

Application Note 7

Powered Hubs

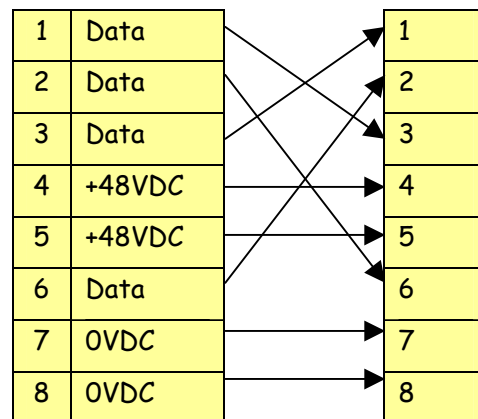
Powered Hub is the generic term used to describe Ethernet Hubs that can supply power over the CAT5 cable.

Artistic Licence products such as Down-Lynx, Up-Lynx and Net-Lynx can use powered Ethernet to avoid connection of an external power supply.

The standard for Powered Ethernet has recently been released: The standard is called IEEE802.3af.

The power is nominally 48V DC and is supplied either over the spare two pairs of wire or as phantom power over the data pairs. The Powered Hub detects which method should be used by 'probing' the wires with a low voltage signal to test for the correct resistance.

Artistic Licence products do not support the phantom power variant. The RJ45 connector wiring is as follows:



The following is a list of currently available powered hubs.

Manufacturer	Product Code	Description
Artistic Licence	Power Hub 4	4 port with 3 powered, hub.
PowerDSine	4001	1 port powered hub.
PowerDSine	4006	6 port powered hub.
PowerDSine	4012	12 port powered hub.
PowerDSine	4024	24 port powered hub.
Cisco	Catalyst Inline PSU	48 port powered inserter, requires external hub or switch.

The Artistic Licence products [Insta-Lynx](#) and [Tour-Lynx](#) can be used instead of a powered hub.

Wayne Howell

Artistic Licence (UK) Ltd

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