I. Installing DirectSoft

A. Download the software installer from https://support.automationdirect.com/products/directsoft.html

B. Install the latest version of DirectSoft

    1. License Key: QKGD-6L68-Y019-J117

II. Connecting to the PLC

A. In the DirectSoft program, navigate to the toolbar and click the dropdown menu labelled "PLC".

B. Select "Connect…".

C. If the PLC has never been connected to the computer before, create link.

    a) In the "Select Link…" pop-up window, click "Add…".

    2. Select the communications port that the PLC is connected to.

        a) This may be found in the Device Manager of your computer's Control Panel

    3. Select the PLC's product family.

        Ex. DirectLogic205 will be from the DL 0/1/2/4/350 Family

    4. Select the protocol to use in the communications link.

        a) SLAC LSS uses K Sequence

        b) Address: 1

D. In the "Select Link…" pop-up window, click on the PLC you are using and press "Select".

III. Port Settings

A. Navigation

    1. Navigate to the toolbar and click the dropdown menu labelled "PLC".

    2. Roll-over "Setup" and select "Setup Sec. Comm Port…" from the dropdown menu.

B. Settings

    1. Port 2

    2. Non-Seq(ASCII)

    3. Base Timeout

    4. Data bits: 8

    5. Baud rate: 9600

    6. Stop bits: 1

    7. Parity: None

    8. Memory Address: V7000

C.   Write the new settings to the PLC by clicking the icon:

IV. Common Program Rungs
  A.   Standard Order of Code
    1.   Reset all variables
    2.   Set necessary variables
    3.   Shutter section
    4.   Interlocks and latches
    5.   Mode changes inhibited
    6.   Logic section
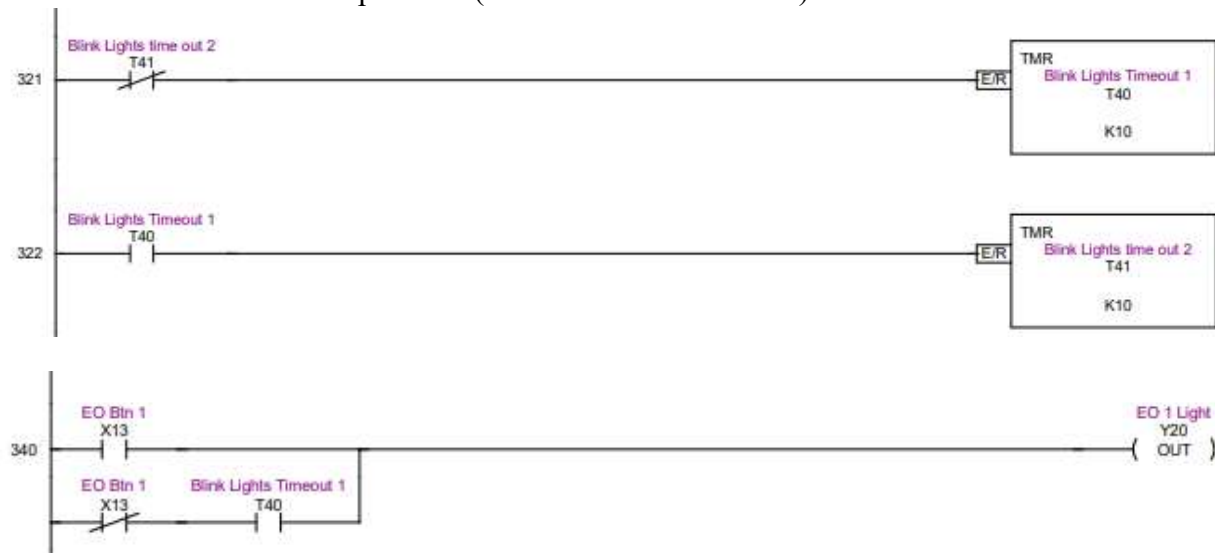   a)   Bypasses
      b)   Mode selection
          (1)   In order from the mode with the least privileges to the mode with the most privileges
      c)   Lights
      d)   Signs
    7.   End
  B.   Alternating On/Off
    1.   For blinking lights, special buzzer patterns, etc.
    2.   Example code (in context of EO buttons):

C. Signs

    1. PRINT Box

        a) Port: K2

        b) Script example: "_00_00_00_00_00_01Z00_02A0_1B b_1A9_1C1LASER IMMINENT _04"

        c) Start of header

            (1) "_00_00_00_00_00

        d) Define sign address

            (1) Broadcast to all signs: _01Z00

            (2) Message for signs with specific address: _01Z01, _01Z02, _01Z03, etc.

        e) Define start of text string

            (1) _02A0

        f) Text dynamics

            (1) Scrolling: _1B a

            (2) Static: _1B b

        g) Text height

            (1) _1A#

            (2) # may be 1-9, with 9 being full height

        h) Text color

            (1) Red: _1C1

            (2) Green: _1C2

            (3) Yellow: _1C3

        i) Write message text

            (1) Example: LASER IMMINENT

        j) End string

            (1) _04"