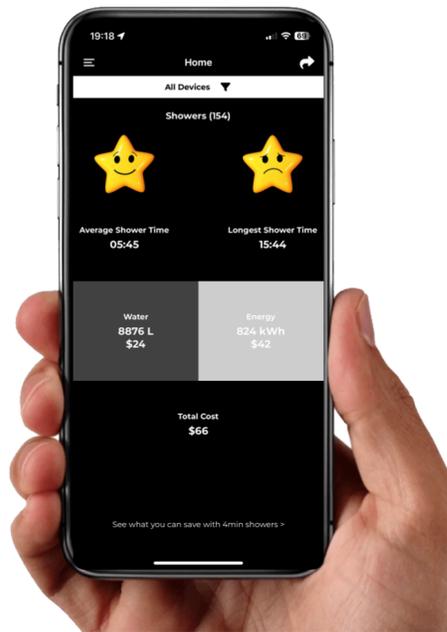




# SHOWERSTAR™

## USER MANUAL



<https://touchgrid.com/>

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TouchGrid Pty Ltd

Rev 7 25 March 2025

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# 1 INTRODUCTION

Shortening your shower time not only conserves precious water, but also the energy required to heat it.

ShowerStar features coloured LEDs to notify you at different stages of each shower, helping you change your behavior to take shorter, more water and energy efficient showers.

ShowerStar provides visual feedback when:

1. Water flow detected
2. Timer started
3. Half-time
4. Full-time
5. Over-time

The USB rechargeable battery lasts 6-8 months before needing recharging<sup>1</sup>.

The Timer is configurable for up to 10 minutes, with a default shower time of four minutes.

The simple design enables installation with no technical expertise or contractors needed. Simply mount the ShowerStar using the included zip ties to any shower pipe or showerhead and you're ready to save water and energy!

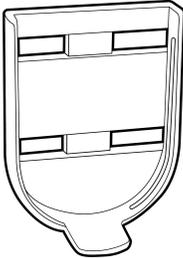
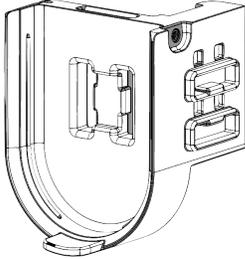
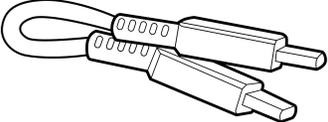
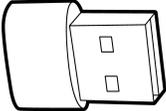
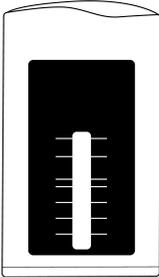
---

<sup>1</sup> Assuming 4 showers a day and default alert settings..

## 2 FEATURES



## 2.1 WHAT'S IN THE BOX

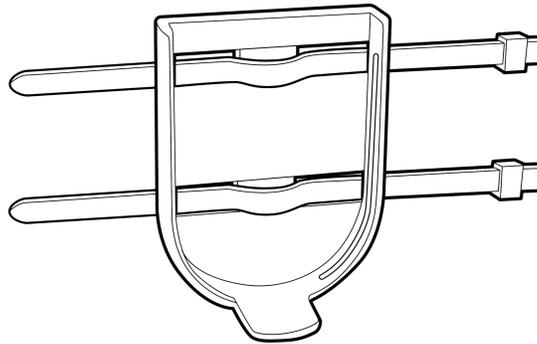
<p>ShowerStar™ (1)</p> 	<p>Mounting Cradle (1)</p> 	<p>Universal Mounting Cradle (1) <i>(supplied with selected units)</i></p> 
<p>USB Type-C Charging Cable (1)</p> 	<p>USB Type C to Type A Adapter (1)</p> 	<p>Zip Ties (2)</p> 
<p>Sticker (1)</p> 	<p>Shower Flow Rate Measurement Bag (1)</p> 	

## 3 INSTALLATION

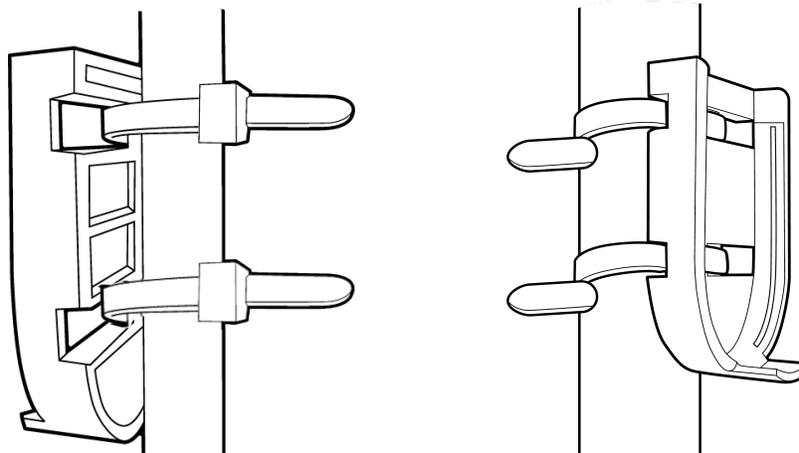
### 3.1 ZIP TIES

Insert a zip tie into the upper slot on the mounting cradle. Then, insert the second zip tie into the lower slot. The rounded end of the mounting cradle should point down, with the flat end facing up.

Front View



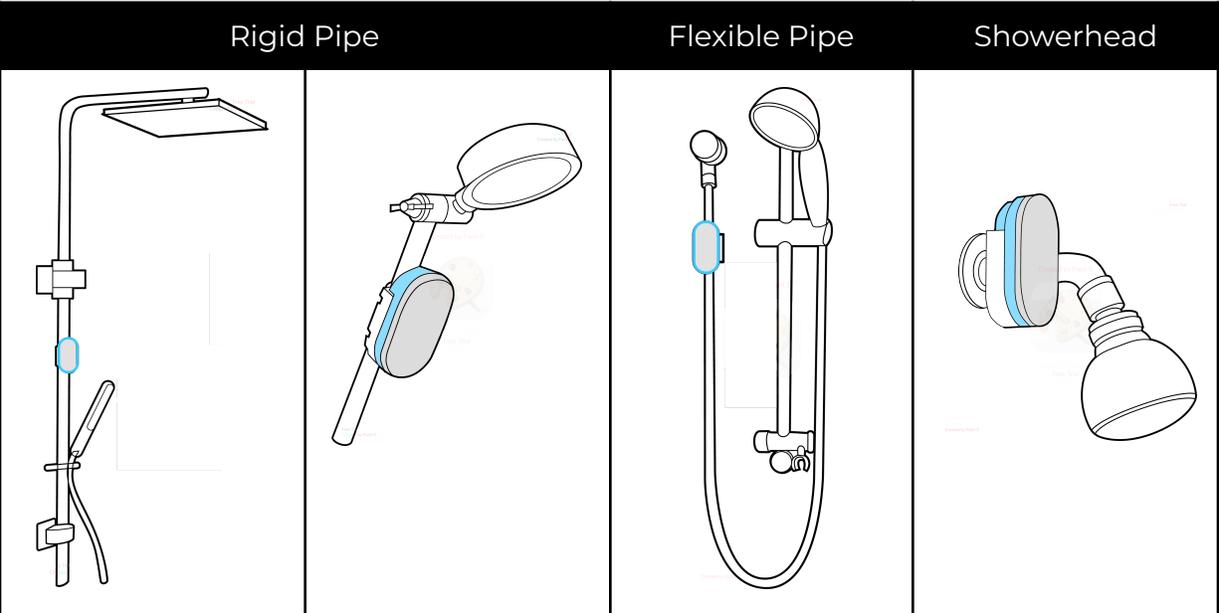
Wrap both zip ties around the pipe, then take the pointed end and insert it into the head of the zip tie, one at a time. Ratchet both zip ties tight to ensure the mounting cradle is properly fixed and does not slide along the shower pipes.



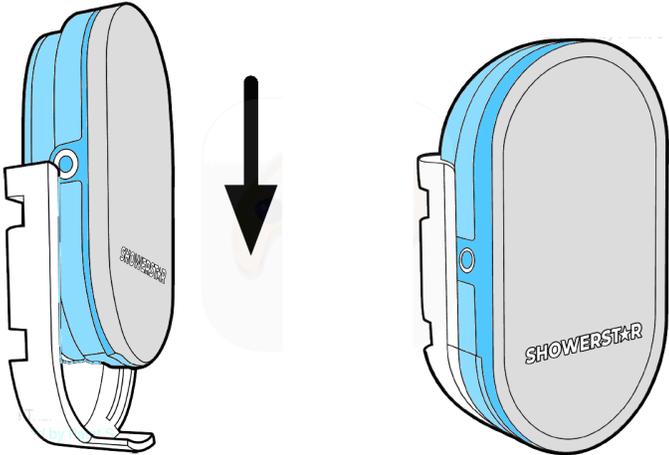
#### Note

- Mount ShowerStar™ 5 to 6ft . / 1.5-1.8m above floor level.
- If installing ShowerStar™ onto the flexible pipe, do not over-tighten to avoid compressing the pipe.
- Trim off excess length off the zip ties.

