cleverscope

plug & play instruments
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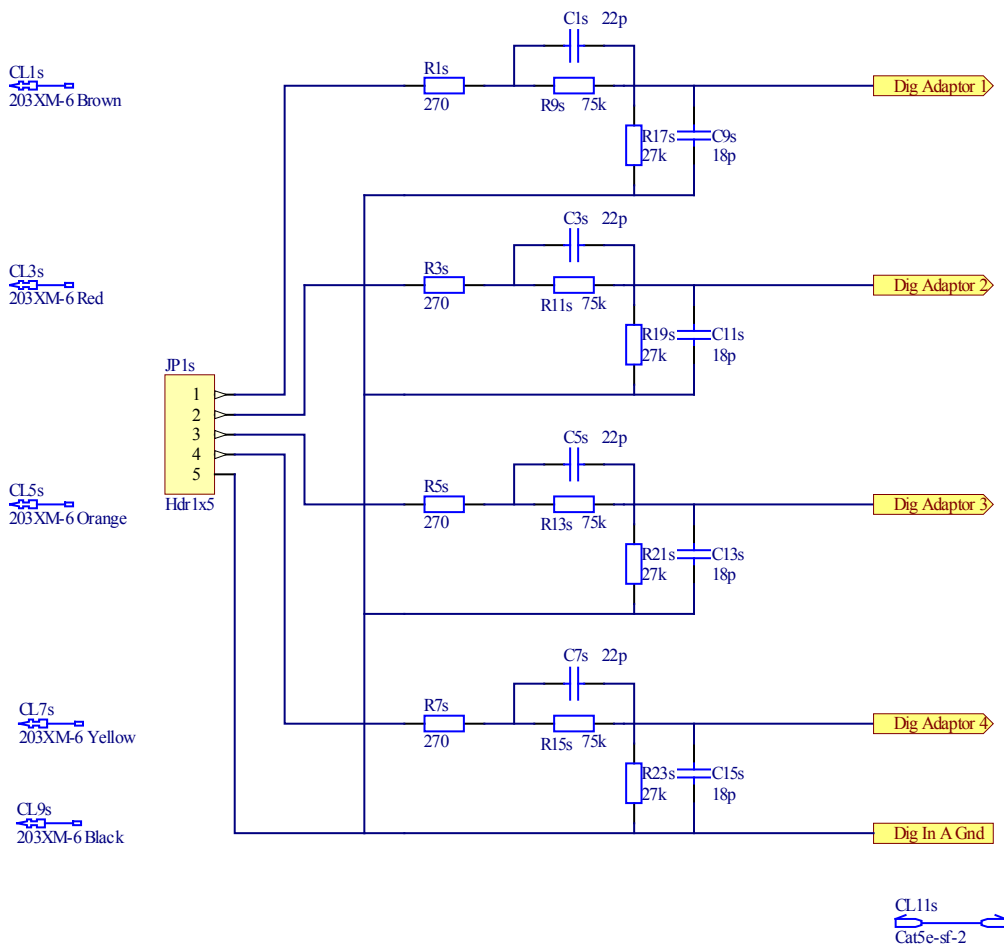P.O. Box 26-527
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20 Feb 2006

Digital Input Module

The Digital Input Module provides attenuation and impedance matching between the digital input probes and the CS328 digital input socket.
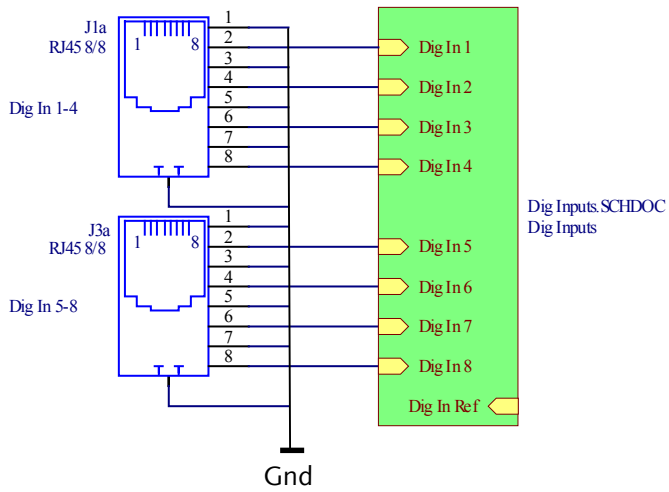
The Pod schematic is

Minimum input swing is 400 mV

Signal range is -16V to +20V

Threshold range is 0-5V in 20 mV steps

Hysteresis is 280 mV

Signals flow from left to right, entering at the header (Hdr1x5) which connects to the individual probes, and exiting via the Dig Adaptor 1-4 signals to the CS328 acquisition unit. If you replace the pod with your own solution, the capacitive divider C1s – C9s needs to take into account the capacitance of the connecting cable

and CS328 input capacitance (around 5pF). It may be best to experiment with the divider so that the digital threshold on rapidly changing signals matches that selected on the Acquisition Settings dialog. The two pods are identical.

The CS328 input sockets are configured as below:

The sockets are standard RJ45 8/8 sockets.