

TABLESMITH



# CELR-12

## OWNER'S MANUAL

Patent Pending

# Important Safety Information

Please read this safety information before operating your Tablesmith CELR-12.

- The CELR-12 Block is hot or cold when in use. Use caution to avoid burns and always allow the Block to return to ambient temperature before handling.
- Never use extension cords or a damaged cord or plug with your CELR-12. Use properly grounded electrical outlets and unplug the CELR-12 when not in use.
- Never disassemble your CELR-12 for cleaning beyond the steps explained in this manual.
- Never use deionized water (DI) water with your CELR-12.
- Never operate the CELR-12 when the Base Station reservoir is empty.
- Never fill the Base Station reservoir with anything other than water.
- Always supervise children when they are in the area where your CELR-12 is in use.
- Always make sure the cooler you are using your CELR-12 with is food safe.
- Consuming raw or undercooked meats, poultry, seafood, shellfish, or eggs may increase the risk of foodborne illness.

# An intro to your new tool

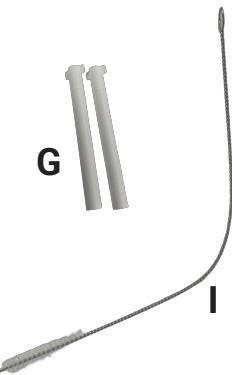
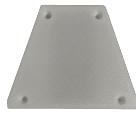
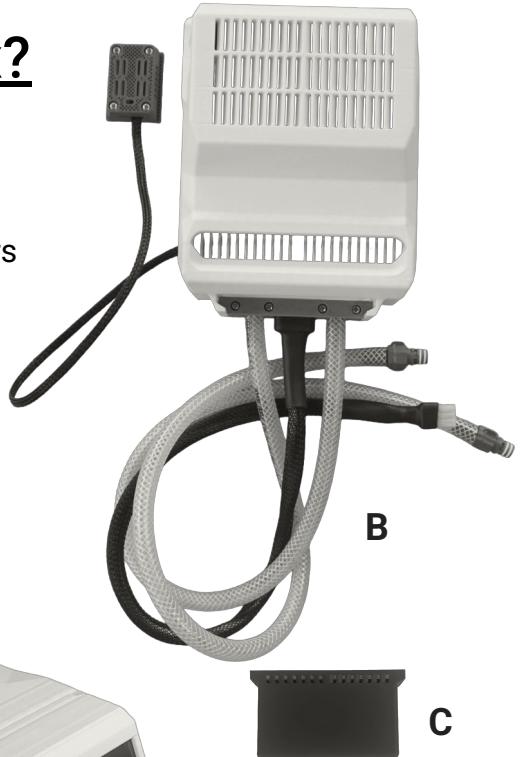
This is the CELR-12 from Tablesmith, it is designed to unlock cooking styles that were previously reserved for the pros. This machine will turn a standard cooler into your most versatile and interesting cooking tool, while being easily stored when not in use. With temperature control between 28° F - 145° F, use it to dry age, cure meats and cheeses, make fermentations, or as an auxiliary warming oven or refrigerated space.

## Understanding performance

The CELR-12 is a modular add on that is designed to be paired with a standard consumer cooler. All coolers are different, and because of this, it is impossible to predict the performance of a certain pairing exactly. Depending on variables regarding cooler choice (size, insulation, etc...) the lowest and highest reachable temperatures will vary. Your choice of cooler will also affect the speed at which you can reach temperature setpoints, and the stability of the temperature inside your cooler. In addition to cooler choice, ambient air temperature will affect performance in the same ways. For best performance, it is best to use the CELR-12 with the smallest and most well insulated cooler you can find, and in the lowest possible ambient air temperature.

