Operation Manual

Ultraviolet Fluorescent Lighting Fixtures

EM-42E EM-43E

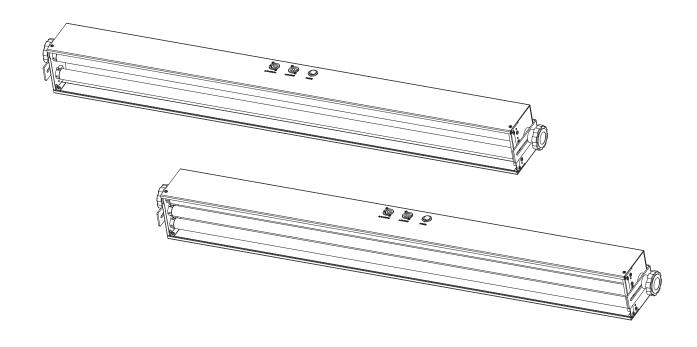




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Introduction

Congratulations on your purchase of an Effects Master Energy Series Fixture by Wildfire. These powerful and versatile ultraviolet fluorescent lighting fixtures feature F32T8BLB lamps, polished Everbrite reflectors and state of the art electronic universal voltage ballasts. Each Effects Master Fixture is precision engineered to provide you with years of trouble free service. Please take a moment to read this manual thoroughly before attempting to operate this fixture. Improper set-up, use or servicing may cause damage to the fixture and/or lamps and void the unit's warranty.

Safety Information

CAUTION – THIS FIXTURE IS TO BE OPERATED IN ACCORDANCE WITH THE WAY IT WAS DESIGNED AND TESTED. OPERATE IN DRY INDOOR LOCATIONS ONLY. USE WITH MAX 32W T8, LAMPS ONLY. SUITABLE FOR SURFACE MOUNTING ONLY.

Designed, Engineered and Built in the USA

Specifications

Housing: 16 Ga. Rolled steel with stainless steel hardware Finish: Flat black powder coat Mounting: Two fully adjustable L brackets Reflector: Polished Everbright aluminum 165° Sockets: Four or six positive locking medium Bi-Pin G13 **Ballast:** Electronic Universal Voltage HO, Power Factor > 98% Input Voltage: 120-250VAC **Input Current:** 1.0A Max Frequency: 50-60Hz. **Power Factor:** 0.98 **Power Consumption** EM-42E: 88W EM-43E: 108W **Operating Temperature:** 50° F to 100° F **Power Cord:** 8' 16/3 SOW with PowerCON and male Edison **Power Input Connection:** Neutrik PowerCON **Power Output Connection:** Neutrik PowerCON, Max 4.0A Lamps: EM-42E: Two F32T8BLB (Not Included) Three F32T8BLB (Not Included) EM-43E: **Peak Spectral Output:** 368nm With Wildfire SableLux Lamps Installed. Lamp Life: 12,000 Hrs. With Wildfire SableLux Lamps **Dimensions:** 4.25"/10.79cm High x 5.00"/12.44cm Wide x 51.37"/130.48cm Long Weight: 15.05 lbs./6.82kg. IP Rating: IP-20 Indoor use Listing: UL / CUL Standard Equipment: Adjustable Mounting Brackets **Optional Accessories:** Twenty Clamp (147-021) Safety Cable (147-002) Floor Mount (147-006)

UVT Protective Lens Kit (138-011)

Setup & Operation

Unpacking

Unpack the fixture and carefully inspect it for any signs of physical damage. Report any damage to Wildfire or your local distributor immediately. Included with each unit should be the following items:

- 1. Power Cord
- 2. PowerCON power output cable connector (used to power link additional fixtures)
- 3. Operation Manual
- 4. Warranty Card

Optional Accessories:

Twenty Clamp – These clamps when attached to both of the fixtures adjustable mounting brackets allows you to mount the fixture to a standard 2" pipe truss. Contact Wildfire or your local distributor for pricing.

Safety Cable- This cable is to be used when installing the fixture on a pipe truss with the Twenty Clamps. It attaches to the adjustable brackets on the sides of the fixture securing it from falling if the clamp is not tightened properly. Contact Wildfire or your local distributor for pricing.

Floor Mount Kit- This aluminum stand set enables you to mount your fixture on the floor for footlight applications. Contact Wildfire or your local distributor for pricing.

T-Bar Ceiling Mount- These brackets enable you to mount your Effects Master fixture to the t-bars in a standard drop ceiling. Contact Wildfire or your local distributor for pricing.

