

# Setting up Vonage/VoIP on B4RN

## and notes on integrating it with a home phone circuit

### Introduction

So you've got your shiny new B4RN (Fibre To The Home) connection and you want to start using it for cheaper phone calls without any traditional line rental costs! Well, read on and you'll find it's all pretty straightforward.

VoIP stands for Voice over Internet Protocol which is just a fancy way of saying 'phonecalls over broadband'. The quality and ease of use is much the same as a normal phoneline though do be aware it won't work during a powercut because both B4RN and VoIP require mains power, so keep your mobile charged for emergencies during powercuts (or if your phoneline is absolutely critical then you could buy a UPS battery backup - see the guide at [www.b4rn.org.uk/resources](http://www.b4rn.org.uk/resources) for details).

Vonage is one of the most established companies in the world for VoIP services and they have a good reputation so although there are many other VoIP service providers, Vonage are the most popular option. Parts of this document will be more widely relevant but it has been written specifically with Vonage in mind. Other VoIP services providers can be found by searching online. Of particular interest might be pay-as-you-go VoIP services which can work out much cheaper if you only make occasional calls.

***This is a self help guide and B4RN are not responsible for your phone service but if you need help their techdesk will try their best to advise:  
01524 238499 / [techdesk@b4rn.org.uk](mailto:techdesk@b4rn.org.uk)***

## 1. Vonage - Easy step by step

*I suggest you read through all these steps before you place your order:*

**Choose a Call Plan:** First have a look at the current packages available on [www.vonage.co.uk/call-plans](http://www.vonage.co.uk/call-plans) - the standard is £9.25 per month (at the time of this update) and includes unlimited free UK landline calls, but for a small extra premium (£4.50pm) you can get free calls to 60+ countries and/or free calls to mobiles. In most cases you can keep your existing number or you could choose to get a completely new phone number with a dialing code of your choice. Your old ones will work too. The cheapest (£9.25 tariff) also charges a £10 activation fee, but higher tariffs are free from the activation charge.

The only additional cost is £5 delivery for your Vonage Box.

At the right hand side of the page there is a box where you can add on free mobile calls, The combined cost increases to £15 a month, but there is no activation fee.

If you want to keep your existing landline phone number and have it transferred to Vonage please follow instructions below!

**VERY IMPORTANT: DON'T TERMINATE YOUR LANDLINE YET**

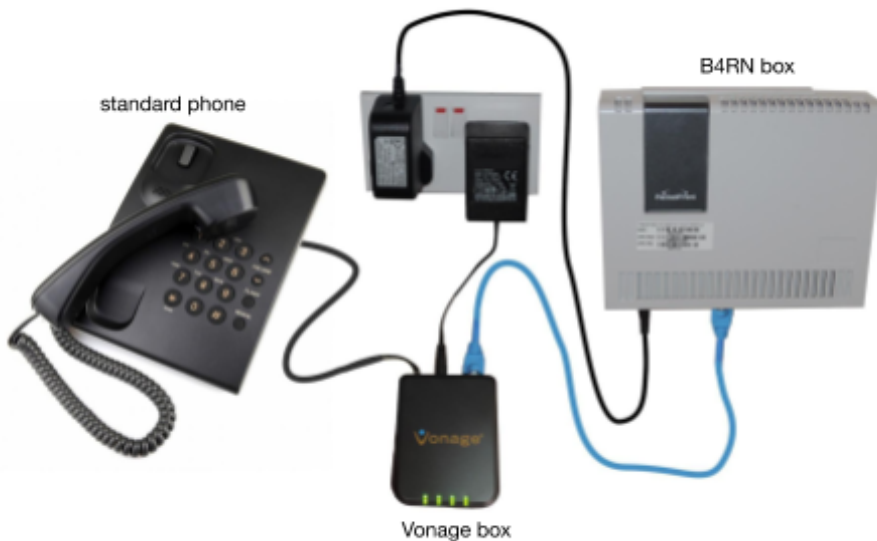
Terminating your landline too early will mean your cherished existing phone number will be lost in the ether! This is easy to avoid if you read on and follow this guide.

