# THEORY LABS

# Edge Tub User Manual

V1.2 - REVISED 04.01.23

# **Table of Contents**

- **01** Warnings
- **02** Parts References
- **03** Control Panel References
- **04** Setup Instructions
- 05 WiFi/App Setup Instructions
- 06 Takedown Instructions
- 07 Water Maintenance

- **08** Setting Tub Buckle Combination
- 09 Recommended Routine Maintenance
- **10** Troubleshooting Guide
- **11** Limited Warranty
  - 2 Recommended Accessories

## **A** WARNING

YOU MUST CONSULT WITH A MEDICAL PROFESSIONAL TO ENSURE YOU ARE MEDICALLY FIT PRIOR TO USING YOUR EDGE TUB. IT IS IMPORTANT YOU UNDERSTAND THE RELEVANT RISKS, SERIOUSNESS OF RISKS AND POTENTIAL CONSEQUENCES OF USING THE TUB, EITHER WITH COLD OR HOT WATER. AS WITH ANY RECEPTACLE FOR WATER, THERE IS THE RISK OF DROWNING WHICH CAN BE FATAL. IT IS YOUR RESPONSIBILITY TO ENSURE MINORS ARE ALWAYS PROPERLY SUPERVISED IN THE EDGE TUB AND ANYONE WHO ENTERS CAN SAFELY STAY ABOVE WATER. THE EDGE TUB SHOULD NEVER BE USED WHEN IMPAIRED UNDER ANY SUBSTANCE WHICH COULD AFFECT YOUR ABILITY TO REMAIN AWAKE, CONSCIOUS AND A CLEAR MIND. WITH COLD WATER, THERE IS THE RISK OF HYPOTHERMIA AND ANYONE USING THE TUB SHOULD EXERCISE EXTREME CAUTION AND SENSIBLE JUDGMENT TO EXIT THE EDGE TUB BEFORE THE ONSET OF ANY SUCH COMPLICATIONS. EXTREME CAUTION SHOULD BE USED BECAUSE AS YOUR BODY BECOMES COLDER, MOVEMENTS AND CIRCULATION IN YOUR BODY MAY SLOW DOWN. THE USE OF THE EDGE TUB WITH HOT WATER CAN RESULT IN NAUSEA, DIZZINESS AND LIGHT-HEADEDNESS. CAUTION AND SENSIBLE JUDGMENT MUST BE USED TO PREVENT ANY SUCH SIDE EFFECTS. ALWAYS LEAVE THE TUB BEFORE YOU ARE EXPERIENCING ANY SUCH SYMPTOMS. YOU ALSO UNDERSTAND THAT BY USING THE EDGE TUB, YOU WILL BE SOLELY RESPONSIBLE FOR ITS HYGIENE, SANITATION AND MAINTENANCE. THE EDGE TUB IS ONLY TO BE USED FOR THE EXPLICIT PURPOSE OF BEING A RECREATIONAL COLD OR HOT TUB AND FOR NO OTHER PURPOSES. THE BEST WAY TO AVOID ANY OF THE RISKS OF USING THE EDGE TUB IS TO REMAIN AWARE OF HOW YOU ARE FEELING AND ERR ON THE SIDE OF CAUTION.

#### DROWNING

To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times and after consulting a physician.

Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children.

Tub Cover is not a Safety Cover.

#### ELECTRICAL

This product is provided with a ground-fault circuit-interrupter integrated with the power plug at the end of the cord. The GFCI must be tested before each use. To perform the test, first ensure the *Power Switch* on the back of the *Chiller* is up in the "on" position and then press the orange "T" Test Button above the Power Switch. The *Power Switch* should flip to the down "off" position. Now flip the *Power Switch* back up to the "on" position. If this test does not cause the Power Switch to turn off, do not proceed, and contact support for assistance.

#### DO NOT USE IF THIS TEST FAILS

Do not handle electrical outlet with wet hands.

Do not permit any electric appliance within 5 feet of this product.

Only use this product with 120v/60hz electrical circuit; outlet must be grounded appropriately.

Never submerge machine or expose to direct water spray.

#### HEALTH

Elderly persons, pregnant women, infants, and those with health conditions requiring medical care especially cardiovascular and neurological - should consult with a physician before using this product.

Hot and Cold Water Immersion while under the influence of alcohol, narcotics, drugs or medicines may lead to serious injury and is not recommended.

#### Do not use alone.

Long exposure may result in hyper or hypothermia, nausea, dizziness, or fainting.

Do not exceed 5 minutes in cold or 30 minutes in hot water; excessive exposure may be harmful to health.

Always enter and exit the tub slowly and cautiously. Wet surfaces are slippery.

#### **ADVISORY**

Pool owners may need to comply with local or state laws relating to childproof fencing, safety barriers, lighting, and other safety requirements. Customers should contact their local building code enforcement office for further details.

Keep hair, fingers, towels, and other items away from the fan.

Only professional technicians may work on the system.



This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to: www.P65Warmnings.ca.gov.

# 02 Parts References

**Accessories** - Included with Edge Tub purchase.

**Carrying Backpack** - The backpack designed to carry your tub and components when needed.

**Hand Net -** The net for catching debris on the surface and within the water in the tub.

**Measuring Cup** - This is a 30cc measuring cup to use for sanitizer and oxidizer dosing.

**Oxidizer** - This Sirona Simply Oxidizer is part of the water maintenance protocol for the water in the tub. Refer to the maintenance instructions for proper use.

**Sanitizer** - The Sirona Simply Sanitizer is part of the water maintenance protocol for the water in the tub. Refer to the maintenance instructions for proper use.

**Test Strips -** The Sirona Simply Test Strips is part of the water maintenance protocol for the water in the tub. Refer to the maintenance instructions for proper use.

**Tub Patch Kit -** The patch for repairing any punctures causing an air leak in the tub.

**Chiller** - The main unit which chills/heats, circulates, and filters the water.

**Chiller Drain** - The drain with cap at the middle bottom on the rear of the chiller. This is meant to be opened to allow the machine to drain water out when the Chiller is being moved or packaged.

**Chiller Fitting Cap** - The protective caps that thread on the Chiller Inlet and Outlet ports.

**Chiller Hoses -** The flexible hoses are used to flow water from the Edge Tub to the Chiller.

**Hose Connection Fittings -** The fittings on the end of each hose. They connect the Chiller Hoses to the Chiller Inlet/Outlet and Tub Valve Fittings.

**Hose O-Rings: -** The o-rings in the hose connections. These are vital for water-tight and air-tight connections with the Chiller Hoses and Tub or Chiller.

**Chiller Inlet (Red) -** The connection on the chiller, which incoming water enters through. This is marked with a red ring.

**Chiller Outlet (Green)** - The connection on the chiller, which outgoing water leaves through. This is marked with a green ring.

**Control Panel** - The visual readout including Tub Temperature, Set Point, and the Control Buttons (detailed in Control Panel References).

**Double Action Air Pump -** The air pump to inflate and deflate the Edge Tub.

**Inflation Hose -** The hose used with the Double Action Air Pump to inflate and deflate the Edge Tub.

**External Water Strainer** - The assembly of parts that is used to prevent any debris from entering the Chiller. It connects to the Chiller Inlet (red) and is made up of the Water Strainer Cover, Strainer O-Ring, and Inner Water Strainer.

**Inner Water Strainer** - The cylindrical mesh element that attaches to the Chiller Inlet (red).

**Strainer O-Ring** - The o-ring at the base of the External Water Strainer connection (red) on the Chiller.

**Water Strainer Cover -** The metal cover that will screw on the Chiller Inlet (red) over the Inner Water Strainer.

**Inflation Valve** - The port used to inflate the Edge Tub with the Double Action Air Pump. Includes the Inflation Valve Cap, and Inflation Valve Pin.

**Inflation Valve Cap** - The cap that covers and protects the inflation valve on the tub.

**Inflation Valve Pin -** The spring loaded component of the Inflation Valve that is exposed when the Inflation Valve Cap is removed.

**Power Plug -** The plug that connects to a power source.

**Power Switch -** The power switch that toggles the Chiller power on/off.

**Storage Strap** - The strap for securing the tub when deflated.

Tub - The inflatable tub.

Tub Cover - The lockable cover for your tub.

**Locking Buckles -** The locking buckles on the tub cover that fasten and lock the cover to the tub when not in use.

**Tub Fitting** - The male connection permanently installed on the Tub Water In (green) and Water Out (red) fittings.

**Tub Valve Fitting** - The connection elbow/valve that connects the Tub Fittings to the Chiller Hoses running from the chiller. The parts of the Tub Valve Fitting are the Threaded Collar, Elbow, and Valve.

**Elbow -** The 90 degree section of pipe connecting the Connection Ring and the Valve.

**Threaded Collar** - The female rotating threaded component on the Tub Valve Fitting that connects to the Tub Fitting.

**Valve -** The stainless steel valve that controls water flow.

**Water Filter Housing** - The assembly which houses the Water Filter. Includes the Upper Water Filter Housing and Lower Water Filter Housing.

**Filter Housing O-ring -** The filter housing o-ring is located in the Upper Water Filter Housing and is used to create an air tight connection between the Lower and Upper Water Filter Housings.

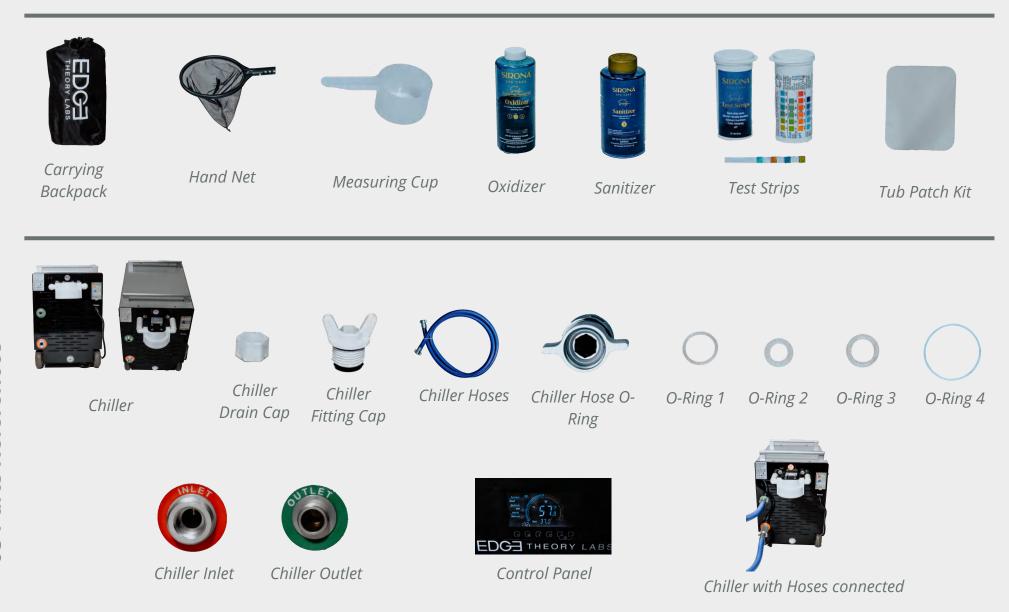
**Filter Housing Wrench -** The wrench designed to be used when the Lower Water Filter Housing is too tight to loosen by hand. Do not use the wrench to tighten the filter housing when setting up or changing the filter.

**Lower Water Filter Housing -** The filter housing which holds the water filter and connects to the back of the chiller (lower clear part).

**Upper Water Filter Housing -** The water filter housing connection point (upper white part) on the rear of the chiller.

**Water Filter -** The water filter is used to filter debris from the water running through the chiller. This is placed into the Lower Water Filter Housing.

#### Accessories













Double Action Air Pump

Inflation Hose

Inner Water Strainer

Water Strainer Cover

Inflation Valve Cap



Inflation Valve Pin



Power Plug

Power Switch



Storage Strap



Locking Buckles





Tub Valve Fitting (elbow)

Water Filter





Tube Valve Fitting (threaded collar)



Water Filter Housing

Tub Cover





Filter Housing O-ring







Water out - on tub

Tub Valve Fitting (valve)



Chiller and Water Filter Housing

Red Inlet with Water Strainer

Red Inlet with Water Water In - on tub Strainer Cover

Air Valve Wrench







# 03 Control Panel References

#### **O1 POWER BUTTON**

Press and hold for 2 seconds to turn the Chiller On or Off.

#### **02 MODE BUTTON**

Press and hold for 5 seconds to switch between Fahrenheit and Celsius temperature units.

#### **03** SETTING BUTTON

Press and hold for 1 second to change temperature setting.

#### **04 WIFI ACTIVATION BUTTON**

Press and hold for 10 seconds to engage WiFi setup mode.

#### 05 UP ARROW

Press or hold to increase set temperature after pressing Setting Button.

#### 06 DOWN ARROW

Press or hold to decrease set temperature after pressing Setting Button.

#### 05 + 06 UP AND DOWN ARROW

Press and Hold for 5 seconds to engage Child Lock.



#### **07 TUB TEMPERATURE**

Shows the current temperature of the water coming from the Tub.

#### **08** SET TEMPERATURE

Shows the desired temperature setting for the Tub.

#### **09 WATER FLOW INDICATOR**

Shows the water flow of your Chiller in liters per minute.

#### **10 MODE INDICATOR**

Shows the mode the Chiller is operating in (always "Default" for normal function).

#### **]]** DEFROST INDICATOR

Shows if the chiller is defrosting. Will display "On" or "Off".

#### 12 COOL/HEAT SYSTEM INDICATOR

Shows if the Chiller is actively cooling ("Cool"), heating ("Heat"), or on standby (blank).

#### **13** COMPRESSOR STATUS (FLAME AND SNOWFLAKE)

Shows when the compressor is running.

#### 14 WIFI INDICATOR

Shows Wifi status. Solid for connected, blinking for setup mode. No logo for disconnected.

## **Setup Instructions**

#### Setup

#### DETAILED SETUP VIDEOS CAN BE FOUND HERE.

### Step 1 – Unbox your Chiller and *Tub*

Remove the *Chiller* and *Tub* from their shipping cartons, and remove protective wrapping. We recommend keeping the Chiller box for future transportation needs. When choosing your location, select a flat and smooth surface that is free from objects that could potentially puncture or damage the bottom of the Tub. A water source and 120v power source should be accessible. We recommend setting the tub up in a sheltered area if being set up outdoors for an extended period of time for longevity of your product. Remove the Tub from the Carrying Backpack, then remove the Storage Strap and set aside. If using the optional Protection Mat, first place the mat down in the desired location. Unfold the Tub in the desired orientation.

#### Step 2 – Install the Valve Fittings to the Tub

The *Threaded Collar* on the *Valve Fitting* should be screwed onto the *Tub Fitting* by rotating it clockwise until hand tight. Do not tighten with tools. The *Valve Fittings* should be oriented as shown (see image).

#### Step 3 – Inflalte the *Tub*

Inflate the Tub using the included Double Action Air Pump, ensuring that the Inflation Hose is connected to the "Inflate" side of the pump (see image a). Open the Inflation Valve Cap on the Tub by rotating counterclockwise. When inflating the *Tub*, check to ensure that the Inflation Valve Pin is in the depressed (out) position or the air will be released after the Inflation Hose is detached (see image b). The Inflation Hose connects to the Inflation Valve with a guarter turn clockwise to attach. Inflate until the gauge reads 10 PSI. Do not over inflate or product damage will occur. When done inflating, replace the Inflation Valve Cap with a clockwise turn.

#### Step 4 – Install the External Water Strainer

First remove the protective *Chiller Fitting Caps* by rotating counterclockwise. Then, install the *Inner Water Strainer* by turning clockwise onto the red "Inlet" fitting on the Chiller. Ensure the *Strainer Oring* near the *Chiller* body is in place (see image). The silver *Water Strainer Cover* fits over the *Inner Water Strainer* and should be tightened until hand tight and the enclosure is flush with the *Chiller* body.

#### Step 5 – Connect the *Chiller* to the *Tub*

Before connecting the hoses, ensure that there is a Hose O-Ring in place inside each end of the four Hose Connection Fittings. If there is not, place an o-ring from the spare parts bag to avoid leaking. The green "Water In" fitting on the Tub should connect to the green "Outlet" on the Chiller. The red "Water Out" fitting on the Tub should connect to the red "Inlet" on the Chiller. To tighten, thread on the Hose Connection Fittings and rotate clockwise. The threads should tighten easily and smoothly. If resistance is felt immediately, try attaching the hose again. Hand tighten until resistance is felt. Please Note: the Hose Connection *Fittings* should be hand-tightened only; do not use tools. Overtightening may cause leaking or damage.

#### Step 6 – Fill the *Tub*

Check that the *Chiller Drain Cap* and hoses are in place. Remove the plastic and insert a filter into the Water *Filter Housing*, and then fill with water. Ensure the *Filter Housing O-Ring* is in place in the *Upper Water Filter Housing*. Install the *Lower Water Filter Housing* by turning right if facing the back of the *Chiller* until hand tight. Do not use the filter wrench to tighten the water filter housing. It is only for loosening. The Tub can now be filled with water up to the "Fill Level" line.

Overfilling may cause water to overflow from the *Tub* for some users, though you may fill to your preference.

Please refer to the *Water Maintenance Instructions* for the weekly protocol on checking the condition of the filter and how and when to change it.

#### Step 7 – Open valves

Once the *Tub* has been filled, confirm the Tub Valve Fittings are in the open (parallel) position (see image). Ensure this step has been completed to prevent damage to *Chiller*, and the valves are always in the open (parallel) position any time you turn your unit on. Damage will occur if the valves are closed when the machine is turned on!

### Step 8 – Power on the *Chiller*

Plug the *Chiller* into a standard 120v grounded power supply with 15 amp minimum circuit and test the GFCI functionality. To perform the test, first ensure the *Power Switch* on the back of the Chiller is up in the "on" position and then press the orange "T" Test Button above the *Power Switch*. The Power Switch should flip to the down "off" position.

Now flip the *Power Switch* back up to the "on" position. **(see image).** If this test does not cause the Power Switch to turn off, do not proceed, and contact support for assistance. Place the *Power Plug* in an elevated position off the ground and away from water. Do not handle with wet hands. You may now turn on the *Chiller* by pressing the "Power On" button on the display screen. The *Chiller* may take up to 2-3 minutes to purge air from the system and will flash "o1.x" or "02.x" while purging.

Once this has been completed, this code will change to the current water temperature and water will flow from the "Water In" fitting on the *Tub* and the *Chiller* will begin cooling or heating. If the "FL" (Flow) error appears, or if this step takes longer than 2-3 minutes, check that the *Valves* are open, and that the hose connections and filter housing are connected properly, and then repeat this step.

#### Step 9 – Set your temperature

To change the temperature set point, press and hold the "S" key for 2-3 seconds until the Set Point flashes, and then use the up or down arrow keys to set your desired temperature. Press the "S" key once more to confirm the setting. Your *Tub* will reach minimum or maximum temperature in about 3 hours depending on ambient temperature and set point. Child lock can be enabled by pressing and holding both the "Up" and "Down" arrow keys simultaneously until a beep is heard and a lock appears on the screen.

### Step 10 – Startup water sanitation

Prior to use, the water should be treated with the startup Sanitizer dose. The startup dose is below and should be used any time the water is replaced in the Tub.

- 1.Add 60cc (2 *Measuring Cup*) of *Oxidizer* into water
- 2. Wait 15 minutes
- 3.Add 15cc (½ *Measuring Cup*) of *Sanitizer* into water
- 4. Wait 15 minutes before entry into Tub

Please refer to the Water Maintenance Instructions for the weekly protocol for maintaining clean water in your Tub.

#### Step 11 – Cover your Tub

Finally, put the *Cover* on if the *Tub* will not be immediately used, and secure the four *Locking Buckles*. Note that the factory combination code for the *Locking Buckles* is 0-0. See "Setting Buckle Code" write-up in section 9 for instructions on how to change the combination code.

### Enjoy your new Edge Tub!

Please watch the Water Maintenance Instructional video for the weekly protocol you need to follow to ensure the water stays clean and clear. Enjoy!

# **Setup References**



Step 2 - Reference



Step (3a) Reference



**05 Setup Instructions** 



Step (3b) Reference



Step 4 - Reference

WAR

Step 7 - Reference

Step 8 - Reference

# 05 WiFi / App Setup Instructions



#### STEP 1 –

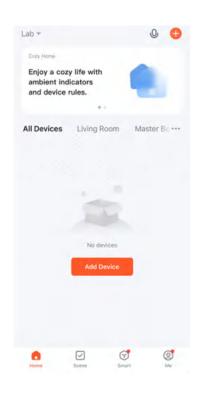
Download and install the Tuya Smart application from your mobile operating system's app store by scanning the QR Code (left) or visiting appropriate website below:

Apple: https://apps.apple.com/us/app/tuyasmart/id1034649547 Android: https://play.google.com/store/apps/details? id=com.tuya.smart&hl=en\_US&gl=US

#### **STEP 2** –

Ensure the device you are using to set up your product is connected to the WiFi network that you wish to connect the *Chiller* to, and open the *Tuya Smart* application. You will be prompted to register and set up a home location name.

*Important Note:* The Tuya Smart system only works with 2.4 GHz wireless networks. Many modern wireless networks utilize 5 GHz dual band frequencies and may need to be configured to 2.4 GHz to allow the Chiller to connect. Please contact the manufacturer of your Wi-Fi router for support on this matter if you experience trouble during Step 8.



#### **STEP 3** –

Once the Tuya Smart app is open, you may add the *Chiller* by selecting "Add Device" on the home screen.

#### STEP 4 –

From the following menu, select "Small Home Appliance" on the left sidebar menu and then select "Thermostat (Wi-Fi)."

#### STEP 5 –

Next, the Wi-Fi Network screen will prompt to confirm the wireless network that should be set up and request the password for the network. These should be entered and doublechecked before moving onto the next screen.

#### STEP 6 –

Now you may turn on the Chiller if not already by insuring GFCI is in "on" position and pressing power button (#1) on Control Panel until the display turns on.

Then press and hold the "W" button (#4) for 5 seconds until the Wi-Fi indicator on the display flashes rapidly.

#### **STEP 7** –

Once the Wi-Fi indicator is flashing rapidly, you may return to the Tuya Smart app and confirm that the indicator is "blinking quickly." If the indicator is not blinking rapidly, then retry step 6.

#### **STEP 8** –

The app will now attempt to connect to the Chiller. This may take up to 2 minutes. If the attempt fails, you will be informed that connection has failed and it will ask if you want to retry.

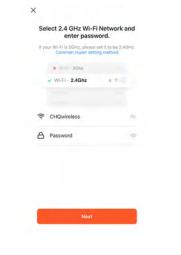
You may retry this step and if it fails again, then check that you are using a 2.4 GHz wireless band and confirm that the network name and password are correct.



Your Chiller should now be connected successfully. You may change the name of the device by selecting the pen and paper icon next to the original name.

From here, you will see the Chiller in your home screen and can select the device to see the control page. Use the circular slider to select your desired set point from anywhere you have cell service!







nfirm the indicator is blinking rapi....

Reset Device Step by Step



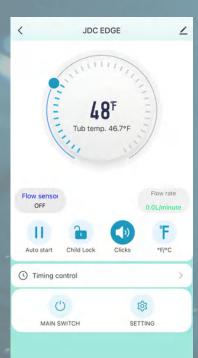
Scan devices.



### **App Timer Instructions**

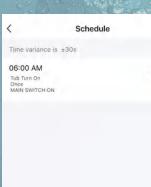
#### STEP 1 -

Open the Tuya app and navigate to the timing control option. Open the timing control page.



#### STEP 2 -

Once the timing control page is open, press and open "add schedule".



Add Schedule

### STEP 3 –

Set the desired time and desired settings. then press "save".

<	Add Schedule			Save
	4	58		
	5	59		
	6	00	AM	
	7	01	PM	
	8	02		
Repeat				Once >
Note			Tub '	Turn On >
Notification	n			0
MAIN SWITCH				ON >

# Takedown, Instructions

06

Detailed takedown videos can be found here.

#### Step 1 – Turn the Chiller off

Turn the Chiller off by toggling the Power Switch on the back of the Chiller to the down "off" position.

#### Step 2 – Close the Valves

Turn the Tub Valve Fittings to the closed (perpendicular) position (see image).

#### Step 3 – Drain the Tub

There are three methods that can be used to drain the Tub: Option (a) is best used outdoors and options (b) and (c) are best used for controlled draining of the tub.

**a.** Disconnect the red "Water In" hose from the *Chiller* by rotating the *Hose Connection Fitting* counterclockwise. Direct the hose to the desired area for drainage and open the valve. Water will flow out of the hose until it reaches the Lower Water Fitting. The remaining water can be removed by turning the tub over.

**b.** Disconnect both hoses from the *Tub* by rotating the *Hose Connection Fittings* counterclockwise. The red "Inlet" hose from the *Chiller* should be placed inside the tub as shown (see image). The green "Outlet" hose from the *Chiller* should be directed to the desired location for drainage and the *Chiller* can be turned back on. The *Chiller* will pump water out until the *Tub* has been drained down to the end of the water hose. The *Tub* can be slightly tipped as the water level gets low to remove the last bit of water. Be sure to turn off the *Chiller* immediately when the *Tub* has been drained to avoid damaging the *Chiller*.

**c.** Purchase a submersible Sump pump like shown. Connect your garden hose to the pump and drop the pump into the water. When you plug the pump in, water will begin draining. Please visit our help center or reach out for recommendations on Sump pumps.

#### Step 4 – Disconnect the Hoses

Once the *Tub* is drained, the hoses can be disconnected from the Tub and Chiller by rotating the Hose Connection Fittings counterclockwise, and the Chiller can be unplugged.

#### Step 5 – Dry the Tub

The *Tub* should now be dried inside and out (including bottom) with a towel to prevent mildew from developing. This is also a good time to clean with mild soap and water if the Tub has not been cleaned recently.

#### Step 6 – Deflate the Tub

Remove the Inflation Valve Cap with a counterclockwise turn. Press the Inflation Valve Pin to allow the air to be released. The air will release aggressively so don't be startled! Remove the remaining air by attaching the Inflation Hose to the "Deflate" side of the Double Action Hand Pump. When deflating the Tub, check to ensure that the Inflation Valve Pin is in the depressed (out) position (see image). Connect the Inflation Hose to the Inflation Valve with a guarter turn clockwise to attach. Deflate the Tub using the hand pump until all air has been removed and remove the inflation hose with a guarter turn counterclockwise. Replace the Inflation Valve Cap with a clockwise turn. The Tub Valve Fittings should be removed by Threaded rotating the Collar counterclockwise.