UVT Protective Lens Kit - This kit consists of an acrylic plastic lens that slides into the housing to protect the lamps. Included in this kit are two small brackets that mount on either end of the fixture holding the lens in place. This protective lens is made from a special UV transmitting plastic and is designed not to yellow or become brittle under normal operating conditions. Contact Wildfire or your local distributor for pricing

Setup

The first step is to install the lamps in the fixture. Refer to Lamp Replacement on page 5 for correct installation.

Connect the blue PowerCON connector on the power cord to the blue PowerCON AC Input receptacle on the fixture. The fixture is also provided with a gray PowerCON AC Output receptacle, enabling you to interconnect power between fixtures. **Do not connect more than 4.0A Max to the PowerCON AC OUT connector.**

Plug the fixture into the appropriate properly grounded power source. If you are controlling the unit with a lighting control board you will need to make sure it is plugged into a non-dim circuit. **Do not at any time plug the fixture into a dimmable circuit, doing so will damage the ballast in the fixture and void the warranty.**

Operation

To turn the fixture on switch the rocker switch on the side of fixture to the ON position. Unplug the fixture from the AC power outlet during prolonged periods of non-operation.

Maintenance & Troubleshooting

Lamp Replacement

Refer to Fixtures Specifications on page 4 for information on selecting the proper replacement lamp for your fixture. Unplug the fixture. If this is not possible then steps should be taken that would allow the fixture to remain in an off state while re-lamping. If your Effects Master is equipped with The UVT protective lens or Transverse Louver option, this will need to be removed first before replacing the lamps. To remove the protective lens, first determine which end is easiest to slide the lens from the unit. Looking at that end, locate the two Phillips screws that hold the lens-retaining bracket to the side of the fixture. Using a Phillips screwdriver, loosen the two screws that hold the bracket in place. (Do Not Remove the Screws). Once the two screws are loose, the bracket will slide out from under the screw heads. Now that the bracket is removed, slide the protective lens out of the housing. Holding the lamp firmly with two hands, one hand near each end of the lamp, rotate the lamp about its long center-line axis, one quarter (1/4) turn either clockwise or counter-clockwise. The sockets will click and the lamp will become loose. Gently lift the lamp free of the sockets. Install the new lamp by lining up the two pins on the ends of the lamp so that they will slide into the open slot in the lamp holder. Gently set the lamp into the sockets until the lamp pins rest on the lamp socket. Gently turn the lamp one-quarter (1/4) turn either clockwise or counter-clockwise, until the lamp socket makes a small click, or you feel a detent position. Gently lift up on the lamp to make sure that both ends of the lamp are installed correctly, neither end of the lamp should move in the socket.

Cleaning

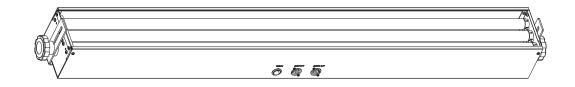
For best performance, the reflector, lamps and protective lens should be kept free of dirt and dust. At no time should any cleaning chemicals or abrasives be used to clean any part of the unit. For normal cleaning, a dry soft cloth should be used to wipe any surface free from dust and light dirt. Cleaning the reflector will require that the lamps be removed. Remove lamps by following the instructions listed under Lamp Replacement above. Always unplug the unit before cleaning. Once the lamps have been removed, gently wipe off the reflector using a soft dry cloth. In the event the reflector is heavily soiled, lightly dampen the cloth with a mild window cleaning agent and wipe. Lamps should be cleaned using the same method; first use a dry soft cloth and then proceed with a window-cleaning agent if lamp is too heavily soiled. Do not spray or apply any liquid directly to any part of the fixture.

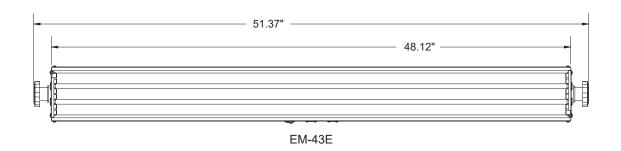
Troubleshooting

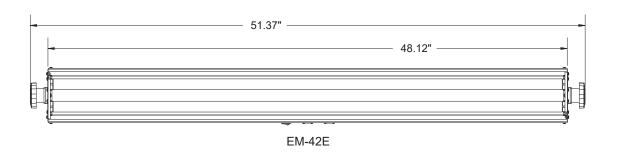
Other than the lamps, there are no user serviceable parts in the fixture.

