DEMASLED

CONDMXRGB

LN-DMXTCON-4CH-LV DMX Decoder

Product Specifications



SHENZHEN LEYNEW TECHNOLOGY CO., LTD

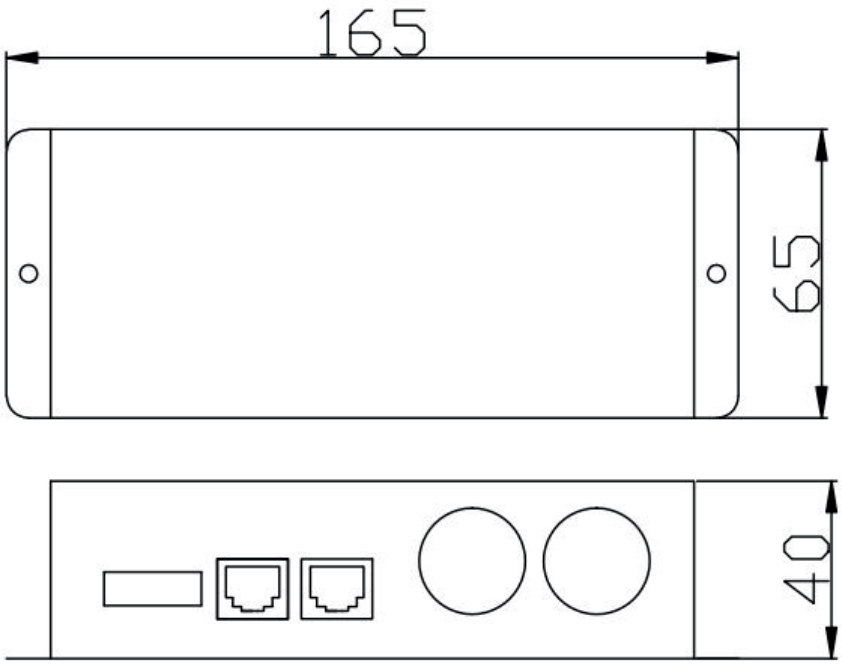
1.Summarization

DMX Decoer adopts the advanced micro control unit, it receives standard DMX-512 digital control signal and transformed it into PWM signal for driving LED;You could connect DMX module with DMX digital console to achieve dimming or various changes in procedures.

2.Technical Parameters

2.1 Working temperature: -20-60 ℃
2.2 Supply voltage: DC12～24V
2.3 Output: 4 channel
2.4 External dimension: L165*W65*H40（mm）
2.5 Packing size: L185*W85*H60（mm）
2.6 Net weight: 310g
2.7 Gross weight: 389.5g
2.8 Static power consumption: <1W
2.9 Output current: each channel 4A
2.10 Output power: 12V:<192W,　24V:<384W
2.11 The controller output frequency: 980 Hz

3.External Dimension



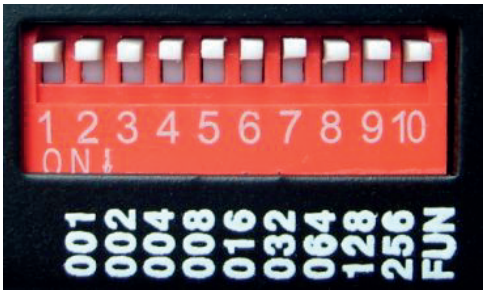
4.Interface specifications



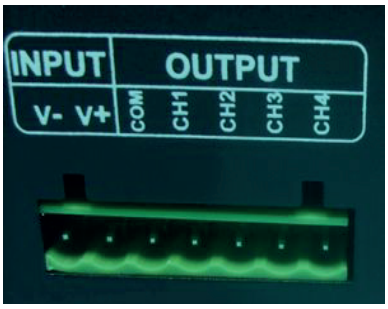
DMX input/output interface



DMX input/output interface: RJ45 Interface



The interface of settings for address code and function



Supply power and load interface

5.Direction for use

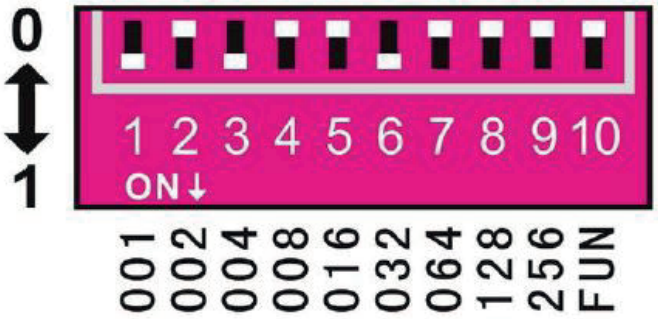
5.1 DMX address code settings

Each DMX decoder occupied 3 DMX addresses, adopt coding switch set address, it is a Binary numerical code switch which is setting DMX original address code from 1 to 9, 1 is the lowest, and 9 is the highest,511 address codes could be setted in all.DMX original address code equal aggregate value of the coding switch value from 1 to 9,dial the coding switch upwards(ON is setted 1),the value of bit can be gotten, on the contrary, the value of bit is 0.

