## ThermIQ installation for Raspberry Pi, version 1.3

Installation prerequisites:

- 1. An out-of-the-box Raspberry Pi model B
- 2. A micro-USB power adaptor
- 3. An Ethernet cable
- 4. A formatted SD-card of 8GB or more
- 5. A ThermIQ card
- 6. An USB cable (A to mini-b)
- 7. telnet/ssh client, in windows: i.e telnet.exe or Putty
- 8. Optional: USB Keyboard and HDMI Cable
- 9. Optional: Experimental support of <u>Tellstick DUO</u> for RF-temperature sensors

## Configuration (expect about 30 min-1h installation time)

Help and instructions in black

Actual commands/actions in blue

1. Start on your PC by downloading and installing Raspbian "wheezy" from:

## http://www.raspberrypi.org/downloads

There are good guides on this site on how to format and write the wheezy image to the SD-Card i.e by using Win32DiskImager.

2. Connect the Raspberry to the network, to a monitor and keyboard, insert the SD-card and power it on. Once started it will prompt you for an user and password

- or -

Connect the Raspberry to the network, insert the SD-card, power it on and telnet to it (You have to find out the ip-address given to it by dhcp). Once connected it will prompt you for an user and password.

3. Log in with

user: pi password: raspberry At the prompt type: sudo raspi-config

In Raspi-config do (Meny layout differs slightly between releases):

Enable boot to Desktop -> Disabled Internationalisation Options Configure keybord layout Change timezone Advanced Options Enable ssh Update Change password Expand rootfs to fill SD-Card



Then exit without rebooting

4. If you want your Raspberry to have a static ip-address, which is recommended: (from http://www.penguintutor.com/linux/light-webserver)

Type:

cd /etc/network sudo nano interfaces

Replace the line "iface eth0 inet dhcp" with the blue lines below, but replace the ipaddresses in red with your values:

iface eth0 inet static address 192.168.1.66 netmask 255.255.255.0 gateway 192.168.1.1

Save (Ctrl-o), Enter and Exit (Ctrl-x)

You should also take a look at the file /etc/resolv.conf and check it has a nameserver entry (probably pointing at your default gateway). Something like this: nameserver 192.168.1.1 cat /etc/resolv.conf

if not type: sudo nano /etc/resolv.conf

and add your nameserver

Reboot to get the new ip-address: sudo reboot

5. Now it's time to install the ThermIQ sw package

Type: cd /tmp rm setup\_script sudo wget http://www.thermiq.net/ThermIQ\_Client/pkg\_raspberry/setup\_script sudo chmod a+x setup\_script sudo ./setup\_script 2>&1 | sudo tee /var/thermiq\_install.log

This will take 30-60 minutes. At the end you will get a question if to install support for Tellstick-DUO, this option can be selected even if you currently don't have a Tellstick-DUO but plan to get one in the future.



When finished you should connect the ThermIQ interface to the USB port of the Raspberry and type

sudo reboot

That's all setup needed on the Raspberry!

- Open link: <u>http://ip-address/check\_install.php</u> in a web-browser with the IP address from step 4. See if all looks Ok. User: "admin"
  - b. Password: "manager"
- 7. Connect the ThermIQ board to the heatpump, place the Raspberry inside the heatpump and power the Raspberry with the USB-charger. More instructions at: <u>www.thermiq.net/install.pdf</u>



- 8. Open link: <u>http://ip-address/</u> in a web-browser with the IP address from step 4 Login with:
  - a. User: "admin"
  - b. Password: "manager"
  - c. Select "Administration" in the bottom left corner of the index-page and configure the installation for your setup in "Basic Settings"
  - d. Select "pollers" and configure your ThermIQ device(s)
  - d. Select "Databases" and generate a "New temporary DB" and do a "Dummy poll".
  - e. Select "Widgets" and enable the widgets you want to see on the home page

## Done 😳

Note, if you want to access your ThermIQ remotely, you can open your router/firewall using "port forwarding" for the ip-address and port above. But please be aware of the potential security risks this enables.

Now is a good time to check out the RaspberryPI home page at <u>http://www.raspberrypi.org</u> where there's a lot of information available especially in the forum i.e :

- How to secure your Raspberry from intruders.
- How to connect the Raspberry to a wireless network using a WLAN adapter.
- How to setup a free dynamic ip service if you want your pi to be easily accessible from the internet

and don't forget to google ...