

Q&A

VEX IQ Robotics Competition 2024-2025: Rapid Relay

Tagged: G8

Welcome to the official VEX IQ Robotics Competition Question & Answer system, where all registered teams have the opportunity to ask for official rules interpretations and clarifications. This Q&A system is the only source for official VIQRC Rapid Relay rules clarifications, and the clarifications made here from the Game Design Committee (GDC) are considered as official and binding as the written [Game Manual](#) itself.

Please review the [Q&A Usage Guidelines](#) before posting. This system is only intended for specific VIQRC Rapid Relay rules questions.

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 - For VEX technical support, contact support@vex.com or sales@vex.com.
- For game questions, suggestions, or concerns outside of specific and official rules questions, contact GDC@vex.com

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870: Enforcement of the blue box under <G8>b

27-Sep-2021

G8

What should Event Partners or Head Refs do to make sure that this rule isn't being exploited for strategic gain, especially if a team only show up with one team member?

<G8> Drivers switch Controllers midway through the Match. ... b. For the 2021-2022 season, Teams may elect to have one Driver in the Driver Station, instead of two. If only one Driver is present in the Driver Station, they may drive for the full Match, and a controller switch is not required. It is at the Team's discretion whether they wish to have one Driver or two. If two Drivers are present in the Driver Station, the controller switch rules in <G8a> would then apply. ... Blue Box: The intent of point "b" in this rule is to provide flexibility for Teams who are unable to meet in a traditional capacity due to local health guidelines. As noted in the definition of "Team", teamwork is a core tenet of the VEX IQ Challenge, and the two-Student drive team is intended to be a fundamental application of this skill. If a Team has the capacity to include multiple Students, it should also be expected that they will not take advantage of this single-Driver exception for strategic gain.

Answered by committee

Throughout the Game Manual, "blue box" clarifications are included to provide additional "intent of the rule" context for both Teams and Head Referees beyond the "black-and-white" verbiage of the rules themselves.

Rule G8-b was intentionally written such that the only black-and-white requirement is as follows: *"It is at the Team's discretion whether they wish to have one Driver or two."*

As noted in the blue box, the intent of this is *"to provide flexibility for Teams who are unable to meet in a traditional capacity due to local health guidelines"*. It would be impossible to expect an Event Partner to have an in-depth knowledge of all health guidelines imposed on all Teams at their event, whether they are governmental, school-specific, club-specific, or at the request of a Student's parents. With this in mind, we would strongly advise Event Partners and coaches to be cautious about making any assumptions regarding a Team's circumstances when G8-b has been utilized in a tournament. We will not be implementing, requiring, or endorsing any specific "validation tests", as it is ultimately at the Team's discretion whether they wish to have one Driver or two.

With that in mind, as noted in the last line of the blue box, *"it should also be expected that they will not take advantage of this single-Driver exception for strategic gain."* This intention should be regarded similarly to rules like G1, G2, G6, R1-a, R1-b, and R1-c. That is to say - whether it is "caught" during an event or not, a Team who has exploited this rule for strategic gain has knowingly violated several points of the [Code of Conduct](#) and/or the [Student-Centered Policy](#). These violations are addressed through an official COC resolution process; Event Partners who have questions about this process should contact their [REC Foundation Event Engagement Manager](#) for more information.

- Act with integrity, honesty, and reliability
- Behave in a respectful and professional manner with event staff, volunteers, and fellow competitors
- Exhibit maturity and class when dealing with difficult and stressful situations
- Respect individual differences
- Follow all rules as listed in the current game manual(s)
- Student-centered teams with limited adult assistance
- Safety as a top priority
- Good sportsmanship, which includes supporting your alliance partners

2600: Alignment Aid

3-Mar-2025

G8 T6

[<G8>](#)

I have a team asking if there are any restrictions on what alignment aids they could use during pre-match setup. G8 references that pre-match alignment tools are allowed. In the past I have seen tools made from vex pieces, but this group is wanting to use more traditional tools like squares or levels to understand field conditions and robot placement. As long as T6 is followed and pre-match set up is done promptly would this be allowed?

