The OnQ
Home Wiring System

Owner's Manual
Congratulations on purchasing a home featuring the OnQ Home Wiring System!
Your home is equipped with an advanced structured wiring system that provides
the electronic foundation necessary to ensure that your family can be connected to
today’s services and prepared for new technologies.

**With the OnQ System, your home is Wired for Living!**

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The following are lists of parts and features for the OnQ Home Wiring System. In some cases, package features and descriptions may change without notice or obligation by OnQ Technologies, Inc. For further information on option availability, contact a qualified OnQ installer or visit our website at www.onqtech.com.

**OnQ Base Package**

- 1x6 Basic Telecom Module
- 1x4 Passive Video Module
- 12” Enclosure
- Single Telecom Outlet
- Single Video Outlet
- RG-6 Coaxial Video Cable
- Category 5 Telecom Cable

**Home Entertainment Package**

- 2x6 Enhanced Video Module
- Triple Video/Telecom/Data Outlet
- RG-6 Coaxial Video Cable
- Category 5 Telecom Cable

Note: Televisions, modulators and DSS box not included.
Home Office/Education Package

- Home Office Module
- AnyLine Adapter
- Telecom Surge Protection Module
- Home Office HideOut Outlet
- Category 5 Telecom Cable
- RG-6 Coaxial Video Cable

Note: Phones, fax machines, modems, and computers not included.

Home Network Package

- 5 Room Network Interface Module
- 5 Room Network Hub Module
- Single Data Outlet
- Category 5 Telecom Cable

Note: Computers, printers, digital service modems, and network cards not included.
The OnQ Home Wiring System provides the critical wiring infrastructure for whole house distribution of multiple telephone lines, high speed data, audio, cable and satellite TV, and VCR or DVD movies, all in a flexible, modular installation which can accommodate future changes and additions.

The OnQ System consists of three main components:

- OnQ Service Center
- OnQ Cables
- OnQ Outlets

Additional equipment from other manufacturers may be installed as part of the OnQ System. Contact a qualified OnQ installer for information about other manufacturer's equipment.

**OnQ Service Center**

The heart of the OnQ System is the Service Center. This is where services from outside the house, such as cable TV, telephone, Internet, and digital satellite, enter the home. This central hub distributes these services to locations throughout the house, similar to the electrical breaker panel, over high-speed, high-quality telephone, data, and video cabling, terminating in attractive wallplates.

**OnQ Cables**

To ensure reliable connections and maximum performance, only the highest quality cables are used with the OnQ System.

- OnQ Category 5 Telecommunications Cable
- OnQ RG-6 Quad Shielded Coaxial Video Cable

OnQ Category 5 Telecommunications cable is used to distribute telephone and data signals throughout the home for telephone, fax machines, modems, and computer networks. All OnQ cable meets EIA/TIA 570 standards. OnQ RG-6 Coaxial Video cable distributes cable television, digital satellite, and whole house video signals throughout the home. All Quad Shielded RG-6 Coaxial Cable has low RF leakage and meets the most stringent FCC requirements. All services are delivered via OnQ cables that are connected to outlets in each room throughout the home.

**OnQ Outlets**

The OnQ wall outlets are specially designed to ensure the highest quality system connections and performance. The wall outlets come in a large selection of combinations for telephone, data, TV, and audio. The outlets provide convenient connections for home theater, music and sound, home office, cable and satellite TV, and even in-home computer networks.
Features and Descriptions

The OnQ Home Wiring System provides an organized approach to low voltage communications wiring distribution. The OnQ Service Center enclosure sizes cover the complete range of home sizes and desired functionality. An array of snap-in modules support telephone, data, audio, and video services of all types.

In addition, OnQ Home Management System controllers are available to control security, lighting, energy, and other conveniences. The modular design of the OnQ System permits customization based on home size and application needs, such as home office (fax, modem, Internet), entertainment (video, audio), control of heating and cooling, programmable lighting, and more.

