

# NOTICE

### Warning: Risk of Fire or Electrical Shock

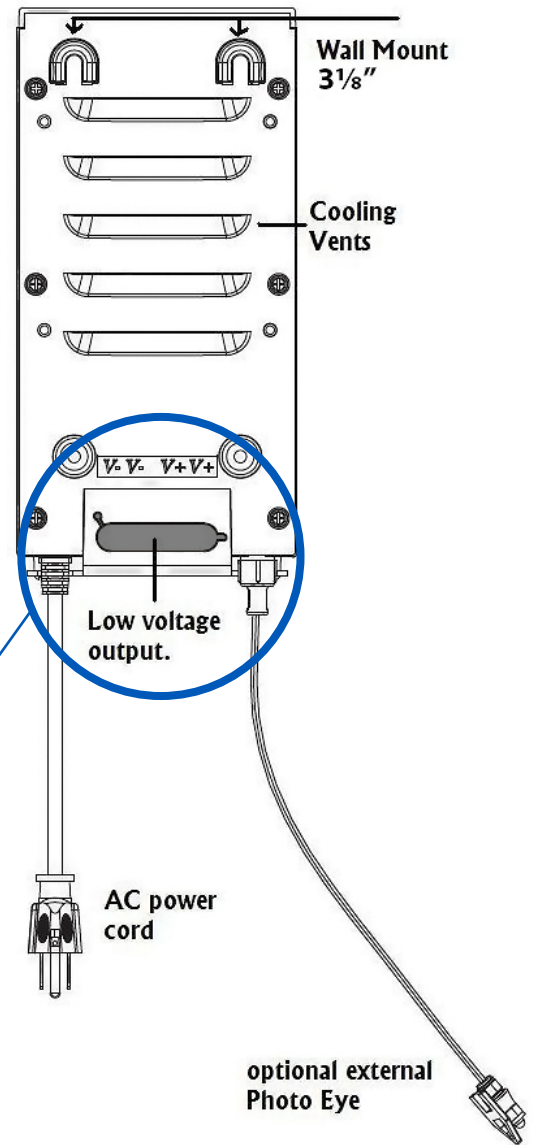
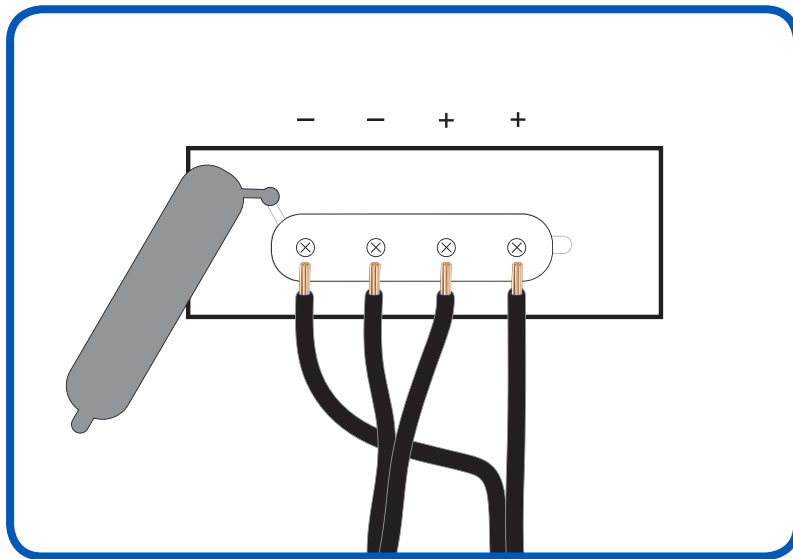
- Install the power unit 5 feet (1.5 m) or more from a pool, spa, or fountain. Where the power unit is installed (a) indoors within 10 feet (3.0m) of a pool, spa, or fountain or (b) outdoors, connect power unit to a receptacle protected by a GFCI.
- Do not use on a dimmer circuit.
- Do not use with an extension cord.
- “CAUTION” For use only on a branch circuit protected by a class A type ground fault circuit interrupter.
- Use Azek/TimberTech 12 volt products only.
- This device is accepted as a component of landscape lighting systems where the suitability of the combination shall be determined by CSA or local inspection authorities having jurisdiction.
- Use Azek/TimberTech wire only.
- To order additional lengths of wire, order AZTDLLEDWIRE (for secondary runs only).
- The secondary wiring is intended for shallow burial (less than 6 inches/152mm)
- Only use a proper three-pronged GFCI outlet.
- The power unit shall be connected to a GFCI protected hooded flush type cover plate receptacle marked “Wet Location” while in use.
- Do not cut or modify the AC power cord.
- Do not use submersible luminaires.
- Do not connect two or more power supplies in parallel.
- Power supplies are for indoor/outdoor use.
- Risk of fire. (Do not place wire insulation in the terminal block). Check the connection after installation.
- Minimal serving required. Lugs only needing to be tightened occasionally. Check torque of terminals occasionally.
- Follow the recommendations in the lighting manual for proper installation on the secondary wiring.

