



# LED Door Indicator Light System with HMI Panel

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## TOOLS:

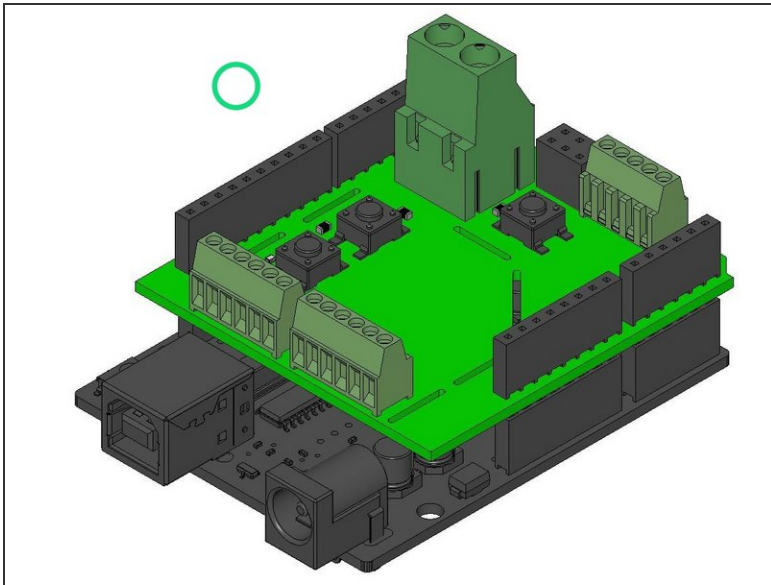
- [1/16in Flat-Head Screw Driver](#) (1)
- [1/8in Flat-Header Screw Driver](#) (1)
- [#2 Phillips Screw Driver](#) (1)
- [Wire Stripper/Cutter](#) (1)

## Step 1 — Installing the LED Strips



- Each LED Strip Assembly comes with pre-installed Pressure Sensitive Hook and Loop Velcro Strips.
- Peel the Clear Backing off each Velcro Strip (6 Total) and stick the LED Strips onto the Vertical Tracks.
- The LED Strip with the longer cable (25ft) is mounted on the non-drive side of the opening.
  - ⚠ Ensure the LED Strip is oriented such that the shortest possible length of Cable is needed to reach the Control Panel.
- The LED Strip with the shorter cable (10ft) is mounted on the drive side of the opening.
  - ⚠ Ensure the LED Strip is oriented such that the shortest possible length of Cable is needed to reach the Control Panel.
- ⚠ DO NOT LENGTHEN EITHER OF THE LED STRIP CABLES AS THIS MAY CAUSE INCONSISTENT PERFORMANCE. THE PROVIDED CABLE LENGTHS ARE IN THEIR 'WORST-CASE' CONFIGURATION.
- ① If the provided Cables do not reach the Control Panel, you will need to re-route them, or add a Junction Box to house the Microcontroller (see next step) in a location where both Cables can reach it.