Answered by committee

As long as T6 is followed and pre-match set up is done promptly would this be allowed?

Yes. However, in the interest of keeping the event running on time, we'd advise that your Students work with the Event Partner to do most of this checking on Fields before Matches begin to ensure there's time to address any issues (e.g., un-level Fields) that arise.

2598: Drive team conversations with others in referee deliberations

3-Mar-2025

G8 T3

Rule [<T3>](#) reads as follows:

The Drive Team is permitted to immediately appeal a Head Referee's ruling. If Drive Team Members wish to dispute a score or ruling, they must stay in the Alliance Station until the Head Referee from the Match talks with them. The Head Referee may choose to meet with the Drive Team Members at another location and/or at a later time so that the Head Referee has time to reference materials or resources to help with the decision. Once the Head Referee announces that their decision has been made final, the issue is over and no more appeals may be made (See rule [<T1>](#)).

Are drive team members permitted to discuss the match with others before the appeal? I think [<G2>](#) explicitly disallows discussions with Adults, but my understanding (as a competitor and now also as a head referee and EP) has always been that the drive team must appeal a decision independently; they may discuss with each other (and presumably with their alliance partner's drive team), but not with others, including Students who are not on the drive team for that match. I think this is a reasonable consequence of [<G8>](#) and [<T3>](#), but it is not written in explicitly so I would like some clarification.

PS: If the GDC agrees with my interpretation (i.e., that Drive Team is not permitted to discuss the match with anyone before/as part of the appeal), then I would suggest that:

- This should be made explicit in the wording of [<T3>](#).
- The logistics of this rule should be considered in recommendations for EPs and Head Referees in the KB. In particular, note that referees are posted on the opposite side of the field from the audience; depending on the event layout, it may even be possible for drive team members to converse with someone in the audience zone without physically leaving the driver station, or only leaving by a couple feet (which is generally not very enforced, especially after match play), and it is difficult for head referees to watch for this while scores are being counted or the other alliance is being talked to. Should someone other than a head referee be posted there? Should there be standard signage for audience areas close to fields (or equivalently on the drive team side) to note that this is prohibited?

Answered by committee

Are drive team members permitted to discuss the match with others before the appeal?

There is no rule in the game manual that prohibits this, although rule [<T4>](#) gives Event Partners the authority to create and enforce rules that do not affect gameplay.

Interactions with individuals outside the Alliance Station, if not prohibited by the event, are subject to all other rules.

- Per [<G2>](#), discussions should be limited to Student Team members.
- Per [<T3>](#), Drive Team Members must remain in the Alliance Station and once the Head Referee announces that their decision is final, the issue is over and no more appeals may be made.
- Per clause A of [<G8>](#), communication devices are not allowed in the Alliance Station; this includes any post-Match discussion.

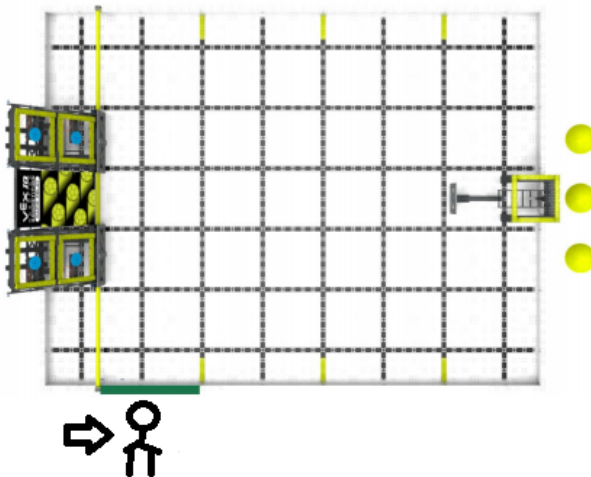
2427: Loading team member position

11-Jan-2025

G8

According to the rules, there is no restriction on the position of the loader. However, in the signing match of the China Asian Open that ended on January 1st, the referee kept asking our loader to stand in the pick-up area of the field,

1. Should QA or the on-site referee's regulations be followed? 2? Can the loader stand in the position shown in the picture?? [<G8>](#)



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Answered by committee

As described in rule [<G8>](#):

Note 2: Loaders are not restricted to the Driver Station, and may move around the Field freely.

