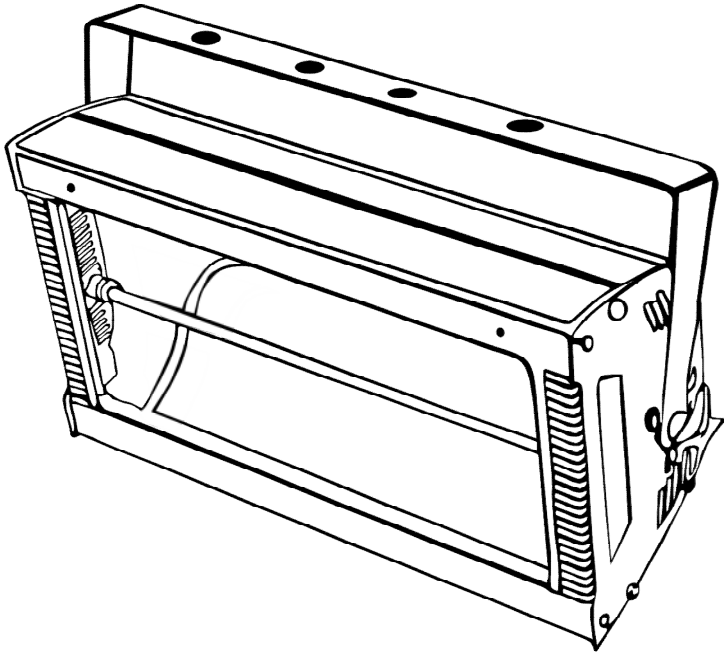
NEUTRONIC

user manual



Please read this user manual before using this product！

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Thank you for having chosen a Neutronic. You will see you have acquired a powerful and versatile device.

1. Safety Instructions

Please read these instructions carefully,which includes important information about the installation, usage and maintenance of this product.

Warning! This product is for professional use only! It is not for household use.It presents risks of lethal or severe injury due to fire and heat, electric shock, and falls

Important

Every person involved with the installation, operation and maintenance of this device has to be qualified and follow the instructions of this manual
Manufacturer will not with responsibility for those operation not according to this Instruction

Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
Always ground (earth) the fixture electrically.
To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
Replace the lamp when it becomes defective or worn out.
Disconnect the fixture from AC power and allow the fixture to discharge for 1 minute before changing the lamp or fuse.
Always disconnect the power and allow the fixture to cool for at least 15 minutes before attempting to open the equipment housing or carrying out any maintenance.
Do not attempt to bypass the fuse, and replace the defective fuse with ones of the specified type and rating only.
During long periods of non-use, disconnect the unit's main power.

Do not attempt to operate this unit if the power cord has been frayed or broken.
Never use the device during thunderstorms. Over voltage could destroy the device. Always disconnect the device during thunderstorms.
Do not open the rear pannel ,there are no user serviceable parts inside
Maximum ambient temperature (Ta) is 104°F (40°C). Do not operate fixture at temperatures higher than this.
Never operate this unit when it's glass cover is removed or damaged.
Always be sure to mount this unit in an area that will allow proper ventilation.
Do not attempt to operate this unit, if it becomes damaged.
Never look directly into the light source, as sensitive persons may suffer an epileptic shock , especially meant for epileptics.
Please do not use the product near stairs, and a notice must be told that strobe light is working to prevent epileptics.
Replace the tube promptly when it was damaged or reached the limited life.
Keep all combustible materials (for example fabric, wood, paper) at least 0.5 meters (20 inches) away from the fixture. Keep flammable materials well away from the fixture.
The surface of the fixture can reach 120°C (248°F), do not touch it unless let it cooling down at least 15 minites.
Provide a minimum clearance of 0.1 meters (4 inches) around air vents.
When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.
Block access below the work area whenever installing or removing the fixture.

2. Technical Specifications

Light source: Philips XOP 15 or XOP 7 xenon lamp
Source lifespan: 500 hours (strobe rate less than 10/sec)
Working voltage:Use Philips XOP 15 125V-260V
Use Philips XOP 7 90V-260V
Suggestion of working voltage not below 200V
Working current:0-30A（Maximum momentary current）
Dimension: 500* 280* 140MM
Weight: 7.5KG

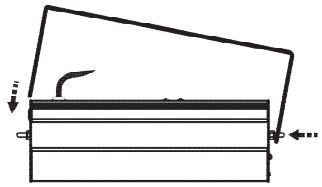
3. Installation

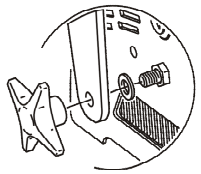
To install the mounting bracket as below figure

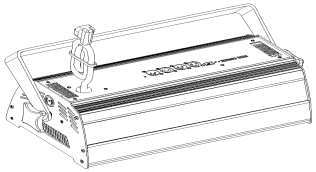
1. Place a plastic washer on each mounting bracket stud.

2. Place one end of the bracket on one of the mounting studs. Bend the other end of the mounting bracket open slightly and work it onto the opposite stud.

