

Game Manual - Team UPDATE - 1357682644

Section: The DISCS

The DISCS are Wham-O part number 53214 (custom colored Red, White, or Blue) and have a nominal diameter of $10\frac{5}{8}$ 11 in., a nominal height of $1\frac{3}{4}$ 1.4 in., and a weight of 180 ± 5 grams.

Section: CLIMB Points

Points are awarded for the highest Level achieved for every ALLIANCE ROBOT that CLIMBS its PYRAMID. The Level to which a ROBOT has CLIMBED is determined by the lowest point of the ROBOT (in relation to the FIELD) at the point in which final scores are assessed per [Section 3.2.4](#). CLIMB point values and Levels are defined in [Figure 3-4](#).

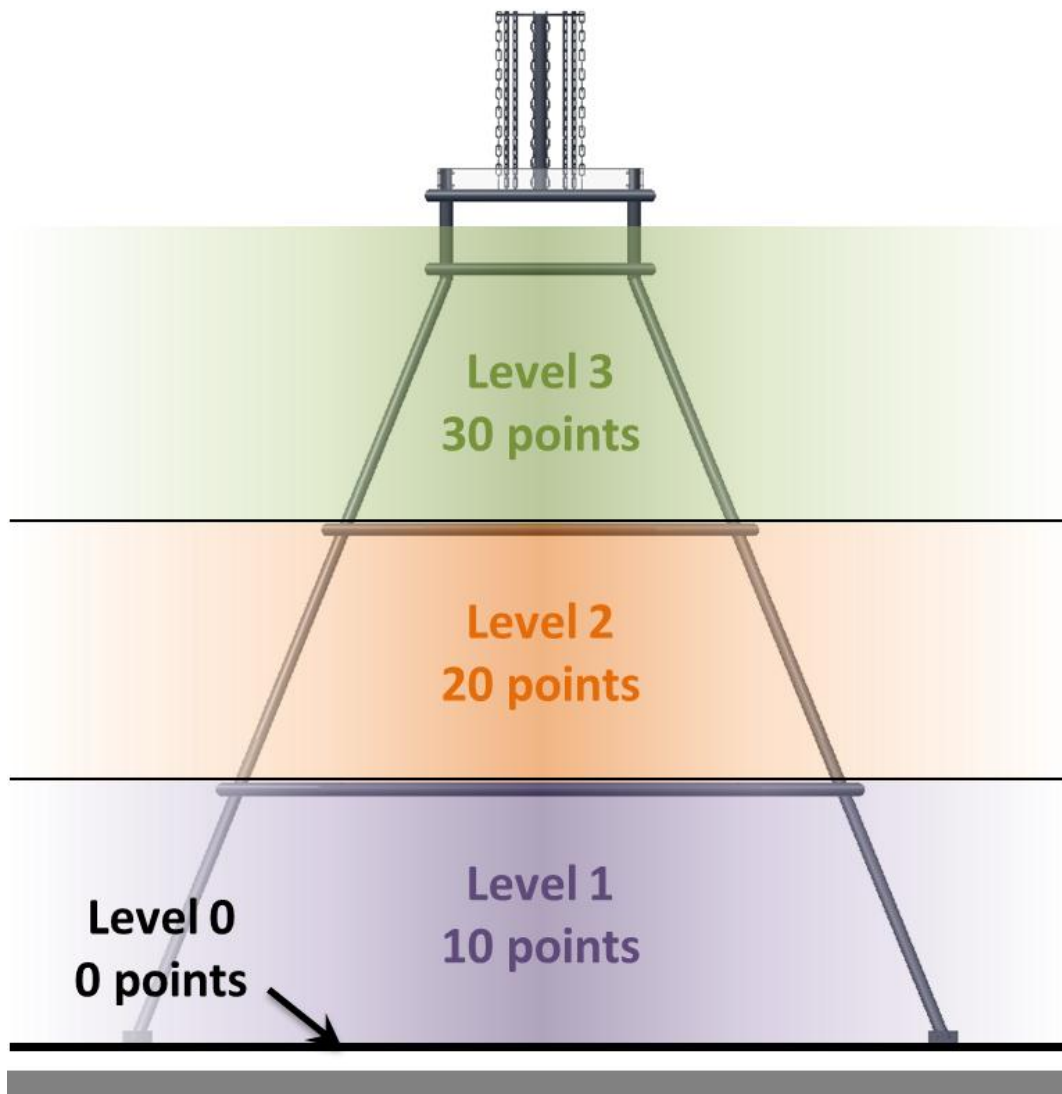


Figure 3-4: PYRAMID Levels

As competition at the *FIRST* Championship is typically different from that during the competition season, *FIRST* may alter the value of CLIMBING at the *FIRST* Championship by up to ten (10) points per Level.

A ROBOT has CLIMBED its PYRAMID if it contacts the PYRAMID and/or the floor (Level 0) in

- A. sequential order (Level 0, 1, 2, 3) during ascent and
- B. no more than two (2) Levels simultaneously.

Section:G04

ROBOTS may only be removed from a PYRAMID under the following conditions:

- A. by the TEAM,
- B. unpowered,
- C. and under the supervision of a *FIRST* Technical Advisor (FTA), FTA Assistant, Referee, or Field Supervisor.

Additionally, if any part of the ROBOT is in Level 3, TEAMS are required to attach a *FIRST* supplied belay line, detailed in ~~Section 2.2.6~~ [Section 2.2.5](#), to their ROBOT to spot a ROBOT while the TEAM removes it from the PYRAMID.

Violation: YELLOW CARD

Section:G30

Regardless of who initiates the contact, a ROBOT may not contact an opponent ROBOT

- A. contacting its PYRAMID or
- B. touching the carpet in its LOADING ZONE.

Violation: FOUL. If purposeful or consequential, TECHNICAL FOUL. If an opponent's CLIMB is affected, each affected opponent ROBOT will be awarded points for a successful Level 3 CLIMB.

Section:R48

All active circuits shall be wired with appropriately sized insulated wire:

Table 4-3: Legal Wire Size

Application	Minimum Wire Size
