STILL SPIRITS

CREATE+ T5000

COLUMN & CONDENSER INSTRUCTIONS





WARNING: If distilling alcohol, this system can produce a highly flammable liquid.

PLEASE READ ALL OF THESE SAFETY INSTRUCTIONS CAREFULLY BEFORE USING YOUR CREATE+ T500 PRO COLUMN & CONDENSER

Precaution:

- The CREATE+ T500 Pro Column & Condenser is designed to be used with a Still Spirits Boiler 25 L but can also be attached to other boiler units. Please follow the safety instructions supplied with your boiler unit.
- Always operate the CREATE+ T500 Pro Column & Condenser in a room with adequate ventilation.
- Do not use outdoors, as drafts affect distillation efficiency.
- Never leave the CREATE+ T500 Pro Column & Condenser unattended when operating.
- Keep the CREATE+ T500 Pro Column & Condenser away from all external sources of ignition, including smoking, sparks, heat, and open flames.
- Ensure all other equipment near the CREATE+ T500 Pro Column & Condenser and attachments are earthed or unplugged.
- If using the CREATE+ T500 Pro Column & Condenser for distillation of alcohol, then please ensure a fire extinguishing device suitable for alcohol is kept nearby. This can be water fog, foam, dry powder, carbon dioxide, sand, or dolomite.
- Do not distill any liquid starting above 40% ABV as this could cause a vacuum and other potential safety issues.
- Do not submerge the distillate out tube as this could cause a vacuum, which may result in the boiler imploding.

CAUTION: The boiler and column surfaces will become extremely hot during use. Take care when handling.

For battery safety, do not mount the thermometer and bracket on a hot column if ambient temperature exceeds 40°C (104°F).

In case of spillage:

- Shut off all possible sources of ignition.
- Clean up spills immediately using cloth, paper towels or other absorbent material such as soil, sand, or other inert material.
- Collect, seal, and dispose of accordingly.
- Mop area with excess water.

NOTE: Not following the safety information above could result in serious injuries and may void your warranty.

SIGNED CREATE

YOUR CREATE+ T500 PRO DISTILLING JOURNEY STARTS HERE. CHEERS.

THESE INSTRUCTIONS ARE DESIGNED TO GET YOU GOING WITH YOUR FIRST DISTILLATION ON THE CREATE+ T500 PRO COLUMN & CONDENSER. THESE INSTRUCTIONS COVER; PREPARING YOUR T500 PRO, CLEANING, AND HOW TO COMPLETE YOUR FIRST DISTILLATION.

WARNING: MISUSE COULD LEAD TO IMPLOSION

Make sure the distillate out tube (white) is never submerged into the distillate, otherwise the boiler may implode. You should see the drops of distillate falling into your collection vessel.

BEFORE YOU GET STARTED:

If you're distilling water please keep reading. If you're making alcohol, before you get underway, you'll need to prepare a wash. Please visit **help.stillspirits.com** or scan here to see our "how to make a wash" video.





DISCLAIMER: Please note that in certain countries alcohol distillation and the possession of distilling equipment is illegal and permits/licenses may be required. For guidance or advice, contact your relevant local authorities.



ABOUT YOUR CREATE+ T500 PRO Column & Condenser

The T500 Pro is perfect for distilling water and alcohol. Follow our step by step instructions to produce maximum yields and high quality distillate.

All-In-One Reflux Condenser and Column

Engineered for modularity and performance, the T500 Pro is an all-in-one apparatus that eliminates the need for separate components, streamlining the distillation process without compromising performance. Its cutting-edge design incorporates pre-packed copper and stainless steel saddles, ensuring optimal vapour reflux and superior-quality distillate production. Ideal for both novice and experienced distillers, the T500 Pro redefines convenience in home distillation with features such as a thermowell at the top of the column for accurate vapour temperature readings, a beeping alarm thermometer with adjustable high and low temperature alarms, and 2" tri-clamp connections, including a detachable product condenser and removable cold finger cooling coil. Additionally, it saves up to 30% on water usage compared to the T500, depending on usage, offering a seamless blend of form and function for unmatched results.

