

6.) System clock Luxom :

***A,0,g,aa;*Z,1bb;*Z,1cc;*Z,1dd;*Z,0ee;**

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Databyte bb						Databyte cc						Databyte dd						Databyte ee													
Min (6 bits)						Hour (5 bits)					Day (5 bits)					Month (4 bits)				Year (7 bits)			Weekday (3 bits)			Holiday (2 bits)					

Min : 0 ... 59

Hour : 0 ... 23

Day : 1...31

Month : 1...12

Year : 0 ... 127 (2000...2127)

Weekday :

- 100= MONDAY
- 010= TUESDAY
- 110= WEDNESDAY
- 001 = THURSDAY
- 101 = FRIDAY
- 011 = SATURDAY
- 111 = SUNDAY

Holiday : 'hw'

w=1 if current time is in the weekend

h=1 if the current time is on a holiday or a holiday period

Example 1 :

Saturday 6/01/2001 - no holiday – 00:00 h = *A,0,g,aa;*Z,100;*Z,130;*Z,111;*Z,030;

Hex	00		03		11		03	
Bin	0000	0000	0000	1100	1000	1000	0000	1100
	Databyte bb		Databyte cc		Databyte dd		Databyte ee	

Example 2 :

Friday 22/02/2002 - no holiday – 01:02 h = *A,0,g,aa;*Z,142;*Z,1B0;*Z,122;*Z,028;

Hex	24		0B		22		82	
Bin	0100	0010	0000	1101	0100	0100	0001	0100
	Databyte bb		Databyte cc		Databyte dd		Databyte ee	

7.) Pulse Counter :

***A,0,g,aa;*Z,1bb;*Z,1cc;*Z,1dd;*Z,0ee;**

g = group (0...F)

aa= address (00...FF)

bb= databyte 1

cc= databyte 2

dd = databyte 3

ee= databyte 4

Example :

3290 pulses decimal = 00 00 0C DA pulses hexadecimal = *A,0,g,aa;*Z,1DA;*Z,10C;*Z,100;*Z,000;

8.) RGB :

For controlling RGB leds in the Luxom system there are 4 possibilities:

1. Change the intensity:

***A,0,g,aa;*Z,0ii;**

g = group of the RGB led (0...F)
aa = address of the RGB led (00...FF)
ii = intensity (00...FF)

2. Change the intensity with a fading time:

***A,0,g,aa;*Z,1ii;*Z,0ff;**

g = group of the RGB led (0...F)
aa = address of the RGB led (00...FF)
ii = intensity (00...FF)
ff = fading time (00...7F)

3. Change the RGB color without fading time:

When no fading time is send to the RGB led, the fading time configured in the module settings is used.

***A,0,g,aa;*Z,1rr;*Z,1gg;*Z,0bb;**

g = group of the RGB led (0...F)
aa = address of the RGB led (00...FF)
rr = color RED (00...FF)
gg = color GREEN (00...FF)
bb = color BLUE (00...FF)

4. Change the RGB color with a fading time:

***A,0,g,aa;*Z,1rr;*Z,1gg;*Z,1bb;*Z,0ff;**

g = group of the RGB led (0...F)
aa = address of the RGB led (00...FF)
rr = color RED (00...FF)
gg = color GREEN (00...FF)
bb = color BLUE (00...FF)
ff = fading time (00...7F)

Info:

ii (intensity) : 00 = 0% - FF = 100%
ff (fading time) : 00= 0sec - 7F = 127sec
rr (color red) : 00 = 0% red - FF = 100% red
gg (color green) : 00 = 0% green - FF = 100% green
bb (color blue) : 00 = 0% blue - FF = 100% blue

Example:

Set RGB led with group 5, address 2E on 100% green in 5sec with 50% intensity:

***A,0,5,2E;*Z,100;*Z,1FF;*Z,100;*Z,005;**
***A,0,5,2E;*Z,07F;**