Parameters**					
	1	Off Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	0	rw	y
	2	Off Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	3	Off Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	4	Off Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	5	Off Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	6	Off Off Delay (ms)	16	0..65535	0	rw	y
	7	Off Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	8	Off Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	9	Off Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	10	Off Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	11	On Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	1	rw	y
	12	On Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	13	On Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	14	On Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	15	On Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	16	On Off Delay (ms)	16	0..65535	0	rw	y
	17	On Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	18	On Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	19	On Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	20	On Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	21	Hold Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	2	rw	y
	22	Hold Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	23	Hold Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	24	Hold Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	25	Hold Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	26	Hold Off Delay (ms)	16	0..65535	0	rw	y
	27	Hold Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	28	Hold Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
	29	Hold Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	30	Hold Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
85		**Button 2 Parameters**					
	1	Off Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	0	rw	y
	2	Off Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	3	Off Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	4	Off Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	5	Off Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	6	Off Off Delay (ms)	16	0..65535	0	rw	y
	7	Off Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	8	Off Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	9	Off Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	10	Off Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	11	On Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	1	rw	y
	12	On Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	13	On Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	14	On Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	15	On Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	16	On Off Delay (ms)	16	0..65535	0	rw	y
	17	On Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	18	On Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	19	On Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	20	On Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	21	Hold Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	2	rw	y
	22	Hold Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	23	Hold Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	24	Hold Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	25	Hold Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	26	Hold Off Delay (ms)	16	0..65535	0	rw	y
	27	Hold Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	28	Hold Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
	29	Hold Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	30	Hold Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
86		**Button 3 Parameters**					
	1	Off Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	0	rw	y
	2	Off Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	3	Off Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	4	Off Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	5	Off Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	6	Off Off Delay (ms)	16	0..65535	0	rw	y
	7	Off Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	8	Off Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	9	Off Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	10	Off Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	11	On Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	1	rw	y
	12	On Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	13	On Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	14	On Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	15	On Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	16	On Off Delay (ms)	16	0..65535	0	rw	y
	17	On Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	18	On Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	19	On Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	20	On Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	21	Hold Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	2	rw	y
	22	Hold Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	23	Hold Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	24	Hold Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	25	Hold Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	26	Hold Off Delay (ms)	16	0..65535	0	rw	y
	27	Hold Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	28	Hold Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
	29	Hold Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	30	Hold Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
87		**Button 4 Parameters**					
	1	Off Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	0	rw	y
	2	Off Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	3	Off Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	4	Off Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	5	Off Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	6	Off Off Delay (ms)	16	0..65535	0	rw	y
	7	Off Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	8	Off Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	9	Off Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	10	Off Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	11	On Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	1	rw	y
	12	On Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	13	On Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	14	On Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	15	On Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	16	On Off Delay (ms)	16	0..65535	0	rw	y
	17	On Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	18	On Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	19	On Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	20	On Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	21	Hold Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	2	rw	y
	22	Hold Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	23	Hold Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	24	Hold Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	25	Hold Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	26	Hold Off Delay (ms)	16	0..65535	0	rw	y
	27	Hold Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	28	Hold Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
	29	Hold Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	30	Hold Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
88		**Button 5 Parameters**					
	1	Off Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	0	rw	y
	2	Off Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	3	Off Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	4	Off Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	5	Off Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	6	Off Off Delay (ms)	16	0..65535	0	rw	y
	7	Off Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	8	Off Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	9	Off Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	10	Off Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	11	On Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	1	rw	y
	12	On Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	13	On Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	14	On Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	15	On Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	16	On Off Delay (ms)	16	0..65535	0	rw	y
	17	On Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	18	On Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	19	On Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	20	On Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
	21	Hold Animation Type	4	0 = Off, 1 = Steady, 2 = Flash, 3 = Two Color Flash, 4 = Intensity Sweep, 5 = Color Sweep	2	rw	y
	22	Hold Output	2	0 = Off, 1 = On, 2 = Pattern	0	rw	y
	23	Hold Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y
	24	Hold Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y
	25	Hold Off Delay Type	1	false = Leading Edge, true = Trailing Edge	0	rw	y
	26	Hold Off Delay (ms)	16	0..65535	0	rw	y
	27	Hold Color 1	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	11	rw	y
	28	Hold Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?
	29	Hold Color 2	5	0 = Green, 1 = Red, 2 = Orange, 3 = Amber, 4 = Yellow, 5 = Lime Green, 6 = Spring Green, 7 = Cyan, 8 = Sky Blue, 9 = Blue, 10 = Violet, 11 = Magenta, 12 = Rose, 13 = White, 14 = Custom1, 15 = Custom2	0	rw	y
	30	Hold Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y
89							
90		**Custom Color 1**	24				
	1	Red	8	0..255	255	rw	y
	2	Green	8	0..255	255	rw	y
	3	Blue	8	0..255	255	rw	y
91		**Custom Color 2**	24				
	1	Red	8	0..255	255	rw	y
	2	Green	8	0..255	255	rw	y
	3	Blue	8	0..255	255	rw	y

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Chapter Contents

Chapter 4 IO-Link Events

Events and Error Types are acyclic transmissions from the IO-Link device to the IO-Link master. Events can be error messages and/or warning or maintenance data.

Event Types		
Code	**Type**	**Description**
0 (0x0000)	Notification	No malfunction
20480 (0x5000)	Error	Device hardware fault/Device exchange

Error Types			
Code	**Additional Code**	**Name**	**Description**
128 (0x80)	0 (0x00)	Device application error - no details	Service has been refused by the device application and no detailed information of the incident is available
	17 (0x11)	Index not available	Access occurs to a not existing device
	18 (0x12)	Subindex not available	Access occurs to a not existing subindex
	32 (0x20)	Service temporarily not available	Parameter is not accessible because of the current state of the device application
	35 (0x23)	Access denied	Write access on a read-only parameter
	48 (0x30)	Parameter value out of range	Written parameter value is outside its permitted value range
	49 (0x31)	Parameter value above limit	Written parameter value is above its specific value limit
	51 (0x33)	Parameter length overrun	Written parameter length is above its predefined length
	52 (0x34)	Parameter length underrun	Written parameter length is below its predefined length
	53 (0x35)	Function not available	Written command is not supported by the device application
	54 (0x36)	Function temporarily unavailable	Written command is not available because of the current state of the device application
	65 (0x41)	Inconsistent parameter set	Parameter inconsistencies were found at the end of the block parameter transfer, device plausibility check failed

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Facebook



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