

EarthLink[®] High Speed Business DSL User Guide

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WELCOME TO EARTHLINK HIGH SPEED BUSINESS DSL

Thank you for choosing High Speed Business DSL from EarthLink—the small business expert! You've made the right choice for a fast, reliable connection.

You'll find all the information you need to get started, including helpful contact and billing information, and a brief overview of the EarthLink high-speed Internet service you've ordered, inside this guide. We encourage you to take a few moments to familiarize yourself with the information inside this guide before your installation.

Finally, we'd like you to know that you're in good hands with EarthLink. Your business will be backed by one of the largest Internet service providers in the nation, with over 10 years of experience in providing reliable, quality Internet service. And because EarthLink specializes in supporting small businesses like yours, we offer a complete range of products—from high speed to Web hosting to e-commerce—all designed to meet the needs of your growing business. We're there for you whenever you need us, with practical, affordable solutions.

So thanks again for choosing EarthLink. We look forward to serving you for many years to come!

The EarthLink Business High Speed Team

1.888.698.4357 for Technical Support and Customer Service
www.earthlink.net

FEATURES & BENEFITS OF BUSINESS DSL

EarthLink High Speed Business DSL is the high-speed Internet service that can keep up with your business—it delivers the speed you need, and provides a secure, reliable, high-speed network connection for all the computers in your office, making file sharing and intraoffice communication a breeze.

As part of your Business DSL service, you will receive:

- Professional installation
- Performance guarantees backed by our industry-leading *Service Level Agreement* (for more information, visit www.earthlink.net/go/sdsl/sla)
- 25 email mailboxes
- 10MB of personal webspace per mailbox
- An EarthLink Unlimited dial-up access account
- Up to 8 static IP addresses (as justified)**
- DSL router with built-in firewall capabilities
- 24/7 toll-free technical support

** Additional IP addresses may be ordered for a fee

While EarthLink guarantees your installation will be complete within 30 days, you may want to access the Internet in the meantime. Included in your EarthLink welcome kit is our award-winning TotalAccess® software. Using a standard modem, you can install the software and set up a dial-up connection using your Unlimited dial-up account.

INSTALLING YOUR BUSINESS DSL SERVICE

The process of installing your Business DSL service has two parts: EarthLink's and yours.

EarthLink will coordinate with your local phone provider for the necessary DSL line services, register and administer your domain name, assign the IP addresses for your network, professionally install and configure the hardware at your office, do any necessary inside wiring, and ensure that your DSL connection is functioning properly.

Your part begins once the installation is complete. At that time, all you'll need to do is configure the computers on your network.

EarthLink's Part in the Installation Process

EarthLink's installation process begins as soon as you place your order and lasts until the day a professional installer comes to install your DSL equipment. Your complete installation is guaranteed within 30 days:

- Once you have placed your order for Business DSL, we will coordinate with your local phone company to install the necessary phone line.

- EarthLink High Speed Business DSL requires installation by our professional installation team. You will receive an email notifying you of your installation date. It is very important that you're available. If you miss your scheduled appointment, you will be charged a fee, and rescheduling may take up to two weeks. If you need to reschedule your installation appointment, please call EarthLink Business Access Customer Service at **1.888.698.4357**.
- Your professional installer will come to your location to connect your DSL hardware and configure your EarthLink service. The installation includes 20 minutes of inside wiring, if needed.
- Once your DSL equipment has been installed, your DSL line is active, and data can be transmitted and received, your installation will be complete and billing will begin.

Your Part in the Installation Process

You will be responsible for connecting your other computers on your network to the Internet. In your EarthLink welcome kit, you received an EarthLink TotalAccess CD. This CD provides everything you need to connect to the Internet and set up your email. If you're using other Internet connection software, you'll find the help you need at the EarthLink Support Center (support.earthlink.net), which has online tutorials that will walk you through these procedures.

Remember, if you need help for any reason, feel free to call a support specialist at **1.888.698.4357**. We're here anytime you need us, 24/7.

