

## **Owner's Manual**

Compact Range 2024

Series 5





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# Your iCoolSport Compact

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### What's new in Series 5

#### **Owner's Manual**

The Series 5 of the Compact Range has been designed with improved performance and the latest technology in cooling and heating power. Today's iCools are the most powerful mobile ice bath machines on the market to give you the fastest chilling performance available anywhere. Manufactured from the highest quality materials and components for long service life. Ice bath sessions are quick to set up, easy to use, easy to pack up and transport.

#### **Superfast Cooling**

The Compact Series 5 range are the latest version our the best selling range of cooling and heating machines ever. More than 20,000 in service worldwide.

Perfect for small and medium size baths from 200L up to 2,000L. Depending on the model, they can cool or heat your pool in as little as 1 hour outperforming anything else on the market

#### **Wide Temperature Range**

All Compact models have the capacity to chill water down to  $4^{\circ}$ C ( $40^{\circ}$ F). Dual Temp models also have the capacity to heat water up to  $40^{\circ}$ C ( $104^{\circ}$ F). The IceMan machine has capacity to chill water down to  $2^{\circ}$ C ( $35^{\circ}$ F). These limits are preset in the machine software for your safety.

#### 100% mobile

The most advanced cooling power in a slim profile compact mobile package so you can take a cold plunge wherever your recovery takes you. Transport made easy with ransport two strong handles and two smooth running roller wheels.

#### **HD Touch Screen**

All models feature as standard a big bright & great looking HD touch screen, the industries biggest, clearest and best.

#### **Remote Control**

Remote control is available by connecting your Compact to your home network and pairing it with your smartphone, tablet or computer.

## Use with any iCool pool even your own bath tub.

All Compact models can be used with any of our large range of portable pools, our IcePod or our MiPod pools. Or you can use with your own pool or bath tub. We can provide the spedcial fittings needed to connect to quick connect to almost any pool or bath tub.

#### 24/7 Operation

All Compact chillers are designed for any type of use, from once a week to non stop 24/7 operation. All done fully automatically and quietly with a simple one touch start on the large bright smart tech touch screen.

### Identify your Compact

This manual is intended to help you get started with your Compact Range machineand to know your device's features, specifications and operating instructions. First let's identify your product. Below are some guidelines to help you determine your exact model series and your machine's voltage.

#### **Identify your model**

Your device's model name is printed on the front cover of your unit 1. There are 5 models in the Compact Range:

- > Compact Cool
- > Compact Cool Dual Temp
- > Compact XP
- > Compact XP Dual Temp
- > IceMan

#### **Identify your series**

The Series of your product corresponds to a certain 'batch' of cooling units made at a certain date. The Series is marked on the side panels of your device and on the front page of your owner's manual.

### **Identify your voltage**

To determine the voltage of your machine, please refer to the voltage label affixed on the left hand side of your unit 13.

#### **Identify your serial number**

Your *Device ID* (or Serial Number) is noted on the label attached at the back of your unit 9.

#### **Included with your Compact\***



Full HD Capacitive Touch Screen built-in



Industrial Water Pump with fittings to match the voltage of your machine (220V: Yellow Davey Pump / 110V: Red Marlin Pump)



Complete Hose Set:

- > 18mm x 3000mm (red or light green)
- > 12mm x 3000mm (dark green)
- > 18mm x 500mm (red or light green)



Standard pool fittings to suit 19mm (1") pool connections.

Actual colours may vary due to quick fittings supplier batches.



Power plug to suit country (EU, USA, AUS or UK)

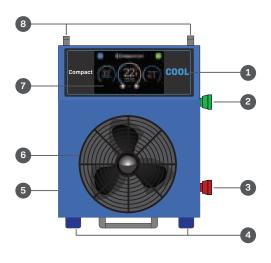


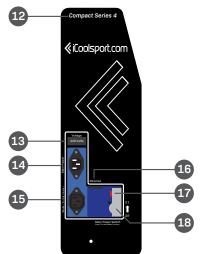
Owner's Manual

The high quality Quick Connect water fittings we supply are a patented design available only from one specialist manufacturer. Therefore, colours in your kit may vary. RED fittings may be replaced by LIGHT GREEN fittings for example.

#### **Front View**

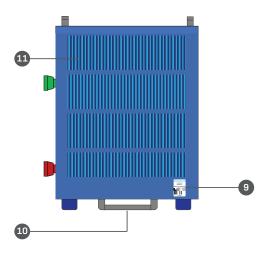






#### **Back View**

### **Right Side View**





- 1 Product Model
- 2 Water OUTLET
- 3 Water INLET
- 4 Wheels
- Main Chassis
- 6 Fan
- Standard Control Touch Screen
- 8 Top Handles
- 9 Serial Number
- 10 Bottom Handle
- 11 Condenser
- 12 Product Series
- Machine Voltage (110V or 220V)
- 14 Main Power Socket
- 15 Water Pump Power Socket
- Ethernet Port
  (use for Remote Control Version)
- Safety Test Button
- 18 Main Power Switch

