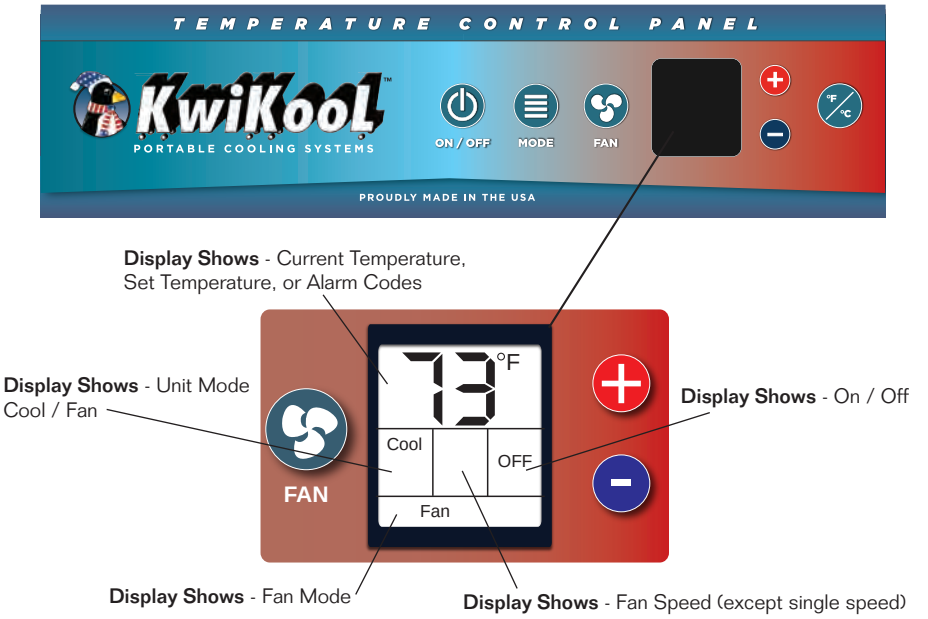
IV / System Operation

A. Apply Electrical Power - Once power is engaged by plugging in your system and/or switching the breaker to the on position, your KwiKool display will come alive and show the current room temperature. The unit is set to OFF and the fan is set to the default position. A 2 minute time delay starts, indicated by a flashing F on the display. If you are not seeing anything on the display, refer to the Troubleshooting Guide section of this manual.

B. Control Panel - The control panel display shows the current operational status of the unit.



1. **ON/OFF Button -** Pressing this button on your control panel engages or shuts down your KwiKool system. All settings selected are stored in the microprocessor board even if the power is lost including the ON/OFF selection. Refer to the Troubleshooting Guide section of this manual if your KwiKool is alerting an alarm after selecting ON.

2. **MODE Button -** Depressing the MODE button selects your choice of operations. Cool, for cooling with compressor operation. "Cool" will flash when the compressor is running. "Cool" will not flash when the room temperature is equal to or lower than the set temperature or the system is timing out. Fan, for air circulation without compressor operation.

3. **F/C -** Selects the way that room temperature and set point are displayed on the control panel. Choices are Fahrenheit or Celsius. F is the factory default. This indicator will flash when the system is in "time out" to prevent compressor short cycling.

4. **Fan -** Pressing the fan button has different operations depending on the model.

   a. **Single Speed Models -** KIB 2411, KIB6023, KIB6043, **KIB12023, **KIB12043. On the single speed models, pressing the fan key cycles the supply air fan between auto fan and fan on. When the system is in auto fan, the supply air fan only operates when the compressor is running. When the fan is set to on, the fan runs continuously as long as the unit is in the ON position. The fan speed window will be blank on these models.

   b. **Three Speed Models –** (All other models **NOT** listed above.) The supply air fan control button has several functions. First pressing the fan key will cycle through the fan speeds. Each press cycles from low, med, high, and multispeed. Multispeed will display all three speeds and flash only the speed currently in use. The fan speed is automatically adjusted based on demand. The second function is to change from auto fan to fan (constant fan). To change this function, press and hold the fan key until the indicator changes from fan (constant fan) to auto fan. When in FAN MODE, auto fan is not available. If the unit was set to auto fan before changing the mode to fan, auto fan will return when the unit is set back to COOL. Factory default is fan (constant fan) and is the best choice for electronic equipment.

   c. ****KIB12023 and KIB12043 -** These models are 2 stage systems and have a fan speed for each stage. This feature is **not** user settable. This system always starts in first stage fan speed (low) in COOL or FAN MODE, second stage fan speed (high) only operates in COOL MODE when the second stage compressor is running.

