

autopilot™

Environmental Controllers

APCLC8DX AND APCLC12DX COMMERCIAL LIGHTING CONTROLLERS



APCLC8DX



APCLC12DX

BASIC DESCRIPTION

The commercial 8 and 12 light controllers from Autopilot are designed to safely control today's ballast. Our commercial lighting controllers (CLC) have been designed to activate multiple HID or fluorescent lighting fixtures from a single controller or timer.

A simple "trigger cable" is used to connect the commercial light controller's to a timer or lighting controller. When the trigger cable is powered on, one or more heavy-duty relays inside the CLC activate and turn on the lights connected to it.

The 8 and 12 light units have a time delay to "soft start" each bank of 4 lights so that start-up loads (amps) are reduced.

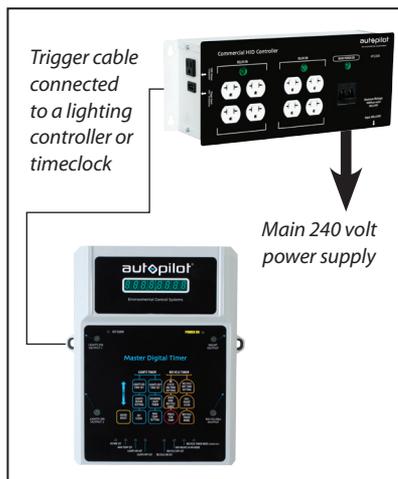
SPECIFICATIONS	APCLC8DX	APCLC12DX
Main Power Voltage	120 or 240 volts	120 or 240 volts
Main Circuit Breaker / Wire	50 amps # 6 AWG wire	60 amps # 4 AWG wire
Receptacle Type	8 Nema 5-15, Nema 6-15 or universal	12 Nema 5-15, Nema 6-15 or universal
Maximum Lighting Wattage	8000 watts / 1000 watts per outlet	12000 watts / 1000 watts per outlet
Maximum Relay Amperage	30 amps(x 2 relays)	30 amps(x 3 relays)
Operating Temperature Range	32-110° F	32-110° F
Operating Humidity Range	0-99% RH non condensing	0-99% RH non condensing
Minimum Relay Operations	100,000 @ full load	100,000 @ full load

PRINCIPAL OF OPERATION

The best way to control multiple lighting fixtures is to use a main/ master lighting controller. The CLC lighting controller is designed to provide power to multiple lights and to activate the lights. An external timer (or digital lighting controller) is used to determine when the lights will turn ON and OFF.

The CLC is simple. A single main 240 volt power supply is connected by the user using (3) simple connection points on a clearly marked terminal strip. Once the main power is connected properly, the lights that are connected to the CLC will turn ON when the trigger cable is powered on. The trigger cable is a standard 120 volt power cable that can be connected to a standard timedock or to a HID lighting controller that is designed to activate lights based on a timed schedule.

NOTE: DO NOT connect any lights to this unit until the power has been installed and verified to be the correct voltage for the ballast that will be connected.



MAIN POWER REQUIREMENTS

1. The user must provide a source of main power for the lights to operate. The main power connection must be rated for the amperage of the lights to be connected to the unit (see *Specifications*).
2. The main power can be “hardwired” into a circuit breaker panel or by installing the appropriate high amperage portable cable and connector end (provided by the user).
3. A ground lug is provided to connect the ground wire. Do not operate this product without a properly connected ground wire.
4. Most applications will use 240 volt power. It is up to the user to ensure that all ballasts that are connected to the unit are wired for 240 volt (see *Ballast Requirements*).
5. If the unit is to be used for 120 volt ballast, ensure that all of the ballasts connected are wired for 120 volt operation (see *Ballast Requirements*).

BALLAST REQUIREMENTS

It is the user’s responsibility to ensure that all of the lighting devices that are connected to this unit are rated for the voltage being provided by the main power.

NOTE: This product can be used to operate 120 volt lights. In order to operate 120 volt lights, ensure the main power connected to the unit is 120 volt. The manufacturer, distributors, and their retailers cannot be held responsible for any damage or injuries, consequential or otherwise, arising from the use of this product. The user of this product assumes all responsibility for the installation and proper use of this product.

INSTALLATION

NOTE: ONLY qualified electricians should install this equipment. ALL power must be disconnected prior to installing or servicing the equipment.

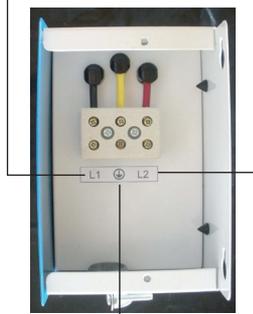
CONNECTING THE MAIN POWER

1. Remove the small metal cover by removing the 2 Phillips head screws that hold the electrical cover on the right side of the unit. Once opened you will see the (3) terminals to connect the main power wires to.