## Specifications

MODEL	COOL	COOL Dual Temp
Power Line Voltage Cooling / Heating Running Power 220V (& Max.) Running Power 110V (& Max.) Frequency 110V / 220V	Manufactured in 110V or 220V 5200 Watts / Chill Only 5 Amps (12 Amps) 10 Amps (20 Amps) 50/60Hz	Manufactured in 110V or 220V 5200 Watts / 5400 Watts 6.5 Amps (13 Amps) 13 Amps (26 Amps) 50/60Hz
Finishes & Materials Cabinet & Chassis & Coatings Heat Exchanger Heat Pump Pumbing Handles / Wheels / Side Panels	Marine Grade Aluminium - Blaze Blue Titanium Commercial Grade Copper St. Steel / Polyurethane / Co Extruded Acrylic	Marine Grade Aluminium - Blaze Blue Titanium Commercial Grade Copper St. Steel / Polyurethane / Co Extruded Acrylic
Size & Weight  Net Height x Width x Depth in mm  Net Weight Kg / Pounds  Size & Weight in STANDARD SHIPPING (LxWxH)  Size & Weight in TRAVEL CASE (LxWxH)	650 x 550 x 350 mm 32 Kg / 72 Lbs 650 x 460 x 840 mm 45 Kg 880 x 490 x 830 mm 52Kg	650 x 55 x 35 mm 36 Kg / 79 Lbs 650 x 460 x 840 mm 49 Kg 880 x 490 x 830 mm 57Kg
Pool Compatibility & Recommended Pool	Max. 500L pool / IceOne Pro	Max. 500L pool / IceOne Pro
Operation Lowest Temp / Highest Temp Automatic operation 24/7 operation allowed	4ºC (40ºF) / No heating Yes Yes	4ºC (40ºF) / 40ºC (104ºF) Yes Yes
<b>Display</b> Software-chip Standard Display: 10 inch High Definition Remote Screen Remote Control over WiFi	Developed by iCool Full HD Capacitive Touch Screen Optional Yes	Developed by iCool Full HD Capacitive Touch Screen Optional Yes
Electrical  Earth Leak Device for maximum user safety Power Plug 3 pin UK, US, AUS, EU Airflow Sound Compressor Manufacturer Water Pump electrical safety	Yes 30 Milliamps max allowed leakage 3 Pin Heavy Duty to suit country Low Noise - 2000 Cubic ft per minute 59 dBa tested at 1.5m Rotary type by Panasonic or Mitsubishi Powered by built-in RCD electrical safety device	Yes 30 Milliamps max allowed leakage 3 Pin Heavy Duty to suit country Low Noise - 2000 Cubic ft per minute 59 dBa tested at 1.5m Rotary type by Panasonic or Mitsubishi Electrically Isolated Pump supplied by built-in Powered by built-in RCD electrical safety device

ХР	XP Dual Temp	ICEMAN
Manufactured in either 110V or 220V	Manufactured in either 110V or 220V	Manufactured in either 110V or 220V
7200 Watts / Chill Only	7200 Watts / 7100 Watts	7800 Watts / Chill Only
7.5 Amps (14 Amps)	7.5 Amps (14 Amps)	7.5 Amps (14 Amps)
14 Amps (28 Amps)	15 Amps (28 Amps)	14 Amps (28 Amps)
50/60Hz	50/60Hz	50/60Hz
Marine Grade Aluminium - Blaze Blue	Marine Grade Aluminium - Blaze Blue	Marine Grade Aluminium - High Gloss Black
Titanium	Titanium	Titanium
Commercial Grade Copper	Commercial Grade Copper	Commercial Grade Copper
St. Steel / Polyurethane / Co Extruded Acrylic	St. Steel / Polyurethane / Co Extruded Acrylic	St. Steel / Polyurethane / Co Extruded Acrylic
650 x 55 x 35 mm	650 x 55 x 35 mm	650 x 55 x 35 mm
39 Kg / 85 Lbs	39 Kg / 85 Lbs	39 Kg / 85 Lbs
650 x 460 x 840 mm 52 Kg	650 x 460 x 840 mm 52 Kg	650 x 460 x 840 mm 52 Kg
880 x 490 x 830 mm 60 Kg	880 x 490 x 830 mm 60 Kg	880 x 490 x 830 mm 60 Kg
Max. 2000L pool / IceMate Pro	Max. 2000L pool / IceMate Pro	Max. 2000L pool / IceMan Pro
4ºC (40ºF) / No heating	4ºC (40ºF) / 40ºC (104ºF)	2ºC (35ºF) / No heating
Yes	Yes	Yes
Yes	Yes	Yes
Developed by iCool	Developed by iCool	Developed by iCool
Full HD Capacitive Touch Screen	Full HD Capacitive Touch Screen	Full HD Capacitive Touch Screen
Optional	Optional	Optional
Yes	Yes	Yes
Yes 30 Milliamps max allowed leakage 3 Pin Heavy Duty to suit country Low Noise - 3000 Cubic ft per minute 69 dBa tested at 1.5m Rotary type by Panasonic or Mitsubishi Electrically Isolated Pump supplied by built-in Powered by built-in RCD electrical safety device	Yes 30 Milliamps max allowed leakage 3 Pin Heavy Duty to suit country Low Noise - 3000 Cubic ft per minute 69 dBa tested at 1.5m Rotary type by Panasonic or Mitsubishi Electrically Isolated Pump supplied by Powered by built-in RCD electrical safety device	

Quick Set up

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### Prepare for set up

To make setup as smooth as possible, please carefully follow the instructions outlined below. Do not use the cooling unit until you have read and followed the advice in this owner's manual. Improper installation or operation may result in equipment damage not covered by warranty.

Most important: Your Machine MUST have enough air flow front and back for safe proper cooling.

#### Unboxing 🐎



We strongly recommend keeping the original packaging of your unit for as long as your warranty lasts. It can be used if you ever re-locate the chiller and offers you peace of mind for transport.

To unpack, cut vertical straps and slowly remove cardboard lid. You'll then see all your accessories in a foam block. Make sure nothing is missing.

Pull out foam block and remove cardboard edges. Your chiller is held by a zip tie on the bottom handle. Cut zip tie carefully and remove Compact from its base.

#### Requirements of the room

Your Compact can be placed anywhere you want and may be used in an outdoor area as long as it is not i direct rain or strong sunlight. As with any appliance you must avoid very corrosive environments such as very close to the ocean and avoid exposure to extreme temperatures.

