



How it works:

A remote control computer has a USB MIDI stick and sends midi data on midi channel 1 as noteOn:

Note 1 Velocity 1
 Note 2 Velocity 1
 Note 3 Velocity 1
 etc ...

On remote control computer a dedicated software is DIAcontrol. It is based on html, javascript and php. So: the computer must have XAMPP server installed (or at least Apache and PHP). On dedicated computer it is best to have Apache server as service.

Folder diacontrol must be put in htdocs folder. Chrome browser has MIDI enabled by default – other browsers need Jazz-Plugin installed and Web Midi API extension.

In this way any computer operating system can be used.

This device (DIAcontrol) receives midi data via a cable on one of three types of inputs. The opto-coupler transfers the data to microcontroller (Arduino UNO). Microcontroller decodes the Note received – and triggers a pulse of 250ms on one of six relevant outputs.

These outputs are doubled: one output is control LED on DISPLAY board, second output creates a shorting contact on ISOLATING TRIGGER SWITCHES board.

Relays are used because they are isolating and the speed that is needed is relatively low. It is still fast enough so that trigger on all outputs happens momentarily.

Diaprojectors:

- they are old machines with simple advancing.
- about 40 VDC / 0.3A triggers solenoid action.
- relays are 5-6VDC / 1A – contacts in parallel

It should be the most robust solution for a variety of old diaprojectors.

DIAcontrol midi receiver / pulse trigger receives remote midi on channel 1 as NoteOn 1-6, velocity 1 makes 250ms long pulses to turn on briefly the corresponding six isolating switches -> relays.

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