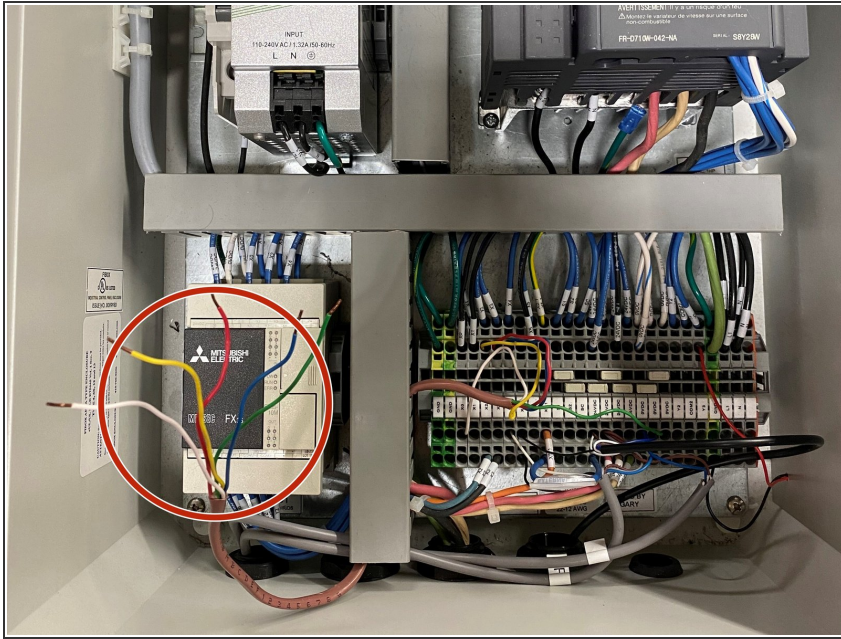
## Step 2 — Parts



- In your Kit, you will also find the following:

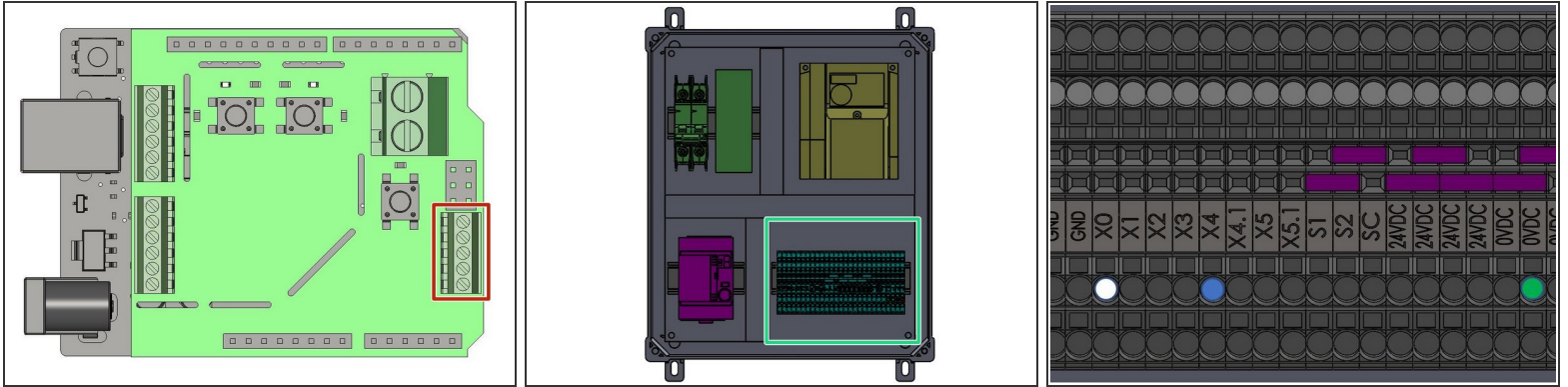
- One Microcontroller.
- One Power Supply.
- 5-Conductor Cable to make the necessary Electrical Connections inside the Control Panel.
  - ⓘ If Receiving this Kit new with your Door, this Cable will be Pre-Installed from the Factory.

