

# Contents:

<b>Version 3.0</b>	<b>2</b>
<b>Version 3.1</b>	<b>2</b>
<b>Version 3.2</b>	<b>4</b>

## Version 3.0

- Initial Release

## Version 3.1

- Standardized formatting
- Removed parts tables under the field specifications from the Manifest
- Small wording additions in the Overview and Treasure Map sections for clarification
- The Route:
  - Added a section detailing how the route should be displayed on the robot
  - Added a section detailing initial robot starting state
  - Added a section detailing signal repetition
  - Added an example describing the requirement to complete destinations in order
  - Changed wording to clarify certain sections
  - Described in greater detail how to earn points from the treasure chest
  - Added a section describing the proper operation to earn points via the rotary encoder and the colors the RGB LED will be using
  - Changed the dead time between when Destination A changes to Destination C to a lockout time of 45 seconds; in this period of time Destination C will not be available for activation.
  - Added a section describing the location and operation of the green indicator LED
- Playing Rules:
  - Clarified the ‘water’ out of bounds section as including vertical space
  - Changed wording to clarify certain sections
  - Removed 250 point penalty for losing an appeal and added a note that points may be removed based at the judge’s discretion
  - Clarified the time in which sequestering occurs and the need for 15 minutes between the end of sequestering and beginning of the matches
  - Clarified how the T-shirt points are earned
- Field Specifications:
  - Added a note referencing the CAD file and how to obtain it
  - Added paint specifications and table containing the paints used
  - Initial Signal:
    - Removed references to using NEC protocol and replaced with “Similar to NEC”
    - Updated image to show the location of Most Significant and Least Significant bits
    - Updated wording for clarification on the signal structure
    - Added Table Containing information on the IR LED used in the field

- Destination A and C:
  - Added the location of the green indicator LEDs and described which LED is associated with each button press
- The Water:
  - Added image to aid in correctly describing the zone encompassed by the water
  - Changed wording to clarify exactly where the water is located
- Destination B:
  - Added current approximate weight needed to depress the lever
  - Removed Home Depot references in parts table
- Added “Green indicator LED” section:
- Added parts table for Green LED indicator section
- Flag Destination:
  - Clarified that the wheel should fit over the knob supplied with the rotary encoder
- Treasure Chest:
  - Removed now defunct Home Depot references
  - Added links to websites where each item can be purchased
  - Added sinker weights to parts list
- Two Qualifying Rounds:
  - Clarified that rounds begin once the first IR signal is sent and end when Destination C is pressed, regardless of if it is correct or incorrect
- Scoring
  - Changed all point values except for time points, the maximum earnable points, not accounting for time points, is now 1500
  - Described how the robot should display the code and provided updated examples
  - Removed Destination B association with other points scoring opportunities
  - Added description on the process of earning flag raising points
  - Added partial points for partially raising the flag
  - Clarified the wording in the out of round points earning descriptions
- **Edits missed in this release:**
  - Removal of the 150 partial points for delivering the chest without activating Dest. B; if the chest is delivered to the ship the full 300 points will be awarded regardless of the status of Dest. B
  - The Date in the footer should read October 16, 2017

## Version 3.2

- Updated Date and Version number
- Terminology:
  - Added “Treasure Chest” and “Pirate Flag” definitions to the terminology list
- Changed some wording to clarify sections of the Overview
- The Route:
  - Clarified destination ordering process regarding skipping a stage
  - Added Signal LED operation with respect to Dest. A
  - Various changes to wording for consistency
  - Elaborated on rotary encoder operation and scoring regarding encoder reset for overturning
  - Specified indicator LED locations
  - Added section allowing for robots to use indicator LEDs
- Playing Rules:
  - Added Indicator LED operation when incorrect button is pushed
  - Added maximum points deduction for frivolous appeals
  - Specified that no projectiles or microcontroller interference will be tolerated
  - Added limits for dropping the treasure chest
- Clarified wording in the Doubloon earning locations section
- Made clarifications in robot specifications section on size and no projectiles
- Added Team Logo Specifications
- Team Flag Specifications:
  - Added examples of bad materials
  - Clarified location of team flag and that the pirate flag is provided as part of the field
- Field Specifications:
  - Paint specifications:
    - Added image detailing locations of paint
  - Initial Signal:
    - Added section detailing voltage and resistance currently used in the IR LED
  - Dest. A/C
    - Added location of the Indicator LEDs
    - Updated lower image to include LED locations
  - Dest. B
    - This stage was redesigned and eliminated the spring
    - Rewrote section to reflect stage redesign
    - Changed activation weight to >0.5lb
    - Added limit switch to parts list table
    - Updated Figure 7 to reflect redesign

- Pirate flag:
  - Added field to encoder measurement
- Treasure chest:
  - Specified that 18" is from the center of the chest
- Scoring:
  - Elimination Round:
    - Added clarification on how the final round is scored in relation to the qualifying rounds.
  - Table 11:
    - Added route number reference for consistency in the *Display Correct Code* section.
    - Expanded *Move Treasure Chest* wording to better explain points qualification between moving and picking up the chest
    - Addressed questions about picking up the treasure chest vs. storing the chest such that picking up and/or storing will earn full points if the attempt is obvious
    - Added further wording to remove association between Destination B and the treasure chest
    - Removed 150 partial score for delivering the chest w/o activating Destination B