This figure shows the OnQ Service Center with the Base Package and optional upgrades for Home Entertainment, Home Office/Education Center, and Home Network.

Telephone Distribution Modules

The OnQ Telecom Modules distribute telephone service to the telephone outlets in each room of the home. All OnQ Telecom Modules distribute up to four incoming telephone lines to six or more telephone outlets.*

* Note: The number of phones that can be connected at one time is dependent on the Ringer Equivalency Number (REN). Each phone will have a REN, typically printed on the plate on the underside of the phone’s base. To determine your total REN for your house, simply add the REN numbers for each phone together. The total REN capacity of your house will vary by the type of phone service your telephone company provides. If you have exceeded the total REN capacity for your house, you may encounter problems with getting the phones to ring during an incoming telephone call. For additional information, contact your local telephone company.

1. LINE IN – Incoming telephone service from the telephone company’s Network Interface Device (NID), which is typically located on the side of your house, is terminated at this connection point. The telephone service is transmitted over a Category 5 cable through four individual twisted pairs of wires (one pair for each incoming phone line). Each incoming line is carried over color-coded cable pairs throughout the OnQ System: Line 1 pair (solid blue, white/blue stripe), Line 2 pair (orange, white/orange), Line 3 pair (green, white/green), and Line 4 pair (brown, white/brown).

2. LINE OUTPUT – Up to four lines of incoming telephone service are distributed via Category 5 cable to the telephone outlets in each room with these connections.

Note: With the Enhanced Telecom Modules, phone locations can easily be configured as data outlets with the proper OnQ Network Modules. For additional information, contact a qualified OnQ installer.

3. SURGE – An OnQ Telecom Surge Protection cube can be added to help protect your telephone equipment, fax machine, or modems from damaging voltage spikes that may be transmitted over the telephone lines. The surge connection also needs to be properly grounded by a qualified OnQ Installer.
4. **TEST SWITCH** – If a security system is not interfaced to the OnQ System, all four dip switch selectors should be in the fully "On" position. If a security system is interfaced to the OnQ System, dip switch selector 1 should be in the "Off" position. (This enables the security system to "seize" Line 1 to automatically dial-out to a security monitoring station or other location in the event of a break-in. In order to dial-out, the security system must first be properly programmed by a qualified security installer.)

5. **SECURITY/RJ31X** – The security system is connected to the OnQ Telecom Module through this jack. (This enables the security system to "seize" Line 1 to automatically dial-out to a security monitoring station or other location in the event of a break-in. In order to dial-out, the security system must first be properly programmed by a qualified security installer.)

6. **TEST/BRIDGE (LINE JACK)** – The Test/Bridge jack (also called Line Jack on 1x11 Telecom Modules) connects to the OnQ Telecom Expansion Module to provide additional telephone outlets throughout the home.

7. **WIDE AREA NETWORK – IN** – This connection supports a single Category 5 cable for high-speed digital data services from the telephone company such as DSL (Digital Subscriber Line) service or ISDN (Integrated Services Digital Network) service. Once both Category 5 cables are terminated at the Wide Area Network In and Out connection points, a jumper cable is plugged into the two modular jacks (In and Out) to deliver the signal between the two connection points.

8. **WIDE AREA NETWORK – OUT** – This connection supports a single Category 5 cable for high-speed digital data services to be delivered to a single wall outlet in the home.

9. **LINE 1 & 2 (KSU/PBX Telecom modules only)** – This connector interfaces to the Key Service Unit or PBX with a KSU Interface Cable Kit.

10. **LINE 3 & 4 (KSU/PBX Telecom modules only)** – This connector interfaces to the Key Service Unit or PBX with a KSU Interface Cable Kit.

11. **DATA** – This connection supports a single Category 5 cable for high-speed digital data services from the telephone company such as DSL (Digital Subscriber Line) service or ISDN (Integrated Services Digital Network) service.
The OnQ Video Modules distribute incoming cable television and digital satellite service signals to the video outlets in each room of the home. All OnQ Video Modules feature advanced two-way transmission capability, allowing for addressable set-top boxes and interactive TV services.

