GRAINFATHER

CHEERS, NICE TO MEET YOU

GF30 INSTRUCTION MANUAL

G SERIES

HI, I'M THE GF30
CONTROL ME 📡
FROM ANYWHERE

GRAINFATHER
3
YEAR WARRANTY

THANK YOU FOR CHOOSING THE GRAINFATHER GF30 FERMENTER

Get your equipment ready by following these quick and easy steps, and you'll be ready to ferment up to 27 L of beer in no time. We recommend reading the following safety information before use. Please also find enclosed, instructions for connecting the **G**C2 or **G**C4 Glycol Chiller or Cooling Pump Kit to your **G**F30. Plus, how to set up automatic fermentation and connect fermentation tracking devices, such as Tilt and Plaato, as well as advice for cleaning and storage, and top tips.

SAFETY INFORMATION

1. Read all instructions before use.
2. Do not touch hot surfaces. Use handles or knobs.
3. To protect against fire, electric shock and injury to persons, do not immerse cord or plugs in water or other liquid.
4. Close supervision is necessary when any appliance is used by or near children.
5. Unplug from outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts, and before cleaning the appliance.
6. Do not operate any appliance if:
   • It has a damaged cord or plug
   • The appliance malfunctions
   • It has been damaged in any matter Return appliance to your nearest retail service provider for examination, repair or adjustment.
7. The use of accessory attachments is not recommended by the appliance manufacturer as it may result in fire, electric shock, or injury to persons.
8. Do not use outdoors.
9. Do not let the cord hang over the edge of a table or counter and do not let it touch hot surfaces.
10. Do not place on or near a hot gas or electric burner, or a heated oven.
11. Do not use the appliance for anything other than the intended use.
12. Ensure that the main power supply to the controller contains overload protection (maximum load: 230 V/16 A) in accordance with the related national and/or local codes.

NOTE: Not following the safety information above may void your warranty.

ANATOMY DIAGRAM
& PARTS LIST

1. Airlock

2. Rubber Bung

3. Liquid Inlet

4. Cone Plug Seal

5. 5 cm (2") Tri Clamp

6. Dual Valve Tap

7. Silicone Transfer Hose (10 mm (0.4") inner diameter)

8. Fermenter Lid

9. Fermenter Body

10. GF30 Controller

11. Base

NOTE: The full spare parts list for the **G**F30 is available online: **help.grainfather.com**

PRE FERMENTATION ASSEMBLY 🔧

Before use, we recommend cleaning your **G**F30 and all of its components using the Grainfather High Performance Cleaner.
For detailed cleaning instructions, see page 14.

INSTALL THE DUAL VALVE TAP

1. Unpack the fermenter and all its parts. Remove all the protective packaging and then assemble the dual valve tap.
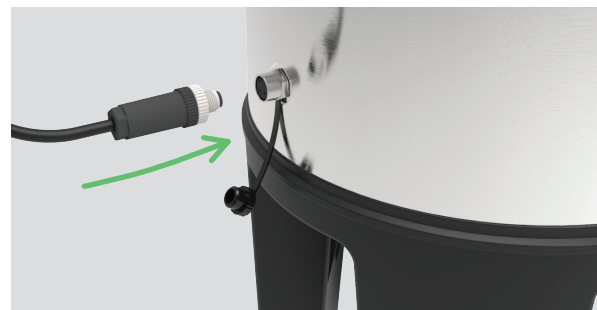
Screw on ball valve

