WLS15 Pro with PICK-IQ™ Device Register Map

Instruction Manual

Original Instructions
219137 Rev. A
1 April 2021
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219137

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1 Holding Registers

1.1 Holding Registers for Device Information

Address without Offset	Address with Offset	Description	Holding Register Representation
1000	1001	Low word model number	Example: 0x0002A734 (hex) = 173876 (dec) High word = 0x0002 Low word = 0xA734
1001	1002	High word model number	
1002	1003	Model version (BCD)	
1003-1018	1004-1019	Model name, string	
1019	1020	Low word configuration number	Example: 0x00016D43 (hex) = 93507 (dec) High word = 0x0001 Low word = 0x6D43
1020	1021	High word configuration number	
1021	1022	Configuration version (BCD)	
1022-1037	1023-1038	Serial number/date code, string	
1038-1053	1039-1054	Serial number, string	

1.2 Holding Registers to Configure Modbus Communication

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
6100	6101	Device ID: the Modbus individual node ID	1–247	1	Yes
6101	6102	Baud rate	12 = 1200 24 = 2400 48 = 4800 96 = 9600 192 = 19200 384 = 38400	192	Yes
6102	6103	Parity	0 = none 1 = odd 2 = even	0	Yes
6103	6104	Stop Bits	1 = 1 2 = 2 3 = 1.5	1	Yes

1.3 Holding Registers to Restore Factory Defaults

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
6600	6601	Restore factory defaults	0 = Disabled 1 - 65535 = Enable	0	No
6601	6602	Restore factory defaults key 1	43690(0xAAAA) = Enable	0	No
6602	6603	Restore factory defaults key 2	21845(0x5555) = Enable	0	No

1.4 Holding Registers for Device-Specific Configuration

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2200	2201	Operating Mode Selection	0 = Segment Mode 1 = Run Mode 2 = Level Mode 3 = Dim and Blend Mode 4 = Gauge Mode 5 = LED Mode 6= Demo	1	Yes

1.5 Holding Registers to Configure Run Mode

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2000	2001	Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	0	No
2001	2002	Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	No

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2002	2003	Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	No
2003	2004	Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	No
2004	2005	Pulse Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	No
2005	2006	Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	No
2006	2007	Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	No
2007	2008	Scroll/Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	No
2008	2009	Percent Width of Color 1	1-100 = Percent Width of Color 1	0	No
2009	2010	Direction	0 = Up 1 = Down	0	No

1.6 Holding Registers to Configure Segment Mode

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2000	2001	Segment 1	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2001	2002	Segment 2	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2002	2003	Segment 3	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2003	2004	Segment 4	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2004	2005	Segment 5	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2005	2006	Segment 6	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2006	2007	Segment 7	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2007	2008	Segment 8	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2008	2009	Segment 9	0 = Off 1 = On 2 = Flash 3 = Animation	0	No
2009	2010	Segment 10	0 = Off 1 = On 2 = Flash 3 = Animation	0	No

1.7 Holding Registers to Configure Level Mode

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2000	2001	Level Value	0-65535	0	No

1.8 Holding Registers to Configure Dim and Blend Mode

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2000	2001	Dim and Blend Mode Value	0-65535	0	No

1.9 Holding Registers to Configure Gauge Mode

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2000	2001	Gauge Value	0-65535	0	No

1.10 Holding Registers to Configure LED Mode

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2000	2001	LED 1 Color, LED 2 Color, LED 3 Color, LED 4 Color	0 = Off 1 = Green 2 = Red 3 = Orange 4 = Amber 5 = Yellow 6 = Lime Green 7 = Spring Green 8 = Cyan 9 = Sky Blue 10 = Blue 11 = Violet 12 = Magenta 13 = Rose 14 = Daylight White (5000K) 15 = Custom 1	0	No
2001	2002	LED 5 Color, LED 6 Color, LED 7 Color, LED 8 Color			No
2002	2003	LED 9 Color, LED 10 Color, LED 11 Color, LED 12 Color			No
...	...	...			...
2015	2016	LED 61 Color, LED 62 Color, LED 63 Color, LED 64 Color			No