DMX signal can be received when coding switch FUN(10)=OFF(ON is setted 0).

example 1:

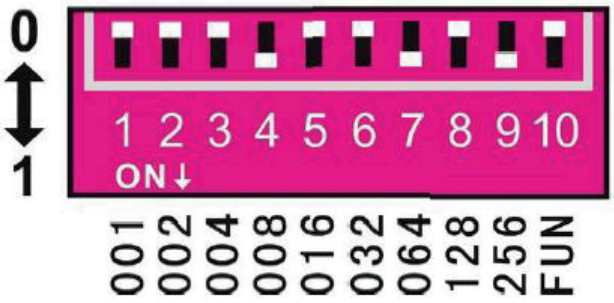
Look at the following picture,if you want to set 37 as the address code,you can only dial down the first,the third and the sixth code switch, the aggregate value of coding switch value from 1 to 9 is 32+4+1,that is,the original address code of DMX512 is 37.



Picture 1

example 2:

Look at the following picture,if you want to set 328 as the address code,you can only dial down the ninth,the seventh and the fourth code switch, the aggregate value of coding switch value from 1 to 9 is 256+64+8,that is,the original address code of DMX512 is 328.



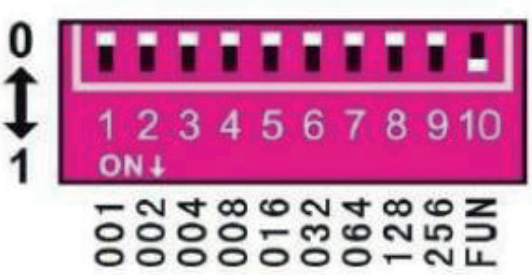
Picture 2

5.2 Other functions direction for use

5.2.1 Testing function:

The tenth bit of coding switch is “FUN”,that is a built-in function button.FUN=OFF shows the DMX decoder function,DMX signal can be received.

The default coding switch1-9 is off:black



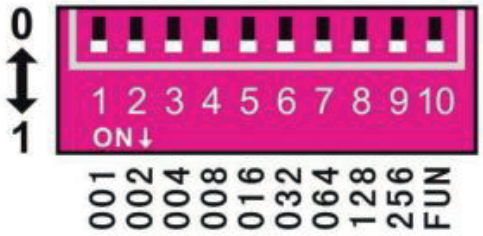
Picture 3

1-9 switch OFF: black
Switch 1 = ON: CH1 bright
Switch 2 = ON: CH2 bright
Switch 3 = ON: CH3 bright
Switch 4 = ON: CH4 is bright
Switch 5 = ON: 4 channels are bright
Switch 6 = ON: stroboscopic (6 gears of choice)
Switch 7 = ON: monkey (6 gears of choice)
Switch 8 = ON: water (6 gears of choice)
Switch 9 = ON: the gradient (6 gears of choice)

5.2.2 The speed chioce of jumpy changing,gradual changing effect

When testing capabilities, switch is 6 = ON stroboscopic effect, switch 7 = ON monkey's effect, when the switch 8 = ON water effect, switch is 9 = ON gradient effect, every effect has 6 gears of choice:

Switch1-5=OFF :0steps
Switch1=ON:1 steps
Switch2=ON:2 steps
Switch3=ON:3 steps
Switch4=ON:4 steps
Switch5=ON:5 steps(the greatest speed)



Picture 4

When multiple switches are ON, the larger switch shall prevail. When all the dial switch = ON, the decoder speed: the mode speed is 5.

5.3 DMX address code and code figure:

Coded table(1 for Dial up, 0 for Dial down)

