

[www.iCoolSport.com](http://www.iCoolSport.com)



## INSTRUCTION MANUAL FOR COMPACT RANGE

**COOL**

**DUAL TEMP**

**TWIN**

**Never use Chlorine, Bromide or Salt in models with Stainless Steel Heat Exchangers  
Only the Titanium Heat Exchanger models can use Chlorine and Salt in the water  
Never use Bromide with any iCool, it is very corrosive and will cause serious damage.**



## USER MANUAL FOR iCOOL RECOVERY SYSTEMS

MODEL C COMPACT MODELS 2009-2010 Updated Oct 2010.

Updates are published regularly on our website [www.icoolspot.com](http://www.icoolspot.com)



### THERE ARE THREE VERSIONS OF THE ICOOL COMPACTS

**C**OMPACT Cool is our most popular and economic system. It provides rapid cooling, fully automatic control and excellent mobility.

**C**OMPACT Dual Temp provides all the power and function of the “Cool” plus both cooling and heating automatically, for advanced contrast therapy sessions.

**C**OMPACT Twin is the most powerful mobile ice bath cooling system available. It has all the features of the “Cool” plus extra cooling power and stronger water flow for cooling 2 pools at once if required or for cooling spa baths and larger iCool Demountable multi person pools.

THE OPERATION OF ALL 3 MODELS IS THE SAME EXCEPT WHERE NOTED IN THIS MANUAL

| MODEL             | COOLING POWER | HEATING POWER | VOLTAGES AVAILABLE |
|-------------------|---------------|---------------|--------------------|
| COMPACT Cool      | 3000 Watts    | -             | 220-240 OR 110     |
| COMPACT Dual Temp | 3200 Watts    | 2400 Watts    | 220-240 OR 110     |
| COMPACT Twin      | 5100 watts    | -             | 220-240 OR 110     |

## IMPORTANT SAFETY ADVICE

### POWER SUPPLY VOLTAGE

iCools can only be used with the voltage marked on the machine, they are not multi voltage. The voltage is marked next to the main power socket.

TO ENSURE SAFE OPERATION THE POWER OUTLET YOU USE MUST HAVE A PROPER EARTH CONNECTION.

### BUILT IN SAFETY SYSTEMS

Your iCool system has many safety features to protect against such things as a loss of water flow, overheating of the system, or any chance of the user receiving an electrical shock. If any such potentially dangerous things should occur, in most cases your iCool will shut itself down and a red warning screen will appear to assist you to identify and correct the problem. In the case of overheating, the main fan will continue to run for some time until the temperature is safely back to normal.

For the safety of users, any leakage of even a small amount of electrical current will cause the system to instantly remove all electrical power.

In the unlikely event that your system shuts itself down for any of these reasons, you must identify and correct the problem that has caused the safety systems to operate before allowing anyone to use the system.

### PLEASE TEST THE EARTH LEAKAGE SAFETY DEVICE REGULARLY

The main power switch is also part of the electrical safety circuit that can prevent the possibility of electric shock. It is essential to test this safety system each time you use the iCool to make certain it is operating correctly. This is very easy to do and takes only a few seconds.

Turn on the main switch and then press the orange test button just above the switch. If the safety system is working normally, pressing the test button will cause the main power switch to shut off instantly.

After a successful test, reset the main switch to ON to begin normal operation. If pressing the test button fails to instantly shut off the power switch DO NOT USE THE SYSTEM until you contact iCool for advice. Failures of this system are very rare.





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### ADVICE ABOUT OBTAINING THE CORRECT FLOW OF WATER

OCCASIONALLY YOU MAY EXPERIENCE SOME DIFFICULTY GETTING THE WATER TO FLOW CORRECTLY THROUGH YOUR iCOOL DUE TO TRAPPED AIR IN THE SYSTEM OR THE HOSES. PLEASE READ AND FOLLOW THESE SIMPLE INSTRUCTIONS TO LEARN HOW TO CORRECT THIS.

**ABOUT PUMPS.** Water flow through your iCool is produced by a high-quality long life circulating type pump that for safety is completely isolated electrically from the water.

Circulating type pumps can lift and move water reliably for many thousands of hours, however they do not provide suction and are therefore not self priming. Self priming type pumps are generally not as reliable over long periods and so are not suitable for this type of system.

This means that the pump in your iCool can not begin to operate unless it is fed with a head of water above the pump and any air trapped in the system is removed. The water in the pool must be above the water inlet connector on your iCool cooling system before you start to pump. Furthermore, there must be no air trapped in the supply hose and no part of the hose from the pool to the cooling system can be above the level of the water as this traps air which can prevent water from flowing.

Water pumps can not operate for long periods without water as the water provides the lubrication. To prevent damage, your iCool system will shut down the pump if water is not flowing properly for more than ONE minute. If this happens a warning screen will normally appear to explain to you how to correct the problem.

There are several easy ways to clear trapped air in the system. For example, by touching the PUMP ON OFF button 3 or 4 times so the pump is off for about 5 to 10 seconds each time. The surge when the pump starts can often clear the trapped air but it may take a few times if there is a lot of trapped air.