# What's in the box?

- A. Base Station
- B. Block
- C. Drip Tank
- D. Hanger Plate & fasteners
- E. Power Cord
- F. Hex Key (3/16")
- G. Fill Gauge (x2)
- H. Funnel
- I. Cleaning Brush
- J. Hose Clamps
- K. Sensor Bracket



# Features of the Base Station

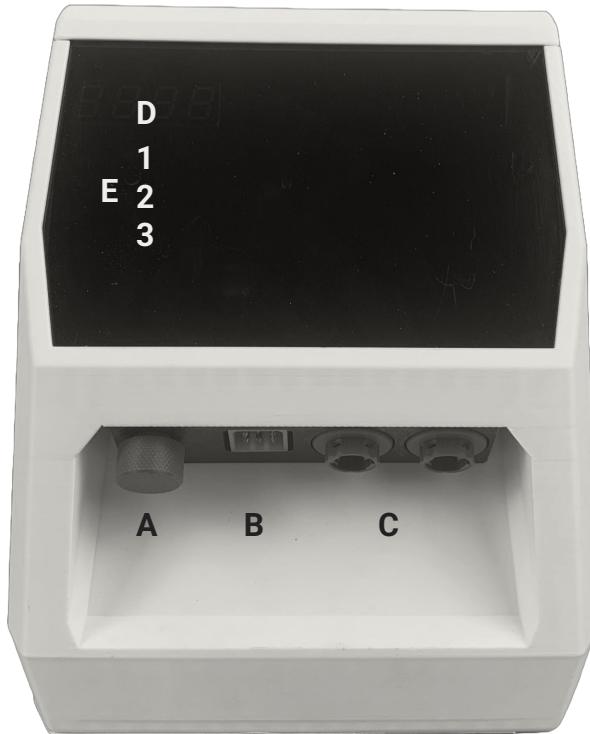
## Station Front

- A. Knob
- B. Cable port
- C. Hose ports
- D. Display
- E. Status lights



## Station Rear

- F. Reservoir fill cap (1/4" ORB)
- G. Power port



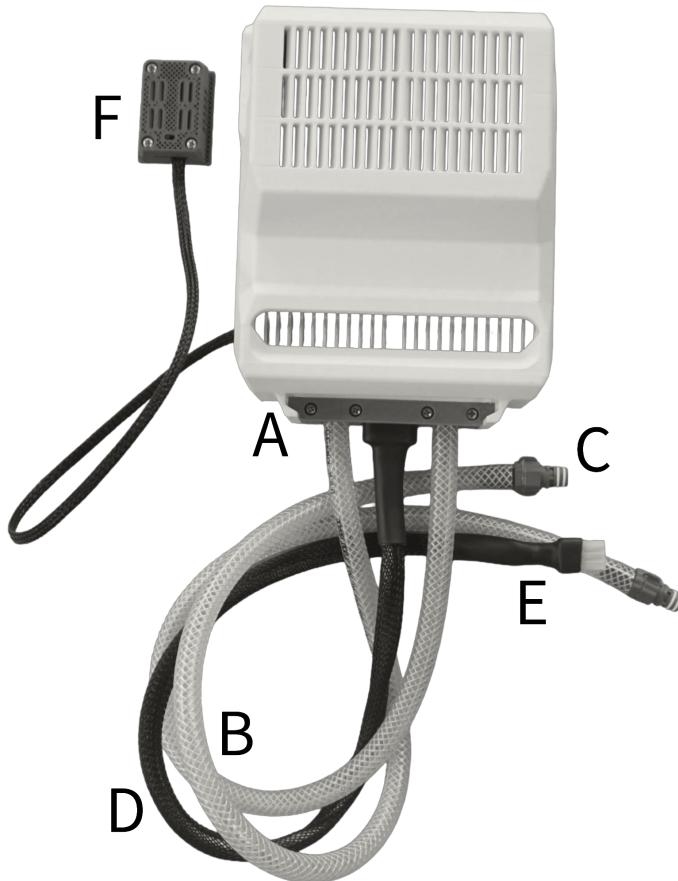
# Features of the Block

## Block Front

- A. Drip Tank bracket
- B. Hoses
- C. Hose fittings
- D. Cable
- E. Plug
- F. Sensor Pod

