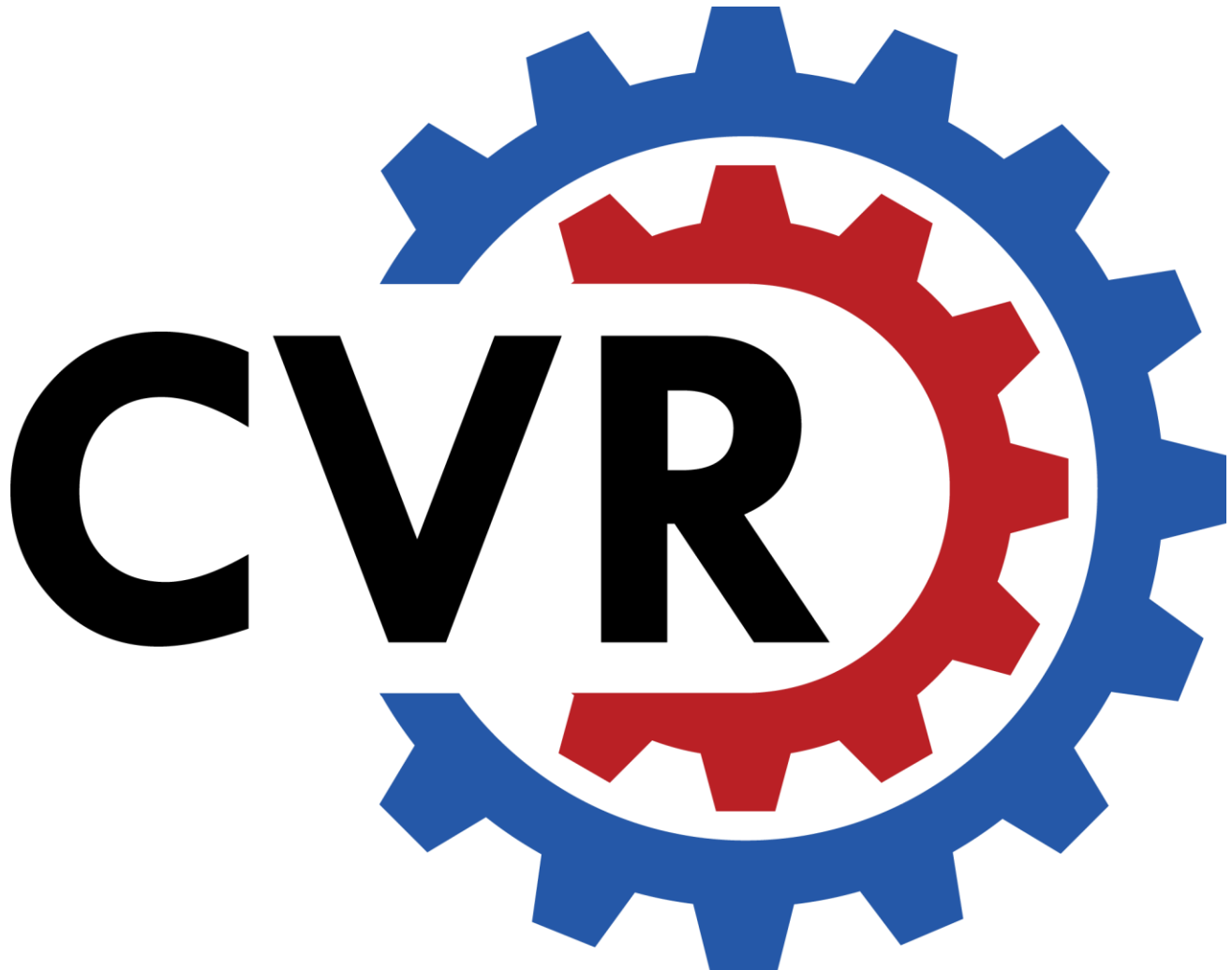


Revision 2017.1

March 17, 2017



Sponsor's Manual

Help us promote STEM in California's Central Valley!

Central Valley Robotics

<http://www.cvrobotics.org>



Central Valley Robotics **FIRST® LEGO® League Programs**

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Central Valley Robotics **FIRST® LEGO® League Programs**

Sponsor's Manual

Thank you for your interest in supporting our efforts at Central Valley Robotics! We provide exciting after school programs for children ages 6-14 that gets kids excited about Science, Technology, Engineering, and Math (STEM).

Our events are exciting, high energy events where student accomplishments are celebrated and students are motivated to pursue technical careers. In *FIRST*, it's not about winning, it's about the process of problem solving and learning across the entire season.

Purpose of this document

This document is designed to help those interested in supporting us learn more about what we do and the many support areas that are available. Additionally, our main expansions projects, and their costs, are detailed in this manual.

Donations are Tax Deductible

Central Valley Robotics operates out of the Clovis Unified School District (Tax ID: 94-2840774) and donations to Central Valley Robotics are tax deductible. Contact us for more information.

