

Wireless Interference

101 “Why is my network so slow??”

Here are some common concerns about wireless and slow speeds

- Have you ever called your Internet provider about your Internet being slow and your videos buffering all the time?
- While working with your provider to figure out what's going on with your slowness issues and the tech says “Our signals and equipment look good, it must be something else.” What else could it be?
- When you go test your speed you find out your getting less then what your paying for?

When there are a lot of wireless devices in any given physical area, the air around you will be noisy to every wireless device.

It is like a bunch of people having different conversations, in 1 room trying to talk over each other with mega-phones. If we keep adding people with mega-phones soon there will soon be a point where the noise is too high for us to comprehend any of the conversations.

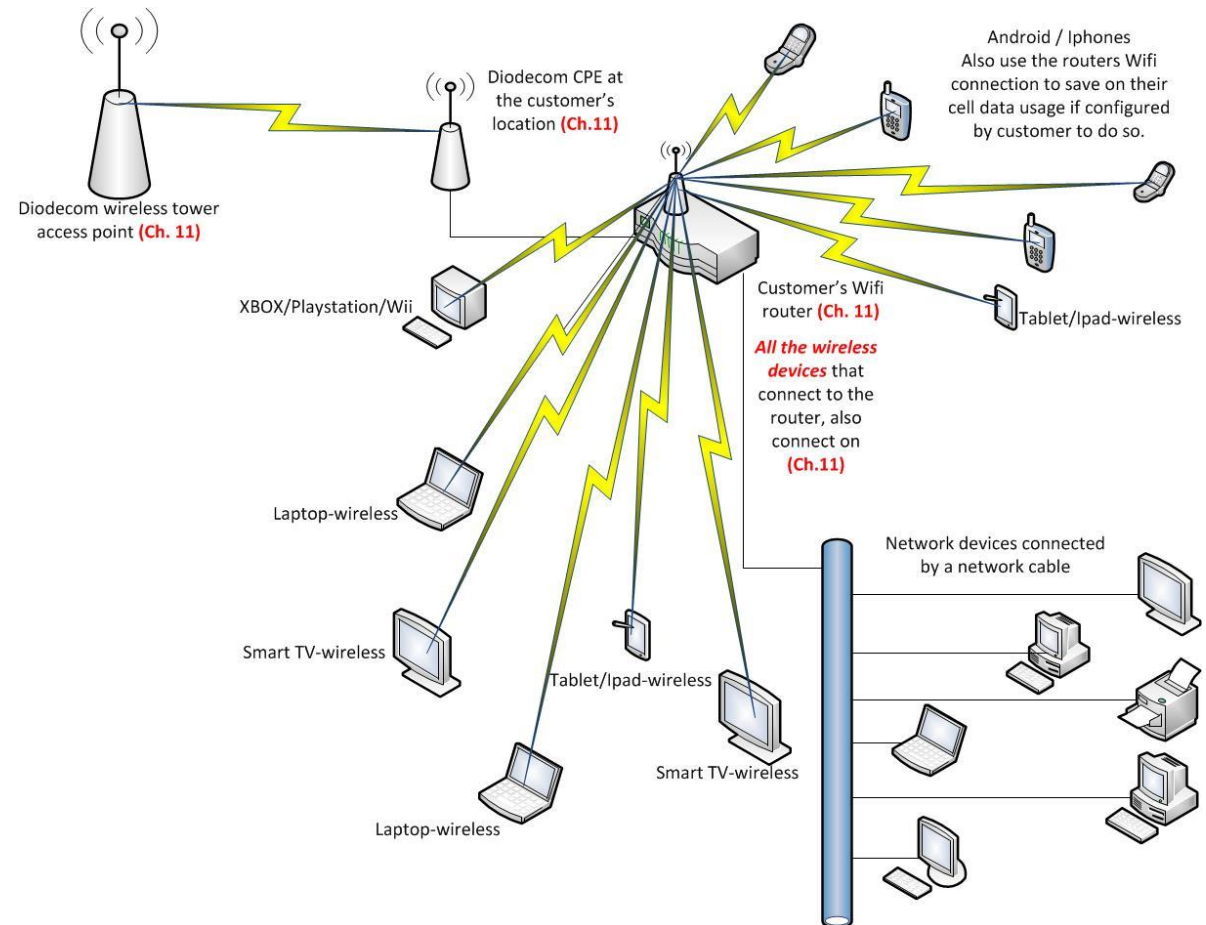
Site Survey

Scanned Frequencies:

2.412GHz 2.414GHz 2.419GHz 2.422GHz 2.424GHz 2.427GHz 2.429GHz 2.432GHz 2.434GHz 2.437GHz 2.439GHz 2.442GHz 2.444GHz 2.447GHz 2.449GHz 2.452GHz 2.454GHz 2.457GHz 2.459GHz 2.462GHz

MAC Address	SSID	Device Name	Radio Mode	Encryption	Signal / Noise, dBm	Frequency, GHz / Channel
BC:AE:C5	Grandma		802.11n	WPA2	-45 / -90	2.462 / 11
4C:17:EB	WIN_5BF1		802.11g	WPA	-90 / -96	2.462 / 11
F0:9F:C2		airMAX AC	802.11n	WPA2	-56 / -90	2.462 / 11
A8:4E:3F	HI	F180	802.11n	WPA	-77 / -90	2.462 / 11
48:F8:B3			802.11n	WPA	-83 / -90	2.462 / 11
6A:54:FD			802.11n	WPA2	-86 / -90	2.462 / 11
C0:56:27	belkin.894		802.11n	WPA2	-89 / -90	2.462 / 11
0E:62:A6			802.11n	WPA2	-88 / -90	2.462 / 11
E8:FC:AF	MyCharterWiFi		802.11n	WPA2	-92 / -96	2.462 / 11
F0:9F:C2		airMAX AC	802.11n	WPA2	-78 / -90	2.462 / 11
AE:20:2E		VM	802.11n	WPA	-88 / -96	2.437 / 6
7C:03:4C	WIN_M		802.11g	WPA	-88 / -96	2.437 / 6
00:22:6B			802.11g	WPA	-88 / -96	2.437 / 6
34:64:A6	DIRECT-3F-HP ENVY 5660 series		802.11n	WPA2	-74 / -87	2.437 / 6
E0:B7:0A	WIN_0126		802.11n	WPA2	-84 / -87	2.437 / 6
0C:47:3D	H	8800	802.11n	WPA	-85 / -87	2.437 / 6
C2:56:27	belkin.894.guests		802.11n	NONE	-90 / -90	2.462 / 11
4C:17:EB	d	wireless	802.11g	WPA	-71 / -96	2.412 / 1
F0:9F:C2		airMAX AC	802.11n	WPA2	-60 / -89	2.412 / 1
10:78:5B	WIN_901596		802.11n	WPA2	-74 / -89	2.412 / 1
00:17:9A		Legion	802.11g	WPA	-88 / -96	2.412 / 1
A0:8C:FD	DIRECT-EC-HP ENVY 4510 series		802.11n	WPA2	-82 / -89	2.412 / 1
6C:B0:CE	NETGEAR28		802.11n	WPA2	-84 / -89	2.412 / 1
00:23:69	I AM	YOU	802.11g	WPA2	-83 / -96	2.437 / 6
A8:47:4A	PS4-15		802.11n	WPA2	-89 / -96	2.437 / 6
AA:4E:3F	C	C8	802.11n	WPA	-93 / -96	2.437 / 6
AE:20:2E		AD38	802.11n	WPA	-93 / -96	2.462 / 11
AE:20:2E		NN WIFI 2	802.11n	WPA	-90 / -96	2.442 / 7

Selectable SSID's must be visible and have compatible channel bandwidth and security settings.

