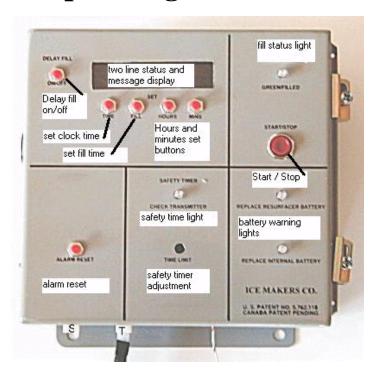
# **Operating Instructions**



Turn on power switch located on the left side of the control box and set the time. The time must be set for the unit to work. Press and hold the Time button (leftmost button under message display) and then press the Hour or Minute buttons until the correct time appears. The display should now show the time and state "Ready / Put hose in tank." This indicates that you are in the immediate fill mode and are ready to start filling.

There are two modes of using the control: immediate fill and time delay fill. Time delay fill allows you to set a time at which filling will take place.

### Immediate fill

This is the most commonly used mode.

- Insert the hot water filling hose into the resurfacing machine's filling hot water conduit.
- Press the large red Start/Stop button. The red fill light should come on.
- The display will change to a running fill time in minutes and seconds.
- When the tank is filled, solenoid will stop water flow, the fill light will turn green, the unit will start to beep (1/4 second once a minute), and the display will state "Filled Remove Hose & Reset". The fill time will be displayed until the alarm reset button is pressed.
- Remove hose
- Hit the Alarm Reset button
- The fill light will go off and the last fill time will be displayed

If you want to stop the fill cycle before it has completed, push the Start/Stop button to interrupt the fill.

## Time Delay (Auto fill) fill

This mode is used to set the unit to automatically fill at a preset time. Allow sufficient time for the unit to fill, e.g. program an 11:15 am fill time for an 11:30 am ice cut.

- Insert the hot water filling hose into the resurfacing machine's filling hot water conduit.
- Press the Fill button (second button from the left under the display panel). The last programmed fill time will be displayed. If this is the time you wish to use, skip the next step.
- To set the fill time, press and hold the Fill button while using the hour and minute buttons to set the desired time.
- Press the Delay Fill button to the left of the display.
- The display will show the current time, and indicate that it is in autofill mode and the start time for filling.
- If the time is incorrect or to cancel the delay fill press the Delay Fill button again. The unit will now be back in immediate fill mode.
- One minute before filling will commence, a 4 second alarm will sound to warn anyone present that the filling cycle is about to start. The display will read "Filling starts in 60 seconds" and will count down. This will alternate with a display reading "Push Start/Stop to Cancel". Please double check that the hose is in place.
- The fill status light will turn red when filling commences.
- The rest of the cycle is identical to the immediate fill mode.

# **Setting the Safety Timer**

The system has a back up time which will shut off filling after a preset amount of time. This would prevent a continuous loss of hot water if someone failed to place the hose into the tank or the resurfacer transmitter unit failed to send a filled signal due to a dead battery in the transmitter unit. The control unit comes from the factory pre programmed for 25 minutes. If the fill cycle exceeds the safety time limit, the filling will cease and the Safety time light will start flashing. The display will read "Warning Safety time > Shut off" alternating with a second message. "Remove Hose - Push Reset".

Hit the reset button before attempting to do another fill. The red safety time light will continue to flash until you have completed a successful fill.

Based on your average fill times, you may wish to set a higher or lower time. (e.g. if your average fill time is 14 minutes, we recommend that you set the safety time to 16 or 17 minutes. To set the time, remove the plastic plug labeled Time Limit. Use a small screwdriver to turn the adjustment up or down from 5 to 59 minutes. As you are adjusting it, the display will show the programmed safety time.

If the safety timer has stopped the fill and the replace transmitter battery light is on (non blinking), it means that the transmitter signal has stopped due to a dead battery. Replace the 9 volt transmitter battery immediately.

# **Power Failure**

When there is a power failure, the display will read "Power Down". If the power fails during countdown (1 minute delay prior to filling), during filling, or while in delay fill mode, the lower line will read what activity was in progress at the time. In order to cancel the operation hit Start/Stop button for counting down or filling or hit the Delay Fill button if you wish to cancel the delay fill that has not started. If you do not cancel the current operation, when the power is restored that operation will continue.

# Fill Valve Bypass



If the solenoid fails, you can still use it as a manual valve. Release the locking clip on the solenoid by lifting up on it. Unscrew the solenoid by turning it one half turn only, in a counter clockwise direction. This will allow water to flow. You can use the knob to regulate the flow or shut off flow.

If the power fails during a fill and you manually fill the resurfacer until it overflows, the control unit will be in the ready to fill condition when the power is restored.

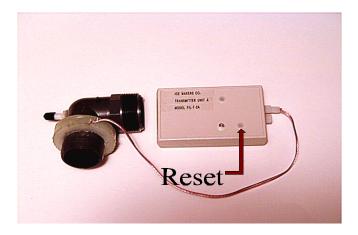
## **Batteries**

The system has 2 batteries an alkaline 9V battery (Eveready # 522 or equivalent) in the transmitter and a 9 volt NiMH or NiCd rechargeable battery for the control system. The 9V nicad battery is always being recharged by the control unit circuitry. The control panel has a warning light, which indicates when each has to be replaced. When the transmitter battery lamp starts to blink you have about 30 days in which to replace it. If the transmitter battery light stays on continuously, then the battery is dead (safety timer light will start blinking too, when it does not receive a filled signal) or the battery will fail in a short period of time.

# **Troubleshooting**

Inside the control unit and the transmitter unit are reset buttons. Both the control unit and the transmitter unit have small computers in them that control the functions of these devices. Some time computer (very unusual) programs fail for unknown reasons and need to be reset. If the control unit fails to function properly (display is illegible, buttons do not function correctly), reset the control computer by loosening the two screw latches on the control unit hinged panel and open unit. Push & let go the round red button on the main circuit board to reset the computer. Close cover, tighten the screw latches and reset the time.

### Transmitter unit with water sensor



To reset the transmitter unit if you do not think it is working properly. Remove plastic plug next to indicator light. Below in hole is a reset button. Use a small non metallic rod to push & let go of button. The indicator lamp should blink 4 times. If it does not, replace battery .Replace plug. If these remedies do not work, call your dealer for replacement repair or warranty, or call us, ICE MAKERS (518) 761-3063 roger@ice-makers.com.

Other helpful information: Each time the transmitter unit receives a new full signal the indicator lamp on the transmitter unit will blink 2 times with a fresh battery. When the battery gets weak, the indicator light will not blink on a new fill condition to save battery power. It will send the filled signal to the control unit .

<u>WARNING:</u> This device operates under Part 15 of the FCC rules. Any modification to this device not expressly approved by ICEM Enterprises Inc. /D.B.A. Ice Makers Co. may void the user's authority to operate this device.