WORK LIGHT INSTRUCTION MANUAL

FireTech Work Lights

FT-WL-X-*

HiViz LED Lighting
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PO Box 565, Naples, NC 28760

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FT-WORK LIGHTS

SAFETY NOTICE & WARRANTY

WARNING: INSTALLATION MUST BE CONDUCTED BY A QUALIFIED TECHNICIAN.

IMPROPER INSTALLATION CAN RESULT IN INJURY OR DEATH.

- Installation must be conducted by a qualified automotive electrician or emergency vehicle technician in accordance with the applicable NFPA standard(s) and procedures (Including but not limited to NFPA 1901, 1906, 1911, 414, 1900)
- Improperly installed, aimed, or operated lights can create significant hazard to motorists which can result in collision. Ensure light fixtures are installed and operated such that their beam does not shine into oncoming traffic
- All circuits must be fused at 125% of the rated power consumption of the loads on the circuit
- A voltage drop greater than 10% in the power feed to a fixture could be an indicator of an under-sized conductor. Use of improperly sized conductors will, at a minimum, result in poor performance, and at a maximum could result in fire
- Verify input voltage is within fixture range before installation. Voltage range information can be found in this manual or printed on the fixture body
- The use of personal protective equipment (safety glasses and gloves) is highly recommended
- Allow proper cooling time before handling the fixture if it has been installed & powered to prevent burns
- Any modifications to the fixture will void warranty and are not authorized by the manufacturer
- Always inspect the fixture for any damage prior to installing and DO NOT install if any damage is present

⚠️ **PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION** ⚠️

Warranty Information: Full policy available Online at www.hivizleds.com/warranty

- Proof of purchase may be required to validate warranty. All FireTech products are warranted for the useful service life of the vehicle for which they were first installed
- Improper installation, accident, physical damage, neglect, and normal wear and tear are not covered under warranty
- Lights operated in environments over 150° Fahrenheit are not covered under warranty
- All advance-exchange warranty claims must be validated with HiViz Technical Support prior to issuance of a shipping label. Failure to return defective product will result in an invoice for the full replacement value of the product
- HiViz Lighting will repair or replace defective product at its discretion. Replacement product will be in similar or better cosmetic condition than the defective part
- Warranties should be handled through the dealer/reseller the product was purchased from; customer is responsible for delivery
- If product is found to have damage not covered under warranty, customer will be responsible for return shipping charges and/or cost of repair
- Non-warranted items can be repaired at the customer's expense of parts and labor, at the discretion of HiViz LED Lighting, who will provide an estimated repair cost before proceeding with the repair

WHAT'S INCLUDED
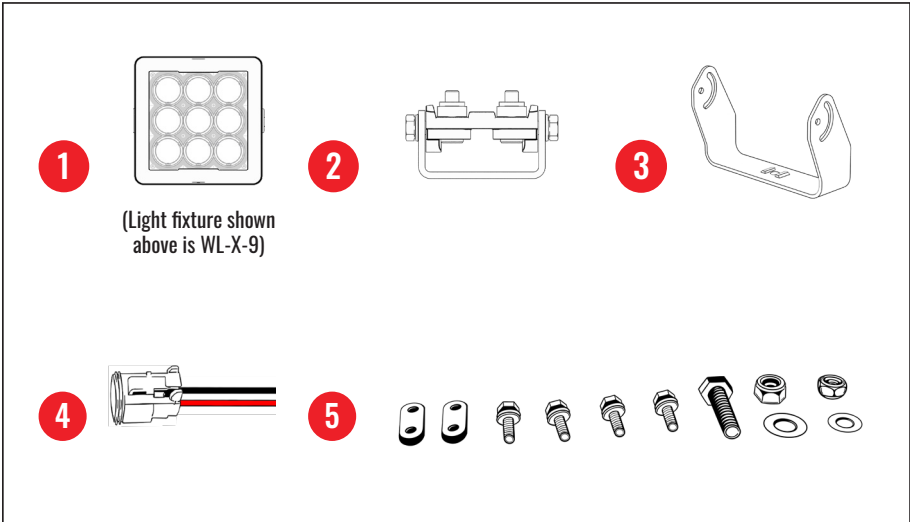
(1) (Light fixture shown above is WL-X-9)

(2)

(3)

(4)

(5)