### 3.2 MOUNTING

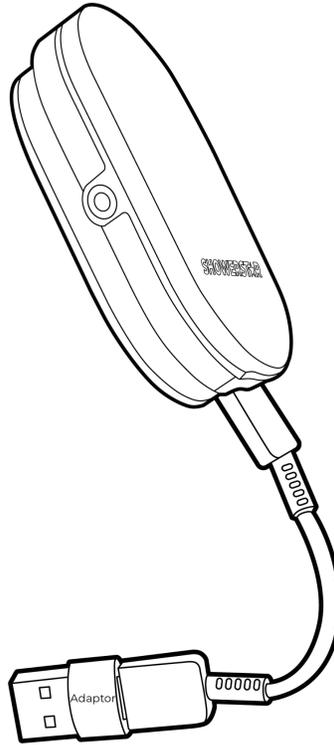


Slide the unit top down into the mounting cradle. The protruded tip of the mounting cradle should slide right into the grooves along the rounded end of the body, securing the unit.



## 4 CHARGING

When you first receive your ShowerStar, it must be charged for at least 6 hours before use. Connect the USB Type-C cable to the charging port on the ShowerStar, then connect the other end to any 5VDC phone or USB charger.



\* A USB Type-A to Type-C adaptor is included.

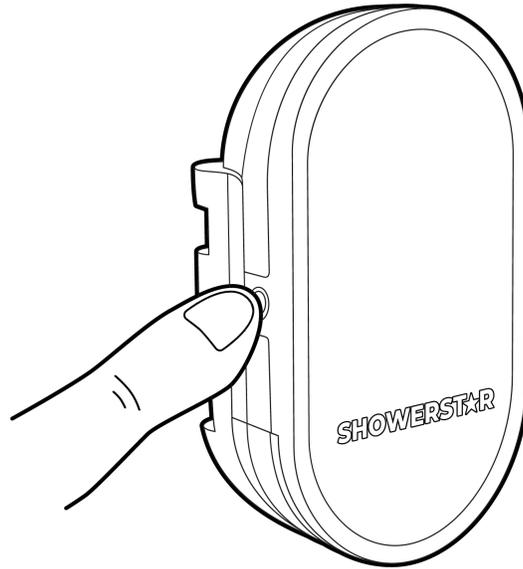
Power on the ShowerStar device (press and hold the Operation Button for 4 seconds) and the RGB LED indicator will illuminate **red** to indicate that the unit is charging.

Once fully charged, the RGB LED indicator will illuminate **green**. You can then disconnect the USB Type-C charging cable and slide it back into the mounting cradle.

The battery will typically last six to eight months, depending on configuration and frequency of showers.

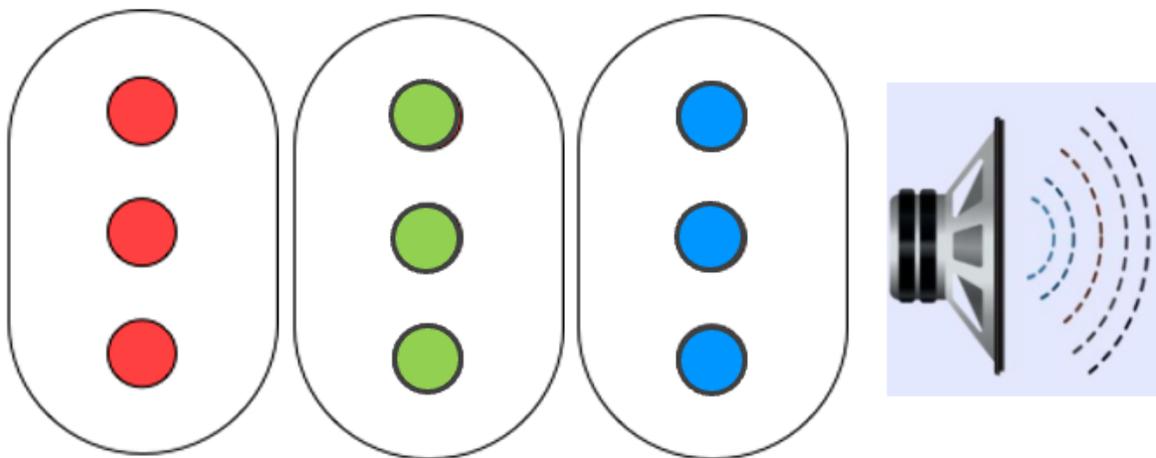
## 4.1 POWERING ON / OFF

Press and hold the Operation Button for 4 seconds to power on. To power OFF, press and hold the Operation Button for 5 seconds. The red indicator illuminates and then extinguishes.



## 4.2 STARTUP

On power up, the RGB LED indicators illuminate: RED, GREEN, then BLUE, and the speaker beeps.



# 5 CONFIGURATION

Download the “ShowerStar” App from the App Store or Google Play.

## 5.1 PAIRING

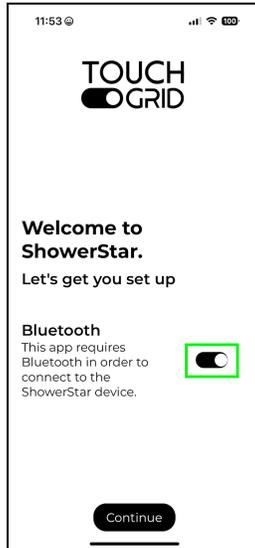
*\* Turn Bluetooth on on your mobile device settings.*

Open the “ShowerStar” App on your mobile device and follow the steps below.

Step 1: Welcome Page



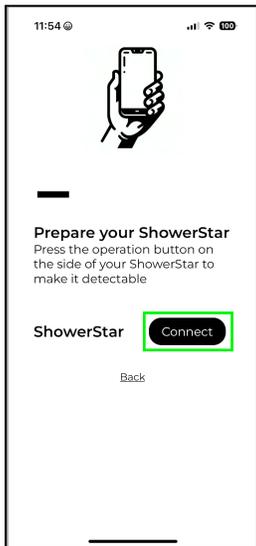
Step 2: Turn On Bluetooth



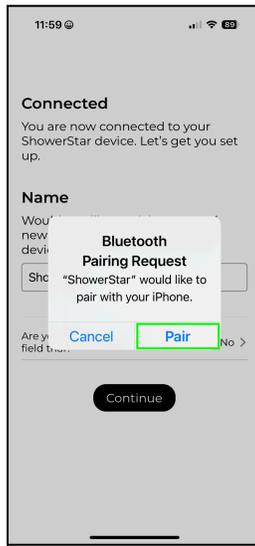
Step 3: Key in the details.



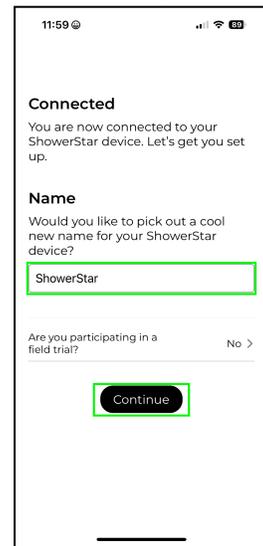
Step 4: Connect the device



Step 5: Pair the device



Step 6: Name your device



\* Step 3: Refer to **Section 6.5, App Settings, Page 17** for the details.

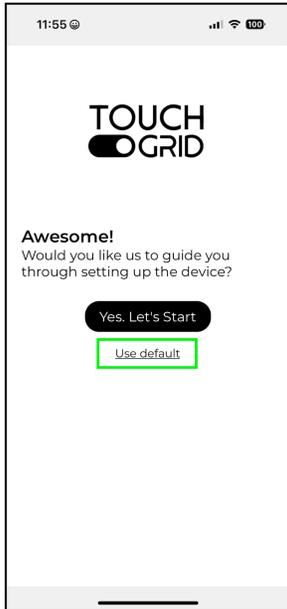
: You can re-configure these settings later in the App under the App Settings page.

\* Step 6: Participate in a Field Trial. Refer to **Section 5.2.3, Page 12**, for the details.

