Contents

Introduction

Progwhiz is a software house that has dedicated 5yrs research and development in the field of robotics for the purpose of making Robotics:

1) More accessible to the General user public
2) To aid in fast tracking Research, Development and Testing
3) Facilitate with plug n play capability to Produce working prototypes expeditiously

We are pleased to present for your consideration a Software and Hardware Suite of products aligned to the both the Educational, Hobbyist and Business Markets. We welcome the opportunity to present for your consideration to aid and encourage new and seasoned Robotics enthusiasts alike. The Robot Commander Pro is an innovative tool to aid Developers and Teachers in expediting creation and comprehension of Robotics. The Robot Commander Pro is a suite of software products and Hardware kits to both introduce robotics to beginners and enhance the capability of expert robotic enthusiasts by embracing the plug n play model. We would like to invite you to review the attached documents to assess the value the products may add to your curriculum.

History

The Robot Commander Pro suite is a mature product of five (5) years in the making. The concept son which it was based are:

- ➢ Seamless integration with most peripheral devices (Sensors, Servos, Switches etc)
- ➢ Ease of use for non robotic enthusiasts yet powerful functionality
- ➢ Ability to fast track development and push to market
- ➢ Remote and wireless managements
- ➢ Modular and scalable design
- ➢ Adhoc programming (scripting(2nd layer) and logical conditions via GUI)

To achieve the above goals several hardware (Controller) manufactures we explored and relevant interfaces we developed to test the pros/cons of each. The results of which gave rise to a suite of four (4) distinct user applications.

- ❖ Robotis
- ❖ Robobuilder
- ❖ CMUCam
- ❖ Pololu

Whilst all products are fully supported from the software interface perspective we deemed the Pololu controller brand the highest potential to facilitate the greatest ease to adapt to both Hobbyist/Academic/Business needs. Some of the real world applications are:

- ✓ Computerisation of RC Kits
- ✓ Motorised PreAssembled Kits
- ✓ Monitoring/Response Systems
- ✓ Home/Office Management
- ✓ Corporate Solutions to streamline software integration with managing hardware systems

Functionality

- ➢ Windows Application to manage Servos, Sensors remotely
- ➢ Developer Kits for Beginner and Expert alike
- ➢ Real time updates to logical conditions via Application GUI
- ➢ Ability to customize settings on the fly without reprogramming the Robot Memory
- ➢ Ease to connect additional devices
  - o CMOS Cameras RS232/TTL
  - o Joy Stick (Easy mapping of Ports Dialogue)
  - o Analog and Digital Servos
  - o Analog and Digital Sensors
  - o Motors
  - o Relays
- ➢ Ability to write, compile and test run scripts remotely using proprietary language and compiler
- ➢ Ability to develop client side applications using our API in a client/server model developed for corporate solutions

Comparison Matrix

Functionality	Progwhiz Robotics Products	Other Robotics Products
Controller Hardware/Software Adapters	X	
Camera Hardware/Software Adapters	X	
Support Internal/Embedded Scripts	X	X
Support External Scripts	X	
Non Pass through Capability	X	
Camera Image Snapshot via API	X	
Configuration Update Remotely	X	
Joystick Built in Support out of Box	X	
Create Secure TCP Client/Server App	X	
Develop Server Application via ActiveX	X	
Develop Client Application via ActiveX	X	
Customise OutOfBox Application	X	
Create Triggers via GUI	X	
Wireless Range 1+ Miles	X	

Reference Material

[Robotics Presentation](#)

[Robotics User Guide](#)

[Robotics Developer Kits](#)

[Robotics Mechanised Kits](#)

[Robotics Scripting Editor and Compiler](#)

[Robotics API (Corporate Solutions)](#)

[Robotics Client ActiveX](#)

[Robotics Server ActiveX](#)

[Software Suite](#)

[Prototype Kits](#)

Video Walkthroughs

[Mini Tank Demo1](#)
[Buggy Demo](#)
[Tank Demo1](#)
[Tank Demo2](#)
[Video Capture Demo](#)
[Scripting Demo1](#)
[Scripting Demo2](#)
[Joystick Demo](#)

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