

HEADS UP!

CRANE SAFETY LIGHTS & WARNING DEVICES

**FLOOR PROJECTED LED WARNING LIGHT SYSTEMS THAT
ALERTS PERSONNEL OF OVERHEAD CRANE PROXIMITY**

**HEAVY DUTY WARNING LIGHT/ SIREN
ALERT PERSONNEL WITH AUDIBLE AND VISUAL WARNINGS IN
ONE UNIT**

HEADS UP! CRANE SAFETY LIGHTS

INTRODUCTION

Why are Crane Safety Lights and Warning Buzzers, Horns, and Sirens Important?

Many construction and manufacturing companies use overhead cranes to transport loads from one area to another. These overhead cranes are heavily used, daily. Often, employees are hard at work in the same vicinity as the overhead cranes while they are in use. Crane's impressive lifting capabilities paired with a lack of situational awareness can lead to major injuries in the workplace. Accident or injury in the workplace is unfortunate because it leads to both monetary losses as well as physical harm to an employee.

Warning Sirens, Buzzers, and Horns (Audible Signal)

For many years, audible alarms have been the solution to creating awareness of the proximity of an overhead crane or load. Per OSHA, cranes equipped with radio controls or cab controls are required to have horns, buzzers, or sirens to provide an audible warning to other personnel while cranes or loads are in motion. Audible alarms are the industry safety standard and a productive safety solution. The alarm tones are loud and clear, undeniably effective in commanding attention. If there is ever limited visual contact, the aggressive audible signal will make the crane's location known with its every movement. Another benefit of the audible warning signal is it is universally understood. It does not matter who may encounter the audible warning device, they will know that it is an alert.

Crane Safety Lights (Visual Signal)

As technology continues to advance, another safety solution has become increasingly popular, crane safety lights. Crane safety lights both complement and adds to the application of the audible warning signals. The combination of audible and visual signals acts as the ultimate safety solution.

LED crane safety lights are becoming common as an industry safety standard. LED technology has improved over time. The durability and lumen output of LED lights have been enhanced. The clean, crisp boundaries created by these lights are hard to ignore. Some of the main benefits of implementing the use of crane safety lights for your overhead cranes and hoists include:

- The lights serve as a visual warning to both motorized and pedestrian traffic that is going to be or are in the overhead crane's vicinity
- Visual warning at floor level as well as at a higher elevation
- Reduce operator error and accidents
- Assist operator by giving visual clues for more precise handling avoiding potential hazards
- Ability to withstand harsh weather conditions and harsh environments while producing sufficient illumination in such situations
- Energy efficient
- Application versatility
- Can be installed both indoors and outdoors
- Can be installed on both new and old crane and hoist builds
- Option of many different configurations to warn personnel of overhead load
 - Lines
 - Spots
 - Boxes
 - Custom Images

The benefits of these affordable and easy-to-install products are a given considering the potential, extreme costs associated with injury and loss of production.

HEADS UP! CRANE SAFETY LIGHTS

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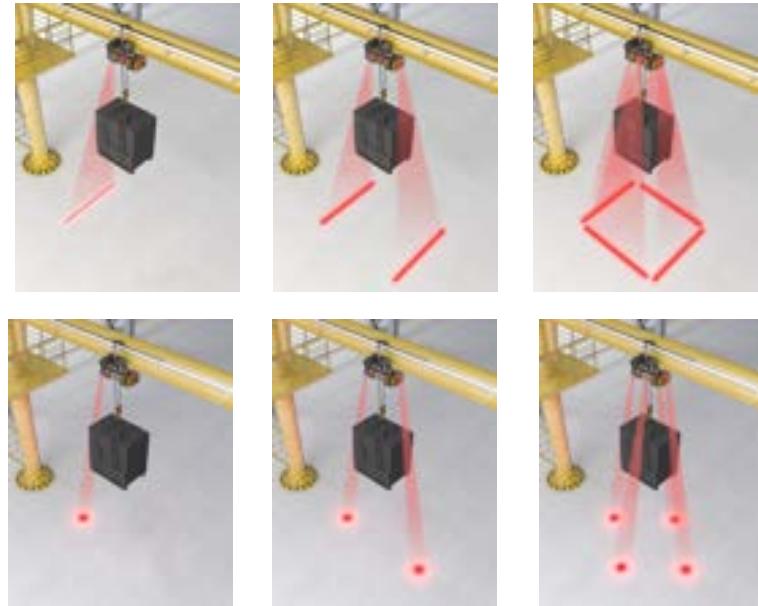
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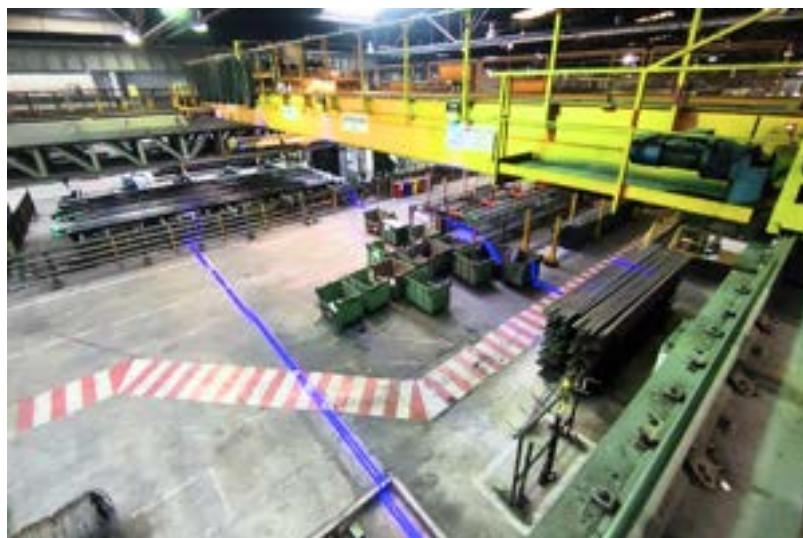
HEADS UP! CRANE SAFETY LIGHTS

LED SPOT OR LINE LIGHT(S)

TYPICAL CONFIGURATIONS FOR TROLLEY & HOIST APPLICATION



TYPICAL CONFIGURATION FOR BRIDGE APPLICATION
LINE LENGTHS ARE ADJUSTABLE TO ACCOMMODATE ANY BRIDGE SPAN



STANDARD AND CUSTOMIZABLE SYMBOLS AVAILABLE



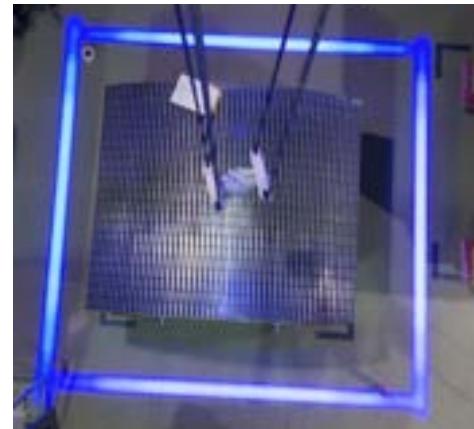
MAX SERIES

SB HP, SB SUPER HP & SB HYPER HP

HEAVY DUTY LED LINE LIGHT FOR BRIDGE AND TROLLEY APPLICATIONS. SUGGESTED FOR INSTALLATION HEIGHTS UP TO 20 METERS AND HEAVY DUTY ENVIRONMENTS.