## Step 3 — Inside the Control Panel



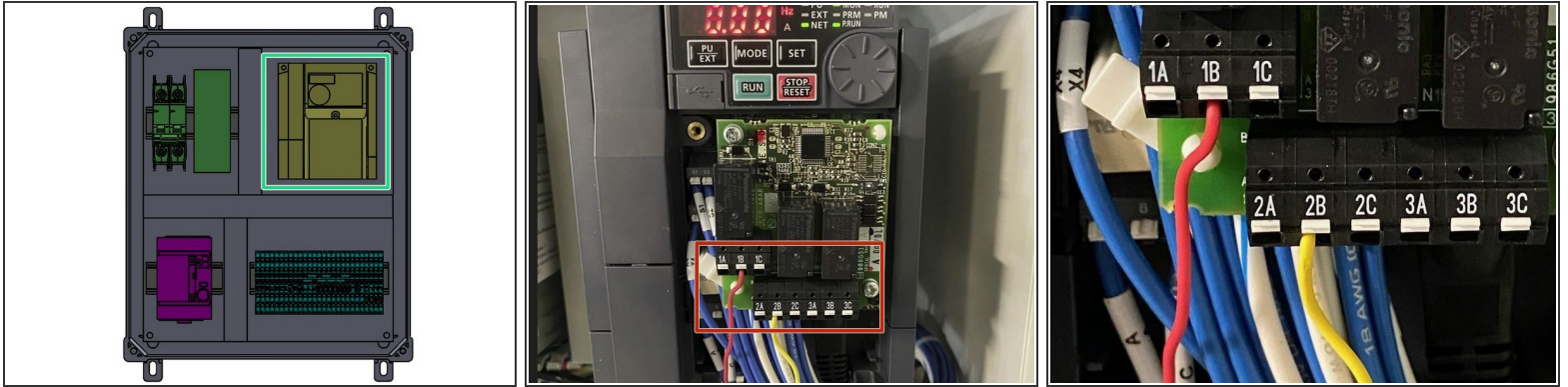
- Once you have routed the Wires from the LED Strips into the Control Panel, you will have to make a series of Electrical Connections.
  - ⚠ If receiving this System with your Door Order, the Terminations from the Microcontroller to the Control Panel will be made from the Factory.
  - ⚠ In a Retrofit Application, you will need to make the Terminal Connections inside the Control Panel from the Jobsite.
- Find the 5-Conductor Cable.
  - ① Colors: Green, Blue, Red, Yellow, White

## Step 4 — Wiring: Inside Control Panel Part 1 (Retrofit Only)



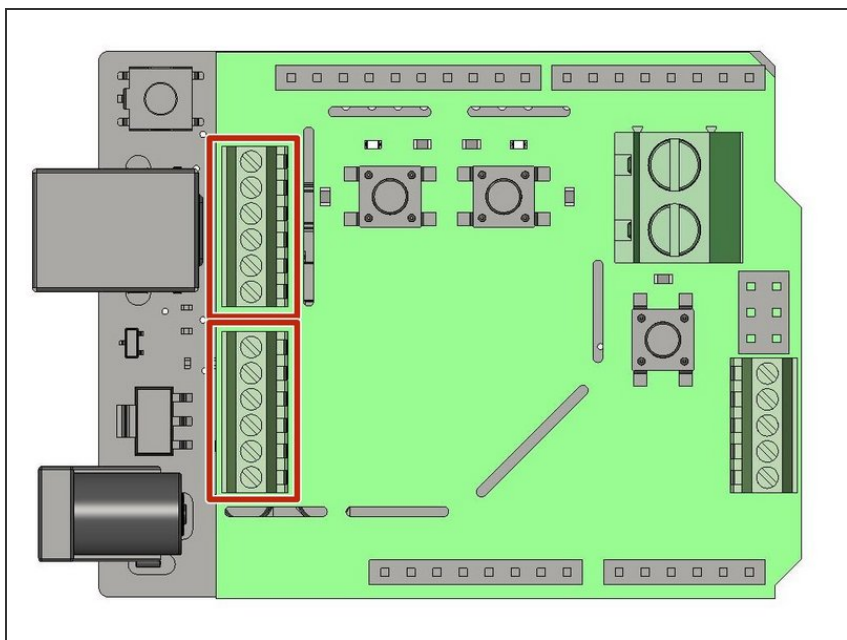
- Located the J3 Terminal Block
  - ⓘ Note the Orientation of the Microcontroller in the Diagram.
- Make the following Connections on the Microcontroller (from Top to Bottom) using the 5-Conductor Cable:
  - White, Yellow, Red, Blue, Green
- On the other end of the 5-Conductor Cable, 3 of the wires Terminate in the Control Panel as seen in Images 2 and 3.
  - ⓘ All Terminals Vertically Aligned are Electrically Identical.
  - ⓘ Multiple Wires can be placed in the same Terminal.