Please also be aware that if you have a bundled 'phone and broadband' package from a company such as PlusNet, then canceling your broadband could also terminate your landline and your number could be lost. You must ensure your landline remains in operation until the transfer of your phone number to Vonage is complete.

If your existing broadband/phone line company put their prices up it releases you from your contract within the 30 day period, just enough time to change to VoIP.

If you make a mistake and terminate your landline too soon there are companies such as RSR Communications, Salford, who can help rescue your number for around £100.

**Plug It In:** A courier will deliver your Vonage Box within a couple of days. It's very straightforward with colour coded connections (see *Useful hardware notes* on p6). Follow the included instructions in order, making sure you connect the blue cable to one of the four ports on the bottom of your B4RN box. Once the Vonage Box has completed its setup simply plug in one of your existing phones and you will be able to make and receive phone calls. Now you can try different setup options around the house (see p3-4).



1.3 Basic Vonage setup

**Try It Out:** You now have a 30 day money back guarantee period. Try your Vonage phone and tell them if you're unhappy with anything. I found everything worked really well and there are many special features like free 'call waiting', 'caller

display', 'answerphone' etc that can be setup via your account on the Vonage website.

I had one problem that was resolved; I found voices were too loud so I emailed Vonage and they adjusted the volume remotely to a better level. If you or your caller speak too loudly you may get an echo!

My only criticism now is that I have to dial the area code first when dialing out to local numbers. Unfortunately this will always be the case (except when using speed-dial for numbers in the phone's memory). Incoming calls from your local friends and neighbours etc are not affected by this; they don't need to start dialing the area code to call you unless they have also started using Vonage.

**Transfer Your Old Phone Number:** When you sign up with Vonage they will give you a new non-geographic phone number (beginning '03...'), on the higher tariffs you can choose a local number, but in most cases you can keep your old landline number if you wish. Once you have got a vonage account, simply go to [www.vonage.co.uk](http://www.vonage.co.uk) and log into your account's control panel. In the main 'summary' panel click on the blue 'add-ons' icon (as shown on the left) and then select 'move my number to Vonage'.

There you can request the transfer of your existing landline phone number to your new Vonage line. It usually takes a few weeks until the day of the transfer. You should receive an email confirming the day that the transfer will take place. **You must leave your Vonage line plugged in during this period** and you must have made at least one phonecall on it.

***Keep paying for your normal landline until the transfer is complete!***

On the day of the transfer there may be a few hours disruption on incoming calls while your old number is in 'no mans land' mid switchover from your old telco to Vonage.

You'll know when the number transfer is complete because your landline will go dead, and your Vonage connected phone will now ring when people call your old number! Your existing telco (e.g. BT) should now send you your final bill, but if you don't get confirmation from them ask them to send you your 'FINAL BILL'. Do not ask for your line to be 'disconnected' as this is unnecessary and will usually incur a charge of around £31. If you ever decide to leave Vonage they will transfer your number to your new telco/VoIP provider on request.

If Vonage seem to be having problems or delays transferring your phone number from your old telco, ask to speak to a supervisor and pressure them.

**Cancelled Your Broadband Yet?:** If you haven't already cancelled it, then getting your final bill for your landline will obviously disconnect your old ADSL broadband (presuming it's on the same old landline). You **may** be asked to pay a £30 fee to have your broadband service switched off - this is normal and unavoidable.