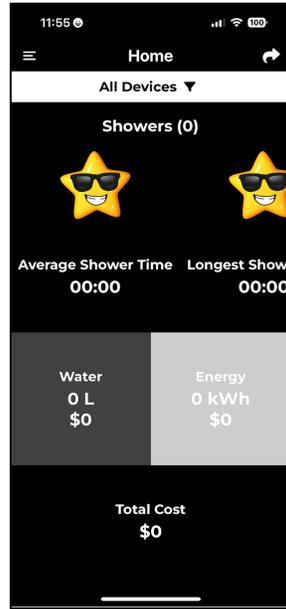
\* Bluetooth RF range indoors is typically ~16 ft / 5 meters.

## 5.2.1 DEFAULT SETTINGS “Use default”

Step 7: Select Default



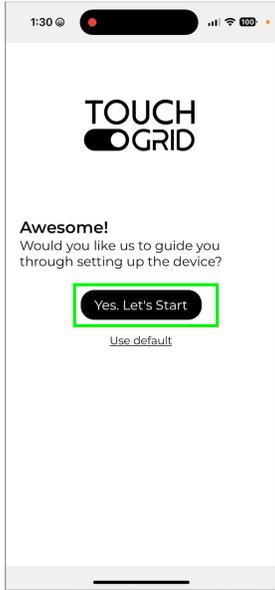
DEVICE READY TO USE



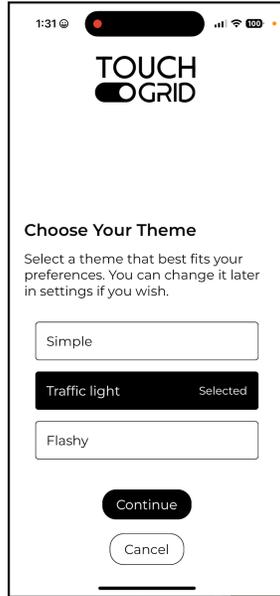
Once the setup wizard has completed, you will arrive on the Home page.

## 5.2.2 CUSTOMISATION “Yes. Let’s Start”

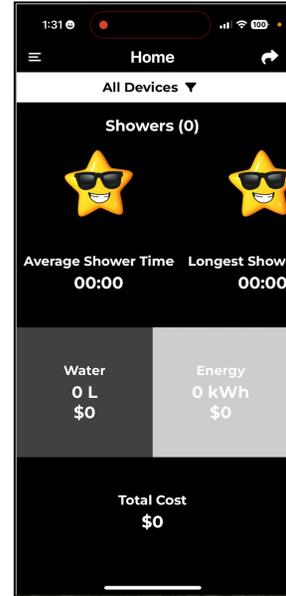
Step 7: Select “Let’s Start”



Step 8: Choose Your Theme

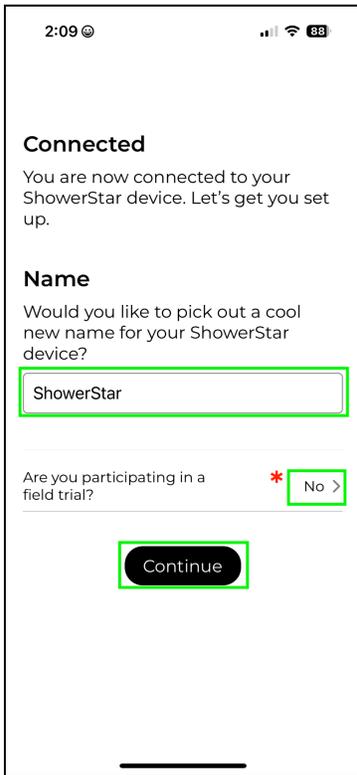


DEVICE READY TO USE

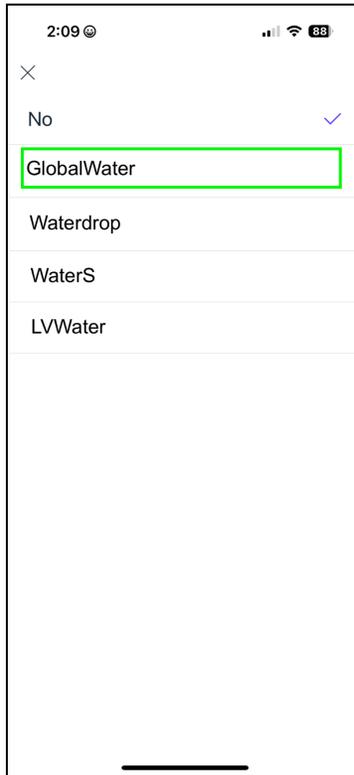


## 5.2.3 PARTICIPATE IN A FIELD TRIAL?

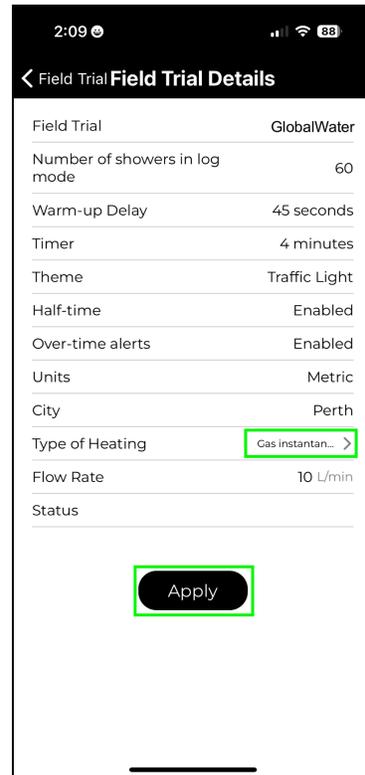
Step 6: Name your device  
: Participate in Filed Trial



Step 6.1: Selection



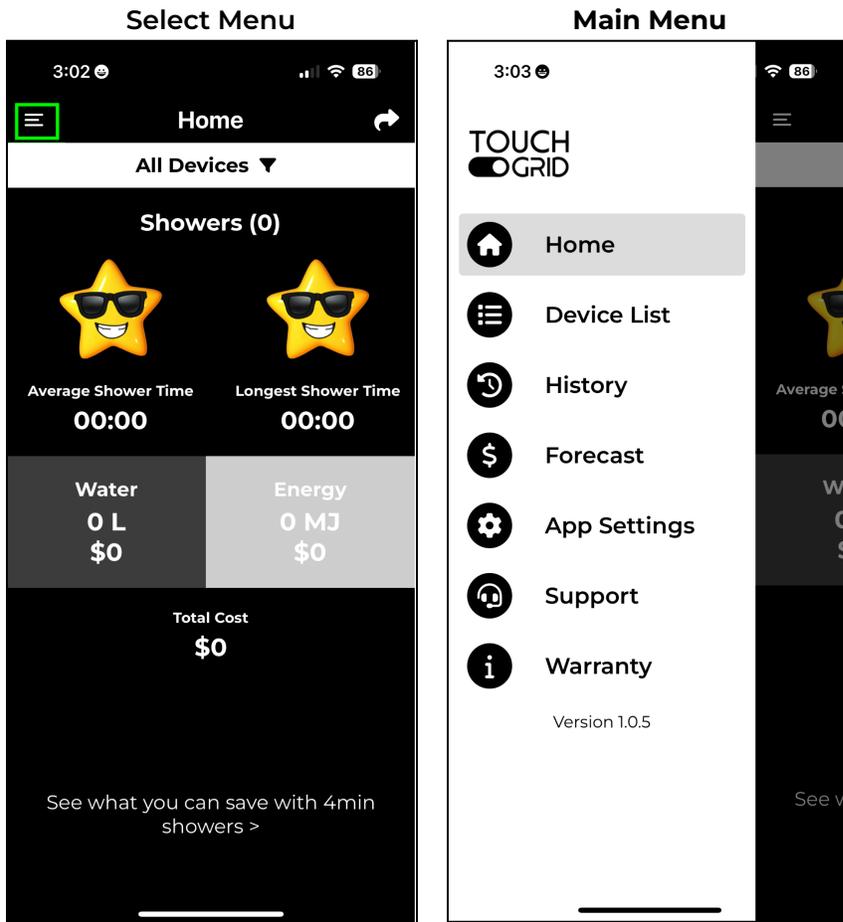
Step 6.2: Apply Field Trial  
Details



- \* Step 6.1 : Select the utility company on the list if you are participating in a field trial.
- \* Step 6.2 : Select the Type of Heating
  - : Select Apply, and the firmware will auto-update.