If you still do not have a good flow of water try detaching the water inlet hose at the iCool until you see a good clear flow of water coming out of the hose and quickly snap it back into position and lock it again.

You can do the same thing with the outlet hose at the iCool unit, this also allows the air to escape.

**YOU ONLY NEED TO BLEED THE SYSTEM ONCE FOR EACH SET UP.** Once primed of air, the system will remain primed until it is emptied or moved and water will normally flow instantly each time you start the pump.

### NEVER USE CORROSIVE CHEMICALS IN STAINLESS STEEL MODELS

Bromide and Chlorine can cause major long term damage even to the high grade stainless steel heat exchanger in your iCool and cause a total system failure that is not covered by your warranty. These chemicals eat away most metals and are also damaging to athletes. For total control of bacteria use an inexpensive iCool Ultra Violet Steraliser unit. This is the totally safe way to deal with bacteria and keep your pool safe without using expensive and potentially damaging chemicals. It is also much safer for athletes. Also please avoid the use of salt water to ensure long life of your system.

**IF YOU HAVE THE TITANIUM HEAT EXCHANGER MODEL YOU MAY USE LOW CONCENTRATIONS OF CHLORINE AND SALT WATER BUT NEW USE BROMIDE.**

#### POOL SETUP ADVICE

Before you turn on your iCool system you must set up and fill the pool. iCool portable inflatable pools and semi permanent demountable pools come with their own instructions and are easy to set up. Just be sure that they are in the position you require before you fill them with water as the weight of the water will make it impossible to move them once they are filled.



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## QUICK START GUIDE

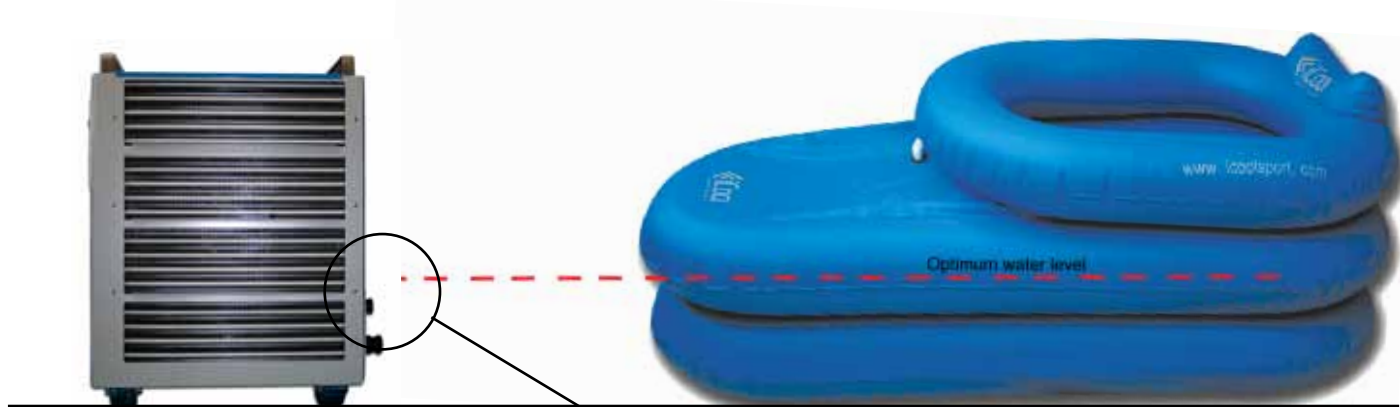
The following is a quick start guide to get your iCool up and running quickly, however you should read the entire manual to get the most out of your iCool.

### STEP 1

Before you fill the pool you must connect the 2 hoses provided. The connections are clearly marked on both the pool and the iCool system. iCool hoses have convenient snap fittings that are very quick and easy to use. Make sure that the small clear plastic in line filter in the hose carrying water from the pool to the iCool is in place and is clean, as this prevents contamination such as hair or fabric particles from clogging the heat exchange mechanism. **The end of the hose that contains the filter is connected to the cooling system not the pool. Also the white perforated inner filter membrane inside the clear filter housing must be installed in the correct direction or it will block the flow of water. It is correctly installed when it is held in place by the screw fitting, it should not float about inside the clear filter housing.**

### STEP 2

Fill the pool with clean fresh water (not saltwater) to the level marked on the pool liner. Never use chlorine or bromide solutions as these chemicals can attack the stainless steel heat exchange panels that remove heat from the water. Because the water is very cold, bacteria is not normally a problem for one or two days use. If you intend to use the pool for longer periods without changing the water then you should use an inexpensive iCool compact ultraviolet sterilising unit or for permanent use a full iCool self powered filtration and sterilising unit.



The water level in the pool must be above the water inlet and outlet connections on the iCool. The iCool must be on the same level surface as the pool. It must not be above the pool.

