



N2ADR Station Control

The AT200PC is an antenna tuner made by LDG, and is connected to the PC by a USB to serial adapter. The switched high pass and low pass filters consist of a bank of LC filters selected by relays. The relays are operated by a microcontroller and an I2C bus connected to the PC through an Ethernet gateway. Both filters have transmit-receive (T/R) relays so they can provide a bandpass response in both Tx and Rx paths. The Rx path provides a switched low-noise amplifier and two switched attenuators. The Tx path has two amplifiers and a 40 MHz VHF filter. The microcontroller sequencer provides two 5 volt T/R switching signals. On key down, the filters are switched before the exciter is turned on, and the reverse on key up. The exciter also sends the key up/down status to the PC using UDP over Ethernet. These station control elements are designed to be independent of the exciter, and have been used with two excitors so far. February 2010.