AC-DMXW2 Address Writer

The AC-DMXW2 is a device used to set the starting DMX address of DMXSphere strands. It sets the number of the first DMXSphere and then all subsequent DMXSpheres, in the continuous strand, take the following 3 dmx channels each automatically. So the DMX values are 1, 2 and 3 if the first sphere is set to 1. If the first sphere is set to 2, then the starting address of that strand would be DMX channels 4,5, and 6 for the first sphere, 7,8 and 9 for the second sphere and so on. This will be explained later in this manual in greater detail. Each DMXSphere in the strand will take 3 unique DMX channels to control its RGB LEDS. The first channel will be red, the second green and the third is blue.

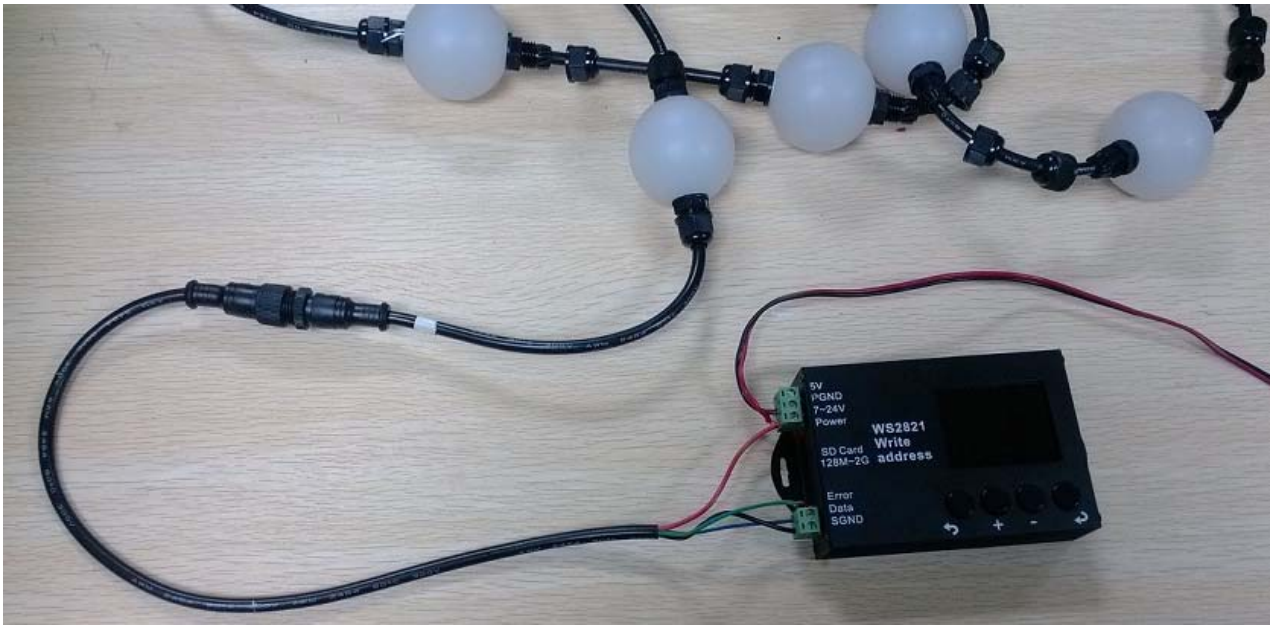
Physical specifications:
Color Display: 2.25” Diagonal
Size: 5.5” x 3” x 1”
Weight: 0.44 Lbs / 0.20 Kgs
Power: 5-24vDC
Color: Black

Buttons:

	Back to last menu
	+Plus – moves to next function
	-Minus – moves to last function
	Enter or confirm

How to use the DMX Address Writer

Step 1: hooking it up and wiring



Disconnect from power prior to making any connections. Connect the DMXSphere strand of spheres to the address writer as shown above. It will require an external power supply between 12 and 24vDC to power the DMXSpheres. We suggest using the same power supply that will supply the DMXSpheres with 15vDC.

CAUTION: DO NOT MAKE ANY CONNECTIONS WHILE POWER SUPPLY IS POWERED ON.

The 4 wires from DMXSphere strand are Red, Blue, Black, Green

Connect to:

Red: 7-24V Blue: Data

Black: SGND Green: Not used

In photo the power supply output 15V, on two wires (Red, Black) from power supply.

Connect to:

Red: 7-24V Black: PGND

Step 2: Setting the start address

Once it is fully wired. Connect a strand of DMXSpheres to the 4 pin plug (sold separately). Turn on the power supply. After it boots up, you will see 5 functions on the display. Using the +/- buttons, move the red selecting point inside the square to choose a function. You will select and use the first function: Address By Pixel as show below. Then press the enter  button.

You will then see the following screen.

With the red selector in the first box, Begin Pixel, set this number to be the number of the first sphere in the strand. Leave the Adjoin IC Pixels NO. set to 0. Once you have set the number of the first sphere also known as a pixel in the strand, use the -/+ buttons to move to the Confirm Writing box. Press enter  button.

Once the strand is programmed to the start address desired it will light up in white as shown below.

Step 3: Finishing the setup

Once the DMXSphere is programmed, the strand will go all white. Turn off or disconnect the power supply. The strand is now set and may be disconnected and connected to power and DMX using the proper cables. Repeat the steps above to program the start address of another strand.

> **Note:** This device can only be used to set the Begin Pixel. No other functions on this device will work on the DMXSpheres.

