# 12-inch / 305mm
# LED Searchlight
Eco-Friendly Product


Joystick Electric Control

**Beam Intensity**

**3.5° Beam Option**   4,115,000 Candela
1 Lux at 2028 Meters (approx.)

**8.5° Beam Option**   1,050,000 Candela
1 Lux at 1024 Meters (approx.)

**Color Temperature**   5700 Kelvin

**Controls**   Joystick Electric Control, Remote Lever-Gear Control and Local Handle Control

**Environmental**   IP56

**LED Emitter Life**   20,000+ Hours

**Light Energy**   7000 Lumens

**Material/Finish**   Brass and Stainless Steel with Salt-resistant, Scratch-resistant white powder coat finish

**Modular Redundancy**   Each pod has its own electronics, so if one fails, a bright beam is still projected (Pg.2)

**Power Consumption**   120 Watts

**Voltages**   12VDC, 24VDC, 110VAC – 277VAC


Remote Lever-Gear Control

## OPTIONS

**Anti-icing Heater**   Thermostatically-controlled heater prevents ice build-up in cold climates (motorized base-only)

**Azimuth Indicator**   LCD Panel displays horizontal aiming position in degrees (motorized base-only)

**Finishes**   Custom Colors and Sparkling Chrome available

**High Powered Strobe**   Disorients and denies night vision of intruder and transforms searchlight into a Nonlethal Weapon

**Infrared Night Vision**   Integral Infrared (IR) LEDs covertly light up objects, which appear like daylight on a camera monitor. Covert IR energy is 850NM (Pg.4)

**SmartVIEW™**   Control System provides Digital BUS Network, and TCP/IP Interface allows Remote Computer Control. Protocols supported:  ONVIF, Pelco-D, NMEA 0183 and Carlisle & Finch's own Protocol

**Wall of Light LEDs**   Extremely wide beam at short range, illuminates areas where the narrower beam cannot service (Pg.3)


Local Handle Control

*Lighting the way forward since 1894*

# *Redundancy and Extreme Long-life provides much higher reliability than Halogen Searchlights!*

Qty (1)
**3-LED**
Pod

Qty (1)
**7-LED**
Pod

**Front View**
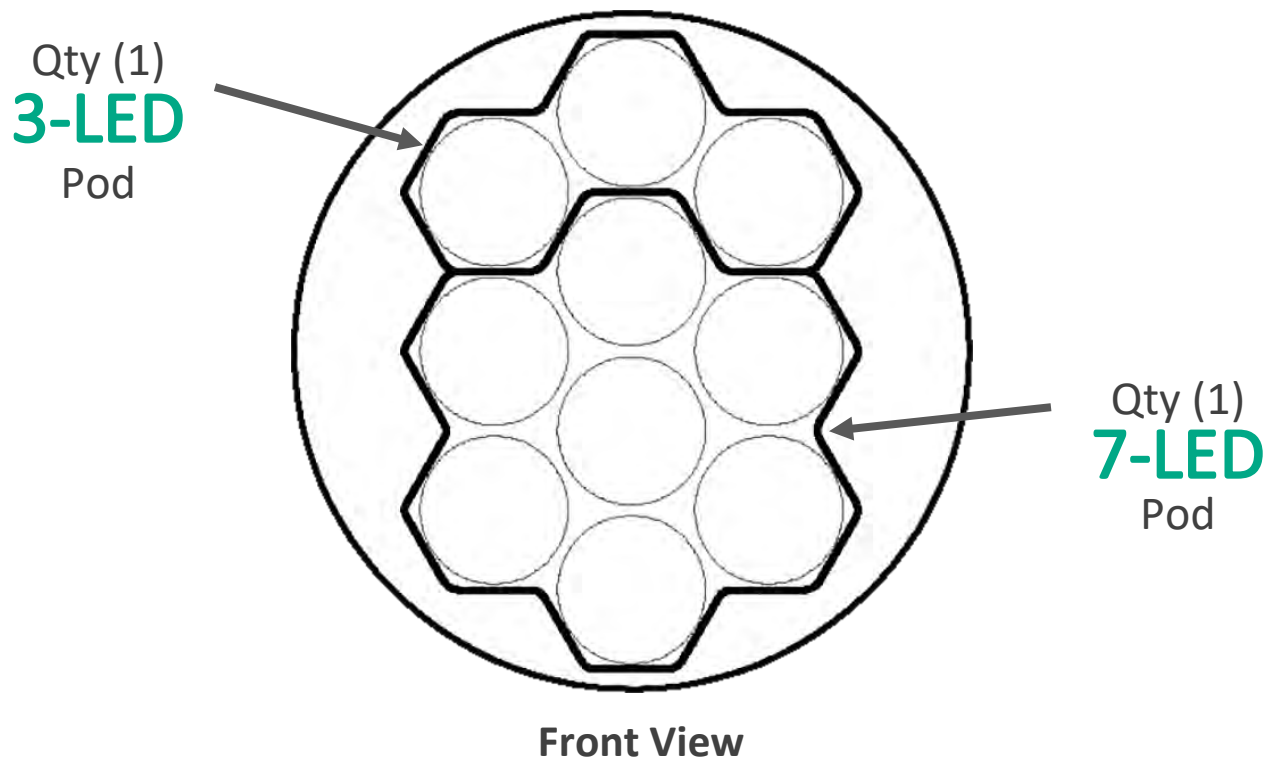
- **Multiple LED Redundancy:** There are 10 Individual LEDs (i.e., light sources.) If one fails, there are 9 more producing a bright beam.