Attach liquid inlet
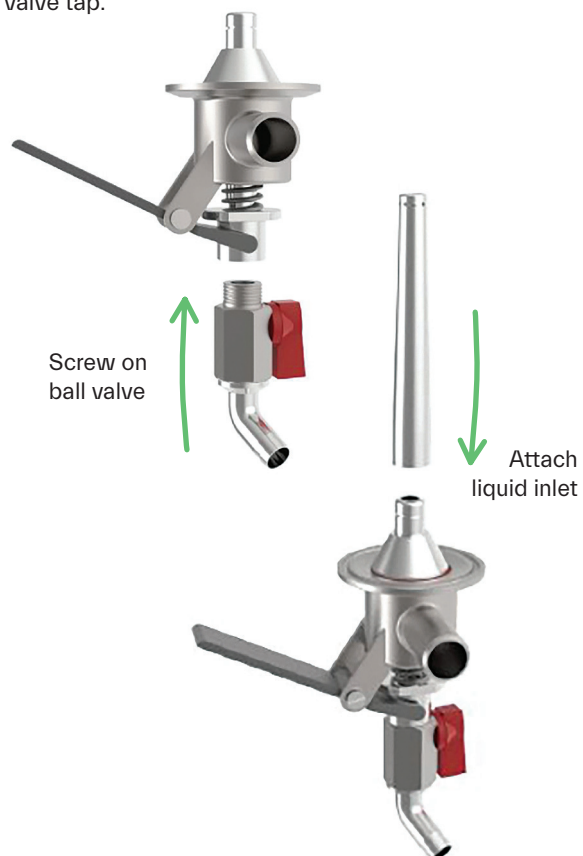
2. Attach the valve to the bottom of the fermenter by inserting the cone plug seal. Then use the tri clamp to tighten it and secure it in place.
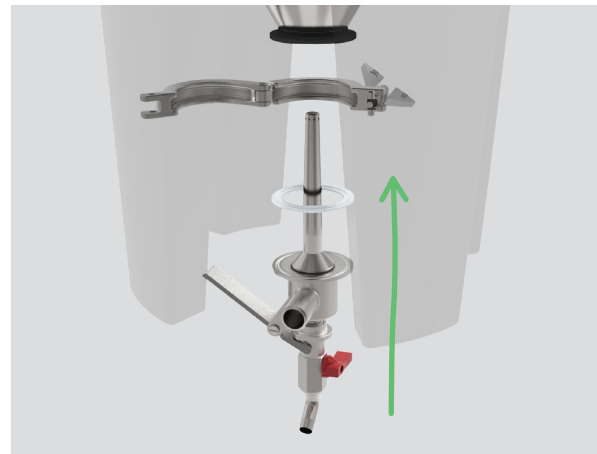
CONNECT THE POWER CORD

3. Plug the 2 m (6.5 ft) power cord into the back of the fermenter.

4. Then plug the other end of this cord into the power adapter. Do not plug this into a wall and switch on the power until you are ready to heat the fermenter.

ATTACH THE BUNG, AIRLOCK & LID

5. Push the rubber bung into the hole in the fermenter lid. Once fitted, push the airlock into the hole of the rubber bung. The airlock stops anything from entering the fermenter during fermentation, helping to keep your brew safe.

NOTE: Clean the unit as per the cleaning instructions before use.

CONNECTING
TO A CHILLER ❄

CONNECTING THE GC2, GC4 OR COOLING KIT.

1. A cooling connection kit is included with with the **G**C4, **G**C2 Gylcol Chillers and the Cooling Pump Kit. This consists of brass couplers, seals, and hoses.

2. To connect the couplers to the fermenter, place the white seal inside the threaded hole on the side of the fermenter.

3. Take the threaded section of the coupler and screw it onto the same side of the fermenter where you placed the seal. Ensure that it's screwed on tightly. Use a spanner if necessary but do not over tighten.

4. Connect the other end of the coupler to the section you just assembled, by pushing the spring-loaded sleeve back and sliding it over.

5. Repeat these steps on the other side of the fermenter. Ensure that the hot/red hose is connected via the higher point on the fermenter and the cold/blue hose is connected via the lower position.
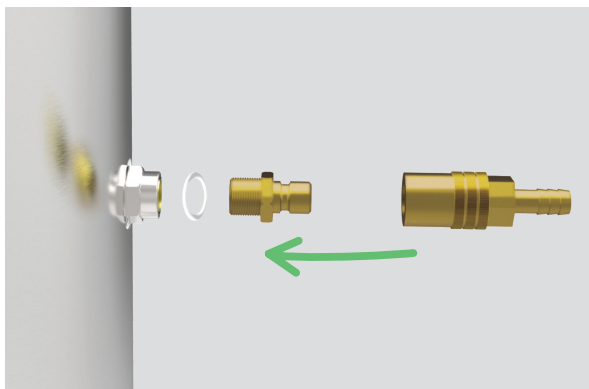
NOTE: You can measure and cut the hoses to make them shorter if needed. This will also increase maximum cooling efficiency. Ensure that you use a minimum of 15 L (4 Gal) when pumping liquid through the cooling sleeve.

THE GF30 CONTROLLER

CONNECTION SETUP

When you first turn on the controller, you will be greeted with one of these connection setup screens.
Press 'set' to go to the main default screen.