SPECIFICATIONS:

- POWER SUPPLY: 460VAC OR 90-305VAC
- SB HP: 65W (BLUE) 50W (RED)
- SB SUPER HP: 98W (BLUE) 80W (RED)
- SB HYPER HP: 150W (BLUE) 120W (RED)
- AMP DRAW AT 120V:
 - SB HP: .54 AMPS (BLUE) .42 AMPS (RED)
 - SB SUPER HP: .82 AMPS (BLUE) .67 AMPS (RED)
 - SB HYPER HP: 1.25 AMPS (BLUE) 1 AMP (RED)
- AMP DRAW AT 460V:
 - SB HP: .14 AMPS (BLUE) .10 AMPS (RED)
 - SB SUPER HP: .21 AMPS (BLUE) .17 AMPS (RED)
 - SB HYPER HP: .33 AMPS (BLUE) .26 AMPS (RED)
- PROJECTED SHAPE: LINE (ADJUSTABLE LENGTH)
- OPERATING TEMPERATURE: -40°C TO 60°C (BLUE) -40°C TO 50°C (RED)
- MATERIALS: ANODIZED ALUMINUM (HOUSING), PAINTED STEEL (BRACKET), STAINLESS STEEL (SCREWS AND CABLE GLANDS), GLASS (LENSES), EPDM (GASKETS), PVC (LENS COVER)
- IP RATING: IP65
- IK RATING: IK08
- WEIGHT: 4.2 KG
- DIMENSIONS: 262 L X 65 H X 243 W (MM)
- 1 METER OR 3 METER PIGTAIL



**LENS COVERS TO
ADJUST LINE LENGTH**



Demo Video

***OPTION OF BLUE OR RED LIGHT**

» Part Numbers

90-305VAC	460VAC	PRODUCT
LC0117N	LC0117N-HV	SB HP BLUE
LC0118N	LC0118N-HV	SB HP RED
LC0285N	LC0285N-HV	SB SUPER HP BLUE
LC0286N	LC0286N-HV	SB SUPER HP RED
LC1767	LC1767-HV	SB HYPER HP RED
LC1766	LC1766-HV	SB HYPER HP BLUE

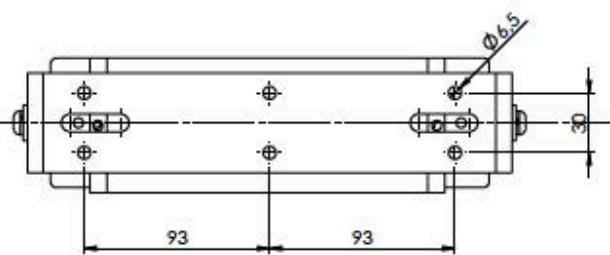
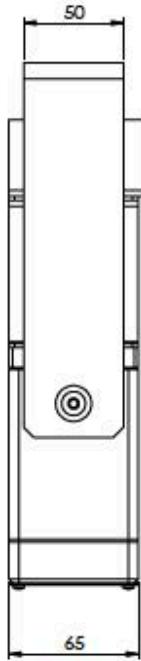
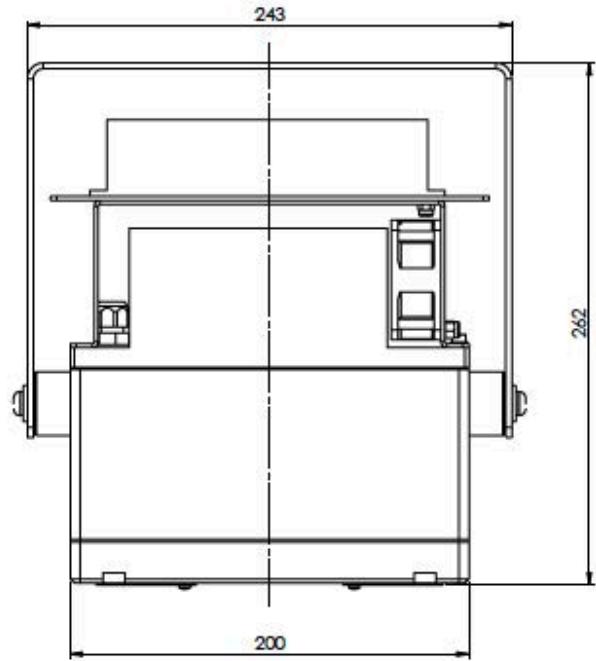
***FOR 3 METER PIGTAIL, ADD -3 TO P/N**

WWW.ENGINEERED-COMPONENTS.COM | 828-683-0176 |

SALES@ENGINEERED-COMPONENTS.COM

MAX SERIES

SB HP & SB SUPER HP



SB HP

Installation Height	Length	Thickness
5.0 M	3.30 M	73.00 mm
5.5 M	3.60 M	80.00 mm
6.0 M	3.90 M	87.00 mm
6.5 M	4.20 M	94.00 mm
7.0 M	4.60 M	102.00 mm
7.5 M	4.90 M	109.00 mm
8.0 M	5.20 M	116.00 mm
8.5 M	5.50 M	123.00 mm
9.0 M	5.90 M	131.00 mm
9.5 M	6.20 M	138.00 mm
10.0 M	6.50 M	145.00 mm

SB SUPER HP & SB HYPER HP

Installation Height	Length	Thickness
8.0 M	5.20 M	116.00 mm
8.5 M	5.50 M	123.00 mm
9.0 M	5.90 M	131.00 mm
9.5 M	6.20 M	138.00 mm
10.0 M	6.50 M	145.00 mm
10.5 M	6.80 M	152.00 mm
11.0 M	7.20 M	160.00 mm
11.5 M	7.50 M	167.00 mm
12.0 M	7.80 M	174.00 mm
12.5 M	8.10 M	181.00 mm
13.0 M	8.50 M	189.00 mm
13.5 M	8.80 M	196.00 mm
14.0 M	9.10 M	203.00 mm
14.5 M	9.40 M	210.00 mm
15.0 M	9.80 M	218.00 mm
15.5 M	10.10 M	225.00 mm
16.0 M	10.40 M	232.00 mm
16.5 M	10.70 M	239.00 mm
17.0 M	11.10 M	247.00 mm
17.5 M	11.40 M	254.00 mm
18.0 M	11.70 M	261.00 mm
18.5 M	12.00 M	268.00 mm
19.0 M	12.40 M	276.00 mm
19.5 M	12.70 M	283.00 mm
20.0 M	13.00 M	290.00 mm

MAX SERIES POWER PACKAGES

Typically, cranes are powered with 460V and have a small 120VAC control transformer for small consumers like VFDs, sensors, and other control hardware. Often, an additional transformer is needed for larger consumers like lights.

A power package consists of a NEMA 4X junction box with or without a 460VAC to 230VAC transformer, terminals, circuit protection, and cable glands. The step down transformer provides the 230VAC for the lights on the 460V crane and the junction box provides a central wiring point out to the individual lights. **The SB HP, SB Super HP, and the Safe 40 all have an integrated 460VAC power supply so there is no need for a transformer in the junction box.**