### WATER FLOW WARNING

**If water does not flow correctly after 3 minutes either during the initial set up or at any time during normal operation an alarm will sound, THE SYSTEM WILL STOP TO PROTECT THE PUMP and a red warning screen will appear with instructions.**

**You must find the reason for the lack of water flow or the system will stop every 3 minutes for safety until the water flow is correct.**

### IF THE WATER FLOW WARNING APPEARS

Please check to see that the hoses are not bent or blocked under heavy objects and that the lower hose is not higher than the water in the pool at any point as this will trap air.

The red screen that will appear gives you 2 options. (see the illustration on the next page) Normally you would touch the RESTART PUMP button and then bleed the system again by referring to the instructions above and the advice about water flow on page 2.

In most cases this will fix the problem and return the system to normal operation. If all the trapped air is not removed by the automatic system or the manual bleed valve you can also remove the top hose fitting from the cooling system for a few seconds while the pump is running until the air escapes. This is not normally necessary but can help in difficult situations.





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The Water Flow Warning Screen also provides an option to over ride the flow protection system in the rare situation of a false alarm.

**NEVER USE THIS OPTION UNLESS YOU ARE ABSOLUTELY CERTAIN THAT THE SYSTEM IS STOPPING BECAUSE OF A FALSE WATER FLOW ALARM!**

**NEVER USE THIS FUNCTION IF YOU HAVE THE TITANIUM MODEL AS THE TANK COULD FREEZE SOLID AND BE DAMAGED BY EXPANSION OF THE ICE.**

**NEVER DISARM THIS SAFETY FEATURE WHEN USING THE HEATING FUNCTION IN THE "DUAL TEMP" MODEL AS IT COULD ALLOW THE SYSTEM TO OVER HEAT**

Once you use this function to disarm the flow safety monitor nothing will stop the system even if water is not flowing and this can seriously damage the pump as it will have no lubrication or cooling from the water.

**This over ride function is only to be used for short periods where it is essential to keep your system operating until the reason for the false alarm can be determined and corrected.**

**WATER FLOW CAN ALSO STOP IF THE HEAT EXCHANGER TANK IS FROZEN SOLID!**

If you set the temperature below about 7°C or 45°F it is occasionally possible in certain climatic conditions for the heat exchange tank to freeze solid which will block most, but not all, of the flow of water.

A small amount of water may still be flowing through the automatic air bleed system which bypasses the heat exchanger, but the safety system monitors the heat exchanger tank flow only and if no water is flowing through the tank the system will stop.

In order to cool the pool water to these extremely low temperatures the system must cool to at least 5 to 7°C below the set temperature and this takes it very close to the temperature that water freezes solid.

Following international safety standards your iCool will not accept water temperature settings below 6°C or 42°F as this would put athletes using the system unattended at risk of hypothermia. However, the iCool is easily powerful enough to freeze the water inside the system itself and if this happens the safety screen above will appear and the system will stop.

Please be aware that the tank can only freeze if your setting is below 7 to 8°C and this can only happen in certain conditions. If your set temperature is above this then it is much more likely that the system has stopped because of a lack of water flow caused by either a hose or filter obstruction, or an air leak in the hoses, or trapped air in the system.

If there is a possibility that the heat exchanger tank is frozen, then you must allow the system to warm up for about 30 minutes to thaw the ice. Leave the power switched on so that the fan can operate if necessary to thaw out the tank. Set a new temperature no lower than 8 or 9°C before restarting so that the tank does not freeze again.

### STEP 3

Connect the power cable provided with your iCool to a standard power outlet capable of providing at least 12 amps in countries with a 220 V supply and 24 amps in countries with a 110 V supply. Although the system requires much less power than this in normal operation, all heat pump compressor motors need considerably more power for a minute or so each time they start up.

**FOR SAFETY, THE POWER OUTLET YOU USE MUST BE EARTHED CORRECTLY.**

The main power switch is also part of the electrical safety circuit that prevents the possibility of electric shock. It is a good idea to test this system each time you use the iCool by turning on the main switch and then pressing the test button above the switch. If the safety system is working normally, pressing the test button will cause the main power switch to shut down instantly.

After this test, reset the main switch to ON to begin normal operation.

## WARNING !

### WATER IS NOT FLOWING or EXCHANGER TANK IS FROZEN

THE WATER FLOW SAFETY SENSORS INDICATE THAT NO WATER IS FLOWING IN THE HEAT EXCHANGER TANK. THE iCOOL HAS STOPPED AUTOMATICALLY TO PREVENT DAMAGE. PLEASE CHECK THE HOSES AND CONNECTIONS FOR ANY RESTRICTIONS AND MAKE SURE THAT THE POOL WATER LEVEL IS HIGHER THAN THE "WATER IN" CONNECTOR ON THE iCOOL. OTHERWISE THE PUMP CANNOT RECEIVE WATER FROM THE POOL. ALSO MAKE SURE THAT NO PART OF THE HOSE CARRYING THE WATER FROM THE POOL BACK TO THE iCOOL IS ABOVE THE WATER INLET CONNECTOR AS THIS CAN TRAP AIR AND STOP THE FLOW. TRAPPED AIR IN THE SYSTEM IS THE MOST COMMON CAUSE OF WATER FLOW PROBLEMS.