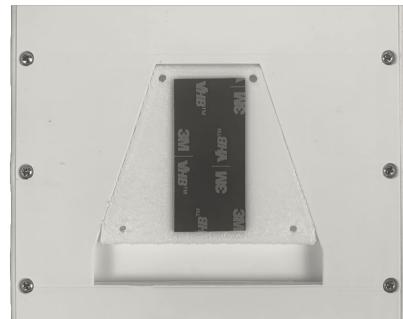
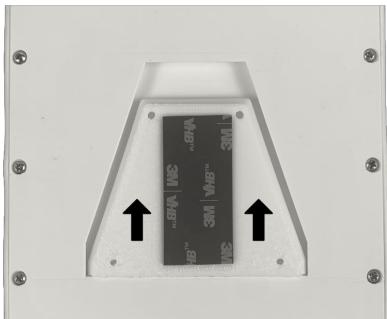
## Block Rear

- G. Hanger Plate dovetail



## Mounting the Hanger Plate and Sensor Bracket

1. The plate and bracket have adhesive tape on them, remove the film from the tape.
2. Place the Hanger Plate into the dovetail on the Block, tape facing out.
  - a. When pressed into the top of the dovetail, the Plate should stay in place on its own. However, if yours does not, you can use a small piece of household tape to secure it temporarily.



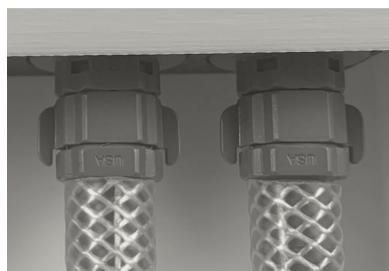
3. Orient the Block inside your cooler as desired and press the Plate against a surface of the cooler.
  - a. The Block should hang vertically, ideally on the wall above the cooler's drain.
  - b. **Once in position, use four of the included screws to securely fasten the Hanger Plate in place. The screws are required, the tape is only for alignment.**
4. Place the sensor bracket in the middle of the back wall of your cooler, and press it in place.
  - a. Screws are not necessary for the bracket, but can be used if desired.

## Set up

1. Mount the Block and pod inside your cooler.
2. Route the cable and hoses through the drain hole of your cooler.
  - a. Try the cable first, then hoses, it's meant to be a tight fit.
3. Mount the Drip Tank as desired.
  - a. Holes facing the Block - reduce humidity
  - b. Holes facing out - increase humidity



4. Plug the hoses into the hose ports on the Base Station (orientation doesn't matter).
  - a. Check for full engagement:



5. Plug the cable into the cable port on the Base Station.
  - a. Make sure to align the grooves of the plug to the grooves of the port.
  - b. Make sure the plug is pressed all the way into the port.

## Set up (continued)

1. After every six months, check the water level in the Base Station reservoir using the Fill Gauge.
  - a. When removing or fastening the reservoir cap, be gentle and careful not to strip the threads by overtightening.
  - b. NEVER fill while the power cord is plugged in, if you spill any water during filling, let it dry COMPLETELY before plugging the power cord in.
  - c. The fill gauge has a line on it, float the gauge in the Base Station reservoir, if the line is below the top of the Base Station, add water.
  - d. Fill if necessary using the funnel - go slow and take care not to overfill.

Full



Water Low



2. Plug the power cable into the Base Station power port.
  - a. Make sure the plug is pressed all the way into the power port.

# CELR-12 Controls

The knob on the front of the base station is how you control the CELR-12, it has four functions:

1. Power on/off
  - a. PRESS and HOLD the knob for four seconds to power the machine on and off.
2. Unit selection
  - a. PRESS the knob once to switch between fahrenheit and celsius.
3. Mode selection
  - a. Quickly PRESS the knob twice to switch between heating and cooling mode.
  - b. The status LEDs will rise when in heating mode, and fall when in cooling mode.
4. Target temperature
  - a. TURN the knob left or right to increase or decrease the target temperature.