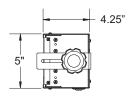
Diagrams

Isometric & Line Views

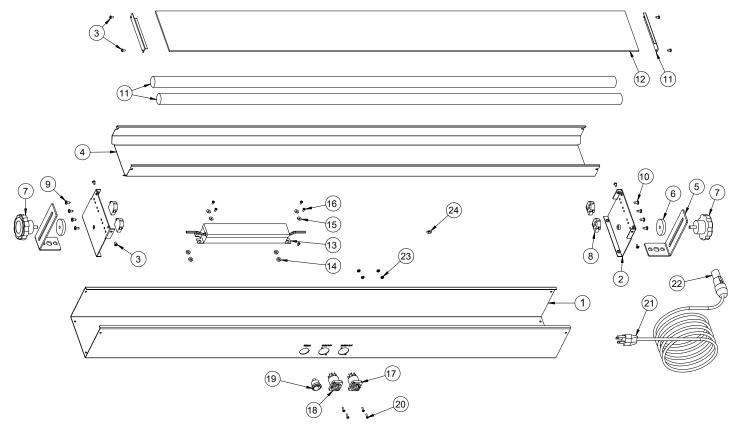






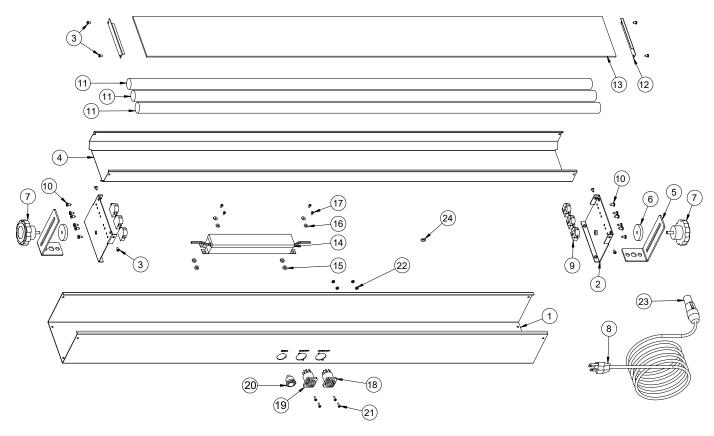


Exploded View & Part List EM-42E



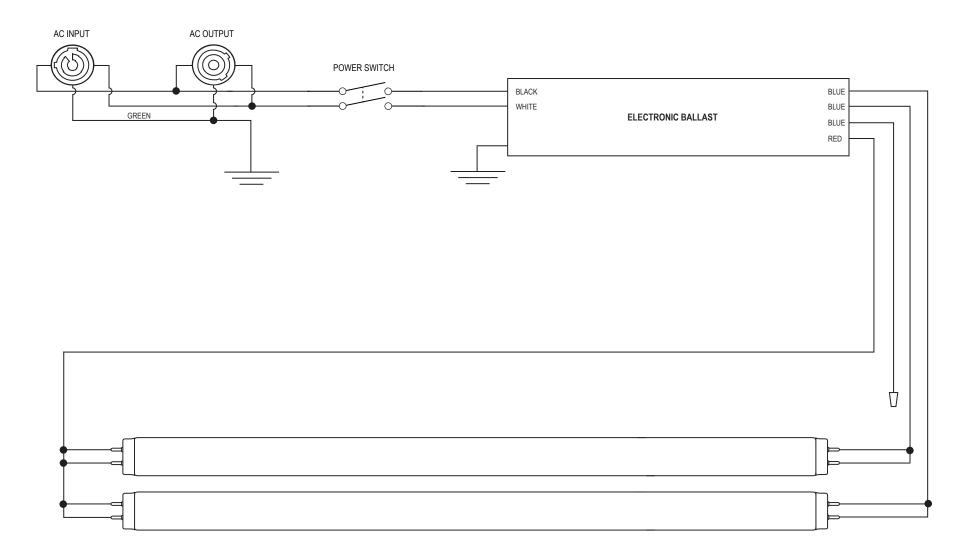
#	QTY.	PART#	PART NAME	#	QTY.	PART#	PART NAME
1	1	104-065-03	Housing, 4'	13	1	110-025	Ballast, GE LFL, UltraMax 78619
2	2	104-059-03	Cover, Housing, Side	14	4	121-066	Spacer, Nylon, 3/8 od, #8 id, .125" thk.
3	12	121-005	Screw, M, PHL, PH, 6-32 x 1/4" 18-8 SS	15	4	121-056	Washer, Flat
4	1	126-003-03	Reflector, 4' Fluorescent	16	4	121-001	Screw, M, PHL, PH, 4-40 x 1/4" 18-8SS
5	2	104-003-02	Bracket, Mounting	17	1	106-053	Receptacle, PowerCON 1, Power-OUT NAC3MPB-1
6	2	121-051-01	Washer, Neoprene, 1.5" OD, .25" ID .2" THK Black	18	1	106-051	Receptacle, PowerCON 1, Power-IN NAC3MPA-1
7	2	120-002	Knob, Bracket Adjustment	19	1	105-020	Switch, DPST, 15A, Effects Master Series RRA12C1121
8	4	108-004	Socket Lamp G13 Base	20	4	121-056	Screw, M, PHL, PH, 4-40 x 3/8" 18-8SS
9	8	121-017	Screw, SM, PHL, PH, #8 x 3/8", 18-8SS	21	1	107-003	Cord, Power, Black, 16AWG, 8'
10	2	141-002	Lamp, SableLux Fluorescent, 4' (Optional Lamps)	22	1	106-050	Connector, PowerCON 1, Power-In NAC3FCA
11	2	104-004-01	Bracket, Lens Retaining (Optional Lens Kit)	23	4	121-034	Nut, Nylock, 4-40 x 3/8" 18-8 SS
12	1	124-016-01	Lens, Clear, UVT, 4' x 4 3/4" (Optional Lens Kit)	24	1	121-035	Kepnut, 6-32 18-8SS

