FLUENCE

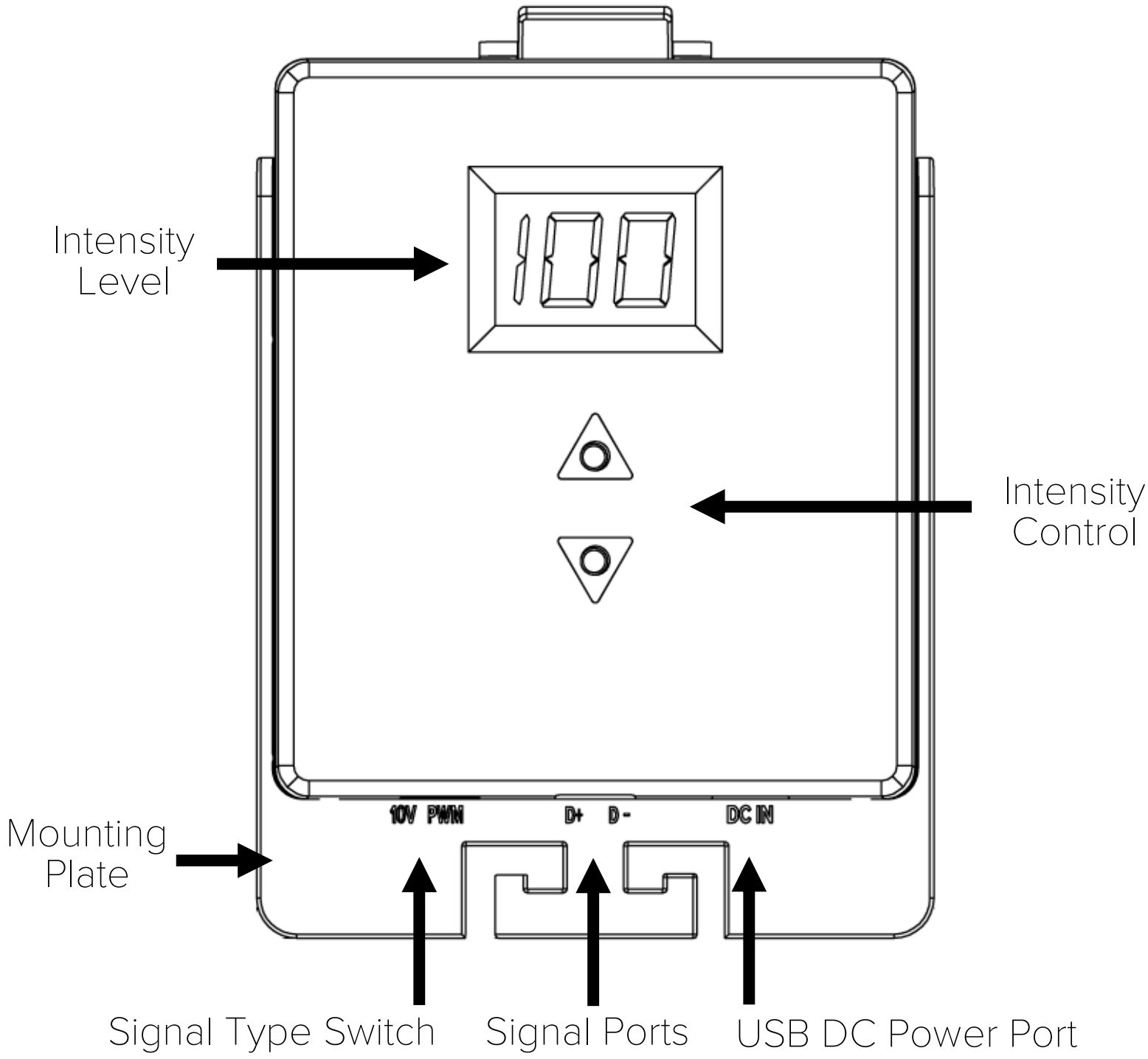
BIOENGINEERING

DIMMER USER MANUAL

OVERVIEW

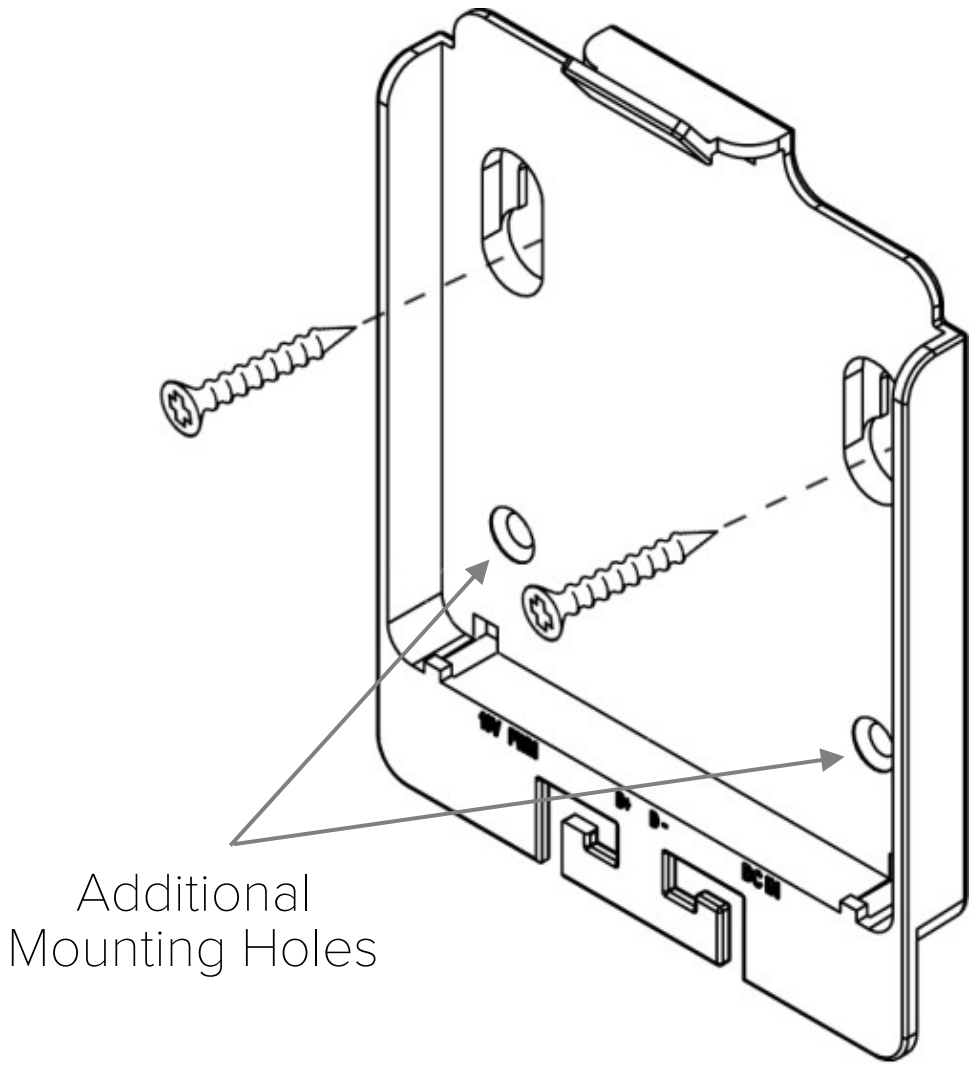
This product can dim up to 50 fixtures over 200 feet of signal wire via a 0-10V or PWM signal for uniform control of light intensity delivered to crops. Extending the signal wire more than 200 feet will weaken the signal strength and may reduce the total number of fixtures that can be dimmed. If more than 200 feet of total signal wire is needed, please consult an electrician or contact a Fluence representative at support@fluencebioengineering.com.

Please note: This dimmer is meant to control the overall light intensity of your Fluence Bioengineering fixture(s). It is not meant to act as a timer to control photoperiod. Please use a switch or timer to power fixtures on/off for photoperiod control.


Intensity Level
100
Intensity Control
Mounting Plate
10V PWM
D+
D-
DC IN
Signal Type Switch
Signal Ports
USB DC Power Port