IF WATER IS ACTUALLY FLOWING THIS ALARM MEANS THAT THE HEAT EXCHANGE TANK IS FROZEN SOLID. THIS IS POSSIBLE IF THE iCOOL IS SET TO AN EXTREMELY LOW TEMPERATURE, BELOW 6°C (45°F). IN THIS CASE NO FURTHER COOLING IS POSSIBLE UNTIL THE ICE IS CLEARED. TURN OFF THE UNIT AND LEAVE IT FOR AT LEAST 30 MINUTES TO LET THE ICE MELT. THIS ONLY OCCURS RARELY AT VERY LOW TEMPERATURES. RESET TO A HIGHER TEMPERATURE TO AVOID THIS PROBLEM.

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HOME



HELP



DISARM FLOW SAFETY SENSOR



RESTART PUMP





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### STEP 4

#### YOUR SYSTEM SOFTWARE WILL BEGIN LOADING

Your iCool has a full colour high-resolution touchscreen that eliminates all switches and provides complete control over your iCool system in a user-friendly and intuitive manner. It also provides a substantial amount of additional information to assist you.

When you turn on the power for the first time the system will load the latest software from its memory card and run a diagnostic self test routine. This will take about 20 seconds. During this time you will see this screen (shown at right) and then a BLACK screen.



THE SOFTWARE LOADING SCREEN

#### THE STATUS BAR WILL FLASH WHITE

The STATUS BAR on top of the iCool changes colour or flashes to give a clear indication of each function.

While the software is loading the status bar will flash white while the screen shown above and then a black screen appears for about 15 seconds while the computers test the safety systems.

Touching your personal logo screen (see below) will stop the bar flashing and show a steady white light to indicate that the systems check was successful and that your iCool is ready to use.

Then the iCool owners logo screen will appear such as the screens below.



THE STATUS BAR LIGHT

The Status bar glows **BLUE** when only the pump is running, **GREEN** when the cooling system is running and **RED** when the heating system is running  
If the bar glows **RED** when you start cooling please refer to page 15 for an explanation.

#### YOUR PERSONAL LOGO WELCOME SCREEN LIKE THESE SAMPLES BELOW WILL APPEAR AT THIS TIME



TOUCH THE LOGO SCREEN ANYWHERE TO CONTINUE



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The **MAIN OPERATING SCREEN** provides many options which are covered elsewhere in this manual, however to quickly start the system you can simply accept the default water temperature setting of 15°C or touch the **CHANGE SETTINGS** button to select a different temperature. 10°C will be inserted automatically but you can change to any temperature you require. **The temperatures can also be displayed in Fahrenheit. This is explained later in this Manual.**

Simply touch the up and down arrow buttons and the desired pool water temperature will appear on the bottom left-hand of the screen in the blue window marked “SELECTED TEMPERATURE”. The right-hand side of the screen shows the outside air temperature.

Once the pool water temperature you want your iCool to cool to is showing, touch the **START** button. This takes you back to the main run screen which is the screen that you will use most of the time during normal operation.



**MAIN OPERATING SCREEN**

### STEP 5

Touch the **START PUMP** button. This will start the pump operating and water should begin circulating. **NOTE! When you touch START buttons they change to STOP buttons and can then be used to STOP that function if required.**

**IT IS ESSENTIAL THAT THE WATER IS FLOWING CORRECTLY BEFORE YOU TOUCH THE START SYSTEM BUTTON.**

The water flow is pre set to an optimum flow of about 15-20 litres or around 3-5 gallons per minute. This allows time for the heat exchanger to operate at maximum cooling efficiency. Pool water is completely changed approximately every 15 to 20 minutes.

Do not touch the **START SYSTEM** button until you are sure that water is flowing smoothly. If water does not flow smoothly within a minute, please check that the hose from the bottom of the pool is flat on the floor and no part of it is higher than the top of the water. Check that the water in the pool is higher than the inlet connectors on the iCool. If this does not correct the problem the system will sound an alarm and a red warning screen will appear with information about how to correct the water flow problem.



**WATER TEMPERATURE SETTING SCREEN**

### STEP 6

Now that you have pre set your desired temperature and started the circulating pump, the touch screen should look like the picture at the top of this page. (of course the temperatures may be different). Notice that the pump button will have changed from **START** to **STOP**. You can use this same button to start and stop the pump at any time.

Now, touch the **START SYSTEM** button and the cooling cycle will begin. The water will be cooled to your preset temperature and the system will then cycle to maintain it at that temperature automatically. **The SYSTEM can only be started once within any 3 minute period to avoid overloading the compressor. If you don't hear it start do not touch the START SYSTEM again, it will start automatically after the 3 minutes safety period elapses.**

If your iCool is the **CONTRAST MODEL** then, depending on the temperature you set, it will either heat or cool the water automatically to reach your preset temperature and then maintain it at that temperature. More detailed information about the operation of the **CONTRAST** version can be found later in this manual.