The packages are offered in 4 configurations -

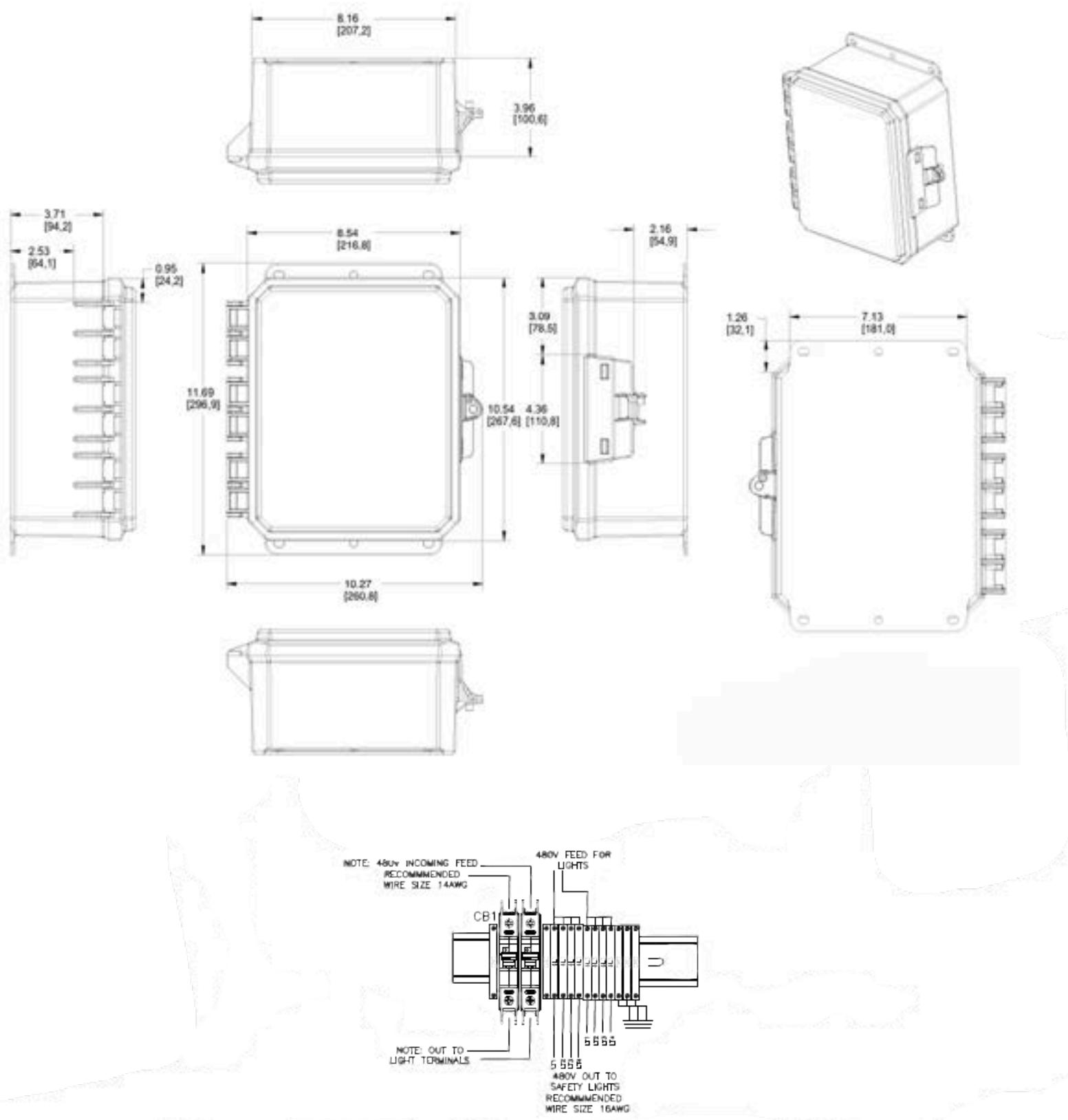
1. **P/N 460PP-JB-4L** Junction box to power up to four 460VAC max series SB LED line projectors
2. **P/N 460PP-250VA-JB-4L** Junction box with 250VA transformer to power up to four 85-305VAC max series DES laser line projectors
3. **P/N 460PP-500VA-JB-4L** Junction box with 500VA transformer to power up to four 90-305VAC max series SB LED line projectors
4. **P/N 575PP-500VA-JB-4L** Junction box with 500VA transformer to power up to four 90-305VAC max series SB LED line projectors

The pre-engineered Max Series power packages are provided to simplify procurement and installation. The robust design allows these packages to be utilized in most applications.