ABOUT YOUR EARTHLINK BUSINESS DSL EQUIPMENT AND SERVICES

Your DSL Router

We will provide you with an EarthLink-certified DSL router. Your router provides an instant, high-speed connection to the Internet for all the computers on your network. There's no dialing, no waiting for connections, and no busy signals.

As part of your EarthLink service, we'll configure your router for you, and if you allow us to maintain administrative control over it, we'll support it for free. If you decide to administer it yourself, then decide later to have EarthLink take control, there will be a one-time technical support fee.

EarthLink is not responsible for any alterations you make to your router. If you alter your router in any way and need EarthLink to reset or reconfigure it remotely, you will be charged a fee.

Inside Wiring

The first 20 minutes of inside wiring are included with your installation. Additional inside wiring may incur an additional charge. If extensive inside wiring is required, it may be necessary to hire an independent contractor to complete this work for you. Some wiring may require access to your office's telephone closet.

IP Addresses

Static IP addresses allow you to control network costs by hosting your own email, Web, and FTP servers in-house. You can also set up a VPN (virtual private network), giving employees secure, remote access to the company Intranet.

If you requested the use of static IP addresses, you will receive one block of IP addresses (up to eight) at no additional charge with your EarthLink Business DSL service.

If you need additional IP addresses, you must send a written request. Please see the section titled *Keeping Up With Your Business Needs: Ordering Additional IP Addresses* for more details. As with all IP address blocks, two IP addresses are used for networking and one IP address is used for the router. The rest can be used for individual devices.

Domain Name

You can register a new domain name with EarthLink or with an existing registrar. You may also transfer an existing domain name to EarthLink. To register your domain name, contact EarthLink, or follow the procedures outlined by your domain name registrar service. Note that you will be billed directly by the domain registrar company (such as Network Solutions or InterNIC), and not by EarthLink.

For any additional questions about your domain name, send an email to [**sdsl-dns-request@earthlink.net**](mailto:sdsl-dns-request@earthlink.net).

News Services

To gain newsreader access, you must call EarthLink Business Access Customer Service at **1.888.698.4357** after your installation is complete.

Mail Services

EarthLink can route your email to a computer on your network that is running an SMTP-compliant mail server (or mail gateway). Your mail server is responsible for accepting incoming email from other computers on the Internet and delivering that mail into user mailboxes on your network. Your mail server can then run POP3 or IMAP software to allow access to user mailboxes from computers on your network.

EarthLink Mail Server Information:

Incoming Mail Server: **pop.earthlink.net**

Outgoing Mail Server: **smtp.earthlink.net**

DNS Servers: ns1.mindspring.com (207.69.188.185)
 ns2.mindspring.com (207.69.188.186)
 ns3.mindspring.com (207.69.188.187)

If you have your own domain name and you want your mail server to receive email sent to addresses at that domain, EarthLink can provide backup MX services (if EarthLink is administering your domain name service). To have backup MX service enabled, send an email to [**sdsl-dns-request@earthlink.net**](mailto:sdsl-dns-request@earthlink.net).

If you want email addresses with your own domain name, but don't want to run your own mail server, contact Business Access Customer Support at **1.888.698.4357** to learn about our email hosting options.

THINGS YOU NEED TO KNOW ONCE SERVICE BEGINS

We're committed to making your EarthLink experience smooth and hassle-free. Our industry leading Service Level Agreement (www.earthlink.net/go/sdsl/sla) ensures consistently high-performing service. If you should ever need help for any reason, call a support specialist at **1.888.698.4357**. We're here anytime you need us, 24/7.

Invoices

Billing for all fees (installation costs, hardware costs, and monthly service) for your EarthLink Business DSL service will begin when the installation of your DSL line is completed.

We try to make our invoice statements clear and easy to understand. However, if you have any questions, contact EarthLink Business Access Customer Service at **1.888.698.4357** or send an email message to sdsl-service@earthlink.net. Please have your account number available.