PIECES INCLUDED

1 Light Fixture

2 Pedestal Mount

3 Trunnion Mount

4 DT06-2S Wiring Harness

5 Nuts, Bolts and Washers

WL-X-4 & WL-X-5: 1 M10X25 Stainless Mounting Bolt, Nut, Washer; 4 M6X12 Stainless Bolts, Nuts, Washers (WL-X-5H will have additional parts)
WL-X-9, WL-X-12, WL-X-20: 1 M10X25 Stainless Mounting Bolt, Nut, Washer; 4 M8X15 Stainless Bolts, Nuts, Washers; 2 Rubber Bushings

TOOLS REQUIRED

• Basic Automotive Wiring Supplies

For the WL-X-9, WL-X-12, and WL-X-20:
• 13mm socket or screwdriver

For the WL-X-4 and WL-X-5:
• 10mm socket or screwdriver

Notice:
Use of hand-tools to tighten all hardware is recommended. Use of power tools may cause permanent galling and seizure of hardware.
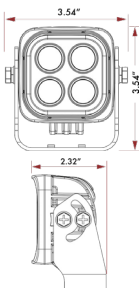
4

TECHNICAL SPECIFICATIONS

FT-WL-X-4-*
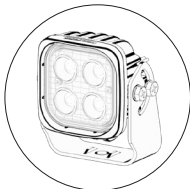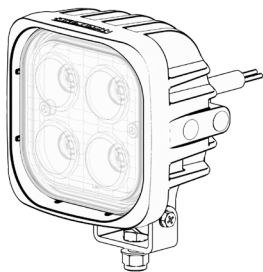
| LEDS	4 X 3W
RAW LUMENS	2,000
EFFECTIVE LUMENS	950
OPT. HOUSING COLORS	BLACK OR WHITE
OPT. BEAM PATTERNS	FLOOD
DIMENSIONS	3.54" X 3.54" X 2.32"
BUILT-IN SWITCH	NO
WATTAGE	12W
AMP DRAW (@12V)	1.0A
INPUT VOLTAGE	9-32V DC
CONNECTOR	DEUTSCH DT04-2P
EMC APPROVAL	CISPR25 CLASS 3
VIBRATION RATING	21.2 G$_{RMS}$

Pedestal P/N:
ABKBLB5HUADBK & ABKBLB5HADBK (black)
ABKBLB5HUGW & ABKBLB5HGW (white)

Trunnion P/N:
ABKBLB5TADBK (black)
ABKBLB5TGW (white)

FT-WL-X-5-**-*
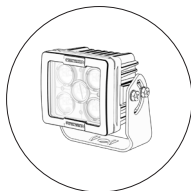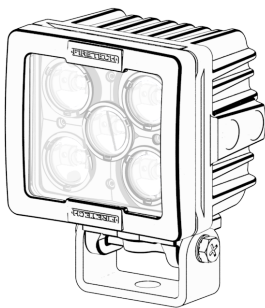
LEDS	5 X 7W
RAW LUMENS	4,000
EFFECTIVE LUMENS	3,305
OPT. HOUSING COLORS	BLACK OR WHITE
OPT. BEAM PATTERNS	SPOT, FLOOD, COMBO
DIMENSIONS	3.94" X 4.57" X 2.95"
BUILT-IN SWITCH	YES
WATTAGE	35W
AMP DRAW (@12V)	2.9A
INPUT VOLTAGE	11-65V DC
CONNECTOR	DEUTSCH DT04-2P
EMC APPROVAL	CISPR25 CLASS 3
VIBRATION RATING	21.2 G$_{RMS}$

Pedestal P/N:
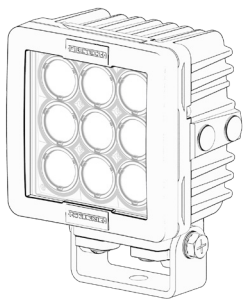ABKBLB5HUADBK & ABKBLB5HADBK (black)
ABKBLB5HUGW & ABKBLB5HGW (white)
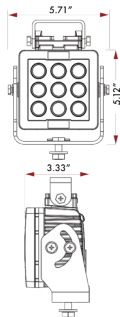
Trunnion P/N:
ABKBLB5TADBK (black)
ABKBLB5TGW (white)