3. Place a hand knob on each stud. Tighten both hand knobs to lock the mounting bracket in place.







To rig the fixture

Warning: read the safety instructions carefully before installing !

1 If clamping the fixture, fasten the clamp securely to the bracket with a M12 bolt and lock nut
2 clamp or fasten the fixture securely to the structure.
3 Install a safety cable around the support and bracket.
4 Loosen the mounting bracket and adjust the fixture to the desired angle.
5 Connect and arrange the power and data cables.

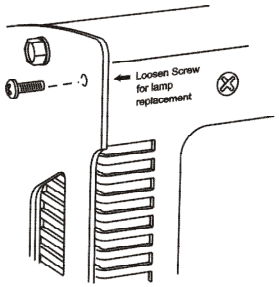
4. Replace the lamp

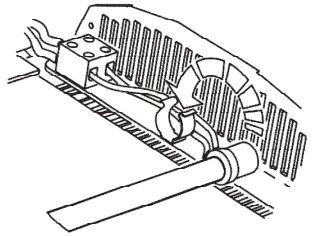
Warning: read the safety instructions carefully before installing !

You can confirm the lamp is spent or not by the flash led on the rear pannel of the fixture. If the LED lights but there is no flash from the lamp, the lamp is spent. If the LED does not flash, there may be a problem with the control signal.

remove the two marked screws on the sides of the fixture and open the front cover.Disconnect the lamp wires at the screw terminals. Lift the old lamp out of the holder ,then place a new lamp and reconnect the lamp wires. Note

that wires do not short-circuit. Close the front cover and replace the side screws.





5. Data connection

The equipment provides 3PIN and 5PIN 2 kind of signal socket connector, PIN1 is signal“ GND”， PIN2 is signal “-”,PIN3 is signal “+”， PIN4、PIN5 is vacant.

Up to 32 fixtures may be connected on a serial link . Insert a termination plug in the output of the last fixture on the link. (The termination plug, which is a male XLR plug with a 120 ohm, 0.25 watt resistor soldered between pins 2 and 3, “soaks up” the control signal so it does not reflect and cause interference.)

6. Mode DIP switch setting

The mode dip switch is the 6-pin dip switch on the rear panel

Lamp power setting

Set pin 6 to on regardless of the other switch settings to reduce about 50% output illumination and extend the lifespan of the lamp

Stand alone flash setting(without controller)

Set pin 1 to on,set pins 2 to 5 to off

When the fixture runs in stand alone flash mode, the address dip switch 1 to 9 are used to control the flash rate. The dip value is Increasing and the rate is Increasing.(see DMX Address Quick Reference Chart)

Slave mode setting under the Special Controller

Set pin 2 to on,set pin 1 and pins 3 to 5 to off

Master mode setting under the Special Controller

Set pin 2 and pin 3 to on, set pin 1 and pin 4 and pin 5 to off

1-Channel DMX mode setting:

set pin 5 to on, set pins 1 to 4 to off.

3-Channel DMX mode setting:

set pins 1 to 5 to off.

4-Channel DMX mode setting:

set pin 4 and pin 5 to on,set pins 1 to 3 to off.

7. DMX address setting

Setting the starting address

This DMX mode enables the use of a universal DMX controller device. Each fixture requires a "start address" from 1 to 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that uses 3 DMX channels and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102. Choose start addresses so that the channels used do not overlap, and note the start address selected for future reference.

Set the start address using the group of DIP switches located back of the fixture. Each dip switch has an associated value. Adding the value of each switch in the ON position will provide the start address. Figuring out which switches to toggle ON given a specific start address can be accomplished by determining which switch values will add up to the address value and turning these switches on.

Dipswitch 1 address equals 1
Dipswitch 2 address equals 2
Dipswitch 3 address equals 4
Dipswitch 4 address equals 8
Dipswitch 5 address equals 16
Dipswitch 6 address equals 32
Dipswitch 7 address equals 64
Dipswitch 8 address equals 128
Dipswitch 9 address equals 256
Dipswitch 10 - it is off when in DMX mode

For example: Set DMX address 21:
Dipswitch # 1 = 1
Dipswitch # 3 = 4
Dipswitch # 5 = 16
= 21

address 21

Set DMX address 201:
Dipswitch # 1 = 1
Dipswitch # 4 = 8
Dipswitch # 7 = 64
Dipswitch # 8 = 128
= 201

address 201

Refer to DMX Address Quick Reference Chart below , you should set the address dip switch more easily and quickly.

8. DMX Address Quick Reference Chart

Dip Switch Position

DMX DIP SWITCH SET 0=OFF 1=ON X=OFF or ON	#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
	#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
	#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5													
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

Dip Switch Position DMX Address

9. Channel Function

1 Channel Mode

CHANNEL	Value	Function
1	0—5	Blackout
	6—249	Flash rate, slow to fast
	250—255	White light effect

3 or 4 DMX Channels Mode

CHANNEL	Value	Function
1	0 – 5 6 - 255	**Flash Intensity** Blackout Minimum to maximum
2	0 - 255	**Flash Duration** 0 - 650 ms @ 50 Hz AC, or 0 - 530 ms @ 60 Hz AC
3	0 - 5 6 - 255	**Flash Rate** No flash (single flash with CH. 1) 0.5 - 25 Hz @ 50 Hz AC, or 0.6 - 30 Hz @ 60 Hz AC

Enable channel 4 with Mode DIP switch

4	0 - 5 6 - 42 43 - 85 86 - 128 129 - 171 172 – 214 215-255	**Special Effects** No effect Ramp up Ramp down Ramp up-down Random strobe Lightning Spikes

Ramp up: Light intensity gradually increases, then blacks out.