Forms of Payment

EarthLink accepts the following forms of payment:

- Credit cards
- Corporate checks or bank drafts
- Money orders

We will contact you if we're unable to apply charges to your form of payment. Keep in mind that this could cause a delay of your installation.

Payment Due Date

Payments are due upon receipt, and are overdue after 30 days. Please include your Invoice Number or Customer Number on all forms of payment.

Change of Address or Contact

If you need to change your billing or contact information, please call EarthLink Business Access Customer Service at **1.888.698.4357**, or send an email to sdsl-service@earthlink.net.

Traveling

With EarthLink, it's easy to stay connected, even when you're traveling. Your Business DSL account includes unlimited dial-up service, which means you can use a standard modem to access the Internet through any of our thousands of local dial-up numbers nationwide. If you aren't using the EarthLink TotalAccess software, you'll need to find an access number for the location to which you're traveling. Visit the EarthLink Support Center (support.earthlink.net) and click the *Internet Access Numbers* link.

Relocating Your EarthLink Business Access Service

If you need your service relocated due to an office or company move, please call EarthLink Business Access Customer Service at **1.888.698.4357**. Because we have to work with your local telephone company, a circuit move typically requires 30 days notice. Please be aware that telephone service must be established at the new location before the DSL service can be moved. Please notify us as soon as possible so we can place all necessary orders and avoid any downtime or inconvenience.

Pricing for relocation is equivalent to a new installation minus the cost of new hardware equipment, as long as no change in your service is needed. Please contact EarthLink for current relocation pricing.

If you are moving within the same physical address (such as to another floor or suite), the line speed that you currently have is not guaranteed. We will send a professional installer to your location to complete any needed inside wiring and to determine what DSL service/speed is available. Charges will apply, so please call EarthLink Business DSL Customer Service at **1.888.698.4357**.

Canceling Your Service

If you need to cancel your EarthLink Business DSL service, please send a fax to **1.404.287.0880**. 30 days' notice for service cancellation is required.

To process your request, we ask that you provide the following:

- A written request submitted on company letterhead by your billing contact
- Your Customer or Account number
- Your current phone number
- The reason for canceling service

If you cancel prior to installation, a cancellation fee will be charged (the early-termination-of-service penalty does not apply).

An early-termination penalty may apply if you cancel after your installation, but before the end of your selected term.

KEEPING UP WITH YOUR BUSINESS NEEDS

EarthLink Business DSL provides high-speed "always on" Internet access designed for the needs of small- to medium-size businesses. Unlike residential DSL products, Business DSL uses SDSL (Symmetric Digital Subscriber Line) technology. The "symmetric" in SDSL means that you get the same speed uploading and downloading, which is especially important to businesses who need to host their own servers, or who customarily upload large files.

Business DSL provides speeds up to 50 times faster than those of a traditional dial-up modem connection. EarthLink Business DSL offers line speeds from 144Kbps to 1.5Mbps in a range of price points to meet your needs.

Upgrading Your Service

You can upgrade an SDSL service to any higher-speed service that's available in your area (early-termination penalties will not apply). The same hardware equipment and DSL line will be used, and the change will not require a visit from a professional installer. Bandwidth (DSL speed) upgrades typically take seven days.

You may also upgrade from IDSL to SDSL service, depending on the availability in your area. There is a one-time upgrade fee, though early-termination penalties will not apply. In addition, you may need new equipment and a reprovisioning of your DSL line, which will require a visit from a professional installer. An IDSL upgrade usually takes about 30 days and is considered a new line installation. If you want to upgrade your service, visit www.earthlink.net/go/sdsl for current pricing plans and promotions or call **1.888.758.2963**.

In addition, EarthLink offers High-Speed Enterprise products. Please call **1.888.758.2963** for product information and pricing. Our highly trained sales staff will help you determine the best solutions for your business.

Ordering Additional Domain Names

EarthLink will set up and administer your domain name at no additional charge. As your business grows, you may find you need additional domain names registered for your Internet service.

