

# Team Update 01

## GENERAL

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### Control System

An issue was discovered with the roboRIO image version 2021\_v3.1 included in the initial release of the NI Game Tools that prevents successful imaging of roboRIOs. Teams that downloaded the installer prior to the morning of January 11, 2021 should re-download and re-install the latest installer (no need to uninstall first) from [NI.com/frc](https://ni.com/frc) (choose either “Download” for the online installer of “2021 f1” from the offline installers. Users with the correct version installed will not see 2021\_v3.1 as an option in the roboRIO imaging tool.

### Translated Documentation

The [Turkish translation of Team Update 00](#) is now posted on [the translated documentation web page](#).

### Broken Links

Our apologies for any broken/misdirected links! We've fixed all known link issues in all 2021 documentation. If you find any others please let us know at [firstroboticscompetitionteams@firstinspires.org](mailto:firstroboticscompetitionteams@firstinspires.org).

## 2021 AT HOME CHALLENGES MANUAL

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### Section 1.8 Team Updates

Team Updates are posted on the [Game and Season Materials web page](#) and are generally posted before 5 pm, Eastern. **Users 18 years old and older may request email alerts to be notified when Team Updates are posting using this form.**

### Section 1.9 Question and Answer System Sponsored by Autodesk®

The Q&A sponsored by Autodesk® is a resource for clarifying *2021 INFINITE RECHARGE Game Manual*, *2021 At Home Challenge Manual*, [Awards web page](#), [Self-Inspection Checklist](#), [official FIELD drawings](#), and/or [FIRST Robotics Competition Event Experience web page](#) content. **For questions about other materials (e.g. Game Design Activities), please inquire using the [2021 Season Supplemental Resources section of the FIRST Forums](#).** Teams can search for previously asked questions and responses or pose new questions. Questions can include examples for clarity or reference multiple rules to understand the relationships and differences between them.

### Section 1.11 Deadlines

The following are the important deadlines for the 2021 At Home Challenges:

- Thursday, February 4th at noon ET – Submission portal/**opt-in** opens
- Thursday, March 4th at 3pm ET – Submission portal/**opt-in** closes
  - Submissions due for the following:
    - Game Design Challenge
    - INFINITE RECHARGE<sup>SM</sup> at Home (Judged Award component)
    - FIRST Innovation Challenge presented by Qualcomm
  - Submissions temporarily closed
    - INFINITE RECHARGE<sup>SM</sup> at Home (Skills Competition)

### Section 2.4.10.3 Scoring

The raw score is the total number of points scored with the fifteen (15) POWER CELLS within the 1-minute period.

### Section 2.4.11 Overall Score

#### d. Determine $B_{\text{first}}$ and $B_{\text{last}}$ based on the GROUP

$B_{\text{first}}$ ,  $B_{\text{last}}$  = the first, last place Bounded Scores in the GROUP. Note that  $B_{\text{first}}$  will be the lowest time in time-based challenges and the highest point total in points-based challenges.

If  $B_{\text{first}}$  and  $B_{\text{last}}$  are equal, then all teams receive a computed score of  $C_{\text{max}}$ .

### Section 4.5.1 The Business Pitch (2 min)

At the Finalist level, *FIRST* Innovation Challenge teams who advance to the *FIRST* Global Innovation Awards receive expert pitch advice from real-world entrepreneurs before their final judging and a 1:1 pitch coaching session with staff from one of the top social impact business incubators from real-world entrepreneurs before their final judging.

### Section 6 Glossary

<b>ELEMENT</b>	chain. For the purposes of this challenge, the definition of chain is "a series of links or rings connected to or fitted into one another and used for various purposes (such as support, restraint, transmission of mechanical power, or measurement). (in manual use bookmark)
<b>OPERATOR CONSOLE</b>	a pre-college student DRIVE TEAM member who acts as a POWER CELL manager the set of COMPONENTS and MECHANISMS used by the DRIVERS and/or HUMAN PLAYER to relay commands to the ROBOT

## GAME DESIGN CHALLENGE ACTIVITIES

Headings in this document were reformatted to include numbering.

## 2021 FRC GAME MANUAL

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### Section 3.7 Vision Targets

An 8 ft. (~243 cm) strip of 3M 8830 Scotchlite™ Reflective Material is in each Kickoff Kit and additional strips are available in [FIRST Choice](#).