

## Sanqiaohui | Professional Ice-O-Matic Commercial Ice Machines Control System Solutions

Website: [www.sanqiaohui.com](http://www.sanqiaohui.com)

**Ice-O-Matic commercial ice machines** are engineered for continuous, reliable ice production in foodservice, hospitality, and other commercial environments.

The system integrates a vapor-compression refrigeration cycle with automated water management and sensor-based control logic to ensure consistent ice quality, operational safety, and long-term reliability.

By combining precise thermal control with intelligent sequencing, Ice-O-Matic machines are capable of producing uniform, high-quality ice under demanding operating conditions.

### 1. Key Technical Features of Ice-O-Matic Ice Machines

- Fully automatic Freeze – Harvest sequence (Sequence of Operation)
- Integrated monitoring of water level, temperature, and ice formation conditions
- High-efficiency evaporator and condenser design
- Food-safe materials and sanitation-oriented construction
- Intelligent controller with fault protection and diagnostic capability
- These features enable stable ice production while minimizing energy consumption and maintenance requirements.

### 2. Ice-O-Matic commercial ice machines are widely recognized for:

- Stable and consistent ice output, even under high-demand conditions
- High durability achieved through robust mechanical and refrigeration design
- Reduced maintenance and downtime through modular construction and sensor-based protection
- Improved energy efficiency through optimized thermal performance
- Enhanced operational safety, preventing damage caused by abnormal water or temperature conditions

### 1051224-01 Float Switch Kit

The **1051224-01 Float Switch Kit** is a mechanical water level sensing device used in Ice-O-Matic commercial ice machines.

It is installed in the water reservoir or sump and provides real-time water level feedback to the machine's control system.

This component plays a critical role in maintaining safe operating conditions and ensuring consistent ice production.

## 2. Operating Principle

The float switch operates through a simple and reliable mechanical mechanism:

- As the water level rises or falls, the float moves vertically.
- When a predefined water level is reached, the internal electrical switch changes state.
- The switch sends a signal to the control board indicating whether water conditions are acceptable for operation.
- This signal directly influences whether the ice machine is allowed to continue or initiate a freeze cycle.

## 3. Role in Ice Machine Control Logic

Within the ice machine's control system, the float switch performs several essential functions:

- Prevents ice production under low-water conditions
- Enables automatic water refill control
- Protects the water pump and evaporator from dry operation
- Maintains a stable water level to ensure consistent ice quality and formation

If abnormal water levels are detected, the controller can pause ice production or stop the system entirely.

## 4. System-Level Importance

The 1051224-01 Float Switch Kit functions as a **critical safety interlock** within the overall Sequence of Operation.

By continuously monitoring water availability, it helps prevent mechanical damage, reduces service incidents, and extends equipment lifespan.

Reliable water level detection also improves ice consistency and overall system stability, making the float switch an essential component in commercial ice machine operation.