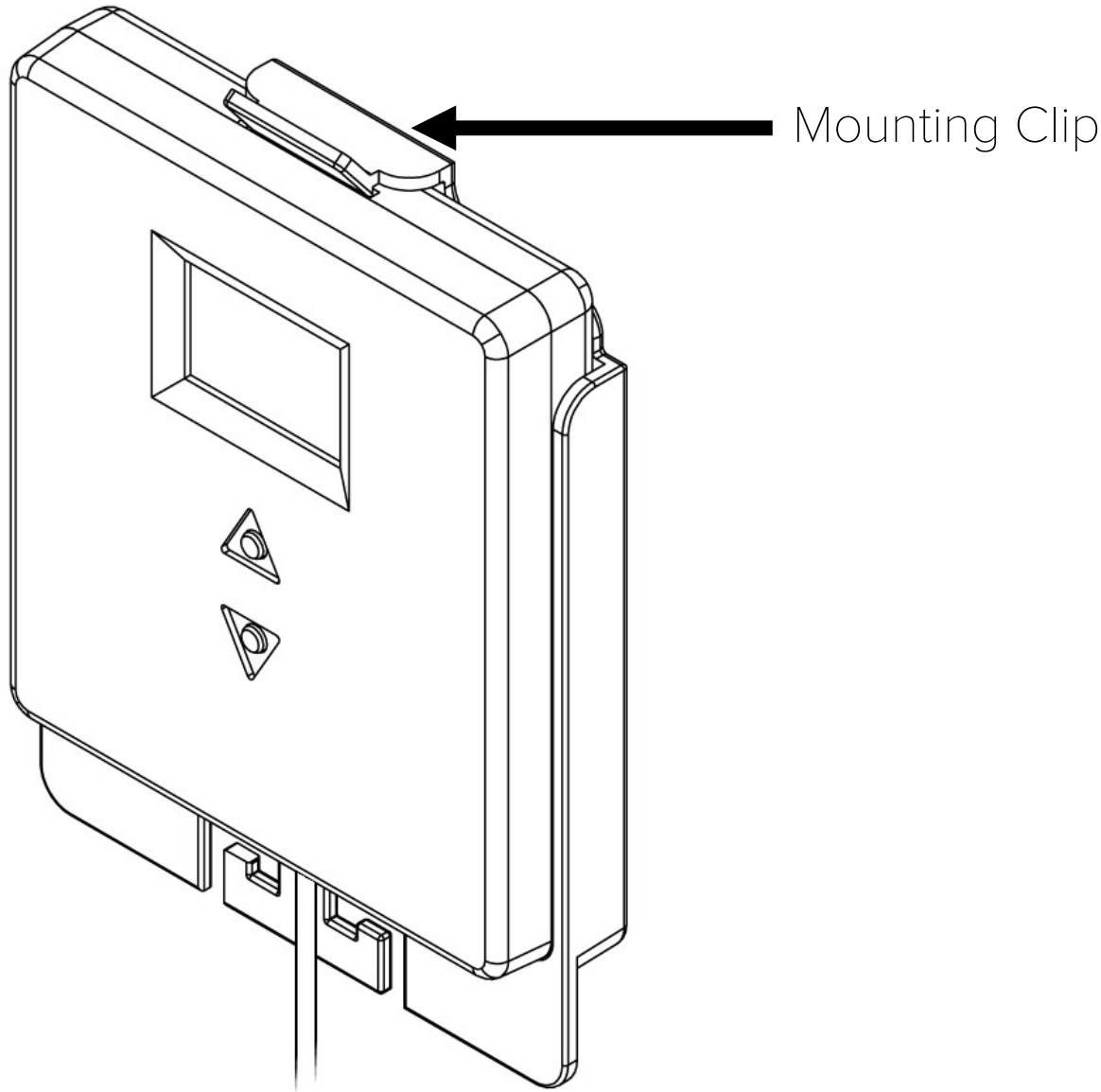
1 Install Mounting Plate

Attach the mounting plate to the wall with screws. Install away from areas that may get wet. Do not install in environments with 80%+ humidity.



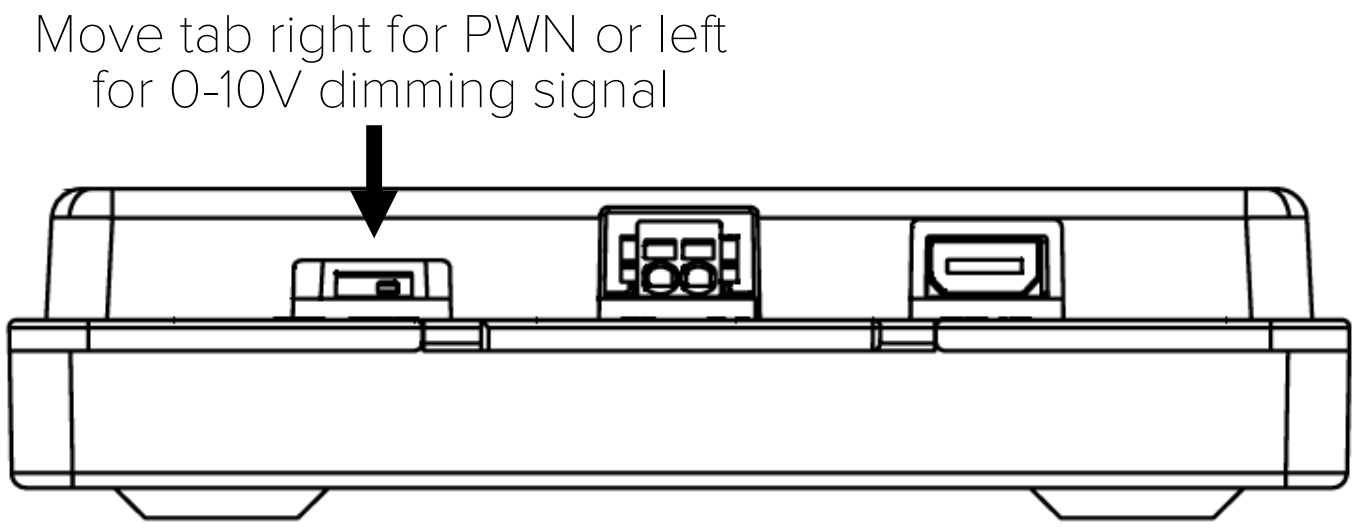
2 Mount Dimmer