MAX SERIES POWER PACKAGES

Wiring Diagram

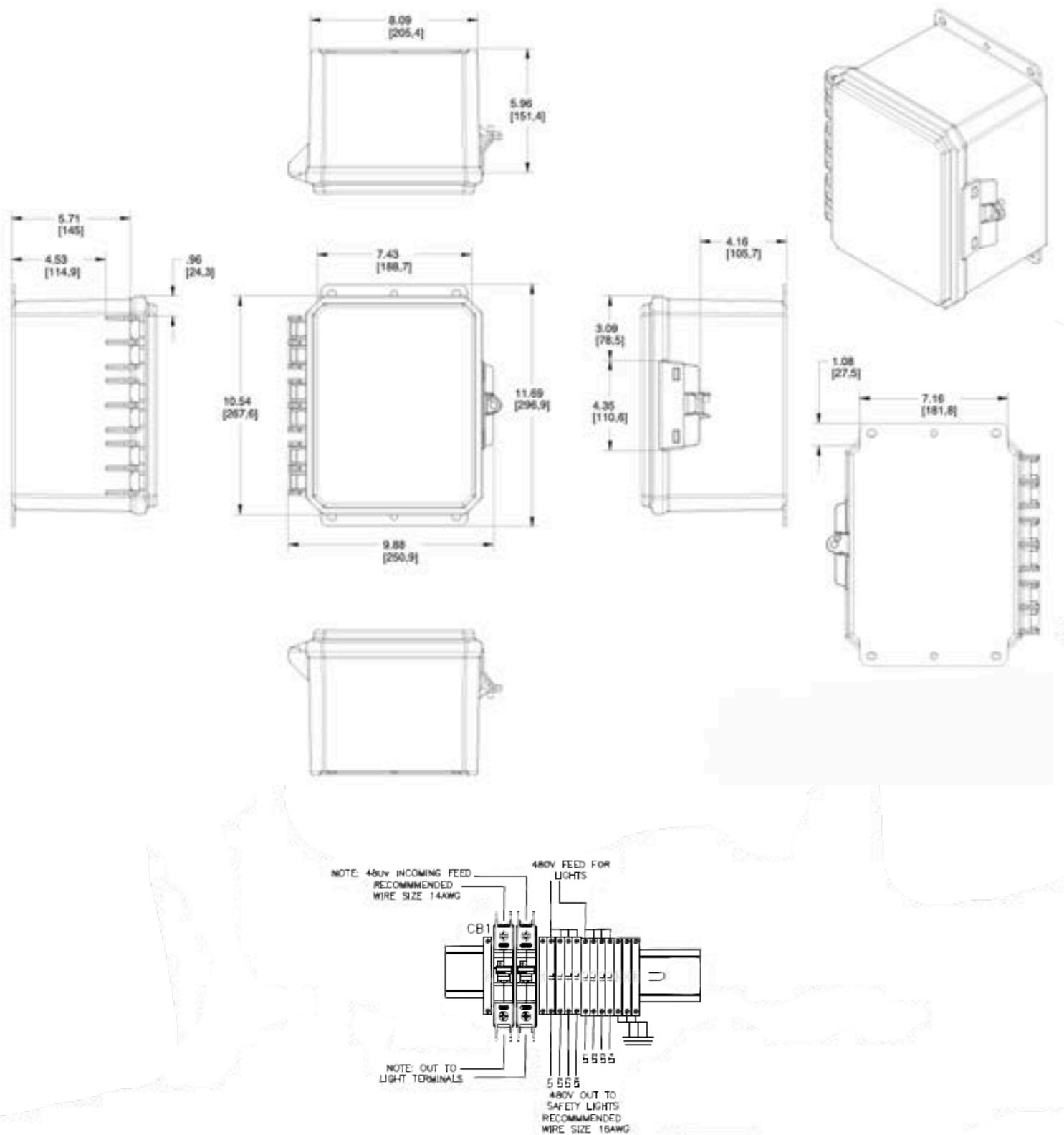
460PP-JB-4L



MAX SERIES POWER PACKAGES

Wiring Diagram

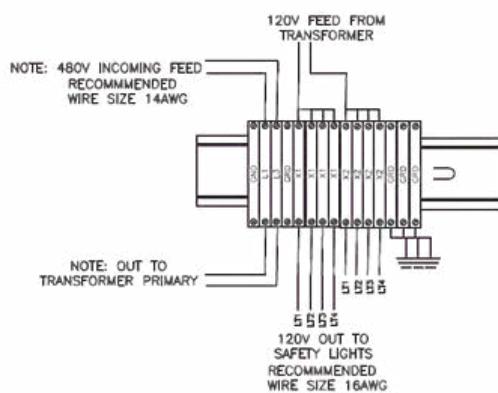
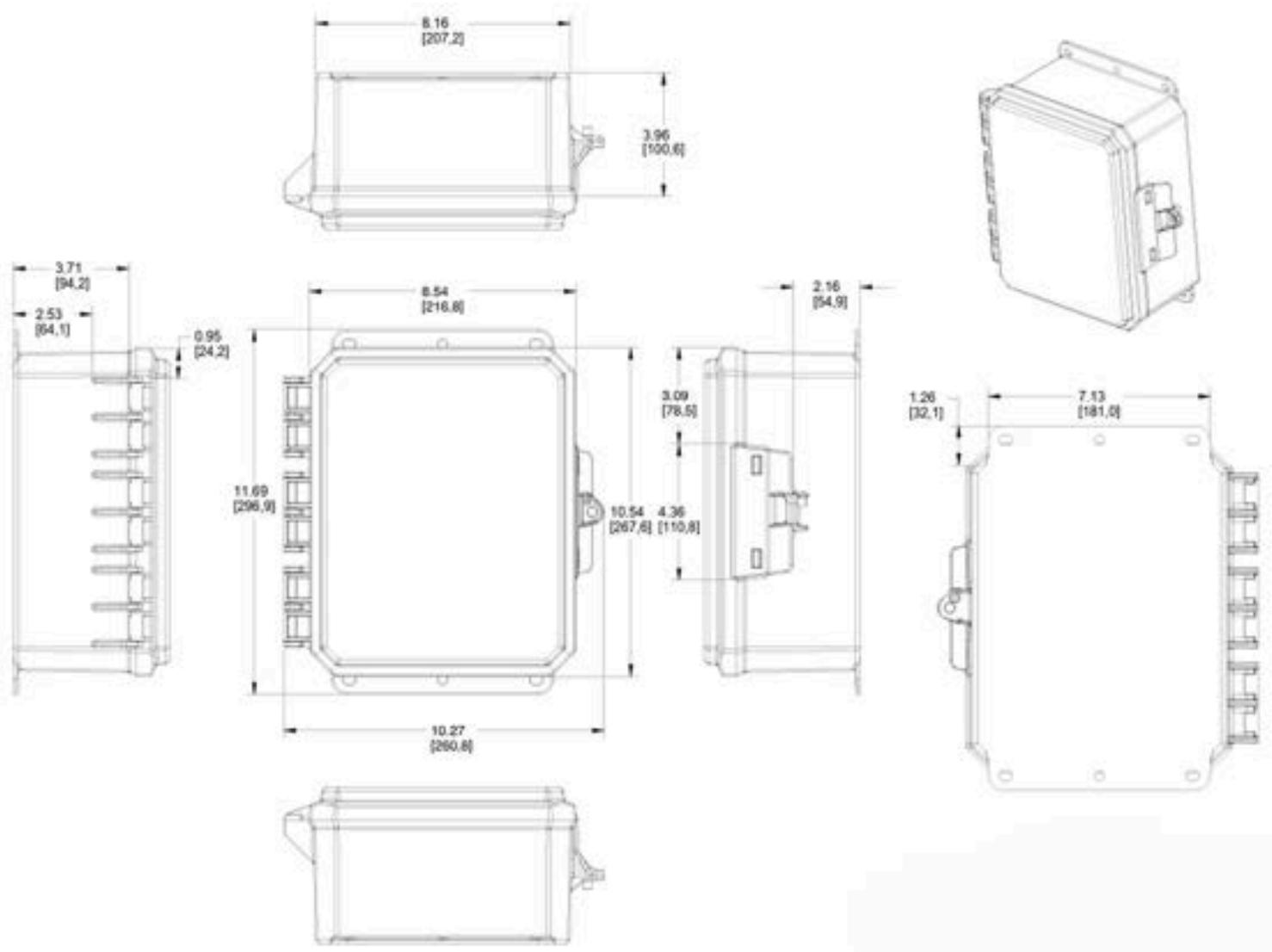
460PP-250VA-JB-4L



MAX SERIES POWER PACKAGES

Wiring Diagram

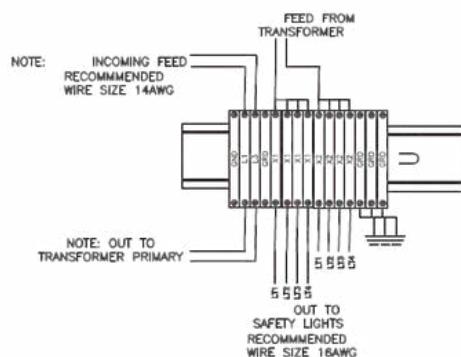
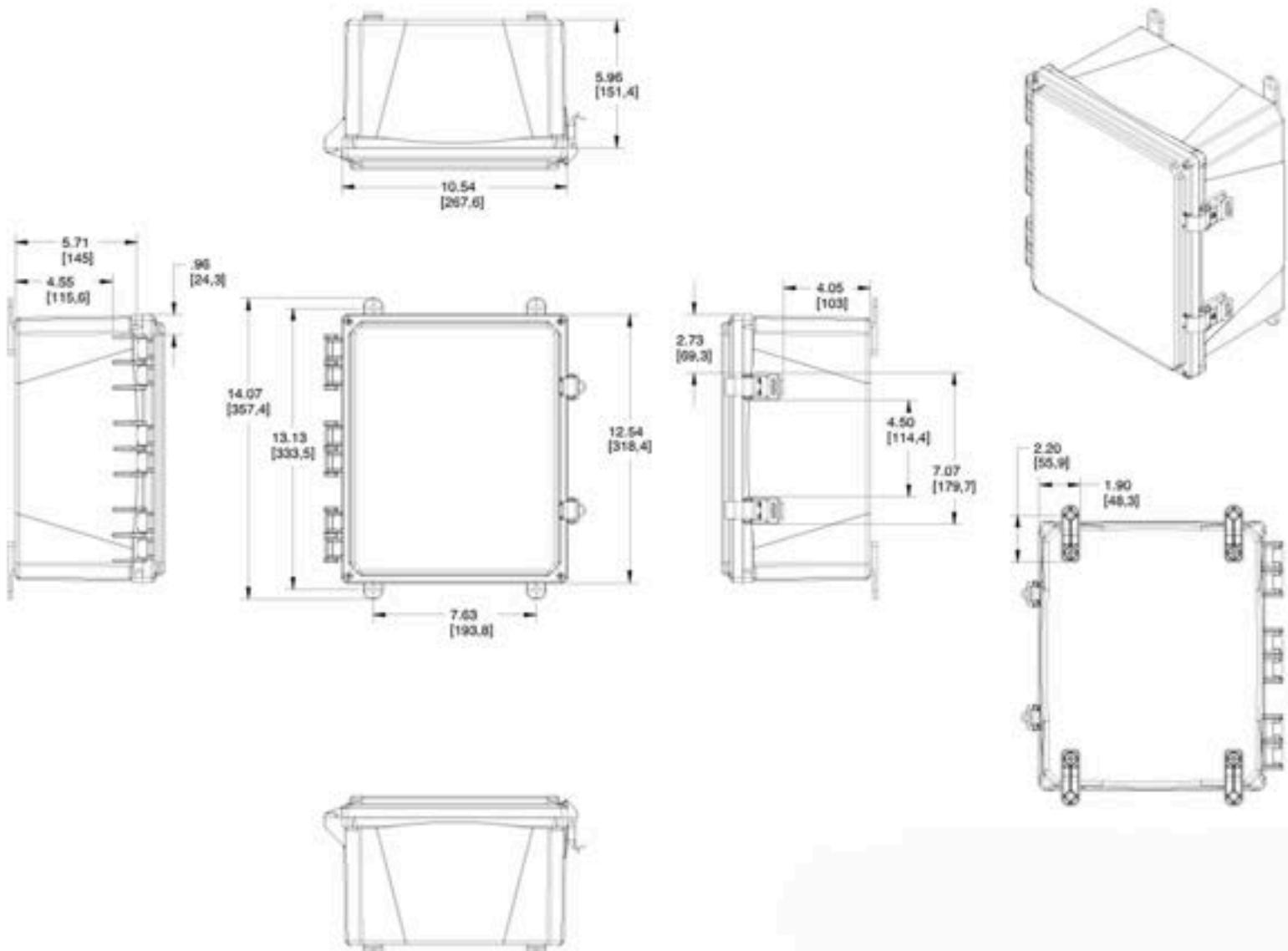
460PP-500VA-JB-4L



