HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

INTELLIGENT HOUSE CONTROL

E.1347

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Summary

This project was carried out having in mind to investigate the trends in controlling with convenience all those electronic devices (and not only) which are around us in the place we live. This research should expose what could be controlled and how this control is done. It must be noted that many of the solutions described can be inconvenient and not provide a simplified control but still should be studied in order to reach to the best solution.

This project was very interesting since it is an area where a common standard hasn't been agreed so it was interesting to study all the different technologies implemented to perform, in many cases, the same task. The only thing close to a standard was X10, but from the whole research it came out that big companies still try to place their own technologies. X10 technology was examined in detail and the digital theory behind it was found very educational.

Much time was also spent on the design and construction of the control device with RS-232 port which was chosen because of its low cost and many possibilities since it would be controlled from the PC. The whole procedure in designing the circuit, constructing the PCB, troubleshooting and finally watching it work, really takes all the theory in action

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