Not recommended for use in air temperatures above 48°C

#### **Extreme Weather Exposure**



Never allow the water to freeze in the titanium tank or serious damage could occur that is not covered under warranty.

On very hot climates over 45°C, it may not be possible to run the system at full power due to the excessive heat. We recommend against use in air temperatures above 48°C

If the temperature inside the unit exceeds 60°C, the over heat safety circuit will operate and shut the machine down to protect the machine from heat damage. This will be displayed on the touch screen. The machine will return to normal operation automatically if the temperature is reduced to a safe level. If your machine fails to cool after an extreme heat event contact our support team. It may have vented refrigerant to reduce pressures for safety reasons. support@icoolsport.com

### **Positioning**



Your Compact unit must be placed on a flat and level surface. It should not be placed more than 25 meters from your pool. Be sure to place the pool and chiller on an area that can support the weight of the bath when full (water is very heavy, 1KG per Litre). It is recommended that you seek the advice of a qualified engineer or the local council if unsure.

We suggest that you closely consider the location for your ice bath and how you will drain your bath or pool.

#### Airflow



AS with any powerful refrigeration machine it needs plenty of airflow to operate. You must allow at least 250mm of clear distance front and back from any obstacle, wall or structure to allow proper airflow. Please also make sure it is kept away from heat sources of any kind or your operating costs will increase. You **must** provide appropriate ventilation to keep the machine within a safe operating temperature. Refrigeration machines can not cool if they can not disperse the heat effectivelyand can not operate safely in a closed space such as a cupboard or under stairs.

Your machine has over heat safety devices built in but continuous operation at close to the extreme heat safety setting of 60°C can cause long term damage or loss of refrigerant.

 ${\tt Contact\ support@icoolsport.com\ if\ your\ machine\ fails\ to\ chill\ properly\ after\ an\ extreme\ heat\ event.}$ 

#### **Water Condensation**

Your machine is a very powerful refrigeration device. All such devices produce very cold surfaces that will condense moisture from the air in humid or damp conditions. This is why all airconditioners need a drain from the indoor evaporator. Water vapour may condense and leak from under your chiller. You can place a drip tray under the unit to catch the water if this is persistant. It is more likely if your machine is hesating water as the panel at the rear becomes extremely cold.

### **Assembly Connection**

The first step is to connect the water hoses between your chiller, your water pump and your pool. Compact chillers have quick connect fittings that are compatible with the same fittings on all iCoolSport pools Range. In this case you only need what is supplied in your kit. If you wish to connect your machine to your own pool or bath tub we can supply special plumbing devices that can add the convenience of these same quick connectors to your own pool ot tub.

## 1. Connecting the water hoses to your Compact

Connect your hose set to your Compact by following these diagrams and matching the colours of the connectors as shown.

To connect the water fittings, line up the white marks and twist clockwise 1/4 of a turn to lock them.

## 2. Connecting the water hoses to your water circulation pump

Use the shortest length of hose supplied with the RED connectors to join the water inlet on the bottom of the chiller to the top (outlet) connection of the water pump as shown below.

The longer length of hose with RED connectors is used to join the bottom connection of the pump (water inlet) to the bottom connection of the pool. This allows the pump to suck water from the bottom of the pool and feed it to the chiller.

NOTE: Your pump may not look exactly like the one below but the connections and water flow will be the same.

## To keep the pool water while cleaning the filter



A Ball valve is included with your chiller if ordered with an IcePro or IcePod tub.

This valve must be connected to the BOTTOM outlet of your pool and then to the longer hose with RED connectors. It must be open when chiller is ON.

It also allows you to remove the chiller but keep the water in the pool.

## Using your machine as a remote chiller for a MiPod



If ordered as a **MiPod Remote chiller**, your
machine will come with
PVC barrel unions installed
to allow for permanent
connection to 1 inch
standard PVC pool pipes.

Installation is recommended to be completed by a certified plumber.

#### Your own bath, spa or tub

If using your **own bath tub**, there are options to connect it to your chillers quick connect hoses.

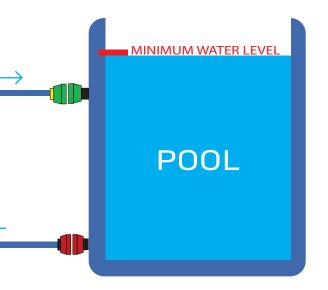
We can provided "thru hull" fittings to fit to your tub or pool that match our quick connectors and hoses. This requires 2 small holes to be drilled in the tub to accept the special fittings.

Alternatively we can supply a low voltage submersible pump that can be safely operated under water in the bath tub and can therefore lift the water over the edge of the bath to the Compact machine.

## 3. Connecting the water hoses to your Pool

The thinner and longer length of hose with GREEN connectors connects from the top of the chiller to the top of the pool.

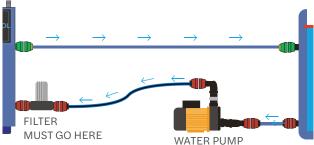
NOTE: The colours of our pool fittings supplied in your kit may be different (the red may be light green instead) but regardless of that the hose connections will be exactly the same.



## 4. Connecting a Water Filter (Optional)

If using the optional iCool Compact filter, an additional 500mm hose is provided if ordered at the same time.

Place the filter between the pump and the Compact machine as shown in the digram below. The filter can connect directly to the Compact. This layout provides maximum pressure to the filter for best effect.



#### 5. Fill with water

Once all hoses have been connected, fill your pool with water. Please make sure the pump is being compeletly filled with water from the hose connecting it to the bottom of the pool and that both the hose and pump are entirely below the water in the pool. Pool pumps can can not operate (prime) unless compeletley filled with water and any trapped air is removed.

When filling the pool always account for the volume of water the person using it will displace to avoid an overflow.

