



# MLC-8D & 8Da Master Lighting Controllers

C.A.P. offers a full range of equipment for the growing enthusiasts. The MLC-8D & 8Da allow you to control up to EIGHT 1000 watt HID lights from one 40 amp, 240 volt power source. They come with two 120 volt trigger cables, which will allow you to independently control two banks of 4 lights each, with standard 120 volt timers.

## CHECKING YOUR BALLASTS

Before making any connection, you should verify the ballasts you plan to run with the MLC are properly internally connected for 240 volt operation. Follow the steps below to verify ballast wiring. **NOTE: The ballasts must be wired for 240 volt operation. Most ballasts have multiple taps which allow several voltages to be used with the ballast. Please consult your ballast manufacturer if you have any questions about the voltage of your ballast. If you plug in a ballast wired for 120 volts into an MLC, you will burn out your ballast and potentially risk having a fire.**

- 1) Disconnect power from the ballast. Allow 5 minutes before continuing to provide time for the voltage to drain from the capacitor!
- 2) Open the ballast cover exposing the ballast core, capacitor and wiring.
- 3) Look for wires coming from the ballast core that are marked 120 volt and 240 volt. If there are no wires with these markings or no spare wires, the ballast is not a "multi-tap" ballast.
- 4) Once you've identified the marked wires, find the ones marked 120 volt and 240 volt. If the 240 volt wire is not connected and the 120 volt wire is connected, the ballast is currently wired for 120 volt operation.
- 5) If the 240 volt wire is connected, the ballast is wired for 240 volt operation.
- 6) Make sure that your ballast power cord plugs match the outlets on your MLC.

## POWER & WIRING REQUIREMENTS

**WARNING: Consult a licensed electrician if you do not fully understand these instructions.**

- 1) The main 240 volt / 40 amp power must be supplied to the MLC using either 8/3 Romex Cable or a 40 amp Dryer or Range Plug cable.
- 2) The user must provide over current protection for the MLC using a 40 amp double pole circuit breaker.
- 3) 40 amps of power require a wire size of at least 8 awg.
- 4) Three wire cable with ground (8/3) is recommended.
- 5) The Ground Wire (copper or green) must be connected to the Aluminum ground lug.
- 6) Make certain that your ballasts are wired for 240 volt!

## CHOOSING THE APPROPRIATE POWER CORD OR CABLE

There are two ways to hook up an MLC to a 240 volt power source. The first is using an existing 240 volt range or dryer receptacle with 40 amp service. Make sure that you look carefully at the plug configuration as there are generally 4 that are in use in modern homes. You can buy the correct plug from your local C.A.P. dealer. The second way is to wire 8/3 Romex Cable directly into your circuit box connected to a 40 amp breaker. "8/3" designates 8 gauge wire with 3 insulated wires (normally red, black and white) and an uninsulated copper ground wire. Some Range or Dryer Cables do not have a white wire. They can be used on the MLC.