**Note:** The following Video Modules are available in four, six, or eight room configurations.

1. **IN** – Incoming cable television service from the cable company or antenna signal is terminated at this connection point. The incoming TV service is transmitted over an RG-6 coaxial cable.

   **Note:** The IN connection on the CEBus Video Modules supports the combined internal video signals from each modulated video signal input. An RG-6 cable connects the internal video signals (IN) to the video combiner connection (INTERNAL). Incoming cable television service is connected to the CABLE input. The combined cable TV and internal video signal is delivered to an OnQ video distribution module from the EXTERNAL connection.

   **Note:** The incoming digital satellite signal cannot be connected to the IN port for distribution throughout the home. All digital satellite cables must be connected to the digital satellite ports to function properly.

2. **AUX** – These connections accept modulated signals for combining into the home’s video network. A modulated signal originates from a video source such as a baby’s room camera or security camera (closed circuit television) or an audio/video component such as a VCR or DVD player (whole house video). Video modulators are available through a qualified OnQ installer.
3. **OUT** – The television signal is distributed from these connections via RG-6 coaxial cable to the TV outlets in each room throughout the home.

   Note: The OUT (3) connections on the CEBus Video Modules accept modulated signals for combining into the home video network. These signals are combined and transmitted from the IN (1) connection to the INTERNAL (9) connection.

4. **DIGITAL SATELLITE – IN FROM DISH (LNB)** – These connections support dual LNB antenna inputs from a satellite dish. Use one for a single LNB dish and both for a dual LNB dish.

5. **DIGITAL SATELLITE – OUT TO RECEIVER (REC)** – The satellite signal is distributed from these connections via RG-6 coaxial cable to the TV outlets in one or two locations within the home.

6. **POWER IN** – 12 volt DC power is supplied to the amplifier from the OnQ Power Supply which is plugged into a 120 volt AC outlet.

7. **IN** – (CEBus™ Video Modules only) - An RG-6 cable connects the internal video signals to the video combiner connection (INTERNAL).

8. **EXTERNAL** – The cable television service or antenna signal is combined with the modulated internal video signals and is sent to a video distribution module for delivery to video outlets throughout the home.

9. **INTERNAL** – This connection accepts the combined internal video signals from the IN (7) connection.
The OnQ Digital Satellite Modules distribute incoming digital satellite and cable television service signals to the video outlets in each room of the home. The digital satellite modules combine the incoming cable TV/antenna signal and the satellite signal to deliver it over a single cable to the video outlet in the room, where it is split at the TV/DBS receiver by a diplex filter.

The OnQ Digital Satellite Multiswitch provides the ability to watch satellite programs on up to four televisions independently.

The portability of the OnQ Diplex Filter Assembly allows the satellite and cable TV/antenna signals to be split very easily. By simply relocating the satellite receiver, the new room can now access satellite programming.

1. **ANTENNA** – Incoming cable television service or antenna signal is terminated at this connection point via an RG-6 coaxial cable.

2. **SATellite (LNB A/LNB B)** – Incoming digital satellite service is terminated at these connection points via an RG-6 coaxial cable.

3. **RCVR** – The combined satellite and antenna/cable TV signal is distributed to one television outlet within the home.

   Note: The Diplex Filter Assembly (IN) is connected to the TV outlet at the room where the service is delivered. The Diplex Filter Assembly splits the combined satellite and cable TV/antenna signal into two separate signals for connection to the satellite receiver.

4. **POWER** - 20 volt DC power is supplied to the module from the OnQ Power Supply, which is plugged into a 120 volt AC outlet.

5. **IN** - An RG-6 coaxial cable is connected from the wall outlet to this point.

6. **SATellite** (Diplex Filter Assembly) - This cable is terminated at the satellite connection on the satellite receiver.