**FOR THE SAFETY OF USERS, YOU CAN NOT SET TEMPERATURES BELOW 5°C OR ABOVE 45°C. (40°F-112°F)**

**IN AN EMERGENCY YOU CAN STOP ALL FUNCTIONS IMMEDIATELY BY TOUCHING THE “ALL STOP” BUTTON however, if the cabinet is hot, the fan may continue to run until the cabinet has cooled.**



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MAIN OPERATION SCREEN

### DETAILS OF THE MAIN OPERATING SCREEN

The **POOL TEMPERATURE** window shows the actual water temperature returning from the pool. **This will vary slightly to the actual temperature in the pool because for safety reasons the electronic sensor is in the cooling unit not in the pool.** It accurately reads the actual temperature of the water that is returning to the pool. The actual pool temperature will be slightly different depending on your particular setup. The temperature is always accurately maintained but if you want to display the actual pool temperature within 1 degree you can simply set an offset amount to compensate for the difference when selecting your required temperature.

The **HEAT PUMP TEMPERATURE** window shows the temperature inside the cabinet. **If this exceeds 70°C or 158°F the system will shut down,** an alarm will sound and a warning screen will appear. This could happen in extremely hot conditions or if the unit is covered by an object such as a towel or anything that prevents proper airflow.

The **OUTSIDE TEMPERATURE WINDOW** shows the current room or outside temperature. It is not desirable to operate this system in temperatures above 42°C or 108° F. If the reading exceeds this you need to move the system to a cooler area or improve the air flow. The **PRESET TEMPERATURE WINDOW** always shows your selected temperature. This is the temperature the water will be automatically cooled (or heated) to and maintained at.

### CHANGING THE TEMPERATURE SETTING

You can change your preset temperature at any time by touching the **CHANGE SETTING BUTTON**, this will take you to the change settings screen. From here you proceed as described previously. **If you have the CONTRAST model, for safety reasons you cannot change directly from heating to cooling or cooling to heating. To do this you must switch off the entire system at the main switch and start again. This is required to reset the computer.**

### FAN SPEEDS

During normal operation the main fan will automatically change speeds as required to maintain the highest efficiency. The fan will be at full speed when temperatures are high or the water is warm.



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### YOU CAN DISPLAY THE POOL TEMPERATURE AT FULL-SCREEN SIZE

If you touch the number in the pool temperature window on the Main Operation Screen for a few seconds the screen will change to a full-screen display of that temperature.

This is useful if you wish to monitor the system from a distance.

The pre-set temperature and the outside temperature continued to display in smaller windows for your reference.

To return to the main operating screen touch the **BACK 1** button.

### TO STOP THE SYSTEM AT THE END OF YOUR RECOVERY SESSION

There are several ways to stop the system and close it down.

You can stop the cooling system by touching the **STOP SYSTEM**

button, in this case the pump will continue to run, however you can stop to pump at any time by touching the **STOP PUMP BUTTON**. Alternatively you can stop everything by touching the **ALL STOP BUTTON**. Alternatively you can simply switch off the main power. If you use the **ALL STOP BUTTON** the fan may continue to run for a short time to cool the cabinet.



### EMPTYING THE POOL USING THE BUILT IN PUMP.

You can use the main circulating pump to empty the water from the pool by detaching the top hose from the top of the pool and directing it to a drain. The pump can be turned on and off at any time using the pumps **STOP/START** button.

## DETAILED OPERATION

THE TOUCH BUTTON FUNCTIONS

### SYSTEM SETTINGS



When your iCool start up, the first screen you will see offers you a **SYSTEM SETTINGS** button. **OPTIMUM SETTINGS ARE AUTOMATICALLY SELECTED** so there usually no need to use this feature. The three settings you can change are the fan speed range, the temperature from degrees Centigrade to Fahrenheit and the sound level from the screen.

**MAIN COOLING FAN SPEED.** This allows you to set the main cooling fan to either **NORMAL** or **QUIET MODE**. **Generally you should always leave it in the NORMAL mode** which is fully automatic and allows the system to control the fan speed to give the very best efficiency and fastest cooling.

If you are in a very quiet environment you can select **QUIET MODE**, but you must be aware that this will reduce the cooling ability of the system, however it will be quieter overall as the fan will not run higher than 60% of maximum **unless there is a risk of overheating, in which case the safety system will turn the fan back to high no matter what the setting.** The **NORMAL** setting is used to give absolute maximum cooling power where higher fan noise is not a problem. On a normal day this gives about 25% more cooling than in the **QUIET MODE**.

If cooling seems lower than normal, check to see if this feature was previously set to Quiet Mode.



**TEMPERATURE DISPLAY SCALE** This can be set to either Centigrade or Fahrenheit and this changes all of the displays throughout the entire system. When you first start the iCool it will normally start in Centigrade as this is the world standard. **Due to complex decimal calculations between C° and F° there may be minor difference in the true F° displays.** This has no effect on actual cooling accuracy.

The **SOUND LEVEL** adjusts the sounds made by touching the screen and by the alarms. Normally it should be left on high to assist with settings and to make sure alarms are heard.

A **red dot** indicates which setting is selected in each of the available settings.