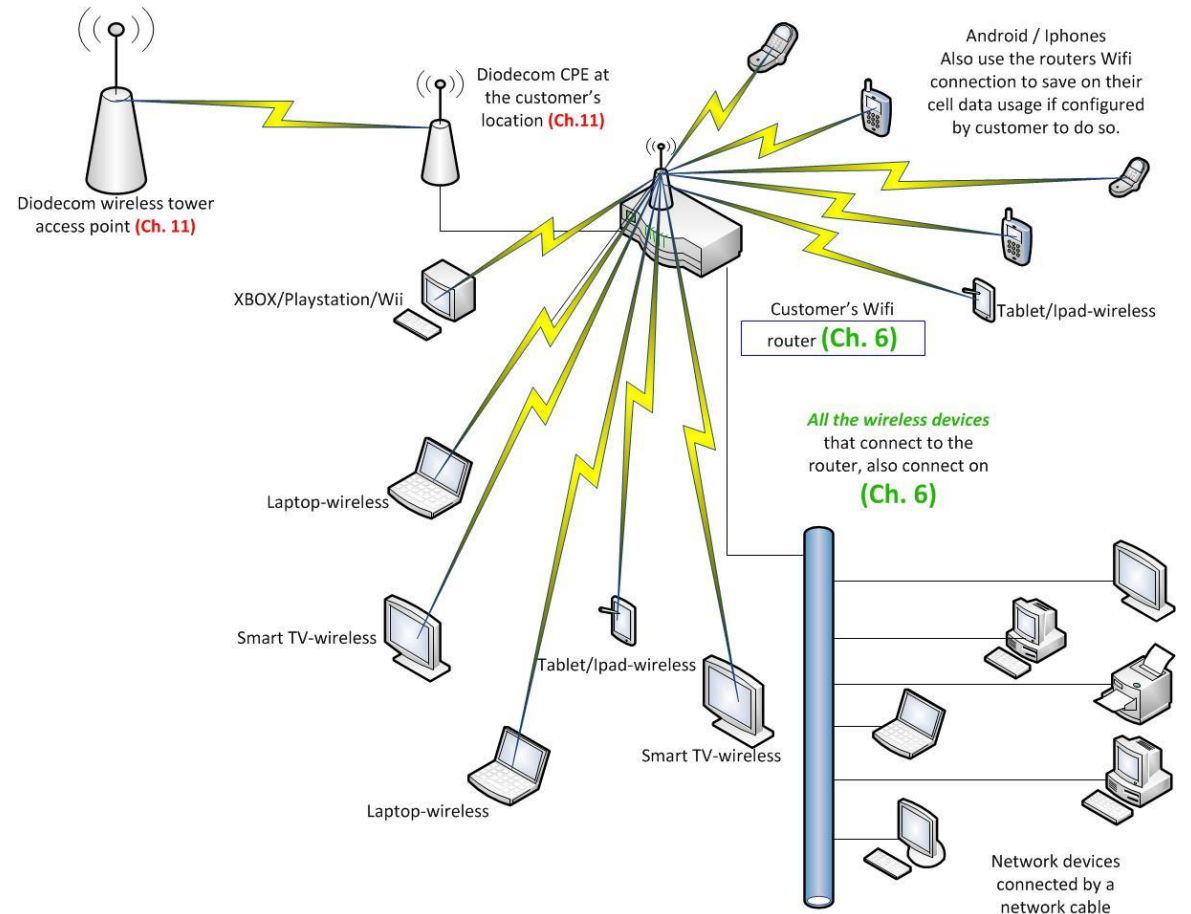


If you set the frequency to something different than the channel, that the Diodecom equipment uses (Example: Ch. 11) you will notice that your wireless devices, and network function better.

Some of the issues that this would address, are slowness, buffering with wireless video streaming (Roku, Amazon stick, smart TVs), not getting the speed you are paying for,....etc.

Although this may seem to be a magic bullet for your Wi-Fi troubles.....there are also outside interference factors to consider. Such as neighbor's Wifi, microwaves, baby monitor/video, long range Bluetooth,..etc.

Remember:
We can not control all of the radio environment around us but we can prevent "self-interference" with our own devices.



If you have any questions about your wireless devices and possible interference issues, call Diodecom 402-793-5125 and we would be happy to help you figure out possible sources of self interference.