MAX SERIES POWER PACKAGES

Wiring Diagram

575PP-500VA-JB-4L



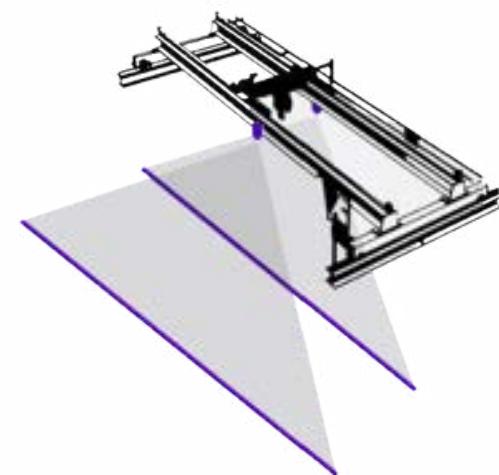
MAX SERIES

DES LASER LINE LIGHT PROJECTOR

IDEAL FOR BRIDGE LINE LIGHT APPLICATIONS. LASER TECHNOLOGY ALLOWS FOR EXTREMELY LONG LINES AT LOW INSTALLATION HEIGHTS. INCLUDES ADJUSTABLE MOUNTING BRACKET, 3 METER PIGTAIL, AND OPTIONAL PRE-ENGINEERED JUNCTION BOX

SPECIFICATIONS:

- INPUT VOLTAGE: 85-305VAC
 - FOR 460VAC APPLICATIONS, USE 460PP-250VA-JB-4L
- INPUT CURRENT: .04-.13A
- INPUT FREQUENCY: 50-60 HZ
- MATERIALS: ANODIZED ALUMINUM AND STAINLESS STEEL AISI
- OPERATING TEMPERATURE: -40F-149F (-40C-65C)
- WEIGHT: 4 LBS
- EMITTING ANGLE: 10 DEGREES - 100 DEGREES
- IP65 RATED
- COOLING: STATIC (NO FAN)



PART NUMBER CLARIFICATION -

***DES-B = BLUE**

***DES-R = RED**

PROJECTED LINE DIMENSIONS

INSTALLATION HEIGHT (FT)	RED LINE LENGTH (FT)	RED PART NUMBER	BLUE LINE LENGTH (FT)	BLUE PART NUMBER
15	23	DES-LL-RED-4/8-A OR B	42	DES-LL-BLUE-4/8-A OR B
20	30	DES-LL-RED-4/8-A OR B	56	DES-LL-BLUE-4/8-A OR B
25	38	DES-LL-RED-4/8-A OR B	71	DES-LL-BLUE-4/8-A OR B
30	34	DES-LL-RED-9/14-A OR B	60	DES-LL-BLUE-9/14-A OR B
35	40	DES-LL-RED-9/14-A OR B	70	DES-LL-BLUE-9/14-A OR B
40	46	DES-LL-RED-9/14-A OR B	80	DES-LL-BLUE-9/14-A OR B

CONSULT US FOR INSTALLATION HEIGHTS ABOVE 40 FEET

LINE LENGTH FORMULAS

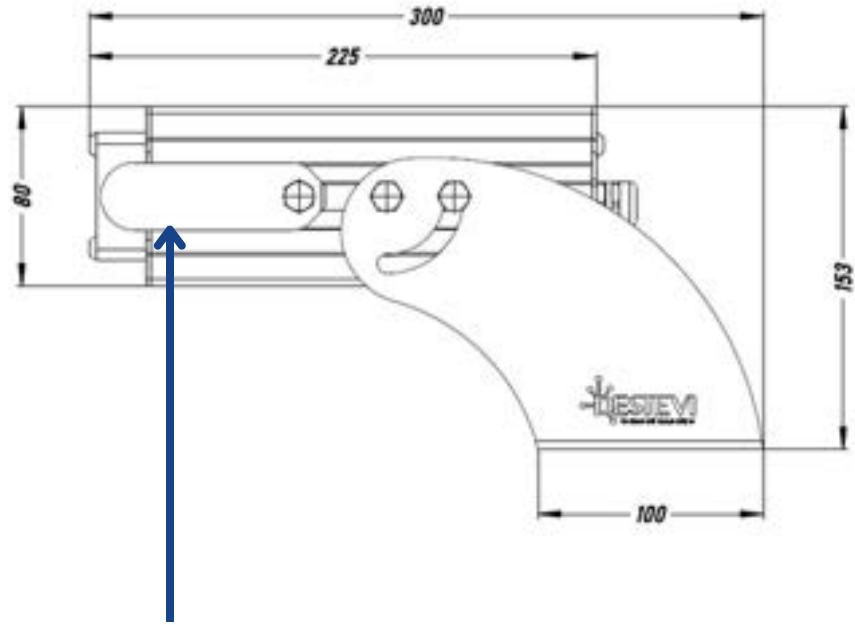
RED 13-26 FT INSTALLATION HEIGHT = 2 X INSTALL HEIGHT X .76

RED 27-46 FT INSTALLATION HEIGHT = 2 X INSTALL HEIGHT X .577

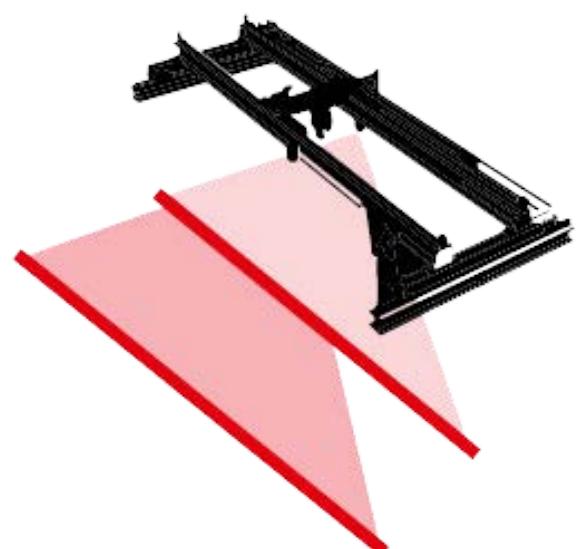
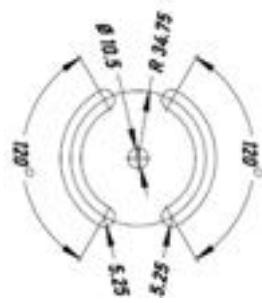
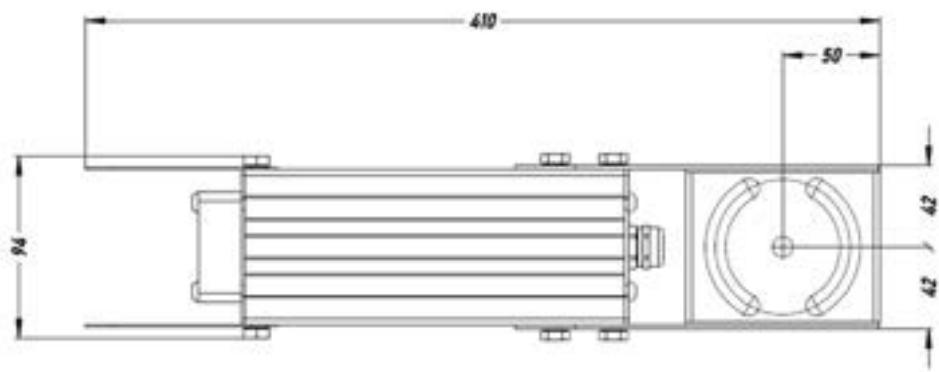
BLUE 13-26 FT INSTALLATION HEIGHT = 2 X INSTALL HEIGHT X 1.42

BLUE 27-46 FT INSTALLATION HEIGHT = 2 X INSTALL HEIGHT X 1

MAX SERIES DES LASER LINE LIGHT PROJECTOR



***PLATES TO ADJUST LINE LENGTH**



MAX SERIES

DES LASER LINE LIGHT PRE-ENGINEERED KIT

Below the Trolley Box/Rectangle Configuration

Kit consists of -

(4) laser line projectors with 3 meter cable pigtails, (1) pre-engineered junction box