1.11 Holding Registers to Configure Segment Mode Settings

Table 1: Segment Mode Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2300	2301	Segment Mode Number of Segments	0 = Manual 1 = 1 Segment 2 = 2 Segment 3 = 3 Segment 4 = 4 Segment 5 = 5 Segment 6 = 6 Segment 7 = 7 Segment 8 = 8 Segment 9 = 9 Segment 10 = 10 Segment	3	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2301	2302	Segment Mode Background Color	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	13	Yes
2302	2303	Segment Mode Background Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	3	Yes
2303	2304	Segment Mode Animation Sync	0 = Disabled 1 = Enabled	1	Yes

Table 2: Segment 1 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2310	2311	Segment Mode Segment 1 Basic Color	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	1	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2311	2312	Segment Mode Segment 1 Basic Flash Rate	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2312	2313	Segment Mode Segment 1 Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	0	Yes
2313	2314	Segment Mode Segment 1 Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	Yes
2314	2315	Segment Mode Segment 1 Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2315	2316	Segment Mode Segment 1 Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2316	2317	Segment Mode Segment 1 Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2317	2318	Segment Mode Segment 1 Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	1	Yes
2318	2319	Segment Mode Segment 1 Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2319	2320	Segment Mode Segment 1 Scroll/Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2320	2321	Segment Mode Segment 1 Color 1 Percent	1-100 = Percent Width of Color 1	50	Yes
2321	2322	Segment Mode Segment 1 Direction	0 = Up 1 = Down	0	Yes
2322	2323	Segment Mode Segment 1 Offset/ Threshold Marker Offset	0-63	0	Yes
2323	2324	Segment Mode Segment 1 Width/ Threshold Marker Width	0-63	0	Yes

Table 3: Segment 2 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2324	2325	Segment Mode Segment 2 Basic Color	Same as Segment 1	4	Same as Segment 1
2325	2326	Segment Mode Segment 2 Basic Flash Rate		Same as Segment 1	
2326	2327	Segment Mode Segment 2 Animation			
...	...	...			
2337	2338	Segment Mode Segment 2 Width/ Threshold Marker Width			

Table 4: Segment 3 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2338	2339	Segment Mode Segment 3 Basic Color	Same as Segment 1	0	Same as Segment 1
2339	2340	Segment Mode Segment 3 Basic Flash Rate		Same as Segment 1	
2340	2341	Segment Mode Segment 3 Animation			
...	...	...			
2351	2352	Segment Mode Segment 3 Width/ Threshold Marker Width			

Table 5: Segment 4 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2352	2353	Segment Mode Segment 4 Basic Color	Same as Segment 1	9	Same as Segment 1
2353	2354	Segment Mode Segment 4 Basic Flash Rate		Same as Segment 1	
2354	2355	Segment Mode Segment 4 Animation			
...	...	...			
2365	2366	Segment Mode Segment 4 Width/ Threshold Marker Width			

Table 6: Segment 5 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2366	2367	Segment Mode Segment 5 Basic Color	Same as Segment 1	13	Same as Segment 1
2367	2368	Segment Mode Segment 5 Basic Flash Rate		Same as Segment 1	
2368	2369	Segment Mode Segment 5 Animation			
...	...	...			
2379	2380	Segment Mode Segment 5 Width/ Threshold Marker Width			

Table 7: Segment 6 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2380	2381	Segment Mode Segment 6 Basic Color	Same as Segment 1	2	Same as Segment 1
2381	2382	Segment Mode Segment 6 Basic Flash Rate		Same as Segment 1	
2382	2383	Segment Mode Segment 6 Animation			
...	...	...			
2393	2394	Segment Mode Segment 6 Width/ Threshold Marker Width			

Table 8: Segment 7 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2394	2395	Segment Mode Segment 7 Basic Color	Same as Segment 1	11	Same as Segment 1
2395	2396	Segment Mode Segment 7 Basic Flash Rate		Same as Segment 1	
2396	2397	Segment Mode Segment 7 Animation			
...	...	...			
2407	2408	Segment Mode Segment 7 Width/ Threshold Marker Width			

Table 9: Segment 8 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2408	2409	Segment Mode Segment 8 Basic Color	Same as Segment 1	8	Same as Segment 1
2409	2410	Segment Mode Segment 8 Basic Flash Rate		Same as Segment 1	
2410	2411	Segment Mode Segment 8 Animation			
...	...	...			
2421	2422	Segment Mode Segment 8 Width/ Threshold Marker Width			

