

Quick Start Guide

- 1.) Make sure power is off for each product being connected.
- 2.) Mount enclosure back box using 4 mounting holes with provided hardware.
 - * Use 4 inner or 4 outer holes as shown on template below.
- 3.) Connect black wires to low voltage output **12V AC** from landscape lighting transformer.
- 4.) Connect red wires for each lighting zone to lamps for that zone. **(Do not exceed 10 amps or 120 watts per zone.)**
- 5.) Verify/Set mode switch for each zone to position "0" for start-up testing.
- 6.) Adjust dimming trimmer to full clockwise for each lighting zone. **(Full brightness)**
- 7.) Turn on power and verify each lighting zone turns on.
 - * If landscape lighting flashes off and on this indicates an overload for that zone.
 - * Hint..... Low efficiency (low power factor) lamps will limit how many lamps can be on one zone.
 - * Hint..... Wattage listings for lamps usually don't include power factor.
- 8.) Adjust dimmer level using trimmer for each zone.
 - * Hint..... If low level flickering occurs or lamps don't dim well make sure lamps are dimmable.
 - * High quality dimmable lamps should have a power factor rating above 0.8

CONNECTING TO A CONTROL SYSTEM OR OTHER SENSORS

- 9.) After completing the above steps, power off the connected devices and set the mode switch to the desired setting.
 - * Refer to back side of this guide for mode setting descriptions.
 - * Use QR code to access full installation manual for in depth instructions on each mode.
- 10.) Connect yellow wires to the desired control system or sensor. **(5V to 30V AC/DC)**
 - * Yellow leads from multiple zones can be connected in parallel for shared control.
 - * Use QR code to access full installation manual for details on yellow control lines.
- 11.) Example Case: Using Mode "D" **(Irrigation controller output connected to yellow control lines.)**
 - * Program the irrigation valve output to pulse on for one minute to turn landscape lighting zone "ON".
 - * Program the irrigation valve output to pulse on for one minute to turn landscape lighting zone "OFF".
 - * Hint..... You must wait for at least 2 minutes between any off or on pulse using this mode.
- 12.) When testing is complete, attach the lid using the 4 plastic insert screws.



Mode Switch	
Sw Pos	Function
0	"ON" @ Power Up, works as dimmer
1	"ON" @ Power Up, "OFF" @ 1 Hour
2	"ON" @ Power Up, "OFF" @ 2 Hours
3	"ON" @ Power Up, "OFF" @ 4 Hours
4	"ON" @ Power Up, "OFF" @ 6 Hours
5	"ON" @ Power Up, "OFF" @ 8 Hours
6	"ON" @ Power Up, "OFF" @ 10 Hours
7	"ON" @ Power Up, "OFF" @ 12 Hours
8	Edge Triggered "ON", "OFF" @ 1 Min
9	Edge Triggered "ON", "OFF" @ 5 Mins
A	Edge Triggered "ON", "OFF" @ 10 Mins
B	Edge Triggered "ON", "OFF" @ 15 Mins
C	Direct Mode, "ON/OFF", Signal/No Signal
D	Irrigation Controller Mode, Pulse Triggered
E	Master Control Mode, 100 Hz PWM Input
F	Percentage Mode, 0-100 Seconds

Output of home automation system & some irrigation controllers connected to the control input (YELLOW WIRES). A pulse of ≈5 secs to 100 secs sets dim level with 100 secs being full on. A second short pulse (≈1 second) will turn off the zone.

(Example: 60 Seconds = 60% Brightness.)

At power up, lights automatically adjust to the dimmer setpoint.

Note: Timer accuracy is ± 1% (12 hour timer accuracy ± 7.2 mins)
 This mode is typically used in standalone operation.
 The transformer is turned on with the typical photocell or atomic clock.
 Rear yard lights might be wired to a zone using one of these timer modes.
 Then, the rear lights can be set to shut-off around midnight.
 The front yard lights might remain on all night.
 Control (YELLOW WIRES) can trigger the zone to full brightness for 1 min.
 This can be used with a motion detector as a security feature.

Typically used with motion detector or driveway sensor connected to the control input (YELLOW WIRES). At power up, the zone turns on and sets the zone to the dim pot setting. A motion event ramps zone to full brightness with subsequent motion events resetting the timer. Once timer expires, lights return to the dimmer setpoint.

