

TONE

REVOLUTION
IN BREWING & EXTRACTION



TOUCH 04

DIGITAL MANUAL

Please download software here



Get in touch with your dealer for
any information about installation.

JANUARY 2024
VERSION 1.0

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1. PROPER USE

This machine is only intended for the use for which it was basically developed. Any other use shall be considered ill-suited and improper. The manufacturer shall not be considered responsible for any damages caused by improper use. The electric safety to the machine is achieved only when the machine is correctly connected to a grounded electric system. This fundamental requirement shall be assessed by qualified personnel.

Manufacturer and installer shall not be held responsible for any damages caused by the lack or inefficiency of system grounding.

1.1 FOR YOUR SAFETY

Read and follow the instructions in these operating instructions in order to operate this machine safely. Do not carry out any independent modifications or repairs on the device.

The following warning symbols are used in these operating instructions.

1.2 EXPLANATION OF SAFETY WARNINGS



DANGER!
Failure to observe the warning can result in danger to life and limb.



WARNING!
Failure to observe the warning can result in material damage.



CAUTION!
Matters which should be taken into account when using the appliance.



INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2012/19/EU

This product must not be disposed of as urban waste at the end of its working life. It must be taken to a special waste collection centre licensed by local authorities or to a dealer providing

this service. Separate disposal of the product will avoid possible negative consequences for the environment and for health resulting from inappropriate disposal, and will enable the constituent materials to be recovered, with significant savings in energy and resources.

OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS AT ALL TIMES:

- The appliance is only to be installed in locations where its use and maintenance is restricted to trained personal.



DANGERS TO CHILDREN AND OTHER PERSONS!

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



DANGER DUE TO FAULTY OPERATION!

Improper use of the appliance can result in damage or injury.

- Do not use the appliance barefoot or when hands / feet are wet.
- Unplug the appliance from the electric system and turn of water supply before carrying out any cleaning and ordinary maintenance.

- Do not put the appliance under a jet of water, nor plunge it into water to clean it.
- Do not leave the appliance turned-on and unattended for long periods (e.g. 1 day)



**NO LIQUID MAY
OVERFLOW ON
THE DEVICE PLUG
CONNECTION**

- In order to ensure the efficiency and correct functioning of the appliance, it is necessary to follow the instructions provided by the manufacturer and to carry out its ordinary maintenance.
- The appliance shall be installed so that the highest surface is at least 1 meter high.
- The appliance shall be placed on a level horizontal surface to ensure a safe use.
- The temperature range of the environment surrounding the appliance shall be included between 5°C and 30°C. In case the appliance is temporarily placed in an environment where the temperature is below 0°C, contact a local Technical Service authorized by the manufacturer.
- The machine shall be placed on a surface guaranteeing secure support.
- Ideally the appliance is bolted onto the working surface using a pair of slotted countersunk screws (M8, stainless).
- The machine must be connected exclusively to an appropriate cold drinking water source, in compliance with national norms and rules. The pressure of the incoming water must be between 0.3-0.4 MPa. If this is not met, install a pressure reducer / regulator according to the requirements.
- A shut-on tap must be installed between machine water hose and water system to block water flow in case of necessity.
- When installing the appliance, use exclusively the current hose-set provided with the appliance itself (not included).
- In case of appliance breakdown and/or malfunctioning, turn the main switch OFF and refrain from trying to repair it. Then

If the above-mentioned instructions are not followed, the safety and wear of the appliance can be jeopardized and its guarantee is no longer valid.

contact a local Technical Service that has been authorized by the manufacturer.



**WARNING DUE TO
UNAUTHORISED REPAIR!**
Faulty repairs can result in damage to the appliance.

- Repairs should be carried out only by authorised customer service centers.
- If you cannot correct a fault with the aid of the steps described in these operating instructions, please refer to your authorised dealer.
- The electric safety of the machine is achieved only when the machine is correctly connected to a grounded electric system.
- The user shall arrange electric, water and draining systems in a suitable position to allow correct machine installation.



**WARNING BEFORE
SERVICING OR OPENING
THIS DEVICE**

Make sure the brewer is disconnected from power by pulling its plug. The service technician has to see the pulled plug during the whole service operation.

- The installer cannot modify the existing system built by the user.
- If the electric supply plug is damaged, it must be replaced by another plug provided by the manufacturer or by its Technical Service.
- For good machine functioning and maintenance, it might be necessary to install a water softener in order to avoid scale formation. This must be evaluated by the installer and the user shall leave a space for the correct installation of a water softener, following the instructions contained in its manual.



DO NOT USE WATER JET DEVICES IN THE AREA WHERE TOUCH 04 IS INSTALLED!



DO NOT TILT TOUCH 04 DURING OPERATION! MAX. TILT ANGLE < 5°.



ONLY TO BE OPERATED BY TRAINED PERSONNEL!

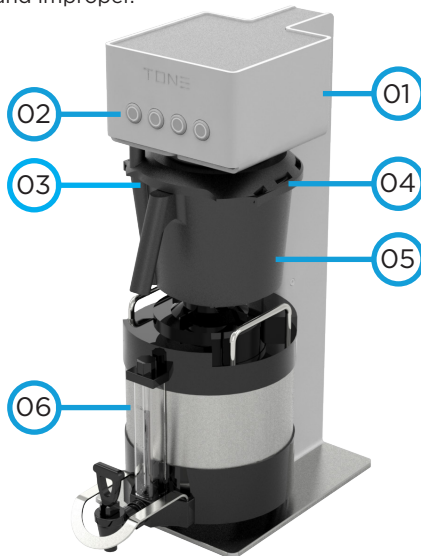
2. DESCRIPTION OF THE PRODUCT

2.1 Purpose of the Product

This machine shall be destined exclusively to the use it has been expressly designed for. Any other use shall be considered ill-suited and improper.