## Step 5 — Wiring: Inside Control Panel Part 2 (Retrofit Only)



- In the Upper-Right Corner of the Control Panel, Locate the VFD. Remove the Cover with the single Screw on the Front.
- The remaining 2 Wires (Red and Yellow) that were not wired into the Terminal Block will be landed on the VFD as seen in Images 2 and 3.
  - Red Wire in Terminal 1B (Image 3)
  - Yellow Wire in Terminal 2B (Image 3)
- ⚠ In a Retrofit application, you will need to run (2) additional wires:
  - Between 24VDC on the Terminal Block and 1C.
  - Between 24VDC on the Terminal Block and 2C.
- Replace the Cover Removed at the Beginning of this Step.

## Step 6 — Wiring: LED Strips to Microcontroller



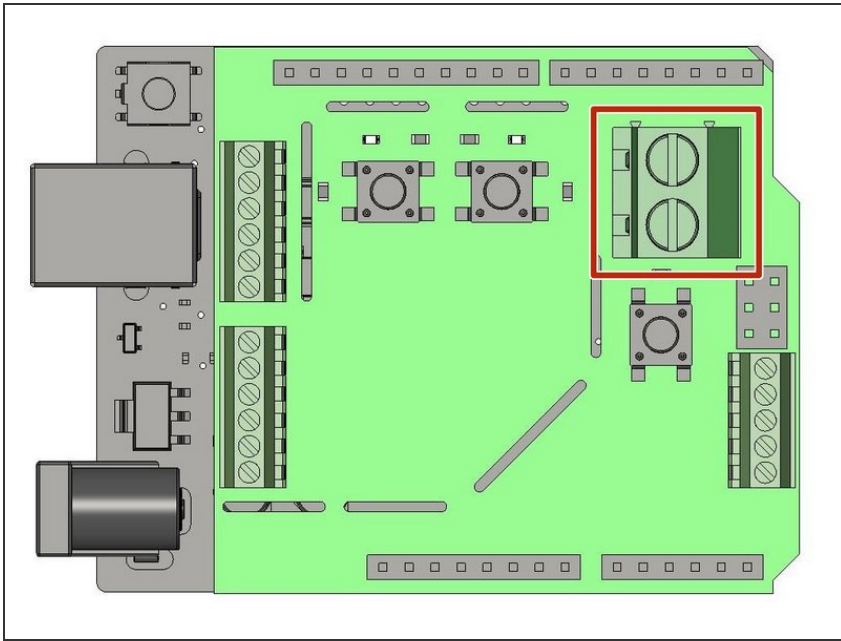
- Bring the (2) 3-Conductor Cables from the LED Strips into the Control Panel.
- Locate the J6 and J7 Terminal Blocks
  - ⓘ Note the Orientation of the Microcontroller in the Diagram.
- ⚠ Each Terminal Block receives Wires from One of the LED Strips.
- Make the following Connections (from Top to Bottom) on each Terminal Block:
  - Red, White, Empty, Empty, Empty, Black