- **Multiple Pod Redundancy:** Each searchlight has two pods. Unique to C&F, each pod has its own separate electronics. If a board happens to fail, the "second pod" produces a bright beam in back-up mode.

- **Long Emitter-Life:** When the lamp fails on traditional Halogen searchlights, the entire searchlight fails. Lamp-life is approx. 250 hours for the most popular industry standard lamps. Since the LEDs will last 20,000+ hours, there are approximately 80 Halogen searchlight failures for every LED searchlight due to lamp-life alone (i.e., 20,000 ÷ 250 = 80 failures.)

# *The Wall of Light!*

## *"Auxiliary LEDs illuminate wide areas at close range where the narrower beam cannot service"*
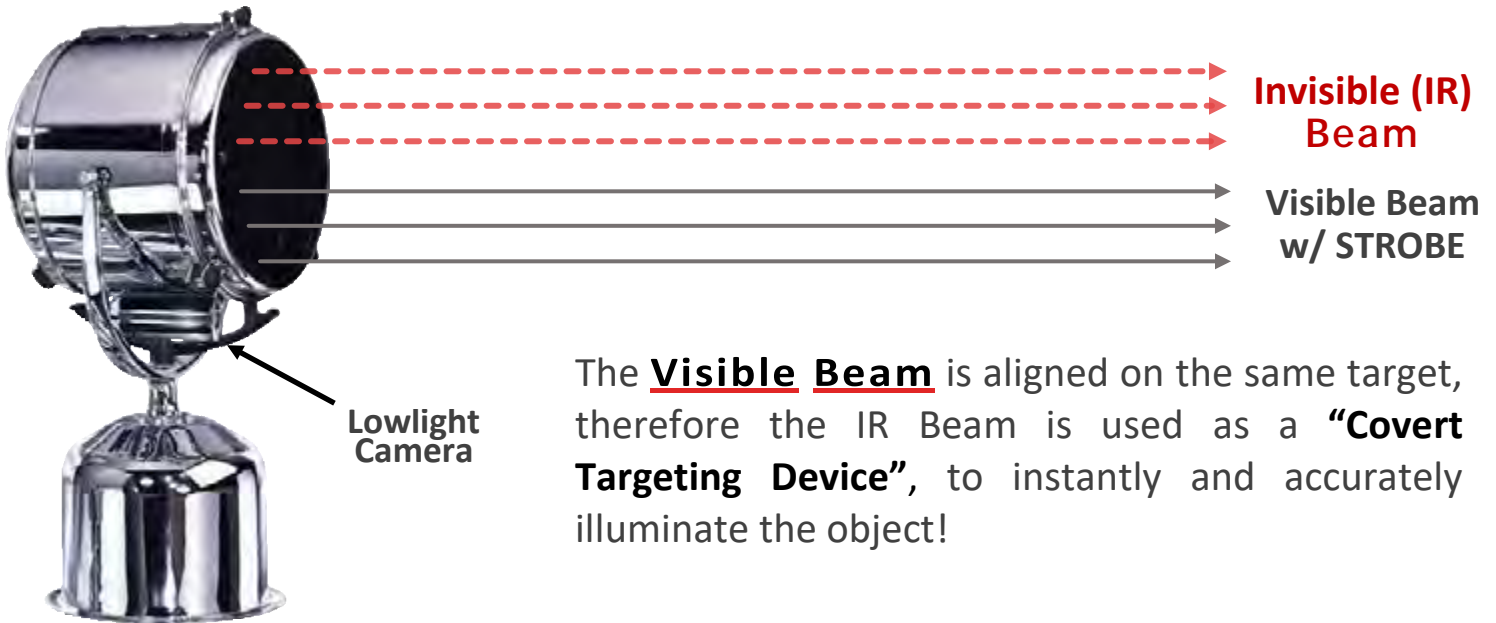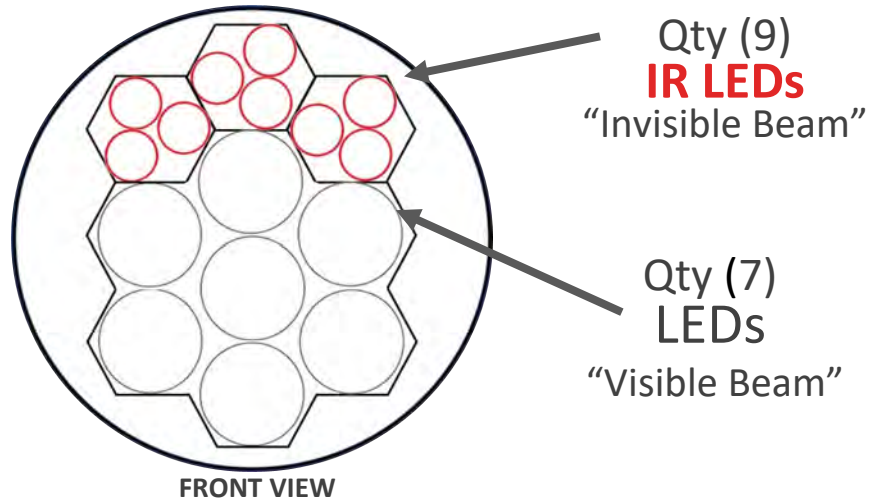
