iCool
COMPACT

Owners Manual

# iCool Recovery

iCoolsport.com

iCool Recovery

# THE NEXT BIG STEP IN
## COMPACT & AFFORDABLE RECOVERY

There are four versions of the iCool Compacts. The operation of all 4 models is basically the same except where noted.

**COMPACT Cool** is a popular lower cost system for fast cooling of a single person pool. It provides increased cooling power for 2016 now at 4000 watts. Fully automatic control and excellent mobility. Very quiet operation with the latest technology powerful low noise turbo fan.

**COMPACT Plus (+)** The Compact Plus is a full featured machine at a budget price. It offers more chilling power than the "Cool" model plus it has a larger touch screen and a multi speed cooling fan. A perfect fit for those on a tight budget needing a step up in power and more features and the top of the range appearance.

**COMPACT Dual Temp** provides all the power and functions of the Compact + plus with the added benefit of heating, as well as powerful cooling for advanced contrast therapy sessions. It can provide any temperature used in recovery therapy.

**COMPACT XP** provides all the function of the "Dual Temp" and features the most powerful advanced heat pump ever available in a mobile system. 7000 watts of cooling and heating in this amazing compact mobile package. For very fast cooling, or for bigger pools, the XP is the best mobile ice bath system available anywhere.

| Model | Cooling Power | Heating Power | Function | Available in |
|---|---|---|---|---|
| COMPACT Cool | 4000 Watts | | Cooling | 220v or 110 volts |
| COMPACT Plus (+) | 5000 Watts | | Cooling | 220v or 110 volts |
| COMPACT DUAL TEMP | 5000 Watts | 5000 Watts | Cooling & Heating | 220v or 110 volts |
| COMPACT Twin XP | 7000 Watts | 7000 Watts | Cooling & Heating | 220v or 110 volts |

# IMPORTANT
## SAFETY NOTICE

**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 thing 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 prevents 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.**

# ADVICE
## ON WATER FLOW

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 these simple instructions to learn how to correct this.**

**THE PUMP**

Water flow through your iCool is produced by a high quality long life circulating pump.

Circulating type pumps can lift and move water reliably for many thousands of hours, however, just like swimming pool and spa pumps, they do not provide suction and are therefore not self priming. Self priming diaphram type pumps are not as reliable over long periods and so are not suitable for this type of operation.

The pump with your iCool can not begin to operate correctly unless it is fed with a head of water from a pool where the level is above the pump and any air tapped in the feeding hoses is removed. The water in the pool must be above the pump before you start it. There must be no air trapped in the supply hose from the pool to the pump and no part of the hose from the pool to the pump can be above the level of the water because this will trap air that can prevent water from flowing to the pump.

There are several easy ways to clear trapped air. 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, with the pump running, undo the levers on the snap hose fitting that connects the hose from the pump to the bottom inlet on the iCool. There is no need to remove the fitting, just open the levers and this will allow any trapped air to escape. As soon as you see water coming out of fitting, quickly snap it back into position and lock it again.

**YOU ONLY NEED TO BLEED THE SYSTEM ONCE FOR EACH SET UP**

Once primed of air, the system will remain primed and water will normally flow instantly each time you start the pump until the pool is emptied or the iCool is moved.

**NEVER OPERATE THE PUMP WITHOUT WATER**

Water pumps can not operate for long periods without water because the water provides the lubrication to the bearings. To prevent damage, your iCool system will shut down the pump automatically if water is not flowing properly for more than 2 minutes. If this happens a warning screen will normally appear to explain to you how to correct the problem.

**POOL SETUP ADVICE**

Before you turn on your iCool system you must set up and fill the pool. iCool portable inflatable pools and hard 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.

**VERY IMPORTANT INFORMATION ABOUT CHLORINE, SALT AND BROMIDE**

All iCool Compact models are fitted with the latest chemical and salt resistant Titanium Heat Exchanger tanks, however we highly recommend that chlorine should only be used in very small doses to prevent skin and eye irritation to pool users and to extend the life of metal parts such as the circulating pump in your iCool. In cold water, Chlorine is very effective in small doses of just 1.5 parts per million, (1.5 ml per litre).

For example an iCool inflatable pool needs only half a teacup full of chlorine per daily session and only if the water is to be used again. If the water is to be discarded after one session chlorine is not needed at all.