## Step 7 — Power Supply



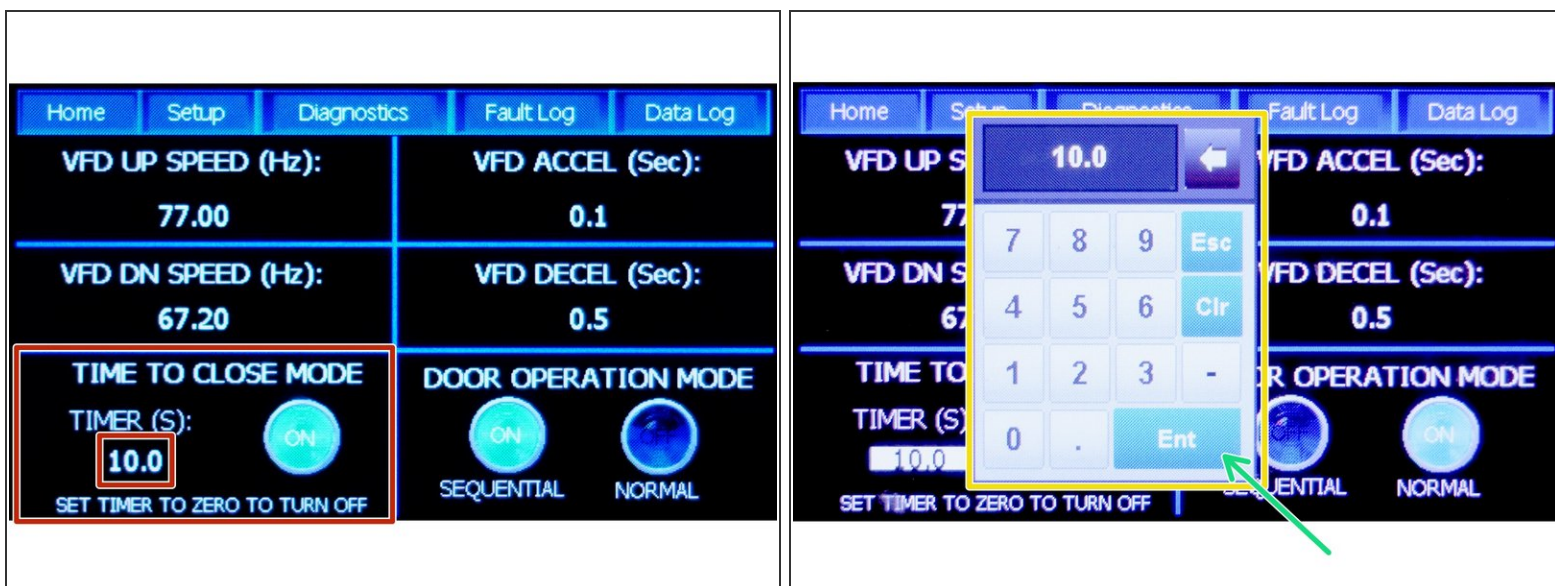
- Locate the Provided Power Supply.
- Bring Power (Single-Phase 120 to 240VAC) to the Power Supply via the Plug or by Hardwiring.
  - ⓘ Power can come from an Outside Source, or can be pulled from the Supply that is feeding your Control Panel.
- ⚠ Make sure Electrical Requirements can be fulfilled without straining the System.

## Step 8 — Wiring: Powering the Microcontroller



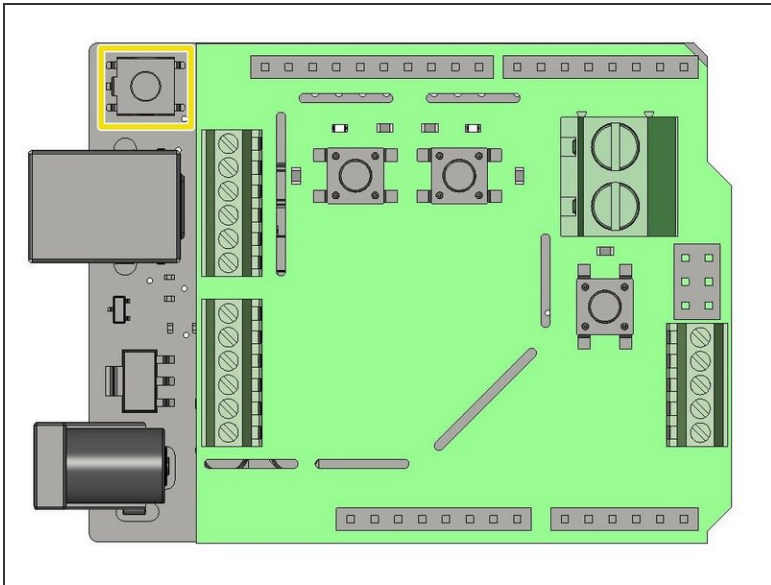
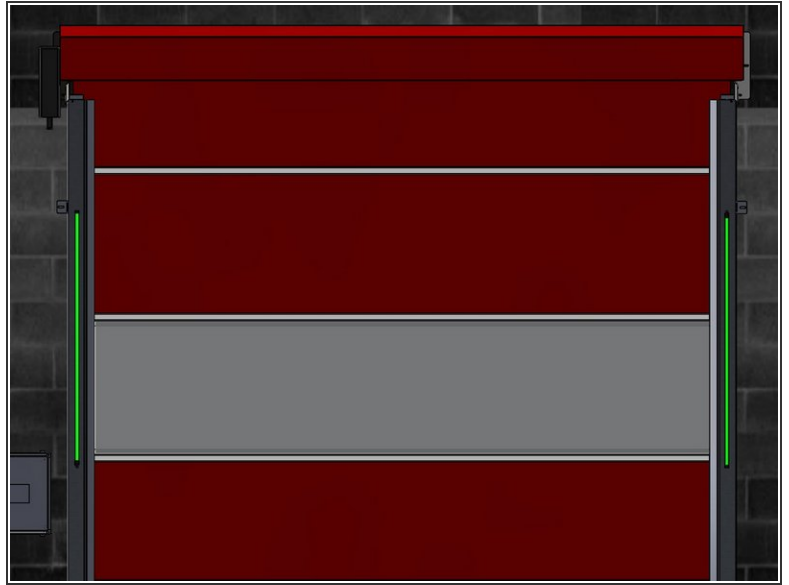
- Cut the Barrel Connector off of the Output Side of the Power Supply.
- Bring the Power Supply Output into the Control Panel.
- Locate the J9 Terminal Block
  - ① Note the Orientation of the Microcontroller in the Diagram.
- Make the following Connections (from Top to Bottom):
  - Red, Black