MAIN DEFAULT

The main default screen shows the current and target temperatures, unit symbol (Celsius or Fahrenheit), current temperature control status (heating/cooling/tracking) and if there is a fermentation running using managed mode, it displays all the information from the current session.
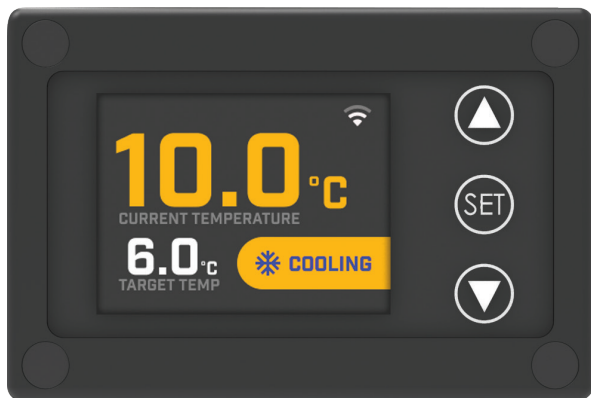
Use the 'up/down' buttons to change the target temperature. To enter the controller settings press the 'set' button, then navigate using the 'up/down' buttons and press the 'set' button to select an option.

MAIN MENU

This screen displays the main menu options:

- Fermentation Profiles
- Network Configuration
- Settings
- About

FERMENTATION PROFILES

This sub menu manually controls your fermentation profile. If you already have a fermentation profile active, you can stop/finish the session from this menu without opening the app.
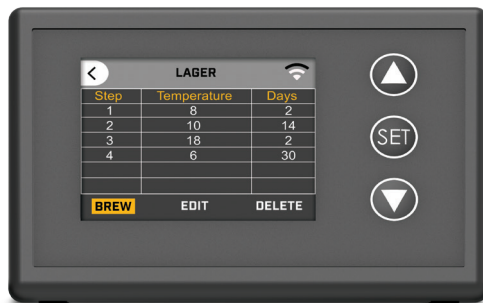
SAVED PROFILES

These are the saved fermentation profiles on the **G**F30 Fermenter. You can access these directly on the **G**F30 Fermenter without being connected to the Grainfather App or a brew session.

There are two default profiles that are already saved onto the **G**F30 Fermenter – lager and ale.

NOTE: These steps are fully editable, so you can customise these. The maximum number of steps that you can use is 7.

CREATING PROFILES

This section allows you to build two additional custom fermentation profiles. These can be saved onto the **G**F30 Fermenter without being connected to the app or wireless internet.


NETWORK CONFIGURATION

On this screen, you can add a new wireless network and connect your fermenter. If you've previously connected your fermenter to other networks, you can also clear these here.

SETTINGS

This screen displays the main settings:

- Change temperature control (to disable heating or cooling).
- Change units (Celsius or Fahrenheit).
- Hysteresis (the margin of temperature variation from the set temperature allowed before the temperature control turns back on): 0.1–2.0°C (0.22–4°F).
- Lower temperature alert (default setting: yes). We do not recommend changing as lower temperatures may result in an uneven temperature distribution.
- Calibrate temperature. (we do not recommend changing this setting).
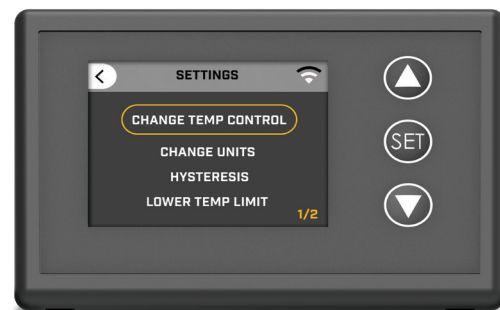
ABOUT

This gives the device information and location for updating the controller firmware.

CLEARING **G**F30 NETWORKS

If you're experiencing network issues or troubleshooting, you can use this function to remove your saved network and password.

