This note provides general information for connecting multiple EtherRain controllers directly to a home router.

Most home routers provide both wireless access as well as ports for attaching standard Ethernet cables (called CAT5 patch cables). Most home routers provide up to four ports for directly attaching computers and other devices via an Ethernet cable.

If your home router doesn't have four ports, or if they are all in use, you can extend the number of available ports by attaching an Ethernet switch to the router. Ethernet switches are available in 4, 8, and 16 port versions and are low in cost.

Once you have a port available for each EtherRain controller in your installation, all you have to do is connect them together with a patch cable.

For powering the EtherRain controllers, a Connection Kit is available that lets you share one transformer between multiple EtherRain controllers. This kit also allows you to share a single rain sensor.

The diagrams below illustrate typical wired connections between a home router and multiple EtherRain controllers.

**Diagram 1. Direct Connection**

**Diagram 2. Port extension with a Switch**

**EtherRain Power Sharing**

Connection kits are available to allow two or three EtherRain controllers to share a single power transformer as well as a single rain sensor.