The use of salt serves no practical purpose in ice bath therapy and should be avoided as salt is very corrosive.

**⚠ WARNING**

Never use bromide or bromine based products, they are extremely corrosive and can damage the metal parts

Household first aid disinfectants such as Dettol or similar can be used instead of chlorine, they are very effective for bacterial control and will not harm your iCools components. 2 to 4 capfuls per day is usually enough. iCool also produces a very effective anti bacterial solution especially formulated use with for ice bath pools and equipment. Please see our website for details.

# 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 & 2

### Before you fill the pool you must connect the 2 hoses provided

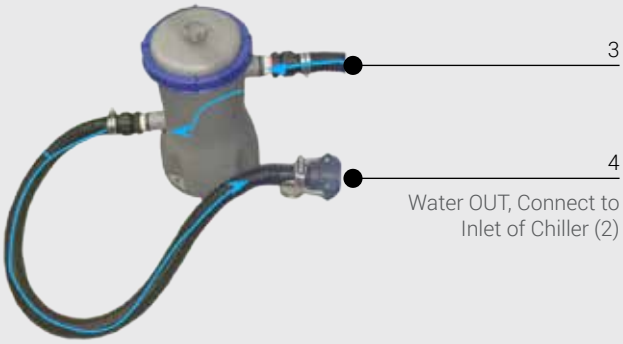
ICool hoses have convenient snap fittings that are very quick and easy to use. Your 2016 model features a built in filteration system to help keep the water clean.

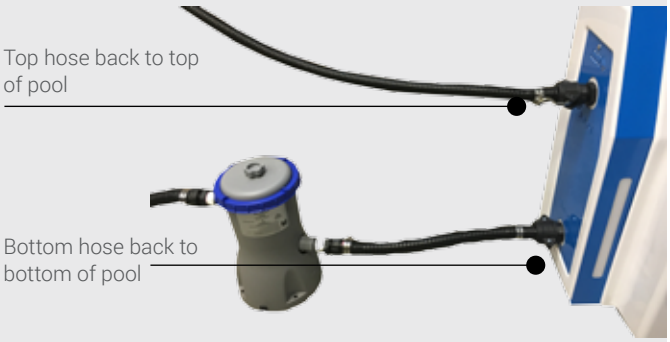
### Water Level

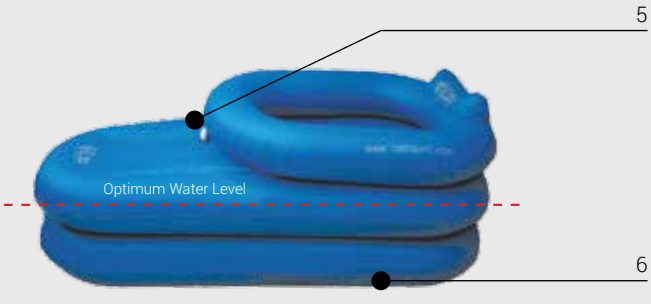
The water level in the pool must be above the water inlet to the pump.

Your iCool must be on the same level surface as the pool. It must not be above the pool.

1. Connect to top of the pool
2. Connect Water OUT on pump (4)
3. Connect water from bottom of pool (6)
4. Connect this hose to the Chilling system (2)
5. Connect to top OUT of Chilling system (1)



# STEP 3

## Connect the special I.E.C plug from the pump to the marked socket on the side of the iCool

**⚠ WARNING**

Always use this power socket, it provides electric safety protection to the pump and your pool users.

## Connect Main Power Cable

Connect the main 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 starts up.

**⚠ WARNING**

For safety, the power outlet you use must be earthed correctly. Your pump must connect to the iCool not to an external power socket

## The Main Power Switch

The Main Power Switch is also part of the ELECTRICAL SAFETY CIRCUIT that guards against the possibility of electric shock. Every electric component in the iCool is protected by this device. 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 a SUCCESSFUL test, reset the main switch to ON to begin normal operation. If this test fails you must have your iCool checked by an electrician before using it. It may not be safe.**

# 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 System Status Bars will flash white

The STATUS BARS on each side at the front of the iCool will change colour or flash to give a clear indication of each function. While the software is loading the status bars will flash white, the screen shown at right will be seen , then a black screen appears for about 15 seconds while computers tests the safety systems.

