

UDPtoDMX Protocol:

The commands have to be sent by UDP to Port 7000.

Easy way to send and receive UDP Packets for testing is <https://packetsender.com/>.

General Format:

header	typ	#	channel	#	value	#	speed_S	#	curve	#	speed_F
DMX	P	#	1	#	100	#	7	#	3	#	1

Orange is Optional

Examples:

DMXC2#129
DMXP3#55#1
DMXP3#56#2#2
DMXR1#3066012#1#1
DMXR1#3066012
DMXK1#302700

Header:

always DMX

Typ:

P: percent (0-100)

C: direct (0-255)

R: RGB (loxone format: R + G * 1000 + B * 1000000)

V: tunable white (0-100): channel: WW, channel+1: CW

W: tunable white (0-100): channel: CW, channel+1: WW

K: direct Kelvin mode for tunable white (works best for high resolution dimmers like H801)

302700 => 30% at 2700K, 655000 => 65% at 5000K (recommended)

Y: tunable white with direct setting of each channel (40100 => channel: 40% WW, channel+1: 100% CW)

Z: tunable white with direct setting of each channel (40100 => channel: 40% CW, channel+1: 100% WW)

Value:

Integer Value

speed_S:

Integer Value (0-255)

255: set Value immediately (no Fading)

1: Fast

99: Slow

+100: 4-times faster

+200: 8-times faster

see Time-Table

curve: (dimming curve)

Integer Value (0-3)

0: linear (0%=0, 50%=128, 100%=255)

1-3: “logarithmic” curve

see dimming curve graph

speed_F:

like speed_S, but it is used when dim-step is more than 10%

will be set so speed_S if the value is missing

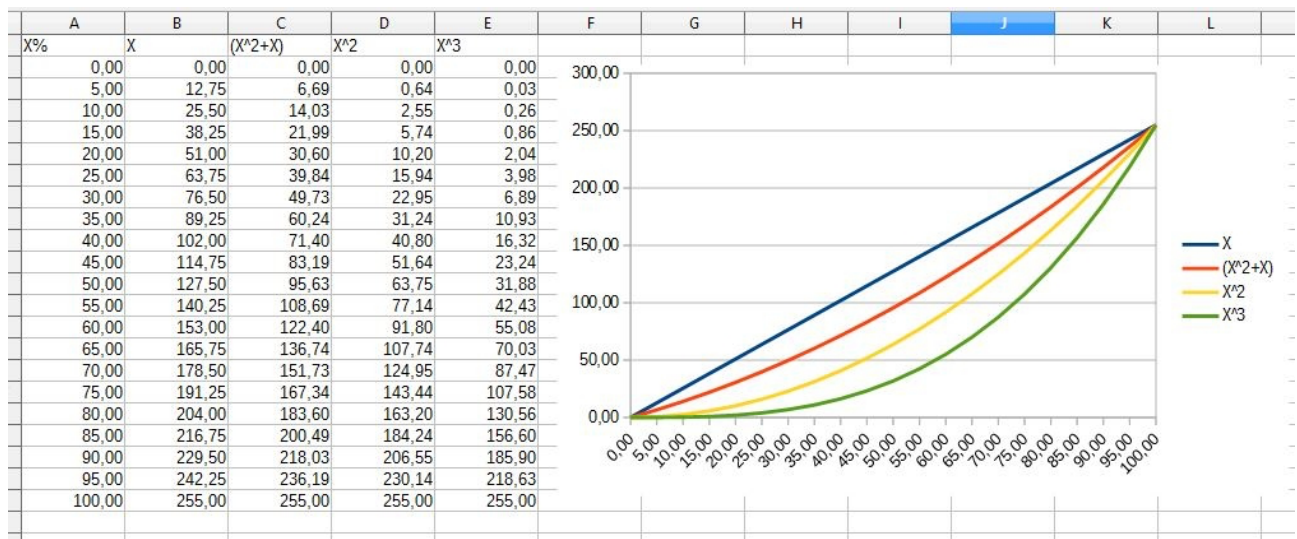
this is for fast dimming (e.g. from 0% to 100%)

Time-Table:

(from 0% to 100% or 100% to 0%)

Speed	ms
1	591
2	1176
3	1749
4	2350
5	2890
6	3495
7	4061
...	
98	57262
101	147
102	293
103	434
104	583
...	
201	72
202	145
...	
254	3691
255	0

Dimming curve:



Tunable white mode:

