Technical Manual

RoboTag

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EE 491

Product Design II

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Contents

Section 1.   Introduction

.1   Overview

The game control panel allows the attraction host to specify the duration of the game, number of lives, start the game, stop the game, and receive the output of the score.

1.2   Scope

This document provides an overview of the game control panel subsystem and operational instructions.

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Section 2.   Theory of Operation

2.1   System Overview and Purpose

The game control panel is the way that the attraction host will control the game parameters, start the game, and view the final score.

2.2   Subsystem Purpose and overview

This is a subsystem application that will run on the Robotag server. This application will send a signal to the laser gun subsystem with the game start message and the setting for the number of lives. The Robotag server will provide this application with a text file of information about every confirmed hit in the game for score tabulation. The game control panel will also communicate with the laser gun subsystems when the game is over.

2.2.1   Subsystem Images Schematics/Block Diagram
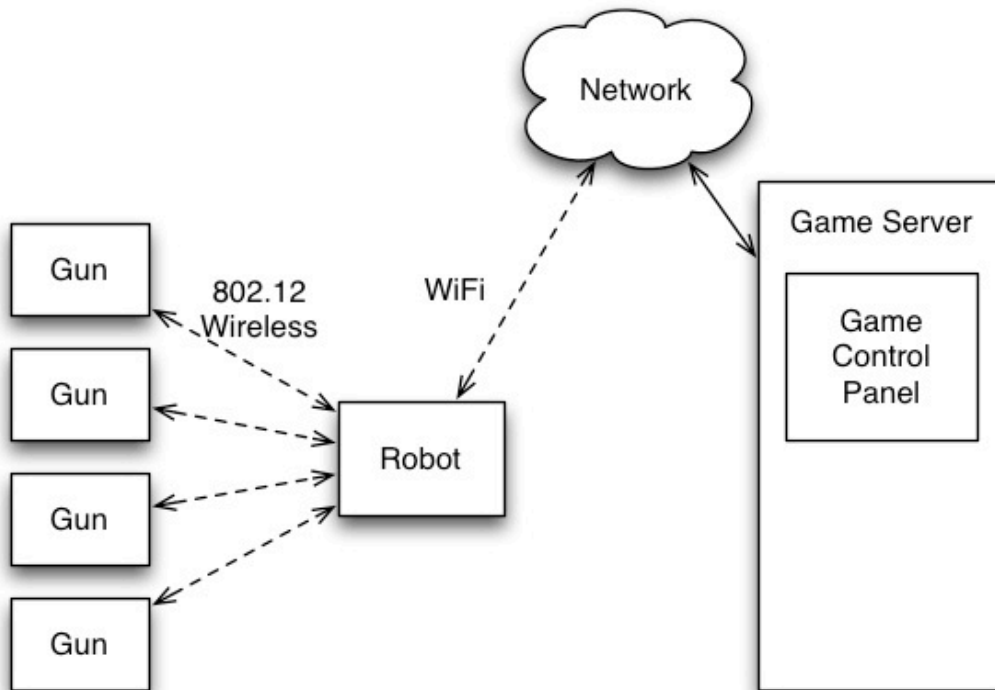
2.2.2   Subsystem Operations

Open the Game Control Panel application on the Game Server. Select the number of lives and game duration. Click the start button. If the game needs to end for any reason click the e-stop button.

Section 3.   Controls and Indicators

3.1   Purpose

This section lists the controls available in the game control panel and their functions.

3.1.1   Description of controls and Images

Lives available:
        This drop down allows the attraction host to specify the number of lives available for each player.

Game duration:
        This allows the attraction host to specify the length of the game.

Start:
        This button will start the gameplay.
E-Stop:
        This button will stop the gameplay in the event of an emergency.

3.1.2   Description of Indicators and Images

Countdown timer:
        This provides the time remaining in the game.
Scores:
        This lists the scores at the end of the game.

Section 4.   Troubleshooting and Maintenance

4.1   Troubleshooting Symptoms and Probable causes

Error: can not receive score information

4.1.1   Subsystem troubleshooting

Explanation: The file containing the score data is missing. Ensure that the application directory is in the right place.

Section 5.   Setup Required for User (Installation)

5.1   Subsystem Set Up Actions

5.1.1   Set up actions

1. Install Game Control Panel on the Game Server
2. Set up networking and establish communication with the Robots

3. Open the Game Control Panel application

Section 7.   Glossary

Term	Definition
Attraction Host	The person who will be running the demonstration of RoboTag. This is the operational role that will include setting up the game parameters and starting the game.
E-stop	Emergency stop to terminate the game prematurely