***You're all done! Read on only if you want to play around with how you set up your phones around the house...***

***Added information about using your mobile to make calls for free on your tariff at the end of this document.***

## 2. Optional setup with DECT phones or Homeplugs

It's a no-brainer to connect a wired phone to your Vonage Box, beside your B4RN box, but what do you do if you don't want to sit next to your B4RN box when you're on the phone? You could of course use a long ethernet cable, or a long telephone extension cable; but if you want to avoid long leads you have two easy options:

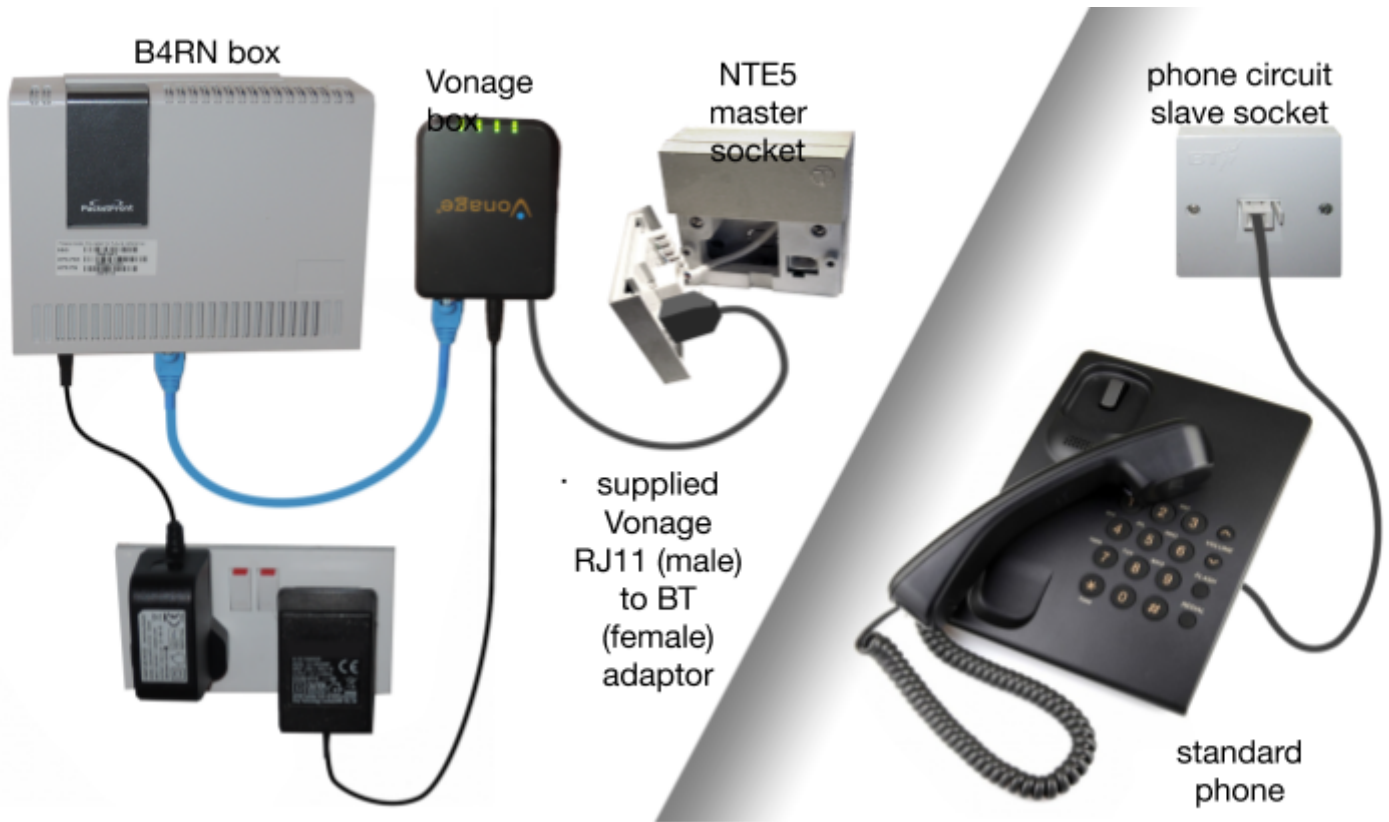
**Vonage with DECT phones:** These are digital cordless phones and so can have their base next to your B4RN and Vonage box but then the handsets taken anywhere you like around the house. Multi handset packs are available and extra handset bases can be put in other rooms.