2.2 Contents

- 1x TOUCH 04 Brewer
- 1x Basket holder TO-305051
- 1x Shower head cpl. TO-200567
- 1x Manual Touch 04
- 1x Basket carrier TO-305052
- 1x Basket || TO-305053
- 1x Basket ||| TO-305054
- 1x Pressure reducer (4bar)
incl. check valve TO-530196
- 1x Power cord incl. plug TO-200659
- 1x Water pipe Ø8mm incl. 3_8"/
Ø8mm fitting TO-200660
- 1x Base Cover TO-305059



2.3 APPLIANCE OVERVIEW

- 01 Power switch (on back side)
- 02 Four programmable buttons
- 03 Shower head

- 04 Brew basket holder
- 05 Brew basket
- 06 Thermos 4L (available separately)



CAUTION
Improper electrical installation will damage electronic components. Damage caused by incorrect electrical connections is not covered by warranty.



CAUTION
Power to brewer must be OFF before proceeding with plumbing installation.

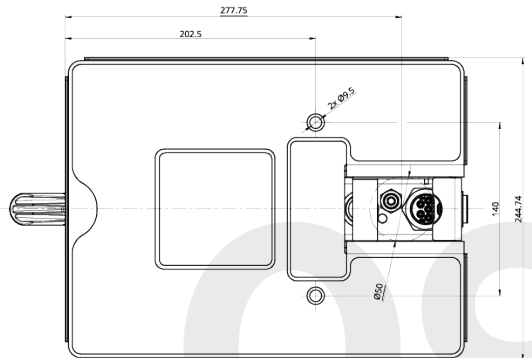
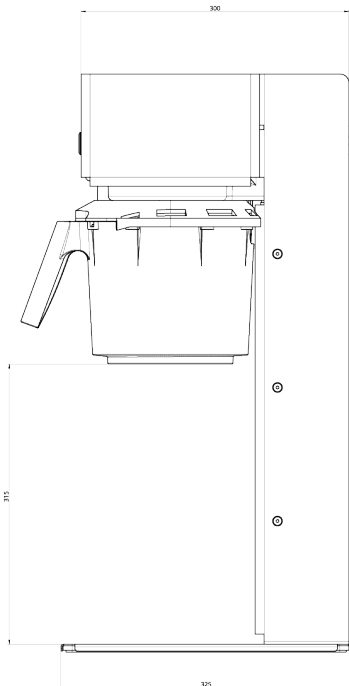


Cold Water | Softener

Ethernet connection cable

Powercord
P1/P2 | N | GR

2.4 DIMENSIONS



3. INITIAL USE

3.1 PLACE OF USE

Brewer should be installed only inside and in a dry environment. Brewer should be installed on a secure, level, surface capable of fully supporting the weight of the brewer, including the water retained in the brewer, and any fully loaded dispenser(s) that may be placed on the brewer.

- A potable water line (cold water) capable of consistently supplying the required minimum flow rate within the noted pressure range is required at the install location.
- A grounded electrical connection to a circuit that meets the electrical specifications of the brewer and is protected by the appropriate size and type of breaker is required. See the supply cable specification in *chapter 3.3*.



CAUTION

Power to brewer must be off before proceeding with plumbing installation.



CAUTION

Improper electrical installation will damage electronic components. Damage caused by incorrect electrical connections is not covered by warranty.

3.2 PLUMBING CONNECTION

- The brewer must be rinsed after being connected to the water supply line. Remaining air in the system will be *removed (check point 3.4 Initial Set-Up)*. Otherwise it may lead to malfunctions and noise in the housing. Follow instructions in section Button functions.
- The pressure of the water line must be within 3-4 bar (a 4bar pressure reducer is included in the scope of delivery).

- The installation of a water softening filter system is mandatory for the use of TONE equipment. Any violation of this regulation will lead to a complete loss of any warranty on the complete system.
- The brewer has a descaling tracking function available. *Follow the instruction at point 4.2 Descaling.*

3.3 ELECTRICAL CONNECTION



WARNING

The brewer must be disconnected from the power source until specified in INITIAL SET-UP.



CAUTION

Improper electrical installation will damage electronic components. Damage caused by incorrect electrical connections is not covered by warranty.

- An electrician must provide electrical service as specified in conformance with all local, state and federal electrical codes.
- Recommended backup two phases, both fused to 16A.
- If the supply cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.
- The electrical ratings can be found on the type plate which you will find on the device.
- Use a voltmeter to check the voltage and color coding of each conductor at the electrical source.
- Ensure power switch on rear of brewer is in the off position. Connect brewer to power source and verify voltage at terminal block. Replace rear panel and top cover. If plumbing has been hooked up, brewer is ready for Initial Set-Up. If not, disconnect brewer from power source.



WARNING

Electrical connections must be made as specified above. Failure to follow these instructions can result in personal injury, property or equipment damage.



WARNING

Before servicing or opening this device make sure the brewer is disconnected from power by pulling its plug. The service technician

has to see the pulled plug during the whole service operation.

This device must be connected to a line system impedance $Z_{sys} \leq 0.082 + j0.051 \Omega$
 Symbol explanation:

- I = ON
- O = OFF

Consult the supply authority before connecting.

3.4 INITIAL SET-UP

- Remove the cover from the housing.
- Connect the blue water hose with the Touch O4 and your water supply. (Note: The TONE Touch O4 needs to be run with filtered water, check water specification on page 26).
- The water pressure should be between 0.3 and maximum 0.4 MPa (the flow of the machine is calibrated at the factory with 0.3 MPa). A pressure reducer is supplied with the machine to ensure that no more than 0.4 MPa of water pressure enters the machine.
- To prevent the water from flowing back into the drinking water system, a check valve is supplied with the Touch O4. This must be installed in the blue water hose. (check the correct flow direction).
- The delivered connection adapter from TONE has a 3/8 inch thread.
- Connect the machine to the power supply. The power supply needs to be of any of the

following types:

- 16A three-phase via a CE plug.
- 30A single-phase with Fuse box from Tone.
- 30A three-phase with Fuse box from Tone.

