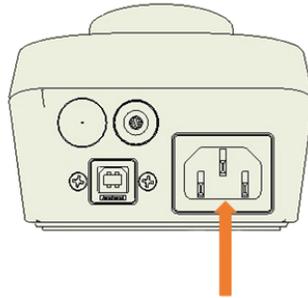


### POWER

The controller accepts a power cable with a C13-IEC style plug and offers voltage characteristics of 100-240 VAC. This allows it to be compatible with most standard international voltage standards. Power cables are NOT included with the purchase of a controller and must be ordered separately.

1. Insert the female end of the power cable to the back of the controller.
2. Insert the male end of the power cable to the wall outlet.
3. Press the power button on the controller. When the digital read-out turns on, the controller is ready for operation.

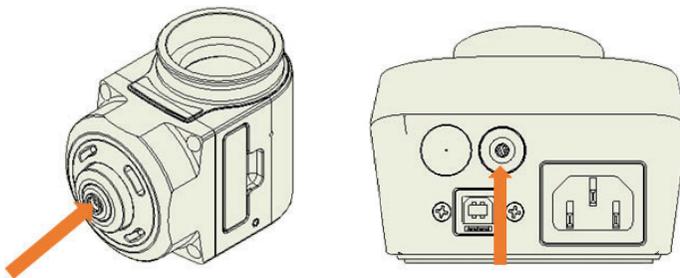


Power cable inserts into this port.

### LIGHTING CABLE

The lighting cable is a barrel plug cable with connector dimensions 2.1mm ID, 5.5mm OD plug cable. Inside the cable contains two wires which offer power line communication for power and data transfer. Lighting cables are NOT included with the purchase of a controller or illuminator and must be ordered separately.

1. Insert the lighting cable into the illuminator.
2. Insert the other end of the lighting cable to the back of the controller. Ensure that the controller is powered off before making the connection to avoid "hot swapping".
3. Press the power button on the controller and the illuminator should power on.

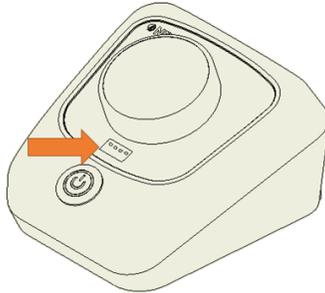


Lighting cable connection location.

## DIGITAL READOUT/POWER SWITCH

The controller contains a digital readout, giving users the ability to set a specific power levels in 1% increments. The user can also toggle between two channels by depressing the knob, allowing users to quickly switch from two different lighting levels instantly.

1. With the controller powered on and the illuminator connected, turn the knob on the controller to the desired lighting level (0-99).
2. Depress the knob to access the other channel. Turn the knob on the controller to the desired lighting level.
3. Depress the knob on the controller to quickly toggle between the two desired lighting levels.



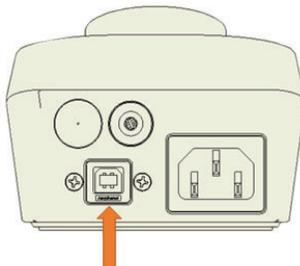
Location of digital readout, just above the power button.

## SERIAL CONNECTION

Users can control the illuminator via programs such as Tera Term for serial communication using a USB-A to USB-B cable (purchased separately). The controller has access to the following command structure:

<regname>	<regnumber>	Values	Read/Write	Description
bright	0x80	integer (0...99)	w	driver brightness
power	0x81	0: OFF 1: ON	w	controller power

1. Insert the USB-B end of the connector to the back of the controller.
2. Insert the USB-A end of the connector to your computer.
3. Use the following default settings:
  - a. Baud Rate: 38400
  - b. Data bits: 8
  - c. Stop bits: 1
  - d. Parity: None
  - e. Flow Control: XON/XOFF
4. With the controller connected to the power source, and the illuminator properly connected, turn on the illuminator using the following: 'write power 1'
5. The controller and illuminator will turn on. Use the 'bright' command to adjust the brightness of the illuminator to the desired setting.



USB cable connection location.