

01/10/2018

Subject: Kelleys Island Internet 101

Fun Memo From: Steve Merkel..... <https://www.merkwebmagic.com>

Hello.....

Everyone on the Island would love to have the most ***robust, reliable and fast*** internet service provider available. (Like what you are used to on the mainland !)

However, because we do live on an Island, our ISP (Internet Service Providers) options are very limited.

The purpose of this Memo is to provide Islanders with general information about Internet Service Providers.

The Memo consists of existing information that is available anywhere on the World Wide Web.

I, Steve Merkel, do not profess to being anywhere close to a technical expert....my intent is to help all interested Islanders understand our Internet situation.... as Clint Eastwood says, "A man has to understand his limitations."

So.....here we go!

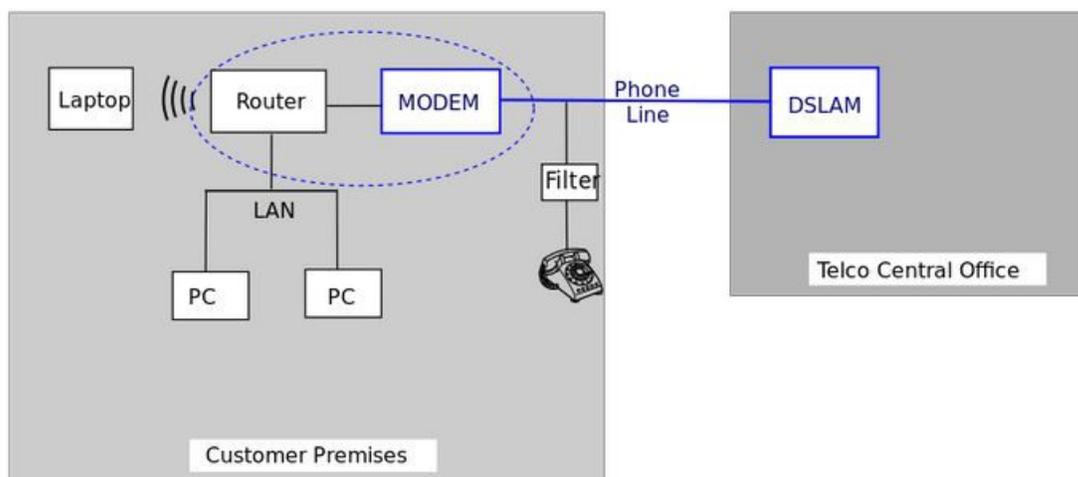
What are all of the options to receive internet services? (For your home PC/Laptop/Wireless Router)

The type of Internet service you choose will largely depend on which **Internet Service Providers** (ISPs) serve Kelleys Island, along with the types of service they offer. Here are some common types of Internet service:

- **Dial-up:** This is generally the slowest type of Internet connection, and you should probably avoid it. Dial-up Internet uses your **phone line**, so unless you have multiple phone lines you will not be able to use your landline and the Internet at the same time.
- **DSL:** DSL service uses a **broadband connection**, which makes it much faster than dial-up. DSL connects to the Internet **via a phone line** but does not require you to have a landline at home. And unlike dial-up, you'll be able to use the Internet and your phone line at the same time.
- **Cable:** Cable service connects to the Internet **via cable TV** and not currently available on Kelleys Island.
- **Satellite:** A satellite connection uses broadband but does not require cable or phone lines; it connects to the Internet **through satellites orbiting the Earth**. As a result, it can be used almost anywhere in the world, but the connection may be affected by weather patterns. Satellite connections can be slower than DSL or cable and expensive and subject to weather conditions that also affect Direct TV and Dish.
- **Wireless Internet:** (Line of Sight Service):

The most common ISP on the Island is Frontier. Frontier provides DSL service to a very large base of customers.

The following Illustration shows a typical DSL Installation:



The Telco Central Office for Frontier is located on Chappell Street. This Office/Building houses all equipment relating to your **Landline** and **Internet DSL service**. This equipment actually receives all signals via a dedicated underwater cable to the Mainland.

Note: Hancock Wood uses their own dedicated fiber optic cable from the Mainland to Kelleys Island. It can not be used as an IPS to Kelleys island.

Unfortunately, there are limitations to **Internet DSL Service**.

DSL Speed Differences Between Households

The rated maximum bandwidth of a DSL connection often cannot be reached. Additionally, actual DSL speeds vary between households. Factors affecting DSL speed include:

- Quality of the phone line at your residence. Neighborhoods with better copper wiring can achieve somewhat faster DSL speeds. (Kelleys Island is stuck with existing copper wire phone cabling)
- Length of the phone line between the residence and the phone company hub (often called "central office"). DSL technology is "distance sensitive" because its performance decreases significantly as you get further away from this hub.(Households beyond 11,000 ft from KI Hub will experience drop-off of service.)
- Service glitches. While normally a constant, DSL speed can suddenly drop if the service provider has technical difficulty with their network. Speeds should return to normal after a few minutes or hours.

