



Pro-Note No: 2012-01

Date: 29 Jan 2012

Title: R2Sonic SIM-to-PC Ethernet Connection

Executive Summary:

Do not use a HUB - Treat your Ethernet connection like a serial connection

Observations:

Issue: Inconsistent Data Delivery / Severe Data Latency

Latest generation sonars like R2Sonic multibeam echosounders must send their data via Ethernet connection rather than serial connection due to the high data rate.

Many users are making the (reasonable) assumption that the SIM-to-PC Ethernet connection can be treated like any other standard Ethernet connection i.e. run it through a network switch or a hub rather than directly to the PC. Doing this will result in erratic performance of data delivery from the SIM to the PC depending on the volume of Ethernet traffic going through the hub or switch.

Solution:

Treat your SIM-PC Ethernet connection as if it were a serial connection i.e. go straight from the SIM to the PC with nothing in-between.