

# Differences Between ISDN and DSL

## Definitions

[Integrated Services Digital Network](#) (ISDN): ISDN is a digital transmission system, which is used to transmit voice and data through copper telephone wires. In other words, it's a circuit-switched data transmission system that is used for voice and data transmission over the wire.

[Digital Subscriber Line](#) (DSL): DSL is also a digital transmission system and utilizes already installed copper wires to send voice and data packets.

## Differences

As far as the differences between ISDN and DSL transmission system are concerned, there are several differences one can find:

### Speed

In terms of speed, DSL is faster than ISDN. DSL sends data packets with speeds ranging from 128Kbps to over 100 Mbps using latest DSL standards such as VDSLv2. On the other hand, ISDN comes in two different speeds i.e., 64Kbps and 128Kbps.

### Price

In terms of price, ISDN is somewhat more expensive than DSL. The main reason is that DSL utilizes wires that are already installed into homes or businesses, and there is no special line installation needed.

However, [ISDN lines](#) need to be installed and connection charges vary depending upon the connection you choose. In case of dedicated or, "always on" connections – you will have to pay more as some ISDN packages are charged on per minute basis. A special dial-up package, on the other hand, will cost less and might be an easy option where a [DSL connection](#) is still not available.



## Technology

ISDN is a dial-up service and transmits voice and data through a single line. There are two types of ISDN: Basic Rate Interface (BRI) and Primary Rate Interface (PRI). BRI is used mostly for residential homes and comes with three channels. On the other hand, Primary Rate Interface (PRI) ISDN is a business version and comes with 24 channels. In this case, 23 B channels are used to transmit voice, data and video – all through the same wire. A D channel carries low speed data and signaling. This signaling is used to generate alarm signals and provide support for non-voice functions. ISDN does not transmit data through analog lines.

DSL connections are often referred to as "always on" connections, so don't do not need to dial up a number. In DSL, there is only a single route for carrying voice, data and video. Two types of DSL connections are widely: [Symmetric DSL](#) (SDSL) and Asymmetric DSL (ADSL). These two types of DSL connections differ in their data carrying capacities i.e., upload and download. For more downloading, ADSL is a better choice.

ISDN and DSL are both distance sensitive. To get either service, your place should not be more than 18,000 feet away from the central office.

**Source:** <http://www.tech-faq.com/difference-between-isdn-and-dsl.html>