





#### FOR FIELD ASSISTANCE PLEASE CALL +1-213-255-2060 #4

- Before wiring to power supply and during servicing or relamping, turn off power at fuse or circuit breaker.
- All servicing or relamping must be performed by qualified service personnel.
- Product must be grounded to avoid potential electric shock or other potential hazard.
- Product must be installed at locations and heights, in a manner consistent with its intended use, and in compliance with electrical code and local codes.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



meteor-lighting.com

WHIZ 2.0 BI-DIRECTIONAL REMOTE EMERGENCY PACK

# **METE**<sup>O</sup>R

#### WIRING DIAGRAM

SPV / STV (0-10V)



LED Fixture

#### **Test Method** Disconnect the AC power of the LED fixture and EMP. The LED Fixture should be lit by EMP.

### WHIZ 2.0 BI-DIRECTIONAL REMOTE EMERGENCY PACK

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#### WIRING DIAGRAM

DMX



LED Fixture

#### **Test Method** Disconnect the AC power of the LED fixture and EMP. The LED Fixture should be lit by EMP.

### WHIZ 2.0

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#### DMX REQUIREMENTS

The Whiz 2.0 Bi-Directional fixture with DMX is a **single channel dmx** unit. The downlight and uplight are controlled **separately**. When placing an order, please indicate DMX address. (The DMX address will be listed on the back of the fixture). Do not connect more than 32 fixtures per DMX daisy chain.

DMX Address			
Fixture	Uplight	Downlight	
#1	1	2	
#2	3	4	
#3	5	6	

The fixture can be connected with RJ45 or XLR sockets. DMX cables **are not** included; please refer to compatible DMX cabling list for more information. The final fixture on each daisy chain should be terminated by the use of a DMX terminator purchased from a 3rd party or from Meteor.

CONNECTION	RJ45 (CAT5e)	5-PIN XLR
Common	WHITE/BROWN(PIN7) & BROWN (PIN 8)	PIN 1
Signal -	ORANGE (PIN 2)	PIN 2
Signal +	WHITE/ORANGE (PIN 1)	PIN 3
Spare	-	PIN 4
Spare	-	PIN 5



#### COMPATIBLE DMX CABLING LIST

DMX uses a cable consisting of two twisted pairs plus a shield to carry data. The cable must be specifically impedance matched for the digital DMX signal, meaning that microphone cable or other non-rated cable **must not be used to carry DMX**. Network cable (Cat5, 5e or 6 cable) may be used to carry DMX in an installation; however special consideration must be given to shielding and termination. Under no circumstances should solid core cable like Cat5 be terminated into a screw down connector.

Meteor recommends the use of Belden 9729 or Belden 9841 for DMX installation. Belden 9729/9841 is a two pair cable, which allows for a spare pair for 'out and back' type terminations if needed.

#### **INSTALLATION GUIDE**

## **WHIZ 2.0**

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#### NOTES

#### Application note : Wiring for DMX/RDM lighting systems

DMX/RDM is a robust and reliable system for lighting control. However, if not implemented correctly, problems can arise such as random flashing of lights, erratic operation and delays in responding to commands. This document explains the best practices in DMX wiring.

#### Important things to consider are:

- 1. DMX is a three-wire system. Use all three!
- 2. DMX is based on the EIA-485/RS-485 standard.
- 3. Always use cable specifically designed for DMX / RS-485. These cables have an impedance of 120Ω and a low capacitance. For instance : Belden 9729.
- 4. DMX must be terminated with a 120 $\Omega$  resistor to prevent reflections.
- 5. A daisy chain topology should be used.
- 6. After 32 unit loads a repeater/booster should be used. (Important : For tunable white fixtures, After "32" unit loads a repeater/booster should be used.)
- 7. Keep cabling below 200 meters between the controller and the last driver.
- 8. It is generally considered good practice to provide separate DMX in and DMX out / DMX Thru connections to your fixture to aid in installation. This can be in the form of pigtails, RJ-45 connectors or 5-pin XLR connectors.
- 9. Use twisted pair cables with an impedance of 120Ω and a low capacitance.
- 10. UTP Cat5 or Cat6 network cable can also be used but have a slightly lower impedance of 100Ω.
- 11. If shielded cable is used, only connect shield to ground on one side (typically, the controller should have its shield terminal connected to ground).
- 12. Not following the above recommendations may seem to work at first, but can cause problems. Sometimes after weeks of seemingly normal operation.