Contacting Central Valley Robotics

Please contact us via email at contact@cvrobotics.org (preferred) or by phone at **(559) 325-4461**.

How to Donate

We rely on two types of donations to run the *FIRST* Programs: monetary and in-kind (material) donations.

Monetary Donations

Monetary donations to Central Valley Robotics can be sent directly to Clovis Unified. Checks should be made out to **Clovis Unified School District** and place **CV Robotics** in the memo field. Please mail checks to:

ATTN: Sandy Sanchez / CVR
Clovis Unified School District
1450 Herndon Ave
Clovis, CA 93611

If you would like your funds to go towards a specific area of the program or project, please contact CVR prior to mailing your donation.

Materials and In-Kind Donations

If you are interested in donating new or used equipment, please contact us to discuss the donations. Similarly, if you are wishing to donate services, please also reach out to us.

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Central Valley Robotics **FIRST® LEGO® League Programs**

Our Programs



For students ages 6-10, *FIRST* LEGO League Jr. captures young children's inherent curiosity and directs it toward discovering the wonders of science and technology. This program features a real-world scientific concept to be explored through research, teamwork, construction, and imagination. Guided by adult Coaches, teams use LEGO® bricks to build a model that moves and develop a Show Me Poster to illustrate their journey.

Children get to:

- Design and build a challenge-related model using LEGO components
- Create a Show Me Poster and practice presentation skills
- Explore challenges facing today's scientists
- Discover real-world math and science
- Begin developing teamwork skills
- Choose to participate in expos and showcases
- Engage in team activities guided by the Core Values



In *FIRST* LEGO League, children ages 9-14 are immersed in real-world science and technology challenges. Teams design their own solution to a current scientific question or problem and build autonomous LEGO robots that perform a series of missions. Through their participation, children develop valuable life skills and discover exciting career possibilities while learning that they can make a positive contribution to society.

Children get to:

- Create innovative solutions to challenges facing today's scientists
- Strategize, design, build, program, and test an autonomous robot using LEGO MINDSTORMS® technology
- Apply real-world math and science concepts
- Develop career and life skills including critical thinking, time management, collaboration, and communication while becoming more self-confident
- Become involved in their local and global community
- Choose to participate in official tournaments and local events
- Qualify for an invitation to World Festival
- Engage in team activities guided by the Core Values

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Sponsorship Levels

Below is our list of sponsorship reward levels. Our reward levels are inclusive, meaning that supporting at any level will include the benefits from all prior levels. Usually benefits will apply to the current or upcoming season. They apply to our website, cvrobotics.org, and Championship only. Qualifier benefits are determined by the Qualifying Tournament Partner, unless noted below.

Title	Benefits	Minimum Amount
Friend	Text listing on sponsors page on our website	\$100
Supporter	Logo on sponsor page/section on our website.	\$500
Bronze Sponsor	Signage up at the Championship. (Signage provided by the sponsor.)	\$1000
Silver Sponsor	Logo on Championship Volunteer Shirts. Logo also rotating on Score System screen, if available.	\$1500
Gold Sponsor	Logo Placement under the Sponsors banner on our homepage. Booth space at Championships. (Sponsor will need to staff this, or provide materials to be laid out). Sponsor may insert a one page flyer into the team registration packets at Championship.	\$2000
Platinum Sponsor	Sponsor may insert a one page flyer into all team packets for the season (all events).	\$3000
Program Partner	Booth space at Qualifying events and Championship (CVR will help negotiate booth space at qualifiers) and potential for an award at Championship to be named after the sponsor.	\$5000



Central Valley Robotics **FIRST® LEGO® League Programs**

Championship Tournament Typical Costs

Below is a table listing the usual expenses we incur at our *FIRST* LEGO League Championship. We provide these for sponsors interested in supporting a specific aspect of the event.

Item	Description	Cost
Food	At our events, we supply lunch, as well as snacks and drinks throughout the day.	\$2000
Volunteer Shirts	We provide volunteer shirts for all our volunteers. At Championship, we provide high quality shirts to keep our volunteers warm on event day.	\$2500
Field Kits	The field kits contain the LEGO pieces and mats for the robot game portion of the competition. We are required to use the FLL provided ones. We will also be able to provide practice fields with this donation.	\$1500
Robot Game Tables	The field kits are placed on a custom wooden table. For 2017, we will need to rebuild all our current tables.	\$1300
PR Materials	This includes the program books and season specific signage.	\$3000
Custodial	Our site provides custodial support for setup and day of event support.	\$1300



Central Valley Robotics **FIRST® LEGO® League Programs**

Projects and Conferences

Central Valley Robotics has long term goals to improve this program, and needs help to implement these projects. Additionally, there are a few major events in the *FIRST* calendar that require CVR staff to travel.