# Modes

The CELR-12 has two manually selected modes, heating or cooling. Based on what temperature you're targeting and the ambient air temperature where the CELR-12 is in use, select the appropriate mode by quickly double pressing the knob.

Within cooling mode, there are two special conditions automatically activated based on the target temperature setting.

- a. If set between 28°F and 45°F, a deicing protocol will activate every 150 minutes. You'll see a slight bump in temperature during this eight minute protocol, which is normal.
- b. If set below 28° F the machine goes into full cold mode, which means that temperature monitoring is deactivated and the cooling element is turned on continuously. This mode gives you max cooling power but may ice up after extended use.

# Display and LEDs

The CELR-12 gives you feedback two ways, the display and LED lights.

Under normal operation, the display will cycle between four values, current temperature, average temperature over the last hour, current humidity, and average humidity over the last hour. The averages are denoted with a dot on the far right side of the screen, so it will look something like xF, xF., xH, xH.

When in full cold mode, the display shows “FULL”, when an error occurs, the display shows “CERR” or “HERR”.

The LEDs are animated to denote heating or cooling mode, either rising or falling. When the current temperature is within 5°F of the set point, the animation is slow, when outside that range, the animation is fast.

When an error occurs, all three LEDs will flash.

## **Notes on safe use**

**WARNING** FULL cooling mode has no protection against ice. After extended use, the Block may clog with ice, which will cause the air temperature inside your cooler to rise.

**WARNING** Because each cooler and set point will cause differences in performance, you are responsible for maintaining food safe conditions.

**WARNING** The Block can be hot after use. Always allow it to cool before handling.

**WARNING** Depending on the set point and cooler you're using, high temperatures may cause warping to your cooler.

# Cleaning

It is recommended to clean the Block after every use. Place or hold the Block in a vertical orientation. Dip the provided cleaning brush into a food-safe sanitation fluid solution and run it repeatedly through each channel of the Block. While doing this, make sure the brush is damp, but not dripping, it is important not to leave excess fluid inside the Block.



Wipe down all exposed surfaces of the Block, hoses, and cable with a rag soaked in the same solution. Never submerge any part of the CELR-12.

NEVER store the Cooler Block inside a sealed cooler when in use. This can lead to mold growth or degradation of the components inside.

# Error Messages

If the CELR-12 encounters an error, it will display one of the following messages and flash all three status lights.

1. HERR - Overheating error
  - a. Low water in the Base Station
    - i. Fill the reservoir
  - b. Bad hose connections at the Base Station
    - i. Make sure the fittings are fully seated into their ports and locked
  - c. Latent Block heat
    - i. Let the Block cool down
    - ii. If you were using the CELR-12 in heat mode above 100° F and you switch it to cool mode, it will not operate until the Block drops below 100° F.
2. CERR - Communication error
  - a. Bad cable connection at the Base Station
    - i. Make sure plug is properly seated into its port
  - b. Moisture buildup on the sensor
    - i. This can happen if rapidly changing target temperature, at the very beginning of a project, or if the block has been stored inside a closed cooler.
      - ii. Place the sensor pod into the bracket ON the Cooler Block and let it sit with the cooler lid open.
      - iii. Once dry enough to clear the CERR, set the CELR-12 to heat to 120° F and let it run for four hours to completely dry any moisture within the block.
  - c. Reboot the CELR-12 to clear the error

# Troubleshooting

1. The cooler drain is too small.
  - a. Detach one fitting from its hose, run that hose through the hole, reattach its fitting, then do the same with the second hose.
    - i. This process can fatigue the ends of the hoses over time, which can cause a bad seal and leaking. You can fix this by using the included hose clamps to reinforce the seal.
2. The cooler is not reaching temperature set point.
  - a. Ambient air temperature may be too high.
    - i. Move to a lower temperature environment.
  - b. Cooler may be too big.
    - i. Use with a smaller cooler.
  - c. Insufficiently insulated cooler.
    - i. Use with a better insulated cooler.
  - d. Base Station reservoir water level may be low.
    - i. Fill the reservoir all the way up
  - e. The system may need more time.
    - i. It may be useful to let the cooler and CELR-12 stabilize overnight.