Table 10: Segment 9 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2422	2423	Segment Mode Segment 9 Basic Color	Same as Segment 1	3	Same as Segment 1
2423	2424	Segment Mode Segment 9 Basic Flash Rate		Same as Segment 1	
2424	2425	Segment Mode Segment 9 Animation			
...	...	...			
2435	2436	Segment Mode Segment 9 Width/ Threshold Marker Width			

Table 11: Segment 10 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2436	2437	Segment Mode Segment 10 Basic Color	Same as Segment 1	10	Same as Segment 1
2437	2438	Segment Mode Segment 10 Basic Flash Rate		Same as Segment 1	
2438	2439	Segment Mode Segment 10 Animation			
...	...	...			
2450	2451	Segment Mode Segment 10 Width/ Threshold Marker Width			

1.12 Holding Registers to Configure Level Mode Settings

Table 12: Level Mode Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2500	2501	Level Mode Background Color	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	13	Yes
2501	2502	Level Mode Background Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	3	Yes
2502	2503	Level Mode Dominance	0 = Non-Dominant 1 = Dominant	0	Yes
2503	2504	Level Mode Subsegment Style	0 = Steady 1 = Analog	1	Yes
2504	2505	Level Mode Filter Level	0 = None 1 = Low 2 = Medium 3 = High	0	Yes
2505	2506	Level Mode Hysteresis	0 = None 1 = Low 2 = Medium 3 = High	0	Yes
2506	2507	Level Mode Fullscale Value	1-65535	100	Yes
2507	2508	Level Mode Threshold Markers Type (Define Parameters in Segment Configuration)	0 = Off 1 = Non-Dominant 2 = Dominant	0	Yes

Table 13: Base Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2510	2511	Level Mode Base Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	1	Yes
2511	2512	Level Mode Base Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	Yes
2512	2513	Level Mode Base Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2513	2514	Level Mode Base Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2514	2515	Level Mode Base Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2515	2516	Level Mode Base Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	1	Yes
2516	2517	Level Mode Base Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2517	2518	Level Mode Base Scroll/Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2518	2519	Level Mode Base Color 1 Percent	0-100 = Percent Width of Color 1	50	Yes
2519	2520	Level Mode Base Direction	0 = Up 1 = Down	0	Yes

Table 14: Threshold 1 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2520	2521	Level Mode Threshold 1 is Enable	0 = Threshold Disabled Non-0 = Threshold Enabled	0	Yes
2521	2522	Level Mode Threshold 1 Percent Value	0-100	20	Yes
2522	2523	Level Mode Threshold 1 Type	0 = Less Than 1 = Greater Than	0	Yes
2523	2524	Level Mode Threshold 1 Is Override	0 = Non-Override Mode Non-0 = Override Mode	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2524	2525	Level Mode Threshold 1 Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	0	Yes
2525	2526	Level Mode Threshold 1 Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	Yes
2526	2527	Level Mode Threshold 1 Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2527	2528	Level Mode Threshold 1 Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2528	2529	Level Mode Threshold 1 Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2529	2530	Level Mode Threshold 1 Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	1	Yes
2530	2531	Level Mode Threshold 1 Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2531	2532	Level Mode Threshold 1 Scroll/Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2532	2533	Level Mode Threshold 1 Color 1 Percent	0-100 = Percent Width of Color 1	50	Yes
2533	2534	Level Mode Threshold 1 Direction	0 = Up 1 = Down	0	Yes

Table 15: Threshold 2 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2534	2535	Level Mode Threshold 2 is Enable	Same as Threshold 1	Same as Threshold 1	Same as Threshold 1
2535	2536	Level Mode Threshold 2 Percent Value			
2536	2537	Level Mode Threshold 2 Type			
...	...	...			
2547	2548	Level Mode Threshold 2 Direction			

Table 16: Threshold 3 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2548	2549	Level Mode Threshold 3 is Enable	Same as Threshold 1	Same as Threshold 1	Same as Threshold 1
2549	2550	Level Mode Threshold 3 Percent Value			
2550	2551	Level Mode Threshold 3 Type			

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
...	...	...			
2561	2562	Level Mode Threshold 3 Direction			

