

[Home](#) | [Homehub Index](#) |

## Use your spare Version 1 or 1.5 Home Hub as a Wi-fi extension (Simplified)!

Note Feb 2008: Simplified version for non-technical people, using the bare minimum of changes and with minimal additional information.

If you are more expert or have the V 2.0 hub see the [original article](#)

**Important!** This article assumes that the master hub has a default range of acceptable IP addresses of 192.168.1.1 through to 192.168.1.254 just like a Home Hub. Your master hub may have a different range like 192.168.0.1 thru 255 in which case the slave IP address in the article 192.168.1.175 will need to be changed to 192.168.0.175 for example. Check your documentation or Google it!

**Printing this article:** if it does not page properly, print in sections. or try latest Opera browser for Windows which seems to behave better. This page also available as a [pdf document](#)

If you have a spare Home Hub and any type of broadband modem with an ethernet connection you can convert the home hub to add Wi-Fi to your main modem. The diagram shows the typical end product. If you didn't already have Wi-Fi on your broadband this will give it to you

Follow the instructions to the letter - you do not need technical skills to do this. If you mess it up, reset the Home Hub and start again. I'll tell you how later.

**I would strongly recommend** that you first set up the PC's ethernet "network connection" with a fixed IP address of 192.168.1.100 subnet of 255.255.255.0 Gateway of 192.168.1.254 and DNS of 192.168.1.254

That process is described fully in **step 6** of the technical article <http://www.jarviser.co.uk/jarviser/lock6226.html> You don't have to do it if you follow the instructions step by step, but people try to unplug the slave at the wrong moment or vary the sequence, and a PC with a fixed IP address is much more forgiving in that instance!

### The setup

The sequence is important if you want it to work first time!

I shall be referring to the box that the broadband supplier provided you with as the "Master Hub". The spare BT Home Hub a the "Slave Hub". This is in case your main hub is also a Home Hub!

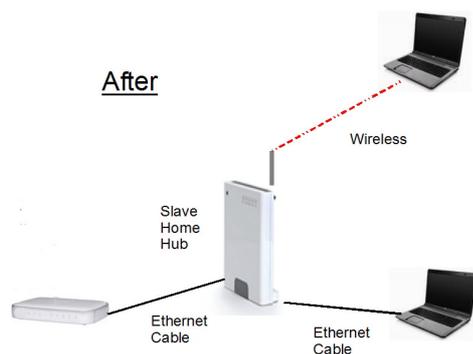
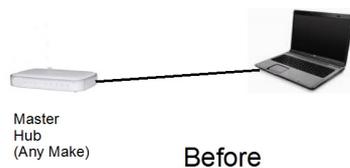
### To start

You will need an extra ethernet cable. One is usually supplied with the Home Hub. You can buy them at any PC shop, but do NOT buy a "Crossover cable", you need a "Straight" ethernet cable. The difference is not important here, just get the straight one.

NB - Do NOT plug the Slave Hub into the phone socket! Your Master hub should remain connected to the phone and switched on as normal.

Plug the Slave Hub into the mains supply and let it settle for 5 minutes.

Unplug all other non-essential equipment from you PC so that it is "Stand Alone" but do not switch it on yet. If you can switch off the wifi easily do so now.



## Set up Slave Hub

Connect the ethernet cable into the yellow socket marked "Ethernet 1" on the Slave Hub. Plug the other end of the ethernet cable into a similar shaped socket on your PC. It will not fit into the wrong socket, but you may also see a similar symbol to the one next to the Slave Hub's ethernet socket.

Press the power button of your PC to switch it on, and let it go through its normal sequence til you get your desktop.

You will have the Data light of the slave hub illuminated. You may have the wireless light on also, but ignore that.

The next requirement is to "Reset" the slave hub. On the original shiny Home Hub (shown above) do this by holding in the wireless association button on the back (There's only one button on the back of the original Home Hub) for 15 seconds or so, until all lights come on in a row and an audible click is heard. Then release the button and wait for the data light to come back on steady.

If you have one of the new (2007/8) smaller V1.5 hubs with three buttons on the side, resetting is a slightly different process. You hold in the recessed "Reset" button for 3 seconds, then release as above. Now we will make the software changes to the Slave Hub. These can be reversed at any time by doing another reset, so you will not break it.

Bring up your Internet Explorer (or whatever other Browser you use such as Firefox)

In the browser address bar where you would normally type in an internet address, type in <http://192.168.1.254> (That number is what is known as an "IP Address") and hit Enter. This will take you into hub's administration system.

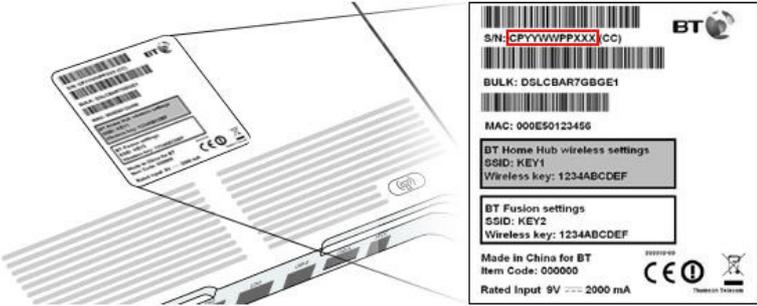
You may get a screen saying that the hub is not connected to the internet. Do NOT hit the "Try Again" button, but re-enter the address as above and hit enter again to get the slave hub's Admin system.

If you have a later version of the hub's software you may see a box like this.

