Hardware and Software Installation

- Screw in the Bluetooth antenna; or connect the instrument using the USB cable
- Connect the power supply to the instrument and turn the instrument on
  A blue light on the front of the instrument illuminates to indicate it is powered on
- Install the Q-qPCR software from provided USB key
  The USB key also contains an electronic copy of the user manual
- Open the Q-qPCR software
  The instrument will be automatically detected and appear in the top right corner

Reaction Setup

- Load reactions into the pre-racked tubes and use the Capping Tool to help fitting caps properly
- Insert the Tubes into the rotor, ensuring the tab is aligned with the marks on the rotor
  To achieve optimum temperature uniformity, it is very important to insert tubes loaded with water (at reaction volume) into all of the unused positions on the rotor.
  See reverse for more details.
- Secure the tubes into the rotor with the Tube Clamp

Starting a Run

- Select New Run from the toolbar
- Add (Assays+) an assay to the run from the assay list
  Additional assays are easily created by selecting New Assay from the toolbar
- Click on the instrument (top right of toolbar) and select Start Run
- Confirm the reaction volume is correct and select Start
  A green light on the front of the instrument will indicate the run has begun
- Before analysis, fill in the sample information on the Sample page
- Drag and drop the assay for each well onto the sample editor
  Assays are used to link samples together for later analysis

Analysis

- Select the required analysis to the run from the options provided
  Cycling
  Melt
  High Resolution Melt (optional)
  Absolute Quantification (indicates Standard Curve)
  Allelic Discrimination
  Relative Quantification
- Select the target to analyze and configure the parameters as required
Water Tubes

No tubes, empty tubes and tubes with different volumes of liquid all have different thermal loads on the metal rotor. Variations in thermal load around the rotor can cause significant thermal gradients both at static temperatures and during ramping, resulting in increased variability in results.

For the best thermal uniformity between samples always follow these simple rules:

- Ensure tubes are loaded into every position around the rotor
- Load unused tubes with water, at the reaction volume
- Check all tubes are firmly pushed into the rotor and the caps are securely fitted
- Use the tube clamp to keep tubes in the rotor during the run

It is very important that all tubes within the rotor contain the same volume of liquid during a run. Empty tubes should be loaded with water.

As the oil overlap prevents evaporation, these Water Tubes can be stored and reused for over a week.