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### TEMPERATURE SETTINGS



When your iCool starts up, you are offered 3 different ways to choose a water temperature setting. Whichever method you choose it eventually takes you to the main run screen. If you make no setting, the system will automatically insert 15°C. (around 59°F) In this case you would navigate directly to the main run screen in order to access and start the pump and cooling system.



If you want to use your previous setting from the last session, you can touch the **USE PREVIOUS SETTING** button and the last setting you used will be automatically inserted into the system. Previous settings may have been lost if you have removed to mains power.



If you want to make a new setting, which is the most common choice users make, you touch the **MAKE NEW SETTINGS BUTTON** and this will take you to the screen illustrated above, where you can use the up and down arrows to select the temperature you require. After you make your setting touch of the start button to go to the main screen where you can start both the pump and the cooling system and where all relevant temperature information is clearly displayed.



WATER TEMPERATURE FULL SCREEN

### TEMPERATURE LIMITATIONS



Because of the dangers of hypothermia in the case of an unattended athlete using the pool, your system will not allow you to set temperatures below 5°C/40°F. If the model you are using is the contrast model which also provides heating for contrast therapy you cannot set the temperature above 45°C/112°F because of the risk of scalding. These temperature limits have been set after wide consultation with the sporting industry around the world. There are no demonstrated benefits in using water temperature lower than 5°C or above 45°C and therefore the risk of doing so is not justified.

### TIMING FUNCTIONS



Your iCool offers a number of very useful timing functions including a real-time clock, a countdown timer to time recovery and training sessions and a timer to shut down the system automatically at a predetermined time after use. To set up and use these functions touch the **TIMER FUNCTION** button on the home screen. You can reach this screen by using the **BACK 1** button or the **HOME** button.



TIME SETTING SCREEN

In order to use these functions you first need to set the time of day on the built-in clock.

To set the clock touch the **SET MAIN CLOCK** button on the timing functions screen and the time setting display on the bottom right of the screen will begin flashing. You must set it while one of the numbers is flashing by using the up down and left right keys. Once you stop using these keys for more than a few seconds the display will stop flashing and the time showing is set into the system and the clock begins operating.

The iCool clock operates in the universal 24-hour time style.



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## AUTOMATIC SYSTEM SHUTDOWN TIMER



You can preset your iCool to shut down at any time up to five hours in the future. This is very convenient for coaches and specialists who may want to leave the training area early but want to make sure that the system is not left running needlessly. To set this time, touch the **SET SHUT DOWN BUTTON** and the clock digits on the bottom right of the screen will begin to flash as with setting the clock. Use the same up down and left right arrows to set the number of hours and minutes you wish to elapse before the system automatically shuts down. The system automatically begins the countdown and will stop when the time you set reaches zero. The time remaining before shutdown is displayed on the main clock display screen.

As the same arrows are used to set all three time functions, to avoid confusion, a red dot appears next to be button of the function being set.



## A very popular and useful feature of your iCool is the SESSION COUNTDOWN TIMER.

This allows you to accurately control the immersion times of athletes and to repeat those times as often as needed. This is an essential part of successful cryo recovery therapy and is just as important as maintaining accurate and consistent temperatures, which of course your iCool does perfectly.

The session timer is set up from the main TIME SETTING SCREEN by touching the **SET COUNTDOWN** button. The numbers on the setting screen in the bottom right-hand corner will begin to flash and you can use the left, right and up, down arrows to change the time in minutes and seconds. Once you have set the time you want your athletes to remain in the bath, touching the **DISPLAY COUNTDOWN FULL-SCREEN** button will take you to the screen illustrated below. This screen allows you to see the countdown from a distance and also to control it in various convenient ways. The current pool temperature and the outside temperature will also be displayed.



The count down can be set for once only, or it can repeat automatically as many times as you like. This is particularly convenient if you have a number of athletes using the same pool at the same time. The system beeps for each of the last five seconds the end of each countdown to warn the athletes to get ready to get either in or out of the pool and pauses for several seconds to allow the changeover before the countdown begins again (if it is set in the repeat mode).



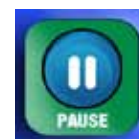
at



Resets time to the preset value in the single shot mode, ready to start again by pressing the START button



When this button is pressed the countdown will repeat until the repeat function is cancelled by pressing once again. A red dot indicates that it is active



You can pause the countdown at any time and start again from the same position with this button, or touch reset to start from the top.



This button starts the countdown



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YOU CAN ALSO DISPLAY THE MAIN CLOCK, SHOWING THE TIME OF DAY IN FULL-SCREEN MODE IF REQUIRED BY TOUCHING THE DISPLAY CLOCK FULL SCREEN BUTTON.

TO GO BACK TO THE PREVIOUS SCREEN TOUCH THE BACK 1 BUTTON.



### EXTERNAL LIGHTING



All iCool models have convenient area lighting which is very helpful if the area around your pool arrangement is not well lit. The lights can be activated from a simple lighting control screen. The lighting control screen can be accessed from several screens by touching the **LIGHTS** button. This Takes you to a simple screen that has

both ON and OFF light icon buttons. When you touch the on button the area lights illuminate and a red dot beside the icon indicates that the lights are set on.