P/N DES-LL-4-RED-KIT

P/N DES-LL-4-BLUE-KIT

LASER LINE PROJECTOR DETAILS

45W POWER

2M EYE SAFE CLASSIFICATION

-45C - +65C TEMP RANGE

IP65 PROTECTION RATING

4.1 KG WEIGHT PER UNIT

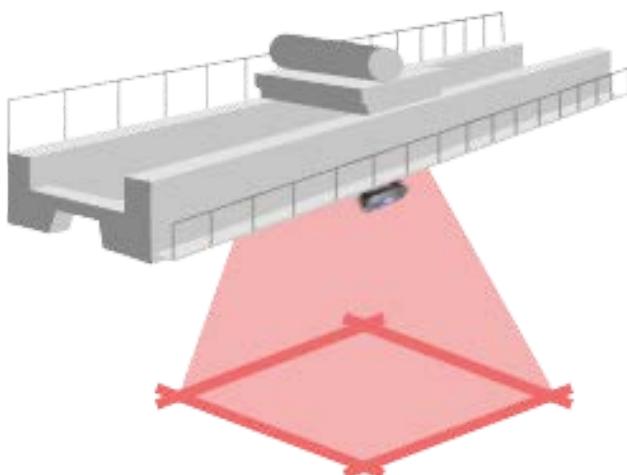
3 METER PIGTAIL AS STANDARD, OTHER LENGTHS ON REQUEST ANODIZED ALUMINUM AND STAINLESS STEEL BODY

14 METER MAXIMUM RECOMMENDED INSTALLATION HEIGHT

ADJUSTABLE LINE LENGTH

16 METERS MAXIMUM AT 14 METER INSTALLATION HEIGHT

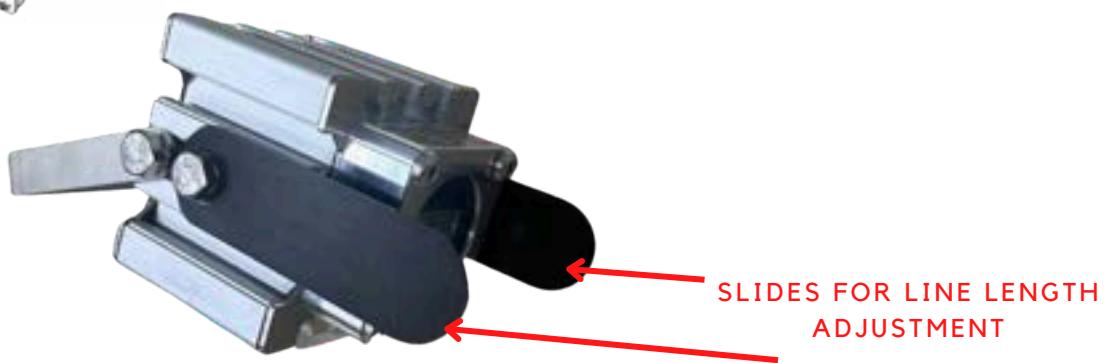
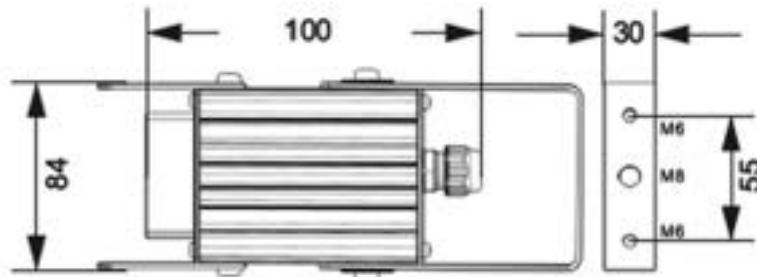
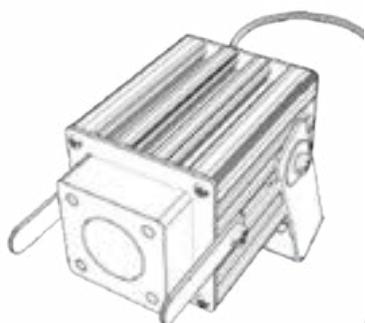
STAINLESS STEEL ADJUSTABLE MOUNTING BRACKET



INSTALLATION LINE LENGTH HEIGHT (M)	LINE LENGTH (M)	LINE THICKNESS (CM)
6	6,9	7
6,5	7,5	7,2
7	8,1	7,4
7,5	8,7	7,6
8	9,2	7,8
8,5	9,8	8
9	10,4	8,2
9,5	11,0	8,4
10	11,5	8,6
10,5	12,1	8,8
11	12,7	9
11,5	13,3	9,2
12	13,8	9,4
12,5	14,4	9,6
13	15,0	9,8
13,5	15,6	10
14	16,2	10,2

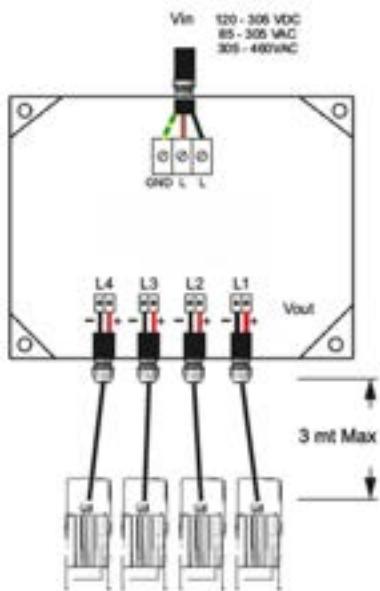
MAX SERIES

DES LASER LINE LIGHT KIT



JUNCTION BOX DETAILS -

10X8X6 NEMA 4 STEEL ENCLOSURE (4X AVAILABLE UPON REQUEST) WITH MOUNTING FEET. CAN ACCOMMODATE INCOMING SUPPLY VOLTAGE OF 305-460VAC, 85-305VAC OR 120-305VDC. PRE-MOUNTED CABLE GLANDS FOR ALL CABLES.



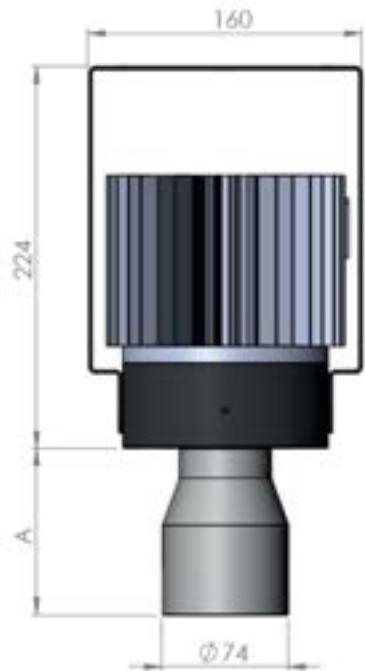
MAX SERIES

POWER SAFE

THIS HEAVY DUTY, 50W PROJECTOR IS IDEAL FOR INSTALLATION HEIGHTS UP TO 13 METERS. INCLUDES INTEGRATED POWER SUPPLY.

SPECIFICATIONS:

- POWER SUPPLY:
 - 90-305VAC - WIRED TO PIGTAIL
 - 460VAC - MOUNTED TO LIGHT WITH INTEGRAL MOUNTING BRACKET
- AMP DRAW:
 - AT 120VAC: .45 AMPS
 - AT 230VAC: .25 AMPS
 - AT 460VAC: .12 AMPS
- PROJECTED SHAPE: SPOT, LINE, OR SYMBOL
- OPERATING TEMPERATURE: -40°C TO 50°C
- MATERIALS: ANODIZED ALUMINUM AND PVC (HOUSING), PAINTED STEEL (BRACKET), STAINLESS STEEL (SCREWS AND CABLE GLANDS), GLASS (LENSES), SILICONE (GASKETS)
- WEIGHT: 5 KG
- DIMENSIONS: 160 MM L X 130 MM W X 400 H (MM)
- PIGTAIL: 3M



A = 80MM-260MM DEPENDING ON REQUIRED OPTIC

Installation Height		MINI STD.	MINI WIDE	MID STD.	MID WIDE
METERS	FEET				
3.05	10	13"	32"	6.5"	18.5"
4.57	15	20"	49"	9.5"	28"
6.05	20	26"	65"	13"	37"
7.62	25	33"	81.5"	16"	47"
9.15	30	NOT RECOMMENDED		19.5"	56.5"
10.67	35			23"	65.5"
12.2	40			26"	75"
13.7	45			29.5	84.5