After the self test is completed, your personal logo screen or a WELCOME screen will appear. Touching this screen anywhere will stop the bars flashing and show a steady white light to indicate that the systems check was successful and that your iCool is ready to use.

The Status bars glow BLUE when only the pump is running, GREEN when the cooling system is running and RED when the heating system is running.

**If the bars glow RED when you start cooling please refer to page 8 for an explanation of the heat mode functions.**

**If you ordered a personal logo screen your WELCOME screen will look like the samples (right). Otherwise the standard iCool welcome screen will appear. touch YOUR logo OR WELCOME screen anywhere to continue.**

Personal Logo Screens

## The Main Operating Screen will now appear

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 15ºC or, to select a different temperature touch the CHANGE settings button. Then 10ºC will be inserted automatically, but you can change to any temperature you require at this point. 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.

The temperatures is in degrees centigrade, however it can also be displayed in Fahrenheit. This is explained later in this Manual.

Once you have selected the pool water temperature you want your iCool to cool to, 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 or so, please check that the hose with the pump 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 pump. 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, 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. So 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.

In an emergency you can stop all functions immediately by touching the "ALL STOP" button  However, if the cabinet is hot, only the fan may continue to run until the cabinet has cooled.

For the safety of users, you can not set temperatures below 5°C or above 45°C. (40°F-112°F)

**Some models have the ability to heat as well as cool**

If your iCool is a 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. It heats by modern heat pump technology using as much as 70% less electricity than conventional electric spa heaters.

## Setting up to use the Heating Mode

For safety reasons you can only initiate the heating mode at the time the unit is first switched on. You can not change to heating while you are using it in the cooling mode or vice versa. You must switch off at the main switch and start again to change modes.

**Your iCool selects either cooling or heating automatically**

If you set the temperature to a value that is BELOW the current water temperature in your pool it will automatically begin COOLING when you touch the START SYSTEM button.

If you set the temperature to a value that is ABOVE the current water temperature in your pool it will automatically begin HEATING when you touch the START SYSTEM button.

To use the heating function use the up down arrows to select the hot temperature you require up to 45ºC (or 108ºF) and then touch the START button. This takes you back to the main operating screen where you can now start the PUMP and the SYSTEM as usual. The status bar on top of the unit will turn RED when you touch the START button to indicate that your iCool is now heating. It will continue to heat until it reaches your pre set temperature and then hold that temperature for as long as you wish.

**You must use a pool cover when heating the water**

We all understand that heat rises, so you must use a cover on top of your pool when heating it or you will lose a large amount of the heat energy into the room and it will take much longer to heat the water.

## The Loss of Water Flow Warning Screen

**If water stops flowing for more than two minutes the iCool will sound a warning and shut down. This screen shown here will appear.**

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

> **⚠ WARNING**
>
> Never use the water flow protection overide option unless you are absolutely certain that the system has stopped because of a false water flow alarm

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 7ºC or (45ºF) it is occasionally possible in certain climatic conditions for the heat exchanger tank to freeze solid which will block the flow of water.

In order to cool the pool water to these extremely low temperatures the system must cool to at least 5 to 7ºC 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 5ºC or (40ºF) as this would put athletes using the system unattended at risk of hypothermia. The iCool is easily powerful enough to freeze the water and if this happens the safety screen above will appear and the system will stop.

Warning Screen

# DETAILED OPERATION

## 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 an actual pool temperature within 1 degree you can simply set an offset amount to compensate for the difference when selecting your required temperature. An offset can be selected by a jumper on the circuit board. Contact iCool for details.

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.

Changing FROM COOLING TO HEATING If you have the DUAL TEMP model you can also heat your pool up to 45ºC for contrast therapy, however, 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 prevent the system from changing modes accidentally.

**See setting up heating mode on page 8**

Main Operation Screen

## Fan Speeds

**The "Cool" model only has one speed**

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.

**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.

Current Pool Temperature Screen

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. You can stop to pump at any time by touching the stop pump button. 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. Because the system will not run without water, touching stop pump also stops the heat pump if it is already running.

