ELC Meeting room, tablet LED controls over ADB.

ADB, controls over tablet led can be done in the simple method using the per-determined buttons like clicking the remote on a cheap LED Strip, more advanced methods allow you to set brightness values for your R , G, and B colors independently, this should allow for custom colors, brightness controls.

Make sure you have your tablet in adb root shell. Using adb root to restart the shell as root, if you want the tablet to boot up in adb root, pull the /system/build.prop file and add the following to the bottom of the file, push it back and reboot.

ro.secure=0
ro.debuggable=1

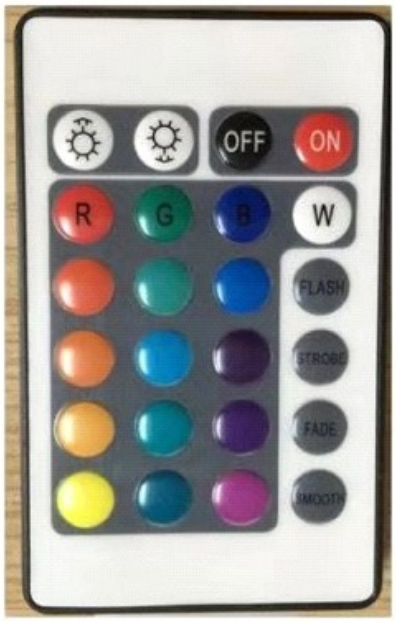
Simple LED Color Select

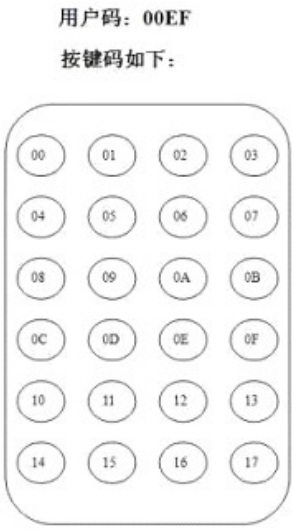
Using the simple color select method you need to turn on the led before changing color and turn off the led when you are done using it, when scripting this is not ideal but this is not an issues with advanced controls.

Control of the tablet led

adb shell "echo w 0x03 > ./sys/devices/platform/led_con_h/zigbee_reset"
this will turn on the led at last set color.
adb shell "echo w 0x04 > ./sys/devices/platform/led_con_h/zigbee_reset"
this will turn the led to red
adb shell "echo w 0x02 > ./sys/devices/platform/led_con_h/zigbee_reset"
this will turn off the led

picture reference, note the up and down brightness does not work using this method.





Advanced RGB Control:

We can also control the led using RGB values of 0-255 in hex using the tag below with the same command.

0X66RRGGBB

So to toggle the same red at full brightness you would use

adb shell **“**echo w 0x66FF0000 > ./sys/devices/platform/led_con_h/zigbee_reset”

To reduce it to 50% brightness

adb shell **“**echo w 0x667F0000 > ./sys/devices/platform/led_con_h/zigbee_reset”

The plus side to using this method is you do not need to toggle the lights on or off while controlling as you are setting the brightness value of each red, green and blue colors, below is a quick reference decimal to hexadecimal chart, this opens up a lot of possibilities for scripting.

Decimal-to-Hexadecimal Conversion Chart

Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex
0	0	64	40	128	80	192	C0
1	1	65	41	129	81	193	C1
2	2	66	42	130	82	194	C2
3	3	67	43	131	83	195	C3
4	4	68	44	132	84	196	C4
5	5	69	45	133	85	197	C5
6	6	70	46	134	86	198	C6
7	7	71	47	135	87	199	C7
8	8	72	48	136	88	200	C8
9	9	73	49	137	89	201	C9
10	A	74	4A	138	8A	202	CA
11	B	75	4B	139	8B	203	CB
12	C	76	4C	140	8C	204	CC
13	D	77	4D	141	8D	205	CD
14	E	78	4E	142	8E	206	CE
15	F	79	4F	143	8F	207	CF
16	10	80	50	144	90	208	D0
17	11	81	51	145	91	209	D1
18	12	82	52	146	92	210	D2
19	13	83	53	147	93	211	D3
20	14	84	54	148	94	212	D4
21	15	85	55	149	95	213	D5
22	16	86	56	150	96	214	D6
23	17	87	57	151	97	215	D7
24	18	88	58	152	98	216	D8
25	19	89	59	153	99	217	D9
26	1A	90	5A	154	9A	218	DA
27	1B	91	5B	155	9B	219	DB
28	1C	92	5C	156	9C	220	DC

29	1D	93	5D	157	9D	221	DD
30	1E	94	5E	158	9E	222	DE
31	1F	95	5F	159	9F	223	DF
32	20	96	60	160	A0	224	E0
33	21	97	61	161	A1	225	E1
34	22	98	62	162	A2	226	E2
35	23	99	63	163	A3	227	E3
36	24	100	64	164	A4	228	E4
37	25	101	65	165	A5	229	E5
38	26	102	66	166	A6	230	E6
39	27	103	67	167	A7	231	E7
40	28	104	68	168	A8	232	E8
41	29	105	69	169	A9	233	E9
42	2A	106	6A	170	AA	234	EA
43	2B	107	6B	171	AB	235	EB
44	2C	108	6C	172	AC	236	EC
45	2D	109	6D	173	AD	237	ED
46	2E	110	6E	174	AE	238	EE
47	2F	111	6F	175	AF	239	EF
48	30	112	70	176	B0	240	F0
49	31	113	71	177	B1	241	F1
50	32	114	72	178	B2	242	F2
51	33	115	73	179	B3	243	F3
52	34	116	74	180	B4	244	F4
53	35	117	75	181	B5	245	F5
54	36	118	76	182	B6	246	F6
55	37	119	77	183	B7	247	F7
56	38	120	78	184	B8	248	F8
57	39	121	79	185	B9	249	F9
58	3A	122	7A	186	BA	250	FA
59	3B	123	7B	187	BB	251	FB
60	3C	124	7C	188	BC	252	FC
61	3D	125	7D	189	BD	253	FD
62	3E	126	7E	190	BE	254	FE
63	3F	127	7F	191	BF	255	FF

Tested on a WA8058T purchased though aliexpress