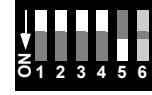


DMX control modes

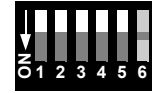
The DMX control options are selected on the Mode DIP switch.

1-channel DMX mode allows you to strobe from 0 flashes per second to the maximum flash rate and trigger the blinder effect from the controller. To select 1-channel DMX operation, set pin 5 of the Mode DIP switch to on; set pins 1 to 4 to off.



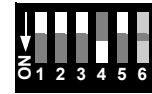
1-channel DMX mode setting

3-channel DMX mode provides control of flash intensity, flash duration, and flash rate for more advanced control than 1-channel mode. To select 3-channel DMX operation, set pins 1 to 5 of the Mode DIP switch to off.



3-channel DMX mode setting

4-channel DMX mode provides six special effects in addition to flash intensity, duration, and rate control. To select this 4-channel DMX operation, set pins 1, 2, 3, and 5 to off; set pin 4 to on.



4-channel DMX mode setting

Control address

The control address, also known as the start channel, is the first channel used to receive instructions from the controller. The address may be any channel from 1 to 511 and is set on the Address DIP switch.

The Atomic 3000 uses 1, 3, or 4 channels depending on the control mode. For independent control, each fixture must be assigned its own address and non-overlapping control channels. Two or more Atomic 3000s may share the same address if individual control is not required.

To set the fixture's DMX address:

1. Select an address for the fixture on your controller. Look up the DIP switch setting for the address in the table below.
2. Set pins 1 through 9 ON (1) or OFF (0) as listed in the table. Set pin 10 to OFF.

Find the address in the table. Read the settings for pins 1 - 5 to the left and read the settings for pins 6 - 9 above the address. "0" means OFF and "1" means ON. Pin 10 is always OFF for DMX operation.

DIP switch Setting					#9	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
0 = OFF					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	
1 = ON					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	
#1	#2	#3	#4	#5	#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	
0	0	0	0	0	32	64	96	128	160	192	224	256	288	320	352	384	416	448	480			
1	0	0	0	0	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481		
0	1	0	0	0	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482		
1	1	0	0	0	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483		
0	0	1	0	0	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484		
1	0	1	0	0	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485		
0	1	1	0	0	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486		
1	1	1	0	0	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487		
0	0	0	1	0	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488		
1	0	0	1	0	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489		
0	1	0	1	0	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490		
1	1	0	1	0	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491		
0	0	1	1	0	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492		
1	0	1	1	0	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493		
0	1	1	1	0	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494		
1	1	1	1	0	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495		
0	0	0	0	1	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496		
1	0	0	0	1	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497		
0	1	0	0	1	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498		
1	1	0	0	1	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499		
0	0	1	0	1	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500		
1	0	1	0	1	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501		
0	1	1	0	1	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502		
1	1	1	0	1	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503		
0	0	0	1	1	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504		
1	0	0	1	1	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505		
0	1	0	1	1	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506		
1	1	0	1	1	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507		
0	0	1	1	1	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508		
1	0	1	1	1	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509		
0	1	1	1	1	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510		
1	1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511		

Table 2: DIP switch address settings



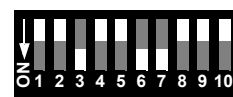
Channel 2



Channel 14



Channel 46



Channel 100

Address Setting Examples

DMX control summary

For specific command values, see “DMX protocols” on page 23.

Intensity

Flash intensity can be set from minimum (blackout) to maximum on channel 1 in the 3- and 4-channel DMX modes. Intensity is maximum in 1-channel DMX mode.

The maximum intensity can be reduced by selecting low power mode as described on page 9.

Duration

Flash duration can be set from 0 to 650 ms on 50 Hz power supplies, or 0 to 530 ms on 60 Hz power supplies, on channel 2 in the 3- and 4-channel DMX modes. Flash duration is fixed in 1-channel DMX mode.

Rate

Flash rate can be set from 0 flashes per second to 25 flashes per second on 50 Hz power supplies, or from 0 to 30 flashes per second on 60 Hz power supplies, on channel 3 in the 3- and 4-channel DMX modes. Flash rate is also controllable in 1-channel DMX mode.

Programmed effects

Six programmed effects are available on channel 4 in the 4-channel DMX mode only. The effects may be altered using the intensity, duration, and rate controls.

- Ramp up: Light gradually increases in intensity, then blacks out.
- Ramp down: Light flashes to full intensity, then gradually fades.
- Ramp up-down: Light gradually increases and decreases.
- Random flash: Light flashes randomly with variable rate and intensity. Multiple units flash independently of each other.
- Lightning: The flashes simulate lightning. Duration is not adjustable.
- Spikes: The lamp remains dimly illuminated between flashes. Set flash intensity, duration, and rate as normal.

Blinder effect

The blinder effect, in which the light remains on for an extended period, is available in all DMX modes. In the 3- and 4-channel modes, the effect is achieved whenever the combination of flash duration and rate prevents pauses between flashes. For example, the blinder effect can be achieved with a flash duration of 0.25 seconds (250 ms) and a flash rate of 4 flashes

per second, or a flash duration of 0.05 seconds (50 ms) and a flash rate of 20 flashes per second.

In 3- and 4-channel DMX mode, the intensity of the blinder effect is controllable on channel 1. Lamp power is electronically regulated to prevent the lamp from overheating. The intensity falls as power is reduced.

Single flash

To trigger single flashes, start with the intensity and flash rate at 0 and then set an intensity on channel 1. When the value of channel 1 changes, the light will flash once with the programmed intensity, duration, and effect.