
PowerLink is a mains control unit which allows safe switch operation of a mains operated electrical device, providing additional experiences and facilitating inclusion. For example, a child can take part in a cookery session by using a switch to turn on and off a food mixer. By using 'real' equipment rather than just toys, and achieving real 'control', children feel that switch operation is more important

PowerLink is mains operated and has:

- one mains socket into which any 240v device or appliance can be plugged.
- a 3.5mm jack socket for a switch.¹
- various different control settings, depending on the user's needs.

Setting up the PowerLink

1. Plug the PowerLink into the mains & switch wall socket on
2. Plug a switch into PowerLink
3. Plug in any electrical appliance, device or toy into the PowerLink
4. Choose your PowerLink setting (see below)
5. Switch the device ON



The lower knob on the PowerLink provides four possible modes of control:

Direct mode: keeps the appliance on only while the switch is being activated.

Often preferred for first-time switch users, just learning cause and effect, so they can see the immediate and 1:1 correspondence between their switch action and the effect produced. Used with a motivating "reward" this may encourage the user to hold down the switch for gradually longer periods. But for users with severe physical difficulties the effect may be so short that the user fails to notice it, or this mode can be frustrating and too effortful.

Timed (seconds) mode: allows a single switch activation to make the appliance run for a set amount of time from 1 to 60 seconds. Use the knob below to set the number of seconds required. About 10 seconds is usually long enough to 'register' that the effect has occurred (but short enough to offer plenty practice in repeating the operation. This setting gives 'maximum reward for minimum physical effort and is useful for a device that has to run for a certain short length of time, such as a whisk or

¹ The PowerLink 3 also has an infra-red receiver for use with the AirLink wireless remote switch, if you have one of these – it's an optional extra.

mixer. This setting can be used to encourage a student to learn to press the switch again repeatedly to complete or prolong an activity.

Timed (minutes) mode: allows the appliance to set a longer running time, eg. from 1 to 60 minutes with a single activation.

This would only be used with someone who has 'got' cause and effect understanding and who is just using the PowerLink for control. This Mode might be used for one track on a story tape, or for a particular radio or TV programme. It could also be used when a longer running time is needed such as a bedside light at night.

Latch mode: one press of the switch turns the appliance on; the second press of the switch turns it off again.

Effective when you want an appliance, such as a lamp or radio to remain on for an extended length of time. Can be used as a simple environment control aid, e.g. for user to switch his/her own bedside radio on.

AirLink Wireless Switch version of PowerLink

This costs more and means you can operate the device/appliance without any wires between the user's switch and the PowerLink, which may give more flexibility and convenience for a particular user. However CALL often advises schools against this version because staff may not realise that the AirLink switch needs batteries inside it. We have seen so often a scenario in which the PowerLink is not used and is said to be 'broken' when actually all that is wrong is that the AirLink switch is positioned too far away from the appliance, or because the switch needs a new battery in it!



Health and Safety

Especially with appliances that get hot or have moving parts/blades such as a light bulb, coffee grinder, popcorn maker or mixer etc., make sure you -

- Do not place appliance too close to the user
- Unplug the appliance from the PowerLink before opening the lid e.g. of blender
- Unplug the appliance from the PowerLink when not in use.

Trouble Shooting

The PowerLink is pretty straightforward and little can go wrong. Most commonly²:

- You've plugged it in or set it up wrong
- The device you're trying to operate is not working / not switched ON
- The switch you're using is not working

Actions you can take:

Unplug everything and start again carefully checking each step.

- Is PowerLink plugged into mains and mains socket switched ON?

² If using a wireless Air Link Switch, check and replace batteries if necessary.

- Is device you want to operate plugged into PowerLink?
- Is device you want to operate switched ON? If it has a pressure sensitive 'trigger' switch, make sure it's taped firmly down into the ON position

If still not working –

- Check if red light on the PowerLink is coming on when you plug it in, if not it may be 'dead'
- Check the device you want to operate is working by plugging it directly into the wall and switching on.
- Check your switch is working by connecting it into another device that you know works.
- Check the PowerLink by connecting it up with a switch and appliance that you know work.

What will a PowerLink operate?

Basically – though with some exceptions – any mains appliance that has a simple on/off switch and no other switches or settings. (On some appliances that have a button that you hold down to activate the device, you may be able to use firm masking tape to tape it into a permanently ON position.)

Everyday Devices

- *Lamp*
- Fan (e.g. rotating table fan or free standing), fan heater
- Cassette tape recorder
- Radio.
- Old style TV (non-digital)
- Paper shredder
- Electric pencil sharpener, stapler
- Disco lights, Christmas lights

*Sadly, some of the more modern appliances and the latest digital appliances are problematical as they have not just an ON/OFF switch but also some fancy electronics in between the mains plug and the operation of the device itself. Sadly, many of these cannot be operated by the PowerLink (e.g. CD or DVD player, microwave oven).

Sensory Experiences

- Any/ all mains operated devices in a Multisensory or White/Black Room, such as bubble tube, fibre-optics, projector etc.
- Massager

Home Economics (some with help or with a partner)

Mixer / food processor	Blender / smoothie maker
Coffee Grinder	Popcorn maker
Electric can opener	



Electric scissors, electric carving knife
Washing machine Tumble drier
Electric or Halogen cooker*
Sewing machine

For some appliances, it may depend on the model you have. For example, some toasters will work with a bit of fiddling around, taping bits down etc. but other models may not – you'll just have to experiment.

Electric kettles are allegedly OK with the new PowerLink, but I once blew the fuse in the plug of an older PowerLink, so I now tell people to avoid kettles, as these can have a very high power surge.

Drama

For dramatic effect in performances: operate bubbles, fog/smoke, spotlight, music

Science / Technical

Lamp Motor
Drill (must be locked on to a stand/holder) or other power tools

Multiple Devices

If you use an adapter or a four way power extension lead block (ideally with surge protection), you can plug in and operate more than one device / appliance. Try not to use several of the highest-powered devices all at once.

Useful Websites

<http://www.northcottcats.com.au/tutorials/index.html> (scroll down to 'Switch Skills' section / How to use a PowerLink 2)

'Ideas on how to use a PowerLink at home and school' (.PDF download)
Google 'northcott ideas powerlink')

<http://www.gedonline.co.uk/catalog/manuals/PowerLink-Man.pdf> **(instruction manual)**

<http://www.spectronicsinoz.com/product/22190/popup>

http://store.ablenetinc.com/videos/how_to/powerlink_howto.mov (video)

<http://www.pisp.ca/strategies/strategies94.pdf>

<http://www.pisp.ca/video/index.htm> (video)

PowerLink Suppliers³

www.gedonline.co.uk (adaptors & interfaces)

www.inclusion.co.uk (products, switch access devices and accessories)

³ You may see pictures online of the PowerLink 3, with 2 sockets on it. This version is not sold in the UK so far, as far as we know.