GF30 SETTINGS

CHANGING THE TEMPERATURE CONTROL

This menu allows the **G**F30 to manage target temperatures. When the **G**C2 or **G**C4 and the heating pad are connected, the default on the adapter allows both heating and cooling functions. In hot environments where the heating function is not needed, you can change to cooling only. When the environment is colder and the cooling function is not needed, you can change to heating only.
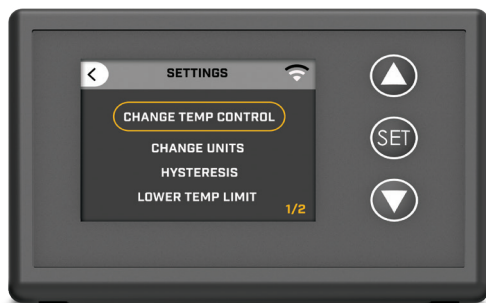
CHANGE UNITS

This is where you can change between Fahrenheit and Celsius, and select your preferred temperature units.
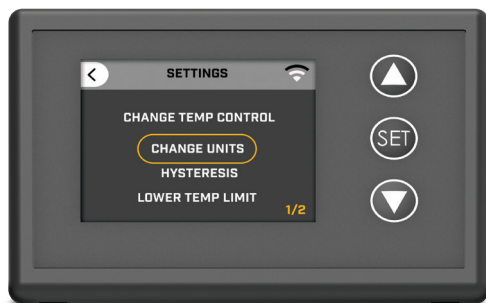
HYSTERESIS

This setting is for the narrowness or wideness of temperature control based on the target temperature. The default is 0.5°C (1°F) which means that once the fermenter has reached the target temperature, then the **G**F30 will not restart cooling or heating until the fermenter temperature is more than 0.5°C (1°F) away from the target temperature.

NOTE: A low hysteresis will cause the heating and cooling functions to become more active. The lowest hysteresis that can be achieved is 0.1°C and 0.22°F.
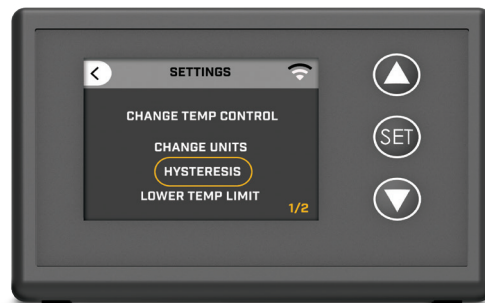
LOWER TEMPERATURE LIMIT ALERTS

This setting allows you to override the lower temperature limit alert. We do not recommend changing this as temperatures lower than 6°C (43°F) may result in an uneven temperature distribution. The default setting is 'on' and will alert you when you try to set the temperature lower than the default setting. Please note that although you can disable this setting, you may still not reach lower temperatures.

CALIBRATE TEMPERATURE

The temperature probes are NTC (Negative Temperature Coefficient) type temperature sensors. An NTC thermistor is a temperature sensor that uses the electrical resistance properties of ceramic/metal composites to measure the temperature.

This feature allows for an offset to be applied to the reading of the temperature probe if it is inaccurate. This should only be used if the temperature probe is compared to a certified calibrated thermometer which has a resolution of +/- 0.01°C or 0.01°F.
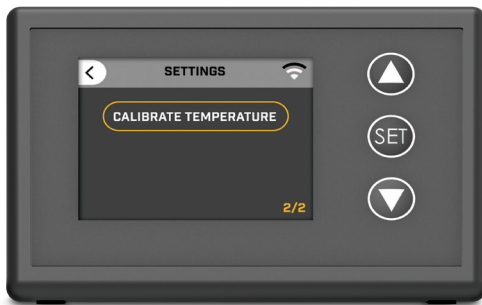
ABOUT

This menu gives the details about the device, and if connected to the internet it can check and install updates to the **G**CA.


Note: We recommend that you do not begin an update during fermentation to limit possible data and fermentation control issues. Ensure your unit is close to a strong Wi-Fi signal before updating your **G**F30. If the signal is weak, your **G**F30 may show a blank screen or take a few hours to update. In this case, please leave the unit to update before taking any further action.

WIRELESS CONTROL & APP INTEGRATION

CONNECTING THE CONTROLLER TO THE APP

1. When you first turn on the **G**F30, you will be greeted with the connection setup screen. If you do not see this screen, then you can press the 'set' button on the controller and go to Network Config > Add New Network. Once on the connection setup screen, you will need to open the Grainfather Brewing App on your mobile device.

2. Within the app, navigate to the equipment screen. The equipment screen shows all the brewing and fermenting equipment that you have already set up on your account.

3. To add a new device, tap the '+' icon on the bottom right of the screen and select 'fermentation tracking equipment'.

4. Select '**G**F30 Fermenter' on the list of equipment.

5. Name your fermenter and save.

6. You are now on the controller equipment page. To link your controller to your wifi home network select the link controller button.

7. Once on the device setup screen, select the colour of the screen you see (white or black) and tap 'ready'.

8. Depending on your mobile device, you may be asked to request certain permission(s) required to connect with the controller. Accept all requests.