Set the bottom of the dimmer into the mounting plate and then push the top of the dimmer in until the mounting clip snaps into place.



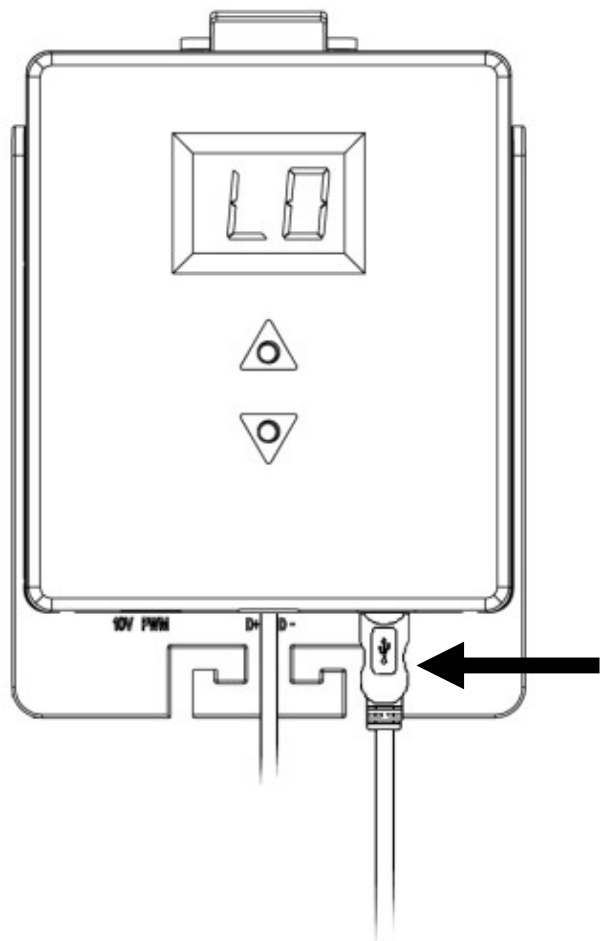
3 Changing Signal Type

Use the small switch marked “10V PWN” to set the signal type to match your fixture.