Examples

Since you are not actually setting the DMX address but a pixel number for the first sphere in the strand, it is important to understand what the DMX address channels will be relatively. You can't pick exactly the DMX start address since the address moves in increments of 3. You can however get close to a desired DMX start address. Each pixel uses 3 DMX channels to control the RGB colors. Below are some examples of settings for various start addresses.

1) For example if you have two strands of 20 spheres each, you will require 60 channels of DMX control to independently control each sphere. To address them, the first strand could be pixels 1-20. So Begin Pixel would be set to 1 on the address writer, and once programmed would be operated on DMX channels 1-60. The second strand would need to start with pixel number 21, So Begin Pixel would be set to 21 on the address writer, and once programmed would respond to DMX channels 61-120.

2) If you had five strands of 30 spheres and wanted them to operate in sets, you could set two of the strands to start as Begin Pixel 1, and the other three to Begin Pixel 31. Two strands would behave the same on DMX channel 1-90 and the other 3 strands would respond to DMX channels 91-180.

3) For three strands, one with 10 spheres, one with 20 spheres, and one with 30 spheres, the first strand of 10 spheres could be set as the first pixel. It would occupy, pixels 1-10 or DMX channels, 1 to 30. The second strand of 20 spheres, would then start as pixel 11, or DMX address 31, 32, 33 and so on for 20 spheres through DMX channel 90. The third strand of 30 spheres, would start with pixel 31, or DMX channels 91, 92, 93 and that strand would end with DMX channel 180.

4) All strands do not need to start in sequence or start with a pixel of 1, you may start your first strand with pixel 100, which is a relative start of DMX channel 298. Your next strand could start at pixel 40, or relative DMX start address of 118.

> **Note:** The DMX start address of a pixel can be found with the following formula: Pixel number x 3 minus 2. So pixel 31 would be 31 x 3 – 2 = start address of 91.

Quick Reference Table of Pixel/Start Addresses

Pixel	DMX Addresses	Pixel	DMX Addresses	Pixel	DMX Addresses	Pixel	DMX Addresses	Pixel	DMX Addresses
1	1,2,3	37	109,110,111	73	217,218,219	109	325,326,327	145	433,434,435
2	4,5,6	38	112,113,114	74	220,221,222	110	328,329,330	146	436,437,438
3	7,8,9	39	115,116,117	75	223,224,225	111	331,332,333	147	439,440,441
4	10,11,12	40	118,119,120	76	226,227,228	112	334,335,336	148	442,443,444
5	13,14,15	41	121,122,123	77	229,230,231	113	337,338,339	149	445,446,447
6	16,17,18	42	124,125,126	78	232,233,234	114	340,341,342	150	448,449,450
7	19,20,21	43	127,128,129	79	235,236,237	115	343,344,345	151	451,452,453
8	22,23,24	44	130,131,132	80	238,239,240	116	346,347,348	152	454,455,456
9	25,26,27	45	133,134,135	81	241,242,243	117	349,350,351	153	457,458,459
10	28,29,30	46	136,137,138	82	244,245,246	118	352,353,354	154	460,461,462
11	31,32,33	47	139,140,141	83	247,248,249	119	355,356,357	155	463,464.465
12	34,35,36	48	142,143,144	84	250,251,252	120	358,359,360	156	466,467,468
13	37,38,39	49	145,146,147	85	253,254,255	121	361,362,363	157	469,470,471
14	40,41,42	50	148,149,150	86	256,257,258	122	364,365,366	158	472,473,474
15	43,44,45	51	151,152,153	87	259,260,261	123	367,368,369	159	475,476,477
16	46,47,48	52	154,155,156	88	262,263,264	124	370,371,372	160	478,479,480
17	49,50,51	53	157,158,159	89	265,266,267	125	373,374,375	161	481,482,483
18	52,53,54	54	160,161,162	90	268,269,270	126	376,377,378	162	484,485,486
19	55,56,57	55	163,164,165	91	271,272,273	127	379,380,381	163	487,488,489
20	58,59,60	56	166,167,168	92	274,275,276	128	382,383,384	164	490,491,492
21	61,62,63	57	169,170,171	93	277,278,279	129	385,386,387	165	493,494,495
22	64,65,66	58	172,173,174	94	280,281,282	130	388,389,390	166	496,497,498
23	67,68,69	59	175,176,177	95	283,284,285	131	391,392,393	167	499,500,501
24	70,71,72	60	178,179,180	96	286,287,288	132	394,395,396	168	502,503,504
25	73,74,75	61	181,182,183	97	289,290,291	133	397,398,399	169	505,506,507
26	76,77,78	62	184,185,186	98	292,293,294	134	400,401,402	170	508,509,510
27	79,80,81	63	187,188,189	99	295,296,297	135	403,404,405		
28	82,83,84	64	190,191,192	100	298,299,300	136	406,407,408		
29	85,86,87	65	193,194,195	101	301,302,303	137	409,410,411		
30	88,89,90	66	196,197,198	102	304,305,306	138	412,413,414		
31	91,92,93	67	199,200,201	103	307,308,309	139	415,416,417		
32	94,95,96	68	202,203,204	104	310,311,312	140	418,419,420		
33	97,98,99	69	205,206,207	105	313,314,315	141	421,422,423		
34	99,101,102	70	208,209,210	106	316,317,318	142	424,425,426		
35	103,104,105	71	211,212,213	107	319,320,321	143	427,428,429		
36	106,107,108	72	214,215,216	108	322,323,324	144	430,431,432		