5. **Up (+) and Down (-) Arrow Buttons -** Raises or lowers the desired set temperature. When changing the set point, pressing the + or – key, the word SET will appear on the display and the current set point flashes ON and OFF. The value of the set point is changed 1 degree each time the + or – is pressed. The adjusted set point flashes on and off 12 times after the last change and then returns to display the room temperature.

   NOTES:

   a. **Lowering or raising the set point will not change the temperature of the supply air.** For best results always adjust the set point to a temperature your KwiKool can cycle on and off at to avoid operational issues such as freezing or rapid discharge fan cycling, KwiKool systems are designed to maintain the set point when sized properly and constant operation without achieving the set point may shorten the expected operational life of your system.

   b. The lowest set point temperature available for your KwiKool is 60 degrees F, and the highest setting is 95 degrees F. The control will not allow adjustments beyond these ranges.

C. System Operation -

1. **Turn On Your KwiKool System -** Pressing the ON/OFF button once on your control panel will put your unit in the ON position and "ON" will be displayed on the right side of your display as well as the previously chosen mode.

2. **COOL -** If the unit was previously set to the cooling mode (cool) then "cool" will be displayed. If the compressor is running, the "cool" on the display will be flashing. If your unit has been sitting for over 2 minutes, this should happen immediately upon turning the unit on, unless your set point is lower than the current room temperature. In this case your unit is ready to automatically turn on once the temperature rises above the set point. If the unit was recently turned off or the unit turned itself off because it reached the set point, the compressor will not turn on until the system waits for approximately 2 minutes. This prevents the compressor from being damaged do to a condition called short cycling. The indicator that the unit is in the "time out" condition is that the F (or C) in the display will be flashing. When the compressor starts, the F will stop flashing and the "COOL" will begin flashing. Note that the condenser fan will not start immediately with the compressor. And once the condenser fan kicks in and if the ambient temperature entering the make up air for the condenser return is below 75 degrees F you may notice the fan cycling on and off, this is normal. For KIB120 models, the fan will instead speedup and slowdown in lieu of turning on and off. If the display flashes 99, this indicates ambient temperature of 99 degrees F or more. This is normal and will stop flashing when the ambient temperature falls below 99 degrees F.

3. **FAN -** If the unit was previously set to the fan mode then "FAN" will be displayed and the fan will start to run.

V / Built in Safeguards

KwiKool is proud to provide its customers with high quality features and safety devices that are not found in most other brands.

A. **Time Delay -** Protects your KwiKool from potential damage by delaying the compressor from starting before the pressures in the mechanical system equalize. This always activates when your KwiKool cycles off, is turned off, power is lost and then restored or the operational mode is changed. Display flashes C or F if the time delay is activated.

B. **Condenser Fan Cycling or Condenser Fan Speed Control -** Part of your KwiKool limited freeze protection and works by regulating the discharge air flow to keep the refrigerant pressures at the optimum range.

C. **High-Pressure Switch and Alarm -** Protects your Iceberg Series unit from potential damage to the mechanical system by shutting down, sounding an audible alarm and displaying a fault code (**HP**) when the system pressure exceeds safe operating conditions. The high pressure switch is a manual reset switch and must be reset after the switch is activated and the condition causing the trip is corrected.

D. **Low Pressure Switch and Alarm -** Protects your KwiKool from potential damage to the mechanical system by shutting down the system, sounding an audible alarm and displaying a fault code (**LP**) when the low side pressure is too low. This is normally caused by low refrigerant charge. This switch is an automatic reset.

E. **Automatic Restart -** In the event of a power loss your KwiKool Iceberg resumes operation when the power is restored. All operational functions are preserved in the memory of the Microprocessor Board including the ON/OFF selection.