

Channel Output Settings

Each channel of the RGB+UV light source is defined by a hex address then by a set value. See Figure 2. Be advised the drive of the Red and Green channels above the specified limits is not recommended for periods of time longer than a few minutes. See Table 1.

HEX	RED	GREEN	BLUE	UV
	0x80 nv ¹ 0x60 v ²	0x90 nv 0x70 v	0x20 nv 0x00 v	0x30 nv 0x10 v
	lm	lm	lm	W
1	-	-	0.032	-
10	-	-	4.8	-
20	-	-	9.1	-
30	-	-	13	-
40	-	-	16.5	-
50	-	-	18.1	-
60	-	-	20	-
74	0.346	-	-	-
78	-	0.556	-	-
80	8.5	15	-	-
90	19	38	-	-
A0	28	56	-	4.10E-04
B0	37	71	-	6.00E-02
C0	44	84	-	1.18E-01
D0	50 ³	95 ¹	-	1.72E-01
E0	55 ¹	105 ¹	-	2.25E-01
F0	56 ¹	112 ¹	-	2.77E-01
FF	58 ¹	120 ¹	-	3.18E-01

Table 1: Hex vs Output Level

¹ nv = non-volatile memory

² v = volatile memory

Channel Adjustments

Sending Data to the RGB+UV light source will enable the configuration of the light output. To set the level of each channel, the MCP2221 I2C SMBus Terminal Application requires a data string. Figure 2 shows an example of an imported data set.

On	Protocol	Address Length	Address	Operation	Register Index	Data	PEC	Delay (ms)	Comments	Send
<input checked="" type="checkbox"/>						default				Send
<input checked="" type="checkbox"/>	I2C	8 bit	58	Write		80, A1, 90, AF, 30, 00			RG+UV PRE-SET	Send
<input checked="" type="checkbox"/>	I2C	8 bit	5C	Write		20, 1D			BLUE PRE-SET	Send
<input checked="" type="checkbox"/>						default				Send
<input checked="" type="checkbox"/>	I2C	8 bit	58	Write		80, A1			RED PRE-SET	Send
<input checked="" type="checkbox"/>	I2C	8 bit	58	Write		90, AF			GREEN PRE-SET	Send
<input checked="" type="checkbox"/>	I2C	8 bit	5C	Write		20, 1D			BLUE PRE-SET	Send
<input checked="" type="checkbox"/>	I2C	8 bit	58	Write		30, 00			UV Set	Send
<input checked="" type="checkbox"/>										Send

Figure 2: Channel Adjustments

Channel Address Output Value
 Colour Select Hex Value