### **Power Connection**

Next connect the chiller to the mains power. You must make absolutely sure that you do not connect your Compact machine to the wrong voltage or this will cause serious damage not covered under warranty. Please check the voltage on the name plate above the power IN socket - it is either a 220 volt model or a 110 volt model.

#### **Power Connection**



Compacts must be connected to the voltage marked on the machine, /!\ they are NOT multi-voltage and using a different voltage may cause severe damage. Please avoid the use of long extension cords as they may result in voltage drops that may trigger the inbuilt under voltage safety system.

Your Compact must be connected to standard AC power capable of providing at least 13 Amps in countries with a 220v supply, and 26 Amps in countries with a 110v supply. The Compacts require much less power than this for normal operation, however they need more power for up to a minute each time they start up and this must be allowed for.

All AC power outlets used must have an earth connection that complies with your local electrical safety regulations.

#### 1. Connect MAIN POWER

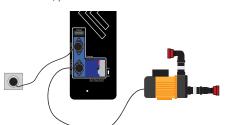
Plug the MAIN POWER to the top socket. You must use the correct voltage shown above the socket.



#### 2. Connect WATER PUMP

Plug the WATER PUMP to the bottom socket. If not using the water pump provided, do not use pumps exceeding 1,000 w.

If your model is 220V, please follow connections shown below.



If your model is 110V, please follow connections shown below for 110V for the International Marlin Pump suppied.



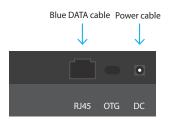
#### 3. SWITCH ON

Turn the Main Power Switch to ON to start the unit.

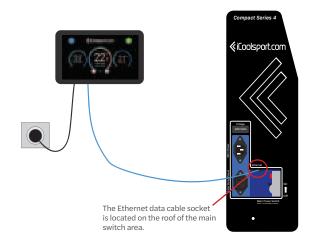


## **4. Connect to your Remote Compact Screen (Optional)**

If you have ordered the optional REMOTE COMPACT SCREEN VERSION, your chiller will come with a separate box that includes a 13 inch Remote Screen. The screen will come with its own power DC cable and a Blue Data cable plus wall mounting hardware & instructions.



To connect the screen to your chiller, plug the DC cable to your screen and to a nearby power outlet, then connect the Blue Data cable to the RJ45 socket behind the screen and the other end to the Ethernet socket in your chiller as shown in the diagrams below. Once connected, your screen will turn on and load the software automatically.



Final assembly should look like this:



## The iCoolSport User Interface

03



### **User Interface**

The iCoolSport user interface is the most advanced in the industry. Completely redesigned to provide completely automatic start up and run operations, water flow correction and multiple safety features plus intelligent power management.

#### 1. Start Up & Software Loading

Switch on the MAIN POWER, the touch screen will be blank for a few seconds.

Then the "Starting your iCool" screen will appear. This will continue for up to a minute while your machine is loaded the operating software and running a full system check.

DO NOT TOUCH THE SCREEN DURING THIS SELF TEST PROCEDUR or it could interupt the system check.

#### 2. Welcome Screen

A welcome screen movie of ice and snow will now appear indicating that the machine has loaded the latest software and all safety checks have been completed successfully.

TOUCH the screen anywhere and the Main Operating Screen will appear and your machine is now ready to use.





#### 3. Starting Up

To start the machine, simply set the temperature you require by repeatedly clicking • or • and then quickly touch the "Set" button to lock in the target temperature you set.

Then press START and that's it. Your machine will begin a fully automatic START UP SEQUENCE and if it detects that everything is safe to operate it will continue automatically to cool (or heat if you have a reverse cycle model) until the water in your pool reaches the temperture you set. It will then hold that temperature for as long as you wish.



#### 3. Starting up.

A PROGRESS BAR will appear along the bottom of the screen during the automatic start up sequence to show the progress. Normally you can ignore this it is simply to provide useful information in the event that the machine is unable to continue for any reason. If it fails to start for it will inform you on the screen what the problem is. Our engineers can usually identify any problem from these sequences.

1 Starting Water Flow: your machine will automatically start the water circulation pump first. Water should start flowing in to your pool and it will say "Water flow started".

2 Starting System: after a few seconds, the refrigeration compressor motor will start. This sound is easily recognisable. If everything runs correctly, it will say "System started"

(3) Introducing Air Flow: after a few more seconds, the main airflow fan will start.

4 As long as the water is actually flowing everything will continue automatically.



If everything has tested correctly and the machine is now chilling to the set temperature the screen will look like this. It will show the temperture you set on the left, the actual pool water temperature in the middle and the temeture of the operating machinery on the right. The animated arrow will indicate if the machine is cooling or heating (reverse cycle models)

#### Run it as long as you need to.

There are no running time restrictions you can leave it on for as long as needed, even non stop 24/7 if you wish. The automatic systems will maintain your set temperature exactly and the intelligent power management system will make adjustments to use the lowest amount of electricty possible.

#### **Trouble Shooting a start up error.**

If the water does not flow steadily the safety sytem will shut the mahine down to protect the titanium heat exchanger from freezing solid. Usually this is due to air being trapped in the hoses or in the pump body. Your machine will make 3 automatic attempts to clear any air trapped. If that is not successful, the screen will let you know that it was unable to resolve the water flow issue. You will need to check why the water is not able to flow. (see page 31)

Immediately following the start up of the water pump the refrigeration motor will start. A small vibration and a low motor sound should be heard. If you don't hear this please contact support@icoolsport.com

3 Following the starting of the refrigeration motor the main cooling fan will begin to spin and sending air out from the front of the machine. If the fan does not start it is very important to turn the machine off to avoid overheating it and to contact support@icoolsport.com

These probems are all very unlikely, but the above checks will assist our engineers to understand the issue and to quickly resolve it for you.