COMMON SYMBOLS

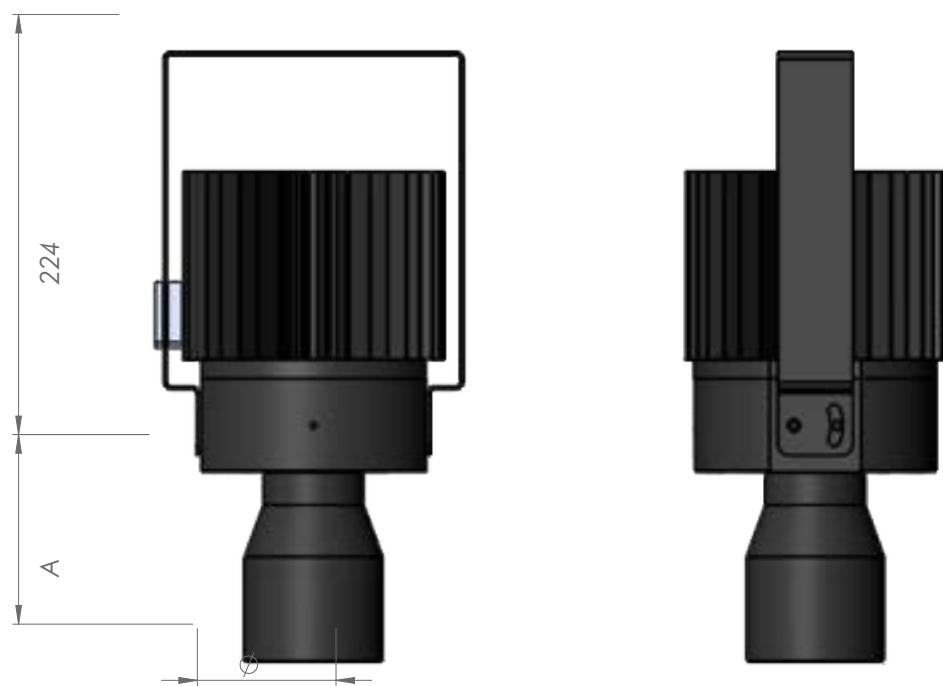
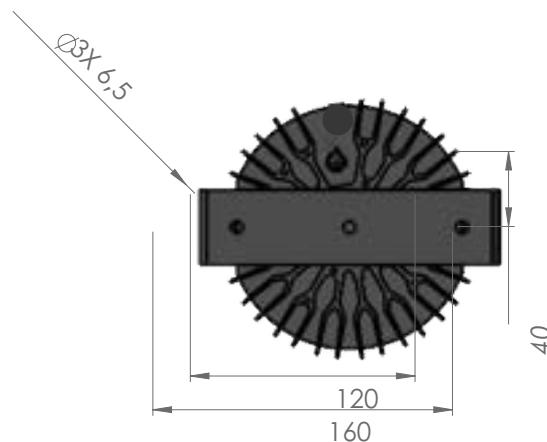


AVAILABLE COLORS
RED, BLUE, GREEN,
WHITE, MULTI

MAX SERIES

POWER SAFE

OPTIC	DIMENSIONS (height/projection width)	LOWER PART LENGTH (A)
LC1389	from 3 to 7mt. / from Ø300 to Ø750	110
LC1390	from 3 to 7mt. / from Ø800 to Ø1900	80
LC1391	from 7 to 13mt. / from Ø300 to Ø750	260
LC1392	from 7 to 13mt. / from Ø1100 to Ø2000	110



MAX SERIES

SUPER SAFE

THIS HEAVY DUTY, HIGH POWER 100W PROJECTOR IS IDEAL FOR BRIGHT AMBIENT LIGHT CONDITIONS AND HIGH INSTALLATION HEIGHTS. INCLUDES INTEGRATED COOLING FAN AND POWER SUPPLY.

SPECIFICATIONS:

- POWER SUPPLY:
 - 90-305VAC - WIRED TO PIGTAIL
 - 460VAC - MOUNTED TO LIGHT WITH INTEGRAL MOUNTING BRACKET
- AMP DRAW:
 - AT 120VAC: .85 AMPS
 - AT 230VAC: .45 AMPS
 - AT 460VAC: .25 AMPS
- PROJECTED SHAPE: SPOT, LINE, OR SYMBOL
- OPERATING TEMPERATURE: -40°C TO 50°C
- MATERIALS: ANODIZED ALUMINUM AND PVC (HOUSING), PAINTED STEEL (BRACKET), STAINLESS STEEL (SCREWS AND CABLE GLANDS), GLASS (LENSES), SILICONE (GASKETS)
- WEIGHT: 5 KG
- DIMENSIONS: 160 MM L X 130 MM W X 400 H (MM)
- PIGTAIL: 3M



Installation Height				
METERS	FEET	STANDARD OPTIC	WIDE OPTIC	SUPER WIDE OPTIC
3.05	10			
4.57	15			NOT RECOMMENDED
6.05	20			
7.62	25	22"	45"	91"
9.15	30	27"	54"	108"
10.67	35	31"	63"	126"
12.2	40	36"	72"	144"
13.7	45	40"	81"	161"
15.24	50	30"	60"	120"
18.3	60	36"	72"	144"

COMMON SYMBOLS



AVAILABLE COLORS
RED, BLUE, GREEN,
WHITE, MULTI

HD SERIES

TYPE MCT

THE ULTIMATE IN FLEXIBILITY - ONE UNIT WITH 7 SELECTABLE COLORS AND 7 TONES.

ALERT PERSONNEL WITH VISUAL AND AUDIBLE WARNINGS IN ONE UNIT. ROBUST POLYCARBONATE HOUSING THAT ALLOWS FOR USE IN THE MOST DEMANDING ENVIRONMENTS.



SPECIFICATIONS:

- Choice of Red, Green, Yellow, Blue, White, Light Blue, Violet
- Strobe Light Mode
- 7 tones
- Adjustable via potentiometer, up to 133dB
- 10ms response time
- IP65 thermoplastic housing
- UV resistant
- 12-30VAC/VDC, 48VAC/VDC, and 85-250VAC/VDC
- -20°C to 50°C (-4°F to 122°F)
- 50,000 hours life minimum

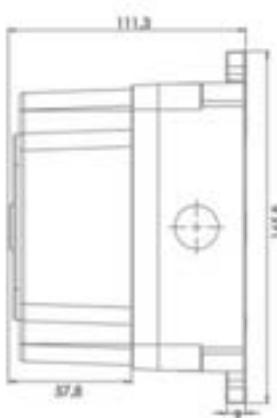
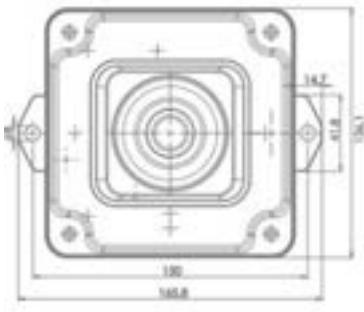
» Coding System

HD	-	MCT	-	13
Series		Type		Voltage
				1828 = 85-250V AC/DC *
				13 = 12-30V AC/DC
				48 = 48V AC/DC



 **Demo Video**

*standard stock item



This unit may also be used as a horn ONLY by disconnecting an internal cable or light ONLY by silencing the alarm with the potentiometer