2425: Setting Items Outside the Field Perimeter to mark location

9-Jan-2025

G8

[<G8>](#) As head ref I had a team setting a beam on the floor outside the field perimeter to mark where they need to line up their robot to make their shots. I cited [<g8>](#) as a rule not allowing them to bring items to the field to simplify the game. They argued that the item they had was like the pre-match alignment aid. I felt it was directly affecting their score and therefore was more significant than that. They removed the item.

Am I wrong to have had them remove the beam?

Answered by committee

Placing beams outside the Field Perimeter to mark ideal Robot locations during a Match falls under clause C of rule [<G8>](#), "Bringing/using additional materials to simplify the game challenge during a Match," and is not allowed.

You're not wrong. Teams should not be allowed to place or use these visual aids in any official Match, including Teamwork and Skills. Repeated / continued Violations may result in a Major Violation and Disqualification from the Match.

2423: hand gesture

8-Jan-2025

G8 RSC8

In autonomous coding skill drive, are we allowed to use hand gesture? For example, the driver/loader will not touch the robot, just hand gesture to interact with the sensors. The following rules did not say if driver can use hand gesture without touching the robot. Is hand considered as "any communication devices". Is hand gesture considered as "A team may handle their robot as many times as desired during an autonomous coding skill match"? Does the loader considered as "A team" since loader could also use hand gesture.

The rest of [<G8>](#), which states that Drive Team Members are not allowed to use any communication devices during their Match, still applies. [<RSC8>](#) Handling Robots during an Autonomous Coding Skills Match. A Team may handle their Robot as many times as desired during an Autonomous Coding Skills Match.

During an Autonomous Coding Skills Match, Drivers may move freely around the Field, and are not restricted to the Driver Station when not handling their Robot.

Answered by committee

Manually triggering sensors or activating any controls on the VEX IQ Controller is not allowed during an Autonomous Coding Skills Match, except during [<RSC8>](#) interactions (as described in [RSC8ai](#)).

Note: this answer was revised on January 16, 2025 to reference [RSC8](#) interactions.

2385: Ray-Ban Meta Smart Glasses

12-Dec-2024

G8

Is it permitted to use the recording feature of the Ray-Ban Meta Smart Glasses on the field during tournament play? We will provide side shields to comply with the safety glasses rule. [<G8>](#)

Answered by committee

<G8> clause A states that Drive Team Members are prohibited from bringing/using any sort of communication devices into the Alliance Station. Non-headphone devices with communication features turned off (e.g., a phone in airplane mode) are allowed.

Because Ray-Ban Meta Smart Glasses have communication and audio features that are comparable to earbuds or powered headphones, they fall under clauses A and D of rule <G8> and cannot be worn or used in the Alliance Station.

1930: Match load positions outside of field

4-Feb-2024

G8

<G8><G8>I am not addressing a specific rule as much as clarification on where the match loads are supposed to be placed before and during a match.

In the game description it shows the team match loads positioned inside the alliance drive stations. As an EP we have trained our field setters to place the baskets holding the match loads in the drivers station.

My students along with many other teams have been moving the baskets outside the drivers station in order to keep their bodies in the driver station while match loading. This is to make it easier to reach the robots as they are touching the match load bar.

My concern is that the students body partially leaves the drivers station to retrieve a triball to match load. Is this a violation? i do not want the students to continue to practice match loading in this manner and then suddenly go to state or World's and be told it is a violation.

Can we get clarification please?

Answered by committee

We believe our responses to [Q&A 1550](#) and [Q&A 1858](#) apply to your question. In general, if the Team, Match Load Triballs, and anything provided by the Event Partner to contain those Triballs remain along the field wall in front of their Alliance Station and not around the corner, this is likely legal. At many events, referees are positioned at those corners, and Teams may have to adapt slightly to provide space for them alongside the field.

