

## **KNOW YOUR BROADBAND**

Dear Customer,

In our endeavor to improve customer satisfaction and serve you better, we are presenting ' KNOW YOUR BROADBAND ' to you. This enables you to know the trivial information about Broadband in a simple way. This is an attempt to educate all our esteemed Broadband customers and we hope it will imbibe more confidence in Broadband service. This E-copy may be preserved for repeated reading as and when required. We invite your valuable comments and suggestions which may kindly be mailed to [de\\_ns@dataone.in](mailto:de_ns@dataone.in)

### **1. Check the Wires:**

The leading-in cable [drop wire] from the junction box [ DP box] to your house should be as straight as possible, to the extent possible should be a single length without any joint. The wires should not be coiled anywhere and should be away from electrical lines. With these types of irregularities, your phone might work fine but the DSL Link will not hold and work satisfactorily.

### **2. Splitters and Parallel telephones:**

Never by-pass the splitter. The splitter does the job of separating the high frequency ADSL signals from low frequency telephone signals. If the splitter is not installed correctly, the broadband connection will go down every time the phone rings. Any parallel phone connection should be after the splitter and not before. The line from the exchange should first enter into the splitter. A two way jack may be connected to this phone jack to install your parallel telephones. The wire leading into the modem should not be running parallel or close to electrical wiring.

### **3. Signal to Noise Ratio [SNR]:**

Check your line SNR. To do this, first you need to enter into the Modem's web page by typing <http://192.168.1.1> in your browser. The modem might ask for user-name and password. The default user-name/password is admin /admin [except for modem Utstar300R where it is admin / utstar]. Under the heading Device Info □ Statistics □ ADSL, you will be able to see the SNR Margin and Attenuation. The SNR should be higher than 20 though anything above 10 is just enough. The Attenuation should be as low as possible. But if the attenuation starts going higher than 40 and SNR going down below 10, it is time to complain about line condition to our Helpline 1500.

### **4. Know about your mode of working.**

You should be aware of whether you are using the Broadband in Bridge mode or PPPoE mode. For the Bridge mode, a network dialer icon will contain your user-id and Password and you need to click the icon to get connected to broadband and thereafter you will open your explorer to view web-sites. The other method which is widely used is PPPoE mode, where your user ID and password will be available [configured] in the modem itself. In this case, after switching-on the modem and when DSL [Link] light is glowing steadily and also Internet/Data lamp glows steadily, you start browsing straight-away. We recommend you to first switch on your modem and then switch ON Your PC/Laptop. Your user-id will be either in dataone.in domain or in bsnl.in domain. You may visit our web-site [www.dataone.in](http://www.dataone.in) and click the appropriate link "Check your account usage" [ for user-id in dataone.in domain] or "Usage Detail Portal"[for user ID in bsnl.in domain & provided with portal-id] to check your usage, change your password etc. You can change your password but please remember that whenever you change your password using the web-site the same password change must be carried-out in modem [ for PPPoE mode] or in the dialer[ for Bridge mode] also.

## **5. DNS server:**

DNS servers are used to resolve the URL like [www.google.co.in](http://www.google.co.in) into an IP Address like 209.85.153.103. which is required by routers to take you to the website. The DNS server IP will automatically be available in the Modem for PPPoE mode of working. Ensure to keep the modem setting to acquire the DNS IP automatically please. For Bridge mode of working your machine will be getting the DNS IP automatically. You may check it by giving the command `ipconfig /all` in the command prompt. It will always be better to assign an IP address to your Ethernet/USB/Wifi adapter to which modem is connected. To set this, go to control panel ,click Network connections and under the “ LAN or High Speed Internet “ there will be icons like local Area connection, Wireless network connection, showing the NIC card, USB port, Wireless adapter to which your modem is connected. Right click on the icon ,select Properties, click on Internet Protocol[TCP/IP], click on Properties, click on “Use the following IP address”.Put the IP address as 192.168.1.10,subnet mask as 255.255.255.0 and default gateway as 192.168.1.1 and Preferred DNS as 192.168.1.1. Click OK and then again OK and close every thing, reboot your PC to take the settings. One can use the public DNS like 208.67.222.222 or 208.67.220.220 also, but if some sites are not opening using this DNS, BSNL cannot take the responsibility. On the contrary, if some sites are not opening with BSNL DNS but opening with the public DNS, the matter may be reported to our helplines so as to analyse and resolve the case by contacting the Website administrators.

## **6. Positioning of Wi-Fi Router**

Though the wireless signals from the wi-fi router can reach wi-fi enabled Laptop/PC within the range of 50 Meters, the brick walls and reflective surfaces will weaken and bounce the signals respectively. It will be better to place the wi-fi Modem[Router] on a higher place to avoid physical obstruction. Another main source of interference is the cordless phone. Keep the router as far away from the cordless phone or choose cordless phone that use different frequencies. To increase the wireless range, one can also use a wireless repeater purchased from the local market. Before purchasing, ensure from the vendor that it supports your wi-fi router.