4 Connect the Power Cord

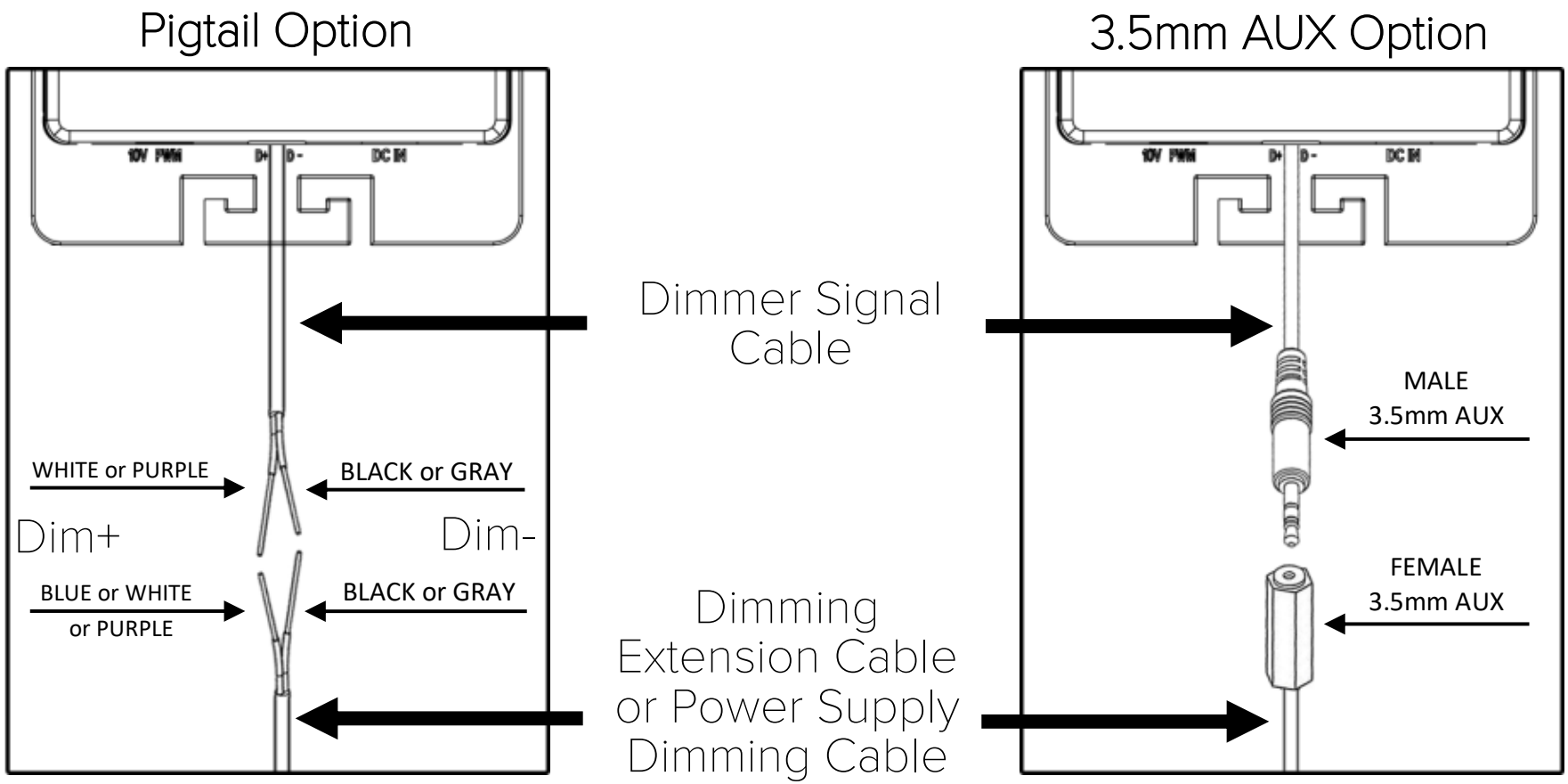
Connect the micro USB power cord to the port labeled DC IN and insert the wall adapter into a plug. The screen will flash “LO” as the battery charges. Please wait at least 30 minutes before connecting to fixture(s). The backup battery lasts roughly 18 hours if the dimmer becomes unplugged*.