## Step 9 — Setting Time-to-Close



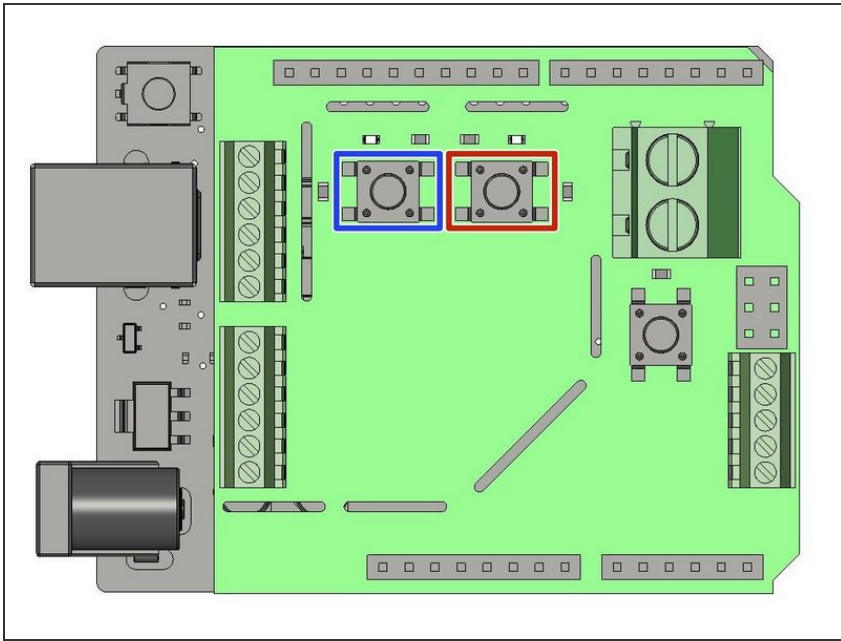
- Before we can Program our LED Door Indicator Light System, we must set up the Time-to-Close (TTC) Feature on our Control Panel.
- To Turn On and Adjust the Timer: Press the number (10.0 in picture) below "Timer (s)" text. A Pop-up Keypad is displayed.
  - ① Seconds from 0.0 to 60.0 are valid entries.
  - ① Set the timer to "0" to Turn Off the Auto-Close Timer/Function.
- In the Numerical Keypad, Enter the Desired time in Seconds before you want the Door to Automatically Close.
- Press "ENT" to save your Timer Delay.
- ⚠ Interrupting/Breaking the Photo-Eye/Safety-Sensor Beam will reset the Timer to the preset Time.