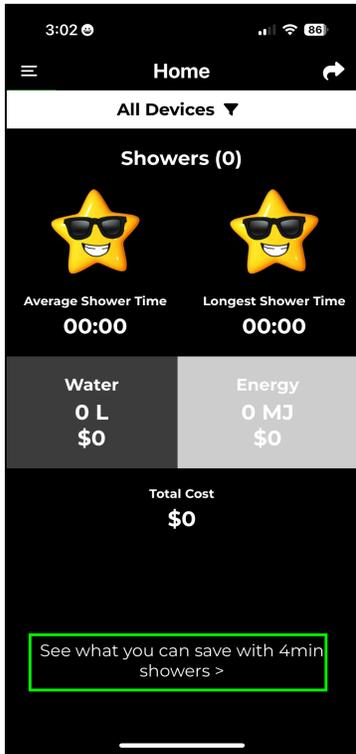
## 6 APP MAIN MENU

The App allows customisation of timer and alert settings, firmware updates, and entering of water and energy data for savings calculation. The menu will be launched, showing navigation to additional pages.



## 6.1 HOME

Home Page



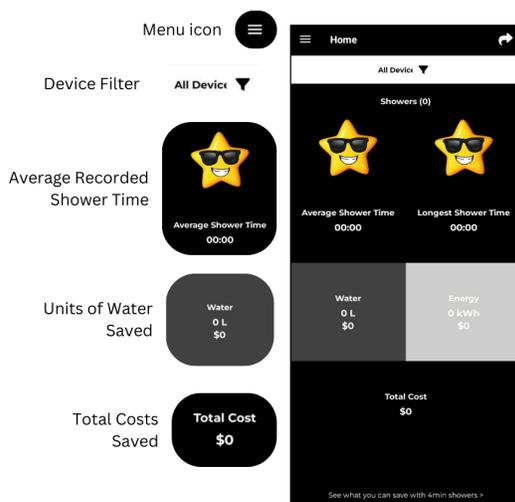
Here, some of the key figures recorded by ShowerStar, such as the average and longest shower times, as well as the units of water and energy saved, are shown. The most important figure here of course is the total cost saved from using the ShowerStar!

Forecast: Save with 4 mins showers

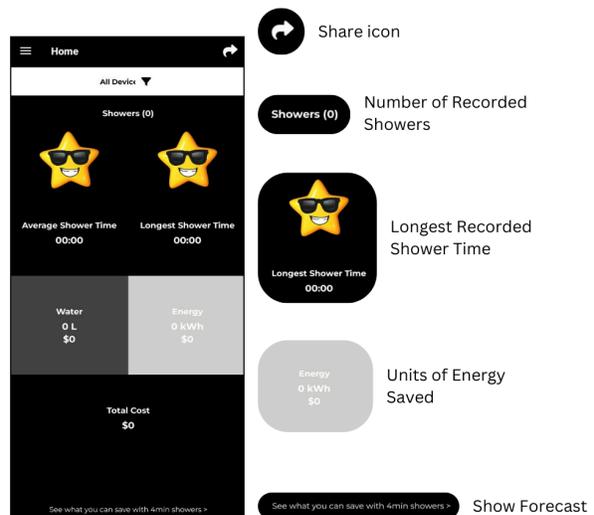


For more information, please refer to the detailed illustrations below:

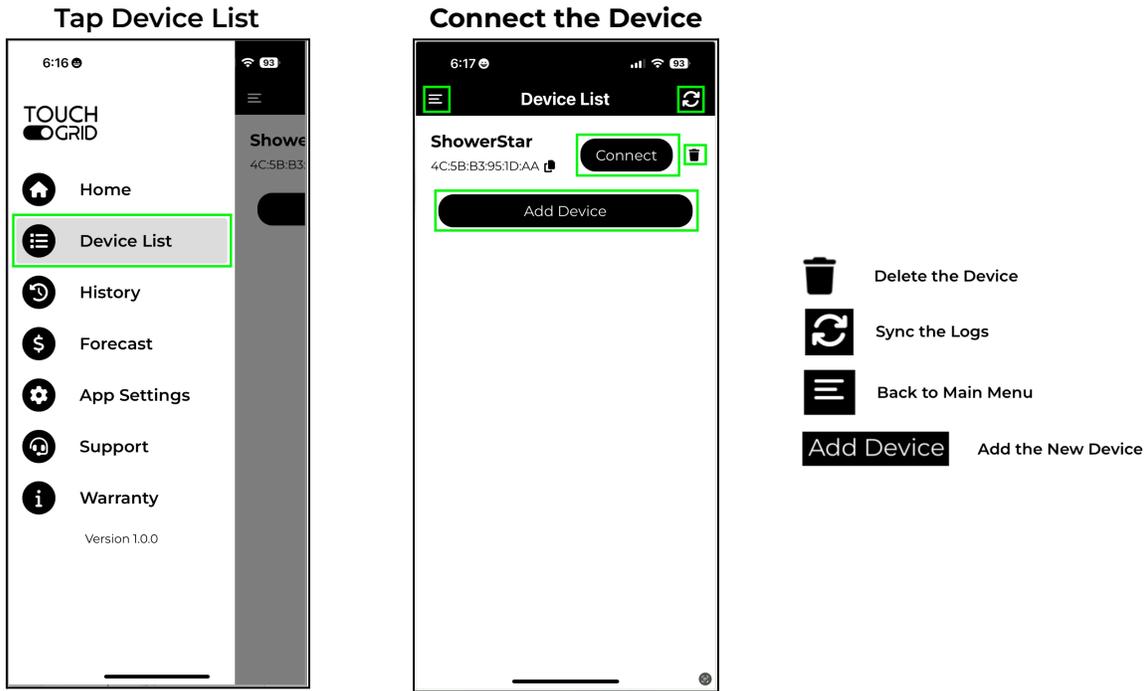
UI elements on the left side of the Home page



UI elements on the right side of the Home page

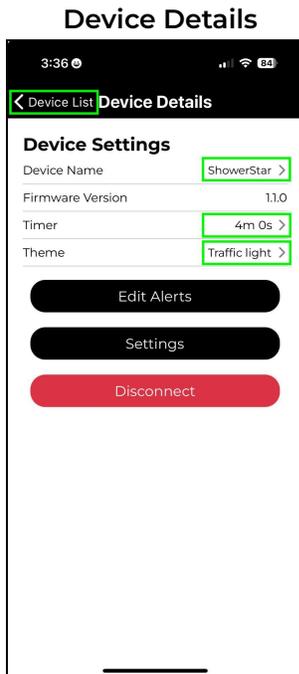


## 6.2 DEVICE LIST AND CONNECT



### 6.2.1 DEVICE DETAILS

The App allows customisation of timer and alert settings, firmware updates



Using the App settings can be edited:

- Device name
- Timer (0-10 mins)
- Theme

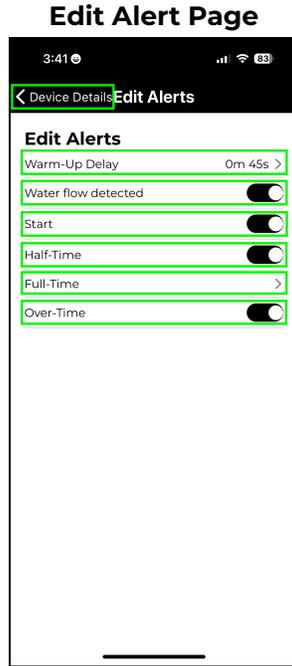
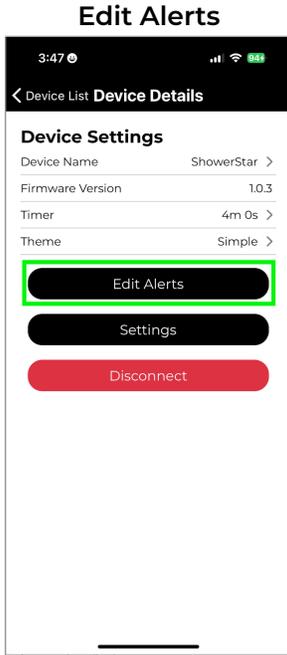
#### Disconnect

To terminate the connection to the ShowerStar device, simply tap on Disconnect.

**Note**, doing so does not remove the paired connection to the ShowerStar device. It simply terminates the Bluetooth connection to the device.