**Before wiring light fixtures to Power Pack, use chart below to calculate wattage load.**

How to Calculate Wattage Load for 150W Power Pack					
Fixture	Watts per Fixture	# of Lights		# of Watts	
Post Cap	4	x		=	
Riser	2	x		=	
Accent	2	x		=	
Under Rail	2	x		=	
InDeck	1	x		=	
Lighted Island Cap	2	x		=	
Wattage Sum				=	
Wattage Sum x .10				=	10% Derating
Wattage Sum + 10% Derating				=	Total Wattage Load

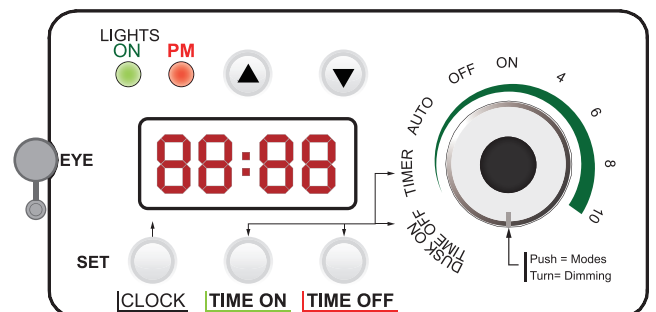
EXAMPLE					
Fixture	Watts per Fixture	# of Lights		# of Watts	
Post Cap	4	x	10	=	40
Riser	2	x	8	=	16
Accent	2	x	8	=	16
Under Rail	2	x	0	=	0
InDeck	1	x	0	=	0
Lighted Island Cap	2	x	6	=	12
40 + 16 + 16 + 0 + 0 + 12				=	84
84 x .10				=	8.4
84 + 8.4				=	92.4

\*\*\*Total wattage load should never exceed 150 Watts.



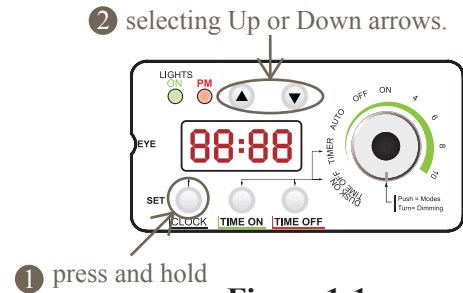
**Power and Lights ON**

**Dimmer Control**



## 1. Setting the Clock:

- 1-1:** To set the clock, press and hold the “CLOCK” button while selecting the Up or Down arrows. (Pay attention to the PM indicator light).



**Figure 1-1**

## 2. Function of each Mode:

- 2-1: DUSK ON/TIME OFF** - Darkness will trigger the lights to come on.

- 2-1-1:** To set the off time; Press and hold the “TIME OFF” button while selecting Up or Down arrow buttons. (Pay attention to the PM indicator).

- 2-2: TIMER** - TIME ON and TIME OFF times must be set.