P/N: FT-WL-X-5H-**-*

5

TECHNICAL SPECIFICATIONS

FT-WL-X-9-**-*
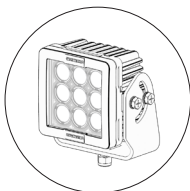
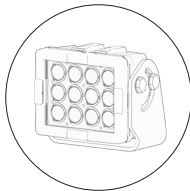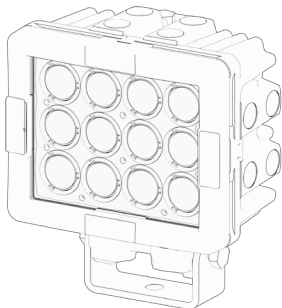|	
LEDS	9 X 7W
RAW LUMENS	7,200
EFFECTIVE LUMENS	5,734
OPT. HOUSING COLORS	BLACK OR WHITE
OPT. BEAM PATTERNS	SPOT, FLOOD, COMBO
DIMENSIONS	5.71" X 5.12" X 3.33"
BUILT-IN SWITCH	YES
WATTAGE	63W
AMP DRAW (@12V)	5.26A
INPUT VOLTAGE	11-65V DC
CONNECTOR	DEUTSCH DT04-2P
EMC APPROVAL	CISPR25 CLASS 3
VIBRATION RATING	21.2 G$_{RMS}$

Pedestal P/N:
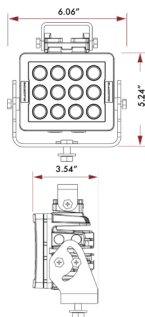ABKBLB9HUADBK & ABKBLB9HADBK (black)
ABKBLB9HUGW & ABKBLB9HGW (white)

Trunnion P/N:
ABKBLB9TADBK (black)
ABKBLB9TGW (white)

FT-WL-X-12-**-*

LEDS	12 X 7W
RAW LUMENS	9,600
EFFECTIVE LUMENS	6,697
OPT. HOUSING COLORS	BLACK OR WHITE
OPT. BEAM PATTERNS	SPOT, FLOOD, COMBO
DIMENSIONS	6.06" X 5.24" X 3.54"
BUILT-IN SWITCH	YES
WATTAGE	84W
AMP DRAW (@12V)	7.0A
INPUT VOLTAGE	11-65V DC
CONNECTOR	DEUTSCH DT04-2
EMC APPROVAL	CISPR25 CLASS 3
VIBRATION RATING	21.2 G$_{RMS}$

Pedestal P/N:
ABKBLB12HUADBK & ABKBLB12HADBK (black)
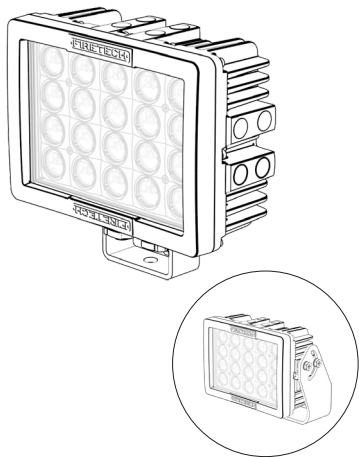ABKBLB12HUGW & ABKBLB12HGW (white)

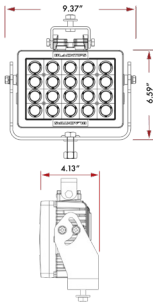**Trunnion P/N:**
ABKBLB12TADBK (black)
ABKBLB12TGW (white)

TECHNICAL SPECIFICATIONS

FT-WL-X-20-**-*

LEDS	*20 X 7W*
RAW LUMENS	*16,000*
EFFECTIVE LUMENS	*11,270*
OPT. HOUSING COLORS	*BLACK OR WHITE*
OPT. BEAM PATTERNS	*SPOT, FLOOD, COMBO*
DIMENSIONS	*9.37" X 6.59" X 4.13"*
BUILT-IN SWITCH	*NO*
WATTAGE	*140W*
AMP DRAW (@12V)	*11.66A*
INPUT VOLTAGE	*11-65V DC*
CONNECTOR	*DEUTSCH DT04-2*
EMC APPROVAL	*CISPR25 CLASS 3*
VIBRATION RATING	*21.2 Grms*

Pedestal P/N:
ABKBLB20HUADBK & ABKBLB20HADBK (black)
ABKBLB20HUGW & ABKBLB20HGW (white)

Trunnion P/N:
ABKBLB5TADBK (black)
ABKBLB20TGW (white)