7. **ANTENNA** (Diplex Filter Assembly) - This cable is terminated at the antenna connection on the satellite receiver.
The OnQ Network Modules provide connectivity for an in-home local area network (LAN). The OnQ Network Interface Modules and the OnQ Network Hub together form the heart of the OnQ Ethernet Local Area Network.

The OnQ Local Area Network provides a convenient way to interconnect personal computers, servers and printers within the home. The OnQ Local Area Network enables computers to be connected to a high-performance 10 or 100 Mbps Ethernet network, the standard for commercial networking.

Networked computers can also share access to high bandwidth digital data services such as Integrated Services Digital Network (ISDN), Digital Subscriber Line (DSL) or cable modem service.

1. NETWORK INTERFACE – This connection supports a single Category 5 cable for an in-home local area network or high-speed digital data services to be delivered to a wall outlet in the home.

2. NETWORK HUB – Each Category 5 cable is connected to the Network Hub via Category 5 jumper cables. Used in conjunction with the Network Interface, the Network Hub connects computers throughout your home network.

   Note: To fully implement an in-home computer network, each computer connected to your network will require networking software (refer to your computer’s operating system manual for configuring your computer for network use), as well as Ethernet network interface cards (10BaseT cards can be used with both the 5 Port Network Hub and 8 Port 10/100 Network Hub; you will need a 8 Port 10/100 Network Hub if you are using 100BaseT cards). For more information, contact a qualified OnQ installer or computer networking integration company.

3. POWER IN – 9 volt DC power is supplied to the amplifier from the OnQ Power Supply which is plugged into a 120 volt AC outlet.

4. POWER LED – Indicates that power is being supplied to the module.

5. COLLISIONS – This light may be lit when the network is in use, particularly for transmission of large files. This is nothing to be alarmed about – data packet collisions are normal for an Ethernet network. When a collision occurs, the packet is resent after a predetermined amount of time. Once the amount of traffic on the network decreases, the collisions will also decrease.

6. DATA – These lights indicate that data is being transferred over the network.

7. LINK – These lights indicate that the Network Hub and the individual computers can communicate with each other over the network.
The Home Office Module supports distribution of up to four incoming telephone lines for connections to a multi-line phone, fax machine, or computer modem. The Home Office Module also supports distribution of high-speed digital data services from the telephone company such as ISDN or DSL. Additionally, the Home Office Module supports distribution of high-speed cable modem service.

1. DATA – IN – This connection supports a single Category 5 cable for high-speed digital data services from the telephone company such as DSL (Digital Subscriber Line) service or ISDN (Integrated Services Digital Network) service.

2. DATA – OUT – This connection supports a single Category 5 cable for high-speed digital data services to be delivered to a single wall outlet in the home. Once both Category 5 cables are terminated at the DATA IN and OUT connection points, a jumper cable is plugged into the two modular jacks (IN and OUT) to deliver the signal between the two connection points.

3. PHONE – This connection accepts an incoming Category 5 cable from the telephone network interface and distributes up to four telephone lines to the Home Office Outlet for multi-line telephone, fax, or modem service. A jumper cable connects from the PHONE jack on the Home Office Module to the TEST/BRIDGE jack on the telephone distribution module for phone service to the home office.

4. CABLE IN – When cable modem service and cable TV are delivered over the same incoming coaxial cable, the incoming cable is terminated to this connection, which splits the signal between cable TV and data.

5. CABLE MODEM – This connection supports the delivery of high-speed cable modem service to the home office via an RG-6 coaxial cable.

Note: Cable modem service can either be used in a single user configuration with a dedicated connection to the home office, or in a multiple user configuration with the cable modem connected to the Network Hub module. In the single user configuration, the cable modem is connected directly to the computer in the home office. In the multiple user configuration, a Category 5 jumper cable is connected from the cable modem’s Ethernet output port to the OnQ Network Hub. For additional information, contact a qualified OnQ installer.