- 2-2-1:** Press and hold the TIME ON button, then press the Up or Down arrow buttons to adjust to the desired TIME ON.

- 2-2-2:** Press and hold on the TIME OFF button, then press the Up or Down arrow buttons to adjust to the desired TIME OFF.

- 2-3: AUTO** - Uses the Photo Eye trigger control.

It turns off when there is light on the eye for over one minute and turns on when there is no light on the eye for over one minute.

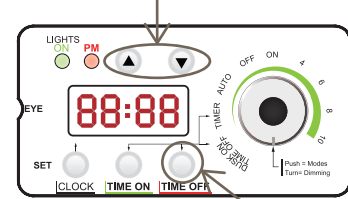
- 2-4: OFF** - Power Pack will not come on.

- 2-5: ON** - Power Pack is always on. Use this mode for other home automation systems.

- 2-6: 4/6/8/10** - Uses the Photo Eye trigger control.

The Power Pack will come on at dusk and will shut off after the selected amount of hours (4, 6, 8 or 10).

- 2** selecting Up or Down arrows, and pay attention to PM indicator.



**Figure 2-1**

- 1** press and hold

**WARNING: Dimmer function is always invoked on all modes. If using non dimmable LED lights, make sure the white mode knob is all the way turned to clock wise position for maximum and full brightness.**

### 3. Safety and Installation Guide:

- 1) Power Pack should be mounted 1 foot or higher above ground level.
- 2) Try to find the best location that keeps the wire runs as short as possible.
- 3) Recommended to be plugged into a GFCI (Ground Fault Circuit Interrupter).
- 4) Calculate the total load by adding all of the fixtures wattages, then add 10% to prevent overload.
- 5) No user serviceable parts are inside, do not remove the cover and expose high voltages.
- 6) User is responsible to check all local regulations and installation requirements for their area.

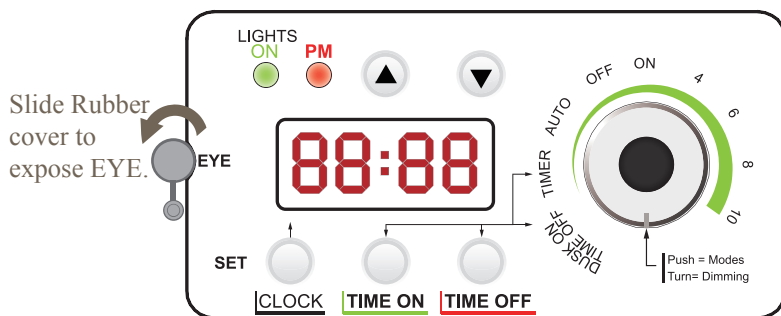
### 4. Troubleshooting and Testing Procedures:

There are many features built into your Power Pack unit to help prevent failures, such as Overload Protection, Thermal Protection, Short Circuit Protection, Cooling Fan Monitor, and Auto Reset.

#### Testing the Photo Eye:

#### Option #1: Use the internal built-in Photo Eye:

**Note:** Photo eye must be uncovered at all times, except when using the external photo eye probe.



#### TO TEST PHOTO EYE

Switch mode to “OFF”

Press and hold the “TIME OFF” button  
slide the rubber cover back and forth  
over photo eye and the green “LIGHT  
ON” led indicator should correspond.

#### Option #2: Use the External Photo Eye:

This option is used when the Power Pack is mounted inside or when you are trying to block uncontrolled light from a nearby source. You should make sure the internal Photo Eye is covered. Then plug the External Photo Eye cable in the bottom and make sure it is flush and is tightly sealed. Use the provided mounting clip to aim the External Photo Eye to the desired position that works best. Use same method as option #1 to test the light sensitivity.

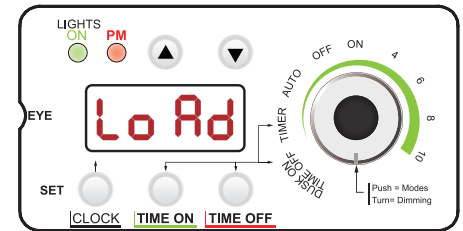
## Troubleshooting and Testing Procedures (cont.)