### 6.2.2 EDIT DEVICE ALERTS

Using the App, the settings can be edited



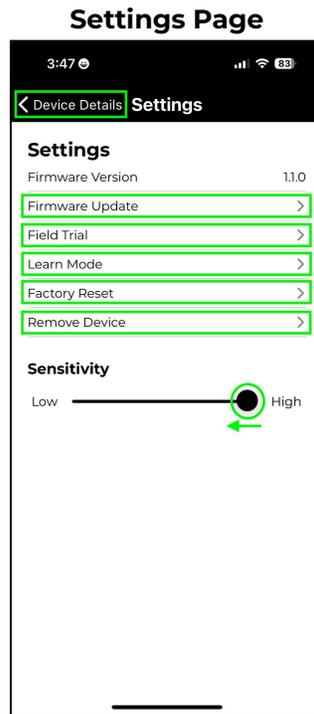
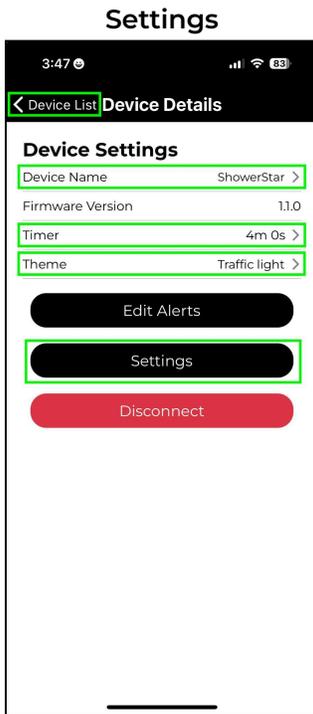
Using the App these alerts can be edited:

- Warm Up Delay time (0-2mins)
- Water Flow Detection LED On / Off
- Half-time alerts (enable / disable)
- Full-time alerts (brightness / duration)
- Over-time alerts (enable / disable / brightness / duration / frequency)

**\*Tap the green boxes to edit the above settings.**

\*Make sure you save the changes.

### 6.2.3 EDIT DEVICE SETTINGS



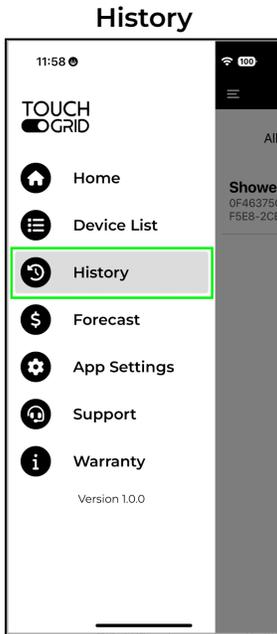
Using the App, these settings can be edited:

- Update firmware
- Field trial mode (enable/disable)
- Learn mode (recalibrates accelerometer to detect when the shower is flowing)
- Factory reset
- Remove device
- Adjust sensitivity manually (Low ⇌ High)

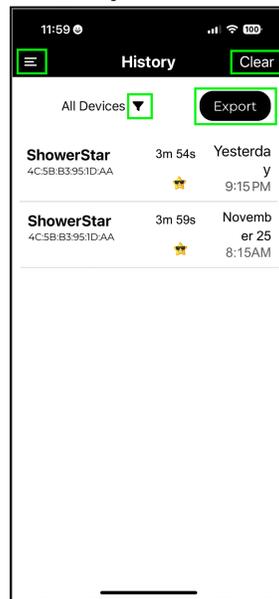
**\*Tap the green boxes to set the above settings.**

### 6.3 HISTORY

The History page will be shown containing a log of all the showers recorded by the ShowerStar device.



#### Filter, Export and Clear



**Note:**

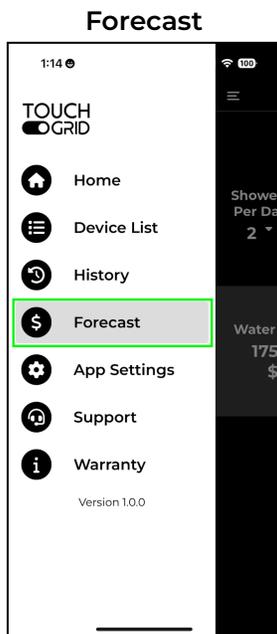
The History page shows all devices by their names and the respective Device IDs, so you can differentiate the shower logs recorded from different devices.

- Filter By device(s).**  
(select the device that need to be filter)
- Export** Export data
- Clear** Erase all recorded shower logs
- Back to main menu**

- The export button allows you to export all shower logs to a CSV file and share the log.
- Tap on CLEAR to confirm that you are clearing all logs.

### 6.4 FORECAST

The Forecast page will then be shown, indicating some annual savings figures.



#### Forecast Settings



The calculation works by getting the time difference between the Average Shower Time and the Target Shower Time implemented by the ShowerStar device.

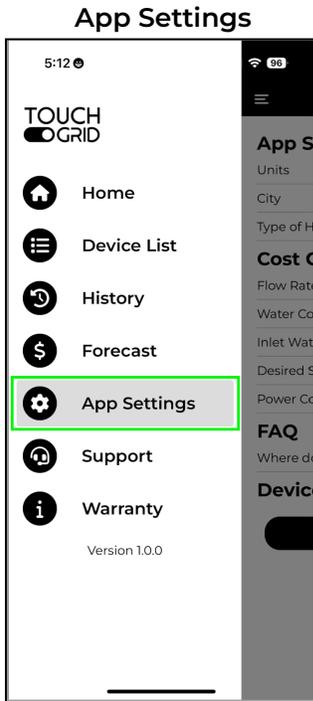
The time difference is then multiplied by the number of showers per day and the water flow rate to obtain the units of water saved per day. This is then multiplied by 365 to obtain the units of water saved per year. Multiply this with the water cost, and the cost of water savings can be obtained.

- Key in shower per day / select average and target shower time**
- Back to main menu**

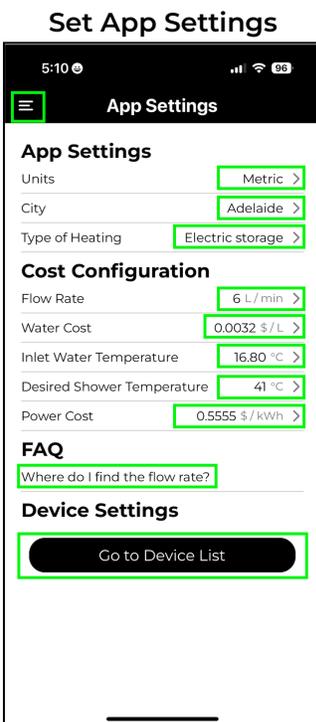
\*Make sure you save the changes.

## 6.5 APP SETTINGS

Here, you may reconfigure the settings that you first set up in the Let's get started page.



The App requires some information from you to calculate the usage and savings of your water and energy resources.



### App Settings:

- Units > Select metric / imperial
- City > Select the listed city or other
- Type of Heating > Select the type of water heating system
  - Gas storage
  - Gas instantaneous
  - Electric storage
  - Electric heat pump

### Cost Configuration:

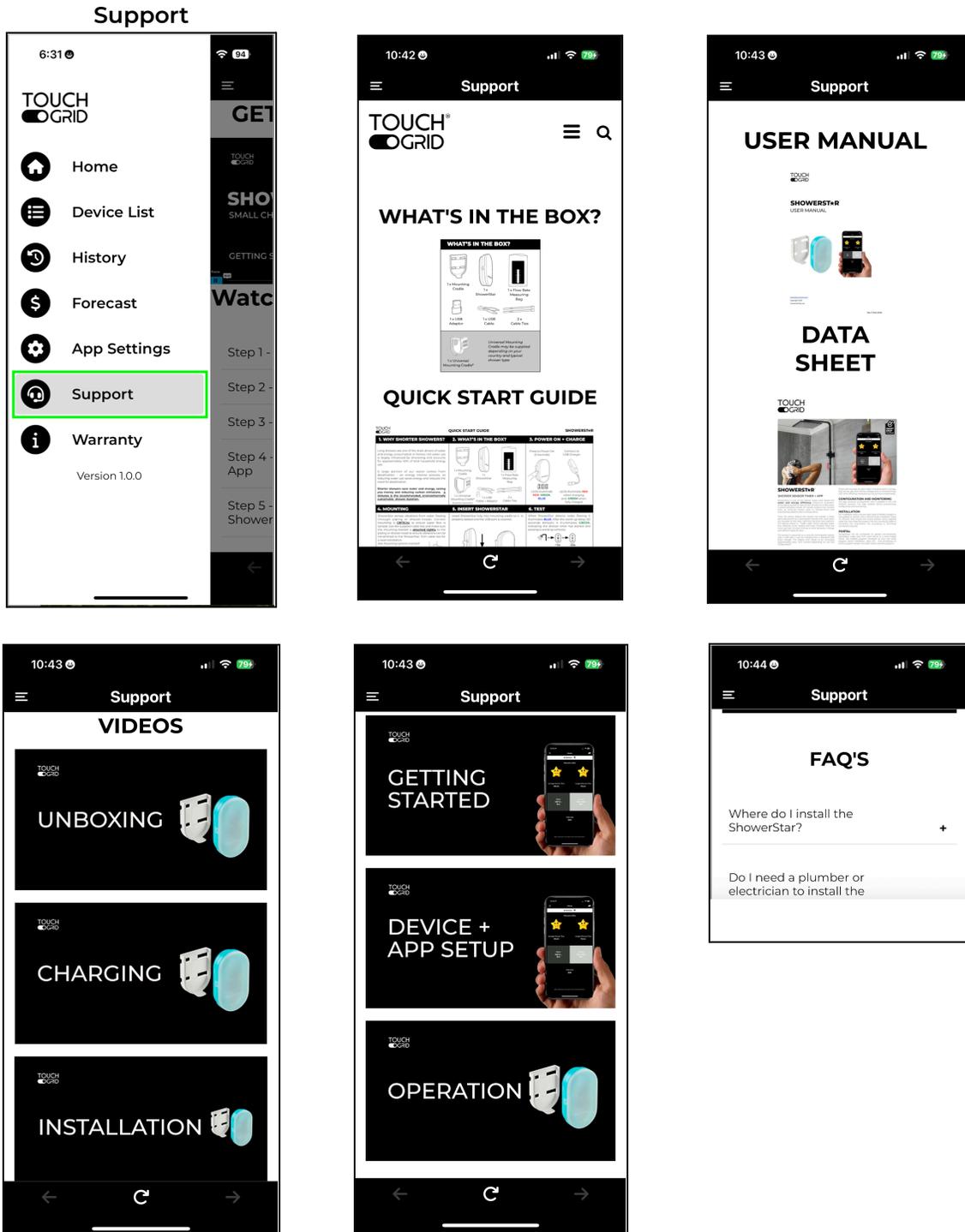
Flow Rate > Enter the Flow Rate measured on your shower system.  
 Select [FAQ "Where do I find the flow rate?"](#) for more information on measuring the water flow rate of your shower system.  
 [or Refer to Section 8.3, Page 23: Measuring Water Flow].