Copper Construction

Crafted from the highest quality materials, the T500 Pro is constructed with precision using T2 Copper. The T500 Pro features a copper cold finger cooling coil and column tube with stainless steel tri-clamp ferrules. Benefit from the natural properties of copper, which help remove unwanted compounds and enhance the quality of your distillate. No plastic components are used in the spirit path; food-grade, high-temperature silicone seals are used at the tri-clamp connections.

Suitable for Distilling Water

The T500 Pro is perfect for distilling water due to the column's stainless steel and copper saddles. These saddles allow for greater removal of impurities from the water compared to other forms of water distillation. See our instructions for distilling water for more information.

Suitable for Clean Neutral Alcohol

Perfect for crafting clean neutral alcohol, this innovative unit ensures precision in alcohol separation, producing alcohol of exceptional clarity and purity. The T500 Pro will produce alcohol of up to 93% ABV and extract 95% of the alcohol in your wash. This neutral alcohol makes a great vodka and is the perfect neutral alcohol base for flavourings or making gins and other botanical spirits.



SETTING UP THE T500 PRO

Once your boiler contents are ready, proceed to set up the T500 Pro. Position the T500 Pro in a location where it can remain undisturbed for approximately 5 hours (6-7 hours for US/CA units). This is the estimated duration for one distillation cycle using a T500 Pro with a Still Spirits Boiler 25 L. Ensure that the T500 Pro is placed on a level bench or table in an area with access to electricity, a sink, a tap, and adequate ventilation, such as the kitchen or laundry. Avoid setting it up outdoors, as drafts significantly impact distillation efficiency.

CLEANING PRE-USE

Please refer to the boiler instructions for cleaning advice. Before transferring content to be distilled into the boiler, rinse its interior with fresh, clean water. The T500 Pro does not require rinsing before its initial use.

ATTACH THE T500 PRO To the boiler lid

These instructions are for use with the Create+ Boiler 25 L. Please refer to the instructions of your boiler if you're using an alternative boiler.



T500 PRO

DISTILLING

The T500 Pro comes pre packed with saddles. If these have been emptied, you will need to add approximately 100 g of copper saddles and 500 g of stainless steel saddles. **Note:** The copper saddles should be positioned at the top of the column. You may have leftover saddles, this is normal.

Remove the DN40 nut from the threaded adapter included with the boiler.

Sit the threaded adapter on a table so that the threaded end is pointing up.

With the inside of the lid facing up, fit the boiler lid onto the threaded adapter.

Add the DN40 nut to the thread and tighten firmly.



Hold the T500 Pro upside down and place the sieved gasket into place over the opening blocking the saddles (this comes pre-assembled on the T500 Pro).

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- Place the boiler lid with threaded adapter over the T500 Pro so that the underside of the lid is pointing up. Connect the two using the 2" tri-clamp and tighten firmly.
- Once the boiler contents are ready, place the lid and the T500 Pro on the boiler, in a position where you can see the thermometer. Secure the lid with the boiler clips.



WATER DISTILLING

Tap water in most cities contains chlorine and sometimes chloramines. These are a form of preservative added to the water. This prevents pathogens and bacteria contaminating the water between the water treatment plant and when you go to drink it. While these are added at safe levels for consumption, they can add a flavour and aroma to the water that some find unpleasant. Distilling the water is a way to remove the chlorine and chloramines from the water. Distilled water is also often used when making fermented beverages so that the yeast is not negatively affected by the chlorine and chloramines in tap water. **Note:** Distilled water is devoid of the minerals our bodies use. Drinking excessive amounts of distilled water may cause mineral deficiencies.

Distilling 20 L (5.3 US Gal) of water will take about 5-8 hours (8-12 hours for US/CA units) from start to finish (excluding heating time). Please ensure you can give your full attention to operating the T500 Pro for this period. The system becomes very hot during operation, therefore extreme care needs to be taken and children should be kept well clear during and after distilling. The T500 Pro will produce approximately 18 L (4.8 US Gal) of distilled water. Once heated, the flow rate of distilled water out of the system is approximately 3 L (3.1 US qt) per hour (220V 2000W).