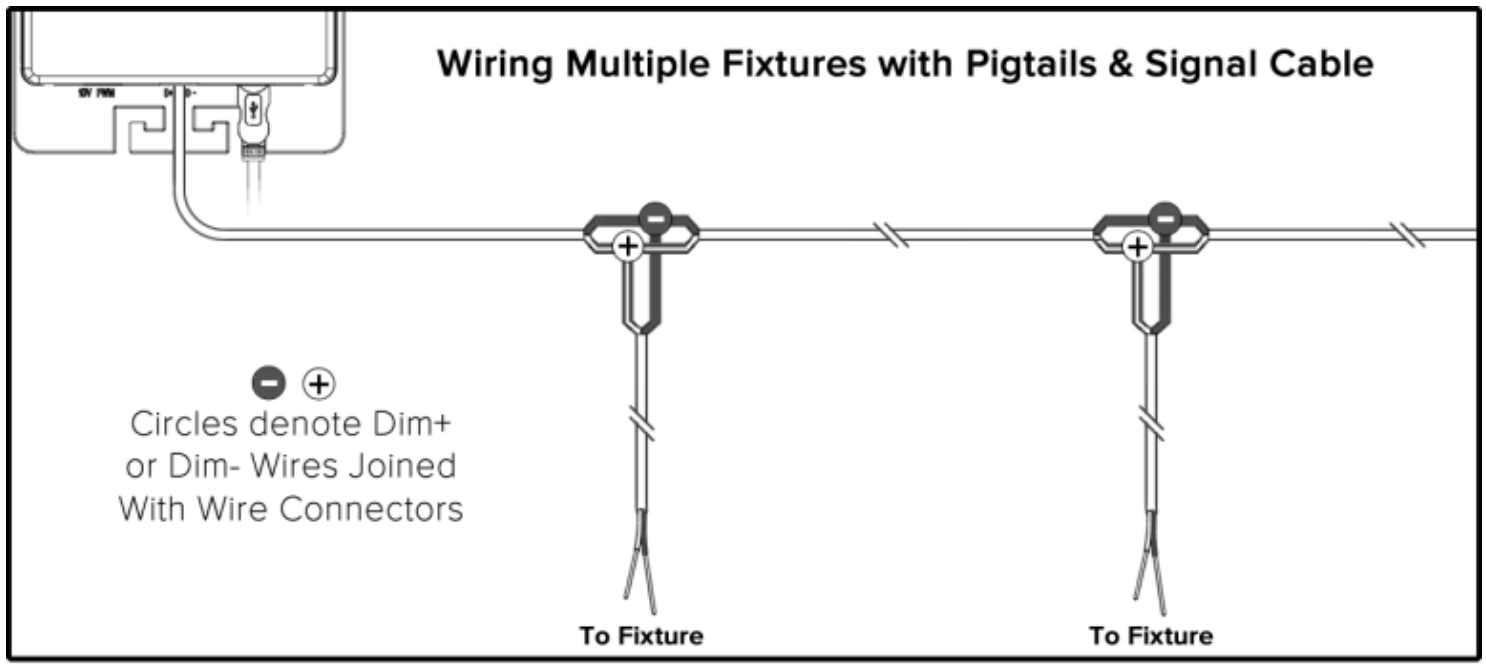
*Please Note: This dimmer is not designed as a battery powered device. The back-up battery is intended to provide a continuous signal during brief power disconnections.