The 7 segment clock display is also used to aid with error codes that can occur. It will shut off after 3 minutes of no button activity. To wake up the display, simply press any button.

### 5. Displayed Error Codes are as Follows:

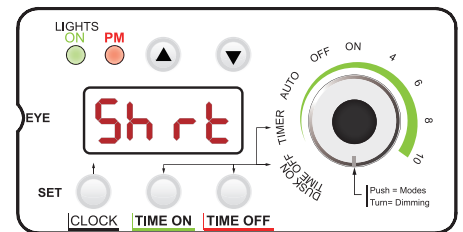
#### OVER LOAD:

Will be displayed by flashing “LoAd” on the clock display. If this condition occurs, the Power Pack will Auto reset 3 times and if Over Load condition still exists, it will shut off and continue flashing “LoAd”. To resolve this, try and find the defective light or remove some of the lights to lower the load. Shorted underground wiring, usually at a distance away, can also cause this, but it will generally trip the Over Load condition faster than too many lights on one circuit will.



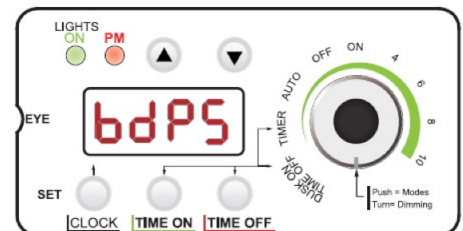
#### SHORT CIRCUIT:

Will shut down the Power Pack within a few seconds upon powering on and it will flash “Shrt” on the display. Check for faulty wiring, frayed wires near the +/- terminal block or defective LED bulb. Isolate short. Reset by unplugging the AC cord, wait 5 seconds and reconnect. Power on unit. If Short circuit does not exist, continue. If fault returns again, isolate the bad wiring or faulty LED bulb.



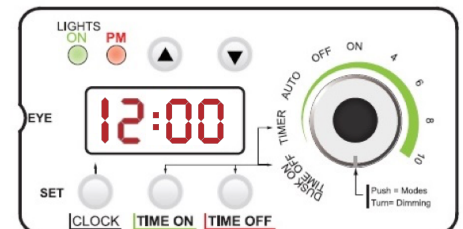
#### BAD POWER SUPPLY:

Will be displayed by flashing “dbPS” on the clock display only upon power on and when 0 volts output detected. If this condition occurs, remove all landscape wiring from output terminal block, remove AC power cord, wait 5 seconds to reset and if message still exist then will require service.



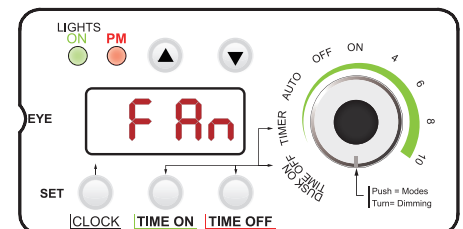
#### FLASHING 12:00:

Will be displayed when system has not been programed, or when battery level is too low. Press and hold the clock button While selecting up/dn arrow to adjust to local time setting. After 1 hour plugged into AC power, the battery will be charged.



#### FAN MONITOR:

If fan is obstructed, there will be 3 attempts to unjam the fan from insects or possible plant growth entering the rear vents. The Power Pack will shut off and flash “FAn”. Unplug the AC cord and inspect rear vents. Plug in the AC power cord and try again.



### 6. Electrical Specifications:

- 1-1: USA Input voltage: 120VAC+/-10% 50-60Hz • Euro Input voltage: 220-240VAC +/- 10% 50-60Hz.
- 1-2: Output DC voltage: (MAX) 13.3VDC +/- 5% variable dimer to 8.5VDC +/-2% (MIN)
- 1-3: Maximum DC AMPS 12.5 continuous
- 1-4: Overload trip @ 17-19 amps from 3-15 minutes