### **Basic Settings**

The new user interface looks and works like a smartphone. You can change settings for temperature units, speaker volume and energy saving by clicking on the menu icon.

#### THE HOME SCREEN LAYOUT

The Main Operating Screen (or Home Screen) allows you to see the current temperature of your pool, machine and the pre-selected temperature.



#### **SETTINGS**

You can change various display settings by touching the Menu Button and selecting SETTINGS.

#### **Temperature Unit**



You can switch between **Centigrade** or **Fahrenheit**.

#### **Light/Dark mode**



You can change the display mode of your screen to **Dark mode**.

#### **Volume**



You can change the volume of the system sounds by repeatedly touching or +.

#### **Energy Saving**



You can set different levels of energy saving. Level 1 provides full cooling power, Level 5 saves the most electricity. We recommend keeping it at 2 as a default.

#### **SYSTEM INFOMATION**

All information about your machine is available in the Menu.

Go to MENU icon (top left) and select INFO

The screen will show.....

- > The *Device ID* (or Serial Number), also noted on the label attached at the back of your unit. This ID number will need to be given to us in the event of warranty queries and repairs.
- > The *Model* (or Product Name).
- > The Software Version of your device.
- > The *IP Adress* of your device. This number is needed if you want of control your Compact machine remotely over Wifi (see following pages for more information about remote control).

#### To LOCK your touch screen.

You can prevent others from using your machine or making changes by locking your screen with a 4-digit passcode.

To set a passcode, go to the MENU icon (top left) and select "Set a PIN"

Enter any 4 digit code.

With your 4 digit PIN now set you will need to enter it to start up the machine or to make any changes while the machine is running.

You can remove the lock by following the same path and selecting "Remove PIN".





### WiFi Set Up

You can connect your machine to your local WiFi network to remotely operate it from any smartphone, tablet or computer connected to the same network.

#### Step 1

Choose WiFi from the MAIN MENU of your iCool. Next, click WiFi WIZARD.



#### Step 2

Click SCAN FOR NETWORKS. The scan might take a few minutes.



#### Step 3

When the scan is complete, a list of available WiFi Networks will be shown.



Scroll down the list if your network is not visible at the top and select yours.

#### Step 4

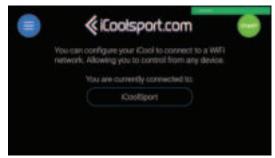
Enter the password and press CONNECT. For capital letters, press SHIFT. For numbers and symbols, press ?123.



If it fails to connect, check password and try again.

## Local network remote operation.

A GREEN notification will appear when the connection is successful.



Your network name will be visible in the middle of your screen. To change your connection, simply tap the network name to reconfigure your settings.

#### Step 6

Click on the Main Menu and choose INFO.

An IP address will appear in the bottom right label as pictured.



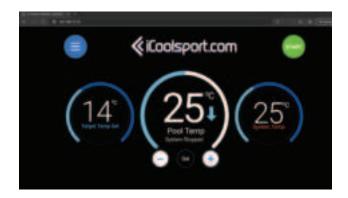
To control your chiller remotely, you will need to copy this IP Address onto a web browser on your smartphone, tablet or computer.

#### Step 7

Open any web browser on your smartphone, tablet or computer and type this IP Address into your browser bar and press ENTER.



You should now see your iCool's screen on your device and you can now operate all the functions of your iCool from this device as long as they are both connected to the same WiFi network.



IMPORTANT NOTE: you can only reconfigure WiFi settings from the built-in Compact screen.

WiFi mode is not available with the Optional 13" Remote Control Touch Screen Versions because the remote screen also operates as a WiFi connection.

Safety

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### **Important Safety Warnings**



#### **POWER SUPPLY VOLTAGE**

iCools can only be connected to the voltage marked on the machine. They are manufactured as either 110v or 220v machines, but they are not multi-voltage. Using a different voltage may cause severe damage. All models can be used on both 50 Hz and 60 Hz AC supplies.

#### **ELECTRICAL POWER CONNECTION**

The power input socket on the side of your iCool must be connected to standard AC power capable of providing at least 13 amps in countries with a 220 V supply and 26 amps in countries with a 110 V supply. The iCool requires much less power than this for normal operation, however all heat pump compressor motors need considerably more power for up to a minute each time they start up and this must be allowed for.

## AN APPROVED EARTH CONNECTION IS ESSENTIAL FOR SAFE OPERATION

To ensure safe operation, the AC power connection you use must have an earth connection that complies with your local electrical safety regulations.

#### **EMERGENCY STOP**

In an emergency, push the ORANGE button on the MAIN POWER SWITCH or switch off the main power switch and all high voltage electrical power is removed instantly from the water pumps and cooling system. Please be sure all users of the pools are familiar with this function. Make sure all operators and users know where the ORANGE button is to remove all power. This button is located on the Main Power Switch. In most cases of electrical leakage this function will operate automatically to remove all power.

## ELECTRIC SHOCK PROTECTION LIMITATIONS

All iCool machines have built-in electrical safety residual earth leakage protection systems. It can only protect against devices actually connected to the iCool including the water pump. It can not protect against faults in other unrelated electric devices in the area.

All electric devices in any pool area must be connected to a power supply that also has a residual earth leakage device either at the main switch board or on the device itself. Never risk using unprotected electrical devices near water.

#### SAFE TEMPERATURE SETTINGS

Following international safety recommendations your iCool will not accept water temperature settings below 4°C 39°F) as this would put athletes using the system at risk of hypothermia. Also it will not accept heating temperature settings above 40° C (104°F) to prevent any chance of scalding sensitive skin.

Please be careful with prolonged cold or heat exposure.

