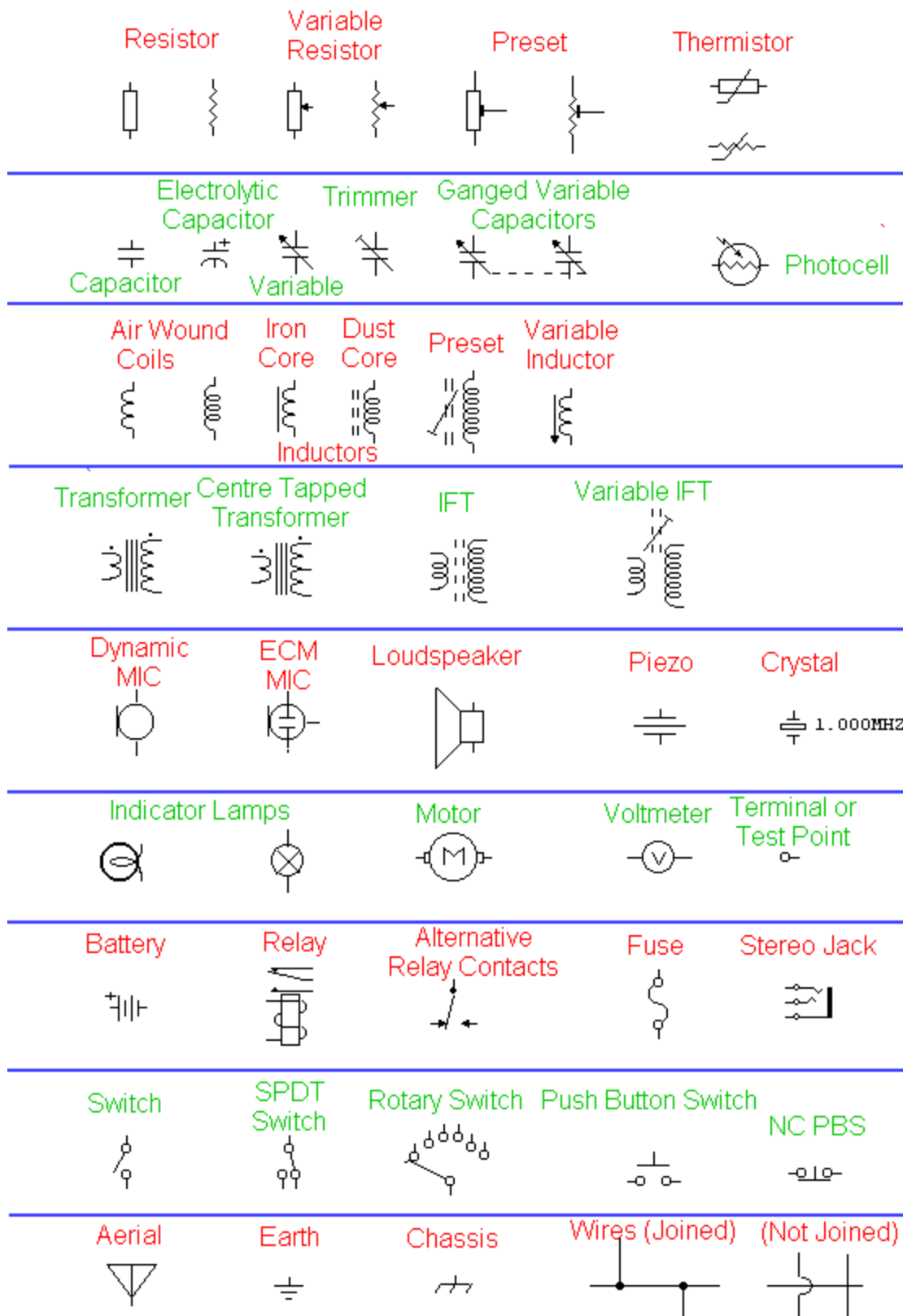


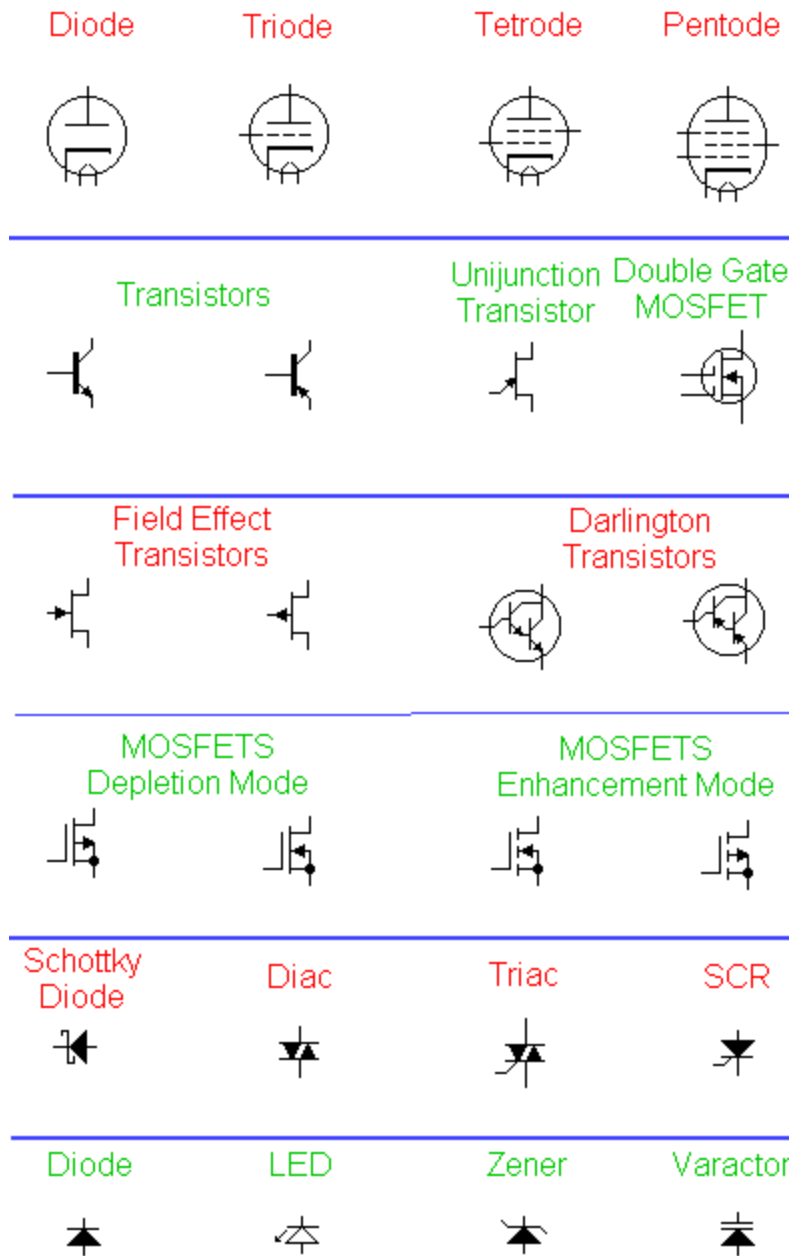
## Schematic Symbols

The diagram below shows passive components, resistors, capacitors and inductors, and also electrical components such as switches, relays, motors and lamps. Also shown are the symbols for wires that are not joined ( no physical electrical connection ) and wires that are joined ( a physical electrical connection ). In europe the symbol for the resistor is a rectangle, whereas the US symbol is a zigzag. On my site, schematics may be drawn with european or US symbols, depending upon which of my circuit simulator programs has been used. Both TINA and Circuit Maker can use either european or US symbols, but i use Circuit maker with US symbols, and TINA with european.



This next diagram depicts active components, the difference between active and passive is that active components require a power source to work, whereas passive

components do not. The top symbols represent vacuum tube or thermionic devices. Although at one time, these were being replaced by the smaller transistor and integrated circuits, they are finding their way back into electronics for use in professional audio equipment and some radio receivers. I would like to point out that the demise of thermionic devices was not due to poor performance, it was because of the physical size, weight and power consumption when compared to transistorized equipment. Also the US symbol set has a circle around most active components, whereas the european symbol set does not.



The two diagrams make up some of the most popular components used in electronics today. I have not shown logic IC's, gates or opamps. These will be

covered elsewhere on my site.

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