

Technical Bulletin

All products in the Hog 4 family (Hog 4, Full Boar 4, Road Hog 4, and DP8000) use 1000BASE-T Gigabit Ethernet connections for HogNet interconnectivity. This provides for a maximum transmission rate of 1000 megabits per second between all Hog 4 family devices provided that all other components used in the HogNet network are also 1000BASE-T.

In **perfect** conditions 1000BASE-T networks are specified to function at cable segments lengths up to 100 meters (328 feet). However, **perfect conditions are rarely met in the real world**. Various factors such as poor cable quality, poor crimping, the use of Ethercon connectors, and external interference from power cables and other electronic equipment can all contribute to the impairment of a network's reliability over long cable lengths. Furthermore, high speed Gigabit Ethernet is also more susceptible to packet loss then lower speed Ethernet.

Therefore, High End Systems recommends that the most reliable way to establish stable Hog console operation and interconnectivity in a network environment is to ensure that all Ethernet cable segments in the HogNet network are under 75 meters (246 feet) in length.

If there is a need in your setup to extend the length of any HogNet Ethernet cable segment beyond 75 meters then High End Systems recommends the use of an active network switch or Ethernet extender.

Please note that at any cable length issues can still occur if the quality of the cable is poor, or if the assembly of the cable connectors is bad, or if the network switches/repeaters used in the system are underpowered or overworked. There is no substitute for good quality network cable and components.