Ramp down: Light flashes to full intensity, then gradually fades.

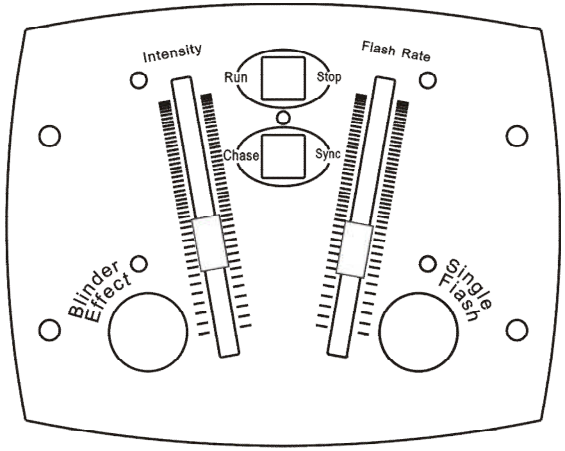
Ramp up-down: Light gradually increases and decreases.

Random flash: Light flashes randomly.

Lightning: The flashes simulate lightning.

Spikes: The lamp remains dimly illuminated between flashes.

10. The Special Controller Instruction



Panel Function

Intensity: Illumination control fader, from minimum (blackout) to maximum

Flash Rate: Strobe rate control fader，from bottom to top and the speed change from slowly to fast．

Blinder Effect: White effect button, press long to last the white light, let go and stop.

Single Flash: Flash effect button, press one time and flash one time, continues pressing and continues flashing.

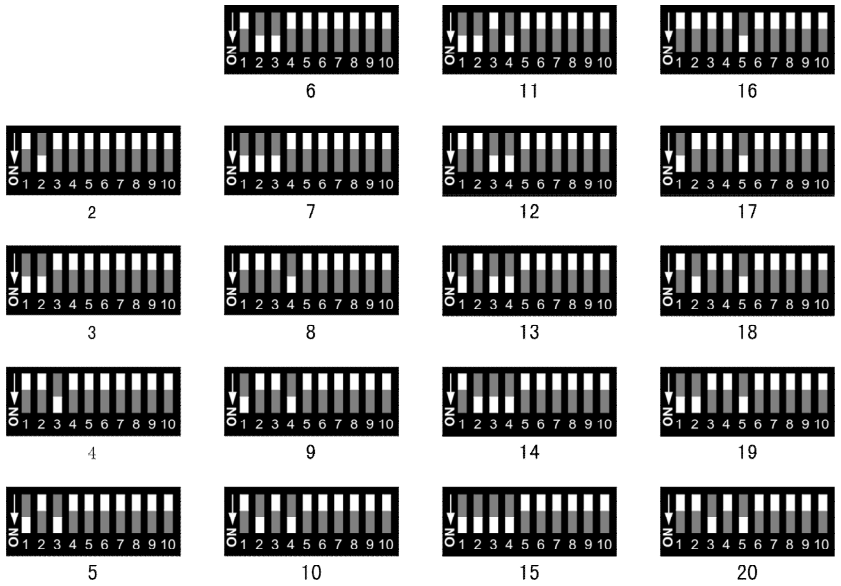
Run/Stop: run/stop button，press one time the indicator flash and can use the fader to control the intensity and speed of the fixture; Press again and the indicator not flashes, and the fader has no function.

Chase/Sync： chase / synchronous function，press one time and the indicator flash accompany With the light carrying out chase effects, press one more time and the indicator will not Flash, lighting fixture carry out synchronous functional effect.

Operation:

1. Connect the special controller to the the fixture via a 3-pin signal cable,set the fixture to be the master fixture(Set pin 2 and pin 3 of the Mode DIP switch to on, set pin 1 and pin 4 and pin 5 to off).The special controller will controll a single fixture.

2. If you want to control more than one fixtures,connect the additional fixtures to the first fixture has set to be the master fixture in series, output to input, for remote control of up to 20 fixtures.The additional fixtures may be set as slave fixture (Set pin 2 of the Mode DIP switch to on,set pin 1 and pins 3 to 5 to off).The special controller will controlls all fixtures in synchronously.

3.Chase effect setting:

Connect the controller and the fixture as described above. Set the first fixture to master mode as described above,and set the speed of Chase effect by setting the pins 1 to 4 of the address dip switch. Set each additional fixture to slave mode on its Mode DIP switch. On its address DIP switch, set the slave's position in the chase sequence. Set 2 on the second fixture to flash, 3 on the third fixture, and so on up to 20.