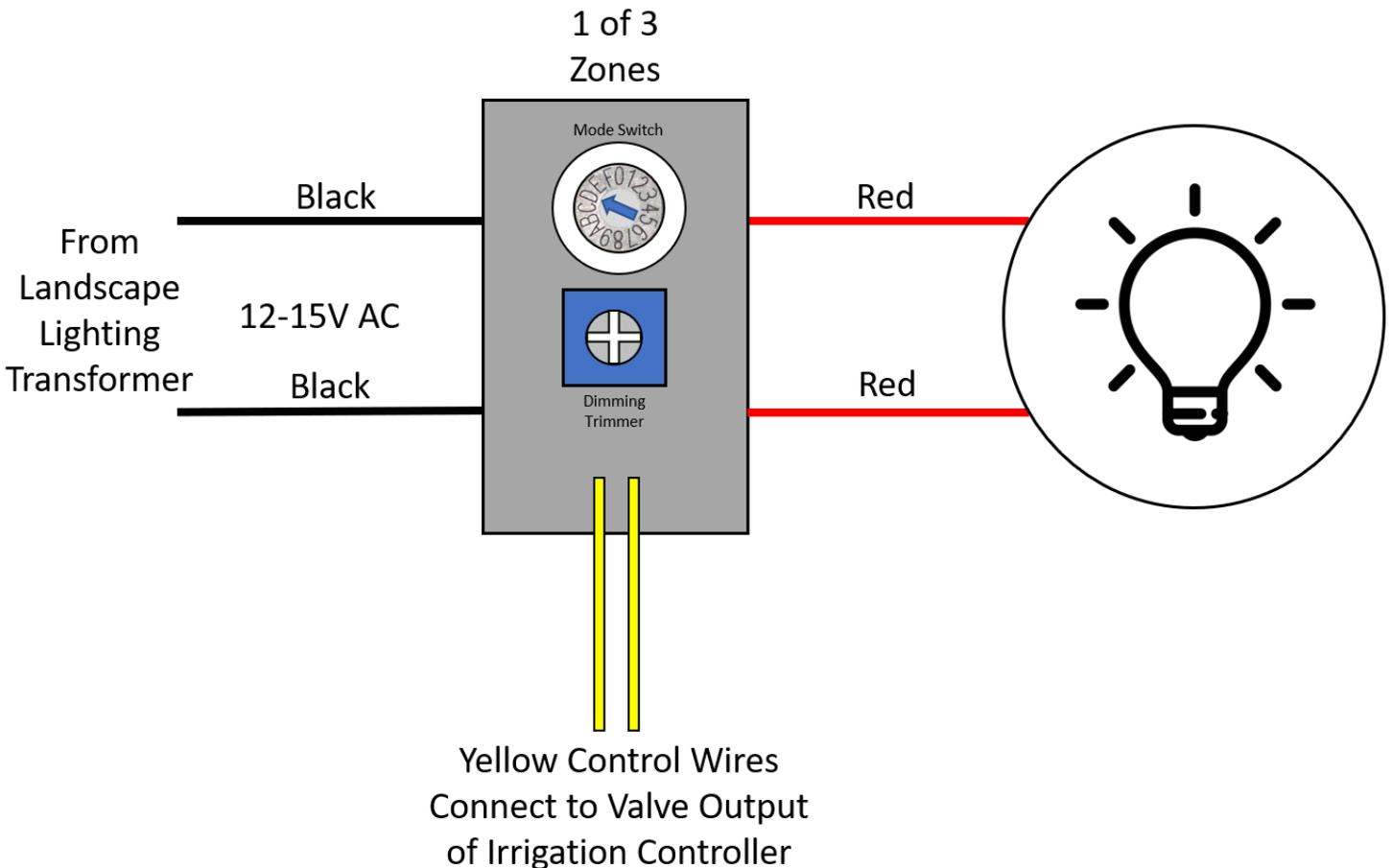
Typically used with home automation systems connected to the control input (YELLOW WIRES) Manually adjust the dimmer setpoint.

Output of an irrigation controller connected to the control input (YELLOW WIRES). Irrigation controller output on for a few seconds to 1 minute will turn lights on. A second pulse turns lights off. On/Off pulses must be spaced by at least 2 minutes. Manually adjust the dimmer setpoint.

Used with Master Control Knob to control dim level. Installer can connect multiple control inputs (YELLOW WIRES) together allowing up to 30 zones to be controlled via one knob. (3600 watts of lighting)
 Typically used in large outdoor venues, restaurants, etc.
 The minimum brightness level for each zone used with the master control knob is set using the manual dimmer setting on the zone controller. When using this mode start with the manual dimmer setting on the zone controller set to full counter clockwise.



**SCAN QR CODE FOR FULL INSTALLATION MANUAL
 AND OTHER HELPFUL INFORMATION**



**EXAMPLE CASE WIRING DIAGRAM WHEN CONNECTING TO AN
 IRRIGATION CONTROLLER USING MODE "D"**