Imagine a passenger suddenly falls overboard on a marine vessel. Using the auxiliary LEDs for **"Search and Rescue"**, an operator can instantly direct a powerful "Wall of Light", wider than a football field, anywhere around the vessel to save the person! This wide beam is also extremely effective for **"Vessel Interdiction"**, **"Docking"**, **"Seeing Workers at Night"**, **"Seeing near the base of a Guard Tower"**, etc. This option provides short range wide-beam illumination and long-range search capabilities, combined within one versatile product.
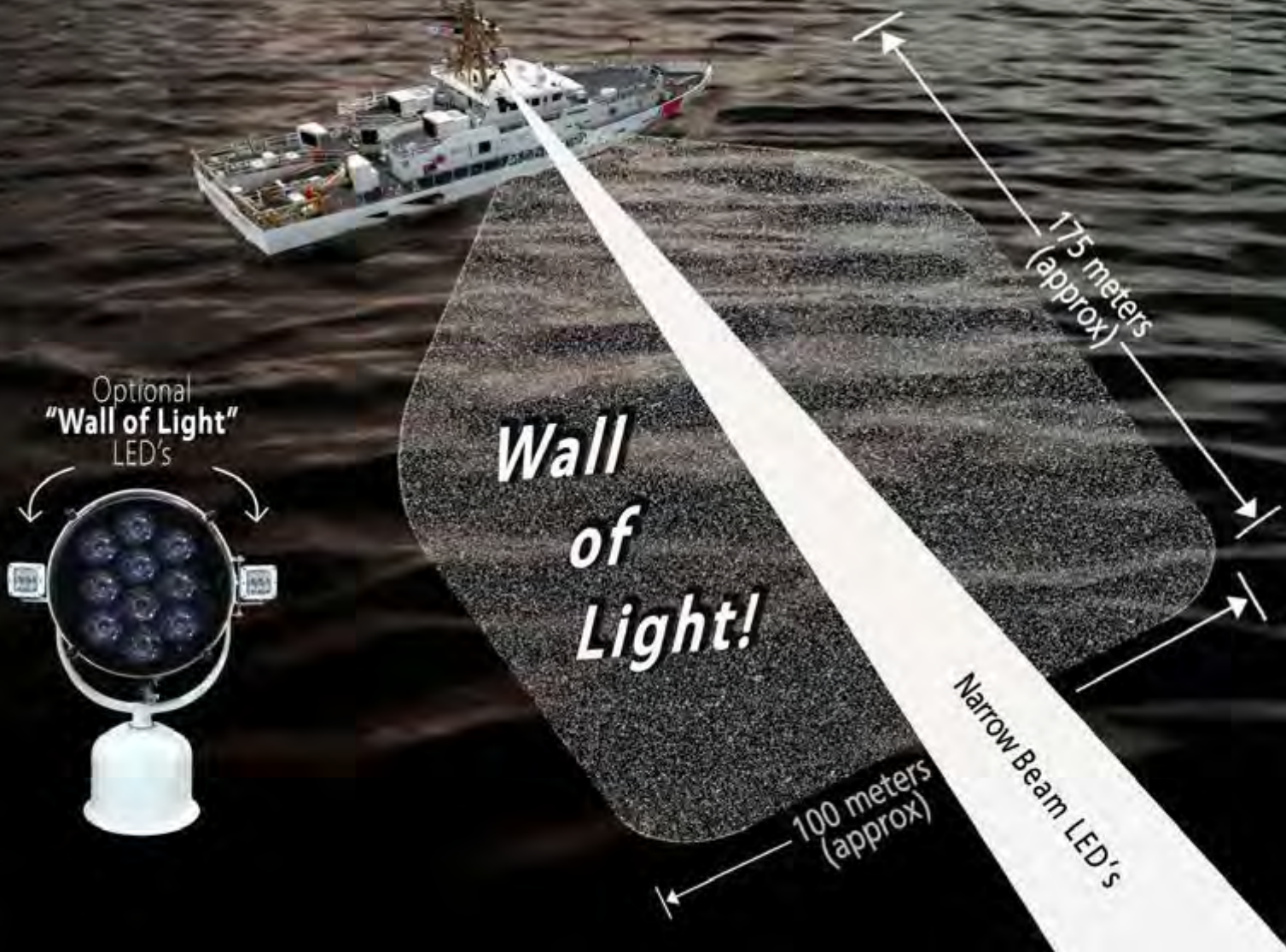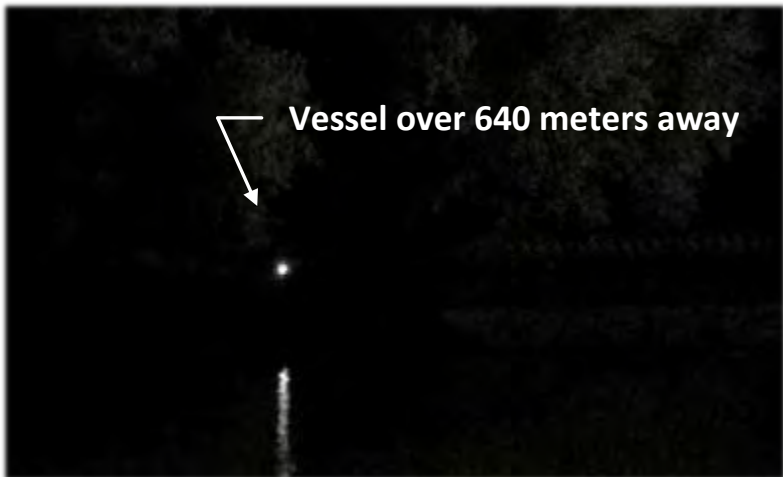
# *Infrared (IR) LEDs provide built-in Night Vision*

