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**HIGHER TECHNICAL INSTITUTE  
ELECTRICAL ENGINEERING DEPARTMENT**

**CONTROLLING VARIOUS DOMESTIC LOADS  
THROUGH A PC / INTERNET**

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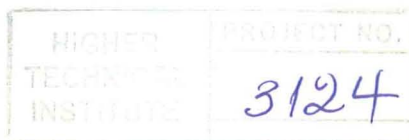
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## SUMMARY

The idea for this project rises from the need to remote control the loads of a domestic installation. An investigation, which was carried out, showed that this could be done in a cost-less way with the use of Internet and a pc.

The implementation of the project deals with the construction of an interface card connected to the ISA bus of the pc, in order to control various loads such as lighting circuits, heating, air-conditioners, water pumps, motors etc. The designed hardware will be fully controlled through appropriate software that is designed with the use of Visual Basic 5.0.

What makes the project interesting is the fact that the various loads will be fully controlled through the Internet, i.e. the pc is going to be connected to the Internet and with the use of the designed software all loads will be accessed from an other computer which is also connected to the Internet and uses the same software as well.

The interface electronics are connected to relays, which are activated with a specific command of the software. The activation of the relays closes a circuit and the corresponding loads are turned on.

The main objects that where studied during the implementation of the project was the computer interfacing techniques, the software design and the Internet. Much time was spent for the construction of the interface and the external cards, which enabled the communication with the computer and the various loads, as well as for the design of the software, which controls the designed hardware. Much effort was also made to study the different ways of communication through Internet.

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