6. CABLE DIST – The cable TV signal output from this connection is delivered to the OnQ video module for distribution throughout the home.
The Audio Module provides stereo connections for up to three rooms. The Audio Module distributes left and right stereo output for up to three speaker pairs.

Note: The Audio Module requires the use of impedance matching volume controls, which can be purchased through a qualified OnQ installer.

1. SOURCE (LEFT/RIGHT) – The stereo output (left and right channels) is connected to these terminals via speaker cable.

2. OUTPUT (LEFT/RIGHT) – The speaker cable connections to each room are connected to these terminals.

Outlets are the user connection points throughout the home to the OnQ System. The outlets are connected to the OnQ Service Center by Category 5 cable, RG-6 Coaxial Video cable, or audio cable. High quality telephone, data, video (cable and satellite TV), and audio jacks provide connections for telephones, fax machines, modems, televisions, satellite receivers, speakers, and computers.

There are three styles of OnQ Outlets. The OnQ Wallplates feature stylish functionality and offer up to six jacks in one single gang sized plate. The Decorator series provides a contemporary appearance and matches Decora or decorator faceplates that may also be installed in the home. The OnQ Home Office HideOut Outlet hides and protects the jacks, allowing you to place furniture, such as desks and filing cabinets, close to the wall.

1. TELEPHONE – Up to four telephone lines are available at each telephone outlet with the OnQ System. If your home does not have a key or PBX telephone system, you can plug in standard one and two-line telephones, fax machines, or analog modems to this jack. If you have a key or PBX telephone system, contact a qualified OnQ installer for information about what kind of equipment can be plugged into each jack.

Note: The high-performance jacks installed with the OnQ System are called “RJ-45” jacks, which support four telephone lines. An RJ-45 jack is slightly wider than the traditional phone plug (called an RJ-11) that comes with most commonly sold telephones. Even though an RJ-11 plug will still work in an RJ-45 jack, you will only be able to access Line 1 and Line 2, because an RJ-11 only supports two telephone lines. To access Line 3 and Line 4, you will need to plug in an OnQ AnyLine Adapter. For more information, contact a qualified OnQ installer.
2. DATA – This connection supports high-speed digital data services from the telephone company such as DSL (Digital Subscriber Line) service or ISDN (Integrated Services Digital Network) service. Alternatively, it can support an in-home computer network connection. To determine what kind of connection is present in your home, contact a qualified OnQ installer.

Note: OnQ data jacks are "keyed", which means they have a small rectangular notch at the right side of the jack opening. OnQ telephone jacks are "unkeyed", which means they do not have a notch at the right side of the jack opening.

3. VIDEO – The incoming television signal (cable TV, antenna, digital satellite service, or internal video signals) is delivered to this connection via an RG-6 coaxial video cable. Alternatively, high-speed cable modem service may be delivered to this connection in the home office. For the proper connection to your equipment, contact a qualified OnQ installer.

If your OnQ System is installed with a digital satellite dish, a satellite decoder box (receiver) is required for each television where you want satellite reception.

Note: If your OnQ System is installed with internal video signals from a baby’s room camera, front door security camera, or whole-house video, turn on the television connected to a video outlet and view the channel assigned for the desired camera or video source. Typically, internal video signals are assigned unused channels on the television network. For more information about which channels are assigned, contact a qualified OnQ installer.

Note: Modulators receive input from the specific device (video camera, etc.) and put the signals back onto the network on a specific channel. Modulators and necessary cables are not supplied but are sold separately by your OnQ System installer. To order, call your OnQ installer.

4. AUDIO – The stereo output (left and right channels) from the in-room volume controls is connected to these binding posts via speaker cable. One speaker connects to each left/right pair of binding posts.

Note: Audio distribution requires the use of impedance matching volume controls, which can be purchased through a qualified OnQ installer.
The OnQ Applications Guide is designed to assist you in understanding how your new technology purchases will fit into your OnQ System. Depending on the complexity of the installation, you may desire to contact your OnQ installer for further assistance.