### NIGHT VISION CAPABILITY!

An invisible beam, undetectable to the human eye, covertly lights up objects in total darkness, and they appear like daylight on a camera monitor. And greatly enhances Night Vision Goggles!
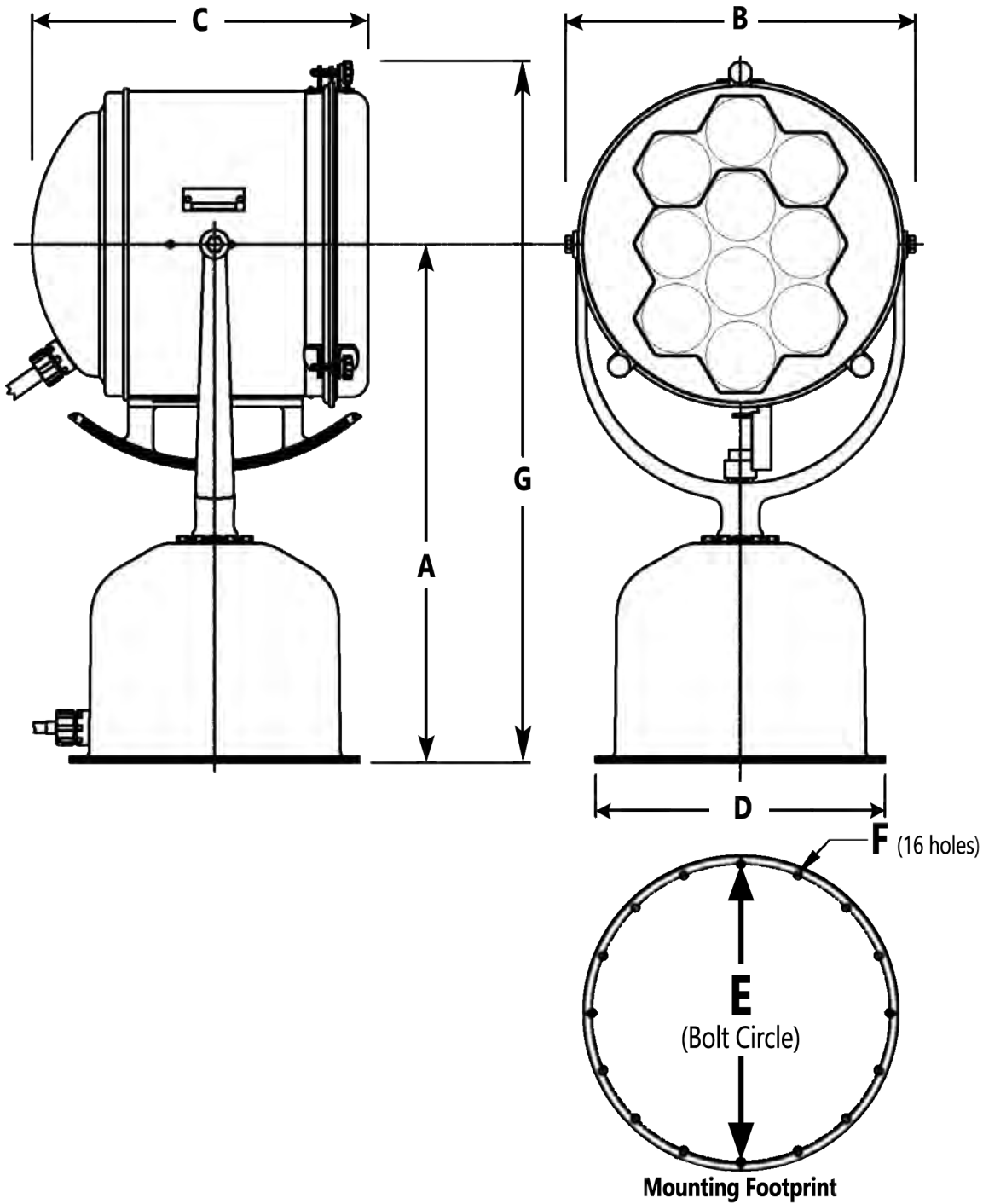
Qty (9)
**IR LEDs**
"Invisible Beam"

Qty (7)
LEDs
"Visible Beam"

**FRONT VIEW**

**Invisible (IR) Beam**

**Visible Beam w/ STROBE**

**Lowlight Camera**

The **Visible Beam** is aligned on the same target, therefore the IR Beam is used as a **"Covert Targeting Device"**, to instantly and accurately illuminate the object!