30 - 40A circuit	12 AWG (2.052mm)
20 - 30A circuit	14 AWG (1.628mm)
5 - 10 20A circuit	18 AWG (1.024mm)
Between the PD Board and the Analog and/or Solenoid Breakout Boards (even though they are protected by a 20A circuit breaker per R47)	
Between the PD Board and the cRIO	20 AWG (0.8128mm)
Between the PD Board and the wireless bridge	
≤5A circuit	
Pneumatic valves	24 AWG (0.5106mm)

Wires that are originally attached to legal devices are part of the device and by default legal as supplies. Such wires are exempt from [R48](#).

Section:Game Manual

General Updates

Bridge Configuration Utility Update

A new version, 01.08.13.195, of the FRC Bridge Configuration Utility is now available for download on the [Technical Resources](#) page. This updated version provides support for firmware version 2.02, which has been found on some of the D-Link DAP1522 Rev B units included in the 2013 Kickoff Kits. Teams who have already downloaded the previous version of the utility can download and run the new installer to update the utility on their computer.

LabVIEW 2012 Update

National Instruments has [released an update for LabVIEW 2012](#), the version included in the 2013 Kickoff Kits. The update is not required, however Teams using the Robot Simulator can expect improved performance when sending the simulated camera image to the Dashboard.

Known Bug List

FRC has published, and will maintain, a list of any control system issues of which *FIRST* is currently aware and the corresponding fixes. The document, *2013 Software Notes*, is found [here](#).

Classmate Image Downloads

We are aware of the current error teams are seeing when trying to download the Classmate Images from the Intel site. We are working with Intel to resolve the issue and will [Blog](#) again when it is available. As a reminder, only Rookie Teams need to image their Classmates for 2013, and USB Keys were

included in the Rookie Kit of Parts to allow them to do so without having to download the image.

In the meantime, please do not re-host the images as this would violate *FIRST's* End User License Agreement with Microsoft.