Digital Tournament Upgrade

CVR would like to push the envelope and develop new technologies for the *FIRST* LEGO League program. For this, we require approximately \$14000 to fully digitize the championship event. The details of the equipment required is in the table below:

Item	Quantity	Description	Retail Cost:
Computers	15-20	We will need to loan out computers on event day for official use. Software is web-based, so we would prefer Chromebooks. Chromebooks are easier to maintain and deploy. Additionally, we can use these computers for check-in and volunteer registration needs at events. The Acer Chromebook 13 would be an ideal choice. Vendor: https://play.google.com/store/devices	\$250 each ~\$5000 Total
Tablets	8 - 10	We will need tablets for use on the robot game tables. Nexus 9's would be ideal. While model is not important, we do need them to be android based. Vendor: https://play.google.com/store/devices	\$400 each ~\$4000 Total
Field Upgrades	4-5	It is possible to create a new system for FLL that allows for digital signage to be placed on each FLL table pair. This signage will show current match status, match time, team number / name, all in real time and controlled by a central system. This is a brand new concept for FLL and being developed here in Central California Vendor: Each field upgrade is composed of a variety of components from Adafruit. (8 matrix panels, 4m LED strands, Arduino Mega + Ethernet, 5 7-segment panels w/ backpacks, 5v10a power supply, connectors and wires, 100ft CAT6)	\$800 – Per Table Pair (need 4 + spare) \$200 – One Time costs. ~\$5000 Total

Total: ~\$14000



Central Valley Robotics **FIRST® LEGO® League Programs**

Video Production Upgrade Phase 2

CVR needs to upgrade our video production systems to allow us to do live to internet or live to tape recordings of our training sessions. This will allow CVR to better provide training and resources to teams and volunteers.

Preferred Equipment: (Includes tax + S&H where necessary)

1. GoPro Hero4 Silver
 - <http://www.amazon.com/GoPro-CHDHY-401-HERO4-SILVER/dp/B00NIYJF6U/>
 - Use: to capture rooms / game tables
 - Quantity: 3
 - Cost: \$1200 (Unit cost: ~\$400)
2. Monoprice Cabling
 - Types vary, would include extension cords, XLR cables, video cables
 - Cost: \$500
3. Solid State Drives
 - <http://www.amazon.com/Samsung-2-5-Inch-Internal-MZ-75E500B-AM/dp/B000BRE5UE>
 - Use: Upgrade speed and stability of capture computers
 - Quantity: 4
 - Cost: \$950 (Unit Cost: ~\$160)
4. Memory Upgrades
 - <http://www.amazon.com/gp/product/B005LDLV6S>
 - Use: Upgrade speed and stability of capture computers
 - Quantity: 12
 - Cost: \$300 (Unit Cost: ~\$25)
5. Sound System
 - <http://www.amazon.com/gp/product/B00ETP9FFI>
 - Use: Backup sound system for events / pit system for champs
 - Cost: ~\$450
6. Canon Camcorders
 - <https://www.amazon.com/dp/B019UDIDXS/>
 - Use: Stage and Awards camera at events, also for training recordings
 - Quantity: 2
 - Cost: \$2500 (Unit Cost ~\$1200)

Total: ~\$6000



Central Valley Robotics **FIRST® LEGO® League Programs**

New Radio Upgrades

CVR needs to upgrade our radio set to handle new venues. Our current radio set cannot handle certain wide venue layouts.

Preferred Equipment: (Includes tax + S&H where necessary)

1. Motorola RMu2080
 - <http://www.techwholesale.com/motorola-rmu2080.html>
 - Quantity: 18+
 - Cost: \$4400 (Unit cost: ~\$240)
2. 6 Unit Charge Tray (PMLN6384)
 - <http://www.techwholesale.com/motorola-pmln6384.html>
 - Quantity: 3+
 - Cost: \$660 (Unit Cost: ~\$210)

Total: ~\$5100

Annual Partner Conference (June)

Every year, *FIRST* holds a national conference for Affiliate Partners, like Central Valley Robotics, to attend to learn about the upcoming year and share ideas. The conference is typically held at the *FIRST* headquarters in Manchester, NH. Since rates and flights change frequently, below are quotes from May 2016.

- Hotel: Between \$600-\$800 per room for the entire trip (4-5 nights). CVR wishes to take as many staff members as possible. While we can make do with one room (1-2 staff members), we would like to get two to three rooms.
- Flights: Flights from FAT to MHT. \$800-\$900 per person. Need to take 2-4 people each year.

Total: \$5200/year

Qualifier Support Costs

To support the costs of materials at qualifiers, CVR asks qualifiers to submit \$525 to cover the costs of printing, shirts, trophies, official playing fields, and more. Donations can be made on behalf of events to allow us to cover all costs of materials for qualifiers. For the 2017 season, this is approximately \$4000.

Total: \$4000/year

Storage Improvements

CVR currently uses a small storage unit at Derrel's mini storage to hold most of our equipment during the year. We would like to improve this with climate-controlled storage (for our tables) or a larger storage unit. In-kind donations are encouraged, however the cost for upgrading our storage unit at Derrel's is \$1400 a year.

Total: \$1400/year

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