**Vonage with Homeplugs:** Homeplugs share B4RN's local area network (including



2.2 Vonage setup with Homeplugs

Internet) through your mains electric wiring. If you have a pair of Homeplugs you can plug one into your B4RN box and then plug in the other at your preferred location for a wired phone. The Vonage Box then plugs into the second Homeplug and gets the Internet connection it needs from there (see photo below). For this type of use I'd recommend a basic pair of 200av Homeplugs costing about £25. You can borrow some from the B4RN computer club to try before you buy any. The vonage unit will also plug into the ethernet ports of the new meshes that some people use to get the wifi round their homes.



3.1 Connecting Vonage to the master socket

### 3. Optional home phone circuit integration

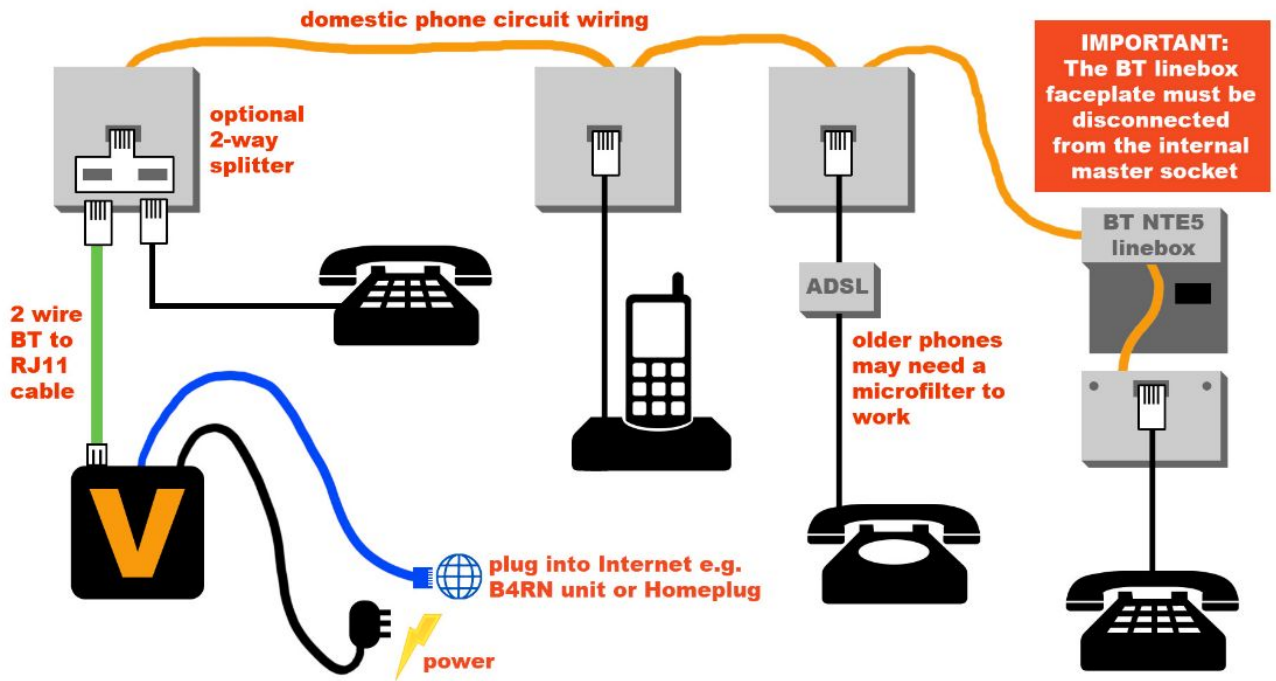
It's possible to enable your old home phone circuit with up to 5 phones for on your Vonage line. **The following two setups are my experiments and are quite simple and effective. Many B4RN users have now tried these successfully, but I'm not a professional phone engineer and it is at your own risk - I can't offer support or warranty (so if you're unsure - hire a professional!).** These setups are based on having the NTE5 linebox as your master socket - this was introduced by BT in 1991 and is still current (see *Useful hardware notes* on p6).