## Night Scenes on Riverbank

**Vessel over 640 meters away**

**in Total Darkness**

**with (IR) Beam ON!**

# Joystick Electric Control Dimensions



F (16 holes)

E
(Bolt Circle)

**Mounting Footprint**

| DIM | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| inches | 20.25 | 13.75 | 13.25 | Ø11.38 | Ø10.81 | Ø.281 | 27.56 |
| mm | 514 | 349 | 336 | Ø289 | Ø274 | Ø7.137 | 700 |

# Remote Lever-Gear Control Dimensions



Mounting Surface

H (Bolt Circle)

J (3-Holes)

K

*G

M

*A

*G

F (4-Holes)

E
(Bolt Circle)

Mounting Footprint
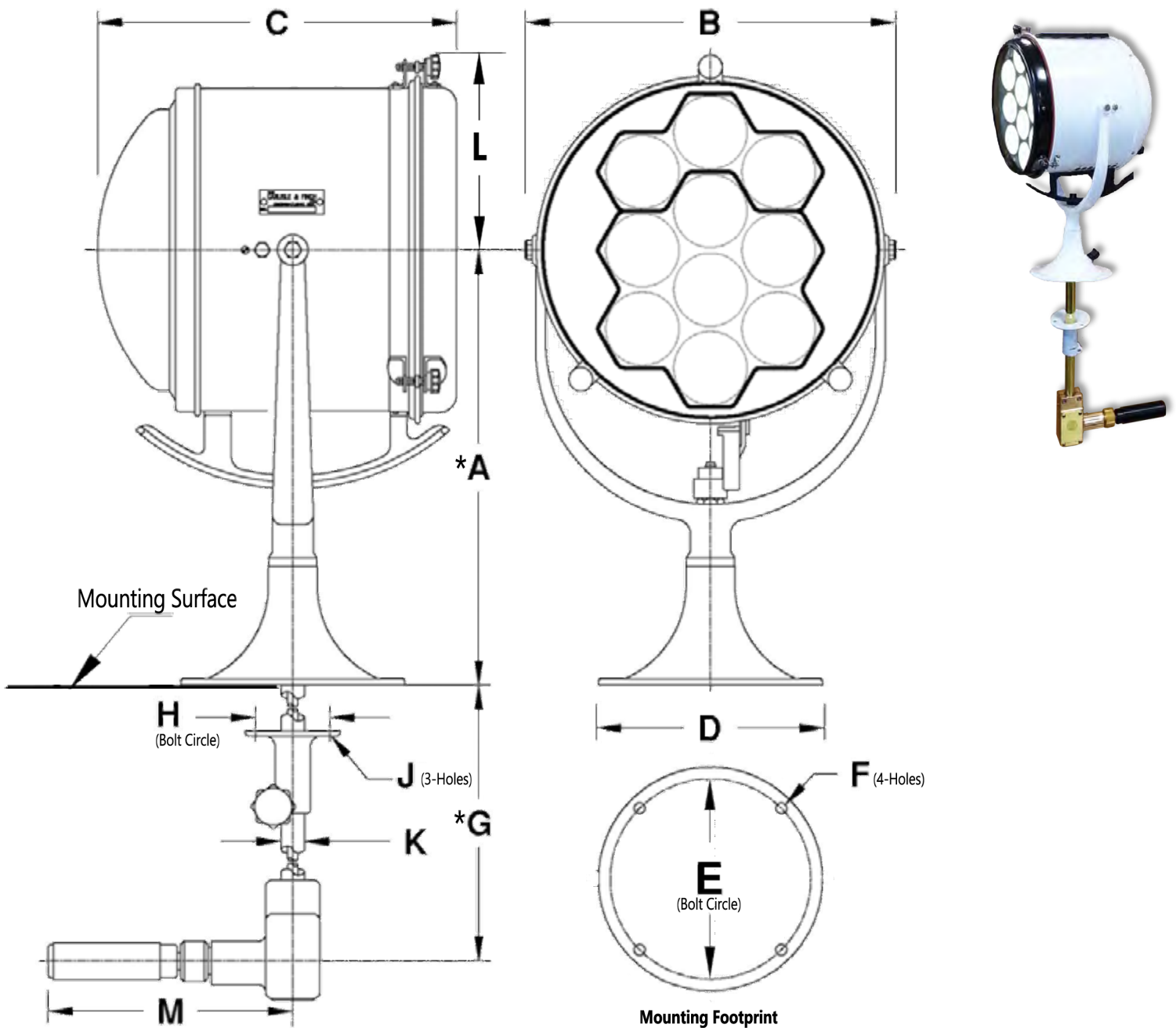
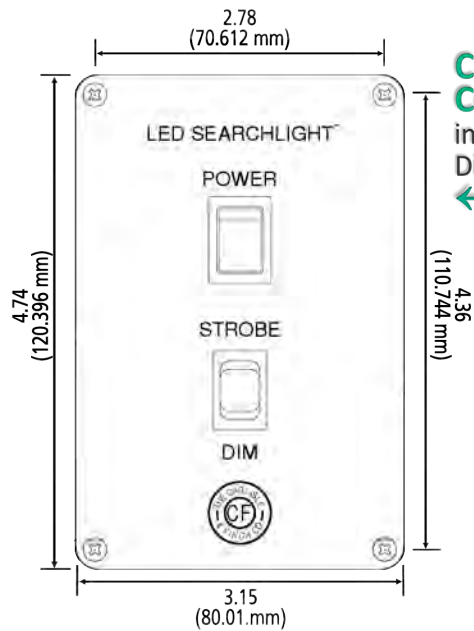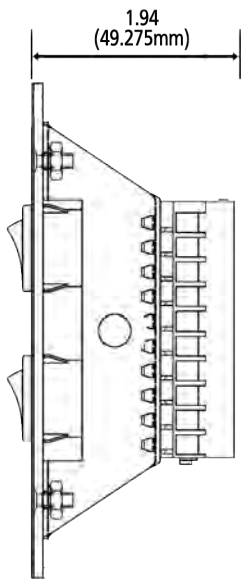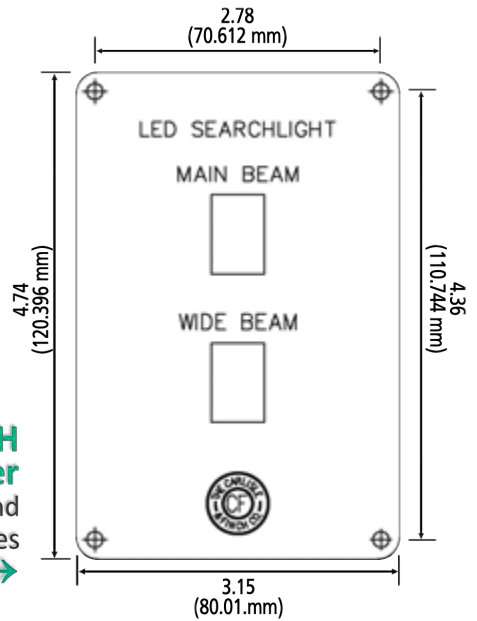| DIM | *A | B | C | D | E | F | *G | H | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| inches | 15.94 | 13.5 | 13.25 | Ø8.25 | Ø7.38 | Ø.41 | 10.88 | Ø2.75 | Ø.28 | Ø.88 | 7.28 | 9.00 |
| mm | 405 | 343 | 337 | Ø210 | Ø187 | Ø10 | 276 | Ø70 | Ø7 | Ø22 | 184 | 229 |
| Note: | Dimension "A" is the standard Searchlight Height, and Dimension "G" is the standard Control Length. These two dimensions can be custom. Consult Factory for exact customer requirements. | | | | | | | | | | | |