HD SERIES

10 FOOT PIGTAIL WITH MAGNET MOUNT KIT



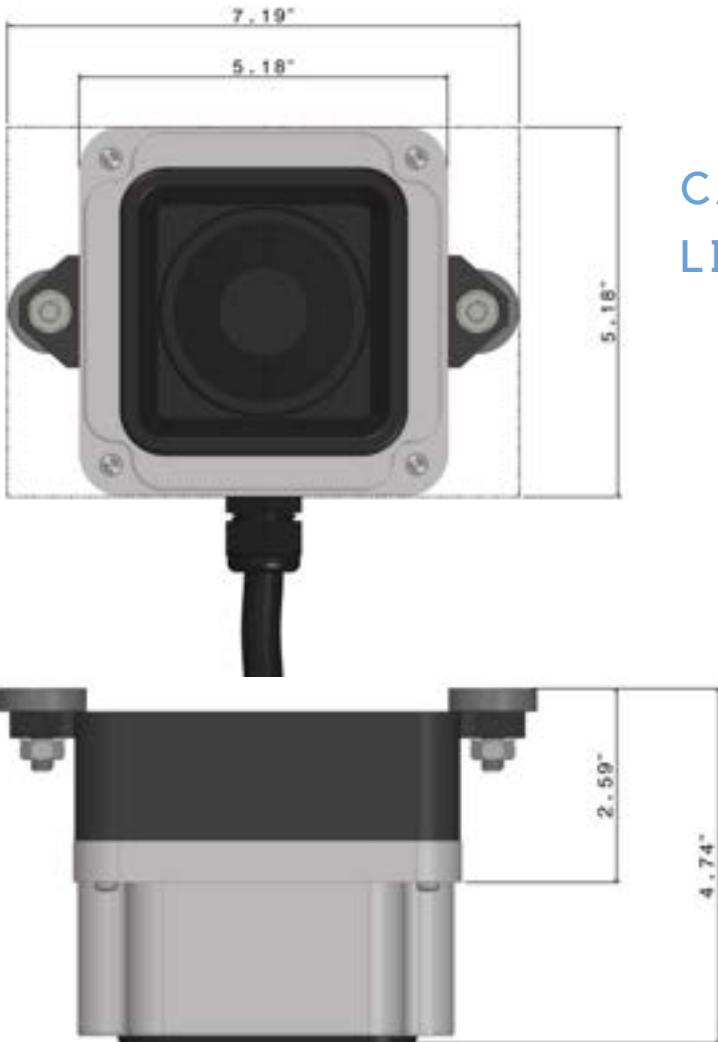
CONVENIENT PACKAGE TO ADD HEAVY DUTY
AUDIBLE/VISUAL WARNING TO ANY CRANE SYSTEM

.....

NEMA 4X PROTECTION RATING

MAGNET MOUNTS FOR FLEXIBLE MOUNTING
INTERNAL WIRE CONNECTIONS VIA LEVER TERMINALS

PREWIRED 10' PIGTAIL WITH 3/8 NPT CABLE GLAND



HD-1828-MAG-10PT

CAN BE USED AS A HORN OR
LIGHT OR BOTH SIMULTANEOUSLY.



MD SERIES

TYPE MCT100

THE ULTIMATE IN FLEXIBILITY - ONE UNIT WITH 4 SELECTABLE COLORS, 16 ADJUSTABLE VOLUME TONES, AND 3 LIGHT MODES IN A COMPACT SIZE.

ALERT PERSONNEL WITH VISUAL AND AUDIBLE WARNINGS IN ONE UNIT. MEDIUM DUTY UNIT WITH IMPACT RESISTANT ABS BASE AND POLYCARBONATE LENS. SUITABLE FOR TYPICAL INDUSTRIAL ENVIRONMENTS.

SPECIFICATIONS:



- Choice of Red, Blue, Green, or Yellow via wire connection
- Solid, Flashing, and Strobe Light Modes selectable via push button
- 16 tones selectable via push button
- 93-120dB (adjustable)
- 10ms response time
- IP65 thermoplastic housing
- UV resistant
- 12-24VAC/VDC and 40-250VAC/VDC
- -20°C to 50°C (-4°F to 122°F)
- 50,000 hours life minimum

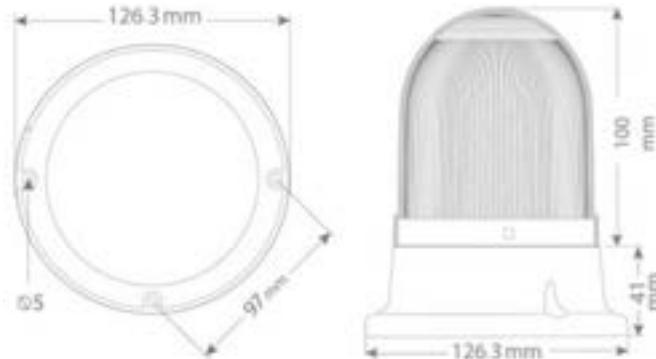
» Coding System

MD	-	MCT100	-	125
Series		Type		Voltage
125 = 40-250V AC/DC *				115 = 12-30V AC/DC

*standard stock item



 **Demo Video**



MD SERIES

JUNCTION BOX & 6 FOOT PIGTAIL WITH MAGNET MOUNT KIT



CONVENIENT PACKAGE TO ADD AUDIBLE/VISUAL
WARNING TO ANY CRANE SYSTEM

NEMA 4X PROTECTION RATING

MAGNET MOUNTS FOR FLEXIBLE MOUNTING
INTERNAL WIRE CONNECTIONS VIA LEVER TERMINALS

PREWIRED 6' PIGTAIL WITH 3/8 NPT CABLE GLAND



MD-MCT100-125-JB-MAG-6PT

FOR STANDARD 120V CONNECTION
AND THE OPTION FOR RADIO
CONTROL AUDIO/VISUAL WARNING
DEVICE



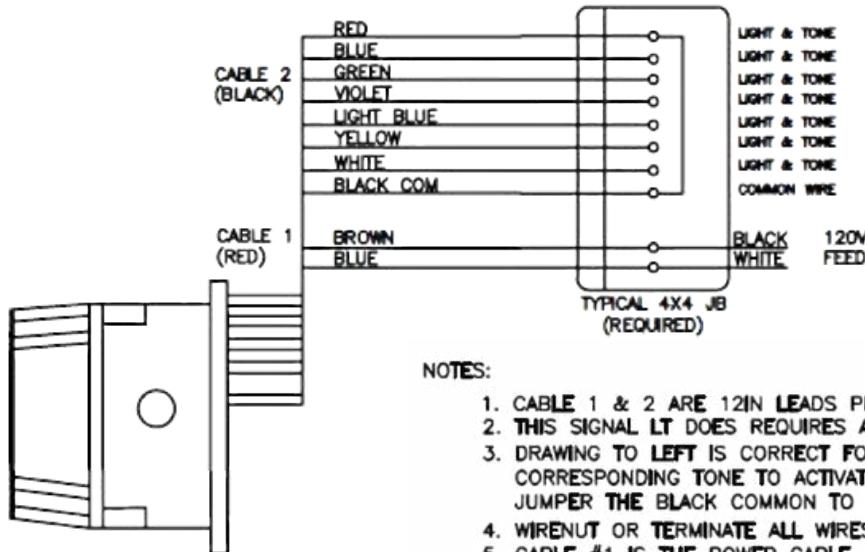
CAN BE WIRED TO ACTIVATE THE LIGHT AND HORN
SEPARATELY OR SIMULTANEOUSLY

HD & MD SERIES

WIRING DIAGRAMS

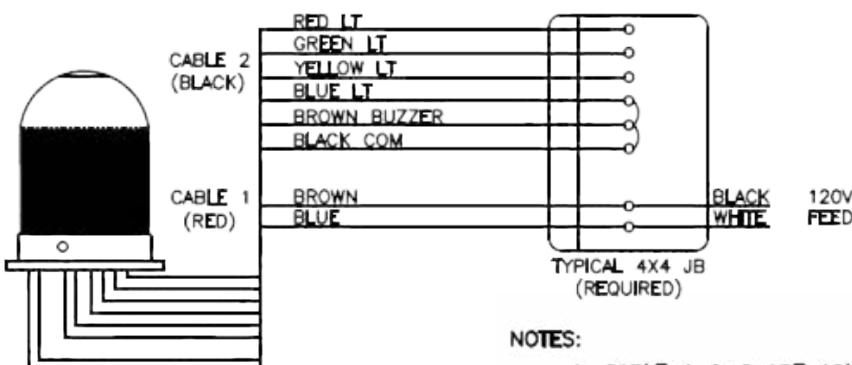
TYPE HD

TYPICAL HD SERIES LIGHT
85-250V AC/DC



TYPE MD

TYPICAL MD SERIES LIGHT
40-250V AC/DC



CONTACT US

**DO NOT HESITATE TO CONTACT US WITH ANY
QUESTIONS OR INQUIRIES:**

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