



BT Business Highway

Common Questions: Technical

1. Does it matter which blue digital socket I plug my PC into?

No. Either socket will work. You can have a PC in each socket if required and another one plugged into the USB socket, although only two calls can be made/received at the same time. An internal ISDN PC card or Terminal Adapter is required to connect to Business Highway via the blue sockets.

2. What protocol does Business Highway use?

Full European ETSI compliant ISDN protocol.

3. Are switches compatible with Business Highway?

No. To use any kind of switch, you need BT's ISDN 2e service.

4. What are the differences between Business Highway and ISDN 2e?

While Business Highway uses the digital technology behind ISDN, analogue devices (such as standard telephones and fax machines) can also be connected directly to the Business Highway line. With ISDN 2e, an additional piece of equipment (a digital-to-analogue converter) is needed. This difference allows BT Calling Features to be available on Business Highway, but not on ISDN 2e. Business Highway cannot be used through a switch (PBX) and does not support Direct Dial In (DDI) or Line Hunting, whereas ISDN 2e does.

5. What are the differences between Home Highway and Business Highway?

The differences come in three areas: Price & discounts, service and functionality. With Home Highway, you can have the residential discounts (Friends & Family etc) whereas Business Highway lines attract the business discounts and Billing options (OneBill, etc). As with discounts, Home Highway customers receive the residential service support and not the business level support, such as Account Management support. Home Highway does not have Digital Select Services e.g. Multiple Subscriber Numbering (MSN), Sub-Addressing, Call Forwarding and Call Barring. Home Highway does not support the ISDNconnect service.

6. How can I tell if I have disconnected from a digital Business Highway call?

A simple way to confirm this is to check if you can hear a dialling tone on both analogue sockets simultaneously. If you are connecting via the USB socket, lighted dots on the USB icon in the bottom right of your screen indicate call connection and data transmission - the User Guide for the USB service provides details on how to check this. If you are connecting via an ISDN card or Terminal Adapter, you should check with the manufacturer or Application provider how the software indicates call disconnection and call status.

7. Can I get extension wiring?

BT can install analogue or digital wiring extensions for a fee. Alternatively these can be bought in extension kit form from other suppliers. For digital extensions, you must ensure the cable complies with ISO/IEC 11801 and is fitted with RJ45 type plugs (Cat 5 cable). For analogue extensions just use normal telephone cable. For more information please refer to the Digital Extension Wiring Guide available under the Literature & Documents section.

8. What happens if the local mains power goes off?

The green Power LED on the Business Highway box will not be lit. Analogue socket 1 will function for outgoing calls, incoming calls can still be received but the ringing will sound different to normal. The analogue socket 2 will not function. Both digital channels will continue to work, however, depending on the nature of the power failure, computer or other digital devices may be affected.

9. Will BT Calling Features work with Business Highway?

BT Calling Features will work on the analogue numbers. However, Call Waiting and Ring Back When Free, will not work when using both digital channels (incoming callers will hear a busy message). Call minder and Call Diversion will still work when both digital channels are in use.



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Existing BT Calling Features should be automatically transferred to Business Highway upon conversion, but any personal setting you have will be lost, and will need to be reconfigured. Call Sign is not available on Business Highway.

10. What equipment do I need to use Business Highway?

To get online, you need a computer with a USB port, CD drive and compatible Operating System, and a USB cable (a test cable can be left at the time of the installation but this is not a part of the Business Highway service and it will not be maintained by BT)*. For more information please refer to "What is Provided" available under the Product Overview section at this site.

If you are not accessing via the USB socket, (because you do not have some or all of these requirements, or because you are running specific applications), you will need an ISDN card or Terminal Adapter, and the software to configure your computer to work with ISDN (the technology used by Business Highway). Terminal adapters and ISDN cards are available from BT and other suppliers.

*Please note: only Business Highway boxes installed after 1st November 2001 have USB sockets. If you want to use the Internet, you will also have to connect to an Internet Service Provider (ISP) that allows digital access. For specific applications such as videoconferencing, you will need the appropriate hardware. BT will supply the BT Highway line box and associated internal wiring, but you will need to have a power supply within safe reach of the 1.8 metre lead connected to the new Business Highway line box. There should be no need for you to change your current phones, faxes or answering machines - almost all will work over Business Highway.

11. Can Apple Macintosh computers be used with Business Highway?

Yes. Apple Macintosh computers work with Business Highway. They can be connected to the USB socket or to the blue digital ports via an Apple Macintosh compatible ISDN Card or Terminal Adapter. Typically these cards/adapters are more expensive than cards and adapters for PCs. You should consider which product is the most appropriate for the applications you want to run and seek information from equipment manufacturers. Apple Macs may also require additional software to support Dial-Up applications and may need an Apple Mac serial cable. These are available from most Apple Mac suppliers.

12. Will a burglar alarm work?

Some alarm monitoring companies support digital access, but you should check with your burglar alarm monitor company. Telecom Red's analogue Alarm Service (RedCare) does not work over the analogue ports of Business Highway. Existing lines should not be upgraded to Business Highway if you wish to retain the RedCare service. However, RedCARE ISDN is a service that can run over the 'D' channel of Business Highway lines. Further information is available from Telecom Red.