# Local Handle Control Dimensions



**F** (4 holes)

**E**
(Bolt Circle)

**Mounting Footprint**
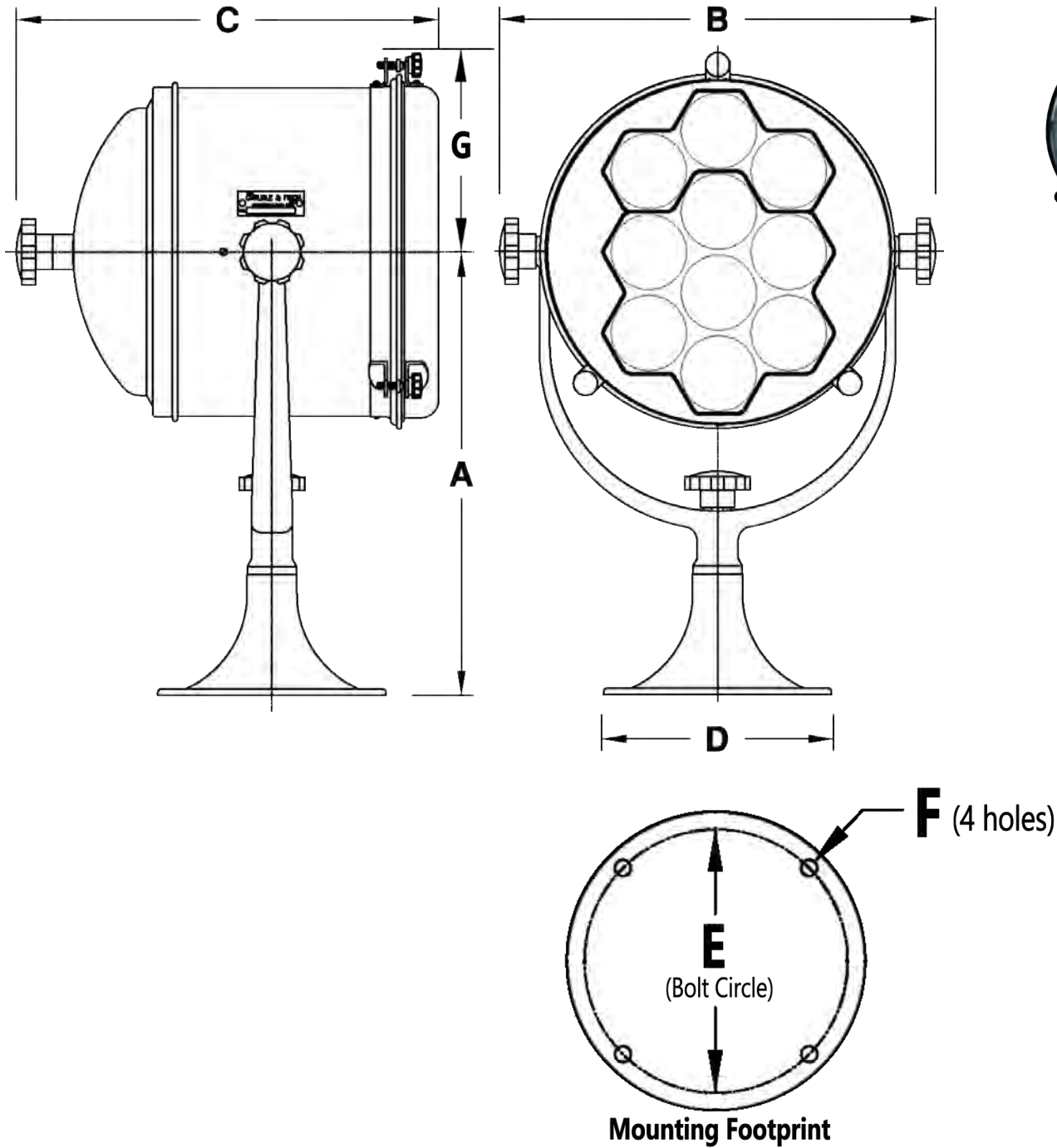
| DIM | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| inches | 15.94 | 15.62 | 15.50 | Ø8.25 | Ø7.38 | Ø.41 | 7.28 |
| mm | 405 | 397 | 394 | Ø210 | Ø188 | Ø11 | 184 |