## **7. Wi-Fi Security:**

The security options of wireless router should be fully utilised to avoid someone from neighbourhood accessing your modem. The wireless signals might reach the neighbouring houses, and if the security options are not enabled there is every chance of misuse of Broadband connection. By default, BSNL gives wireless modem with security enabled. But by some chance, if the modem gets, reset the setting might be lost. Hence it is advised to check the security options are enabled. Customers can visit the modem web page as stated earlier and check the wireless security options. The very basic level of security is by giving the wireless key which will be asked by the modem when a Laptop/PC is trying to access the modem for the first time. There are two types of security key algorithm. One is WEP [ Wireless Encryption Protocol ] and another WPA [ Wi-fi Protected Access] . The WPA is more secured and recommended by BSNL. The next advanced level of security is MAC Filtering by which only your Laptop/PC will be permitted to access the modem, even if someone knows your security key. The detail procedure for the above two levels of wireless security is published in our website [www.dataone.in](http://www.dataone.in) under the heading “Attention Wi-Fi Users “ .The default SSID [ Service set Identifier of the Modem may also be changed as per your desire and the SSID may also be made hidden [ turn-off SSID broadcasting] so that others will not even know about your wireless modem. In this case of Hidden SSID, your Laptop/PC will be connected to the modem as you have already configured for the

connection in your machine. However some times your machine may not be able to get connected and in such case you may just right click on the Wireless Network Connection icon either in the task bar or in the Network Connection under Control Panel and select Repair option please.

#### **8. Watch-out for bandwidth overhead:**

Many applications like Windows updates, anti-virus updates and other software updates will be using broadband connection in the background. Some of these updates might ask for confirmation before downloading, many may not even ask and will be simply running in the background which will affect your browsing/download speed. One can find out the applications which are running by going to the Task Manager [Press Ctrl-Alt-Del keys together to get into the Task Manager]. You may shut down such of those applications which are running without your consent. But beware that shutting down some vital applications required by your operating system inadvertently will cause hanging of your system. Windows updates, Anti-virus updates etc. could be scheduled to run when your system is free and you are not browsing. This will help in utilising the bandwidth effectively.

#### **9. The Nuisance & Danger of Virus :**

You might sometime feel that your broadband was good sometime back but it is slow now a days. One of the major reason for this is the infection of Virus into your machine. Ad wares, spywares too will affect your speed. Hence it is very important to have a good anti-virus software and spyware, adware detectors in your system. Regular updates to these software and Windows updates are also a must. Use only legal version of Windows.

#### **10. Aware of free wares:**

Many free software and tools are offered by many websites. But be careful in selecting these software as some of these software will overload your operating system;some may act as spyware;some may eat away your bandwidth. A browser like Opera or Firefox lets you switch off images,flash banners, javascripts etc. which will cause your browsing speed high. But if you overdo things, many websites which requires these settings will not open for you. Keep always an unmodified copy of Internet explorer in such cases so as to use it when some website are not opening with your other browsers.

#### **11. Crossing the Free-usages :**

When you are crossing the monthly free usage limit[except unlimited plans], you will receive an intimation automatically. You may kindly press the button, "I Agree" to continue to enjoy the broadband which is chargeable as per your plan. However ,we request you to kindly switch off and switch on the modem after pressing the "I Agree " button please.

We have also facility to send sms/e-mail when you cross the free Broadband usage limit for which you can register at our URL <http://bbusage.bsnl.in>

Also you can register yourself with us for getting free sms alerts on your mobile regarding broadband usage/excess usage,landline bill,broadband bill, online payment acknowledgement by sending an sms:

REG[SPACE]LANDLINE NUMBER WITH STDCODE] to 52295 [for BSNL customers] and 9448077777 for other customers.

Example: REG 08152224158 where 0815 is the STD code and 2224158 is the telephone number.

**12. Configuration of CPE [Broadband Modem/Router]:**For configuration of different types of modems supplied by us you may kindly visit our website [www.bangaloretelecom.com](http://www.bangaloretelecom.com) and see under 'Dataone Broadband Service' < > 'Download User Manual Here' or 'Self Trouble Shooting Guide'.

### 13. Trouble Shooting

Kindly switch off your modem when not browsing even if you are in unlimited plan. If the modem has been purchased from BSNL, never change the power adapter of the modem with local one.

Sl. No.	Indications/observation	Suggested Action
1	DSL [ADSL] Link light is not glowing or it is blinking and goes off	Check for any loose connection in splitter and modem. Ensure that ADSL/Modem port of splitter connected to DSL port of the modem.
2	Getting error 691[ in Bridge mode]	Check your User ID and Password.
3	Getting error 678 or 769 [ in Bridge mode]	Check whether your Ethernet/USB/Wi-Fi port is in Disabled state. If so, enable it. Problem not solved? Carry out remedy of serial No.9. Still problem call our helpline.
4	DSL is steady but no browsing [ In PPPoE Mode]	Go to modem webpage and check the WAN status of your modem for possible “authentication failure”
5	DSL is steady and no authentication failure but still no browsing	Check whether your modem is having your user-id. If it is showing something like “ multiply “ change it with your user-id and also enter your current login password, save and reboot the modem and try.
6	DSL is steady no authentication failure, Modem is having your user-id but still no browsing	Go to command prompt [Start □ Run □ type cmd □ press enter] Give command ping <a href="http://www.google.co.in">www.google.co.in</a> and press enter. If getting four successful replies then problem is in your browser. Reinstall it or reinstall O/S. If getting 'Could not find host' there is DNS issue with your machine/modem, call 1504
7	Modem & PC connected via USB but USB light not glowing	Check the USB cable for loose connection. Reinstall modem's USB driver. Still problem call our helpline.
8	Modem and PC connected via Ethernet, but Ethernet/ LAN light not glowing	Check the Ethernet cable for loose connection. Check Local Area Connection icon is available under network connection in Control Panel. If not available reinstall the driver of the Ethernet card.
9	Unable to open the modem webpage <a href="http://192.168.1.1">http://192.168.1.1</a> .	Go to LAN setting. assign IP address 192.168.1.1, subnet 255.255.255.0, Gateway as 192.168.1.1,DNS 192.168.1.1 Reboot PC and try again.