

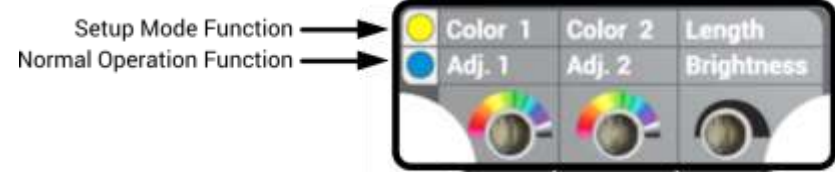


# BLINKIN LED DRIVER

## USER'S MANUAL

# 5 LED PATTERN TABLE

This table primarily describes the behavior of the 5V addressable LEDs as they are capable of more complicated patterns. 12V LEDs will all show patterns with the same color palette as the pattern selected and the speed can be adjusted as indicated for the selected pattern.



	Pulse Width (us)	roboRIO SPARK Value	Pattern Type	5V Strip Pattern	Normal Operation Adjustment 1	Normal Operation Adjustment 2	Normal Operation Brightness
1	1005	-0.99	Fixed Palette Pattern	Rainbow, Rainbow Palette	Pattern Density	Speed	Brightness
2	1015	-0.97	Fixed Palette Pattern	Rainbow, Party Palette	Pattern Density	Speed	Brightness
3	1025	-0.95	Fixed Palette Pattern	Rainbow, Ocean Palette	Pattern Density	Speed	Brightness
4	1035	-0.93	Fixed Palette Pattern	Rainbow, Lave Palette	Pattern Density	Speed	Brightness
5	1045	-0.91	Fixed Palette Pattern	Rainbow, Forest Palette	Pattern Density	Speed	Brightness
6	1055	-0.89	Fixed Palette Pattern	Rainbow with Glitter	Pattern Density	Speed	Brightness
7	1065	-0.87	Fixed Palette Pattern	Confetti	Pattern Density	Speed	Brightness
8	1075	-0.85	Fixed Palette Pattern	Shot, Red	-	-	Brightness
9	1085	-0.83	Fixed Palette Pattern	Shot, Blue	-	-	Brightness
10	1095	-0.81	Fixed Palette Pattern	Shot, White	-	-	Brightness
11	1105	-0.79	Fixed Palette Pattern	Sinelon, Rainbow Palette	Pattern Density	Speed	Brightness
12	1115	-0.77	Fixed Palette Pattern	Sinelon, Party Palette	Pattern Density	Speed	Brightness
13	1125	-0.75	Fixed Palette Pattern	Sinelon, Ocean Palette	Pattern Density	Speed	Brightness
14	1135	-0.73	Fixed Palette Pattern	Sinelon, Lava Palette	Pattern Density	Speed	Brightness
15	1145	-0.71	Fixed Palette Pattern	Sinelon, Forest Palette	Pattern Density	Speed	Brightness
16	1155	-0.69	Fixed Palette Pattern	Beats per Minute, Rainbow Palette	Pattern Density	Speed	Brightness
17	1165	-0.67	Fixed Palette Pattern	Beats per Minute, Party Palette	Pattern Density	Speed	Brightness
18	1175	-0.65	Fixed Palette Pattern	Beats per Minute, Ocean Palette	Pattern Density	Speed	Brightness
19	1185	-0.63	Fixed Palette Pattern	Beats per Minute, Lava Palette	Pattern Density	Speed	Brightness
20	1195	-0.61	Fixed Palette Pattern	Beats per Minute, Forest Palette	Pattern Density	Speed	Brightness
21	1205	-0.59	Fixed Palette Pattern	Fire, Medium	-	-	Brightness

22	1215	-0.57	Fixed Palette Pattern	Fire, Large	-	-	Brightness
23	1225	-0.55	Fixed Palette Pattern	Twinkles, Rainbow Palette	-	-	Brightness
24	1235	-0.53	Fixed Palette Pattern	Twinkles, Party Palette	-	-	Brightness
25	1245	-0.51	Fixed Palette Pattern	Twinkles, Ocean Palette	-	-	Brightness
26	1255	-0.49	Fixed Palette Pattern	Twinkles, Lava Palette	-	-	Brightness
27	1265	-0.47	Fixed Palette Pattern	Twinkles, Forest Palette	-	-	Brightness
28	1275	-0.45	Fixed Palette Pattern	Color Waves, Rainbow Palette	-	-	Brightness
29	1285	-0.43	Fixed Palette Pattern	Color Waves, Party Palette	-	-	Brightness
30	1295	-0.41	Fixed Palette Pattern	Color Waves, Ocean Palette	-	-	Brightness
31	1305	-0.39	Fixed Palette Pattern	Color Waves, Lava Palette	-	-	Brightness
32	1315	-0.37	Fixed Palette Pattern	Color Waves, Forest Palette	-	-	Brightness
33	1325	-0.35	Fixed Palette Pattern	Larson Scanner, Red	Pattern Width	Speed	Brightness
34	1335	-0.33	Fixed Palette Pattern	Larson Scanner, Gray	Pattern Width	Speed	Brightness
35	1345	-0.31	Fixed Palette Pattern	Light Chase, Red	Dimming	Speed	Brightness
36	1355	-0.29	Fixed Palette Pattern	Light Chase, Blue	Dimming	Speed	Brightness
37	1365	-0.27	Fixed Palette Pattern	Light Chase, Gray	Dimming	Speed	Brightness
38	1375	-0.25	Fixed Palette Pattern	Heartbeat, Red	-	-	Brightness
39	1385	-0.23	Fixed Palette Pattern	Heartbeat, Blue	-	-	Brightness
40	1395	-0.21	Fixed Palette Pattern	Heartbeat, White	-	-	Brightness
41	1405	-0.19	Fixed Palette Pattern	Heartbeat, Gray	-	-	Brightness
42	1415	-0.17	Fixed Palette Pattern	Breath, Red	-	-	Brightness
43	1425	-0.15	Fixed Palette Pattern	Breath, Blue	-	-	Brightness
44	1435	-0.13	Fixed Palette Pattern	Breath, Gray	-	-	Brightness
45	1445	-0.11	Fixed Palette Pattern	Strobe, Red	-	-	Brightness
46	1455	-0.09	Fixed Palette Pattern	Strobe, Blue	-	-	Brightness
47	1465	-0.07	Fixed Palette Pattern	Strobe, Gold	-	-	Brightness
48	1475	-0.05	Fixed Palette Pattern	Strobe, White	-	-	Brightness
49	1485	-0.03	Color 1 Pattern	End to End Blend to Black	-	-	Brightness
50	1495	-0.01	Color 1 Pattern	Larson Scanner	Pattern Width	Speed	Brightness
51	1505	0.01	Color 1 Pattern	Light Chase	Dimming	Speed	Brightness
52	1515	0.03	Color 1 Pattern	Heartbeat Slow	-	-	Brightness
53	1525	0.05	Color 1 Pattern	Heartbeat Medium	-	-	Brightness
54	1535	0.07	Color 1 Pattern	Heartbeat Fast	-	-	Brightness
55	1545	0.09	Color 1 Pattern	Breath Slow	-	-	Brightness