## Emptying the pool using the Pumps

You can use the main circulating pump to empty the water from the pool by detaching the hose that runs from the pump to the iCool. The pool water can then be directed to a drain. The pump can be turned on and off at any time using the pump stop/start button.

# FUNCTIONS OF THE TOUCH BUTTONS

## SYSTEM SETTINGS

SYSTEM SETTINGS

When your iCool starts up, the first screen you will see offers you a system settings button. THE BEST SETTINGS ARE AUTOMATICALLY SELECTED so there is 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.

### Quiet Mode

**Models with 3 speed fans only**

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 30% 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.**

Touch Buttons Screen

MAIN SCREEN

MAKE NEW SETTINGS

### 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 can proceed directly to start the pump and cooling system.

If you want to make a different temperature setting, you touch the CHANGE setting button and this will take you to the water temperature setting screen illustrated below, where you can use the up and down arrows to select the temperature you require. After you make your setting touch 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.

After you start the system running you can view the actual water temperature in full screen by touching the blue POOL TEMPERATURE square at the bottom left of the main screen for more than 2 seconds

Water Temperature Setting Screen

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. If you really do need lower or higher temperatures for any reason, iCool can change the software on request, but this modification is at the owner's risk.

Time Setting Screen

TIMER FUNCTIONS

## 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.

You can display the time of day on the built-in clock.

SET MAIN 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.

## 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 amount of time you set reaches zero. The time remaining before shutdown is displayed on the main clock display screen.

SET SHUT DOWN

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.

## Recovery Session Timer Functions

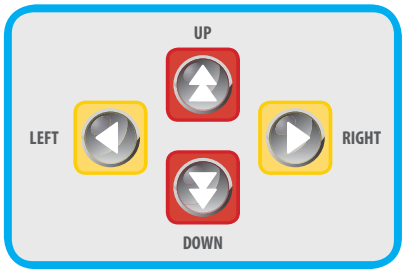
A very popular and useful feature of your iCool is the session countdown timer. This allows you to accurately control the immersion times of athletes and to repeat those times as often as needed. This is an essential part of successful cryo recovery therapy and is just as important as maintaining accurate 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 on the next page. 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 at 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).

SET COUNT DOWN

DISPLAY COUNTDOWN




TIMER FUNCTIONS

Time Remaining Screen

**RESET**

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

**REPEAT**

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

**PAUSE**

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

**START**

This button starts the countdown

Current Time Screen

**DISPLAY CLOCK**

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

# LOCKING YOUR ICOOL SYSTEM

## YOUR ICOOL HAS AN ELECTRIC 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.

## 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.

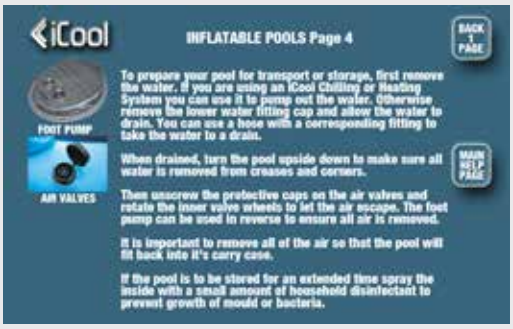
iCool Help Screen

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. This may lead to a computer crash if some pages are missing. You will need to restart your iCool if this happens, to reset the main computer.

## 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.

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

# TROUBLESHOOTING

## 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 may 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 over ridden 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 without water 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.

### Failure of the Touch Screen

**Even if a touch-screen fails or is damaged, 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 and where water and heat are involved.

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 parts of the electronics fail for whatever reason. We do not publish this over ride 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 or the touch screen 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 and we will give you instructions on how to use the manual over ride facility on your particular model.

At www.iCoolSport.com you will find a listing of representatives around the world, or you can request a reply directly from our factory in Australia. 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.

### UNDERSTANDING THE HEATING MODE PROTECTION CIRCUIT

If you have a DUAL TEMP model it can also heat your pool and because it heats by modern heat pump technology and it does so using as much as 70% less electricity than conventional spa heaters.

For safety reasons you can only initiate the heating mode at the time the unit is first switched on. You can not change to heating while you are using it in the cooling mode. You must switch off at the main switch first.