CONFIGURATION INFORMATION

CONFIGURE PART

LEDS | BEAM | HOUSING

FT-WL-X-___ - ___ - ___

4	S	B
5	F	W
9	FT	
12		
20		

EXAMPLE CONFIGURATION
↓
FT-WL-X-12-FT-W

WORK LIGHT - EXTREME - 12 LED - COMBO - WHITE

* ADD "-W" OR "-B" TO DENOTE WHITE OR BLACK HOUSING
** SPECIFY SPOT, FLOOD, OR FIRETECH OPTICS

AVAILABLE BEAM PATTERNS

S=SPOT
LONG DISTANCE

F=FLOOD
AMPLE COVERAGE

FT=FIRETECH OPTICS
BEST OF BOTH

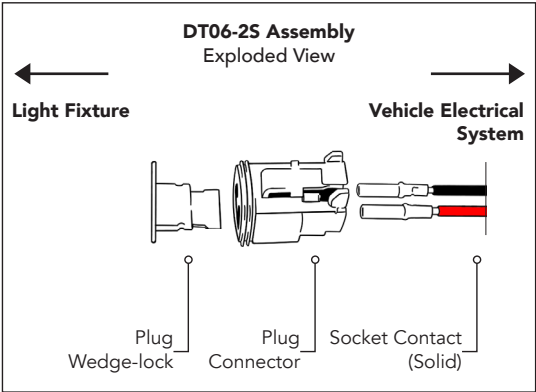HOUSING COLOR OPTIONS
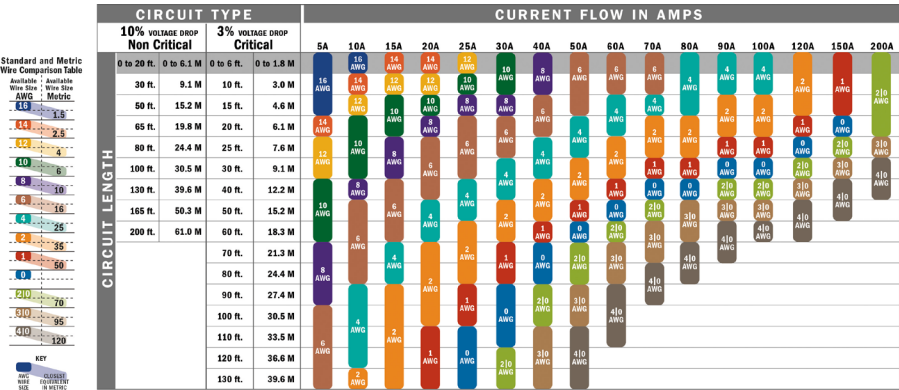
W=WHITE   B=BLACK

WIRING INFORMATION

1. Wiring:

- A DT04-2P connector is included on the cable attached to the fixture. A pigtail containing the mating DT06-2S connector is included with the fixture.

- Pin 1 = Power (Red)
  Pin 2= Ground (Black).

- When wiring to the apparatus, ensure the conductors are sized to carry at least 20% greater load than the calculated amperage at the minimum chassis voltage such that no greater than 10% voltage drop occurs. Fuse the circuit at the power source at a value 20% greater than the calculated load at the minimum chassis voltage. Refer to the below chart for more information.

DT06-2S Assembly
Exploded View

Light Fixture

Vehicle Electrical System

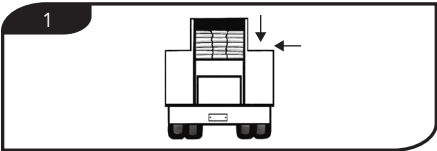Plug Wedge-lock   Plug Connector   Socket Contact (Solid)

Below, **Blue Sea Systems** has provided a chart documenting proper wire size selections for automotive applications. NFPA 1901 13.2.1.1 allows for up to 10% voltage drop on automotive fire apparatus. Please be sure to reference proper conductor size below. Visit bluesea.com for more information.

"Printed with permission of **Advanced System Group**"

Although this process uses information from ABYC E-11 to recommend wire size and circuit protection, it may not cover all of the unique characteristics that may exist on a boat. If you have specific questions about your installation please consult an ABYC certified installer.

INSTALLATION INSTRUCTIONS

1

Hold fixture up to the truck, identify mounting location. Be sure there is nothing on the back side of desired location that would get damaged by a drill bit.