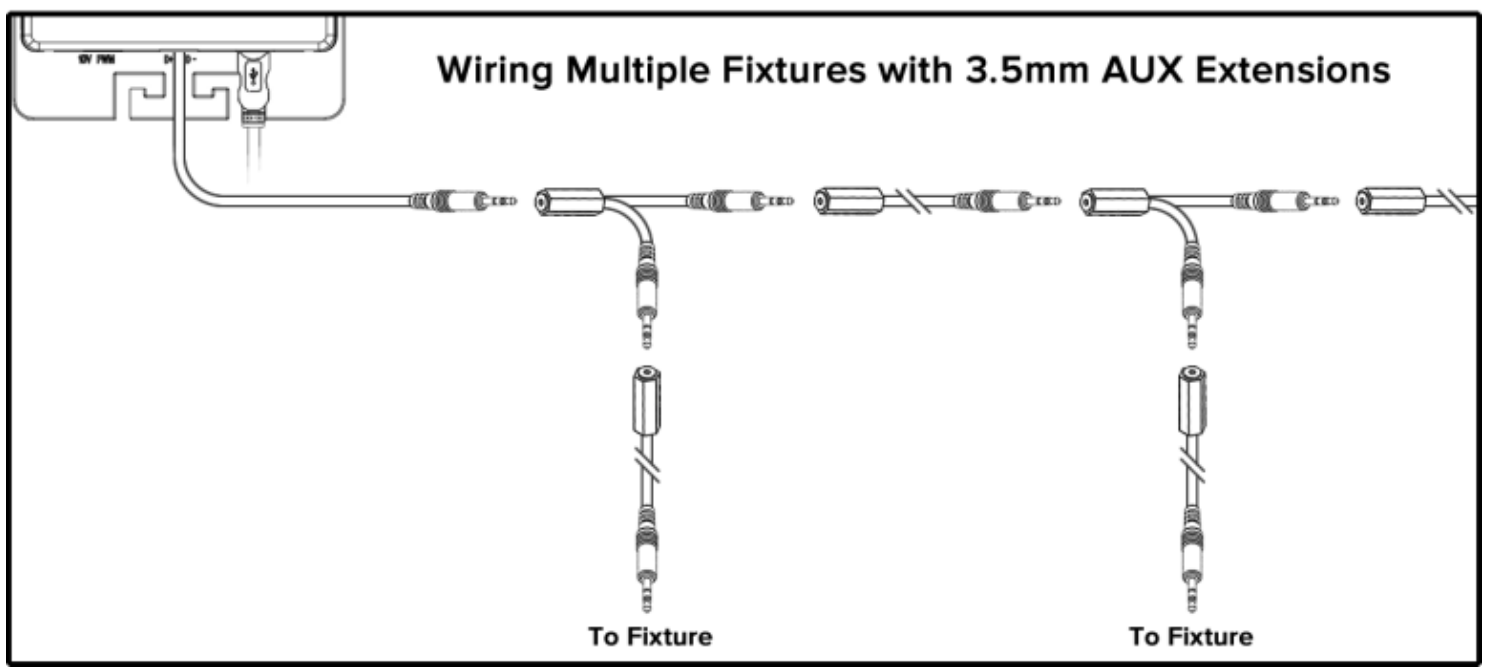
5 Connect the Dimmer Signal Cable

Using the included pigtails or 3.5mm AUX plug, connect the dimmer signal cable to your fixture(s) or an extension cable leading to your fixture(s). If the dimmer is not working, try reversing the dimming leads or switching the signal type (PWM or 10V).