NOTE: The following steps vary for Android and iOS users. Please follow the relevant steps for your mobile device.
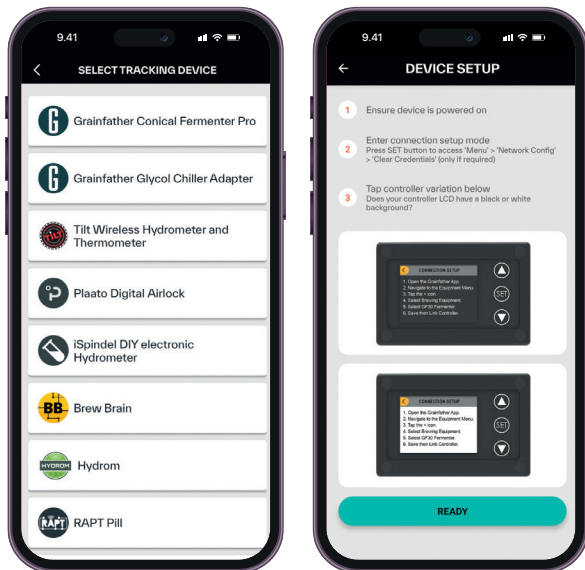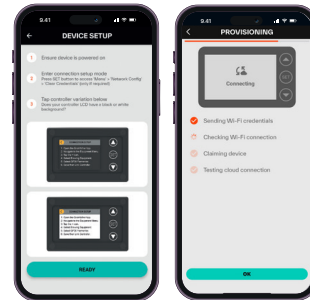

ANDROID

If setting up the controller via an Android device, choose your controller in the list.
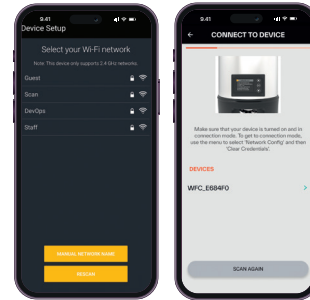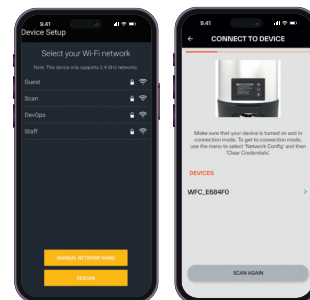

After your phone has successfully connected to the controller (Android), select your wireless network from the list and enter in your network password and then tap 'connect'. Once completed, your **G**F30 Fermenter is connected to the internet.


iOS

If setting up using an iOS mobile device, follow the instructions on the screen and connect your mobile device to the controller. Once the connection is established, you may receive a notification on your mobile device and select allow to continue the process.


After your phone has successfully connected to the controller, select your wireless network from the list and enter in your network password and then tap 'connect'. Once completed, your **G**F30 Fermenter is connected to the internet.
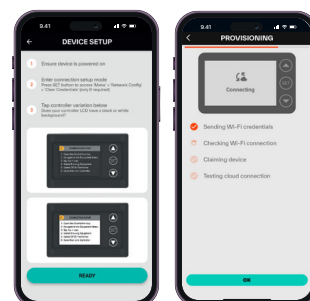
HOW TO USE THE GF30

1. Fill your fermenter by syphon or a Grainfather Counterflow chiller. Ensure that the volume is at least 15 L.

2. Secure the lid. Ensure that the rubber bung and airlock are still tightly in place.

3. Plug the fermenter into a power socket and turn on (heating only). For cooling capabilities, purchase one of the Grainfather **G**C2, **G**C4 or Cooling Pump Kit.