*Note: I found that older phones' bell's didn't ring unless I plugged them in through an ADSL microfilter (these used to be necessary for each phone on a broadband line).*

#### Adding Vonage at the master/primary socket

First to disconnect from the BT line! I removed the two screws on the front of the master linebox, and carefully pulled the faceplate out without dislodging any wires. This disconnects my home's wiring from BT's 'test socket' (the fundamental connection to BT's line). This action is allowed by BT, as long as I don't go any further!! On the inside of the faceplate is a standard BT style phone plug (male) that sticks out of the back of the faceplate. I simply insert this phone plug into the supplied Vonage RJ11 (male) to BT (female) adaptor and voila! Now all my phones on the house circuit are functioning on my Vonage account. Simple.





### Adding Vonage at a slave/secondary socket

First to disconnect from the BT line! I removed the two screws on the front of the master BT linebox, and carefully pulled the faceplate out without dislodging any wires. This disconnects my home's wiring from BT's 'test socket' (the fundamental connection to BT's line). This action is allowed by BT, as long as I don't go any further!!

I now go to a different phone socket on the house circuit and set up my Vonage Box there; first plugging it into power and the Internet (either using Homeplugs or plugging directly in to my B4RN box or ethernet extension).

Now the important bit - I then used a special '**2 wire BT to RJ11 modem cable**' to connect the Vonage Box's phone socket (RJ11 female) to the the phone circuit's wall socket. This cable is shown in green on my diagram and costs about £1 on ebay. I found that an old modem dialup cable met the same specification, and even an ADSL modem cable when combined with a microfilter also did the job. The essential criteria seems to be that the BT plug (male) should only have two metal contacts (one in position 2 and the other in position 5).

#### NOTES:

- An optional 2-way splitter means you can plug both your Vonage Box and a telephone into the phone circuit's wall socket.
- some phones over 5-10 years old seemed to need plugging in through an ADSL microfilter, I don't know why but without this their bells wouldn't ring.

## Using your smartphone with Vonage ‘Extensions’

I’ve been asked to include some additional information on a unique Vonage service called ‘Extensions’. Anyone with a Vonage account can set this up on their smartphone. It makes calls over WiFi so doesn’t require a sim card, and your calls will be free/charged as per your Vonage call-plan.

Simply download the free Vonage ‘Extensions’ app and you can start making and receiving calls. You don’t even need to be at home to use it - all you need is a WiFi connection! So you can use it anywhere from your local cafe to your office in town, or even when overseas on holiday!

Here’s a video explaining it in detail:

[www.vonage.co.uk/videos/how-to-videos/vonage-extensions-app/](http://www.vonage.co.uk/videos/how-to-videos/vonage-extensions-app/)

I’m told this is really handy for people who have all their contact numbers in their mobile phones and not in their landline ones. Also for people with poor mobile reception at home.

- You'll need a UK mobile number
- an iPhone® running iOS 4.3 or above or an Android™ device (v2.2 or above)
- Download the Extensions® app to your smartphone from Google Play or iTunes®
- Follow the instructions in the app to link your smartphone to your Vonage account
- Start making unlimited calls on your smartphone

If all this sounds complicated to you, just come to the computer club at B4RN HQ (Fridays 2-4) and we’ll help you do it all.

Bring your bank details if you want to buy it straight away, and bring your current phone line bill with you if you want us to help move your number off, we need the details on it for the authorisation form.