1905: Headset for Non-Communication Purposes

28-Jan-2024

G8

<G8> States that Only Drivers, and only in the Alliance Station. During a Match, each Team may have up to three (3) Drive Team Members in their Alliance Station, and all Drive Team Members must remain in their Alliance Station for the duration of the Match.

- a. Drive Team Members are prohibited from any of the following actions during a Match:
- b. Bringing/using any sort of communication devices into the Alliance Station. Devices with communication features turned off (e.g., a phone in airplane mode) are allowed.

We would like clarification on what devices are actually allowed as we have come across discrepancies in its interpretation at different events. Below are a few device options we would like to confirm if they are legal for the drive team to use during matches:

1. Cell phone with airplane mode engaged paired with a wireless headset (e.g. airpods)
2. Cell phone with airplane mode engaged paired with a wired headset
3. MP3 player without communication functions connected to a wireless headset
4. MP3 player without communication functions connected to a wired headset

Our intention is not to use it as a communication device but a way to play music softly (still hear referees and team members, one ear only) as a personal calming measure that's very important for some.

Thank you.

Answered by committee

Note: The game manual update on April 2nd specifies that powered headphones, earbuds, and passive earpieces connected to electronic devices cannot be worn/used in the Alliance Station except as required by an officially approved accommodation request. The answer below does not apply to matches at the VEX Robotics World Championship.

The primary intent of <G8> is to prohibit these "coaching" communications from outside the Alliance Station. Provided that any communication features are disabled (e.g. phone in airplane mode), there is no rule prohibiting wired or wireless headphones used for personal music.

However, as noted in your question, this allowance assumes that proper measures are being taken to avoid any risks to safety or gameplay. For example, a Head Referee may ask that a student remove their headphones if they cannot hear verbal calls or warnings during a Match (as an application of rules <T1> / <G1> / <S1> / <G3>). Since there could also potentially be non-gameplay implications involved, it would also be within an Event Partner's purview (under <T4>) to place restrictions on personal headphone usage for all Teams.

1887: Switch control of controller between drive team members

22-Jan-2024

G8

<G8><G8> defined that drive team members can have 3 members during a game or skill. Suppose the drive team only uses one controller, can this controller pass to different person who is in the drive team members during the game or skill challenge?

Answered by committee

There are no rules preventing this, therefore it is legal.

1858: Further clarification of QA 1150 - where can drivers legally introduce match loads.

7-Jan-2024

S1 G8 SG6

<S1><G8><SG6>

In Q&A 1150 as to whether or not teams could leave their driver stations (which is diagrammed in figure 2) to do match loads, the answer left teams to believe that they could be outside of the drive station as long as they were in front of the field wall by the alliance station. Here is the quote they showed me from Q&A:

For the purposes of Match Load entry in Over Under Matches, Drive Team Members may introduce Match Load Triballs from any position along the field wall in front of their Alliance Station, but should not move around a corner of the field to access the area beyond the Match Load Zone. Teams should consider this limitation a constraint of the game, and should identify designs and strategies that allow them to safely introduce Match Loads within reach of their Alliance Station if placing them onto Robots.

Up to that point, I believed they had to stay in their alliance station and could reach over the wall in front of Alliance Station to match load.

Which is correct - allowed to step outside Alliance Station or not? (illustration using Figure 2 from Game Manual - at our events we leave a foot on each side of alliance station as Game Manual depicts in every illustration of Alliance Station so referee can safely see match loads)

