# PURONet UV Disinfection Control System

## Add Safety, Reporting, and Data Collection to Your PURO UV Disinfection Program


### External Control Screen

Large 10" touch screen for system activation and disinfection history


### In-Room Screen

Touch screen mounted inside space

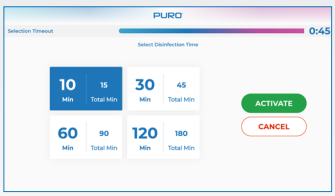
### Motion Sensors

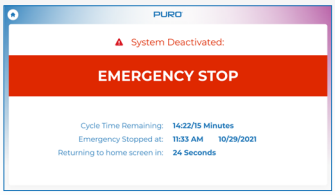
Designed to detect any movement inside target space

### SYSTEM HIGHLIGHTS

The first control system of its kind specifically designed for user-friendly operation.

- Safest way to avoid overexposure for people entering the target room while disinfection is occurring.
- If one of the sensors detects motion, or the “emergency stop” button is pressed from inside or outside the room, all UV disinfection instantly stops to prevent accidental overexposure.
- System records all disinfection cycles, including information on the date, time, and duration of the cycle as well as any cycle interruptions.
- Hardware can also be easily upgraded in the future to access data via the cloud.
- Designed per UL8802 guidelines.
- Operators will be trained on system operation.
- The control system uses up to 4 motion sensors installed in the ceiling, depending on the application.
- This system can be installed as a retrofit in existing buildings, or for new construction.


## EXTERNAL CONTROL SCREEN

Located outside of target space. Use to activate disinfection system after armed, and to view cycle history.



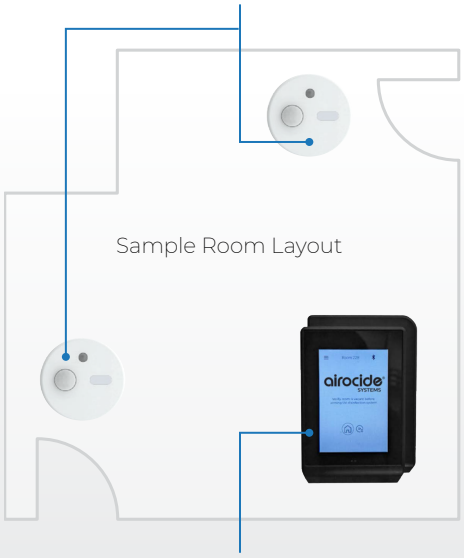
Optional Secondary Indicator Light

## MAIN CONTROL BOX

The system controller, power supply, and relay module are housed in an 18" x 18" x 4" junction box with multiple knockouts available on all four sides.

## MOTION SENSORS

Located inside target space near any means of egress. Stops disinfection cycle if motion is detected.




## IN-ROOM SCREEN

Located inside target space.
Use to arm disinfection system.

Full wiring diagram available in user manual.

## HOW TO ORDER

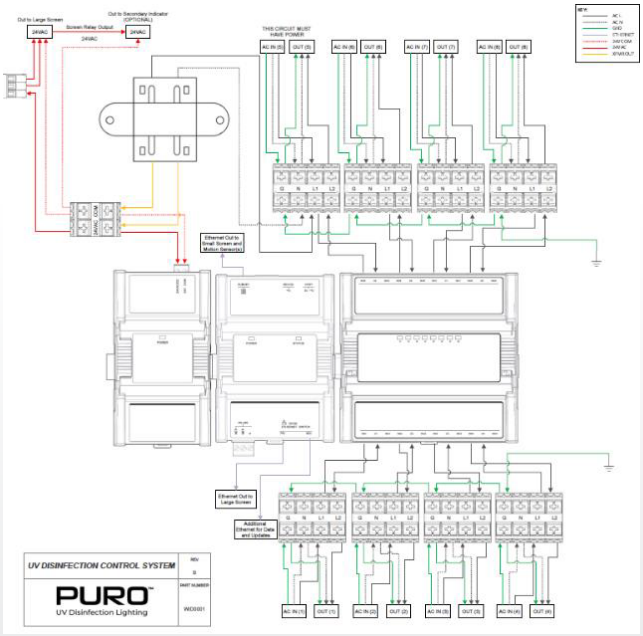
Please specify components below using the letter code in bold to select the desired options.

| Product | Connectivity | Sensor Type | Sensor Quantity |
|---|---|---|---|
| | | | |
| **DCS** = Disinfection Control System | **E** = Ethernet<br>**W** = Wireless | **DT** = Distech Controls EC Multi Sensor | **1** = One Sensor<br>**2** = Two Sensors<br>**3** = Three Sensors<br>**4** = Four Sensors |

Example order: **DCS-W-DT-4**

## SYSTEM COMPONENTS

### THE UV-DCS IS COMPRISED OF THE FOLLOWING ELEMENTS:




### MAIN CONTROL BOX

The system controller, power supply, and relay module are housed in an 18" x 18" x 4" junction box with multiple knockouts available on all four sides.