# Controller Dimensions

1.94
(49.275mm)

2.78
(70.612 mm)

LED SEARCHLIGHT

POWER
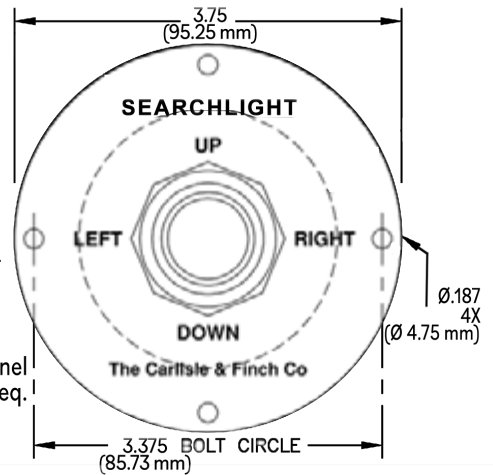
STROBE

DIM

4.74
(120.396 mm)

4.36
(110.744 mm)

3.15
(80.01.mm)

**C2-12 Controller**
includes Beam ON/OFF, Dim and Strobe Switches
←

2.78
(70.612 mm)

LED SEARCHLIGHT

MAIN BEAM

WIDE BEAM

4.74
(120.396 mm)

4.36
(110.744 mm)

3.15
(80.01.mm)
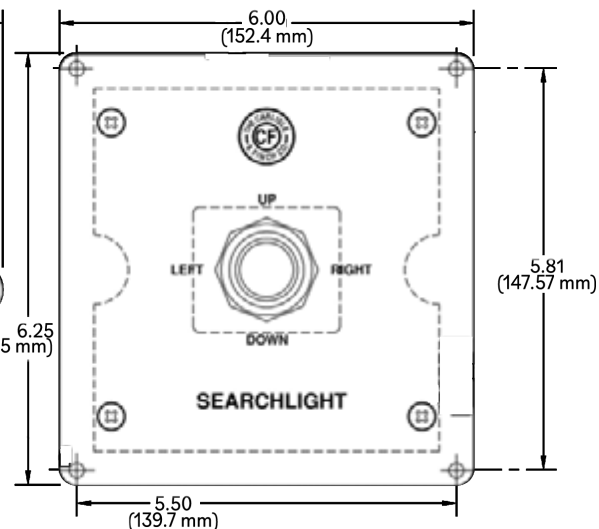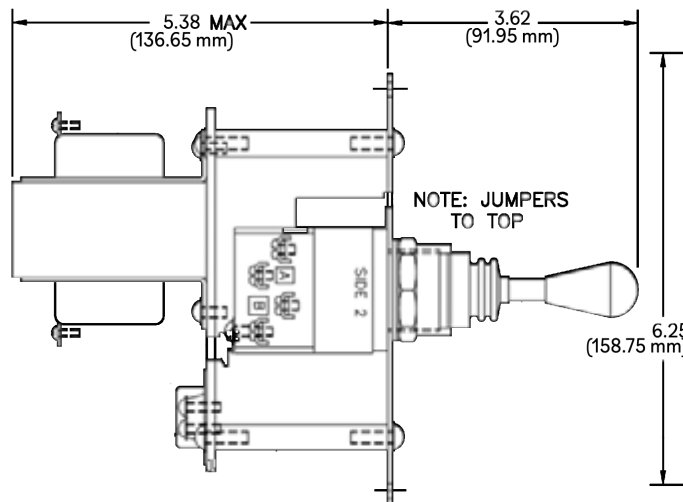
**C2-13-DCH Controller**
includes Beam ON/OFF and Wide Beam Switches
→