4. You can now use the controller manually or via the connection on the Grainfather App on your mobile device. By using the app and your mobile device, you can monitor your fermentation remotely with automatic alerts and notifications.
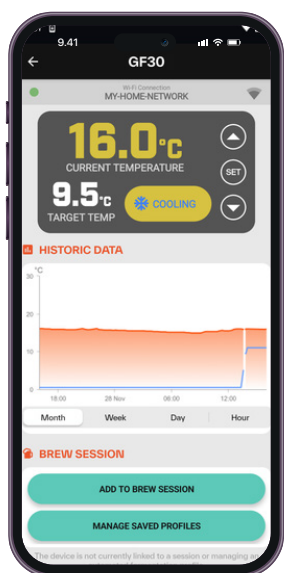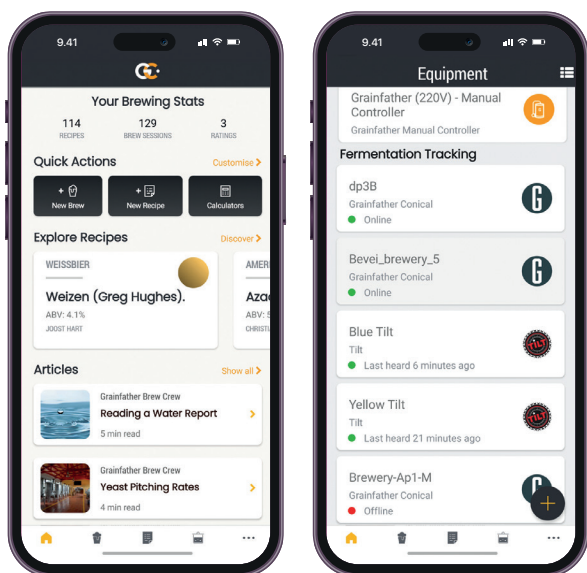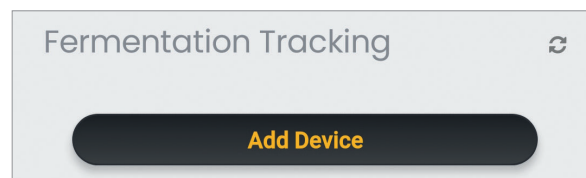

SETTING UP AUTOMATIC FERMENTATION

5. Before starting your brew session, ensure that the recipe you have chosen has a fermentation profile on the Grainfather App.
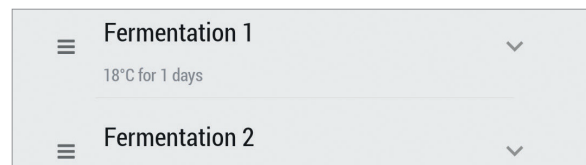
6. Once you have completed the brewing phase of the session go to the fermentation section. Under fermentation tracking, add a new device by selecting 'add device' and choose your **G**F30 Fermenter.

7. After selecting your controller, a device setup page will display. You can exit this page by pressing cancel in the top left corner.

HOW TO USE CONFIGURATION

8. To allow the Grainfather App to manage fermentation as per your profile, go to the fermentation steps and drag the toggle under managed mode.
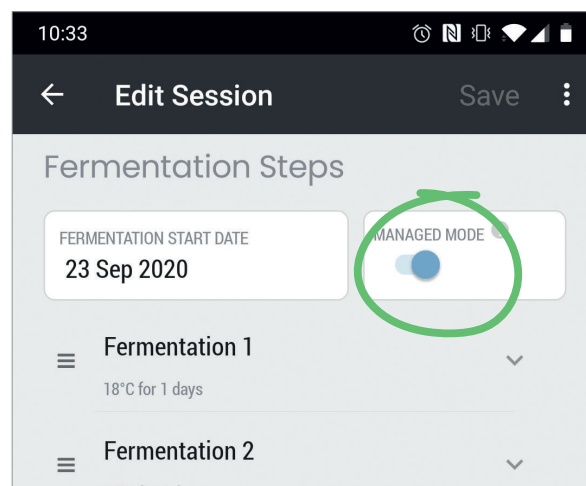
9. The **G**F30 Fermenter, in conjunction with the Cooling Pump Kit/**G**C2 or **G**C4, will now automatically maintain and change the fermentation temperature based on your profile. Under fermentation tracking, you can view a graph that monitors the progress of your fermentation.
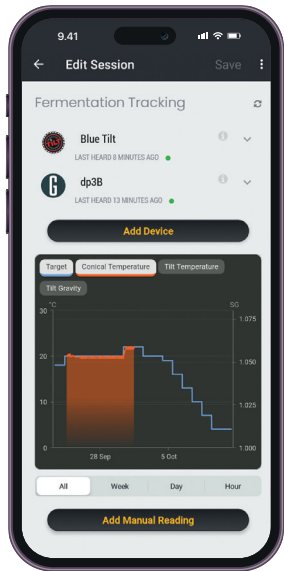

NOTE: If you love brewing lager, check out our online guide for more information on lager fermentation profiles, and discover how you can best use the **G**F30 Fermenter to lager and crash cool:

SCAN HERE

CONNECTING FERMENTATION TRACKING DEVICES

10. Within the fermentation section of the Grainfather App, you can also add other tracking devices such as Tilt© and Plaato.
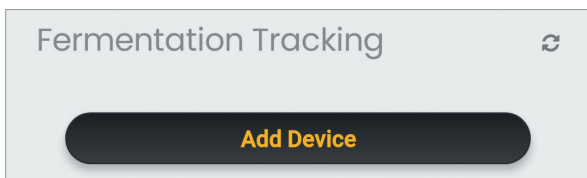
11. Select 'add device' and either follow the instructions on the app or select your fermentation device from the list presented.