## Step 10 — Programming the Microcontroller



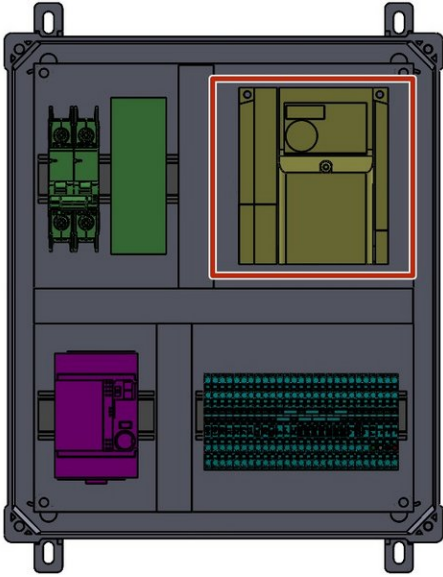
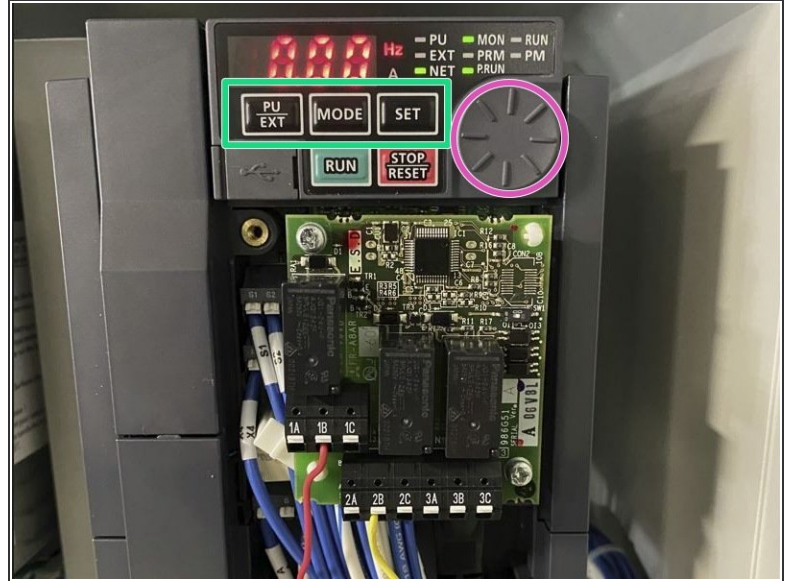
- When first Powered On, the LED Strips will Flash Green for One Second. At this Point, Proceed to the
- If at any point, you need to Restart the Programming Sequence, Press the 'RESET' Button.
  - ① When the 'RESET' Button is Pressed, the LEDs will Flash Green for One Second. When the Green turns Off, you are ready to Begin the Programming Process.

## Step 11 — Programming the Microcontroller



- Locate the Blue Button Labeled SW1
- Each Press of this Button adds One Second to the Timer associated with the LED Light System (10 Presses = 10 Seconds).
- To Sync the LED Light System with your Control Panel, you must Press SW1 One time for every Second Programmed on your Control Panels' TTC Feature.
  - ① If your TTC is set for 10 Seconds, you must Press SW1 Ten times.
- Locate the Blue Button Labeled SW2
- Once you have Synced your LED Light System with your Control Panel by Pressing SW1, Press the SW2 Button One time.
  - ① This Locks in your Programming, and Initiates the Light System's Operation.

## Step 12 — VFD Parameter Changes (Retrofit Only)



- Locate the VFD in the Upper-Right corner of the Control Panel.
- Press the PU/EXT Button Once, and then the Mode Button Once.
- Turn the Rotary Dial Until you see "P. 320",
- Hit the Set Button Once.
- Turn the Rotary Dial Until the Value of that Parameter is "9999"
- Hit the Set Button Once.
- Repeat Steps 3-6 for P. 321 and P.322
- Press the PU/EXT Button Once, then the Mode Button Twice to Exit the Parameter Menu. Your Door is ready to Operate with the LED Indicator Lights.