Simply reverse the procedure to turn the lights off. If the lights are activated they do not turn off when you touch the all stop button or when the system initiates a safety shutdown. This allows an extra measure of safety by continuing to light the area even if a fault has been detected.

### STEREO SOUND SYSTEM



Some iCool models have a very high quality stereo sound system built in to allow athletes to plug-in their iPods or MP3 players or any other entertainment devices and listen to powerful, quality sound while they use the iCool recovery system. This has been a very popular feature and contributes to the general feeling of well-being that everyone reports

after regular use of ice bath recovery systems. Of course this feature has no effect if you're particular iCool model does not have a sound system built-in.

To activate the sound system touch the **SOUND** button, which is available on several screens. This takes you to a simple sound control screen that turns the amplifiers and speakers on and off.

Plug-in any music player to the mini phono jack provided. The volume is controlled by your music player not by iCool stereo system, so be sure the volume is turned down when you first plug in your player.



### THE HELP SYSTEM



Your iCool has an extensive built-in electronic help system. Detailed and well illustrated helpful information on every important subject to do with the operation of your iCool, is available from almost any screen simply by touching the help button.

Touching any help button will take you to the screen illustrated on the right. The screen has eight menu buttons covering all of the important topics you are ever likely to need assistance with.

When you touch the menu button covering the topic you need assistance with, the screen will change to a series of pages covering that subject. Sample screens are illustrated below and opposite.





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You can flip forward or backwards from page to page using the buttons on the right-hand side of the help screens or you can return to be main help menu page at any time.

The built-in illustrated help system is a revolutionary new idea and we are constantly updating it as new information and new feedback comes in from all over the world from iCool clients and from our recovery research programs in several countries.

Some help pages may not be installed on your iCool when it is delivered, so that your local dealer can install them to suit your country and sport. Alternatively iCool can provide a free update memory card with the latest help menus to suit your needs.

### EXAMPLES OF THE ELECTRONIC HELP SYSTEM'S PAGES



You may need a free local upgrade memory card to access all help files for your region.

### LOCKING YOUR ICOOL SYSTEM TO PREVENT TAMPERING.



#### YOUR iCOOL HAS AN ELECTRONIC LOCK

As you can see, iCool Systems have attractive user interfaces, this makes them easy and very intuitive to use, but the downside is that untrained people sometimes like to play with the colourful touchscreens. As with any sophisticated piece of equipment when people start pressing buttons at random anything can happen. Your iCool has many safety features to prevent a person tampering with the system from causing a disaster, but most of these safety features involve

Automatically shutting down the system which of course is undesirable.

We have covered this by installing a secret locking routine. It is a good idea to keep this secret to as few people as possible.

To lock the screen so that no further inputs can be made, touch and hold the iCool icon on the main run screen for more than 10 seconds (you can only lock from this main screen). A picture of a lock will appear. While ever this lock is visible it is not possible to make any inputs or to change screens.



To unlock the system and returned to normal, repeat the procedure. Touch and hold the iCool icon for more than 10 seconds. The lock will disappear and all functions will return to normal.



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### IF YOUR SCREEN FREEZES OR FAILS TO RESPOND

As with all computers and computer controlled devices it is possible that occasionally the system could freeze due to data or software conflicts. Your iCool has 2 computers that monitor and communicate with each other. Occasionally a data error can cause them to stop communicating.

We have designed the system to be as fail safe as possible. In most cases if the screen freezes the main computer will still carry on running the system and monitoring the safety features but you will not be able to change anything. You can either allow it to keep running if that is more convenient, or you can restore the system to normal operation by switching off the main power and re starting. Exactly as you would do if your computer or smart phone freezes.

**The system will always reset to normal when you restart it.**

When your screen first starts up and the welcome screen appears a small warning notice will appear in the centre of the screen for one or two seconds referring to the inter computer communication requirements, this is normal.

### EMERGENCY OVERRIDE PROVISIONS

#### CERTAIN SAFETY FEATURES IN YOUR ICOOL CAN BE OVERRIDDEN IN THE EVENT OF A PARTIAL FAILURE

iCool systems are very reliable and have attained an excellent reputation around the world for this. In addition we have done all that we can in the designs to build-in ways to work around any partial failure, so that you are not prevented from using your system for an important event. There are some circumstances in which it would be acceptable to temporarily override certain safety systems that may become too sensitive and cause trouble until they can be properly readjusted. This allows systems to continue to operate in circumstances where otherwise it might not be possible. Of course we do not advise the overriding of electrical safety circuits.

For example, depending on the way your system has been set up, it sometimes occurs that the water flow monitoring system may be too sensitive and will stop the pump because it appears that water is not flowing properly. We allow this to be overridden if it becomes troublesome. Instructions on how to do this will appear on the screen automatically if this happens. It must be remembered of course that if you disarm this system the pump is no longer protected from running dry and therefore without lubrication so it is essential that you manually monitor the water flow. Our staff can assist you by phone or e-mail to overcome most problems on the spot.