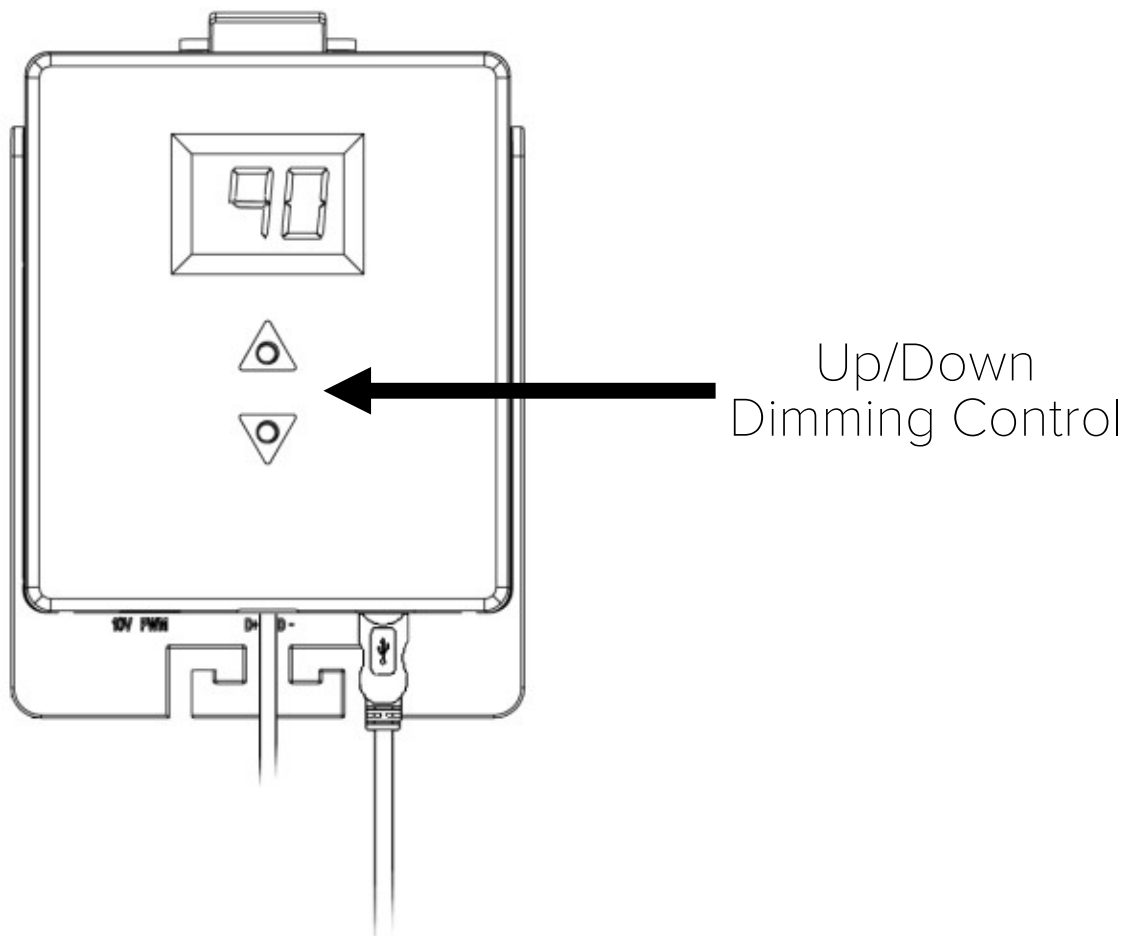
6 Wiring Multiple Fixtures





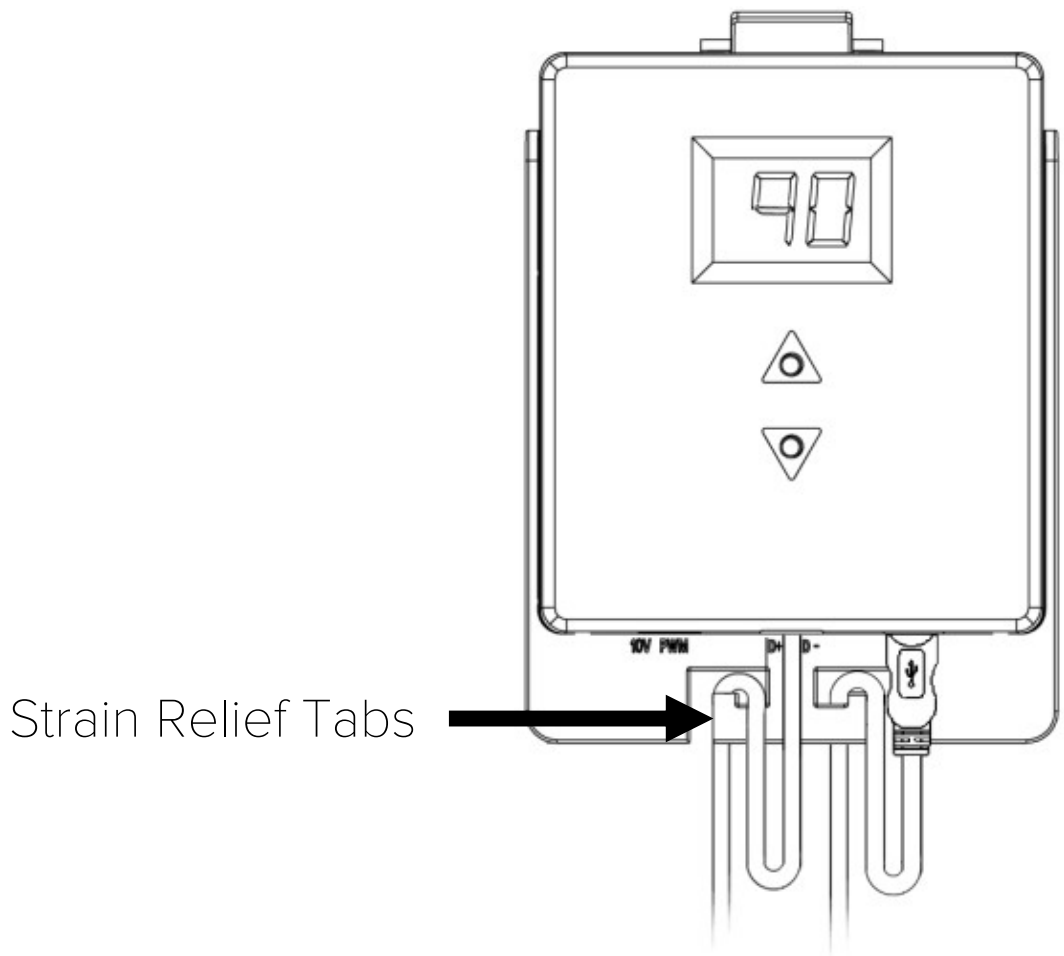
7 Adjust Light Intensity

Use the up/down buttons to adjust the light intensity (0-100) to the desired level.



8 Secure Cords

Loop the dimmer signal cable and power cord around the strain relief tabs to prevent them from becoming disconnected.