Any of the three phases do not need to be shifted by 120°

- Build up a connection with a laptop or tablet to your Touch O4. Connection by ethernet cable to your laptop or connection by ethernet cable to a lan switch or connection over wifi with the IO-GEAR device. (check point 4.3 Connecting).
- Install the TONE Beverage Manager App on your device (iOS, Mac, Windows 10 or Android).
- Rinse the machine by pushing the buttons 1 & 2 and switch ON the main switch (the two buttons will shine up blue and cold water will rinse through the machine until you switch off the machine). This will help to get rid of the air inside of the brewer system. After rinsing a few milliliters turn the main switch OFF.
- Calibrate the flow of the machine to its new home before you use it. (check point 4.6 Service.)

4. PROCESS/WORKFLOW

4.1 BREWING

Carry out preparations for brewing and providing the correct filter size and basket inlet.

Select the desired recipe by pushing the corresponding button. As soon as the program is running the button starts to blink. Be aware that the water flow may be interrupted during the brewing process once or several times. Wait until the recipe is processed completely (button stops to blink).

The basket can be removed as soon as the buttons stop blinking. Until then, the basket will be locked for safety reasons. Remove the brewing vessel from the

appliance and the TONE Touch O4 is ready for use again immediately. The program can be aborted by pushing the chosen button again during process.

There are four factory standard recipes installed on every Touch O4 (from left to right):

- 1 Volume: 2000ml Taste: mild
- 2 Volume: 2000ml Taste: medium
- 3 Volume: 2000ml Taste: bold
- 4 Volume: 2000ml Taste: xbold

The recipes can be exchanged or modified in the TONE Beverage Manager app. (Check *point 4.4 to learn how to create a recipe.*

4.2 STARTUP MODES

Recipe selection:

Button 1 - 4 (from left to right)

Flush Mode:

Push and hold button 1 & 2 while switching the main switch ON. Stop the rinsing by switching the main switch OFF

- Rinse the device after a long-lasting down time or when there may be air inside the system.
- Before air transport or exposure to temperatures below 4°C all remaining water inside the brewer has to be removed. Disconnect the water supply and start the rinsing procedure.



IT IS NOT ALLOWED TO BLOW OUT THE MACHINE IN ANY WAY!

No blowing out with the mouth, no compressed air, no blowing out with the syringe, etc. This will destroy the sensitive flow meter!

Upon entering the flush mode, the machine will flush cold water through the brew head. After entering the flush mode, the user has several flushing options:

1. *Button 1 pressed:* Water flushes through bypass and only through flowmeter
2. *Button 2 pressed:* Water flushes through brew head and only through flowmeter 2.
3. *No button pressed or button 1 & 2 pressed:* Water flushes through brew head and through both flowmeters.

Descaling Mode

Push and hold Button 1 while switching the main switch ON. The descaling recipe will start immediately and last for about 12 minutes. As soon the button stops blinking the recipe is finished. Switching the machine OFF and ON again will bring you back into the standard mode.

Reset Mode

Push and hold Button 1 & 3 & 4 while switching the main switch ON. This mode will bring the four factory recipes (*check chapter 4.1*) back on each button.

Calibration Mode 1 (Flowmeter 1)

Push and hold Button 1 & 3 while switching the main switch ON.

After entering the flowmeter calibration mode, the user has the option to dispense a fixed volume of 500ml by clicking button 1. The actual measured volume can then be used to calibrate the flowmeter 1 via the app or directly on the machine. In order calibrate the flowmeter on the machine, button 3 and 4 can be used. By clicking button 3, the flow calibration value is increased by 0.002. By clicking button 4, the flow calibration value is decreased by 0.002. Those actions can be done multiple time according to the users need. After changing the calibration value, the user can again check the actual volume by pressing button 1, which will dispense 500ml with the updated calibration value.

Calibration Mode 2 (Flowmeter 2)

Same functionality as for flowmeter 1 calibration, but for flowmeter 2. To enter the mode push and hold Button 2&3 while switching the main switch ON.

Basket Detection & Locking Mode

Push and hold Button 1&2&3 while switching the main switch ON. This mode is for testing the sensors for the basket detection and the

locking mechanism. Button 1 and 2 shows the position of the movable locking element. This is the element that gets push up and down when a basket is inserted. When button 1 lights up blue, it signals that the movable locking element has reached the lower sensor. When button 2 lights up blue, the upper sensor has reached as well.

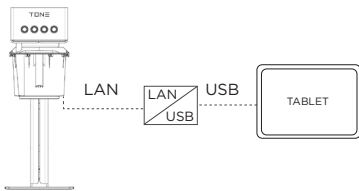
By clicking button 3, the locking pin gets triggered. This will lock the movable locking element when its in the right position. It can be unlocked by clicking button 3 again. At the same time, button 3 will light up blue indicating that its correctly locked.