ASSEMBLE THE T500 PRO

Note: If the distillation system has been used for alcohol production the saddles should be removed, thoroughly cleaned, and then added back into the T500 Pro prior to water distillation. The copper saddles should be added first so that they are at the top of the column. Refer to the 'Cleaning After Use' section on page 13.

Connect the longer 1.5 m tube to the condenser outlet **(A)**. The other end of the tube should be directed into a sink or drain as this is the cooling water outlet.



Connect the shorter 1.1 m tube to the water inlet (B).

Connect the white 0.8 m tube to outlet **(C)**. The distilled water will flow from here to your collecting vessel. **Note:** You don't need a thermometer for water distillation.





ADD WATER INTO THE BOILER

Place the boiler on a firm, level bench where the waste can discharge into a drain or sink. This arrangement helps in avoiding the need to handle the hot boiler when emptying its contents later. Ensure the tap is not directed towards the front to prevent the risk of boiling liquid pouring out in case of accidental knocks. Add water to your boiler, but only fill it within the maximum level line on the boiler. **Note:** For faster results, start with hot water from the tap; this will save a significant amount of time.

COLLECT YOUR DISTILLED WATER

Place the T500 Pro and boiler lid assembly onto the boiler base. Fasten the four clips that hold the lid onto the boiler. Check that the sealing gasket sits firmly on the boiler with no gaps.



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Connect the other end of the water inlet tube (long thin tube) to your water supply using the tap adapters.

- Connect the power to the boiler and turn the boiler on. If you are using the Still Spirits Boiler 25 L with dual element control switches, make sure both power switches are set to the "on" position to maximise power. Cold water will take about 80 minutes to reach boiling temperature. Hot water from the tap will take significantly less time.
 - Use a large vessel to collect the distilled water (as large as the quantity of water initially placed in the boiler).

WARNING: Make sure the white tube is never submerged in the distillate, otherwise the boiler may implode. You should see the drops of distillate falling into your collection vessel.

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Before the water boils, turn on the cooling water enough so that the distillate doesn't steam but flows in a liquid form.





ALCOHOL DISTILLING

The T500 Pro is a reflux distilling apparatus, which means the vapour boiled off from the boiler contents rises up the column, in which the vapours of the heavier liquids (water and heavier undesirable molecules) condense and fall back down into the boiler. The alcohol having a lower boiling temperature and being lighter than water, rises to the top of the column and condenses in the condenser into liquid alcohol. This cycle of evaporation, rising and condensing, is continuous and is described as refluxing. The saddles in the column provide a large surface area to maximise the contact between the liquid and vapour flowing in the column, which accelerates the refluxing action. The T500 Pro produces a high ABV, clean neutral alcohol, which is great for vodka and is the perfect neutral alcohol base for flavouring or making gins and other botanical spirits.

Distilling takes about 5 hours (6-7 hours for US/CA units) from start to finish. Please ensure you can give your full attention to operating the T500 Pro for this period. The system becomes very hot during operation, therefore extreme care needs to be taken and children should be kept well clear during and after distilling. The process produces a highly flammable liquid, keep all sources of ignition away from the still.

TRANSFER THE WASH INTO The Boiler

Position the boiler on a stable, level bench with the tap positioned over a sink or drain. This arrangement helps in avoiding the need to handle the hot boiler when emptying its contents later. Ensure that the tap is not directed towards the front to prevent the risk of boiling liquid pouring out in case of accidental knocks.

Using either a syphon or a 5 L (1.3 US Gal) jug, transfer the cleared wash from the fermenter into the boiler. Alternatively, you can place the boiler below the tap on the fermenter and pour the wash, but be mindful that you'll need to lift the full boiler back onto the bench afterward. Take care to leave behind as much sediment as possible, and refrain from filling the boiler beyond the maximum level line indicated on the boiler.

