



LightObject-X2700 Water Chiller Manual



LIGHTOBJECT

Specifications:

Input power: AC 110V, 60Hz

Full power current: 9Amp

Refrigerant: R410A

Pump power: 50 W

Pump lift (cut off): 25m (80 ft)

Flow rate: 25L/min, 390 GPH

Water tank capacity: 9L

Water Inlet/Outlet diameter: 10 mm

Ambient Temperature: $\leq 35^{\circ}\text{C}$ (95°F)

Chilled Water Temperature: $15\sim 30^{\circ}\text{C}$ ($64.4\sim 86^{\circ}\text{F}$)

Weight: 35kg (77lb)

Dimension: 12.5" W x 20"D x 29" H note: depth measured from blue cap

Built in water flow and high temperature alarm.

Cautions and Conditions

- 1) Ensure good contacts on the AC power plug: Live, Neutral, and Ground
- 2) Stable AC voltage is necessary for operation. AC 110V +/-5%
- 3) Stable AC frequency (Hz) is required. No square wave or modified sinusoidal wave.
- 4) Water pump will be damaged when running without water.



- 5) Air filters must be cleaned regularly; Leaves space around the chiller for proper ventilation.
- 6) Change the distilled water every 3 months. Maintain water level in the green zone of the indicator.



Startup Procedures

- 1) Remove the cap on the back of the unit and fill in water until the water level reaches the top of green zone of the level indicator.
- 2) Use the silicone water tubing to connect the water chiller to the machine. Connect the chiller's water outlet to the laser machine's water inlet. Connect the chiller's water inlet to the laser machine's water outlet.
- 3) Make sure the power button is off. Connect the AC power cord from the back of the chiller to a wall mount AC outlet.
- 4) Power up the chiller. Check the water flow direction. Check for any leaks. Add more water if the water level drops below the green zone.

Left and right alarm pins become open contact when alarm occurs. The middle pin is not used.

Note on Dual Water Outlet:

Each outlet has a water flow sensor behind. If full flow rate is needed, connect both outlets using a Y connector, and connect both inlets using a Y connector. For less amount of flow, connect one outlet to a valve, then back to an inlet. In this way, the valve can control the flow rate of the other outlet/inlet indirectly. However, if the flow rate is too low, it will trigger one of the flow sensors.



Chiller Control Instruction with JLD612

The chilling temperature can be adjusted as needed.



- 1 -- AL1, compressor working.
- 2 -- AL2, valve triggered for low power chilling.
- 3 -- Not used.
- 4 -- Not used.
- 5 -- Setting / Confirm.
- 6 -- Digit select.
- 7 -- Select next parameter / value increment.
- 8 -- Selection previous parameter / value decrement.
- 9 -- Low power chilling temperature.
- 10-- Current temperature.

To set the chilling temperature, press SET. Enter password 0001. After changing AH1 and AL1 values, select END. Restart the chiller.

If the current temperature is higher than AH1, the chiller will start to cool down water at full power. If the current temperature is higher than SV and lower than AH1, the chiller will keep cooling down water at low power.

If the current temperature is lower than AL1, the chiller will stop chilling.