#### **POOL FENCING & SANITISATION**

Please contact your local authorities about pool fencing and sanitisation compliances. iCoolsport can not be responsible for local Government health requirements.

Particular care must be taken on all surfaces on or near baths. iCoolsport can not accept any liability for injury or death from users slippingon wet surfaces in and around the ice bath or chilling machine. Please ensure all users understand the risk of wet slippery conditions.

#### **BUILT-IN SAFETY SYSTEMS**

Your iCool has many essential safety features to protect against such things as:

- A loss of water flow
- Overheating of the system
- Electrical shock protection

If any such potentially dangerous situation should occur, in most cases your iCool will sound an alarm, shut itself down and a warning screen will appear to assist you to identify and correct the problem.

In the case of overheating, the large main fan may continue to run for some time even after a shut down, until the temperature is safely back to normal.

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

The maximum leakage allowed is 30 milliamperes which is considered to be a harmless level. This safety device is part of the main power switch.

To confirm safe operation, pressing the TEST button on the main power switch should shut off all power to the machine and to the water pump. The water pump MUST BE PLUGGED INTO THE PUMP SOCKET ON YOUR MACHINE. NEVER plug the water pump directly to a different power outlet, doing so will mean it can be not shut down automatically in an emergency.

## NEVER RESTART WITHOUT IDENTIFYING AND CORRECTING ANY FAULT

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

#### **ADVICE ABOUT POOL CHEMICALS**

The high quality water pump provided with your machine is especially designed for the purpose. The pumps we provide are resistant to chlorine and salt water at normal concentrations, the use of any chemicals should be kept within the range normally recommended for swimming pools to prolong the life of the pump and the titanium heat exchanger tanks inside the cooling unit.

We recommend against using bromide as it is highly corrosive to all materials and can cause irritation to athletes eyes and skin. Bromide is unnecessary in cold pools because bacterial growth is much slower at low temperatures. A small amount of chlorine is all that is needed to keep the water safe. Use standard pool test strips to determine the amount needed. If the water is emptied after each session then no chemicals are needed.

#### **EXTREME WEATHER CONDITIONS**

iCools is not responsible for damage due to extreme outdoor exposure (rain, sun, rust, salt, freezing temperatures, dust, dirt or any other debris). Your Compact should be kept in a clean and protected area away from direct exposure to the elements. Extremely dirty, dusty, damp and corrosive conditions can cause electrical problems not covered under warranty.

## ICEMAN EXTRA LOW TEMPERATURE SAFETY WARNING

The IceMan model will allow setting as low as 2°C (35°F) and on that setting it will chill as low as 1°C depending on ambient conditions and water volume. If the heat exchange tank freezes, the IceMan may stop to protects against damage from expanding ice. Special care is required using the IceMan at such cold temperatures that can be quite dangerous to untrained users. We advise supervision by another person as a sensible precaution when using near zero temperatures.

#### Maintenance

We recommended cleaning your Compact machine often to avoid dust and debris building up and reducing performance or causing other problems. For best results, use a microfibre cloths and mild cleaners to clean your unit.

#### **Operation**

The ideal operation temperature is indoors between 10 & 25°C. You must protect the machine from dirty areas, freezing temperatures or direct sun. Our machines are built from premium materials and are well protected, but must not be used for long periods in highly corrossive seaside areas or outside in extreme weather conditions.

#### **Sanitisation**

The use of chlorine, salt and mild chemical disinfectants, ozone and UV is acceptable but do not use bromide as it is excessively corrosive.

#### **Water Filter**

If using a water filter, we recommend cleaning it every week and replacing the internal cartridge every 6 months.

#### **Storage**

If not in use, your chiller must be emptied and kept ideally between 15 and 25°C, and protected from extreme weather conditions. Never leave water inside the heat excanger tank if the weather will be below zero. Expanding ice can cause serious damage.

#### **Transport**

Always move the machine by holding the handles. The machine CAN ONLY OPERATE IN AN UPRIGHT POSITION. Never lay on on its back or front sides.





#### **Operation in Very Cold Weather**



If your Compact was specifically ordered for weather conditions below freezing, you may have an anti-freeze system installed. This function is automatic and will cause the machine to stop occasionally to melt any build up of ice.

If extreme cold conditions are expected, empty the water from the unit. If not being used, do not allow the internal tank to freeze solid. Either empty the water or add salt or anti-freeze to lower the temperature at which the water freezes. If not in use, drain the unit and store at ambient temperature.

#### **Operation in Very Hot Weather**



iCool Compact machines are very powerful and capable of removing up to 7,500 watts of heat from the water (25,000 BTUs) depending on the model.

To remove waste heat from the powerful heat pump a powerful high flow cooling fan is installed. The fan is designed to move up to 3000 cubic feet of air per minute. Air flow must never be blocked by any object. It must be well clear of walls.

If the temperature inside the Compact exceeds 60°C the over heat safety circuit will operate and shut it down. The screen will give advice as to when it can be safely restarted. This may occur in very hot weather, or if the airflow is blocked by being placed too close to a wall or if an object such as a bath towel is blocking the air flow.

Never place the back of your iCool machine closer than 300mm (12 inches) from a wall or other obstruction that would restrict the flow of cooling air. Never operate your chiller in a confined space such as a cupboard or very small room, make sure there is enough airflow at all times.

Damage resulting from failure to follow these guidelines will not be covered under warranty.

## **Technical Support**

05



### Water Flow Issues

To protect the pump and the titanium heat exchanger tanks, the system will not allow operation unless the water flows correctly. If water does not flow smoothly or if there is air trapped in the system for more than 2 minutes, the safety system will first attempt to fix it by causing the pump to surge a few times, but if that fails it will direct a shut down for safety.

