

**EBRAX**  
ATM SECURITY LLC

## Technical Instructions

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**Germi-Light**

**EGL 1040**

### **EBRAX ATM SECURITY**

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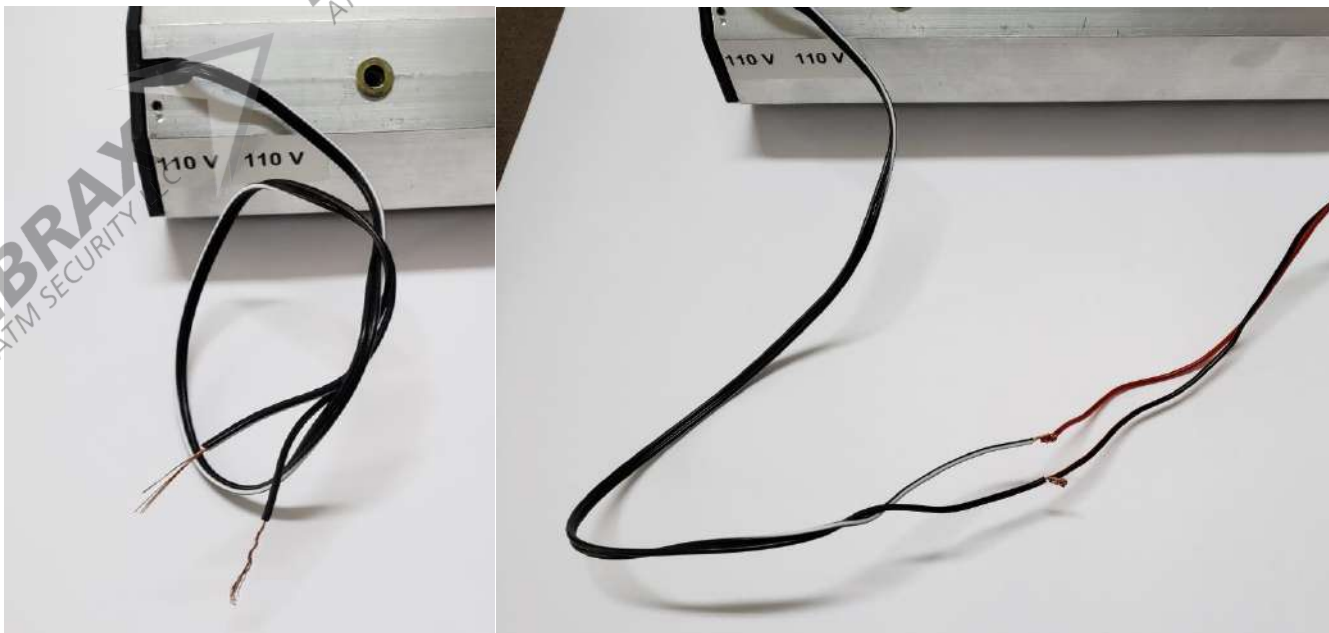
# 1 Electrical Installation

There are two supply voltages for Germi-Light, 127 / 220VAC.

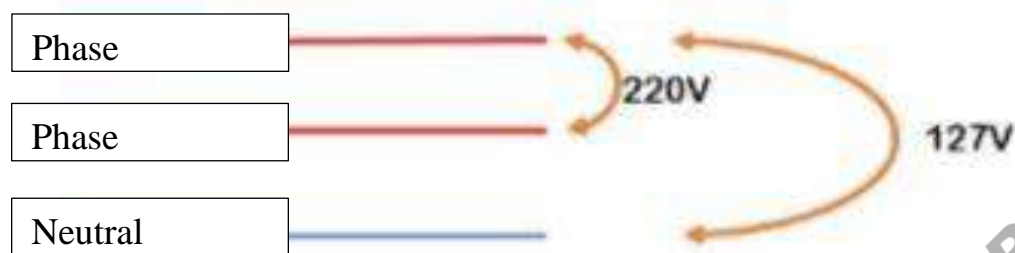
Get hold of a plug, according to the indicated voltage..



If necessary, make a splice with the cables.



For your safety, insulate with electrical tape.



## 2 OPERATION MODE

### 2.1 Operation

Germi-Light operates between UV light activation ranges, which can be recorded / modified via USB.

Below there are 3 examples of opening hours.

The first turns on at: 00:00 and turns off at 05:00;

The second turns on at 20:00 and turns off at 08:00;

The third turns on at 10:00 and turns off at 16:00.

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

The operating range can be defined according to the needs.

To set the ranges, go to Chapter 6: [APP](#).

Note: The factory default operating range is 01:00 to 05:00.

### 2.2 Presence Sensor

The presence sensor plays a crucial role in the operation of the device.

When the presence sensor detects any relevant movement in the environment, a 300 second timer is activated to its logic and during the timer count, the UV light will remain off. After the environment has been stable for more than 300 seconds and is within the operating range of the device, the light will turn on again.