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Next, add all the ceramic boil enhancers to the boiler. **Note:** If using a wash with high protein content like potato, grain or molasses we recommend adding 3 caps of distilling conditioner to protect against surging and puking. The first step in making high quality alcohol is to produce a wash. For best results with the T500 Pro and for removal of impurities produced during fermentation, we recommend using Turbo Yeast, Turbo Sugar and Turbo Carbon in your wash, and clearing with Turbo Clear once fermentation is complete.



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ASSEMBLE THE T500 PRO

Attach the short, thin, clear tube to establish the top loop connection $({\bf A}).$





Identify your water tubing by distinguishing between a longer & shorter tube. Connect the longer 1.5 m clear tube to the water outlet **(B)**, directing the flow into your sink. Connect the tube to the clip provided on the back of the condenser mounting bracket **(C)**.



Connect the shorter 1.1 m tube on the water inlet **(D)** to your tap. This connection facilitates the flow from your tap, via the adaptor, into the condenser.



Proceed to connect the white 0.8 m tube to the distillate outlet **(E)**. The distilled alcohol will flow from this point into your collecting jug. Ensure that the tube is not submerged in the distillate, as submersion could lead to the boiler imploding. Observe the drops of distillate falling into your collecting vessel during the distillation process.

8 First, install the thermometer battery. Then, use the provided mounting bracket to secure the thermometer onto the centre of the 2" column. Insert the stainless-steel sensor probe into the thermowell (small hole) at the very top of the column. (F). To ensure a neat arrangement, use a wire tie to tidy up any loose wiring.

Place the T500 Pro and boiler lid assembly onto the boiler. Fasten the four clips that hold the lid onto the boiler. Check that the sealing gasket sits firmly on the boiler with no gaps.

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OPERATING THE BEEPING ALARM THERMOMETER

The thermometer features three buttons: alarm (AL) / increase ('AL / \blacktriangle ') button, Celsius & Fahrenheit / decrease ('°C/°F/ \checkmark ') button, and 'ON/OFF & HI/LO/SET' button. Turn on the thermometer by pressing the 'ON/OFF' button. Press the '°C/°F/ \checkmark ' button to set your preferred temperature display.

To set the beeping alarm temperature range: First, press the 'HI/LO/SET' button, then use the ' \blacktriangle ' and ' \checkmark ' buttons to set your desired high temperature, press the 'HI/LO/SET' button again to confirm the temperature. Next, use the ' \blacktriangle ' and ' \checkmark ' buttons to set your desired low temperature, press the 'HI/LO/SET' button again to confirm the temperature, press the 'HI/LO/SET' button again to confirm the temperature. Once your high & low temperature is set, press the ' \blacktriangle ' button once to activate the high temperature setting alarm only. Then press the 'AL / \bigstar ' button a second time to activate the low temperature setting alarm. To disable all alarms, press the 'AL / \bigstar ' button a fourth time. To silence the beeping alarm during distillation, press the 'AL / \bigstar ' button.

CAUTION! For battery safety, do not mount on a hot column or tube if ambient temperature exceeds 40°C (104°F).



WATER FLOW REGULATOR



CONNECT THE T500 PRO TO YOUR WATER SUPPLY

If you possess a Still Spirits Water Flow Regulator, proceed to connect it now. This regulator enables optimal control of water flow, preventing issues related to changes in pressure from the water supply.

Attach the tap adapter flow controller (included with the T500 Pro) to your tap or faucet, ensuring the water flow valve is fully closed. Connect the shorter 1.1 m tube to the flow controller (if using the Water Flow Regulator connect it to the outlet barb) and position the longer 1.5 m tube away from the T500 Pro into the sink or drain.

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Insert the white distillate outlet tube into a collection jug or vessel, ensuring it is positioned to avoid submersion under the distillate. This precaution is vital to prevent a potential boiler implosion during the cooling of the boiler at the end of distillation. **Note:** For the initial part of the boil, water supply is not required.

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START THE BOIL

Connect the boiler to the power supply and switch it on. If you are using the Still Spirits Boiler 25 L with dual element control switches, make sure both power switches are set to the "on" position to maximise power.