You’ve purchased the following equipment. Now what do you do?

**Digital Satellite System**

1. Install the satellite dish according to the directions provided with it.
2. Run the appropriate number of RG-6 coaxial video cables from the satellite dish to the OnQ Service Center. Single LNB satellite systems require one cable, while dual LNB systems require two cables. Satellite systems with additional options such as HDTV and high-speed data service may require additional cables. For assistance in running cable, contact a qualified OnQ installer.
3. Connect the incoming service cables to the appropriate OnQ video module within the Service Center. Refer to the sections entitled “Video Distribution Modules” or “Digital Satellite Distribution Modules” to determine which video module is installed with your system.
4. Determine which room you would like to locate the satellite receiver(s).
5. Locate the RG-6 video cable(s) which go to the appropriate room(s).
6. Connect the designated RG-6 cables to the OnQ video module.
7. In each room, connect the satellite receiver(s) to the OnQ video outlet via an RG-6 cable.
8. Connect the satellite receiver to the television with a RG-6 coaxial cable.
9. Turn on the TV.
10. Follow the instructions provided with your satellite dish and your TV to view programming.

**High-speed Data Services (Cable modem, DSL, or ISDN service) – Single User Configuration**

1. Connect the incoming data service cable to the appropriate OnQ module. For cable modem service, the incoming coaxial cable can be connected to the Home Office Module. For telephone company-based services (DSL or ISDN), the incoming Category 5 cable can be connected to any of the following modules that support high-speed data service.

   - Home Office Module (Cat 5 jumper required for DSL/ISDN)
   - 1x11 Basic Telecom Module (Cat 5 jumper required)
   - 1x11 KSU/PBX Telecom Module (Cat 5 jumper required)
   - 1x8 Enhanced Telecom Module
   - Network Interface Module (Cat 5 jumper required)

To determine the proper connection point for each of the above modules, refer to the respective sections within this manual entitled “Home Office Module”, “Telephone Distribution Modules”, or “Data Network Modules.”
2. Determine which room you would like to access the high-speed data service.

3. Locate the Category 5 (if you have DSL or ISDN service) or RG-6 cable (if you have cable modem service) that goes to the chosen room.

4. Connect the designated cable to the OnQ module.

5. If a Category 5 jumper is required, plug it into the DATA - IN and DATA - OUT jacks on the OnQ module.

6. In the room where you will use the high-speed data service, connect the cable modem to the OnQ outlet via an RG-6 cable. Connect the ISDN or DSL communications adaptor to the OnQ outlet via a Category 5 jumper.

7. Using a Category 5 jumper cable, connect the high-speed data equipment to the Ethernet network interface card in your computer. If you do not have an Ethernet network interface card, you can purchase one at a computer supply store.

8. Follow the instructions provided with your network equipment to configure the modem and your computer.

High-speed Data Services (Cable modem, DSL, or ISDN service) - Multiple User Configuration

Contact a qualified OnQ installer for information.
1. Q: What is the OnQ Home Wiring System?
   A: The OnQ Home Wiring System provides the critical wiring infrastructure for whole house distribution of multiple telephone lines, high speed data, audio, cable and satellite TV, and VCR or DVD movies, all in a flexible, modular installation which can accommodate future changes and additions.

2. Q: How does this benefit me?
   A: The Information Superhighway is no dream of the future. In many homes today, you will find a variety of information services including telephone, cable and satellite TV, home offices with a computer, fax, modem, and Internet access.
   Up until a few years ago, most new homes were being wired according to 1950’s standards. This meant that homeowners were unable to access the kinds of information services that they were using in their daily lives.
   That’s why today’s homes need an improved wiring method to handle all of the new electronic equipment and services, now and into the future.