- \*Water Cost > The cost of one unit of water.
- \*Inlet Water Temperature > The water temperature at the inlet pipe.
- Desired Shower Temperature > Shower water temperature
- \*Power Cost > The cost of one unit of power.

\* [Automatically populated once you have selected the City and Type of Heating fields.](#)

## 6.6 SUPPORT

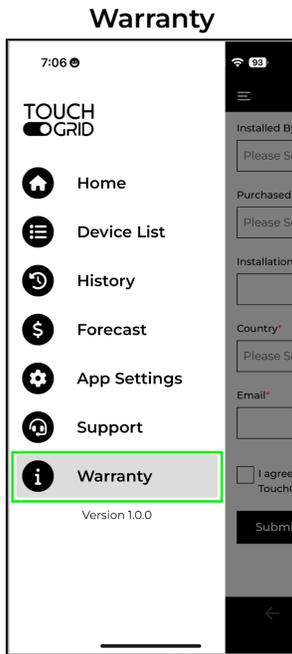
Tap on the Support tab on the side menu to access documentation and some Frequently Asked Questions for the ShowerStar device.



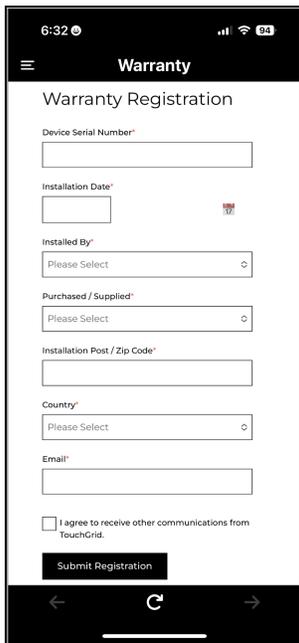
Tap on the Expand icon “+” next to the question to expand the explanation section.

## 6.7 WARRANTY

To activate your warranty, tap on the Warranty tab in the App and fill up the Warranty Registration form. You may refer to the following table to help fill up the form:

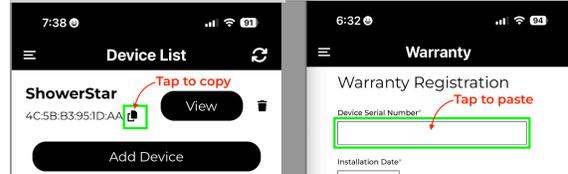


### Activate Warranty



### Device serial number copy and paste

Step 1: Tap to copy from the Device List page  
 Step 2: Paste to the Warranty Registration page or key in the serial number.



Device ID

Installation date

Installed By

Select the date of installation for the device. The warranty will cover a 1-year period from the installation date.

Specify the party who installed the device. Options:

- Self Install
- Plumber
- Energy Contractor
- Other

Purchased / Supplied

Specify the purchaser of the device. Options:

- Self Purchase
- Supplied by water utility
- Supplied by energy utility
- Other

Installation Post / Zip Code

Enter the zip code of your address.

Country

Enter your country of residence.

Email

Enter your email address.

Tick

I agree to receive other communications from TouchGrid.

Submit Registration

**Submit Registration**

# 7 SPECIFICATIONS

## TOUCH GRID

### FEATURES



**Bluetooth**

**Google Play**   **Available on the App Store**

## SPECIFICATIONS



### WARRANTY

1-year limited warranty

### APPROVALS

FCC (US) Part 15.247  
 CE - EMC (EN IEC61326)  
 RED ETSI EN 310 489-1, EN 301 489-17,  
 ETSI EN 300 328, EN IEC 62311:

RCM, RoHS, Prop65

Battery (UL1642, UL2054, IEC62133, CB, CE, RoHS, UN38.3, REACH)

**FOR INDOOR USE ONLY. WATER RESISTANT, DO NOT IMMERSE FULLY IN WATER.**

### ORDERING

**TG168 ShowerStar Shower Sensor Timer**

### LEGAL

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**ELECTRICAL FOR INDOOR USE ONLY**

<p>Battery</p> <p>Charging</p> <p>Communications</p> <p>App OS Support</p> <p>Estimated Product Life</p>	<p>1000mAh 3.7V Lipo                      Recharge every ~8-12 months*                      *Assumes 4 showers / day and subject to alert configuration</p> <p>5VDC USB Charger</p> <p>Bluetooth Low Energy™</p> <p>iOS™ + Android™</p> <p>8-10 years</p>
--	---

**PHYSICAL**

<p>Operating Temp</p> <p>Storage Temp</p> <p>IP Rating</p> <p>L x W x H</p> <p>Weight</p>	<p>32° to 113° F   0° to 45° C</p> <p>14° to 140° F   -10° to 60° C</p> <p>64</p> <p>3.27" x 1.8" x 0.9"</p> <p>83mm x 45mm x 23mm</p> <p>2.3 ounces   65 grams</p>
---	---

**SMALL CHANGE. BIG IMPACT**

[www.touchgrid.com](http://www.touchgrid.com)



## 8 LED INDICATION

### 8.1 THEMES

Theme	Water Flow	Timer Start	Half Time (Optional)	Full-Time	Over-Time (Optional)
Simple					
Traffic Light					
Flashy					

### 8.2 OPERATION

Charging	Fully Charged	Low Battery	Power On	Power Off

## 8.3 MEASURING FLOW RATE



### Step 1: Turn on the shower head

Turn on the shower head to be tested and adjust the flow to how you normally use it.

### Step 2: Hold the SHOWER FLOW MEASUREMENT BAG

Hold the SHOWER FLOW MEASUREMENT BAG supplied with the product open and place it under the fixture for exactly FIVE (5) seconds. Make sure to capture all of the water coming out of the shower head.