Table 17: Threshold 4 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2562	2563	Level Mode Threshold 4 is Enable	Same as Threshold 1	Same as Threshold 1	Same as Threshold 1
2563	2564	Level Mode Threshold 4 Percent Value			
2564	2565	Level Mode Threshold 4 Type			
...	...	...			
2575	2576	Level Mode Threshold 4 Direction			

1.13 Holding Registers to Configure Dim and Blend Mode Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2600	2601	Dim and Blend Mode Number of Colors	0 = 1 Color 1 = 2 Color 2 = 3 Color	0	Yes
2601	2602	Dim and Blend Mode Full Scale	1-65535	100	Yes
2602	2603	Dim and Blend Mode Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	13	Yes
2603	2604	Dim and Blend Mode Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2604	2605	Dim and Blend Mode Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	Yes
2605	2606	Dim and Blend Mode Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2606	2607	Dim and Blend Mode Color 3	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	Yes
2607	2608	Dim and Blend Mode Color 3 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes

1.14 Holding Registers to Configure Gauge Mode Settings

Table 18: Gauge Mode Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2700	2701	Gauge Mode Fullscale Value	1-65535	100	Yes
2701	2702	Gauge Mode Threshold Markers Type (Define Parameters in Segment Configuration)	0 = Off 1 = Non-Dominant 2 = Dominant	0	Yes

Table 19: Base Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2710	2711	Gauge Mode Base Main Percent Width	0-100	20	Yes
2711	2712	Gauge Mode Base Main Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	1	Yes
2712	2713	Gauge Mode Base Main Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	0	Yes
2713	2714	Gauge Mode Base Main Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2714	2715	Gauge Mode Base Main Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2715	2716	Gauge Mode Base Main Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes
2716	2717	Gauge Mode Base Main Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	1	Yes
2717	2718	Gauge Mode Base Main Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2718	2719	Gauge Mode Base Main Scroll/Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2719	2720	Gauge Mode Base Main Color 1 Percent	0-100 = Percent Width of Color 1	50	Yes
2720	2721	Gauge Mode Base Main Direction	0 = Up 1 = Down	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2721	2722	Gauge Mode Base Background Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	1	Yes
2722	2723	Gauge Mode Base Background Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	13	Yes
2723	2724	Gauge Mode Base Background Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	1	Yes
2724	2725	Gauge Mode Base Background Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2725	2726	Gauge Mode Base Background Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2726	2727	Gauge Mode Base Background Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	9	Yes
2727	2728	Gauge Mode Base Background Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	1	Yes
2728	2729	Gauge Mode Base Background Scroll/ Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2729	2730	Gauge Mode Base Background Color 1 Percent	0-100 = Percent Width of Color 1	50	Yes
2730	2731	Gauge Mode Base Background Direction	0 = Up 1 = Down	0	Yes

Table 20: Threshold 1 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2740	2741	Gauge Mode Threshold 1 is Enable	0 = Threshold Disabled Non-0 = Threshold Enabled	1	Yes
2741	2742	Gauge Mode Threshold 1 Percent Value	0-100	20	Yes
2742	2743	Gauge Mode Threshold 1 Type	0 = Less Than 1 = Greater Than	0	Yes
2743	2744	Gauge Mode Threshold 1 Percent Width	0-100	20	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2744	2745	Gauge Mode Threshold 1 Main Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	1	Yes
2745	2746	Gauge Mode Threshold 1 Main Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	1	Yes
2746	2747	Gauge Mode Threshold 1 Main Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2747	2748	Gauge Mode Threshold 1 Main Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2748	2749	Gauge Mode Threshold 1 Main Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2749	2750	Gauge Mode Threshold 1 Main Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	4	Yes
2750	2751	Gauge Mode Threshold 1 Main Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2751	2752	Gauge Mode Threshold 1 Main Scroll/ Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2752	2753	Gauge Mode Threshold 1 Main Color 1 Percent	0-100 = Percent Width of Color 1	50	Yes
2753	2754	Gauge Mode Threshold 1 Main Direction	0 = Up 1 = Down	0	Yes
2754	2755	Gauge Mode Threshold 1 Background Animation	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = Two Color Shift 5 = Ends Steady 6 = Ends Flash 7 = Scroll 8 = Center Scroll 9 = Bounce 10 = Center Bounce 11 = Intensity Sweep 12 = Two Color Sweep 13 = Spectrum 14 = Single End Steady 15 = Single End Flash	1	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2755	2756	Gauge Mode Threshold 1 Background Color 1	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	13	Yes
2756	2757	Gauge Mode Threshold 1 Background Color 1 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	1	Yes
2757	2758	Gauge Mode Threshold 1 Background Speed	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Yes
2758	2759	Gauge Mode Threshold 1 Background Pattern	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Yes
2759	2760	Gauge Mode Threshold 1 Background Color 2	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 = Daylight White (5000K) 14 = Custom 1 15 = Custom 2 16 = Incandescent White (2700K) 17 = Warm White (3000K) 18 = Fluorescent White (4100K) 19 = Neutral White (5700K) 20 = Cool White (6500K)	9	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2760	2761	Gauge Mode Threshold 1 Background Color 2 Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2761	2762	Gauge Mode Threshold 1 Background Scroll/Bounce Style	0 = Solid 1 = Tail 2 = Ripple	0	Yes
2762	2763	Gauge Mode Threshold 1 Background Color 1 Percent	0-100 = Percent Width of Color 1	50	Yes
2763	2764	Gauge Mode Threshold 1 Background Direction	0 = Up 1 = Down	0	Yes