POWER CONNECTIONS

L1 Power connects here

L2 Power connects here



Ground connects here

2. Insert the appropriate sized main power cable into the cable clamp at the bottom of the unit. Secure the cable clamp.
3. Insert the green or bare ground wire into the center grounding terminal and secure the ground wire.
4. Remove the insulation from the red and the black main power wires and insert the wire ends into the 2 power connection points marked L1 and L2 (*see photo on page 2*). L1 will be the hot leg if the unit is connected to 120 volts only.
5. Secure the wires tightly to ensure a good connection. Loose connections could cause the connections to overheat, which can cause damage to the unit that is NOT covered by the warranty.
6. Using the volt meter, carefully touch one tester probe to each of the main power connection points. The volt meter should read approximately 240 volts (if connected to a 240 circuit) or approximately 120 volts (if connected to a 120 volt circuit).
7. Turn on the circuit breaker or connect the main power cable connection.
8. Next, turn on the main circuit breaker on the front of the CLC. The unit will now be "powered on".
9. Once the correct voltage has been verified, carefully reinstall the electrical cover on the unit using the 2 screws.

TESTING THE 120 VOLT TRIGGER CABLE

1. The main relay(s) inside the unit will be turned ON when the trigger cable is connected and activated. The trigger cable must be connected to a timer or lighting controller that will provide 120 volts to the main relays.
2. When the trigger cable is connected and plugged into the timer / controller, the relays will "close" and the small indicator light on the CLC will be illuminated.
3. When the trigger cable is disconnected, the relay will "open" and the indicator light will turn off. Once the trigger has been tested for proper operation, unplug the trigger cable.

CONNECTING THE BALLAST

1. The final step in the installation is to connect the ballast power cables to the receptacles on the lighting controller. **Important: Ensure the trigger cable is not connected or powered up while plugging in or disconnecting the ballasts.**
2. Once the ballasts are connected, the unit is ready for operation.

3. Connect and power up the trigger cable. The unit should activate and the lights should now be turned on.

INTERNAL TIME DELAYS

On the APCLC8DX and APCLC12DX there are internal time delays that will activate each bank of 4 receptacles to reduce the start up "surge" that would occur if all of the lights were energized at the same time.

Be sure to allow enough time for each timer to activate each bank of lights. Each timer is preset for 5 minutes.

TROUBLESHOOTING

When I connect the trigger cable, nothing happens.

When connected, the small indicator light in the unit and the relays inside the unit should turn on. Plug the trigger cable into a known source of 120 volt power and make sure the trigger cable is firmly connected.

When I connect the trigger cable to power, the indicator light on the unit turns on, but none of my lights are turning on.

Check the main power circuit breaker, and ensure that the main power is still connected to the terminals and that the unit is "powered up" by testing voltage at the main terminals.

When I connect the trigger cable to power, the indicator light on the unit turns on, but only some of my lights turn on.

If you are using the APCLC8DX and APCLC12DX there are 2 and 3 relays used. If only some of the lights are turning on, there is likely a problem with one of the relays.

Some of my lights stay on even after the trigger cable is powered OFF or disconnected.

If the lights remain ON when the trigger cable has no power, there is likely a problem with one of the relays.

There is a buzzing sound coming from the unit.

The relays inside the unit are electro-mechanical, meaning they work by means of a small electric coil. Some coils make a slight amount of "noise." This is normal. If the unit is making a loud buzzing sound and there are any other observed problems, there could be a problem with one of the relays.



LIMITED WARRANTY

Hydrofarm, Inc. doing business as Hydrofarm, Inc. (collectively **HYDROFARM**) warrants that for a period of three years from the date of purchase, this product will be free from defects in material and workmanship. **HYDROFARM**, at its option, will repair or replace this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. This is your exclusive warranty. DO NOT attempt to repair or adjust any electrical or mechanical malfunctions on this product. Doing so will void this warranty and may cause serious injury/death/damage.

This warranty is valid for the original retail purchaser from the date of the initial retail purchase and it not transferable. Keep the original sales receipt. Proof of purchase is required to obtain warranty performance. **HYDROFARM** dealers, distributors, service centers and retail outlets selling **HYDROFARM** products do not have any right to alter, modify or in any way change the terms and conditions of this warranty.

This warranty does not cover normal wear of parts or damage resulting from the following: negligent use or misuse of the product, use on improper voltage or current, use contrary to the operating instructions, use contrary to any and all applicable local, state, provincial or federal laws, disassembly, repair or alteration by anyone other than **HYDROFARM** or an **HYDROFARM** authorized service center. Future, the warranty does not cover: Acts of God, such as fire, flood, hurricanes, tornadoes, nor Acts of War or Acts of Terrorism.

WHAT ARE THE LIMITS ON HYDROFARM'S LIABILITY?

HYDROFARM shall not be liable for any incidental or consequential damages caused by the breach of any express, implied or statutory warranty or condition.

Except to the extent prohibited by applicable law, any implied warranty or condition of merchantability or fitness for a particular purpose is limited in duration to the duration of the above warranty.

HYDROFARM disclaims all other warranties, conditions or representations, express, implied, statutory or otherwise.

HYDROFARM shall not be liable for any damages of any kind resulting from the purchase, use or misuse of, or inability to use the product including incidental, special, consequential or similar damages or losses of profits, or for any breach of contract, fundamental or otherwise, or for any claim brought against the purchaser by any other party.

Some provinces, states or jurisdictions do not allow exclusion or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from province to province, state to state or jurisdiction on jurisdiction.

This warranty is offered by **HYDROFARM, INC.**, If you have any other problem or claim in connection with this product, please write our Consumer Service Headquarters, **HYDROFARM, INC.**

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