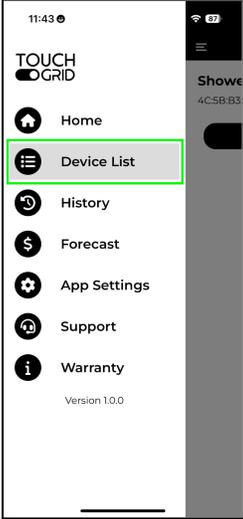
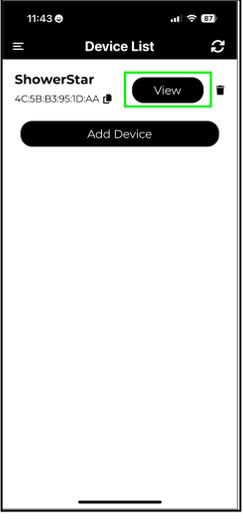
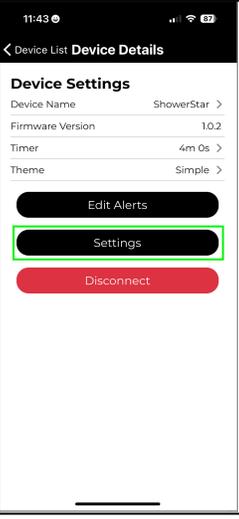
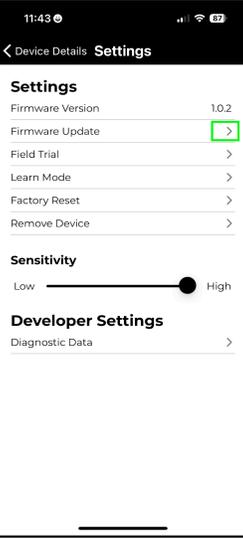
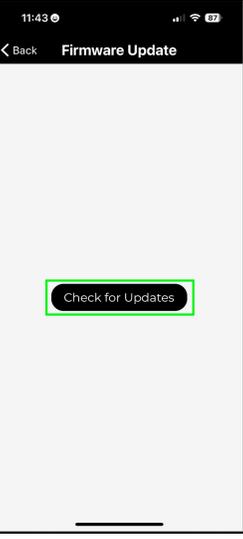
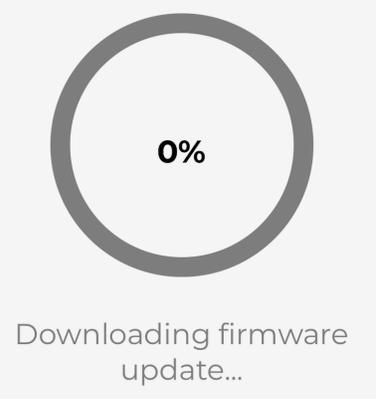
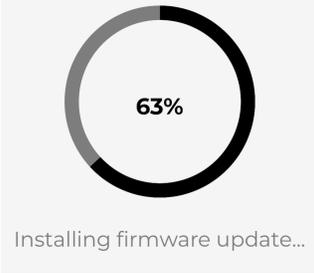
### Step 3: Remove the bag from the flow

Remove the bag from the flow. Holding the bag open, raise to eye level and read the flow rate measurement. Repeat to check the result. Input the flow rate value to the TouchGrid ShowerStar App.

### Tip:

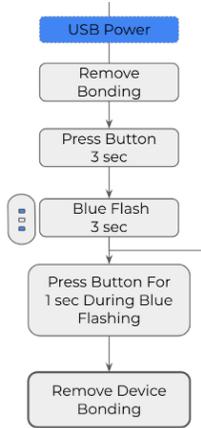
If your showerhead is too wide for this flow rate bag, use the same procedure but collect the water in a bucket and afterwards pour the collected water into the measurement bag to determine the flow rate.

# 8.4 FIRMWARE UPDATE

<p><b>Step 1: Device List</b></p> 	<p><b>Step 2: View</b></p> 	<p><b>Step 3: Settings</b></p> 
<p><b>Step 4: Firmware Update</b></p> 	<p><b>Step 5: Check for Updates</b></p> 	<p><b>Auto Downloading Firmware Updates</b></p> 
<p><b>Auto Rebooting the Device</b></p> <p><b>Rebooting Device</b></p> <p>The device is rebooting to apply the firmware update. Please wait...</p> 	<p><b>Auto Firmware Updates</b></p> 	<p><b>ONCE COMPLETE, THE APP WILL RETURN TO THE DEVICE DETAIL APP PAGE</b></p>

## 8.5 DEVICE BONDING REMOVAL

Remove device bonding to your mobile.

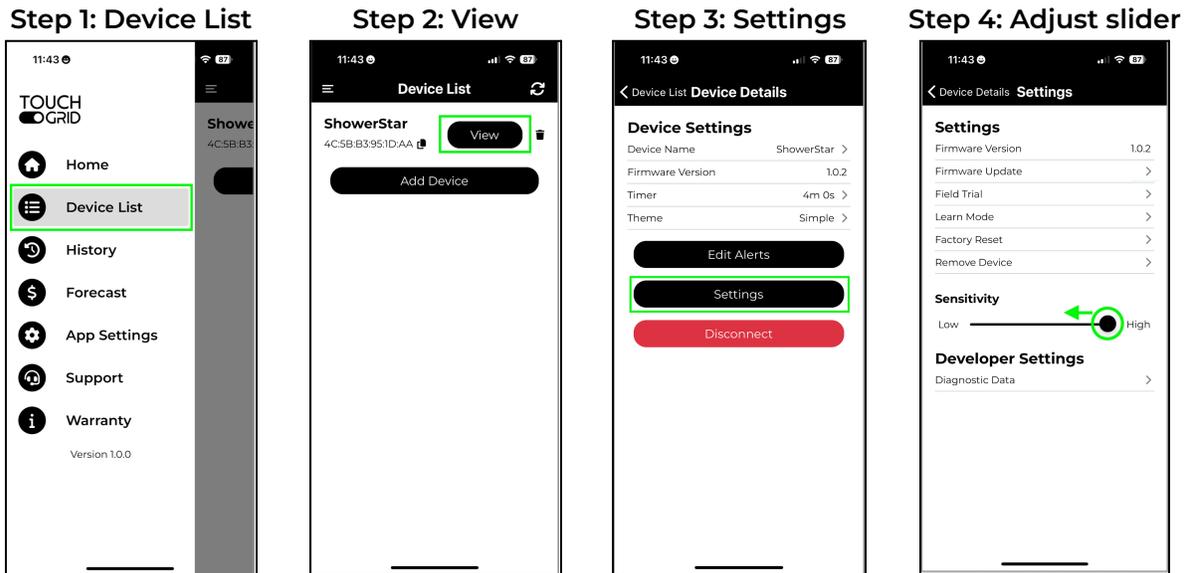


**Steps:**

1. Turn On the Device.
2. Connect the device to the phone charger.
3. Turn On the power for the charger.
4. Red / Green will be flashing.
5. Press the device button for 4 seconds.
6. Blue will be flashing.
7. Quickly press the device button once during the blue flashing.
8. The blue flashing will stop.
9. The device bonding to your phone was removed.

## 8.6 SENSITIVITY

There is also a 15-step sensitivity slider that controls how sensitive the ShowerStar device is at detecting the start of your showers. As this is different for differing showers, you may need to experiment with the sensitivity setting to tune it accurately to your shower.



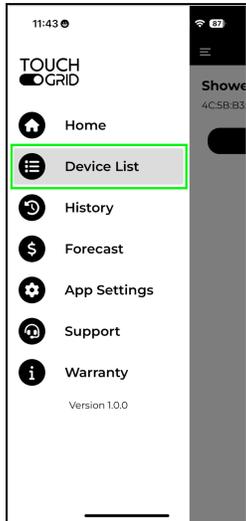
\* Set the sensitivity lower if the device is falsely triggering (blue flashing if no water is running).

# 8.7 LEARN MODE

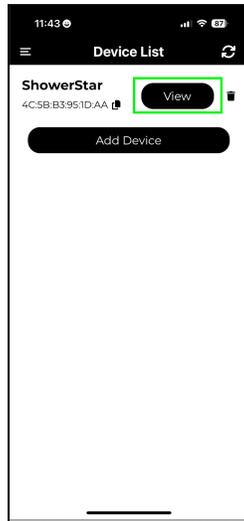
Tap on Learn Mode to enable your ShowerStar to calibrate its sensor to detect the start of your showers accurately.

The Start Calibration window will then be shown. Slide the ShowerStar device to its mounting cradle, run your shower, and tap on START.

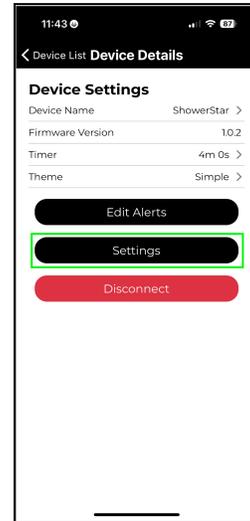
Step 1: Device List



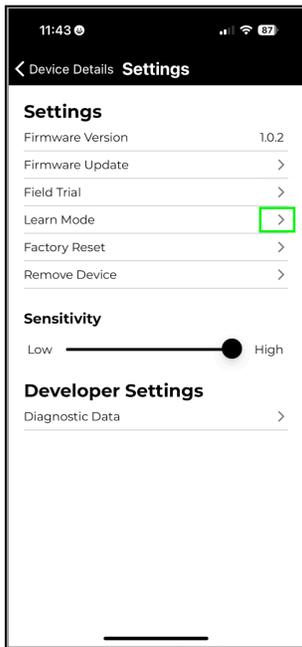
Step 2: View/Connect



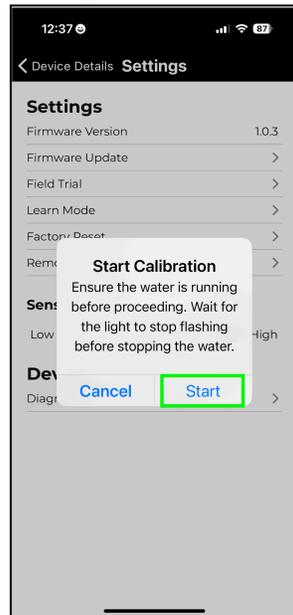
Step 3: Settings



Step 4: Learn Mode



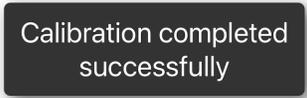
Step 5: Ensure water is running and Select Start