**NEVER OVERRIDE THE WATER FLOW SAFETY SYSTEM WHILE USING THE HEATING FUNCTION IN THE "DUAL TEMP" MODEL AS IT COULD DANGEROUSLY OVERHEAT.**

**EVEN IF THE ENTIRE TOUCHSCREEN USER INTERFACE FAILS, WE CAN USUALLY STILL GET YOU GOING.**

In our efforts to remain the world's number one supplier of mobile ice bath systems, we have continued to improve reliability, but we have also engineered ways to ensure that no matter what happens in the field, in most cases you can still use your iCool for that important event.

Realistically, even the best electronic systems occasionally have problems, especially in portable systems that have a relatively hard life.

Fortunately, we have very few such problems, but as an added benefit we have built into all iCool's a complete manual override system that allows your iCool to operate effectively even if all of the main electronics fail for whatever reason.

We do not publish this override information in the manual because it is a little different from model to model, but in the rare event that you ever have a failure of the electronics which prevents you from operating your iCool, just call or e-mail the local iCool representative in your country, or our international number or go to our web site

[www.iCoolsport.com](http://www.iCoolsport.com) where you will find a listing of representatives around the world, or you can request a reply directly from our headquarters. You will be contacted promptly and we will explain how to work around your problem until we can arrange repairs. This is an important service that we hope you never need, but it's good to know it is there.

In addition to this service you will be pleased to know that your iCool is of a modern modular design, which means that most components can be easily replaced in the field and often by the owner.



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### IF THE STATUS BAR LIGHT ON TOP OF THE iCOOL TURNS RED WHEN YOU START THE COOLING CYCLE.

If the water temperature in the pool is already lower than the cooling temperature you set then the iCool will automatically attempt to heat the water to match the temperature you have set. The red bar indicates activation of the heating mode. If your model does not have a heating system built in nothing will happen.

For safety reasons the system will not change from heating mode back to cooling mode unless you re start it by turning the main power off and back on. For cooling, you must set a temperature that is lower than the present temperature of the water. If you need to set a temperature that is very close to or the same as the present pool temperature start the cooling within a few seconds after starting the pump, before the system has time to read the water temperature.

## SPECIFICATIONS

|   | COMPACT Cool                     | COMPACT Dual Temp                | COMPACT Twin                     |
|---|----------------------------------|----------------------------------|----------------------------------|
| COOLING POWER                                 | 3200 Watts                       | 3200 Watts                       | 5000 Watts                       |
| HEATING POWER                                 | -                                | 2400 Watts                       | -                                |
| RUN (& Max.) POWER @220Volts                  | 5 Amps(12Amps)                   | 5 Amps(12Amps)                   | 7 Amps(14Amps)                   |
| RUN (& Max.) POWER @110Volts                  | 10 Amps(22Amp)                   | 10 Amps(22Amp)                   | 14 Amps(26Amps)                  |
| HEAT PUMP TYPE                                | Rotary                           | Rotary                           | Rotary                           |
| EARTH LEAK SAFETY DEVICE                      | Yes 30 Milliamps                 | Yes 30 Milliamps                 | Yes 30 Milliamps                 |
| STAINLESS STEEL HEAT EXCHANGER TANK           | 12 plate, silver soldered        | 12 plate, silver soldered        | 12 plate, silver soldered        |
| ROLLER BEARING WHEELS                         | Yes                              | Yes                              | Yes                              |
| STAINLESS HANDLES                             | Yes                              | Yes                              | Yes                              |
| AREA LIGHTING                                 | Yes 10 Watts                     | Yes 10 Watts                     | Yes 20 Watts                     |
| HI RESOLUTION COLOUR TOUCH SCREEN             | Yes 800 x 480                    | Yes 800 x 480                    | Yes 800 x 480                    |
| ELECTRICALLY ISOLATED PUMP, S. STEEL SHIELDED | Yes 25 Litres per minute pre set | Yes 25 Litres per minute pre set | Yes 40 Litres per minute pre set |
| MAXIMUM PUMP CAPACITY                         | 55 Litres Per Min                | 55 Litres Per Min                | 85 Litres Per Min                |
| LOCKING POWER PLUG                            | 3 Pin Heavy Duty                 | 3 Pin Heavy Duty                 | 3 Pin Heavy Duty                 |
| WEIGHT KG / POUNDS                            | 37KG 81 Lbs                      | 38KG 84 Lbs                      | 40KG 88 Lbs                      |
| DIMENSIONS H. - W. - D. in mm.                | 545x475x290                      | 545x475x290                      | 545x475x290                      |
| DIMENSIONS H. - W. - D. Inches                | 21.5x18.7x11.4                   | 21.5x18.7x11.4                   | 21.5x18.7x11.4                   |

Please note.

iCool Systems are sold all around the world and these specifications may be different for units delivered in your country due to local conditions or regulations. We are constantly improving our products and therefore certain specifications may change due to ongoing research and development.

We welcome your feedback and suggestions and we offer support for general enquiries and information for specific countries on our website at..

[www.iCoolSport.com](http://www.iCoolSport.com)

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