**IMPORTANT SAFEGUARDS** 

## BSL07/13/14/20 Installation Instructions Self-Testing Emergency LED Driver

#### Read and Follow all Safety Instructions:

- 1. This product is for use with an emergency LED lighting load in compliance with NFPA-101 and NEC 700.12.
- 2. Make sure all connections are in accordance with the National Electrical Code or Canadian Electrical Code and any local regulations.
- 3. To reduce the risk of electric shock, disconnect both normal and emergency power supplies before servicing.
- 4. This emergency driver is intended to be mounted on or enclosed within a luminaire and is suitable for both factory or field innstallation. Emergency driver with separate battery is intended to be enclosed within a luminaire and is suitable for both factory or field installation.
- 5. This product is suitable for use in damp locations product is also suitable for installation in sealed and gasketed fixtures. Product is not suitable for heated air outlets, outdoors, wet, or hazardous locations. Maximum allowable case temp is 65°C. See the unit label for Tcase measurement location.
- 6. An unswitched AC power source is required (120-277 VAC, 50/60 Hz).
- 7. Do not install near gas or electric heaters.
- 8. Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Contact the manufacturer for information on service.
- 9. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 10. Do not use this product for other than intended use.
- 11. Installation and servicing should be performed by qualified personnel.
- 12. Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- 13. For Canadian application the output terminals should be in compliance with the accessibility requirement of the Canadian Electric Code.
- 14. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and
  - (2) this device must accept any interference that may cause undesired operation.
- 15. This product must be grounded. See the wiring diagrams for details.



#### Save these Instructions

This Product Contains A Rechargeable Lithium-ion Battery. The Battery Must Be Recycled Or Disposed Of Properly. **METE R** 

## WHIZ 2.0 EMERGENCY PACK SPECIFICATIONS

# **METE R**

### **Specifications**

#### **UL Listed for US and Canada**

Listed to UL924 and tested to CSA 22.2, No. 141 For Field or Factory Installation (Indoor and Damp) Class 2 Option - UL 1310 Certified, CSA 22.2 No. 223-M91 compliant

#### **Illumination Time**

90 Minutes

**Full Warranty** 5 Years (NOT pro-rata)

### **Universal Input Voltage**

120-277 VAC, 50/60 Hz

**Output Voltage** 20-54 OR 54-200 VDC

#### **Output Power** 20 W

#### Test Switch/Charging Indicator Light

Test Switch Assembly is UL2043 Plenum-Rated.

#### Battery

High-Temperature, Maintenance-Free LFP Battery Technology

#### **Recharge Time**

24 Hours

#### **Temperature Rating**

Ambient: 0°C to +55°C (32°F to 131°F)

#### Dimensions

B2 Enclosure: 15.34" x 2.25" x 1.16" (369 mm x 58 mm x 30 mm) Mounting Center: 15.0" (356 mm)

#### **Maximum Weight**

BSL20B2: 3.07 lbs

### **Benefits:**

·UL Listed for field or factory installation.

• When paired with a compatible LED luminaire, provides NFPA 101

compliant emergency lighting.

· Intelligent output initially provides rated power regardless of the LED

array voltage.

- · High or low voltage output variants
- Meets CEC Title 20 (California Energy Commission) efficiency standards.

· Smart Charger Technology with low energy consumption helps meet

Title 24 building requirements.

· Self-Test automatically performs the code required testing per the

latest standard (UL 924, 10th edition, May 5th, 2022)

- · Allows for luminare to be completely installed prior to AC mains availability (ABConnect).
- · Easily disabled for storage and fool proof commissioning (ABConnect).
- · Universal Input reduces ordering and stocking complexity and reduces field wiring errors.
- Compatible with a wide variety of LED arrays and AC drivers.
- Test switch is IP65 rated for protection to dust and water inaress.
- · Small size, with and without conduit, and separate battery variants

provides maximum flexibility during installation

· No conduit is needed for plenum rated test switch assembly.

### **Dimensions:**

B2 Enclosure Dimensions (with conduit version shown below) 15.34" x 2.25" x 1.16" Mounting center - 15.0"



Meteor Lighting reserves the right to make changes to this product for design and development improvements at any time without prior notice, and such modification shall be effective immediately. @Meteor Illumination Technologies, Inc.