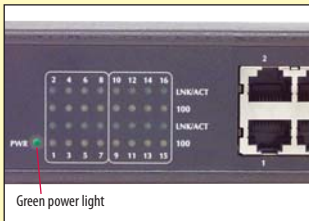




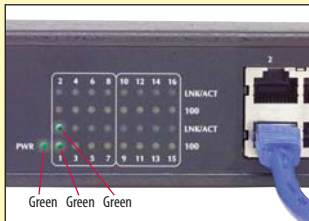
How auto-negotiation works

IEEE 802.3 NWay Auto-negotiation is a data communications protocol used with Ethernet switches, routers and media converters. The NWay protocol was developed so that Ethernet devices, which support multiple transmission speeds such as a 10/100, can operate more efficiently. This protocol automatically selects the highest possible common transmission speed between two Ethernet switches, routers or media converters and automatically sets that speed on the port. Some benefits of using NWay Auto negotiation (also referred to as auto-sensing or auto-negotiation) include:

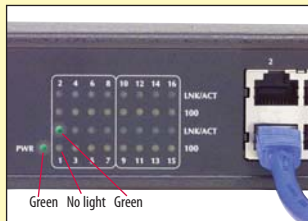
- Network connections that automatically choose the highest performance levels without the need for costly and time consuming manual port configurations.
- Guaranteed network uptime and resiliency. If the NWay protocol detects that a device that is being attached is not of the same technology (i.e.Token Ring to Ethernet connection) the port will not allow a connection or data transfer saving the network from potentially catastrophic downtime.
- NWay Auto negotiation is backward compatible with 10Mbps only Ethernet devices.



Prior to connecting a network device, the link, activity and speed LEDs are not lighted (inactive).



Upon connecting a network device via UTP cabling to port 1 of the switch, NWay Auto-Negotiation automatically detects that the connected device is operating at 100Mbps and sets the local switch port to that speed. The green 100 LED indicates this.



When a network device is connected that is running at 10Mbps, the 100 LED indicator will not light up indicating NWay Auto Negotiation has set the local switch port to 10Mbps.