#### Step 7 – Fold the Tub

The *Tub* can now be folded for storage. First fold the branded "Edge Theory Labs" panel of the *Tub* inward, and allow the end sides of the *Tub* to fold towards the center. The back side of the *Tub* can now be folded over the branded side of the *Tub* so that the tub is now flat. Fold the right side of the *Tub* towards the center, with the crease being just towards the center of the right *Water Fitting*, and repeat on the left side. You should now have a trifolded *Tub*. Hold the tri-folded *Tub* with one hand, and with the other, place the *Storage Strap* under the *Tub*. Fasten the *Storage Strap* and tighten

(see images).

#### Step 8 – Pack the Tub

Place the *Tub*, *Cover*, *Hoses*, and *Double Action Air Pump* into the backpack. This is best done by starting with the *Tub*, then the *Tub Cover*, then *Double Action Air Pump*, and finally the *Hoses*.

#### Step 9 – Drain the Chiller

First, remove the *Chiller Drain Cap*. Then, unscrew and empty the *Lower Water Filter Housing*. Then, unscrew the *External Water Strainer*. The unit can be tipped slightly back to remove water inside the *Chiller*. Once drained, replace the *Chiller Drain Cap* and *Lower Water Filter Housing*. Finally, replace the protective *Chiller Fitting Caps* on the Inlet/Outlet connections.

#### You are now ready to take your adventure on the road!

# **Takedown References**



Takedown Step 2 - Reference



Takedown Step 3 - Reference



Takedown Step 6 - Reference



Takedown Step 7 - Reference



### Initial Setup (new water)

- Add 60cc (2 *Measuring Cups*) of *Oxidizer* into water
- Wait 15 minutes
- Add 15cc (1/2 *Measuring Cup*) of *Sanitizer* into water
- Wait 15 minutes before entry into *Tub*

### **Weekly Maintenance**

**SUMMARY:** There's 3 simple steps for weekly maintenance that take about 15 minutes in total to ensure that your *Tub* is running properly and the water is clean and clear. The first step is checking the water chemistry, then the *External Water Strainer*, then the *Water Filter*.

#### STEP 1 – Check Water Chemistry

- Start by adding 30cc (1 *Measuring Cup*) of *Oxidizer* for low volume (five to seven plunges per week) or 60cc (2 *Measuring Cups*) for high volume (greater than seven plunges per week).
- Wait 15 minutes.
- Immerse *Test Strip* to a depth of 6" for 2 seconds. Remove with pads face up. Shake once to remove excess water. Wait 10 seconds and compare "San" line to color chart on back of bottle. If Sanitizer shows below the "OK" range, add 10cc (1/3 *Measuring Cup*). Wait 15 minutes and test again. Repeat test and add more *Sanitizer* if necessary.
- If Alkalinity, pH, or Calcium are outside of desired range, balancers can be purchased through our website. Of these, pH is most important to have in the right range.

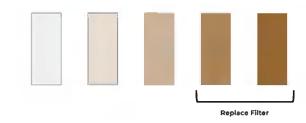
#### STEP 2 – Check External Water Strainer

• Turn off *Chiller*, and close *Tub Valves* by turning the valve handle perpendicular to the valve body.

• Remove the bottom red "Inlet" *Chiller Hose* from the *Chiller*. Remove *Water Strainer Cover* by twisting counterclockwise and check *Inner Water Strainer* for debris; remove any foreign materials present. Use brillo pad or rough sponge if necessary. Check the *Strainer O-ring* at the base of the threads is present and free from damage before reinstalling *Water Strainer Cover*.

#### STEP 3 – Check Water Filter

- To access the *Water Filter*, turn the *Lower Water Filter Housing* to the left if facing the back of the *Chiller*. Check *Water Filter* condition by comparing to the diagram below. If the condition is in the "Replace" range, or if the flow reading on the *Control Panel* reads less than 13.0 L/min, then replace the filter with a new one. When changing the filter, empty the *Lower Water Filter Housing* fully and refill up to the top with fresh water.
- Ensure the *Filter Housing O-ring* in the *Upper Water Filter Housing* (white part) is present and free from damage before reinstalling filter housing.
- Be sure to open the *Tub Valves* before turning the Chiller back on, or damage will occur!



Replace filter when color matches "Replace Filter" range above, or if water flow issues develop with *Chiller*.

# Setting Tub Buckle Combination

Use of Buckle Combination Lock is recommended for all users, but especially for those with children in the household

The original code is preset to "00"

To change or set:

- 1.Locate the pin in the side, depress the pin with a jewelers screwdriver, pen or toothpick.
- 2. While still depressing the pin, rotate the dial to your desired number.
- 3. If a number wheel gets stuck after you adjust the code, push the pin on the opposite side to release the wheel.

4. Do this for each side, one for each number.

#### Repeat above for each buckle

# Recommended Routine Maintenance

To ensure the longevity of your Edge *Tub*, it is recommended to perform maintenance on your *Chiller* and *Tub* on a regular basis. This maintenance protocol will help ensure that the *Chiller* functions as expected and that the water quality of the *Tub* is kept clean and clear. The steps below detail out the recommended maintenance, which should be performed every three months.