DSL customers can do little about changing these factors. Other factors you can more directly control include:

- [Spyware](#) on the computer(s). Even when the DSL network may be functioning at full speed, spyware programs may be consuming the bandwidth, robbing your DSL speed. Anti-spyware programs should be run regularly on networks to prevent this problem.
- Misconfigured wires or wireless [router](#). Routers sit between your computers and the Internet connection. If not functioning properly, a router can greatly limit the DSL speed achievable on all computers. Temporarily connecting a computer directly to the Internet can help diagnose this situation.
- Slow wireless network connection. In extreme cases, a very slow [Wi-Fi](#) connection between a computer and a wireless home network will not keep pace with the speed of the DSL Internet connection. Improving the quality of the Wi-Fi connection will solve this problem.
- Old computers can not keep pace with changing technology.

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Another alternative is what is called “Direct Wireless Internet”

“Direct Wireless Internet” is an option for any Kelleys Island Resident that has a direct line of sight to Perry's Monument or to the Danbury water tower in Danbury Township.

The service is offered by a company called Amplex.

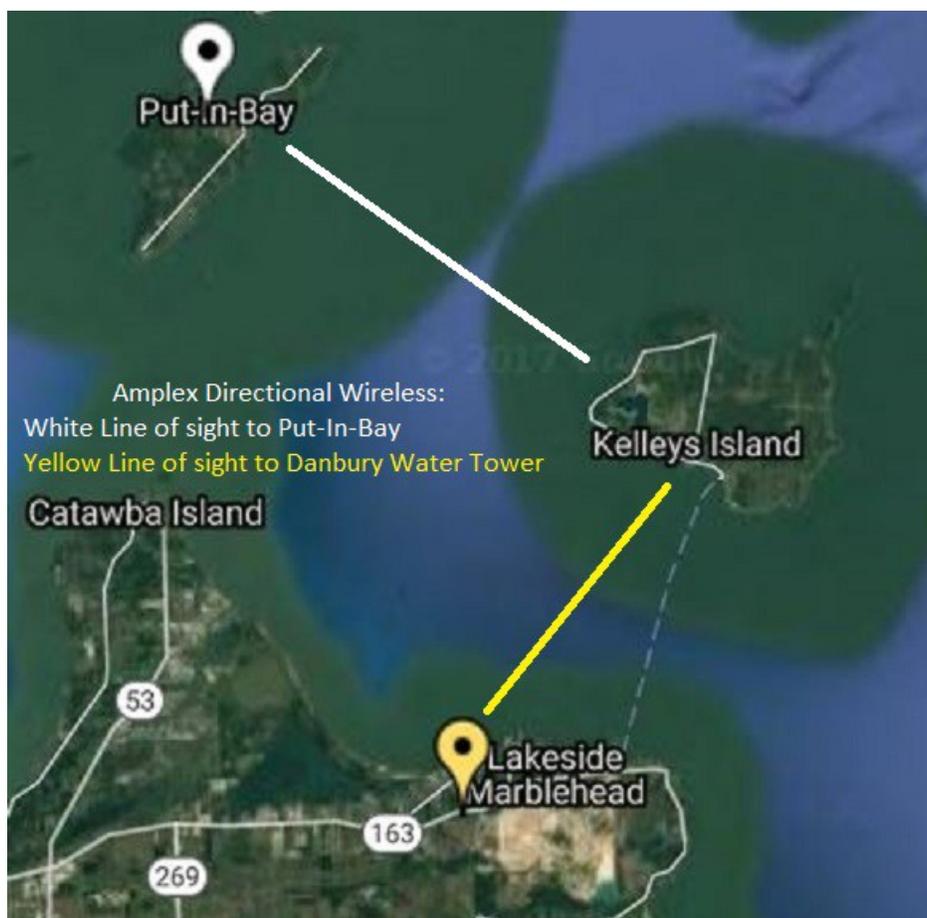
A Kelleys Island resident would subscribe to their service.

An Amplex Receiver is mounted at least 8 feet from the ground by a pole or attached to your house.

The receiver accepts the wireless signal from Put-In-Bay or Danbury and it is directed into your house.

Amplex Web Site is: <http://www.amplex.net>

I, Steve Merkel, is not affiliated, in any manner, with Amplex and offer this as informative info only!



The optimum solution for Kelleys Island would be to have Fiber Optic installed on the Island.

Unfortunately, this would be a major project and very cost prohibitive.

The following link is a brief explanation of Fiber Optic Installations: <https://broadbandnow.com/Fiber>

As you should be aware, eventually a Microwave Transmission Tower will be installed on Kelleys Island.

This Tower could conceivably have an Amplex Antenna/Receiver installed...HOWEVER...it would be line of site to any subscriber on the Island.

So..... unfortunately, a percentage of residents have to accept what is currently available....some win...some loose.

As always,technology is constantly changing and our Village Council is very aware of our Internet shortcomings.

Please feel free to reply with any comments or add-ons to this Memo.