56	1555	0.11	Color 1 Pattern	Breath Fast	-	-	Brightness
57	1565	0.13	Color 1 Pattern	Shot	-	-	Brightness
58	1575	0.15	Color 1 Pattern	Strobe	-	-	Brightness
59	1585	0.17	Color 2 Pattern	End to End Blend to Black	-	-	Brightness
60	1595	0.19	Color 2 Pattern	Larson Scanner	Pattern Width	Speed	Brightness
61	1605	0.21	Color 2 Pattern	Light Chase	Dimming	Speed	Brightness
62	1615	0.23	Color 2 Pattern	Heartbeat Slow	-	-	Brightness
63	1625	0.25	Color 2 Pattern	Heartbeat Medium	-	-	Brightness
64	1635	0.27	Color 2 Pattern	Heartbeat Fast	-	-	Brightness
65	1645	0.29	Color 2 Pattern	Breath Slow	-	-	Brightness
66	1655	0.31	Color 2 Pattern	Breath Fast	-	-	Brightness
67	1665	0.33	Color 2 Pattern	Shot	-	-	Brightness
68	1675	0.35	Color 2 Pattern	Strobe	-	-	Brightness
69	1685	0.37	Color 1 and 2 Pattern	Sparkle, Color 1 on Color 2	-	-	Brightness
70	1695	0.39	Color 1 and 2 Pattern	Sparkle, Color 2 on Color 1	-	-	Brightness
71	1705	0.41	Color 1 and 2 Pattern	Color Gradient, Color 1 and 2	-	-	Brightness
72	1715	0.43	Color 1 and 2 Pattern	Beats per Minute, Color 1 and 2	Pattern Density	Speed	Brightness
73	1725	0.45	Color 1 and 2 Pattern	End to End Blend, Color 1 to 2	-	-	Brightness
74	1735	0.47	Color 1 and 2 Pattern	End to End Blend	-	-	Brightness
75	1745	0.49	Color 1 and 2 Pattern	Color 1 and Color 2 no blending (Setup Pattern)	-	-	Brightness
76	1755	0.51	Color 1 and 2 Pattern	Twinkles, Color 1 and 2	-	-	Brightness
77	1765	0.53	Color 1 and 2 Pattern	Color Waves, Color 1 and 2	-	-	Brightness
78	1775	0.55	Color 1 and 2 Pattern	Sinelon, Color 1 and 2	Pattern Density	Speed	Brightness
79	1785	0.57	Solid Colors	Hot Pink	-	-	Brightness
80	1795	0.59	Solid Colors	Dark red	-	-	Brightness
81	1805	0.61	Solid Colors	Red	-	-	Brightness
82	1815	0.63	Solid Colors	Red Orange	-	-	Brightness
83	1825	0.65	Solid Colors	Orange	-	-	Brightness
84	1835	0.67	Solid Colors	Gold	-	-	Brightness
85	1845	0.69	Solid Colors	Yellow	-	-	Brightness
86	1855	0.71	Solid Colors	Lawn Green	-	-	Brightness
87	1865	0.73	Solid Colors	Lime	-	-	Brightness
88	1875	0.75	Solid Colors	Dark Green	-	-	Brightness

89	1885	0.77	Solid Colors	Green	-	-	Brightness
90	1895	0.79	Solid Colors	Blue Green	-	-	Brightness
91	1905	0.81	Solid Colors	Aqua	-	-	Brightness
92	1915	0.83	Solid Colors	Sky Blue	-	-	Brightness
93	1925	0.85	Solid Colors	Dark Blue	-	-	Brightness
94	1935	0.87	Solid Colors	Blue	-	-	Brightness
95	1945	0.89	Solid Colors	Blue Violet	-	-	Brightness
96	1955	0.91	Solid Colors	Violet	-	-	Brightness
97	1965	0.93	Solid Colors	White	-	-	Brightness
98	1975	0.95	Solid Colors	Gray	-	-	Brightness
99	1985	0.97	Solid Colors	Dark Gray	-	-	Brightness
100	1995	0.99	Solid Colors	Black	-	-	Brightness