When constructing the system, it is vital that all practical work is carried out sfaely. To that end, precautions were taken against the following risks:

**Electrocution** No high voltage/current power supplies will be used (the highest voltage that may possibly be used will be 15 V) so the danger is relatively low. Even so, appropriate precautions will be taken: the circuit will not be touched or modified when switched on and will not be placed near liquids.

**Electrostatic damage** Many of the components used utilise CMOS technology so are very sensitive to electrostatic discharge. To minimise the risk of this happening, I will ground myself on a suitable surface (computer power supply case, grounded radiator, etc) before approaching the circuit.

**Fire and/or burns** A number of components (e.g., the power supply diodes and chips) could potentially get extremely hot if misused. While I will obviously aim not to misuse them, accidents happen, and to this extent I will be careful and slow in touching any component in case it is hot enough to burn. Also, I will ensure no paper or other easily flammable materials are placed near the circuit.

**Back injury** A number of components will need to be ordered from the internet, meaning they will come in large boxes. I will need to use proper lifting techniques when bending down and lifting these boxes to avoid back injury.

**Cutting injuries** Throughout the course of the project I will be using various sharp tools, such as wire cutters. I will need to make sure I am trained in using these tools, that I concentrate when using them and that I leave them in a safe place so others do not accidentally injure themselves. These actions will help to reduce the risk of injuries.