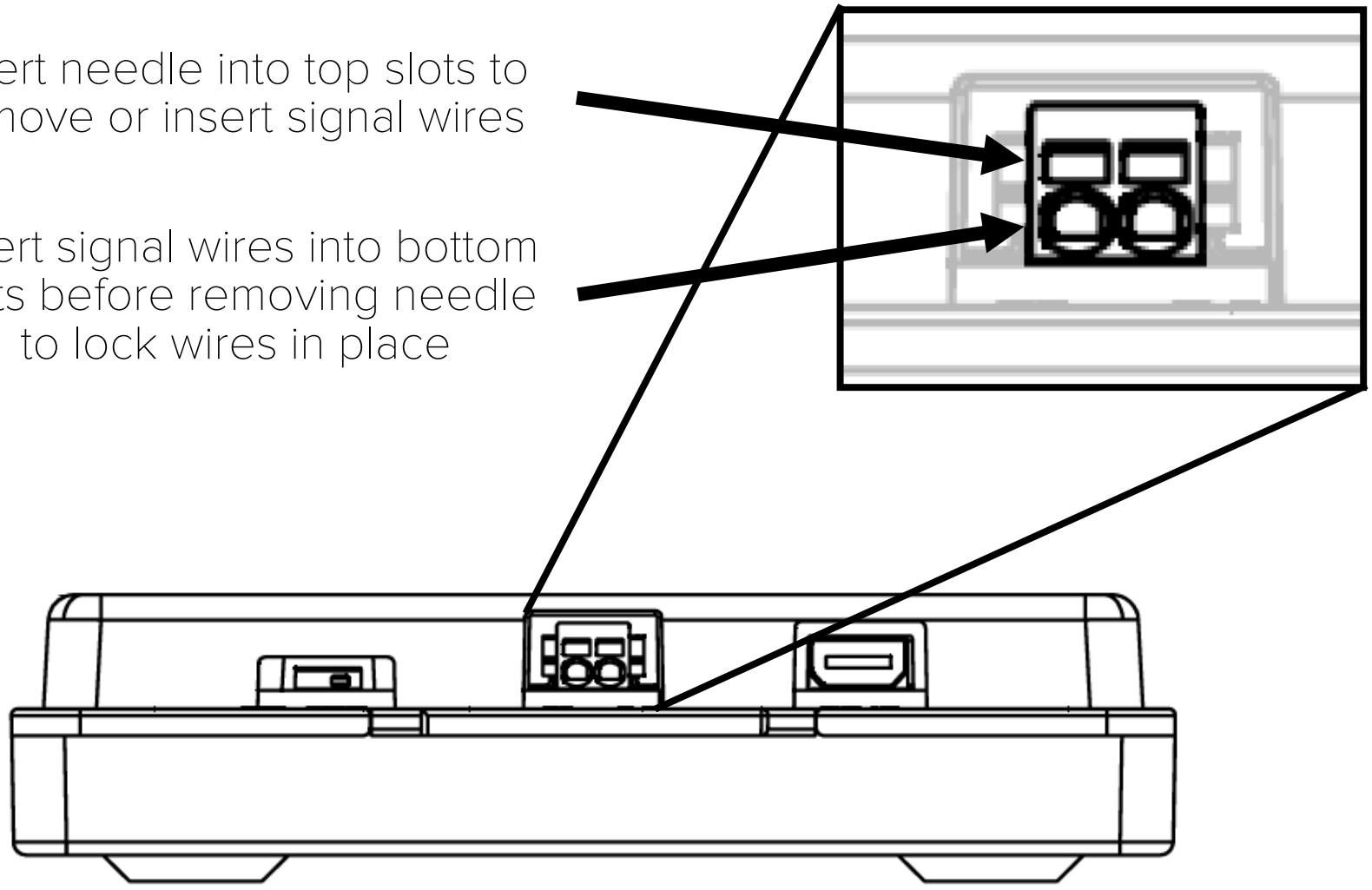


Changing the Dimming Leads

If you need to swap the included signal wire leads, use a needle to open the connector and remove wires and remove the needle after new wires are inserted.

Insert needle into top slots to remove or insert signal wires

Insert signal wires into bottom slots before removing needle to lock wires in place



Install & Usage Guidance

⇒ Mount dimmer away from wet environments, and always dry hands thoroughly before using.

⇒ Do not install this dimmer in environments with 80%+ humidity, or in areas likely to be splashed with water.

⇒ If your fixture(s) appears to reach peak brightness when the dial is at or below 50%, you may need to change the 10V/PWM setting.

⇒ If the dimmer is still flashing “LO” after 30 minutes please check that the power cord is fully connected and the plug you are using is hot. If still flashing “LO” please contact Fluence Customer Support.

⇒ Some fixtures may emit a soft hum or buzz when dimmed.

⇒ The light output associated with the lowest dimmer setting is governed by the power supply that drives the fixture. If multiple models of fixtures are connected to the same dimmer, they may power off at slightly different intensity levels.

⇒ If the dimmer becomes unplugged and the battery loses all charge, SPYDR series fixtures will have zero light intensity, and VYPR series fixtures will go to 10% intensity.

Technical Specifications

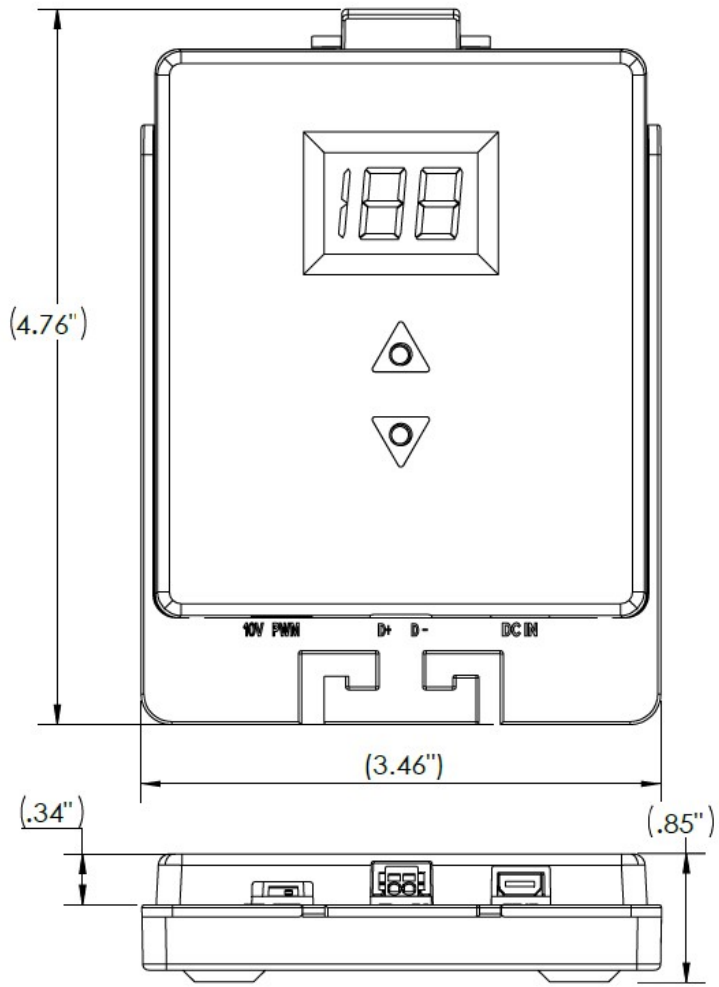
180126
70620B

PWM Dimming
Signal: 0-100% +/- 1%
Source/Sink: 40mA DC

0-10V Dimming
Voltage: 0-10V +/- .1V
Source/Sink: 40mA DC

Backup Battery
LiPo: 600mA (Fully Charged)

USB Charger
Input: 120V AC Power
Output: 5V at 300mA



Family	Model	Wiring Options
C Controllers	W Dimmer	P Pigtails A 3.5mm AUX