Table 21: Threshold 2 Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2770	2771	Gauge Mode Threshold 2 is Enable	Same as Threshold 1	1	Yes
2771	2772	Gauge Mode Threshold 2 Percent Value		80	Yes
2772	2773	Gauge Mode Threshold 2 Type		1	Yes
2773	2774	Gauge Mode Threshold 2 Percent Width		20	Yes
2774	2775	Gauge Mode Threshold 2 Main Animation		1	Yes
2775	2776	Gauge Mode Threshold 2 Main Color 1		1	Yes
2776	2777	Gauge Mode Threshold 2 Main Color 1 Intensity		0	Yes
2777	2778	Gauge Mode Threshold 2 Main Speed		0	Yes
2778	2779	Gauge Mode Threshold 2 Main Pattern		0	Yes
2779	2780	Gauge Mode Threshold 2 Main Color 2		4	Yes
2780	2781	Gauge Mode Threshold 2 Main Color 2 Intensity		0	Yes
2781	2782	Gauge Mode Threshold 2 Main Scroll/ Bounce Style		0	Yes
2782	2783	Gauge Mode Threshold 2 Main Color 1 Percent		50	Yes
2783	2784	Gauge Mode Threshold 2 Main Direction		0	Yes
2784	2785	Gauge Mode Threshold 2 Background Animation		1	Yes
2785	2786	Gauge Mode Threshold 2 Background Color 1		13	Yes
2786	2787	Gauge Mode Threshold 2 Background Color 1 Intensity		0	Yes
2787	2788	Gauge Mode Threshold 2 Background Speed		0	Yes
2788	2789	Gauge Mode Threshold 2 Background Pattern		0	Yes
2789	2790	Gauge Mode Threshold 2 Background Color 2		9	Yes

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2790	2791	Gauge Mode Threshold 2 Background Color 2 Intensity		0	Yes
2791	2792	Gauge Mode Threshold 2 Background Scroll/Bounce Style		0	Yes
2792	2793	Gauge Mode Threshold 2 Background Color 1 Percent		50	Yes
2793	2794	Gauge Mode Threshold 2 Background Direction		0	Yes

1.15 Holding Registers to Configure Custom Settings

Address without Offset	Address with Offset	Description	Holding Register Representation	Default Value	Saved
2800	2801	LED Mode Intensity	0 = High 1 = Low 2 = Medium 3 = Off 4 = Custom	0	Yes
2801	2802	Orientation	0 = Right Side Up 1 = Upside Down	0	Yes
2802	2803	Custom Intensity	0-100	100	Yes
2803	2804	Custom Speed	1-255	10	Yes
2804	2805	Custom Color 1 Red	0-255	255	Yes
2805	2806	Custom Color 1 Green	0-255	255	Yes
2806	2807	Custom Color 1 Blue	0-255	255	Yes
2807	2808	Custom Color 2 Red	0-255	255	Yes
2808	2809	Custom Color 2 Green	0-255	255	Yes
2809	2810	Custom Color 2 Blue	0-255	255	Yes