

# „Electro“ the binary logics simulator

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## Introduction

The program should become a simulator for electronics. I think it will incorporate some more schematics than just plain gates. [THIS SECTION WILL BE CONSTANTLY UPDATING]

## Keyboard / mouse bindings

- Mouse Wheel
  - Resizes N-to-1 elements' input count. Minimum is 2 or the last number of input connected. Maximum is 16.
- Right Mouse Button
  - When on an empty area, creates a new default (OR) element.
  - When on a block, negates it quickly (if schematic allows)
- Left Mouse Button
  - When clicked on a block, selects it.
    - Can also drag block around when held down
  - When clicked close to an output, creates a new connection.
- Delete Key
  - Deletes the selected block with all its connections
- Numpad “+” or “+” Key
  - Increases the visual size of a block
- Numpad “-” or “-” Key
  - Decreases the visual size of a block
- Tab
  - Selects the next block
- Shift + Tab
  - Selects the previous block
- Arrow Keys
  - When a block is selected, moves it by 4 pixel increments
- [THIS SECTION WILL BE CONSTANTLY UPDATING]

## Tips & Tricks

1. [THIS SECTION WILL BE CONSTANTLY UPDATING]

## Bugs & Features

\*B: Do not let repetitive connections to be made

\*B: [THIS SECTION WILL BE CONSTANTLY UPDATING]

\*F: there should be a possibility to code in ASM

\*F: there should be a possibility to code in VHDL/Verilog

\*F: there should be a possibility to convert between ASM<>VHDL/Verilog<>schematics

\*F: **change data structures, these are really bad**

\*F: **sort when adding new connections**

\*F: make input signals controllable and visual

\*F: make it scroll behind borders

\*F: make the signal path visual and clear

\*F: **make wires also deletable**

\*F: **make it support some format to import/export logic**

\*F: there should be a possibility to make macro-objects

\*F: [THIS SECTION WILL BE CONSTANTLY UPDATING]

```
; mov [brush.lbStyle],BS_HOLLOW  
; invoke Brush,brush  
; invoke SelectObject,[hdc],eax
```