OUR EXPERIENCES WITH "HOMEPLUG AV2" POWERLINE NETWORKING

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EXECUTIVE SUMMARY
Here is a description of the various "Homeplug AV" and "Homeplug AV2" kits that we have attempted to use in local networks.
TOPICS

• 2011: Trendnet "TPL-304E2K" (= "Homeplug AV 200")
• 2014: D-Link "DHP-601AV" (= "Homeplug AV2 600")
• 2015: Zyxel "Pla5405" (= "Homeplug AV2 1200")
• 2015: D-Link "DHP-701AV" (= "Homeplug AV2 2000")
TRENDNET TPL-304E2K (HOMEPLUG AV 200)

• We purchased and installed a Trendnet Powerline TPL-304E2K kit in April 2011:
200Mbps Powerline AV Adapter Kit with Bonus Outlet

- Includes two TPL-304E adapters
- High speed building-wide networking from any electrical outlet
- Never lose an electrical outlet with the built in socket
- Advanced noise filter boosts performance
- Power Save mode reduces energy consumption by 70%
TRENDNET TPL-304E2K (HOMEPLUG AV 200) (continued)

- Trendnet refers to this model as a "AV 200" device which implies that it has a nominal data transmission speed of 200 Megabits per second
However, the fine print in the Trendnet's "User's Guide" states that the Ethernet jack of the device can only pass data at a maximum of 100 Megabits per second. (All manufacturers of network equipment do exaggeration of this sort.)
We tested this pair of Trendnet "pair" in various homes in Arizona and it worked fine for extending the local networks there.
The broadband Internet download speeds at all of these homes was between 20 and 50 Megabits per second and this TrendNet "pair" did not impair Internet download speeds, as measured by http://speedtest.net
HANDS-ON EXPERIENCES WITH "HOMEPLUG AV2" (continued)

• In May 2013 which was two years after we installed this Trendnet "pair", it failed and we discarded it at an electronic recycling facility.

• (Our experience with "HomePlug AV2) devices is that they all fail are 2 to 3 years of use. After this length of time, they are obsolete anyway.)
D-LINK "DHP-601AV" (HOMEPLUG AV2 600)

• In February 2014, we purchased and installed a D-Link "DHP-601AV"

• D-Link refers to this device as a "Powerline AV2 600" device which implies that it has a data transmission speed of nominal data communications speed of 600 Megabits per second
PowerLine AV2 600 Gigabit Starter Kit

Speeds of up to 600Mbps - Ideal for HD Video streaming, large file transfers, and multiplayer gaming

Turn a power outlet in your home into a potential Internet connection

Plug and play installation for easy setup

DHP-601AV
We tested this pair of D-Link "pair" in various homes in Arizona and it worked fine for extending the local networks there for homes with broadband download speeds below 100 Megabits per second. For homes with higher Internet speeds, this D-Link "pair" was a bottleneck.
D-LINK "DHP-601AV" (HOMEPLUG AV2 600) (continued)

- In June 2015 which was 1 1/2 years after we installed it, this pair failed and we discarded it at an electronic recycling facility.

- (Our experience with "HomePlug AV2) devices is that they all fail are 2 to 3 years of use. Since this "pair" only lasted 1 1/2 years, we were a bit disappointed by it's lack of longevity.
In June 2015, we purchased a Zyxel "PLA5405" kit because it was recommended in the review at http://www.techhive.com/article/2870782/zyxel-pla5405kit-homeplug-adapter-review-mimo-delivers-the-goods.html:
ZYXEL "PLA5405" (HOMEPLUG AV2 1200) (continued)

• Zyxel refers to this model as a "AV2 1200" device which implies that it has a nominal data transmission speed of 1200 Megabits per second
ZyXEL

HD Powerline Adapter
Adaptateur Powerline HD 1200

Ultimate Performance Performances Ultimes

- MIMO HomePlug AV2
  Create a Super-Fast and Wide Range Network
  Créer un réseau de Gamme ultra-rapide et large

- Fastest
  Share HD Media Without Lag
  Partager multimédia HD sans décalage

- Compact, Wall-Mount Design
  Compact, fixation murale design

PLA5405
1200 Mbps Powerline
Gigabit Ethernet Adapter Starter Kit
Trousse de démarrage pour l'adaptateur
Prolongateur de portée à 1200 Mbps
ZYXEL "PLA5405"
(HOMEPLUG AV2 1200) (continued)

• This Zycel "kit" had significantly lower data transmission speeds (relative to the ones that we used to obtain with the D-LINK "DHP-601AV" "kit"), as measured by http://speedtest.net and Tutusoft's free "LAN Speed Test (Lite)".
ZYXEL "PLA5405" (HOMEPLUG AV2 1200) (continued)

• This Zycel "kit" also failed to make a "link" when we tested it between the floors of our home in California (whereas the former D-Link "DHP-601AV "kit" worked reliably between floors of this house).
• In early July 2015, we returned this Zycel "pair" to the seller for a refund.
D-LINK "DHP-701AV" (HOMEPLUG AV2 2000)

• In early July 2015, we purchased a D-Link "DHP-701AV" kit because it was recommended in the review at http://www.techhive.com/product/1433762/dhp-701av.html
D-LINK "DHP-701AV"
(HOMEPLUG AV2 2000) (continued)

- D-Link refers to this model as a "AV2 2000" device which implies that it has a nominal data transmission speed of 2000 Megabits per second
PowerLine AV2 2000
Gigabit Starter Kit
Create a PowerLine network with Gigabit speeds

Ideal for 4K Media Streaming

Plug-and-Play feature means creating a PowerLine network is simple and easy

Speeds up to 2000 Mbps¹ using HomePlug AV2 MIMO technology make it ideal for activities like 4K video streaming

MIMO Technology provides better coverage and more stable network

DHP-701AV
This D-Link "kit" had significantly higher data transmission speeds (relative to the ones that we used to obtain with the all other "kits" that we tested), as measured by http://speedtest.net and Tutusoft's free "LAN Speed Test (Lite)".
D-LINK "DHP-701AV" (HOMEPLUG AV2 2000) (continued)

- This kit also worked reliably when we tested it between the floors of our home in California