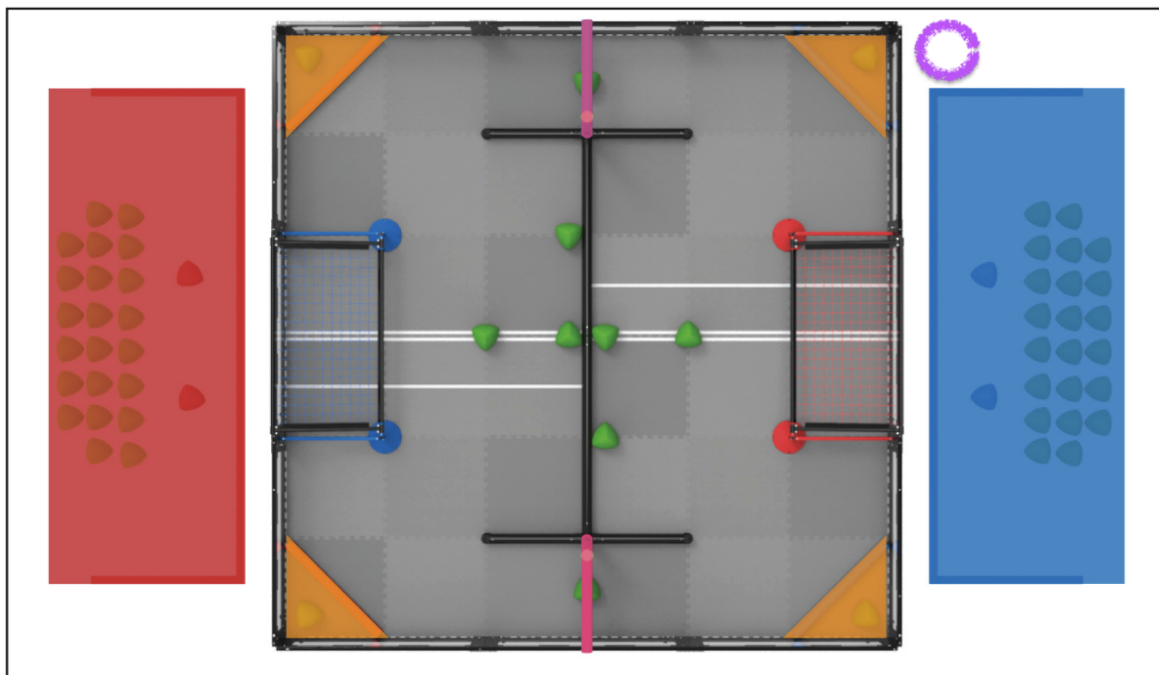


Figure 2: Top view of the field with highlighted Elevation Bars (pink), Match Load Zones (orange), Red Alliance Station (red) and Blue Alliance Station (blue).

Answered by committee

First - just to be clear / for future reference, we believe you are referring to [Q&A 1550](#), not 1150.

In Q&A 1150 as to whether or not teams could leave their driver stations (which is diagrammed in figure 2) to do match loads, the answer left teams to believe that they could be outside of the drive station as long as they were in front of the field wall by the alliance station.

Yes - that is a correct interpretation of the answer that was posted.

Which is correct - allowed to step outside Alliance Station or not? (illustration using Figure 2 from Game Manual - at our events we leave a foot on each side of alliance station as Game Manual depicts in every illustration of Alliance Station so referee can safely see match loads)

As noted in the answer to Q&A 1550, the game manual does not specify the exact size and position of the Alliance Stations, and we acknowledge that some events do not even mark any boundaries (e.g. venues with restrictions regarding tape on floors).

In most games / contexts, abiding by the intent of <G8> and <G9> is sufficient. Referees are not expected to be watching for every time a toe steps past a taped line on the ground, as long as Teams are generally in the correct location (i.e. not hovering over the wall, interfering with field controls, or sprawling past their side of the field).

However, due to the unique nature of Match Loading in Over Under, paired with the known leniency/inconsistency of taped Alliance Station lines, we found it necessary to provide a more explicit clarification for the intended boundaries of those specific Drive Team Members.

1841: Alliance zone borders during Skills

23-Dec-2023

S1 G8

In [Q&A 1550](#), it was stated that Drive Team Members were permitted to "introduce Match Load Triballs from any position along the field wall in front of their Alliance Station, but should not move around a corner of the field to access the area beyond the Match Load Zone" in "Over Under Matches".