12. After selecting your device, a setup page will display. Follow these instructions to set up your fermentation device.
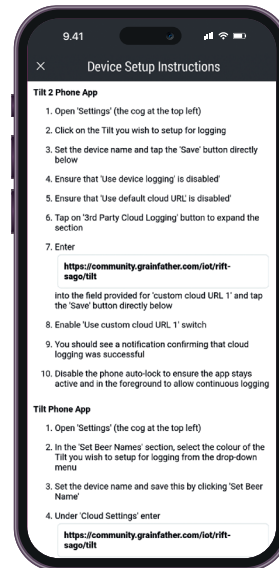
13. Once set up, the app will now display your fermentation tracking on your mobile device.

ADVICE FOR
CLEANING
& STORAGE

- After fermentation, transfer the beer to kegs or bottles.

- Always unplug your fermenter and screw on the fermenter socket cap prior to cleaning.

- Rinse out the remaining trub and fill with water.

- Fill the fermenter halfway with water and add Handcraft Supplies Cold Water Cleaner Detergent.

- Scrub the sides of the fermenter and the lid with a non-abrasive cloth and clean water. Ensure all surfaces have been scrubbed.
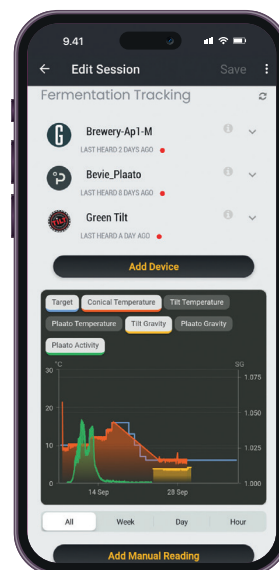
- Drain out the cleaning liquid using both taps on the dual valve.

- Remove, disassemble and clean the dual valve tap.

- Then clean all the equipment with Handcraft Supplies No Rinse Sanitiser.

- Reassemble, dry and store.

- The **G**F30 Fermenter Controller is splash proof to make cleaning the outside of your fermenter easy. However, do not use a high-pressure hose directly on the controller or the fermenter power socket.

- Avoid the controller and power socket (even with the cap securely in place) coming into contact with water for extended periods of time.

TOP TIPS

- We recommend dumping dead yeast and dry hops every 2–3 days during fermentation. This prevents the yeast and hops from clogging the valve.

- Throughout fermentation, the beer valve can be used to collect samples and test the gravity of the beer. To do this, open the ball valve and collect the beer using an appropriate vessel.

- As well as collecting samples, the valve can also be used to transfer the beer after fermentation. Simply connect a hose (10 mm (0.4") inner diameter) to the opening and open the ball valve.

- Temperature distribution changes as it cools. Therefore, when cooling at low temperatures, a reading that's taken at the top of the fermenter with an additional probe, such as a Tilt hydrometer, may be different to a reading that's taken in the cone.

- If you're fermenting in ambient temperatures above 30°C (86°F), we recommend using the **G**F30 Insulation Jacket (sold separately) to improve cooling times.

- To transfer your beer easily into a keg or bottle, we recommend using our Pressure Transfer Kit. If cold crashing, you can use the Pressure Transfer Kit to prevent suck back from the airlock by applying 0.5psi of CO_2 and adjusting the needle valve. This adds a blanket of CO_2 to the top of the fermenter and stops air getting in as the beer contracts as it rapidly cools. Cooling slowly at 3°C (37.4°F) per day will allow equilibrium between the pressure in the fermenter and outside. It also stops air getting back into the fermenter as the temperature drops.

HEATING
TIME GUIDE

The **G**F30 Fermenter has a 30 W, 12 V heating element inside the cavity of the fermenter.
This gently heats the environment between the walls of the fermenter, allowing for an even and controlled temperature increase, which is best for the yeast.

The heating efficiency of your fermenter is dependent on your ambient room temperature; however, the **G**F30 Fermenter can achieve up to 10˚C (~20˚F) higher than ambient room temperature. Below is a guide of expected heating times based on the starting ambient temperature.