Error Codes

- No Flow – Button 3 & 4
- Waterheater Error – Button 2 & 3 & 4
- NTC Error – Button 1 & 4
- Basket Lock Error – Button 1 & 2 & 3 & 4

4.3 CONNECTING

OPTION 1A

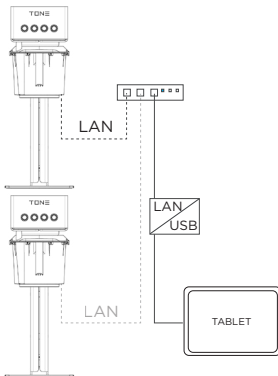


Direct Connection

(direct or via a LAN-2-USB-C)

- connect the Touch O4 to your device
- only one Touch O4 can be connected to the tablet / pc

OPTION 1B



LAN-Switch / LAN-router

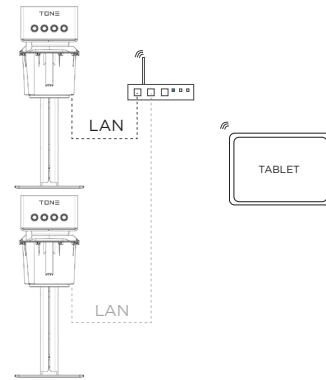
- connect the TONE to the LAN switch
- connect the LAN switch to the tablet / pc (direct or via LAN-2-USB converter)
- you can connect one or more TONE to the tablet / pc

NOTE:

The ethernet port configuration on your tablet / pc should be as follow:

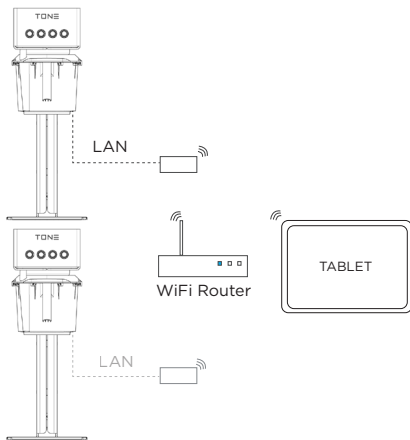
1. connect the cable direct to your device or via the LAN-2-USB converter
2. Open the ethernet properties
Settings - Network and Internet - Ethernet - properties
3. Select automatic mode (dhcp) at the ip-assignment

OPTION 2A



Wifi-Router

- connect the TONE to the wifi router
- connect the tablet / pc to the wifi router
- you can connect one or more TONE to the tablet / pc

OPTION 2B**Ethernet-2-Wifi-Converter (IO-GEAR)**

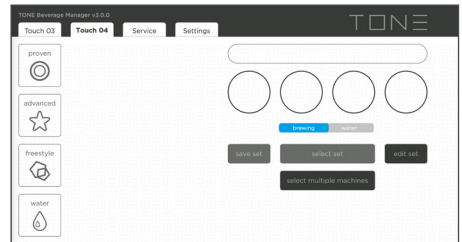
For each Touch 04 you need an Ethernet-2-Wifi-Converter

- Consider the specific manual / video for the set-up on www.tone-swiss.com.

MAKE SURE THAT YOU DISABLE “LIMIT THE TRACKING OF YOUR IP-ADDRESS” ON ANY DEVICE YOUR TONE BEVERAGE MANAGER IS INSTALLED. IF THIS BUTTON IS NOT SWITCHED-OFF YOU MIGHT NOT SEE THE BREWER IN THE TONE BEVERAGE MANAGER.

**4.4 EDIT RECIPES**

Connect your TONE Touch 04 brewer with the your tablet computer as described. Once the installation is complete, switch your TONE Touch 04 ON and it will appear in the list of available TONE equipment as soon you select the tab Touch 04. The factory pre-set name will be ToneTouch04_XXXXX (XXXXX=serial number). This can be customised later (s. Service tab).



Click on your device in the list and the standard configuration of the recipe selection buttons will be displayed. You can either change this configuration by clicking each button individually and chose recipes from the list which will be explained later. Or you can choose a whole set of recipes that you can put together (*check point 4.4.2*)

Please remark that your adaptations are made directly on the device. There is no need for a transfer command or a click on a confirmation checkbox here.

4.4.1 PROVEN MODE

The proven tab provides a tool for a quick and successful recipe creation. There are four pre-set options for coffee and three for tea, which will result in different strengths and extractions



For the coffee recipes, the brewing temperature and the pulsation of the water flow is pre-defined by the TONE IBS (Intelligent Brewing System). You can simply enter how much ground coffees you are using (ratio), the total amount of water that hits the coffee, select a dilution in % or weight and its temperature, as well as an additional drip time, in case you desire it.



Enter the desired recipe name and click the save button. Your recipe will appear on the recipe list.

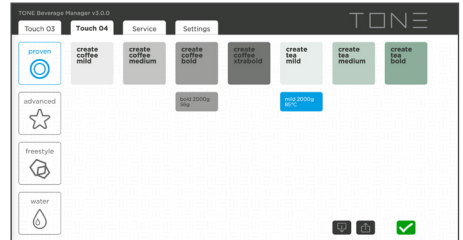


If you do not enter a specific name, the program will give you a name for the recipe, which includes the strength of the coffee, the amount of water and the quantity of ground coffee. The settings of the tea recipes are slightly different. Choose the water temperature considering the type of tea which shall be prepared. The different tea options differ regarding the number of pulses and their characteristics according to the IBS.



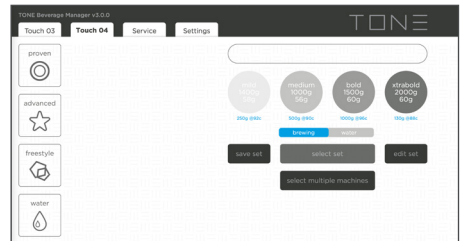
The name of a tea recipe will tell you the strength of the flavour, the amount of water and the brewing temperature. If a recipe is no longer needed, you can delete it in this window by clicking on the

trash bin and selecting the recipe(s) you no longer need. Then click on the green hook to delete.

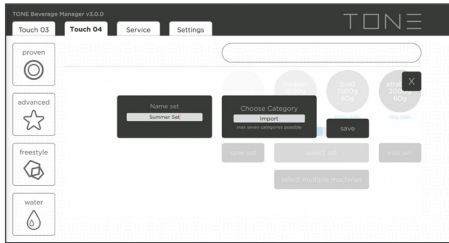


4.4.2 CREATING SETS

It can be decided in advance whether the set is to be made for brewing profiles or for water profiles. This selection can easily be made using the brewing / water buttons. You can compose a set of recipes by clicking on each button of the four square buttons. You can choose a recipe from the proven/ advanced and freestyle mode.