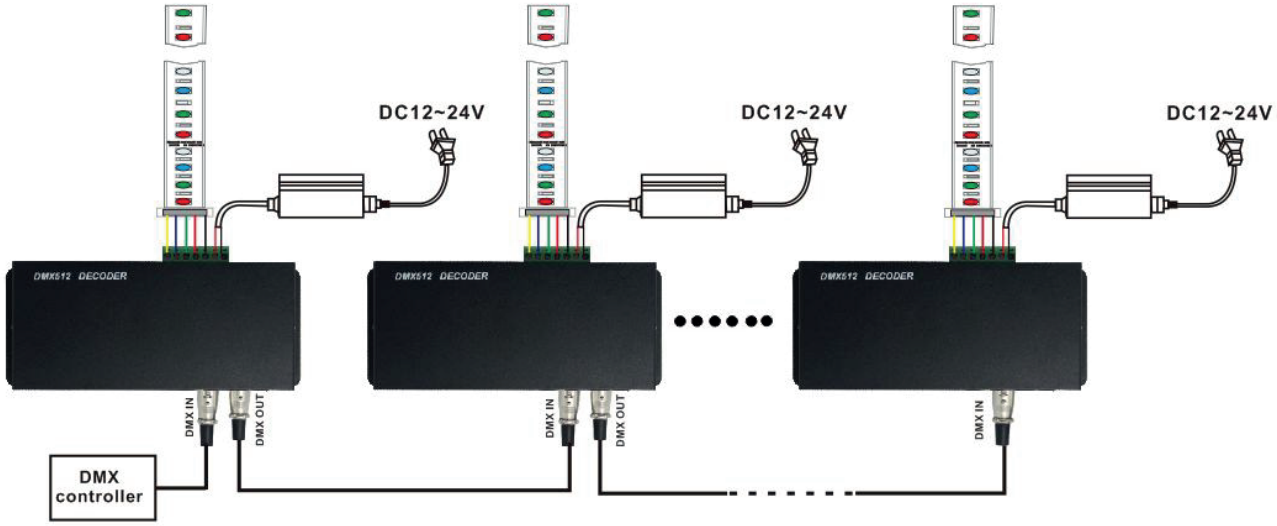
coded value	Dial the code value	coded value	Dial the code value	coded value	Dial the code value	coded value	Dial the code value
1	100000000	57	100111000	113	100011100	169	100101010
2	010000000	58	010111000	114	010011100	170	010101010
3	110000000	59	110111000	115	110011100	171	110101010
4	001000000	60	001111000	116	001011100	172	001101010
5	101000000	61	101111000	117	101011100	173	101101010
6	011000000	62	011111000	118	011011100	174	011101010
7	111000000	63	111111000	119	111011100	175	111101010
8	000100000	64	000000100	120	000111100	176	000011010
9	100100000	65	100000100	121	100111100	177	100011010
10	010100000	66	010000100	122	010111100	178	010011010
11	110100000	67	110000100	123	110111100	179	110011010
12	001100000	68	001000100	124	001111100	180	001011010

13	101100000	69	101000100	125	101111100	181	101011010
14	011100000	70	011000100	126	011111100	182	011011010
15	111100000	71	111000100	127	111111100	183	111011010
16	000010000	72	000100100	128	000000010	184	000111010
17	100010000	73	100100100	129	100000010	185	100111010
18	010010000	74	010100100	130	010000010	186	010111010
19	110010000	75	110100100	131	110000010	187	110111010
20	001010000	76	001100100	132	001000010	188	001111010
21	101010000	77	101100100	133	101000010	189	101111010
22	011010000	78	011100100	134	011000010	190	011111010
23	111010000	79	111100100	135	111000010	191	111111010
24	000110000	80	000010100	136	000100010	192	000000110
25	100110000	81	100010100	137	100100010	193	100000110
26	010110000	82	010010100	138	010100010	194	010000110
27	110110000	83	110010100	139	110100010	195	110000110
28	001110000	84	001010100	140	001100010	196	001000110
29	101110000	85	101010100	141	101100010	197	101000110
30	011110000	86	011010100	142	011100010	198	011000110
31	111110000	87	111010100	143	111100010	199	111000110
32	000001000	88	000110100	144	000010010	200	000100110
33	100001000	89	100110100	145	100010010	201	100100110
34	010001000	90	010110100	146	010010010	202	010100110
35	110001000	91	110101010	147	110010010	203	110100110
36	001001000	92	001110100	148	001010010	204	001100110
37	101001000	93	101110100	149	101010010	205	101100110
38	011001000	94	011110100	150	011010010	206	011100110
39	111001000	95	111110100	151	111010010	207	111100110
40	000101000	96	000001100	152	000110010	208	000010110
41	100101000	97	100001100	153	100110010	209	100010110
42	010101000	98	010001100	154	010110010	210	010010110
43	110101000	99	110001100	155	110110010	211	110010110
44	001101000	100	001001100	156	001110010	212	001010110
45	101101000	101	101001100	157	101110010	213	010110110
46	011101000	102	011001100	158	011110010	214	011010110
47	111101000	103	111001100	159	111110010	215	111010110
48	000011000	104	000101100	160	000001010	216	000110110
49	100011000	105	100101100	161	100001010	217	100110110
50	010011000	106	010101100	162	010001010	218	010110110
51	110011000	107	110101100	163	110001010	219	110110110
52	001011000	108	001101100	164	001001010	220	001110110
53	101011000	109	101101100	165	101001010	221	101110110
54	011011000	110	011101100	166	011001010	222	011110110
55	111011000	111	111101100	167	111001010	223	111110110
56	000111000	112	000011100	168	000101010	224	000001110