ADJUSTING THE WATER FLOW & COLLECTING YOUR SPIRIT

We recommend initially setting the HIGH temperature alarm at 5°C (41°F) above ambient (the temperature displayed before starting the boil). Once this temperature is reached the alarm will sound (approx. 35 minutes, 70 minutes for US/CA boilers), turn on the water supply, then reset the HIGH alarm to your desired temperature. We recommend setting this to 80°C (176°F) or 1-2°C above your stable distilling temperature. It takes just over 1 hour (1.5 hours for US/CA units) to heat a 23 L (6 US Gal) wash to boiling temperature. (Time to reach boil depends on your wash starting temperature and boiler power. A colder wash in a lower powered boiler will take longer. A warmer wash in a higher powered boiler will be faster.)

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Once the wash starts to boil, the spirit will come out of the white tube into your collection jug.

WARNING: Make sure the white tube is never submerged in the distillate, otherwise the boiler may implode. You should see the drops of distillate falling into your collection vessel.

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Gradually open the tap adapter flow controller and/ or the Water Flow Regulator flow controller valve to regulate the flow rate, aiming for a range between 550 and 650 ml per minute (18.6-22.0 US fl oz/min). To measure the water flow, use a 1L (1 US qt) measuring vessel and time the amount in ml/US fl oz flowing into the vessel per minute. **Note:** For US/CA boilers, the cooling water flow should be approximately 9.5 US fl oz/minute, resembling a trickle.



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As the temperature on the thermometer reaches above 70°C (158°F) distillate will come out of the distillate tube. Start to adjust the flow slowly using the water flow controller to maintain a temperature between 78.5-79.5°C (173.3-175.1°F). Maintaining a temperature closer to 79.5°C will make the run go faster but the ABV of the spirit out will be lower. Maintaining a temperature closer to 78.5°C will make the run take longer but the ABV of the spirit out will be higher. **Note:** In environments with warm tap water, switching the boiler unit to 1100W mode may assist in reducing steam and providing better cooling.



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Collect and discard the first 50-100 ml (1.7-3.4 US fl oz) of distillate. **Important:** The first 50 ml (1.7 US fl oz) that comes out of the still (foreshots) may contain lighter molecules, such as methanol, acetaldehyde, ethyl acetate and acetone, which have a strong and unpleasant smell, often described as 'hospital smell' or 'nail polish'. They should not be consumed.



COMPLETE DISTILLATION

Approximately 5 hours (6-7 hours for US/CA units) after turning on the boiler, you should have collected 3.4-4.5 L (0.9-1.2 US Gal) of 90-93% ABV spirit, depending on the ingredients used in your wash. When the distillate becomes slower, at a rate of 1 drop every 5 to 10 seconds, it indicates that all the alcohol has been distilled, and the boiler can be turned off. The alarm should also make a beeping sound once your HIGH temperature has been reached.



Turn off the boiler and disconnect the power outlet. Then, turn off the cooling water supply.

Turn off the thermometer by pressing and holding the 'ON/OFF' button until the display turns off. **Note:** The alarm function will retain your previously set high and low temperatures. Activate the alarm by pressing the 'AL / \blacktriangle ' button according to the instructions. Alternatively, follow the full instructions to change your high and low temperature settings.



DILUTE, FILTER, AND FLAVOUR If flavouring your spirit run, dilute your spirit with drinking water (as per the recommendations of your filtering system). Once filtered, dilute again to 40% ABV, and flavour. Otherwise, dilute to 40% ABV or lower and store appropriately until you do a spirit run from where you can then age and treat accordingly.



POT DISTILLATION AND BOTANICALS

We recommend using the Create+ Alembic Copper Dome & Condenser for superior flavour retention from your wash or botanicals.

If you're wanting to make a spirit with botanicals, we recommend doing a spirit run with the T500 Pro, diluting your distillate to 40% ABV or below, before doing your pot distillation run using botanicals and the Alembic Copper Dome & Condenser.

Refer to applicable botanical basket instructions for use with a botanical basket.

