

## Troubleshoot your ADSL Router/Modem Setup

### **Cannot open configuration screen:**

- Power down your equipment for 30 seconds, then retry.
- Disable your firewall software.
- Ensure your Web browser is not configured to use a proxy server.

### **Line/Internet/ADSL light flashing or off:**

- Power down your equipment for 30 seconds, then retry.
- See the Related Articles; 'How do I set up my DSL Filters' and 'Troubleshoot your DSL Filter Setup'.

### **No lights:**

- Ensure the routers power switch is set to the on position.
- Check the power plug socket with another device.
- Contact the technical support team.

### **Connection to Internet fails:**

- Ensure your username and password are entered correctly. See the Related Article: 'Technical Details Overview'.
- Power down your ADSL equipment and computer for 20 minutes before attempting to connect again. Make a note of any errors you receive.
- Change your ADSL username to: bt\_test@startup\_domain. You do not need to change your password. Make a note of any errors you receive, or if this is successful.
- Reset your ADSL Router to factory defaults.

### **Slow speeds:**

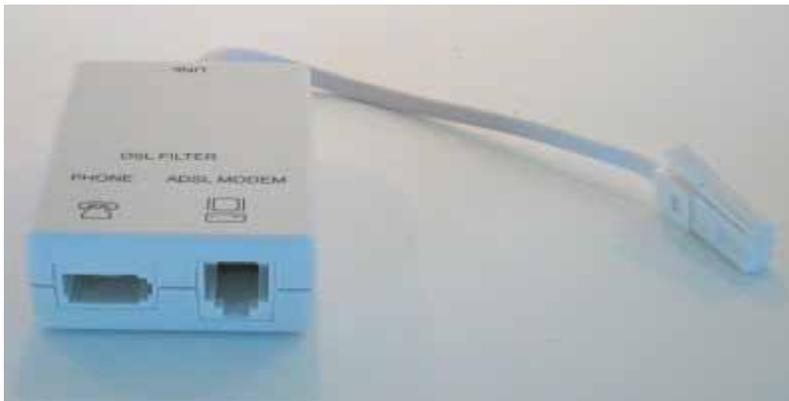
- Reboot your computer and router/modem.
- Test your speed using the speed tester of your ISP.
- Ensure all Internet software is closed when testing - including peer-to-peer and messenger programs.
- Test from a single machine, with all other computers switched off.
- Check all internal wiring and your DSL Filter setup (see the Related Articles; 'How do I set up my DSL Filters' and 'Troubleshoot your DSL Filter Setup').
- Install Firewall and Anti-virus software and perform a full system scan.
- Check for Adware/Spyware.
- If you are using a Wireless router ensure you have enabled encryption and Access Control lists.
- Modify your MTU to 1458 or 1430 and test again.
- Test your speed using the BT Speed Tester.

## How do I set up my DSL Filters?

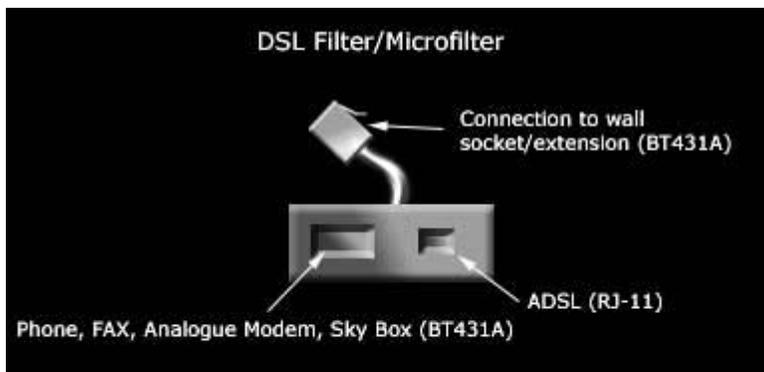
DSL Filters, or Microfilters as they are often described, are required to separate the normal low-end frequencies associated with voice calls from the high-end frequencies used by your ADSL connection. The correct installation of these filters is important to ensure the best possible performance of your ADSL connection.

### Introducing the DSL Filter:

The diagram below illustrates one example of an ADSL Filter. There are several different varieties - including the dongle-type below, a splitter, which plugs directly into your wall socket, and a plate, which replaces the standard BT Master Socket.



The illustration below shows what each of the connectors are for:



### Installing your DSL Filters:

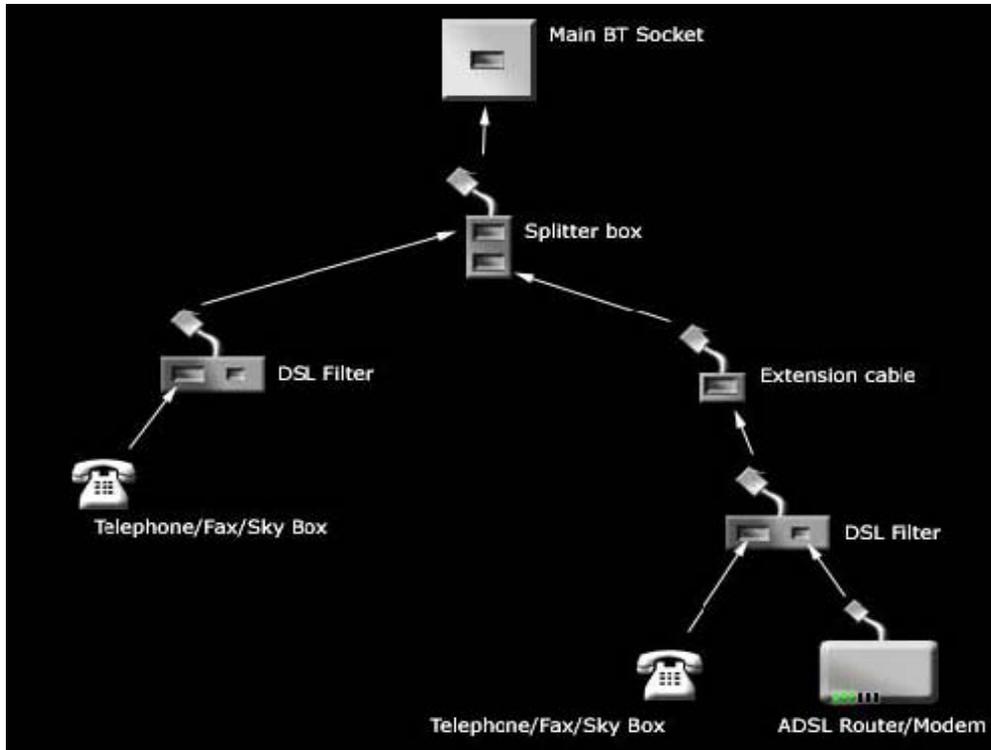
You should remember the following basic rules when installing your DSL Filters:

Every telephony device (Telephones, Faxes and Sky Digital Boxes) must pass through a DSL Filter.

No device should pass through more than one DSL Filter.

For the most basic setup of your ADSL hardware, with just one BT Telephone socket running one Telephone and your ADSL Router/Modem, all you require is the one DSL Filter. This should be plugged directly into the BT Master Socket, then a Telephone and ADSL Router/Modem can be plugged in to the appropriate connectors.

If you have more than one telephony device you wish to use, and have more than one BT wall socket, then each wall socket will require a DSL Filter. If you have only the one BT wall socket then a similar setup to the one shown below may be used:



As you can see from the diagram, a standard splitter is in use along with an extension cable with the standard BT sockets each plugging in to separate DSL Filters.

If a device passes through more than one DSL filter then that device will not be useable.

## **Troubleshoot your DSL Filter Setup**

If there is a fault with your DSL Filters, or the way you have set them up, you may observe the following symptoms:

- Line noise or echo.
- No dial tone, or a flashing ADSL/Line/Internet light on your ADSL Modem.

These simple steps should help you determine where the fault might be occurring:

### ***Line Noise/Echo on the telephone line***

#### **Step1:**

Disconnect all of your ADSL equipment and DSL filters. Plug a telephone directly in to your BT socket. Do you still hear line noise?

- Yes – contact BT to check your telephone line.
- No – go to step 2.

#### **Step2:**

Connect a DSL Filter to the BT master socket, and then connect the telephone to the filter. Do you hear line noise?

- Yes – the DSL Filter could be at fault. Contact support.
- No – repeat with another DSL Filter. If there is no line noise with any of the filters, go to step 3.

#### **Step3:**

Connect your ADSL Modem and a telephone to a DSL Filter at the master socket. Try each of your filters. Do you hear line noise?

- Yes – the Filter may be at fault. Contact support.
- No – there may be a fault with your internal wiring. Repeat steps 2 and 3, but from the extension socket or lead.

### **No Dial Tone**

#### **Step1:**

Disconnect all of your ADSL equipment and DSL filters. Plug a telephone directly in to your BT socket. Do you hear a dial tone?

No – try a different telephone. If you still have no dial tone, contact BT to report a possible line fault.  
Yes – go to step 2.

**Step2:**

Connect a DSL filter to the BT master socket, and then connect the telephone to the filter. Do you hear a dial tone?

No – the DSL Filter could be at fault. Contact support.  
Yes – repeat with another DSL Filter. If you get a dial tone with both filters, go to step 3.

**Step3:**

Connect your ADSL Modem and a telephone to a DSL Filter at the master socket. Try with each of your filters. Do you hear a dial tone?

No – The DSL Filter may be at fault. Contact support.  
Yes – there may be a fault with your internal wiring. Repeat steps 2 and 3 from your extension socket(s) or lead.

**ADSL Modem does not synchronise**

Synchronisation should be indicated on your ADSL Modem by a light labeled ADSL, Line or Internet (I). Power down your equipment for 30 seconds and power back up before beginning these checks.

**Step1:**

Ensure all of the physical connections between ADSL Modem, DSL Filters and BT sockets are secure. Check that all telephony equipment is filtered and the ADSL Modem does not pass through more than one DSL Filter. Can the ADSL Modem get synch?

Yes – the wiring was at fault.  
No – go to step 2.

**Step2:**

Unplug all telephony devices so only one DSL Filter is plugged in to a BT socket. Connect the ADSL Modem. Can the ADSL Modem get synch?

Yes – the wiring or other DSL Filters may have been at fault. Check with your other filters.  
No – swap the DSL Filter and try again. If you still can not get synch, go to step 3.

**Step3:**

Move your ADSL equipment to the BT master socket and repeat step 2. Can the ADSL Modem get synch?

Yes – your internal wiring is faulty; contact BT or a qualified service engineer.

No – your ADSL line may be at fault, contact support.