coded value	Dial the code value	coded value	Dial the code value	coded value	Dial the code value	coded value	Dial the code value
225	100001110	267	110100001	309	101011001	351	111110101
226	010001110	268	001100001	310	011011001	352	000001101
227	110001110	269	101100001	311	111011001	353	100001101
228	001001110	270	011100001	312	000111001	354	010001101
229	101001110	271	111100001	313	100111001	355	110001101
230	011001110	272	000010001	314	010111001	356	001001101
231	111001110	273	100010001	315	110111001	357	101001101
232	000101110	274	010010001	316	001111001	358	011001101
233	100101110	275	110010001	317	101111001	359	111001101
234	010101110	276	001010001	318	011111001	360	000101101
235	110101110	277	101010001	319	111111001	361	100101101
236	001101110	278	011010001	320	000000101	362	010101101
237	101101110	279	111010001	321	100000101	363	110101101
238	011101110	280	000110001	322	010000101	364	001101101
239	111101110	281	100110001	323	110000101	365	101101101
240	000011110	282	010110001	324	001000101	366	011101101
241	100011110	283	110110001	325	101000101	367	111101101
242	010011110	284	001110001	326	011000101	368	000011101
243	110011110	285	101110001	327	111000101	369	100011101
244	001011110	286	011110001	328	000100101	370	010011101
245	101011110	287	111110001	329	100100101	371	110011101
246	011011110	288	000001001	330	010100101	372	001011101
247	111011110	289	100001001	331	110100101	373	101011101
248	000111110	290	010001001	332	001100101	374	011011101
249	100111110	291	110001001	333	101100101	375	111011101
250	010111110	292	001001001	334	011100101	376	000111101
251	110111110	293	101001001	335	111100101	377	100111101
252	001111110	294	011001001	336	000010101	378	010111101
253	101111110	295	111001001	337	100010101	379	110111101
254	011111110	296	000101001	338	010010101	380	001111101
255	111111110	297	100101001	339	110010101	381	101111101
256	000000001	298	010101001	340	001010101	382	011111101
257	100000001	299	110101001	341	101010101	383	111111101
258	010000001	300	001101001	342	011010101	384	000000011
259	110000001	301	101101001	343	111010101	385	100000011
260	001000001	302	011101001	344	000110101	386	010000011
261	101000001	303	111101001	345	100110101	387	110000011
262	011000001	304	000011001	346	010110101	388	001000011
263	111000001	305	100011001	347	110101011	389	101000011
264	000100001	306	010011001	348	001110101	390	011000011
265	100100001	307	110011001	349	101110101	391	111000011
266	010100001	308	001011001	350	011110101	392	000100011

coded value	Dial the code value	coded value	Dial the code value	coded value	Dial the code value	coded value	Dial the code value
393	100100011	423	111001011	453	101000111	483	110001111
394	010100011	424	000101011	454	011000111	484	001001111
395	110100011	425	100101011	455	111000111	485	101001111
396	001100011	426	010101011	456	000100111	486	011001111
397	101100011	427	110101011	457	100100111	487	111001111
398	011100011	428	001101011	458	010100111	488	000101111
399	111100011	429	101101011	459	110100111	489	100101111
400	000010011	430	011101011	460	001100111	490	010101111
401	100010011	431	111101011	461	101100111	491	110101111
402	010010011	432	000011011	462	011100111	492	001101111
403	110010011	433	100011011	463	111100111	493	101101111
404	001010011	434	010011011	464	000010111	494	011101111
405	101010011	435	110011011	465	100010111	495	111101111
406	011010011	436	001011011	466	010010111	496	000011111
407	111010011	437	101011011	467	110010111	497	100011111
408	000110011	438	011011011	468	001010111	498	010011111
409	100110011	439	111011011	469	010110111	499	110011111
410	010110011	440	000111011	470	011010111	500	001011111
411	110110011	441	100111011	471	111010111	501	101011111
412	001110011	442	010111011	472	000110111	502	011011111
413	101110011	443	110111011	473	100110111	503	111011111
414	011110011	444	001111011	474	010110111	504	000111111
415	111110011	445	101111011	475	110110111	505	100111111
416	000001011	446	011111011	476	001110111	506	010111111
417	100001011	447	111111011	477	101110111	507	110111111
418	010001011	448	000000111	478	011110111	508	001111111
419	110001011	449	100000111	479	111110111	509	101111111
420	001001011	450	010000111	480	000001111	510	011111111
421	101001011	451	110000111	481	100001111	511	111111111
422	011001011	452	001000111	482	010001111		

6.Typical applications



7. Remarks

7.1 Connect the load wire at first, following by the power wire; Please ensure short circuit can not occur between connecting wire before you turn on the power.

7.2 The range of power supply voltage is DC12V-24V, more than voltage range maybe burn out the controller.