2
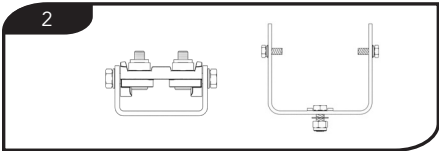
Decide whether you are going to use the pedestal mount, or the trunnion mount with the fixture. Remove the unneeded mounting bracket and set aside.

3a
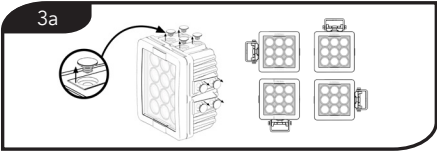
If using the pedestal mounting bracket, install the bracket in the desired location on the fixture. To move it, remove the U shaped lower bracket component using the two 12mm bolts on either side of the bracket, use an allen wrench to remove the mounting plate. Using a pick tool, pull the rubber plugs out of the desired mounting location. Align the bracket and re-install the hardware using a dab of locktite blue.

3b

Install 2nd
Install 1st
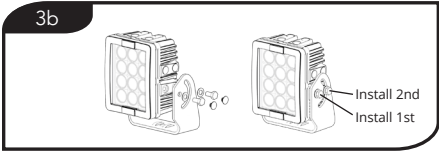
If using the trunnion mount, remove the black plugs on either side of the fixture. Align the mounting hardware for the center hole on the bracket. Tighten the hardware to snug the fixture. Once the center bolt is installed, install the second bolt and tighten until snug.

4
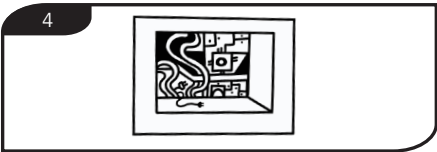
Ensure there are no wires or obstructions behind the desired mounting location.
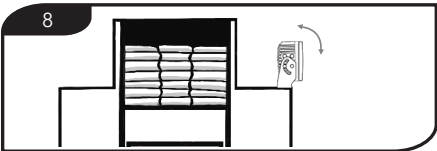
5
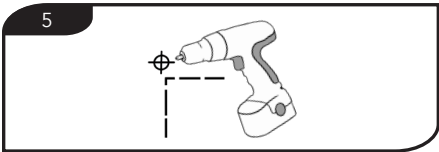
Drill mounting hole.

6
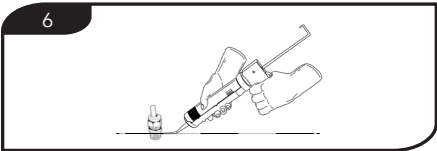
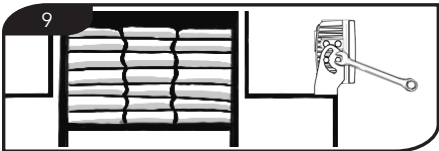
Insert mounting bolt through bracket and desired mounting surface. Install washer and tighten locknut. Seal hole location with silicone if needed.

7

Build electrical circuit and connect wiring to fixture.

8

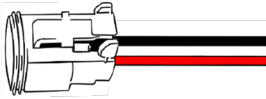Test performance of fixture and set desired aim.

9

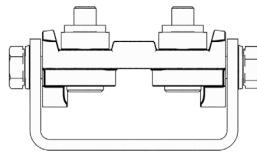Tighten hardware to prevent fixture from moving.
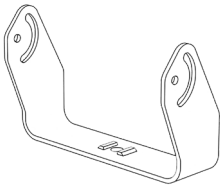
9

ACCESSORIES & REPLACEMENT PARTS

1. Wiring Harness
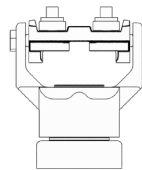P/N: ACB2PIN200MM

2. Pedestal Mount
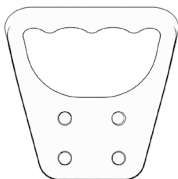(See pgs. 5-7 for part numbers)

3. Trunnion Mount
(see pgs. 5-7 for part numbers)

4. Swivel Base
P/N: FT-WL-X-9-SWIVEL2-B

(works only on WL-X-9 & WL-X-12)

5. Handle
P/N: FT-WL-X-9-HANDLE-B

(works only on WL-X-9, WL-X-12, and WL-X-20)

REFERENCES

For additional information, please visit hivizleds.com

**Work Lights
Product Page**

**Product Specific
Videos Available on
YouTube**

HiViz LED LIGHTING
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