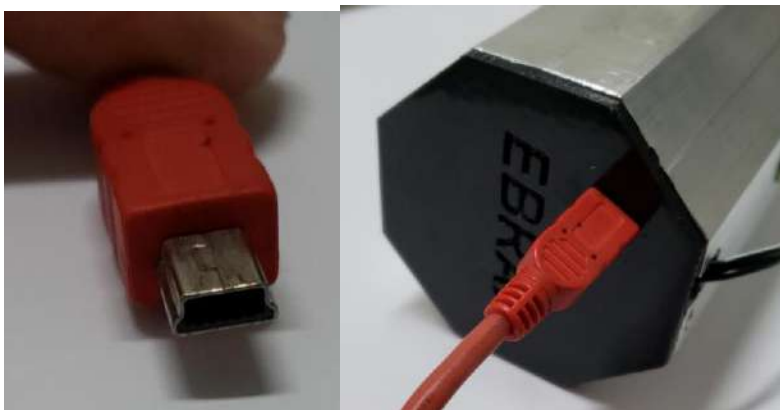
### 2.3 Cyclical Security

Germi-Light's safety logic is to detect if the sensor has been without activation for more than 18 consecutive hours. If the presence sensor does not detect any relevant movement in that time, the UV light will not turn on again, until a technician checks and solves the problem.

## 3 Connection: USB/OTG

Germi-Light has a mini-USB 2.0 output configured to operate at 115200 BaudRate. 8 bits / 1.

An Android application was developed in order to meet all the needs of the device, but it can also be accessed through a serial terminal; see more in topic 4-2. [Alternative](#).



To connect via mobile device, you need an OTG adapter.



## 4 Installation

The lamp should be directed to the region to be disinfected and the motion sensor should be directed to the front of the ATM.

The indicated location for installation is as follows:



Fixing can be done through the M4 screw mounts, which are located on the “back” of the device, fixing them in the ATM casing itself.

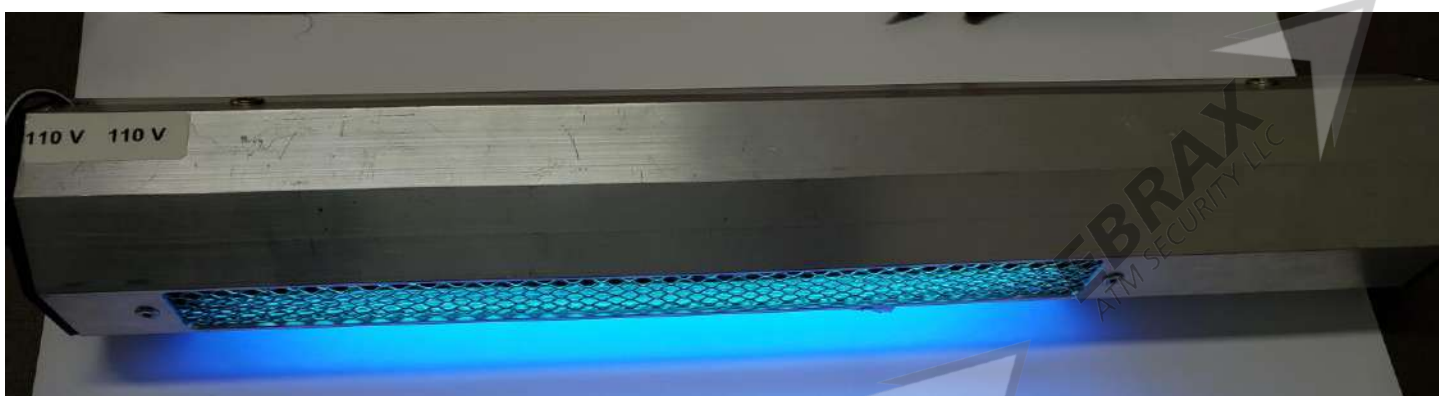


## 5 Testing

To test the device, please connect to the app and set the current time to be the UV light activation time.

Make sure the environment is stable for the next 300 sec, watch the UV light turn on and stay on until it detects any relevant movement in the environment.

To configure the UV light arrangement, go to Chapter 6: [Android APP](#).



By blocking the presence sensor, Germi-Light will deactivate the UV light and restart the activation timer (300 seconds).

Note: It takes between 1 and 15 seconds for the Germi-Light to enter the UV light shutdown routine.