## **Intelligent Water Flow Correction**

if the water does not flow steadily when you first start up due to air being trapped in the hoses to and from the pool or inside the water pump, your iCool will attempt to clear it automatically 3 times.

If this is not successful the touch screen will direct you on how to correct this issue.

The most common issue that can prevent successful operation is  $\underline{lack}$  of water flow.



This can occur if air is trapped in the water pipes or in the pump, or if the flow is restricted in the hoses by some sort of blockage or the hoses are bent or twisted.

The Machine will attempt to clear the problem **automatically** several times by surging the pump to dislodge air. If after several attempts it cannot correct the lack of water flow, it will shut the machine down and warn you that action must be taken to correct the problem.

The reason for this safety feature is because running the iCool with no water flowing can cause serious damage because the heat exchange could quickly freeze solid and risk cracking the internal tank. Lack of water flow can also seriously damage pumps they need water for lubrication and cooling the motor. This is why the system will not allow operation with no water.

#### **Water Flow Issue Fixed**

If your machine can correct the lack of water flow itself it will advise that on the screen with a Green Tick Notification.

No other action is needed, it will continue to operate correctly.



## **Compact Unable to Fix Water Flow Issue**

An explanation will appear in the middle of the screen to notify you why the machine has stopped.

Your machine can not continue until the reason for the lack of water is found. This is very important because such a powerful machine could easily freeze the remaining water in the titanium heat exchange tank solid and that could cause serious damage. The operating system will not allow that to happen.



Please make sure that there is enough water and that the water level is above the minimum required (See Page 13).

If you have a water valve in your pool or elsewhere in the pipes, please make sure the valve is in the OPEN position so water can flow properly.

Disconnect all hoses, one by one, and reconnect again. Water flow can sometimes be restricted by foreign objects such as band-aids or bits of clothing.

Disconnect & reconnect GREEN and RED fittings. You may find some debris or other items blocking the water flow.

Disconnect fittings from Water Pump. You may find some debris or items blocking the water flow.

If none of the above works, please email the iCool Support team with pictures of your entire set up, your pool, your water level and all hoses connected so we can help solve your issue quickly for you support@icoolsport.com.

## **International Multi-voltage Pump - Error E07**

Your iCool machine will either come with a 220 volt Davey Pump or an International Multi-voltage Pump (Marlin). The latter is supplied for countries with 110 volt power, however, the Marlin pumps can also be used with 220v power. It has a range of power settings to suit different pool sizes and hose lengths. Increasing the power setting can help improve flow.



If you were provided with this pump, it automatically starts on its lowest setting.

If you need a more powerful water flow, the power can be increased in steps by repeatedly pressing the **SPEED** Button on the control box that is supplied with this type of pump.

This may be helpful if you are using an inflatable pool that may be restricting the water flow and the error EO7 appears meaning the water is not flowing fast enough to operate the water flow safety device in your machine. Increasing the speed of the pump will usually solve this problem.

## **Heat Exchange Tanks 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 tanks to freeze solid. This will block most or all the flow of water. It should be understood that in order to cool the pool water to these extremely low temperatures, the system must cool to at least 5°C below the set temperature to allow for losses and this takes it very close to the temperature that water freezes solid. If the tank begins to freeze up, the system will stop to protect the tanks and the screen will sound and alarm and give advice.

Allow 30 minutes for the ice to melt and then set the temperature a little higher (no lower than 8 or 9°C to prevent the tanks from freezing again) and restart. Normally settings above 8°C or 45°F will not freeze the tanks in any conditions.

If extreme freezing temperatures are expected, we recommend adding salt or anti-freeze to the water to lower the temperature at which the water freezes.

### Operating Issues

In the unlikely event that your system shuts itself down for any reason, you must identify and correct the problem that has caused the safety system to operate before allowing anyone to use the iCool. Never restart without identifying and correcting any fault.

## **Compact Not Cooling or Heating**

Your iCool has several safety systems including one that prevents the gas pressure reaching a dangerous high level. This can only happen if the machine is extremely overheated.

If the machine has been operated in very hot conditions, in a confined space or if the airflow has been blocked or partly blocked for a certain amount of time, or if it's placed too close to a wall, towel, source of heat or other object, it may cause the extreme temperature/high pressure safety system to operate causing some or all of the refrigeration gas to be lost.

### Damage resulting by any of those reasons will not be covered under warranty.

If your chiller is running normally but hasn't changed temperatures after more than an hour, please first make sure that the Target Temp is lower than the actual pool temp.

If it seems to be running correctly but is not cooling (or heating) at all, or not as well as normal, it may be due to a loss of refrigeration gas and will need to be re-charged.

DO NOT OPERATE IT UNTIL THIS IS CORRECTED OR SERIOUS DAMAGE CAN OCCUR.

Re-charging the refrigerant can be done by your local refrigeration repair person. The type of refrigerant gas and the amount needed is marked on a certificate fixed to the heat exchanger tank inside the machine.

Most Compact machines require 350 grams of R290.

#### "System Too Hot" Warning

Your machine can move large amounts of heat per hour. Naturally this heat needs to be removed into the air surrounding the system. The powerful fan can normally handle this with ease, however if the air flow around the iCool is restricted so that the heat can not escape, or the outside air temperature is more than 45°C, eventually the system will reach the limits of its safe operating range. If the temperature inside the cabinet exceeds 60°C the safety system will shut it down, sound an alarm and display the warning screen.

Please make sure that the fan is actually and the condenser fins on the back of the machine are not covered or restricted and that the area has a good flow of fresh air.

On very hot days when the air temperature is more than 45°C it may not be possible to run the system at full power due to the excessive heat build up.

Cooling a pool that has previously been heated can also cause a heat overload warning and shut down. This will only occur if the pool is above 30-35°C when you start to chill it. It is good practice to allow the heat to reduce naturally to below 30°C before starting the cooling cycle. This also saves a lot of electricity.

