

Cold Door

LED Refrigeration Display Lighting System

Troubleshooting Guide for 701906

Troubleshooting Cold Door Systems *with Dimming*

CAUTION: Always ensure to use a licensed electrician when working with AC sources, primary wiring, or if not confident with any of the following steps or checks.

Problem	Possible Cause(s)	Solution(s)
All lights do not turn on.	1. No incoming power.	- Check incoming power is turned on.
	2. Loose wire(s) or connection(s).	- Check to ensure all connections are properly in place and secure.
	3. Check proper operation dimming controller (P/N 701890-PWR).	- Disconnect light load from dimming controller (701890-PWR). - Set dip switches 1 & 2 to "on" position. - With voltmeter, verify 24 VDC at dimming controller output. - If low or no voltage verified, disconnect dimming controller from power supply. - With voltmeter, verify 24 VDC out of power supply. - If 24 VDC verified, connect dimming controller. If low or no voltage observed, continue troubleshooting.
	4. Check proper operation of power supply.	- Disconnect dimming controller from output of power supply. - With voltmeter, verify 24 VDC output. - If low or no voltage verified, disconnect power supply from AC input. - With voltmeter, verify 90–264 VAC to power supply input. - If proper voltage verified, replace power supply. If low or no voltage observed, ensure to have a licensed electrician continue AC electrical troubleshooting.
Entire fixture does not turn on.	1. Loose wire(s) or connection(s).	- Check to ensure all other lights powered from power supply are operating. - If other lights are on, check to ensure connection(s) is/are properly in place and secure. - If connection(s) secure, disconnect wiring to light. - With voltmeter, verify 24 VDC to light input. - If low or no voltage verified, continue troubleshooting back to power supply. - If 24 VDC verified, replace light fixture.
Individual LEDs do not turn on.	1. Internal fixture damage.	- Replace light fixture.
Entire fixture flickers.	1. Loose wire(s) or connection(s).	- Check to ensure all connections are properly in place and secure.
	2. Short to ground.	- Check to ensure no wires are exposed or touching frame or case. - Check to ensure end fixture wires—not used for installation—are trimmed and capped. - Ensure wires are not capped together.
	3. Power supply overloaded.	- Check to ensure maximum power supply load not exceeded. - Check dimming controller setting, if switches 1 & 2 are set to on (up position), set switch 1 to off (down position). - Check to ensure flickering has stopped. If flickering persists, set dimming controller switch 1 to on, and switch 2 to off. - If flickering persists, or if brightness level is no longer at a desirable level, light fixture load is greater than power supply wattage rating. Add an additional power supply as per installation instructions.
	4. Multiple dimming controllers on single power supply.	- Ensure only one (1) dimming controller used per power supply.
Dimming/occupancy sensing not working.	1. PIR Motion Sensor not warmed up.	- Sensor may take up to 2 minutes to activate once power energized. Wait a couple of minutes and allow sensor to reset.
	2. Loose wire(s) or connection(s).	- Check to ensure all connections are properly in place and secure.
	3. PIR Motion Sensor not energized.	- Create motion in front of sensor. - Check to ensure either red LED light (P/N 400661) or green LED light (P/N 400964) flash. - If LED does not flash, sensor does not detect motion, check RJ45 connections are firmly in place and integrity of CAT 5 cable. - CAT 5 connection from PIR Motion Sensor and dimming controller should be standard cable. Sensor will not work with "Crossover" CAT 5 cable. - If connections and cabling determined satisfactory, set dip switches on dimming controller 3 & 4 to off and verify lights turn off. - Set dip switches 3 & 4 to on and verify lights turn on to 50% full brightness. If lights do not turn off and go to 50% full brightness, replace dimming controller. - If lights turn off and go to 50% full brightness, replace PIR Motion Sensor.
	4. Incorrect CAT 5 cable type utilized.	- Check to ensure CAT 5 cable is not "Crossover" type. (Not required to check if plugging P/N 400661 directly into dimming controller (P/N 701890-PWR)).

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	2. Loose wire(s) or connection(s).	- Check to ensure all connections are properly in place and secure.
	3. Check proper operation power controller (P/N 701929).	- Disconnect light load from power controller (701929). - Set dip switches 1 & 2 to "on" position. - With voltmeter, verify 24 VDC at power controller output. - If low or no voltage verified, disconnect power controller from power supply. - With voltmeter, verify 24 VDC out of power supply. - If 24 VDC verified, replace power controller. If low or no voltage observed continue troubleshooting.
	4. Check proper operation of power supply.	- Disconnect power controller from output of power supply. - With voltmeter, verify 24 VDC output. - If low or no voltage observed, disconnect power supply from AC input. - With voltmeter, verify 90–264 VAC to power supply input. - If proper voltage verified, replace power supply. If low or no voltage observed, ensure to have a licensed electrician continue AC electrical troubleshooting.
Entire fixture does not turn on.	1. Loose wire(s) or connection(s).	- Check to ensure all other lights powered from power supply are operating. - If other lights are on, check to ensure connection(s) is/are properly in place and secure. - If connection(s) secure, disconnect wiring to light. - With voltmeter, verify 24 VDC to light input. - If low or no voltage verified, continue troubleshooting back to power supply. - If 24 VDC verified, replace light fixture.
Individual LEDs do not turn on.	1. Internal fixture damage.	- Replace light fixture.
Entire fixture flickers.	1. Loose wire(s) or connection(s).	- Check to ensure all connections are properly in place and secure.
	2. Short to ground.	- Check to ensure no wires are exposed or touching frame or case. - Check to ensure end fixture wires—not used for installation—are trimmed and capped. - Ensure wires are not capped together.
	3. Power supply overloaded.	- Check to ensure maximum power supply load not exceeded. - Check power controller setting, if switches 1 & 2 are set to on (up position), set switch 1 to off (down position). - Check to ensure flickering has stopped. If flickering persists, set power controller switch 1 to on, and switch 2 to off. - If flickering persists, or if brightness level is no longer at a desirable level, light fixture load is greater than power supply wattage rating. Add an additional power supply as per installation instructions.