

ethernet over a single pair of wires?

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2008-02/msg00572.html>

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 - *Date:* Mon, 4 Feb 2008 21:54:31 -0600
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I'm looking at an application where there is only one available pair of wires through an interface. The wires are in a CAT-5 bundle but only 1 of the twisted pair is available. The length is only about 200 ft.

The desired connection is ethernet with a laptop on one end and a piece of ethernet industrial equipment (commanding and data monitoring) on the other. Since it is only a single pair that would ofcourse mandate half duplex operation. 10Mbits would be plenty fast.

Wifi is not possible for this application.

My question is can a standard laptop with a RJ-45 type ethernet connector be setup to use only a single pair of wires in half duplex mode? Google turned up nothing for me.

Anyone done this before?