### MOTION SENSOR(S)

Wide-angle motion sensors with Cat5 connections are used at any possible points of entry to deactivate all UV emitters if someone attempts to enter the target space while the disinfection system is active. Depending on the application, 1-4 sensors per room are used.


### IN-ROOM SCREEN

The small (approximately 3.5"x5.25") touch screen is to be mounted inside the space targeted for disinfection. The trained user uses this screen to begin the activation process after verifying the target space is vacant.

This screen is connected in series with the motion sensors by Cat5 cables.

## EXTERNAL SCREEN

The large (10") touch screen is to be mounted on the outside of the space targeted for disinfection.

Once the system is armed from inside the room, the trained user enters a PIN on this larger screen and selects a cycle time to start disinfection.


## INCLUDED MATERIALS

- 1x main control box
- 1x 10" external touch screen and mounting kit
- 1x small internal touch screen
- 1-4 motion sensors, depending on the application
- 1-4 Ethernet splitters, depending on sensor quantity
- Secondary indication lights, if selected

In addition to the included materials, installation of the UV-DCS requires mounting hardware for all components, connection wiring, and UV disinfection devices that can be controlled with the 8 relay outputs of the UV-DCS.

## SPECIFICATIONS

### INPUT POWER

The PURO UV Disinfection Control System is powered by 120VAC

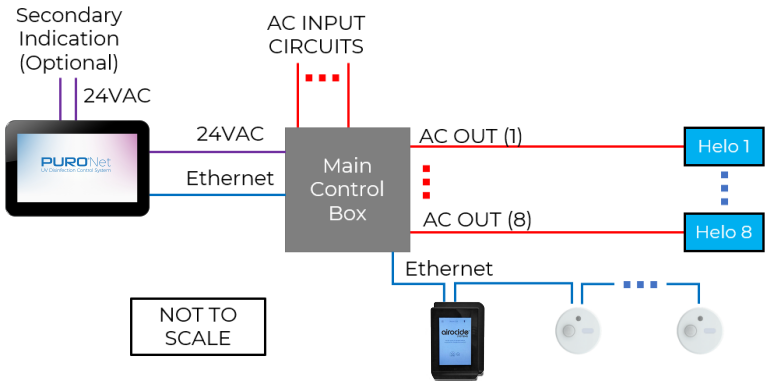
### TOUCH SCREENS

The small touch screen must be installed inside the space to be disinfected, preferably far enough from the main door that the system operator must fully enter the target space and can easily visually verify vacancy of the entire space.

The large touch screen must be installed outside the space to be disinfected, such that it can be used to finish arming the system after all doors to the target space are securely closed.

### CONTROL BOX

The main control box may be installed wherever convenient.




## WIRING

The main control box requires high-voltage (120VAC) wiring for the inputs to the input terminal blocks and from the output terminal blocks to either two Helo F1 devices or one Helo F2 device per output. The input to AC IN (5) must have an accessible disconnect, such as a light switch, used to power cycle the system.

Low-voltage wiring (24VAC) runs between the main control box and the large external touch screen. 24VAC also runs from the relay output of the large touch screen to the secondary indication lamp, if used.

Ethernet cables (Cat5 minimum) connect the main control box to the small touch screen, the small touch screen to the first sensor, the first sensor to the next sensor through an ethernet splitter, then to the last sensor used. These components may be connected in any order – follow the wiring diagram specific to your application. Another Ethernet cable is used to connect the main control box to the large touch screen.

We highly recommend running a second Ethernet cable from the "secondary" terminal of the controller in the main control box alongside the cable from the "primary" terminal to large touch screen, as it may be used to connect to a computer for firmware updates and/or data collection and should be easily accessible.

For best data integrity and response times, do not use Ethernet cables longer than 100'.

## VIEW SYSTEM HISTORY

System records all disinfection cycles, including information on the date, time, and duration of the cycle as well as any cycle interruptions.