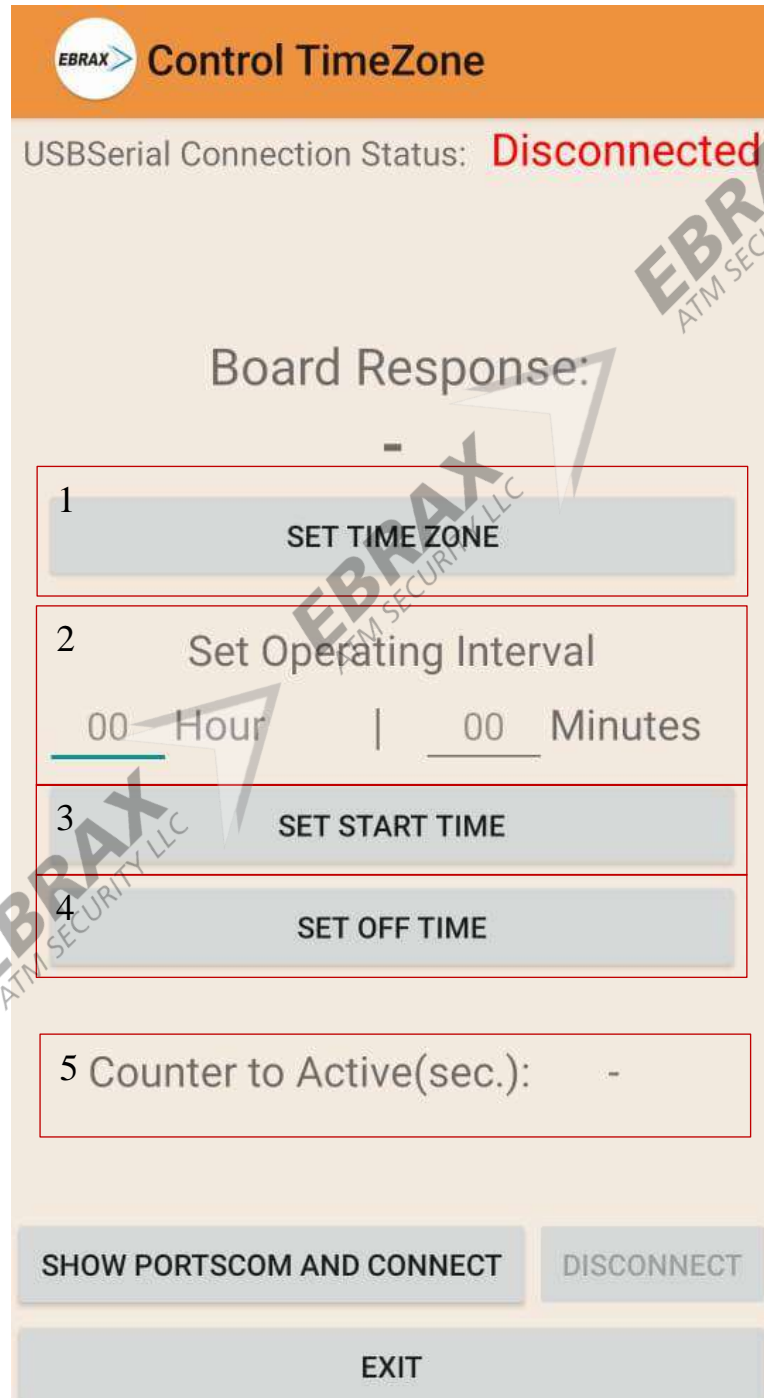
Note: Follow the health guidelines for UV incandescent lamps.

## 6 Android APP

The application has been compiled for Android versions 5.0+.

Communication is done in series using a mini-usb cable and an OTG adapter.

### 1. APP



#### 1 SET TIME ZONE

This function captures the time of the cell phone and sends it to Germi-Light, updating the region's schedule.

#### 2 SET OPERATION INTERVAL

Enter the time to be considered in buttons 3 and 4.

#### 3 SET START TIME

When pressed, the UV light will activate from the time set on the SET OPERATION INTERVAL Screen.

#### 4 SET OFF TIME

When pressed, UV light will turn off from the time set on the SET OPERATION INTERVAL Screen.

#### 5 COUNTER TO ACTIVE (seconds)

Timer for motion detection.

### 6.1 PC Alternative

If, for unknown reasons, the Android App does not work, one of the alternatives is to connect Germi-Light to the computer using the Terminal software shown below and send the configuration commands;

In order to communicate the device with the computer, you must install the Silico Communication Driver. To do this, follow the steps in [Theme 7](#).

To communicate with the device, there are 3 standard messages to follow, they are:

Current Time Recording: =hhh:mm:00 dd/mm/20; **Example: =h16:12:00 24/08/20;**

Recording Time to Activate: =Lhh:mm:00 dd/mm/20; **Example: =L16:12:00 24/08/20;**

Recording Time to Power Off: =Dhh:mm:00 dd/mm/20; **Example: =D16:20:00 24/08/20;**

Hour: hh = hour, mm = minutes

Date: dd = day, mm\* = month;

Recommended software: Termite Terminal Serial RS232.

Download: [https://www.compuphase.com/software\\_termite.htm](https://www.compuphase.com/software_termite.htm)

## 7 Silicon USB Driver

For the integration between the application and the Germe-Light, it is necessary to install the device driver.

Driver: CP210x USB to UART Bridge VCP Drivers

<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>

After the installation of the file, you must accept the terms

If the installation is successful, the following image will appear