Exploded View & Part List EM-43E

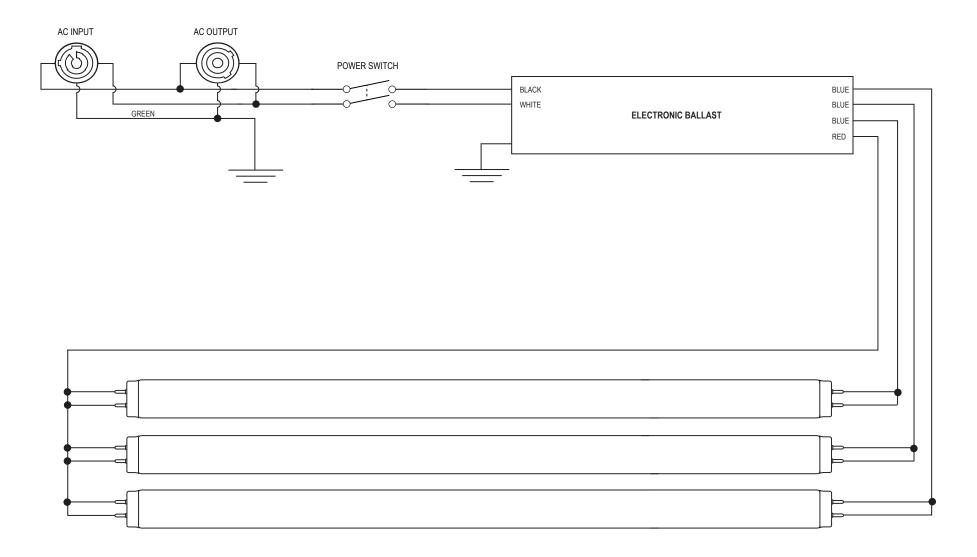


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3	12	121-005	Screw, M, PHL, PH, 6-32 x 1/4" 18-8 SS	15	4	121-066	Spacer, Nylon, 3/8 od, #8 id, .125" thk.
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Schematic, Energy Series EM-43E

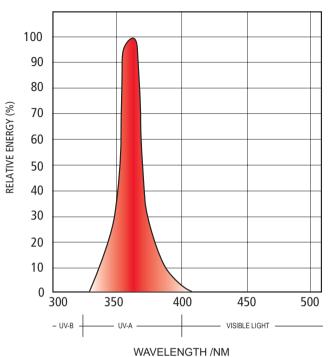


Schematic, Energy Series EM-43E



Spectral Output Graph





Photometrics Chart

Model EM-42E With SableLux Lamps Model EM-43E With SableLux Lamps Distance in Feet / Meters, MF: 2.97 Distance in **Feet** / Meters, MF: **2.97** Beam Diameter Feet 29.7 59.4 89.1 118.8 Beam Diameter Feet 14.8 29.7 59.4 89.1 118.8 Beam Diameter Meters 9.0 18.1 27.1 36.2 Beam Diameter Meters 4.5 9.0 18.1 27.1 36.2 Peak UV-A Irradiance mW/m² 912.0 228.0 57.0 25.3 14.2 Peak UV-A Irradiance mW/m² 1,271 317.7 79.4 35.3 19.8

All peak UV-A irradiance measurements taken at center beam using UVX Digital Radiometer and a calibrated 365nm sensor

CERTIFICATE OF COMPLIANCE

Certificate Number 20150828-E356438

Report Reference E356438-20150828

Issue Date 2015-AUGUST-28

Issued to: WILDFIRE INC

STE G1

2908 OREGON CT TORRANCE CA 90503

This is to certify that representative samples of

FLUORESCENT SURFACE-MOUNTED LUMINAIRES

General Coverage

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1598 and CSA C22.2 No. 250.0 - Luminaires.

UL 8750 - Light-Emitting-Diode (LED) Equipment for Use in

Lighting Products

Additional Information: See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

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