CLEANING AFTER USE

CLEANING POST DISTILLATION

Remove the T500 Pro and boiler lid assembly, and thoroughly rinse the boiler to remove all wash and debris. Take care to preserve the ceramic boil enhancers for the next distillation run. **Tip:** Utilise a non-scented brewery cleaner and, for stubborn areas, use a soft dish brush on the inside of the boiler.

Regularly, every 5 to 10 distillations, run water through the column to rinse the saddles. For a comprehensive clean, recommended every 20 distillations, remove the saddles and cold finger cooling coil from the top of the column by removing the tri-clamp and rinse your column with a citric acid mix (2 tsp citric acid to 1 L or 1 US qt of water). The saddles and cold finger cooling coil can be soaked in the same ratio citric acid mix and rinsed with water once clean. Follow this by flushing with water 2 or 3 times to eliminate any residual acid.

SCAN HERE FOR FAQS, TROUBLESHOOTING,AS WELL AS MORE HELPFUL RESOURCES ON DILUTING, FILTERING, AND FLAVOURING.



REMOVING THE CONDENSER ARM & COIL



First, undo the screw on the back of the bracket securing the condenser arm to the column. Remove the top loop connection tube (short). Use a wrench or spanner to unscrew the nut from the head. The condenser arm can now be removed by lifting it upwards.



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To remove the cold finger cooling coil, first remove the packing material by removing the tri-clamp and sieved gasket from the base of the column. Remove the tri-clamp at the top of the column and pull the top of the cold finger cooling coil upwards. **Note:** If some saddles have become stuck around the coil, it may be harder to remove the coil.

Tap the base of the column on a bench or hard surface to dislodge the stuck saddles. This will make removing the coil easier.



STILL SPIRITS

CREATE+ UNLOCK YOUR POTENTIAL WITH 2" TRI-CLAMP MODULAR COMPONENTS



MASTER THE ART

WE'RE PASSIONATE ABOUT MAKING OUR OWN PRODUCTS, WHETHER IT'S THROUGH THE ART OF DISTILLING OR FLAVOURING, AND WE WANT YOU TO BE TOO. WE BELIEVE THERE'S NOTHING BETTER THAN ENJOYING AND SHARING WHAT YOU HAVE CRAFTED.

WHETHER YOU'RE STARTING TODAY OR ARE ON YOUR WAY TO MASTERING THE ART, WE'RE HERE TO INSPIRE YOU. EVERYTHING WE CREATE IS DESIGNED TO HELP YOU PRODUCE WITH CREATIVITY AND CONFIDENCE AS YOU HONE YOUR CRAFT.

ENJOY THE PROCESS, ENJOY THE JOURNEY AND (OF COURSE) ENJOY THE END RESULTS.



DISCLAIMER:

Please note that in certain countries alcohol distillation and the possession of distilling equipment is illegal and permits/licenses may be required. For guidance, contact your relevant local authorities. The below does not constitute legal advice.

In New Zealand, it is legal to distill your own spirits and liqueurs for personal consumption.

In Australia, USA & Canada it is illegal to distill alcohol for consumption or sale without the necessary permits and licenses from the relevant authorities.

In the UK, it is illegal to produce spirits without a distiller's license from HM Revenue & Customs.

BIOFUEL

Biofuel can be made using the same process as distilling spirits. Please contact your relevant local authorities for information specific to your region.

WARRANTY

The CREATE+ T500 Pro Column & Condenser is warranted against faults in material or workmanship under normal use and maintenance during the warranty period (36 months) from the date of purchase. To make a warranty claim, please contact the store where the product was purchased in the first instance. Proof of purchase will be required before you can make a claim under this warranty. This warranty does not cover the following situations (which is not exhaustive).

Accident.

- Misuse or abuse, including failure to properly maintain or service.
- Normal wear and tear.
- Power surges, electrical storm damage or incorrect power supply.
- Incomplete or improper installation.
- Incorrect, improper or inappropriate operation and cleaning.
- Insect or vermin infestation.
- Exposure to excessive water or outside weather conditions.
- Modifications not undertaken or commissioned by a Bevie approved third party.
- Any other operation outside the uses stated in the instruction manual.



www.stillspirits.com



Please dispose of packaging thoughtfully.