Once you have made your selection of recipes, press "save set", choose a meaningful name and select the desired category. Press then save again.



Press “select set” and select the desired set in the corresponding category. If you press “edit set” you can change one specific set or delete it if no more needed.

4.4.3 ADVANCED

The Advanced tab provides you a very intuitive and comprehensive tool for the creation of new recipes. You can set the temperature of each extraction phase (bloom, turbulence, development) and define the characteristics of the water pulses (temperature, quantity, flow ratio, duration, interval).



First of all, you should fill out all the desired information in the black square box. Varying the bloom or the turbulence phase will adapt the development phase on the water quantity automatically.

Second, you can define how much coffee you need for your recipe by specifying the brew ratio. The amount of coffee is indicated in small letters below. In the same place, you will also see a recommendation of how much water is needed for the blooming phase (this can be transferred to the blooming column if required).



When you have finished your recipe, you can save it by giving the recipe the desired name and select whether it is a tea or coffee recipe. Then click “save recipe”. Next, it will appear in the column when you press the desired key on your selected machine (Touch04) and it will select from the advanced chapter. There is also the possibility to change existing advanced recipes by clicking “edit recipe”.



A new category can be done by pressing the + button in the advanced recipe list.



4.4.4 FREESTYLE

The freestyle chapter provides a way to create a recipe entirely without restrictions or frameworks.

As a first step, you can define the number of pulses (maximum 20) using the + and - keys. Further you can define the parameters per pulse individually. In the upper part you can see the total amount of water and the total time of the recipe.

After assigning a specific name and selecting Coffee or Tea, you can save the recipe with the „save recipe“ key. Again, it is also possible to modify existing recipes with the „edit recipe“ key.



4.4.5 WATER

As soon as the basket is removed, the buttons turn blue and the water mode is activated. The water chapter provides the option of drawing different quantities of water via the bypass. This is done at a defined temperature. Individual recipes up to a maximum of 4 liters can be linked to the 4 buttons. They also can be seen on the main page in blue letters below the button or on the button if you previous push on the water tab.

4.5 IMPORT / EXPORT FUNCTION

If you want to share a recipe you have created to someone, you can use the import / export function. Open the desired tab (proven, advanced or freestyle). Press the edit recipe button. Now you can decide whether you want to import a new recipe or export an existing one.



Import

Select the button if you want to import a new recipe (sent to you from somewhere else) and retrieve the file from where you saved it on your device.



Export

Select the button if you want to export a created recipe. The button will turn blue (see pic. 1) and you can now select all the recipes you want to export. Once you have done this, press the button again (the button will now have a green checkmark, see pic. 2) and select your desired memory location.



Pic 1

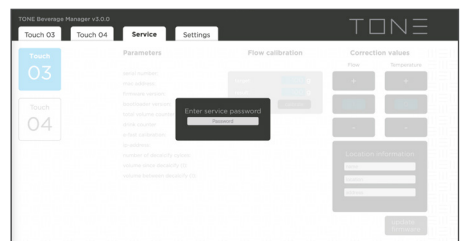


Pic 2

Please note that you can only import an Advanced recipe in the Advanced mode. This also applies to proven and freestyle mode.

4.6 SERVICE

The Service tab provides possibilities to customise the brewer identification and the calibration. And you can also check all important parameters. Clicking on the service tab will automatically open a login pop-up window. Entering the **password "TONEservice"** enables all available options. Select one of the brewers listed in the left column.



In the field “Location information” you can enter a meaningful description of your brewer and its location.

In case your brewer should extract more or less water than intended you can tweak the flow rate by setting a value below 1 in case you want to reduce the amount of water or a value above 1 if you want to increase the amount of water. This is a very sensitive tool and can only be adjusted in permille steps.

To access flow calibration mode, press buttons 1 and 3 for flow 1 and buttons 2 and 3 to access flow 2 calibration. Always simultaneously with the main switch ON. A 500g recipe can then be started with button 1.

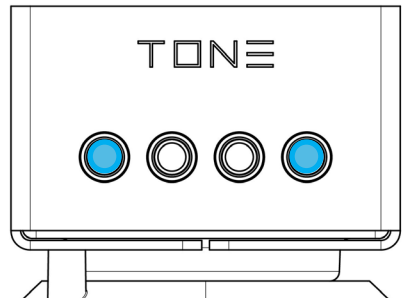
Flow calibration		Correction values	
		Flow	Temperature
target:	100 g	+	+
result:	100 g	1	0
	calibrate	-	-

For the exact calculation of the flow correction you can use the calculator. Enter the desired quantity (target) and the previously measured quantity in the “result” field. Then press the “calibrate” button to transfer the calculated correction to the “Flow” field. This correction is always added to or subtracted from the existing correction.

In case your extraction temperature doesn't fit to the set values of the recipes (e.g. when there is very cold water supply) you can adjust the temperature by clicking “+” or “-“. The maximum values are +5/-5°C. Keep in mind that the maximum possible temperature of a recipe is limited at 97°C. Theoretically you could then achieve a temperature of 102°C. The heating system will then produce steam instead of water, which needs to be prevented in order to achieve good brewing results. Please also remark that the boiling point of water drops with increasing altitude (ffi -1°C/300m).