#### **Software Not Loading**

If the software doesn't load for any reason, we recommend turning the unit OFF and ON first to see if that solves the issue. If the issue persists, please contact iCool Support. support@icoolsport.com

#### **Screen Freeze**

This is a very rare issue. If the screen freezes while the iCool is running normally, the main computer will usually still carry on running the system and monitoring the safety features but you will not be able to change anything and the displayed temperatures will not update. You can either allow it to keep running if that is more convenient,

You can usually restore the system to normal operation by switching off the power and re starting, as you would if this happens to your computer or smartphone.

#### **Remote Screen Not Connecting**

If you're operating via the optional 13" Remote Touch screen and the screen does not connect to your chiller, make sure that the data cable is correctly plugged to the chiller and to the back of the screen. You can also try turning the unit OFF and ON again and waiting for 30 seconds. The connection should be automatic.

#### Wifi Issues

If you're unable to operate your chiller via Wifi, this is most likely due to a slow local Network or issues with your modem. In that case, you will need to operate your chiller from its inbuilt screen.

#### **Water Leaks**

Please note that your unit is a very powerful chiller and condensation will occur inside of it. Water may leak from the back of the chiller, this is completely normal. If necessary, you can place a dripping tray under the unit to catch the overflow water.

If leaks appear around fittings, unscrew fitting and add Plumbing tape to help seal the connector - this is widely available at any hardware store.

#### **Safety Switch Tripping**

If your unit is tripping the safety switch, please make sure you are plugging the chiller to the same voltage noted on the side of the chiller.

If that is correct, please check at what stage of the Progress Barthe unit trips.

1 If the chiller trips when the pump starts --> Check pump connection

② If the chiller trips when the compressor motor starts
--> Please contact iCool Support

3 If the chiller trips when the fan starts
--> Please contact iCool Support

support@icoolsport.com

### **Technical Support**

Before contacting iCoolsport, please make sure you have read through the entire manual. Most issues can usually be fixed via email, alternatively, we can offer a factory repair or we can assist in arranging for a local repair agent to do repair works. We will always do our best to get back to you on the same day, however please allow for time zone differences. We value you as a customer and we will provide help as w quickly as we can.

YOUR COMPACT IS COVERED AGAINST DEFECTS FOR A PERIOD OF 12 MONTHS FROM DATE OF PURCHASE.

THIS WARRANTY EXCLUDES DAMAGE CAUSE BY ABUSE OR NEGLECT. PLEASE READ ALL CONDITIONS ON THE WARRANTY TERMS STATEMENT AVAILABLE ON OUR WEBSITE.

#### **Obtaining Warranty Service**

Any claim under this warranty must be made within 12 (twelve) months of the date of purchase of the product. Proof of purchase may be required when applying for warranty.

Go to www.icoolsport.com/warranty for more details and send details on the Support Request Form shown on the next page, to support@icoolsport.com with a copy of your original invoice.

To check if your product fault is covered by our Standard One Year Warranty, please check the Product Warranty Statement available on our website.

iCoolsport can offer fast assistance via email, our engineers can usually identify the problem from your description and we can either recommend a local repair service or ask for the unit to be shipped to our factory for repair.

#### **Local Repair**

All local repairs must be approved in writing by iCoo. If your unit is still under warranty, we will pay our set fee for the service. We can not pay for service where the cost of the work was not pre-approved in writing by iCool.

#### **Out of Warranty? No problem!**

If your unit is no longer covered under warranty, you can still email us for support. For fast service, we recommend contacting your local refrigeration technician and they can contact us if they need any guidance. We carry spare parts for all models and even most older models

#### **Online Support**

Go to www.icoolsport.com/support and select from the wide range of troubleshooting articles prior to contacting iCool Support.

If your issue is not listed on the website, please fill out the Support Request Form and email it to our friendly Support Team at **support@icoolsport.com**.

Please allow a resonable time for us to get back to you due to time zone difference. We value you as a customer and we will get back to you as quickly as we can.

#### **iCool-certified Repairs**

To get iCool-certified repairs from our iCool Head Office in QLD, Australia, simply send your product to us and we'll assess the issue for you.

#### Cost

All freight costs will be at your charge (except return freight for approved warranty claims).

Once we have received the product, we will inspect it usually the same day depending on staff availability and send you a *Repair Estimate*.

In some cases, a repair might be covered by the iCool Standard One-Year warranty. There's no charge if the issue is covered under warranty.

#### **Time of Repair**

We always do our best to offer same-day service however if our technician needs more time, you'll be notified.

#### How to send it?

Safely pack the unit, and if possible, use the original packaging to avoid any transport damage. Make sure to attach a copy of your previously emailed Support Request Form with your unit and that all information has been provided, including contact details.

For International returns: your freight company may ask for the value of the item you are sending to Australia. To avoid having to pay duties again on your product, we recommend to list it as \$100 and make sure to note that it is being returned for REPAIR only and that it will be re-exported following the repair. This should avoid all import duties both in Australia and in your country.

Once packed, send unit to:

iCool Support 125 Olympic Circuit, Southport, Queensland Australia 4215 Tel: +61 7 5591 7646

#### **Support Request Form**

Customer Name/Last Name:
Phone Number:
Email address:
Street Address:
Product Model/Name:
Serial Number:
Retailer - Country and Name:
Date and Proof of Purchase:
Description of the issue:
Images of the issue:

A copy of the original invoice is required for all Warranty Claims.

Please be as detailed as you can as it will help us to find a personalised solution to your problem. Ex: when did the issue started, any noises, context of the situation, has it been occurring consistently, have you tried any solutions on your own.

Please also provide images of the entire set up, pool and screen.

## **≪**iCoolsport.com

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