There is a one-time charge from EarthLink for each additional domain name you order. In addition, the registrar company will bill you directly for the ongoing annual domain registration fee.

To request additional domain names, send an email to sdsl-dns-request@earthlink.net. You will receive a response along with a tracking number, which can be used for reference. It usually takes one to three weeks to receive additional domain names.

Ordering Additional IP Addresses

As your network expands, you may require additional IP addresses beyond those provided with your EarthLink Business Access service. EarthLink can set up and administer those IP addresses.

To request additional IP addresses, please send an email to sdsl-ip-request@earthlink.net. You will receive a request via email for the information necessary to process your request. You will also receive a ticket number, which can be used for reference. It usually takes up to two weeks to receive additional IP addresses.

When upgrading, previous IP addresses must be turned in and a whole new set will be assigned—renumbering is required (see the section titled *About Your EarthLink Business DSL Equipment and Services: IP Addresses* for more details).

IP addresses are managed by the American Registry of Internet Numbers (ARIN). In order to comply with ARIN's guidelines for IP address usage, EarthLink allocates IP address numbers (IP address blocks) to our customers according to the following criteria:

- At least 25% of the requested IP address space is expected to be for immediate need (to be used within a month of allocation), and with a total of 80% of previous IP addresses having been used.
- IP addresses for future growth should encompass, at most, one year's plans.

GLOSSARY

This glossary provides various industry terms, acronyms, and definitions that you will find useful when using this guide.

ADSL (Asymmetric Digital Subscriber Line) A term for one-way T1 transmission of signals to the home over the single, twisted-pair wiring already going to homes. ADSL modems attach to twisted-pair wiring. ADSL is often provisioned with greater downstream than upstream rates (hence "asymmetric"). These rates are dependent on the distance a user is from the telephone company's Central Office and may vary from as high as 9Mbps to 384Kbps.

CO (Central Office) A circuit switch that terminates all the local access lines in a particular geographic serving area; a physical building where the local switching equipment is found. DSL lines running from a subscriber's home connect at their serving Central Office.

CPE (Customer Premise Equipment) A wide range of customer-premises-terminating equipment that is connected to the local telecommunications network. This includes telephones, modems, terminals, routers, set-top boxes, etc.

Dedicated Line A transmission circuit that is reserved by the provider for the full-time use of the subscriber. Also called a "private line."

DSL (Digital Subscriber Line) A general term for any local network loop that is digital in nature; technically, DSL equates to ISDN BRI, but this is decreasingly enforced terminology. DSL technology is available in several varieties (ADSL, HDSL, IDSL, SDSL, VDSL, xDSL).

DSU/CSU (Data Service Unit/Channel Service Unit) The devices used to access digital data channels. At that customer's end of the telephone connection, these devices perform much the same function for digital circuits that modems provide for analog connections. For example, DSU/CSUs take data from terminals and computers, encode it, and transmit it down the link. At the receive end, another DSL/CSU equalizes the received signal, filters it, and decodes it for interpretation by the end user.

Ethernet A LAN used to connect devices within a single building or campus at speeds up to 100Mbps. Within the OSI model, Ethernet is defined at layer one (physical) and layer two (data link). Based on Carrier Sense Multiple Access/Collision Detection (CSMA/CD), Ethernet works by simply checking the wire before sending data. Sometimes two stations send at precisely the same time, in which case a collision is detected and retransmission is attempted.

Firewall Firewalls block unwanted IP packets to and from protected hosts, while allowing specific information to pass through. Firewalls are designed to keep intruders out of sensitive information on a private local area network.

IDSL (ISDN Digital Subscriber Line) IDSL provides up to 144Kbps transfer rates in each direction and can be provisioned on any ISDN-capable phone line. Unlike ADSL and other DSL technologies, IDSL can be deployed regardless of the distance the user is from their Central Office.

ILEC (Incumbent Local Exchange Carrier) A new term that describes traditional local telephone companies (such as SBC) that, prior to deregulation of the telephone industry, had the exclusive right and responsibility to provide local telephone service. ILEC delineates these service providers from the new "Competitive" providers (CLECs) and "Enterprise" providers (ELECs). The term "local exchange carrier" (LEC) is used as the generic term for all three.

