

What is Phantom Power?

- This is the electricity consumed by electrical devices when they are switched off but they are still connected to an electrical outlet.
- This is also referred to as standby power or vampire power.
- The average Canadian household contains approximately 25 or more devices constantly drawing power.
- This can account for up to 10% of the home's energy use and costs approximately \$150 a year in electricity.
- This electricity is used to provide functions such as remote control, clock displays, and timers
- In other cases, it is simply wasted power as a result of leaving an electronic device or power adapter plugged in.

Advantages

- Phantom power allows the device to be switched on quickly.
- Phantom power can power functions such as LED clock displays, timers, and remote control receivers.
- With phantom power, battery-powered devices can remain fully powered as well.

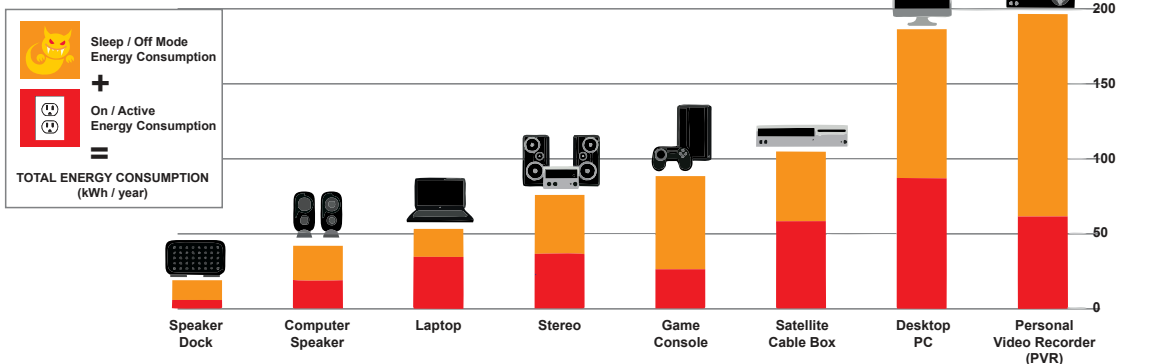
Disadvantages

- Homeowners waste electricity and therefore money.
- Since electricity is often generated by the combustion of hydrocarbons (oil, coal, gas); this, waste harms the environment and accelerates global warming.
- Devices that consume greater amounts of phantom power may overheat and become a fire risk.

Examples of Phantom Power

Greatest users of phantom power:

- Quick switch on devices
 - speaker systems
 - stereo systems
 - satellite cable boxes
 - laptops
 - computer monitors
 - video game consoles
 - televisions
 - PVR
 - DVD, etc.
- LED displays / timers
 - clocks
 - microwaves
 - toasters
 - coffee makers
 - stand mixers, etc.
- Remote control receivers
 - air conditioners
 - ceiling fans
 - televisions
 - video game consoles
 - bluetooth devices, etc.
- Other hidden users
 - phone chargers (even if they are not plugged in to your phone)
 - routers & modems
 - cordless phones
 - printers
 - electric toothbrushes
 - nightlights (especially those with sensors)
 - etc.



Source: www.energy.gov.on.ca/en/empowerme/phantom-power

You Can Prevent Phantom Power Consumption

Just Unplug

Individuals can directly prevent phantom power consumption by simply unplugging devices when not in use; however, there is technology that can make this process more convenient.

Use Smart Outlets

- Smart outlets are a great option to evade phantom power.
- These outlets can be turned on and off using an application on a smartphone to prevent phantom power energy use.
- They can be used in small areas and are especially effective in hard-to-reach places.
- Example, a homeowner could connect their television, speakers, DVD player, stereo, satellite cable, and gaming console to this outlet to save great amounts of energy.
- If the homeowner used these devices for 5 hours a day, on average the smart outlet would save approximately 286.2 kilowatt hours each year (numbers may vary depending on the model of the device).

Or Use Power Bars

- Power bars are another method to combat phantom power.
- There are three main types:
 - timer power bars
 - auto-shutoff power bars
 - motion sensor power bars.

| Power Bar Options | | |
|--|---------------------------------------|--|
| With Timer | With Auto Shut-off | With Motion Sensor |
| Automatically turns power bars on/off at set times | Shuts off power to devices plugged in | Automatically detects your presence to turn on/off |
| Useful for: | Useful for: | Useful for: |
| Charging stations, floor lamps | Computers, TVs, game consoles | Lights, home offices |

For More Information:

Standby Power - Energy Education

https://energyeducation.ca/encyclopedia/Standby_power

Standby Power - Natural Resources Canada

https://www.nrcan.gc.ca/sites/oeo.nrcan.gc.ca/files/files/pdf/residential/personal/Standby-Power_E_Jan2013.pdf

Phantom Power - Hydro One

<https://www.hydroone.com/saving-money-and-energy/residential/tips-and-tools/phantom-power>

What's phantom power and how can you track it? - Save On Energy

<https://saveonenergy.ca/en/For-Your-Home/Advice-and-Tips/Phantom-power>

What are energy vampires and what can I do about them? - Energy Star

<https://energystar.zendesk.com/hc/en-us/articles/212112277-What-are-energy-vampires-and-what-can-I-do-about-them->

Phantom Power - Eyedro

<https://eyedro.com/phantom-power/>

Canadian Standby Power Study of Consumer Electronics - ACEEE

https://www.aceee.org/files/proceedings/2008/data/papers/9_305.pdf

The Cost of Leaving Appliances On Standby -

Canstar Blue

<https://www.canstarblue.com.au/electricity/cost-leaving-appliances-standby/>

15 Home Appliances That Use Energy When Turned Off - Home Stars

<https://blog.homestars.com/common-phantom-energy-appliances/>

How much can you save by unplugging appliances? - How Stuff Works

<https://money.howstuffworks.com/personal-finance/budgeting/how-much-save-unplugging-appliances.htm>

Videos

Phantom Power - Save On Energy Bills by Unplugging Devices - AEPowerHouseTV

<https://youtu.be/VACJdcgUpmY>

Reduce Phantom Power To Increase Energy Efficiency - Monkey See

<https://www.youtube.com/watch?v=kZpjLg4knLQ>