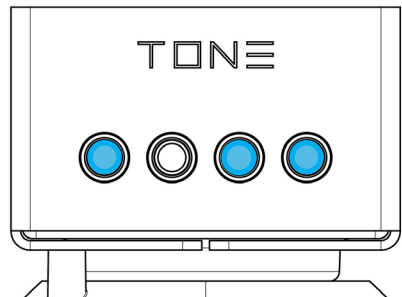
With the “firmware update” button you can easily update the machine. Press the button, select the appropriate “file” on your device and upload it. (If necessary, you can download the actual firmware in the settings tab or ask your authorised dealer if a new file is available).

4.7 ERROR CODES



Buttons 1 & 4 light up blue.

1. Check if the NTC sensor cable (white) is disconnected.
2. Please, contact your dealer.



Button 1 & 3 & 4 light up blue.

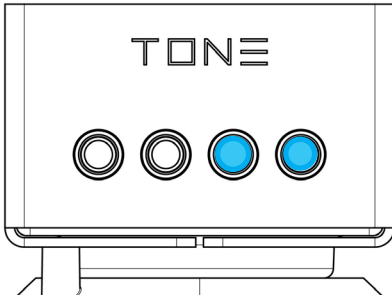
- E-fast disconnected (violet cable).
- Both solid state relay. Disconnected (missing signal).
- Heating fuse defective.
- Cables on top of the heater are disconnected.

1. Save the current recipes on the machine via the TONE Beverage Manager.

Do a reboot by pushing 1/3/4 and switch ON the main switch (this will delete the current recipes on the machine).

Turn the machine off and on again.

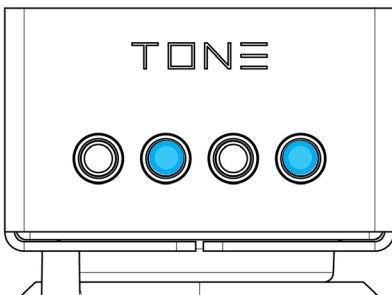
2. Update the firmware to the latest version.
3. In case of any other issues, please contact your authorised dealer.



Buttons 3 & 4 light up blue.

No flow / water supply interrupted.

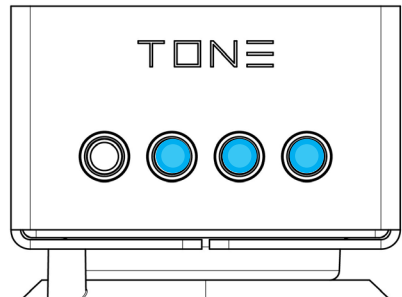
1. Check your water supply / open the main valve.
2. Rinse the machine with approx. 1L by pushing button 1/2 + main switch
3. Descale the machine (*check point 4.2: Descaling*)
4. If no water comes out, build out and clean the proportional valve
5. In case of any other issues, please contact your authorised dealer.



Buttons 2 & 4 light up blue.

- Proportional valve is leaking.

1. Rinse the machine with approx. 1L by pushing button 1/2 + main switch.
2. In case of any other issues, please contact your authorised dealer.



Buttons 2 & 3 & 4 light up blue.

- Brewer overheated / error on heating element / defective thermostat / Flow problem not resolved / missing signal from solid state relay.

1. Switch the brewer OFF and let it cool down.
2. Rinse the machine with approx. 1L as described in *point 4.2: Rinsing*.
3. In case of any other issues, please contact your authorised dealer.

For more precise information go to *point 5.2*. Otherwise please contact your dealer.

Trouble shooting

If vibrating noises are heard from the machine housing, there could be air in the system. This can be the case in particular if the water supply line has been interrupted. In order to remedy the fault, the device must be rinsed. Follow the instruction in *point 4.2 Rinsing*.

In case of any other issues, please contact your dealer.

5. MAINTENANCE

5.1 CLEANING



DANGER DUE TO IMPROPER CLEANING!

Improper cleaning can result in damage to the appliance or personal injury.

- To guarantee proper functionality of TONE equipment it is necessary to clean the device each day.
- To clean the surface of TONE equipment, it is recommended to use a damp cloth soaked in a 1% soda solution (Na_2CO_3).
- Never immerse the appliance itself, the power supply cable or plug in water.
- Never pull the plug out of the socket by the cable, always grasp the plug.
- Never attempt to touch or pick up and electrical appliance if it has fallen into water. In this case, disconnect the plug from the socket immediately.
- Check the appliance and cable regularly for damage.
- If you cannot correct a fault with the aid of the steps described in these operating instructions, please refer to your authorised dealer.

5.2 DAILY CLEANING

- Do not use water jet device to clean the TONE equipment.
- Do not use abrasive means to clean the TONE equipment.
- Check and clean the showerhead daily. All holes of the spray head must always remain open

NOTE - Any remains on the showerhead may influence the water flow and impact your brewing.



DANGER DUE TO UNAUTHORISED REPAIR!

Repairs should be carried out only by authorised customer service centres.

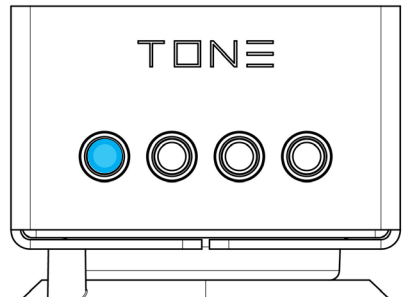
5.3 DESCALING

To guarantee proper functionality of TONE equipment, it is necessary to descale the device.

Please note: The descaling of the TONE Touch 04 brewing system is mandatory as soon the chasing light is appearing or at least once a month.

Any violation of this regulation will lead to a loss of any warranty on the whole brewer.

The demand of a descaling process is indicated on the recipe buttons by a blue chasing light: -> <- ->.



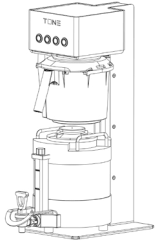
Blue chasing light (Button 1-4) after switching the brewer ON and after finishing a recipe

- Descaling necessary

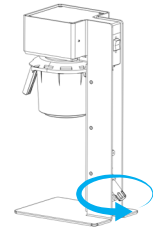
This signal is shown after switching the machine ON and at the end of every extraction.



