



Operation and Installation Instructions

*** IMPORTANT ***

For safe and satisfactory operation, please read the following instructions before installing. Keep for future reference.

Introduction:

The **Ice Qube Vent PAK** has been designed to provide outside ventilation air flow through a computer or electronic equipment enclosure in the event of a power outage or air conditioner failure.

Unpacking Inspection:

What to look for: **Damage to the shipping container.**

If the shipping container has been damaged or marred in any way, carefully remove the Ice Qube Vent PAK and inspect it for any damage that may have occurred during shipping. Check for scratches, dents, or sounds indicating loose components, or any other irregularities. Any evidence of damage should be recorded on the freight bill. The freight carrier's claim procedure should be followed. ***Ice Qube Inc. cannot accept responsibility for damages which occur during shipping.***

Preparing the Enclosure:

A few modifications must be made to the enclosure to provide adequate air flow and insure a secure installation.

1. Determine the location of the Ice Qube Vent PAK on the enclosure.

*** Caution ***

Be sure the weight of the system will not cause the enclosure to become unbalanced causing bodily harm or injury. For units mounted on enclosure doors, be sure the hinges will support the weight of the Ice Qube system. Refer to system specifications for model weights.

2. Using the cutout drawing as a reference, make openings on the enclosure surface for intake and exhaust air, along with the holes for the mounting hardware and the three electrical connections. The Ice Qube Vent PAK should be mounted in a vertical position near the top of the enclosure. Air flow should not be restricted by components in the enclosure or the surrounding ambient.
3. Verify the factory installed gasket material is in place. Insert the two (2) power cords and the thermostat cable through the designated rectangular cutout on the enclosure. Slide the two (2) mounting studs through the matching holes in the enclosure and check to see that all holes are aligned.
4. Mount the Ice Qube Vent PAK onto the enclosure using the nuts and bolts provided. Check to be sure all nuts have been tightened securely and the gasket material is in place.



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5. Next, connect the Vent PAK AC power cord to a properly grounded receptacle outlet with sufficient electrical capacity (extension cords are not recommended). Then, connect the Vent PAK DC power cord to a DC power source. After both the AC and DC power connections have been made, mount the thermostat in an appropriate temperature monitoring location.
6. Although the Vent PAK has been factory tested, it is recommended that it be checked to confirm it is operational. This is accomplished by disconnecting the AC power supply. The fan should immediately start to operate and the louvers will move to the open position.

Sequence of Operation:

1. *AC and DC power supplies are normal; enclosure temperature is below designated set point.*

This is considered the “normal” condition, therefore the fan is not required to operate and the louvers remain in a closed position.

2. *AC and DC Power supplies are normal, enclosure air temperature rises above the set point due to the possibility of air conditioner failure.*

In this mode, the thermostat contacts open, the fan will operate and the louvers will open.

3. *AC power supply fails; DC power supply is normal.*

In this mode, the fan will operate and the louvers will open.

When the primary AC power supply is restored, the fan will stop operation, the louvers will close and the timer will energize. If after a factory set time period of 1000 seconds or 16.67 minutes (adjustable), the thermostat contact is closed - indicating a satisfactory enclosure temperature, the fan will remain off and the louvers will remain closed.

If after the factory set time period the thermostat contact is open, indicating an enclosure temperature above the thermostat set point, the fan will begin operation and the louvers will open.

Note: This timed output can be reset by momentarily interrupting power to the DC power supply circuit. This will increase the time delay another 1000 seconds.