Auto Calibration in Progress (After completing it will return to App Settings Page)

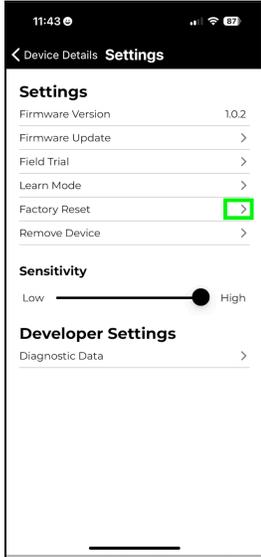


Calibration complete successful message



## 8.8 FACTORY RESET / REMOVE DEVICE

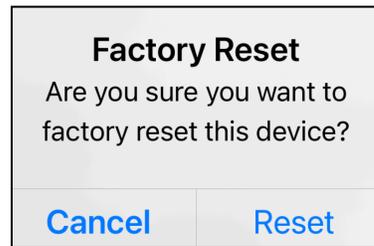
### FACTORY RESET



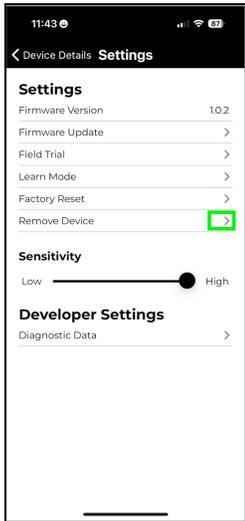
To reset the ShowerStar device to its factory default settings, tap on Factory Reset.

The Factory Reset window will then be shown, seeking confirmation that you wish to reset to factory default settings.

Tap on RESET to continue.



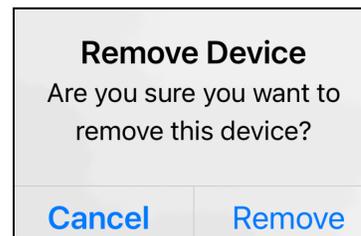
### REMOVE DEVICE



To remove the paired connection between the ShowerStar device to your mobile device, tap on Remove Device.

The following Remove Device window will be shown.

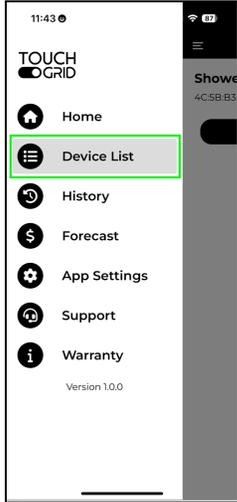
Tap on REMOVE to confirm removing the paired connection to the ShowerStar device.



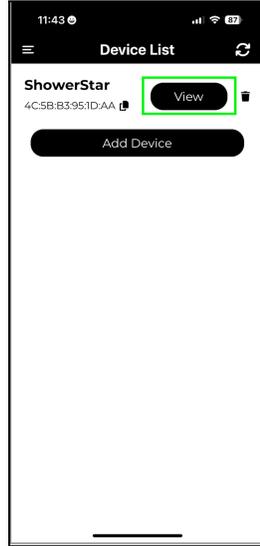
## 8.9 FIELD TRIAL MODE

The Field Trial Mode is a special operating mode designed to assist utility companies in determining the effectiveness of the ShowerStar device. Tap on the toggle to enable or disable the device's Field Trial Mode.

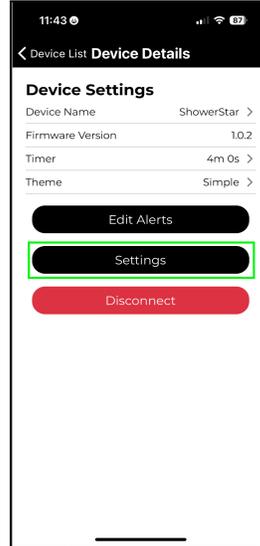
Step 1: Device List



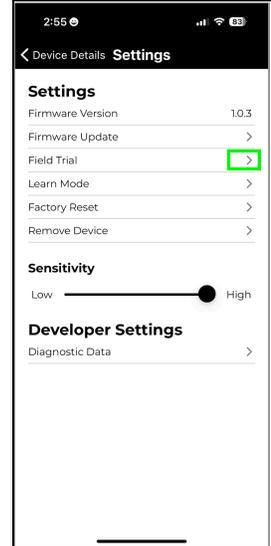
Step 2: View/Connect



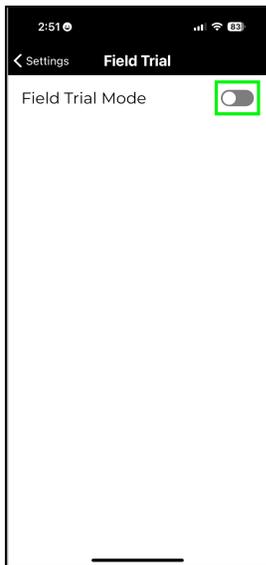
Step 3: Settings



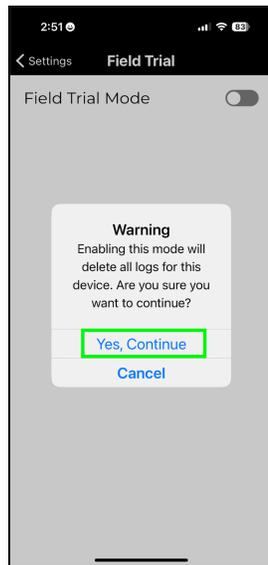
Step 3: Field Trial



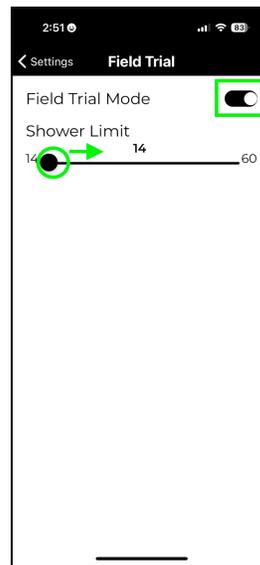
Step 4: Turn On Field Trial



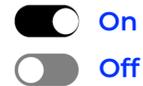
Step 5: Confirmation



Step 6: Field Trial Started



Enable Field Trial



Move the slider to set the number of showers for Field Trial.



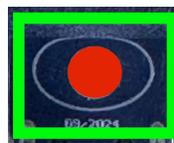
## 9 MOISTURE SENSING LABEL

The label will change color (white to red) if moisture comes into contact with the label.

ShowerStar Back Housing



White Color- No moisture



Red Color - Moisture detected

Remove the device from the holder and turn off the device.

\*Discard, photograph the back of the device, and dispose of it in e-waste bins.

**THE DEVICE IS FOR  
INDOOR USE ONLY.**

**WATER RESISTANT ONLY,  
DO NOT IMMERSE FULLY  
IN  
WATER.**

## 10 TROUBLESHOOTING

- 10.1 False timer starts / Blue flashing, but no water is running.  
Adjust the sensitivity from high to low and monitor again.  
Refer to page 26, section 8.6.
- 10.2 Flushing toilet / Turn On tap water, Blue is flashing  
Adjust the sensitivity from high to low and monitor again.  
Refer to page 26, section 8.6.
- 10.3 Cannot connect to my phone after forgetting the device on my mobile phone.  
Remove the bonding on your device.  
Refer to page 26, section 8.5.
- 10.4 Phone charger with USB Type A Port.  
Use Type A to Type C adapter, included as an accessory.  
Refer to page 5, section 2.1.

# 11 STATEMENTS

## 11.1 FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Important:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC Radiation Exposure Statement:** In order to comply with RED RF Exposure requirements, this device must be installed to provide at least 20 cm separation from the human body at all times.

## 11.2 CE DECLARATION

1. The Radio frequency working range 2402-2480MHz, the max output power 8dBm
2. The distance between user and products should be no less than 20 cm. There is no restriction to use this product across the EU countries.
3. Hereby, We TouchGrid Pty Ltd, declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. and provide the declaration Web link: <https://touchgrid.com/product>.