Turn on the unit at the main switch and when the main screen appears, touch the CHANGE TEMPERATURE button. On the screen that appears use the up down arrows to select the hot temperature you require up to 42ºC (or 108ºF) and then touch the START button. This takes you back to the main operating screen where you can now start the PUMP and the SYSTEM as usual. The status bar lights will turn RED when you touch the START button to indicate that your iCool is now heating. It will continue to heat until it reaches your pre set temperature and then hold that temperature for as long as you wish.

If the lights turn red but you wanted to cool, it is because you have set a temperature higher than the current pool temperature so the system "thinks" you want to heat the water. So start again by setting a temperature that is lower than the current water temp. Once you start the system and the lights are green, then you can set any temperature you need and your iCool will remain in the cooling mode.

**You must use a pool cover when heating the water.**

We all understand heat rises and so you must use a cover on top of your pool when heating it or you will lose a large amount of the heat energy into the room and it will take much longer to heat the water.

**If the status bar lights turn red when you start a cooling cycle.**

For safety reasons the system will not change from heating mode to cooling mode or cooling to heating unless you re start it by turning the main power off and back on. Then it will operate in the mode you first set.

# SPECIFICATIONS COMPARISONS

## COMPACT MODELS

| | Compact Cool | Compact Plus (+) | Compact Dual Temp | Compact XP Dual Temp |
|---|---|---|---|---|
| Cooling Power | 4000 Watts | 5000 Watts | 5000 Watts | 7000 Watts |
| Heating Power | | | 5000 Watts | 7100 Watts |
| Run (& Max.) Power 220 Volts | 5 Amps (12 Amps) | 6.5 Amps (13 Amps) | 6.5 Amps (13 Amps) | 7.5 Amps (14 Amps) |
| Run (& Max.) Power 110 Volts | 10 Amps (22 Amp) | 13 Amps (26 Amps) | 13 Amps (26 Amps) | 15 Amps (28 Amps) |
| Heat Pump Type | Rotary | Rotary | Rotary | Rotary |
| Earth Leak Safety Device | Yes 30 Milliamps | Yes 30 Milliamps | Yes 30 Milliamps | Yes 30 Milliamps |
| Titanium Heat Exchanger Tank | Yes | Yes | Yes | Yes |
| Roller Bearing Transport Wheels | Yes | Yes | Yes | Yes |
| Stainless Steel Handles | Yes | Yes | Yes | Yes |
| Fully Automatic Operation | Yes | Yes | Yes | Yes |
| Hi Resolution LCD Colour Touch Screen | Yes 7 Inch 800 x 480 Resolution | Yes 8 Inch 800 x 480 Resolution | Yes 8 Inch 800 x 480 Resolution | Yes 8 Inch 800 x 480 Resolution |
| Electrically Isolated Pump | Supplied by built in R.C.D | Supplied by built in R.C.D | Supplied by built in R.C.D | Supplied by built in R.C.D |
| Air Flow Capacity | Low Noise 1500 Cubic Ft per Minute | 3 Speed 1200 Cubic Ft per Minute | 3 Speed 1200 Cubic Ft per Minute | 3 Speed 1200 Cubic Ft per Minute |
| Power Plug | 3 Pin Heavy Duty to suit country | 3 Pin Heavy Duty to suit country | 3 Pin Heavy Duty to suit country | 3 Pin Heavy Duty to suit country |
| Weight Kilos / Pounds | 32kg 72 Lbs | 36kg 79 Lbs | 36kg 79 Lbs | 39kg 85 Lbs |
| Dimensions H. W. D. Millimeters | 24 x 19.5 x 9.5 | 24 x 19.5 x 9.5 | 24 x 19.5 x 9.5 | 24 x 19.5 x 9.5 |

| MATERIALS | |
|---|---|
| Cabinet and Chassis | Marine Grade Aluminium |
| Coatings | Heat Fused Appliance Grade Enamel |
| Heat Exchanger | Titanium |
| Heat Pump Plumbing | Commercial Refrigeration Grade Copper |
| Handles | Stainless Steel |
| Plastic Panels | Co Extruded Acrylic |

**NOTE ABOUT SPECIFICATIONS:**

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 or other factors. Also certain specifications may change due to ongoing research and development, because we are constantly improving our products. 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**

**Thank you for choosing iCool, the world's most popular ice bath therapy and recovery systems**

www.iCoolSport.com

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