### Tub

- 1. Disconnect the *Tub* from the *Chiller*.
- 2. Drain all water from the Tub and Chiller Hoses.
- 3. Using mild soap and water, wash down the inside and outside of the *Tub* using a washcloth or soft sponge. Place the *Chiller Hoses* inside the *Tub* and run soapy water through them.
- 4. Rinse Tub and Chiller Hoses off with clean water.
- 5.Allow *Tub* and *Chiller Hoses* to air dry completely; preferably in direct sunlight.
- 6. Any marks or scuffs on the *Tub* can be removed by lightly scrubbing with a moistened Magic Eraser. Do not scrub aggressively or it may damage the material, and do not use on any logos or printed areas.
- 7. Check air pressure of the *Tub* by connecting the *Double Action Air Pump* and refilling to 10 PSI.
- 8. Check the area where the *Tub* was located for any signs of mildew buildup and clean if necessary. If large amounts of mildew buildup are noticed, the *Tub* may need to be placed on a material that can breathe to allow water to evaporate.
- 9. Refill with water and perform Initial *Sanitizer* protocol to sanitize the new water.

#### Descaling

Chiller

- 1. Disconnect the *Chiller Hoses* from the *Tub*. Ensure *Tub Valve Fittings* are in the closed (perpendicular) position if the *Tub* still contains water.
- 2. Place both ends of the *Chiller Hoses* into a 5 gallon bucket or similar container. Fill with distilled white vinegar (cleaning vinegar) and water at a 1:4 ratio. So for a 5 gallon bucket, fill 1 gallon vinegar, and 4 gallons water, being careful to leave room for water to circulate and not overflow.
- 3. Turn on the *Chiller* and run in heating mode at 104°F. Allow the *Chiller* to circulate water for 30 minutes.
- 4. Turn off the *Chiller* and empty the bucket of water. Refill with clean water. Place *Chiller Hoses* back in the bucket and run the Chiller for another 30 minutes. The descaling process is now complete.

#### **Housing Maintenance**

- 1. With a soft cloth, wipe down the exterior of the *Chiller* with mild soap and water.
- 2. Wipe off all soap residue with damp cloth.
- 3. With *Chiller* Off, inspect fan and remove any debris that may be on or around the fan shroud.

## **Troubleshooting Guide**

### Water Circulation Troubleshooting

#### Step One

If your *Chiller* is experiencing issues with establishing water circulation, or you see the *Control Panel* code shown in Step 1 Reference please use the following steps to diagnose and resolve;

The code above displays when the *Chiller* is first started up and while the system is priming with water for circulation. This screen is generally normal to see and establishing water circulation can take up to 3 minutes, especially if the *Chiller* and/or *Chiller Hoses* were recently drained of water.

If after 3 minutes the machine has still not established water circulation, please check each of the following. The *Chiller* can be tested in between each step. **A-** Ensure that the *Tub Fitting Valves* are in the open (parallel) position and hoses are connected without leaks.

**B-** Check that the *Water Filter* and *Inner Water Strainer* are clean and clear of debris. You can find instructions to replace and clean these parts at our **Maintenance Page.** It is a good idea to proactively replace the *Water Filter* even if it looks clean as minerals can block the filter but may not show discoloration.

**C**- Check the *Hose O-Rings* on each end of the *Hose Connection Fittings*. They should be fully seated at the bottom of the threaded fitting and when attached, the connection should only be tightened until a little resistance is felt and hose no longer wiggles at connection point. The green *Chiller "Water In"* fitting is especially sensitive to overtightening. Do not use tools to tighten.

**D-** Remove the *Lower Water Filter Housing* and ensure that the *Filter Housing O-Ring* in the *Upper Water Filter Housing* (white part) is present and not damaged. If you have a purple tinted *Lower Water Filter Housing*, check that the lower *O-ring* is present as well. When reinstalling the *Lower Water Filter Housing*, fill with water to the top and tighten only until a little resistance is felt. Do not overtighten or it will deform the gasket and potentially damage the *O-Rings*.

**E-** Ensure the *Strainer O-Ring* on the *External Water Strainer* is present and not damaged. Replace if necessary from the spare parts kit. The *Water Strainer Cover* should be hand tightened until it stops. See image below.

If the steps above do not resolve the issue, please move on to the next step.

#### Step Two

#### Check Valve (Outlet Port)

There is a *Check Valve* inside the outlet port on the *Chiller*. This can become stuck in the closed position and prevent water from flowing through the unit. If you notice that the *Chiller* is trying to prime but no bubbles are coming out from the *Tub Water-In Fitting*, this is a possible resolution. You will first close the *Tub Fitting Valves* by rotating to the Closed (perpendicular) position to the *Valve* body.

Then Remove the *Outlet Chiller Hose* and check to see if the little pin in the valve is stuck outward (toward you). If it is stuck outward, use a small screwdriver and press on it gently. If it was indeed stuck, you will feel and/or hear a little click that indicates the *Check Valve* has returned to position. Reinstall the *Chiller Hose*, open the *Tub Fitting Valves*, and try *Chiller* again.

#### Step 3

#### Air Trapped in Unit

If you have recently taken a *Chiller Hose* off of the *Chiller or Tub* (For example, to clean the Inner Water Strainer), it is possible that an air lock can be created within the *Chiller*. We will want to release this air lock in the system by loosening the *Lower Water Filter Housing*. Loosen the housing until it is completely off, fill up with water to the top, and reinstall.