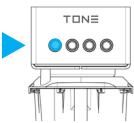
STEP 1
Remove the cover from the TONE Touch 04.



STEP 2
Before the descaling process is started, a vessel with a minimum volume of one liter must be placed underneath the shower.



STEP 4
Screw the descaling agent container into the descaling valve. If the bottle can only be screwed in with great effort, apply a little food grade grease to the thread.



STEP 5
Push and hold button one while switching the machine ON again.



STEP 6
Allow the decalcification recipe (duration approx. 12 min) to run through completely. As soon as the descaling is completed, button one shines constantly blue.

STEP 7
Remove the descaling agent container and restart the machine.

STEP 8
Flush the whole system by extracting at least 300 gramm of hot water.

STEP 9
The TONE Touch 04 is then ready again for brewing excellent coffee.



Scan the QR Code and take a look at the How-to Video.

5.4 TOUCH 04 EQUIPMENT

Provided with the machine:

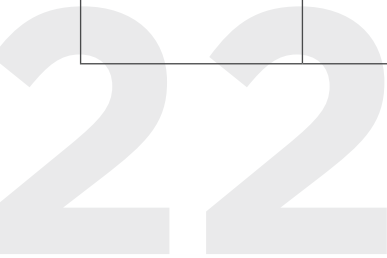
- Brew basket
 - 2 inlets for the basket
Size 2 = Brews for 1.0-3L
Size 3 = Brews for 2.5-4L
 - Starterkit of filter papers (each 25 pcs):
Size 2 = Ø320/110
Size 3 = Ø360/156
 - TONE Green Clean (descaling liquid): one design carton includes 12 green clean bottles x 29 ml - suitable for one year cleaning. (Available at your authorised TONE dealership)
- Available as option:
- Bag of filter paper with 500 pcs:
Filterpaper Size 2 = Ø320/110
Filterpaper Size 3 = Ø360/156



6. FAULT RECTIFICATION

PROBLEM	SOLUTION
<p>Overheating (Buttons 1 & 4 light up blue)</p>	<p>1. In case of any other issues, please contact your authorised dealer.</p>
<p>No recipes visible on the keys (TONE-App)</p>	<p>1. Check if the number of the machine on the left side is marked. 2. Do a reboot of the machine by pushing 1/3/4 and main switch together. 3. Update the machine with the actual firmware. 4. In case of any other issues, please contact your dealer.</p>
<p>Dripping from the machine even when the machine is switched off</p>	<p>1. Rinse the machine with approx. 1L by pushing button 1/2 and mainswitch together. 2. Descale the machine (check manual). 3. In case of any other issues, please contact your dealer.</p>

<p>After switching on, the machine let the water flow though without pushing any Button before or there is no water coming through at all. This means the proportional valve does not open or close at all. (for example during a first installation of the machine).</p>	<p>1. Push the buttons 1+3 and main switch together. This will cause a repeated opening and closing of the proportional valve including a subsequent flushing for 10 sec. This might help to get rid of some lime scale etc. (This action can only be performed if firmware 2.7.0 is called on the machine). 2. Start again a recipe 3. Please, contact your dealer if there is and issue.</p>
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<p>No flow / water supply interrupted</p> <p>Buttons 3 & 4 light up blue</p>	<ol style="list-style-type: none"> 1. Check your water supply / open the main valve. 2. Rinse the machine with approx. 1L by pushing button 1/2 + main switch. 3. Descal the machine. 4. Please, contact your dealer if there is and issue.
<p>Buttons 2 & 4 light up blue -> Proportional valve is leaking</p>	<ol style="list-style-type: none"> 1. Rinse the machine with approx. 1L by pushing button 1/2 + main switch. 2. Please, contact your dealer.
<p>Buttons 2 & 3 & 4 light up blue</p> <p>Brewer overheated / error on heating element / defective thermostat / Flow problem not resolved / missing signal from solid state relay.</p>	<ol style="list-style-type: none"> 1. Switch the brewer OFF and let it cool down. 2. Rinse the machine with approx. 1L by pushing button 1/2 main switch together. 3. Please, contact your dealer if there is and issue.
<p>The machine is heavy sputtering at the beginning of each pulse.</p>	<ol style="list-style-type: none"> 1. Please, contact your dealer.

PROBLEM	TIP
<p>When starting a recipe, no water comes out of the machine (the selected button keeps blinking)</p>	<ol style="list-style-type: none"> 1. Check the fuse of the heating element. 2. Check if during the run of a recipe the LED of both solid state relays are blinking. 3. Update the firmware. 4. In case of any other issues, please contact your dealer.
<p>The machine is not visible in the TONE App (Connection is done by ethernet cable)</p>	<ol style="list-style-type: none"> 1. Check the regulations of your firewall for the TONE app. 2. Select the automatic mode in the ethernet properties. 3. Switch off/ on the machine and the TONE App 4. Check if the machine number is visible in the TONE App 5. In case of any other issues, please contact your authorised dealer.
<p>The machine is not visible in the TONE App (Connection is done over wifi with the IO-GEAR device)</p>	<p>Check the setup of the IO-GEAR device regarding the manual "IO-GEAR Setup" (check video and document on www.tone-swiss.com)</p>

EEC CONFORMITY DECLARATION ACT
2006/42/EC

The undersigned: TONE Kaffeemaschinen
AG with premises at: Kasernenstraße 5, 3600
Thun, Switzerland

Declares that: The coffee machine has been
projected and manufactured in conformity
with Directive 2006/42/EC and relevant
national law, in accordance with the following
norm for conformity evaluation: UNI 9887,
ISPSEL rev. 95.

