### **SmartVIEW**<sup>TM</sup> **Control** Microprocessor-based Controls for all C&F Products

#### **Features**

- Offered on all C&F Searchlights (Halogen and Xenon)
- Multi-Functional Proportional-Speed Joysticks provide Single-Hand Operational Control
- Same Joystick selects and controls any and all Searchlights connected to the RS485 BUS Network
- Low Voltage Network Cable reduces costs
- Multiple Protocols: RS232, RS485, TCP/IP and NMEA 0183
- Auto Return-to-HOME Position
- Position displayed on Joystick Panel Screen in Degrees
- Searchlight Names and Fault Information displayed on Joystick Panel Screen
- Computer-control with creation of a simple GUI
- IP Cameras, IR Illuminators and LED Light Modules integrated onto same Pan/Tilt Base, and controlled by Joystick Switches and/or GUI.





**Description:** SmartVIEW<sup>™</sup> is a Microprocessor-based Digital Control System which can be adapted to any Carlisle & Finch Searchlight. It allows Multi-functional Proportional-Speed Joysticks to intelligently switch from searchlight to searchlight over an RS485 BUS Network, and integrate with other systems using Multiple Protocols (i.e. RS-232, RS-422, TCP/IP and NMEA 0183). IP Night Vision Cameras, IR Illuminators and LED Lighting Options, integrated onto Pan/Tilt Systems, are also controlled digitally by switches on the Joystick Panel, or also by a computer screen with the simple creation of a GUI.

Level I SmartVIEW is an RS485 BUS Network, where all components within the network are C&F searchlight components. Level II SmartVIEW<sup>™</sup>, is when outside systems, control and/or communicate, with the Searchlight Systems. For a more detailed description of SmartVIEW<sup>™</sup> Technology, including network diagrams, scroll down below.



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### **SmartVIEW™ Diagram Descriptions**

Exhibit A (Level I SmartVIEW™): Level I SmartVIEW is

defined as only Carlisle & Finch Searchlight components connected within the same network. This diagram represents three C&F searchlights connected within an RS485 BUS Network (although there can be a greater number of searchlights as well). Any Joystick in this Network will be able to select and control, any searchlight connected to the network.

#### Exhibit B (C&F Joystick Panel): The switches on the C&F

Joystick have the following functions:

- **Searchlight Select:** Operator can scroll through the searchlights on the network, and the searchlight names are displayed on the screen.
- Beam ON/OFF: Operator turns Beam ON and OFF.
- **AUX1/AUX2:** These switches are used to turn ON and OFF optional peripherals mounted to the searchlight, such as Night Vision Cameras, a Strobe Feature or LED Modules.
- LCD Screen: Displays the Searchlight Names, and Searchlight Vertical and Azimuth Aiming-Position in degrees. Also provides fault indication, helpful for trouble shooting.
- **Multi-Functional Joystick**: Provides a Twist Knob for the Beam-Size Focus Feature and Proportional-Speed Aiming (move the Joystick a small amount and the Beam moves slowly... move the joystick further and the Beam speeds up). Joystick can be sold detached, and customer can provide own switches for Glass Bridge Applications.

**Exhibit C (Level II SmartVIEW™):** Level II SmartVIEW™ provides the capability of other systems, outside of the C&F RS485 BUS Network, to control and/or communicate with C&F Searchlights. Various protocols are offered for this capability as follows: RS232, RS422, TCP/IP and NEMA 0183. NEMA 0183 is limited to "listening only".

**Exhibit D (GUI):** This is an example of a GUI made by a customer, which fully controls the Searchlight and two IP-Cameras mounted on the searchlight, using the TCP/IP Protocol. Carlisle & Finch provides an Interface Control Document (ICD), which makes the creation of a custom control GUI, simple and easy.

**Note:** Scroll down below, to see Exhibits A, B, C, and D.



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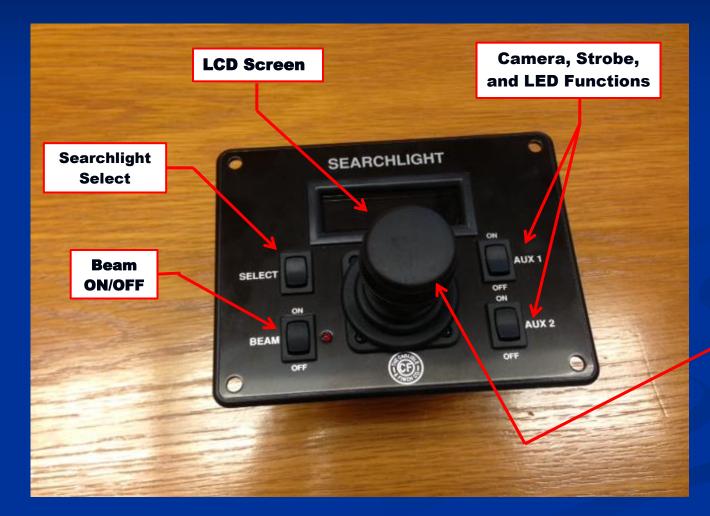
### Level I SmartVIEW<sup>TM</sup>

"Center"



#### Exhibit B

# **C&F Joystick Panel**



Proportional-Speed Joystick with Beam-size Focus Twist Knob!





## Level II SmartVIEW<sup>TM</sup>

(Interface Protocols seen in Red)



#### Exhibit D

## "GUI" Digital Display