13. How do I bond channels?

For Internet access, you will need to contact your ISP to advise them that you now require digital (ISDN 128kbps) access. The ISP will probably give you a different number to dial for access and should advise you on how to bond channels, which will involve reconfiguring your access application (typically Dial-up networking). It is important to note that a 128kbps digital call is treated as two calls, and you will be charged for such. Channel bonding does not happen automatically on most digital devices, and the bonding process is controlled by the application - not the Business Highway service. Your Terminal Adapter or ISDN card must support channel bonding. You can channel-bond over the USB connection and guidelines on how to do this are given in the USB User Guide for your particular Operating System.



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14. Are there any restrictions on who I can communicate with?

There are no restrictions. You can communicate with anyone as normal. It doesn't matter whether you are telephoning someone with an analogue (PSTN) line, Business Highway, an ISDN line or a mobile phone. With Business Highway you have all the advantages of the flexibility of your existing analogue service. You can also make digital calls from the digital ports using an ISDN phone (or a normal phone connected via an adapter) or use them for any digital applications, i.e. Group 4 (ISDN) fax, data transfer, video, etc.

15. Can I plug a DECT phone into the digital port?

Only if your DECT phone has an ISDN connector on it. If not, it will function normally on an analogue port.

16. Is there a Helpdesk?

Yes, the Business Highway Helpdesk can give advice on the Business Highway service. The number is Freefone 0800 917 1161.

17. What are the minimum specifications for my PC?

There are no minimum specifications for your computer, but it needs to support the hardware and software used with ISDN and internet usage. For PCs, we recommend at least a 486 processor with 8mb of RAM running at 100mhz, but this should be confirmed with your card supplier and ISP.

18. What technology is involved?

The Business Highway line box has five sockets*, two for ISDN-compatible equipment, one USB socket and two for analogue equipment (such as phones, faxes and answering machines). You can connect a computer into the USB socket and/or the blue digital sockets. There are equipment requirements depending on your chosen connection method. For more information please refer to "What is Provided" available under the Product Overview section at this site. You can connect a combination of equipment to the sockets and use them to make or receive two calls at the same time. *Please note, only Business Highway boxes installed after 1st November 2001 have a USB socket.

19. What will be installed?

A BT engineer will come around to fit the new Business Highway line box to your wall and run a connection from your existing master socket to the junction box, which can be up to 25 metres away, so you will need to think about where you want the new box to be. You also need to ensure that the location chosen is close to a normal power socket (within safe reach of the 1.8 metre lead connected to the new Business Highway line box). The engineer will give you the CD that contains the USB drivers you will need to connect via the USB socket and a Quick Install Guide for the drivers. A test USB cable can also be left at the time of the installation but this is not a part of the Business Highway service and it will not be maintained by BT.

20. Can two existing PSTN numbers be transferred onto Business Highway?

In many cases this is possible but not guaranteed. We can check.

21. When I buy a Terminal Adapter or ISDN PC Card, what will be supplied?

This should be confirmed with the supplier. However typically an Internal PC Card pack should include 1 PC Card, 1 ISDN Line Cord, 1 Installation & Application Software CD-ROM and 1 Installation Booklet. A Terminal Adapter pack should include 1 Terminal Adapter, 1 ISDN Line Cord, 1 Power Adapter, 1 Installation & Application Software CD-ROM, 1 Serial Lead and 1 Installation Booklet



22. If I exchange data with another user, does the other user have to have Business Highway?

No. Business Highway can communicate with any digital line seamlessly, this includes another Business Highway user or someone with ISDN 2, ISDN 2e, ISDN30 (DASS2), ISDN30 (I.421) and ISDN30e. Some ISDN Cards and Terminal Adapters are also able to communicate with analogue modems at a reduced speed. If your ISDN adapter is not able to communicate directly with analogue modems, then a modem can always be used on one of the analogue sockets instead.

23. Can I have a digital call and two PSTN analogue calls at the same time?

No. Only two calls at any one time are possible. However, Call Waiting and Three Way Calling will function if one digital call is being made.

24. What is the REN number for the analogue Business Highway sockets? How many devices can I attach to one socket?

The REN is 4. So, typically, four analogue devices can be attached to each analogue socket with extension wiring as usual.

25. What equipment is compatible with Business Highway?

Almost all analogue and digital equipment is compatible with Highway.

26. Is an internal PC Card faster than an external Terminal Adapter?

Suppliers of Terminal Adapters and PC cards can advise on the relative specification of their products.

27. Which Internet Service Providers (ISPs) support digital access?

Most ISPs support digital access at 64kbps and some at 128kbps, you should check with your individual ISP. BT Internet is fully compatible at both 64kbps and 128kbps.

28. Can I have one PSTN number across both analogue sockets with Line Hunting?

This service is not compatible with Business Highway.

29. How do I connect extension wiring to analogue socket 1?

Extension wiring can be connected in two ways, either from existing analogue master line box or by plugging extension cabling straight into the first analogue socket on the Business Highway line box.

30. How do I connect extension wiring to analogue socket 2?

Extension wiring should be connected into the second analogue socket on the Business Highway line box. Extension wiring can be fitted by BT or other suppliers for a fee or can be purchased in kit form in many high street stores.

31. How do you connect extension wiring to the digital sockets?

For digital extensions, you must ensure the cable complies with ISO/IEC 11801 and is fitted with RJ45 type plugs (Cat 5 cable). These should be RJ-45 plug ended connectors into either of the blue digital sockets on the Business Highway line box.