If the steps above do not resolve the problem, please contact **support@edgetheorylabs.com** so that we can further assist you!



Step 1- reference



Step 2- reference

### **Other Troubleshooting**

**No waterflow / "E3" Error:** Press [Mode - second button] to restart water circulation cycle; Check to ensure *Chiller Hoses* are connected properly and *Tub Fitting Valves* are in the open (parallel) position; Check *Water Filter* condition- replace if discolored; Check to ensure Water Inlet and Outlet fittings are not blocked.

**Hose Connections Leaking:** Check to ensure gasket is in place; Disconnect and reconnect *Chiller Hose*, ensuring snug hand tight connection; Replace *Hose O-Ring* with new one.

**Tub Deflates Immediately After Inflating:** When inflating, ensure that the *Inflation Valve Pin* is in the depressed (out) position prior to hooking up the *Inflation Hose*; if unsuccessful, *Tub Inflation Valve* may be damaged and require replacement.

**Tub Deflates Over Time:** Temperature change may cause air pressure in *Tub* to change slightly, re-inflate accordingly; If deflation continues regularly, an air leak may be present. Air leaks can be found by using soapy water to locate the leak, and then the included repair kit can be used to prevent further leaking.

**Chiller Will Not Turn On:** Ensure *Chiller* is plugged into an active power source; Check *Chiller* Power Plug GFCI has not tripped by cycling Power Switch Off and then On. Test GFCI functionality by pressing the "Test" button, and reset to On position. Press the Power On button on the *Control Panel* to turn on the *Chiller*.

**Water Is Dripping From Chiller:** During heating mode, condensation may develop inside the *Chiller* unit in certain high humidity conditions. A small amount of water drainage from the *Chiller* is normal in this circumstance; Check *Hose Connections* are secure and that they are tight and have O-Rings in place; Check *Water Filter Housing* connection and that it is tight and has the *Filter Housing O-Ring* in place; Check *Drain Plug Cap* is in place and tight.

When Temperature Set Point is Increased, Chiller Does Not Stop Running: If changing from a low set point to a higher one, or vice versa, the *Chiller* will switch from Cooling mode to Heating mode to reach the new set point. The *Chiller* will also cool or heat to a temperature just beyond the set point to ensure the *Chiller* does not cycle on and off excessively, and will restart automatically when the water temperature gets outside of the set range by a few degrees Fahrenheit.

**Water Has Become Cloudy** - Check filter element and replace if discolored; Add 60cc (2oz) of Oxidizer to water to break down organics and allow to run for 2 hours; Replace water if all above fail

**Tub Is Difficult to Get Into Bag** - It is important that the *Tub* be fully deflated before folding. This is done by deflating with the *Double Action Hand Pump* with *Inflation Hose* on the "Deflate" side. Ensure *Tub* is folded correctly per Takedown instructions.

**Cannot Connect Chiller to WiFi** - Ensure that the WiFi network you are trying to access is 2.4ghz. This product only works with a 2.4ghz wireless network. Some networks can be configured to provide both frequencies if they are dual-band; Ensure WiFi password is correct by testing with another device; Ensure *Chiller* is in-range of WiFi signal; Ensure device with Tuya Smart app has internet connection.

#### Error Code: E1/FL/FU - Too much air inside the water circulating loop.

Double check the *Chiller Hoses, Hose Connectors, External Water Strainer,* and *Water Filter Housing* to see if any connections are not properly made. Review Water Circulation Troubleshooting above for more detailed steps to resolve.

#### Error Code: E2/HH - Water temperature is too high.

Wait for the water temperature to cool down and then select "Mode" (second button) to cancel this error code.

#### Error Code: E3/FU - Water flow is low.

See Water Circulation Troubleshooting instructions above for detailed steps to resolve.

**Error Code: E4/AA Temperature sensor T4 failure -** Contact Edge Theory Labs Support.

**Error Code: E5/PA Temperature sensor T3 failure -** Contact Edge Theory Labs Support.

**Error Code: CH2 Temperature sensor T2 failure -** Contact Edge Theory Labs Support.

# **Limited Warranty**

Edge Theory Labs warrants this product to be free from defects in workmanship and materials, under normal residential use and conditions, for a period of one (1) year from the original invoice date, or six (6) months for commercial use. Edge Theory Labs agrees, at its unfettered discretion, during the warranty period, to repair any defect in material or workmanship or to furnish a repaired or refurbished product of equal value in exchange without charge (cost of shipping and handling will be covered by Edge Theory Labs so long as the warranty claim is deemed legitimate, as outlined in this paragraph above) Such repair or replacement is subject to verification of the defect or malfunction and proof of purchase and Edge Theory Labs retains the right to dismiss a warranty claim if foul play is suspected. For clarity, this warranty does not include: Any condition resulting from other than ordinary residential wear or any use for which the product was not intended, such as use in rental or contract trade or commercial use, any condition resulting from misuse, abuse, negligence, accidents, dissatisfaction due to buyer's remorse, normal wear and tear, damages incurred during transportation, or failure to comply with all instructions and warnings.

# 12 Recommended Accessories

#### **Protection Mat**

Edge Theory Labs

**Electric Air Pump** Edge Theory Labs

Sump Pump Amazon

Aqua Vacuum Amazon

Garden Hose Adapter Amazon

Breathable Tiles Amazon