Still not working? Email [marshall@tablesmith.us](mailto:marshall@tablesmith.us) and we'll work with you to get up and running.

# Tablesmith Limited Warranty

The following limited warranty and limitation of remedies and damages apply to all Tablesmith products purchased through domestic (U.S.) orders only. This limited warranty is not available for international orders. Purchase and use of any Tablesmith product ("product") constitutes acceptance of this limited warranty and limitation of remedies and damages. The remedies provided under this limited warranty are exclusive and in lieu of all other remedies. Read carefully - the terms of this limited warranty affect your legal rights.

## **Limited Warranty**

Tablesmith warrants to the buyer that the product is free from defects in material and workmanship for a period of one (1) year from the date the product is purchased.

**RETURNS** For return requests, please email [marshall@tablesmith.us](mailto:marshall@tablesmith.us) and reference your order confirmation.

**SHIPPING** Tablesmith will send to buyer a prepaid shipping label that will cover shipping and handling charges for the product to be returned to Tablesmith within the contiguous United States. After repair or replacement, Tablesmith will be responsible for shipping and handling for the return of the product to buyer within the contiguous United States. This warranty does not cover shipping costs for returns from outside the United States.

**CLAIM DEADLINE** Buyer must return the product and record of purchase to Tablesmith within 10 business days of the expiration of this limited warranty in order to make a claim under this limited warranty.

**EXCLUSIONS** This limited warranty does not cover damage to the product resulting from accident, misuse, improper installation or operation, failure to provide proper maintenance, unreasonable use or abuse of the product, or failure to follow written installation or operating instructions. Water damage generally and damage from the use of deionized water is not covered. Use of the product in a commercial environment voids this limited warranty. Service, repair, or alteration of the product by buyer or any person or entity not authorized by Tablesmith voids this limited warranty.

## Limitation of Remedies and Damages

TABLESMITH'S LIMITED WARRANTY IS BUYER'S EXCLUSIVE REMEDY WITH REGARD TO THE PRODUCT. NEITHER THIS LIMITED WARRANTY, NOR ANY OTHER CONTENT OR STATEMENT ON TABLESMITH.US, NOR ANY OTHER STATEMENT BY OR ON BEHALF OF TABLESMITH, SHOULD BE CONSTRUED AS AN EXPRESS OR IMPLIED WARRANTY FOR ANY TABLESMITH PRODUCT. TABLESMITH PRODUCTS ARE SUBJECT TO THE SPECIFIC, LIMITED WARRANTY INCLUDED WITH EACH PRODUCT, WHICH IS INCLUDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

TABLESMITH SHALL NOT BE LIABLE TO THE BUYER, OR TO ANYONE CLAIMING UNDER BUYER, FOR ANY OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT, BREACH OF WARRANTY, STATUTORY CLAIMS, NEGLIGENCE OR OTHER TORT OR ANY THEORY OF STRICT LIABILITY, WITH RESPECT TO THE TABLESMITH PRODUCT OR TABLESMITH'S ACTS OR OMISSIONS OR OTHERWISE. BUYER AGREES THAT IN NO EVENT SHALL TABLESMITH BE LIABLE FOR INCIDENTAL, COMPENSATORY, PUNITIVE, CONSEQUENTIAL, INDIRECT, SPECIAL, OR OTHER DAMAGES.

Tablesmith LLC

Brenham, TX USA

Phone: 713-670-4663

Email: [marshall@tablesmith.us](mailto:marshall@tablesmith.us)