7. TECHNICAL DATA

Type	TONE TOUCH 04
Designation	Beverage Coffee and Tea Brewer
Dimensions in mm (w x h x d)	242 x 646 x 320
Weight	22 kg
Boilervolume	boilerless
Maximal waterflow	16g/sec
Required water pressure	0.3-0.4 MPa / 3-4 Bar
Maximal water pressure	1.0 MPa / 10 Bar
Noise level	< 50 dB

The electrical ratings can be found on
the type plate which you will find on the
device.

8. RECYCLING AND DISPOSAL

Instructions for the disposal of old products.

The WEEE Directive (Waste from electrical
and electronic equipment; 2002/96/EG)
was passed for the protection of human
health and the environment, in order to
ensure that old products are disposed of so
as to make use of the best possible recovery
and technical recycling possibilities.

Your product has been developed and
manufactured from high-quality materials
and components, which can be largely
recovered and recycled. Do not dispose
of the product as normal domestic waste.
Please find your local collection points for
electrical and electronic waste products,
which are marked with this symbol:

Please make use of one of the following
disposal possibilities:



1. Dispose of the complete
product (including the cable,
plug and accessories) at the
relevant WEEE collection point.

2. If you are buying a
replacement product, you can
return the old appliance to the dealer. Under
the WEEE Directive, retailers are obliged to
take back such old appliances.

9. WARRANTY NOTE

TONE Kaffeemaschinen AG warrants equipment manufactured by it for 1 year parts and labor. Accessories and Dispensers 1 Year parts only. Electronic Circuit and Control Boards- 1 years parts, 1 year labor. Equipment manufactured by others and distributed by TONE - Please see original equipment manufacturers warranty, TONE Kaffeemaschinen AG will follow.

These warranty periods run from the date of sale TONE warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by TONE or that, in TONE's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, relocation or reinstallation, improper maintenance or repair, incorrect voltage applied to the unit at any time, damage or casualty. This warranty does not apply to any equipment failures related to poor water quality, excessive lime and chlorine and non periodic cleaning and descaling. Warranty is null and void if muriatic or any other form of hydrochloric acid is used for cleaning or deliming. In addition, this warranty does not apply to replacement of items subject to normal use including but not limited to user replaceable parts such as faucet seat cups, sight gauge tubes, washers, o-rings, tubing, seals and gaskets.

This warranty is conditioned on the Buyer

- 1)** giving TONE Kaffeemaschinen AG prompt notice of any claim to be made under this warranty by mail to service@tone-swiss.com;
- 2)** if requested by TONE Kaffeemaschinen AG, shipping the defective equipment prepaid to an authorized TONE Kaffeemaschinen AG service location; and
- 3)** receiving prior authorization from TONE Kaffeemaschinen AG that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS

EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCL., BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

The agents, dealers or employees of TONE Kaffeemaschinen AG are not authorized to make modifications to this warranty or to make additional warranties that are binding on TONE Kaffeemaschinen AG. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

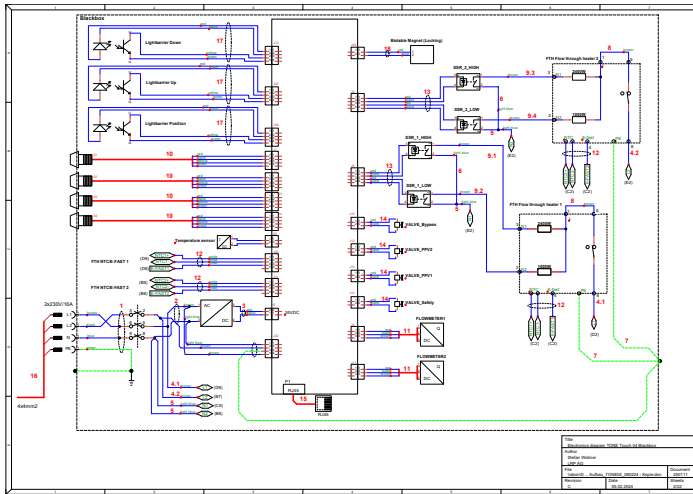
If TONE Kaffeemaschinen AG determines in its sole discretion that the equipment does not conform to the warranty, TONE Kaffeemaschinen AG, at its exclusive option while the equipment is under warranty, shall either:

- 1)** provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a TONE Kaffeemaschinen AG Authorized Service Representative; or
- 2)** shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST TONE KAFFEEMASCHINEN AG FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT NEWCO'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall TONE Kaffeemaschinen AG be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

10. WIRING DIAGRAM



11. TONE WATER SPECIFICATION

Recommended water parameters for TONE TOUCH 04

VALUE	UNITS	MINIMUM	above this values a decarbonation is necessary	MAXIMUM
Conductivity/T.D.S	μS ppm	120 60	180 100	300 160
Total Hardness	ppm °dH	50 3	100 7	160 9
Total Iron	ppm			0,2 mg/l
Free Chlorine	ppm			
Total Chlorine	ppm		free from chlorine and chlorine compounds	
pH				
Alkalinity	ppm	36		107
Carbonate Hardness	°dH	2	4	6
Chloride	ppm	0		30

Required water pressure : 3-4 bar / 0.3-0.4 MPa (40-60 psi / 300-400 kPa)

IRON: Iron is regulated via the drinking water ordinance with 0.2 mg/L.

CHLORINE: Even small amounts of chlorine can lead to a change in taste.

CARBONATE HARDNESS: Depending on the coffee; recommendation: individual tasting during set-up and subsequent fine-tuning of the filter blend, as the KH has the greatest influence.

TONE

TONE Kaffeemaschinen AG
Kasernenstrasse 5
3600 Thun
Switzerland

contact@tone-swiss.com
www.tone-swiss.com

Download all TOUCH 04 brewer documents
here for a quick and easy start:



A printed version can be ordered at service@tone-swiss.com.