**C8160 Joystick Controller**
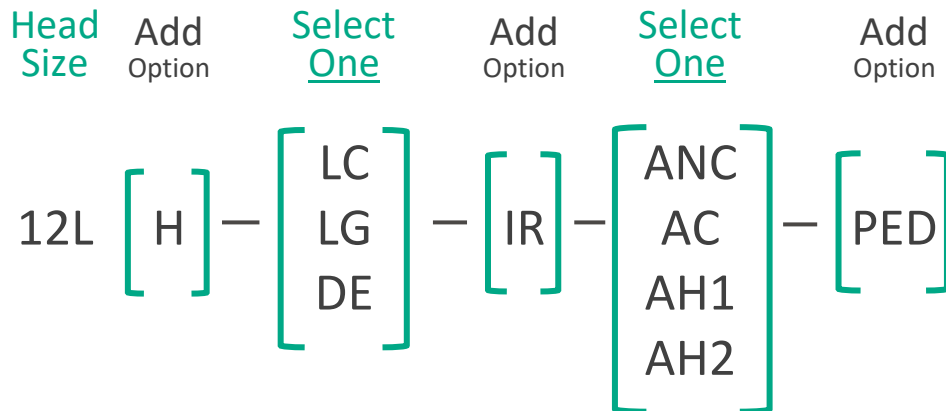provides UP, DOWN, RIGHT and LEFT Aiming and Dynamic Breaking (115 VAC-only)

2.13
(58.67 mm)

3.62
(91.95 mm)

SIDE 2

A
B
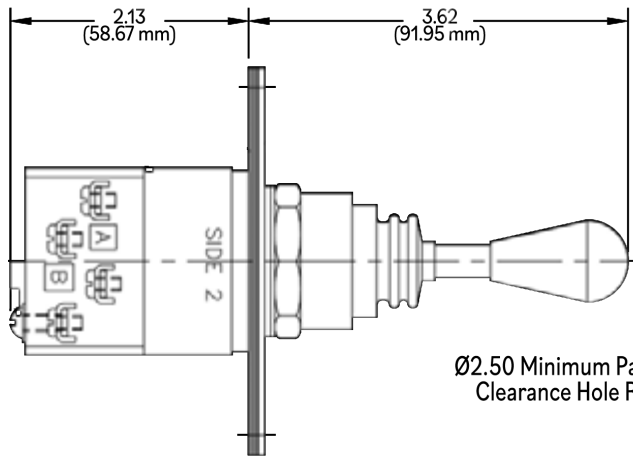
Ø2.50 Minimum Panel Clearance Hole Req.

3.75
(95.25 mm)

SEARCHLIGHT

UP

LEFT          RIGHT

DOWN

The Carlisle & Finch Co

Ø.187
4X
(Ø 4.75 mm)

3.375 BOLT CIRCLE
(85.73 mm)

**C8160-230 Joystick Controller**
provides UP, DOWN, RIGHT and LEFT Aiming and Dynamic Breaking (230VAC-only)

5.38 MAX
(136.65 mm)

3.62
(91.95 mm)

NOTE: JUMPERS TO TOP

A
B
SIDE 2

6.25
(158.75 mm)

6.00
(152.4 mm)

UP

LEFT          RIGHT

DOWN

SEARCHLIGHT

5.81
(147.57 mm)

5.50
(139.7 mm)

# How to specify Searchlight Model Number

**Head Size** | **Add Option** | **Select One** | **Add Option** | **Select One** | **Add Option**

$$12L \begin{bmatrix} H \end{bmatrix} - \begin{bmatrix} LC \\ LG \\ DE \end{bmatrix} - \begin{bmatrix} IR \end{bmatrix} - \begin{bmatrix} ANC \\ AC \\ AH1 \\ AH2 \end{bmatrix} - \begin{bmatrix} PED \end{bmatrix}$$

| | |
|---|---|
| **H** | "Wall of Light" LEDs *Option* |
| **IR** | Night Vision Infrared LEDs *Option* |
| **PED** | Tall Pedestal Base *Option* <br> ■ Manual Control Only <br> ■ Consult Factory |

| | |
|---|---|
| **LC** | Local Handle Control |
| **LG** | Remote Lever Gear |
| **DE** | Joystick Electric Control |

| | |
|---|---|
| **ANC** | 115/230 VAC (no Strobe/DIM) |
| **AC** | 115/230 VAC (with Strobe/DIM) |
| **AH1** | 115 VAC (with Anti-Icing Heaters) |
| **AH2** | 230 VAC (with Anti-Icing Heaters) |
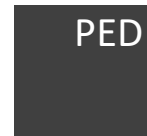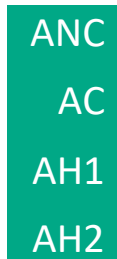
Note: To specify Searchlight Model Number, go to top of page and insert letters from left to right as applicable.

## Example #1

Model Number: 12L-LG-ANC-PED

12-inch (305mm) diameter, Remote Lever-Gear Control, 115 VAC and Tall Pedestal option

## Example #2

Model Number: 12L-DE-AH2

12-inch (305mm) diameter, Joystick Electric Control, 230 VAC and Anti-Icing Heaters