SENTINEL POWER

INTRODUCTION

Sentinel Power is a group of technologists designing a direct current to alternating current (DC to AC) inverter. This inverter will be used in remote locations where there is no existing electrical grid or infrastructure. Sentinel Power is comprised of four team members with different backgrounds. Each member provides a variety of unique skills and contributes to the unique design of this project.

PROJECT DESCRIPTION

Sentinel Power is developing an inverter for use in remote areas where access to grid power is impractical or non-existent. The inverter will provide approximately 500W of RMS power with the ability to network with other units. The modular design of this inverter gives it the potential to aid remote operations by providing AC power from existing DC sources.

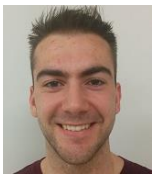
TEAM MEMBERS

Taylor Long

Taylor brings his experience in designing and configuring embedded systems to the group. He has worked for the Department of National Defence and designed a data acquisition system with software tools for testing. Taylor is responsible for the design of the LCD user interface and other embedded components of the project.

Andrew Cameron

Andrew brings his talents as a certified journeyman electrician along with practical experience in power devices and circuit design. Years of trade experience provide Andrew with a degree of quality workmanship, ensuring the safety and reliability of this project. Andrew will be using his talents to spearhead the AC design of this project.



Franco Fantillo

Franco has spent the past year working for Forest Technology Systems where he was responsible for repairing, troubleshooting and testing electronic equipment for remote deployment. Franco will be responsible for the design and testing of the DC components in this project.

Chris Todd

Chris has over a year of practical experience designing and cross-compiling embedded applications for Applocation Systems. As a result, Chris was an ideal candidate for the design, implementation and integration of code and electronic sensors. Chris will also provide support for the AC components of this project controlled by embedded systems.

CONCLUSION

The quality of work apparent in this project is the result of sincere training and dedication. Most importantly, it is a culmination of perseverance, teamwork and guidance from Sentinel Power and the electronics engineering staff at Camosun College. The hard work and dedication within our group and outside of it has facilitated the completion of this ambitious project.

SENTINEL POWER

- Integration and design for monitoring of DC input and AC output
- Integration of LCD interface
- **Writing of technical documentation**

- Design of inverter circuit and AC transformation
- Selection of hardware for use in DC input and AC output
- **Writing of technical documentation**

- Selection of batteries for power backup
- Integration and design for monitoring of DC input and AC output
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