AMBIENT TEMPERATURE 21°C (70°F) Humidity 50% / Volume 23 L (6 Gal)

TIME (HOURS)	0	1	2	3	4	5	6	7	8	9	10	11	12
GF30 FERMENTER	18°C (64°F)	19.2°C (66.5°F)	20.1°C (68.1°F)	21°C (69.8°F)	22.2°C (71.9°F)	22.9°C (73.2°F)	24.1°C (75.3°F)	25°C (77°F)	26.2°C (79.1°F)	27.3°C (81.1°F)	28.1°C (82.5°F)	29.1°C (84.3°F)	30.4°C (86.7°F)
GF30 FERMENTER WITH INSULATION JACKET	18°C (64°F)	19.2°C (66.5°F)	20.1°C (68.1°F)	21°C (69.8°F)	22.2°C (71.9°F)	26.4°C (79.5°F)	27.5°C (81.5°F)	28.6°C (82.9°F)	29.7°C (85.4°F)	30.6°C (87.1°F)	32.2°C (89.9°F)	34.3°C (93.7°F)	35.5°C (95.5°F)

AMBIENT TEMPERATURE 10°C (50°F) Humidity 50% / Volume 23 L (6 Gal)

TIME (HOURS)	0	1	2	3	4	5	6	7	8	9	10	11	12
GF30 FERMENTER	10°C (50°F)	10.8°C (51.4°F)	11.7°C (53°F)	12.6°C (54.6°F)	13.7°C (56.6°F)	14.6°C (58.2°F)	15.5°C (59.9°F)	16.4°C (61.5°F)	17.5°C (63.5°F)	18.7°C (65.6°F)	19.5°C (67.1°F)	20.2°C (68.3°F)	20.2°C (68.3°F)
GF30 FERMENTER WITH INSULATION JACKET	10°C (50°F)	11.9°C (53.4°F)	12.9°C (55.2°F)	13.9°C (57°F)	15.1°C (59.1°F)	16.1°C (50°F)	17.1°C (62.8°F)	18.1°C (64.6°F)	19.3°C (66.7°F)	20.6°C (69.1°F)	21.5°C (70.7°F)	22.3°C (72.1°F)	25.3°C (74.3°F)

AMBIENT TEMPERATURE 4°C (39°F) Humidity 50% / Volume 23 L (6 Gal)

TIME (HOURS)	0	1	2	3	4	5	6	7	8	9	10	11	12
GF30 FERMENTER	4°C (39.2°F)	4.9°C (40.8°F)	5.5°C (41.9°F)	6.2°C (43.1°F)	6.8°C (44.2°F)	7.4°C (45.3°F)	8.8°C (47.8°F)	8.8°C (47.8°F)	8.8°C (47.8°F)	8.8°C (47.8°F)	8.8°C (47.8°F)	8.8°C (47.8°F)	8.8°C (47.8°F)
GF30 FERMENTER WITH INSULATION JACKET	4°C (39.2°F)	5.4°C (41.7°F)	6.1°C (43°F)	6.8°C (44°F)	7.5°C (45.5°F)	8.2°C (46.8°F)	9.2°C (48.6°F)	9.7°C (49.5°F)	10.5°C (50.9°F)	11°C (51.8°F)	11.9°C (53.4°F)	13°C (55.4°F)	14.4°C (57.92°F)

NOTE: 4°C (39.2°F) is the lowest temperature that we recommend for fermentation. Based on a 20°C (68°F) ambient temperature, 36°C (96.8°F) is the maximum temperature that you can achieve when using the **G**F30 Insulation Jacket. Results will vary depending on ambient temperature and humidity.

IMPORTANT ☺
SAFEGUARDS

READ AND FOLLOW ALL INSTRUCTIONS

CAUTION   - Risk of fires and electric shock.
- Replace only with genuine Grainfather cord set, part No. SJTO.
- Do not immerse in water.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

FOR COMMERCIAL AND INDOOR USE ONLY

WARNING
AVERTISSEMENT

RISK OF ELECTRIC SHOCK . DO NOT OPEN.
RISQUE DE CHOC ÉLECTRIQUE. NE PAS OUVRIR

SCAN AND EXPLORE THE FREE GRAINFATHER APP

RESOURCES: Check out our YouTube Channel for helpful videos.
For more information and help, visit our Help Centre: **help.grainfather.com**