Kbps (Kilobits per second) A measure of bandwidth capacity or transmission speed. It represents a thousand bits per second.

LAN (Local Area Network) A data communications network covering a small area, usually within the confines of a building or floors within a building; a relatively high-speed computer communications network for in-building data transfer and applications. Common LAN protocols are Ethernet and Token Ring.

LEC (Local Exchange Carrier) A local telephone company (either a Bell Operating Company [BOC] or an independent [e.g., GTE]) that traditionally had the exclusive, franchised right and responsibility to provide local transmission and switching services. Prior to divestiture, the LECs were called telephone companies or telcos. With the advent of deregulation and competition, LECs are now known as ILECs (incumbent LECs). This terminology differentiates them from CLECs (competitive LECs) and ELECs (enterprise LECs).

Mbps (Megabits per second) A measure of bandwidth capacity or transmission speed. It stands for millions of bits per second.

Modem (MOdulator-DEModulator) Equipment that converts digital signals to analog signals and vice versa. Modems are used to send data signals (digital) over the telephone network, which is usually analog. The modem modulates the 1s and 0s into tones that can be carried by the phone network. At the other end, the demodulator part of the modem converts the tones back into digital 1s and 0s.

NIC (Network Interface Card) The circuit board or other form of computer hardware that serves as the interface between a computer (or other form of data terminal equipment) and the communications network; in ADSL, a common NIC is an Ethernet NIC, which serves as the interface to the ADSL modem from the computer.

NID (Network Interface Device) A device that terminates a copper pair from the serving Central Office to the user's destination. The NID is typically found installed on the exterior premises of the destination location.

PBX (Private Branch Exchange) A private telephone network used within business. Users of the PBX share a certain number of outside lines for making telephone calls external to the PBX.

RBOC (Regional Bell Operating Company) There are seven RBOCs, each of which owns two or more BOCs (Bell Operating Companies). The RBOCs were carved out of the old AT&T/Bell System as a result of the divestiture of the Bell operating companies from AT&T at the end of 1983.

SDSL (Symmetric Digital Subscriber Line) A modified HDSL software technology, SDSL provides up to 1.5Mbps in both directions over a single, twisted pair. However, the distance over which this can be achieved is less than 8,000 feet.

TCP/IP (Transmission Control Protocol/Internet Protocol) TCP/IP is a networking protocol that provides communication across interconnected networks, between computers with diverse hardware architectures, and various operating systems.

Twisted Pair A common form of copper cabling used for telephone lines and data communications. It consists of two copper lines twisted around each other; the twisting protects the communications from electromagnetic-frequency and radio-frequency interference.

CONTACTING EARTHLINK

Before Installation

For questions about your installation, contact EarthLink Business Access Customer Service at **1.888.698.4357** or send an email to **sdsl-service@earthlink.net**.

After Installation

- **Technical Support**

For information about service interruptions or connection performance issues, call **1.888.698.4357** or send an email to **sdsl-support@earthlink.net**. Technical Support is available 24 hours a day, 7 days a week.

- **Customer Service**

For general inquires including billing, cancellation, or change or address, call **1.888.698.4357** or send an email to **sdsl-service@earthlink.net**. Customer Service is available Monday to Friday 8 a.m.—8 p.m. ET.

- **Sales**

To order additional services, or to upgrade your service, call **1.888.758.2963** or send an email to **sdsl-sales@earthlink.net**. Sales is available Monday to Friday 8 a.m.—12 a.m. ET and Saturday and Sunday 9 a.m.—8 p.m. ET.

- **Domain Name Services:** Send an email to **sdsl-dns-request@earthlink.net**.

- **Additional IP Address Blocks:** Send an email to **sdsl-ip-request@earthlink.net**.

- **Suggestions and Comments:** **sdsl-service@earthlink.net**.