**Please reset your password**

As part of a security enhancement, we've changed your BT Home Hub's default password to its serial number. In order to access your Hub's settings via the Hub Manager, you now need to replace this default password with your own.

Here's where to find the serial number:



**BT Home Hub wireless settings**  
 SSID: KEY1  
 Wireless key: 1234ABCDEF

**BT Fusion settings**  
 SSID: KEY2  
 Wireless key: 1234ABCDEF

Made in China for BT  
 Item Code: 000000  
 Rated Input 9V --- 2000 mA

**Set Password**

Your password is case sensitive and needs to be 5-20 characters long. You can use letters, numbers or punctuation. We suggest you don't use 'admin' as your new password.

Please keep a note of your new password. If you can't remember it, you'll need to reset your Hub to its default settings so you can then access your Hub Manager and choose another password.

Serial Number:

New Password:

Confirm New Password:

In which case take a look at the label on the back of the Hub where the serial number is printed, and enter the first 11 characters of that serial number in the first box, then put in a new password of your choice (e.g. [fredblog99](#)) in the second box, and the same new password again in the third box, and click the "Change Password..." button.

NB. Take care with the letters and numbers of the serial number. Zero has a diagonal line through it, U and V look similar, and make sure to use capitals or lower case as appropriate.

When you have changed the password, on the left of the screen you will see a blue option **Advanced** Click on **Advanced**, then when the screen changes click on **Continue to Advanced**

If you had an older version of the hub software that doesn't use the serial number to reset the password you will now see a box that asks for your Name and a Password, in which case you should enter **admin** in name box and **admin** in the password box.

If you have later software you may still get asked for password, in which case it will be **admin** in name box

and **fredblogg99** in the password box.

You will now find yourself in the advanced part of the hub's admin system. Whichever version of the software your hub has, you will see a list of options down the lefthand side of the screen.



One of these options is **Firewall**

Click on firewall and you will see a list of firewall settings, and the "Standard" setting will already be selected.

Click on **Disabled** setting instead and click on the **Next** button, or the **Apply** button if it has one.

When it has accepted the change (takes a few seconds) look at the list of options on the left again and Click **IP addresses**

You will see a small box next to "Use DHCP Server". Click the mouse in this box so the tick disappears. Then click on the **Apply** button.

After a few seconds when the screen has accepted the change, look further down and you will see a section marked "IP Addresses". Click on **IP Addresses**. There will be three IP Addresses, and below that two blank boxes for adding new IP addresses, with an "add" box next to them.

Type **192.168.1.175** in the first box and **255.255.255.0** in the next box and then click on the **Add** button, and wait a few seconds.

What we have done here is to give the hub an alternative access address to use with your browser, so we will now access it via that new address.

Go to the browser address bar again and overwrite the address you see with **http://192.168.1.175** and hit enter or click Go.

You may get a screen saying that the hub is not connected to the internet. Do NOT hit the "Try Again" button, but re-enter the address .

Click on **Advanced** , then when the screen changes click on **Continue to Advanced**

You will be asked for a name and a password again. User Name is **admin** and Password is either **admin** or if you entered a new password earlier in this process, use that new password (e.g. **fredblog99** ).

Click on **IP Addresses**. You will now see four IP addresses instead of three, with the new one you just added at the bottom of the stack.

Delete the top 3 by clicking on the **Delete** next to each address, starting from the top, and just leaving 192.168.1.175 remaining.

NB At some point when you delete one of the addresses you will get a warning that you will lose connectivity. Don't worry, just click on **OK** because you will not lose connectivity (at this point we have confused the Hub sufficiently for it to say silly things)

## Last steps

Switch off the PC.

(The Master Hub should already be switched on at this point).

Disconnect the ethernet cable at the PC end and plug it into a spare ethernet port in the Master Hub.

If you only have one ethernet port in the master hub use that one.

Plug another ethernet cable into the PC's ethernet port and plug the other end into another ethernet port on the Master Hub, or if there isn't a spare one, plug it into Ethernet 2 port on the Slave Hub. The diagram above shows the final setup for a TalkTalk master modem with only one ethernet socket.

Switch on the PC and wait for it to boot up as normal. Switch the wifi back on if you switched it off earlier.

## Now start using it!

The PC should work exactly as it did before.

Now however you can connect up to five more PCs by wireless connection.

If the PCs to be connected wirelessly have the BT wireless connection software you can use that method. (see [here](#) )

PCs with Windows can use their normal Wireless connection method which I will not go into here, but you will need the Wireless key printed on the back of the hub label to gain wifi access. Note that the Home Hub gives the wireless or "WEP" key in "Hex" or "Hexadecimal" format - you don't need to know what that means but you will need that information when you connect.

Vista - when using Vista to connect wirelessly, it can take one or two minutes to complete the connection, starting with "Local Access Only", before getting an internet connection. Just leave it til the Notification Area icon gets its little blue ball.

### Note:

If you want to connect to the slave again directly without the master hub in the network, you must set up the PC's ethernet "network connection" with a fixed IP address of 192.168.1.100 subnet of 255.255.255.0 Gateway of 192.168.1.254 and DNS of 192.168.1.254

That process is described fully in **step 6** of the technical article <http://www.jarviser.co.uk/jarviser/lock6226.html>

## Advanced

OK now you have successfully mastered this little "hack" (yes, you are now officially a hacker!) You can think about increasing the standard Wi-Fi security by changing to WPA-PSK security, and changing the SSID.

BT do a perfectly adequate [guide](#) on WPA-PSK.

[| Home |](#) [Homehub Index |](#)