3. Q: What is "star wiring" and why is it important?
   A: “Star wiring” means a dedicated cable is run from the OnQ Service Center to each outlet jack throughout the home.
   Star wiring is commonly called “home running” the wire.
   Prior to the advent of today’s structured wiring systems, cables were “daisy-chained”, or connected together in a series from outlet to outlet. If there was a connection problem at any outlet, the entire system was corrupted. In a star wired system, each connection is made (or terminated) independently, which greatly increases the system reliability.

4. Q: Can I add additional telephone lines to the system?
   A: The OnQ System can accommodate up to four telephone lines at each telephone jack without any costly rewiring.
   For additional lines, contact a qualified OnQ installer.

5. Q: How do I know what type of service is available at each outlet?
   A: Refer to the Outlet Features section of this Manual. If you have additional questions, contact your OnQ installer.

6. Q: Can I subscribe to any Internet service provider?
   A: Yes.

7. Q: Will the OnQ System allow me to access the Internet at faster speeds?
   A: The Category 5 cable used in the OnQ System allows for transmission up to 100 million bits per second. There are many factors which determine the computer’s actual “performance” on the Internet, including your modem’s speed capability, your telephone/cable company service, and the availability of the information that you are accessing on the Internet.

8. Q: What is whole house video distribution?
   A: Whole house video distribution allows you to send video signal from a variety of sources (such as VCRs, DVD players, baby’s room cameras, or front door security cameras) to all the televisions in the home.

9. Q: How long is my warranty?
   A: A one-year limited warranty is provided.

10. Q: What phone number do I call for service?
   A: Contact either the OnQ System installer or your builder’s customer service department.

11. Q: Is there any periodic maintenance required with the system?
   A: No, the OnQ System is designed to be maintenance-free.
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>10BaseT</td>
<td>An implementation of the IEEE 802.3 Ethernet standard on unshielded twisted-pair telephone wiring. It uses a star-wired configuration, runs at 10 million bits per second (Mbps), and has a maximum segment length of 100 meters.</td>
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<tr>
<td>100BaseT</td>
<td>A 100 Mbps version of 10BaseT.</td>
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<tr>
<td>ADSL</td>
<td>Asymmetric Digital Subscriber Line. A high-speed telephone line for Internet access. Called asymmetric because the transmit and receive speeds are different.</td>
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<tr>
<td>Bandwidth</td>
<td>The amount of data that can flow through a channel. The greater the bandwidth, the more data that can travel at one time.</td>
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<tr>
<td>Bps</td>
<td>Bits per second. The unit of measurement for data transmission speed over a data communications line.</td>
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<tr>
<td>Cable modem</td>
<td>A special type of modem used for high-speed Internet access service, which is delivered by the cable company.</td>
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<tr>
<td>Category 5 cable</td>
<td>Four twisted pairs of wires that transmit information in a computer network or telephone system.  Also called Cat 5.</td>
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<tr>
<td>CCTV</td>
<td>Closed Circuit Television. Video sources from within the home are retransmitted to all the televisions throughout the home.</td>
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<tr>
<td>Coaxial Cable</td>
<td>A type of cable in which the inner conductor is a solid wire surrounded by insulation, wrapped in a metal screen. Also called RG-6 cable.</td>
</tr>
<tr>
<td>Collision</td>
<td>The condition where two packets are transmitted sufficiently close in time that some portion of each intersects and interferes with the other. The signals “bump” into each other, disrupting both signals. If a collision occurs, the signals are automatically transmitted again.</td>
</tr>
<tr>
<td>Computer Network</td>
<td>A number of computers, printers, scanners, and other computer devices that communicate with one another through Category 5 cabling and a shared protocol such as Ethernet.</td>
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<tr>
<td>DBS</td>
<td>Direct Broadcast Satellite. A satellite network used to transmit TV signals received by satellite dishes.</td>
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<tr>
<td>Digital Satellite</td>
<td>A satellite network used to transmit TV signals received by satellite dishes.  Also called “DBS”.</td>
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<tr>
<td>Diplexer</td>
<td>A device used to split combined incoming video signals according to frequency. It enables more than one video signal to be sent to a TV by assigning a signal to a specific channel.</td>
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<tr>
<td>DSL</td>
<td>The generic term for the different types of Digital Subscriber Line service. A high-speed telephone line for Internet access. Available in some areas.</td>
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<tr>
<td>Ethernet</td>
<td>The local area network protocol used in most computer networks. Typically, most Ethernet networks support data transmission speeds of 10 Mbps or 100 Mbps.</td>
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<tr>
<td>Internet</td>
<td>A huge global network of networks based on a common suite of protocols.</td>
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<tr>
<td>ISDN</td>
<td>Integrated Services Digital Network. A high speed telephone line for transferring large amounts of data (up to 128,000 bits per second).</td>
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<tr>
<td>Kbps</td>
<td>Kilobits per second. The unit of measurement in thousands of bits per second for data transmission.</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Local Area Network</td>
<td>A group of computers, each equipped with the appropriate network interface card and software, connected by cable, that share applications, data, and peripherals. A LAN enables users to share files, printers, and other devices under a form of standard control.</td>
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<tr>
<td>LNB</td>
<td>Low Noise Block. A specific type of connection used in digital satellite systems.</td>
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<tr>
<td>Mbps</td>
<td>Millions of bits per second. A term used to describe data transmission speeds between two points on a computer network.</td>
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<tr>
<td>Modem</td>
<td>A device used to send data over analog telephone lines. It converts digital signals to analog signals at the sending end and converts analog signals to digital signals at the receiving end. Modem stands for Modulate/Demodulate, which is conversion process that takes place for transmission and receiving.</td>
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<tr>
<td>Modulator</td>
<td>A device used to assign video signals to specific channels on the in-home video network. Modulated signals are not transmitted outside the house.</td>
</tr>
<tr>
<td>Multiswitch</td>
<td>A specialized device that combines cable TV/antenna signals and digital satellite signals for delivery to greater than two room locations.</td>
</tr>
<tr>
<td>Off-hook</td>
<td>When a phone is in use, or off the hook.</td>
</tr>
<tr>
<td>On-hook</td>
<td>When a phone is not being used.</td>
</tr>
<tr>
<td>Outlet</td>
<td>A wall-mounted device for connection to various services such as telephone, data, video, or audio.</td>
</tr>
<tr>
<td>Packet</td>
<td>A collection of bits comprising data and control information, which is sent from one node to another.</td>
</tr>
<tr>
<td>Passive</td>
<td>A device which passes the incoming signal without amplification.</td>
</tr>
<tr>
<td>R.E.N.</td>
<td>Ringer Equivalency Number is the number of phones that can be connected at any one time and is usually found on the bottom plate of the phone. The R.E.N. varies according to the make and model of phone, as well as the phone service available.</td>
</tr>
<tr>
<td>RG-6</td>
<td>High-quality Quad shielded coaxial video cable used to transmit video signals throughout the home.</td>
</tr>
<tr>
<td>RJ-11</td>
<td>A modular connector used for four- or six-wire analog devices.</td>
</tr>
<tr>
<td>RJ-45</td>
<td>A Category 5 compliant modular jack that can hold up to four pairs of wires. It looks similar to an RJ-11 but is slightly larger.</td>
</tr>
<tr>
<td>Star wiring</td>
<td>A network topology in which nodes are connected in a hub and spoke configuration to a central device or location. Also called “home running” the wires.</td>
</tr>
<tr>
<td>Structured wiring</td>
<td>A planned cabling system which lays out the wiring for a home, including voice, video, and data.</td>
</tr>
<tr>
<td>Surge</td>
<td>An unusual increase in the current transmitted along an electrical line, which may happen during thunderstorms or other abnormal electrical events.</td>
</tr>
<tr>
<td>Twisted pair</td>
<td>A type of copper wiring in which two wires are twisted around each other, which reduces the amount of noise the cable is exposed to.</td>
</tr>
</tbody>
</table>