However, there are some points for which we would like to seek clarification:

1. Does the ability to introduce triballs from any point along the field wall in front of the Alliance Station extend to Skills runs?
2. As long as the triball is being introduced along the field wall in front of the Alliance Station (crosses the plane over said field wall), can body parts of Drive Team Members such as legs be outside of the space directly behind the field wall as long as they do not go "around a corner"? For example, if a Drive Team Member is introducing triballs over the field wall in front of the Alliance Station but they are kneeling on the ground such that their legs extend horizontally past the edge of the field, would this be legal?
3. Since the Game Manual does not specify the exact position or size of the Alliance Stations, are events able to freely decide where the boundaries are?

Image for point #2: [img](#)

Purple dashed line is the extension of the side field wall, marking the edge of the space directly behind the field wall
Green lines are legs of a hypothetical Drive Team Member

Answered by committee

1. Yes.
2. This decision should be made by a Head Referee and/or Event Partner, primarily based on safety and the location of the field.
3. Figures 1 & 2 in the game manual--as well as sheets 1, 2, & 3 of 15 in Appendix A-- show the intended positions and general size of the Alliance Stations. While specific measurements are not provided, it is expected that those general locations and sizes are used at all events.

1739: Driving the Robot while one team member ("non-active driver") is outside of the Driver Station

1-Nov-2023

G8 G10 SG3

<G10><G8><G10> Allows for driver interaction with ("rescuing") the robot under certain circumstances. To do so, they must signal the Referee by placing their Vex IQ Controller on the ground. If the non-active driver is the one who leaves the Driver Station to "rescue" the robot, once the robot has been "rescued" and prior to the non-active driver returning to the Driver Station is the active driver allowed to pick up the Controller and start driving the robot? If not, when Blocks leave the field <SG3>, if the non-driver leaves the Driver Station to place a block that has left the field into the Supply Zone, is the active driver allowed to continue to drive the robot?

Answered by committee

Thank you for your questions! Based on the requirements in rule [<G10>](#) the active Driver can resume driving once their Robot has been returned to a legal starting position, providing the Driver switch is correctly made as described in rule [<G11>](#).

The active Driver may continue operating the Robot while the non-active Driver returns a Block to the field. Rule [<G8>](#) will be revised in an upcoming game manual update to correctly reflect that Drivers may leave the Driver Station to return a Block to the Supply Zone as per rule [<SG3>](#).

1710: Drivers returning blocks outside of the field to the supply zone

19-Oct-2023

G8 SG3

[<SG3><G8>](#)

SG3 states "Blocks that leave the Field during a match may be returned to the Supply Zone by a Driver or Referee." G8 states "Drivers must remain in their Driver Station, except when legally interacting with their Robot per <G10>." May a Driver leave their Driver Station to return a block to the Supply Zone? If yes, what actions do they need to take prior to leaving their Driver Station (i.e., signaling the Head Referee by placing their controller on the ground)?

Answered by committee

Please review the [Q&A Usage Guidelines](#) before posting, specifically point 2, "Read and search existing Q&As before posting." We believe that that our response to [Q&A 1704](#) answers your question. If it does not, please feel free to rephrase and resubmit.

1704: Clarification on Rule SG3

16-Oct-2023

G8 SG3

[<SG3>](#)

The update of Rule SG3 clears up my original question; however, I do have a follow up question. The rule currently says that if a Block leaves the Field, either the Driver or Referee can return it to the Supply Zone. I assume common sense applies, but for clarification, if the Driver is not allowed to leave the Driver's Station (Rule G8) and the Block falls out of the field on the opposite side of the field (out of reach), then the Referee would get the Block and either hand the Block to the Driver or place it back in the Supply Zone himself/herself?

Answered by committee

In this scenario, the Head Referee could permit the non-active Driver to leave the Driver Station and return a Block to the Supply Zone.

1703: Translator at Event and use of Translating apps

16-Oct-2023

G8 T17

Hello

I have a team that does not speak English. We have a translator lined up for them for when they are interacting with others out side of a match. During a match could the translator be near the team to translate? This would mean they are near the driver box. Also can students use an app on their phone to translate as long as it is in airplane mode? I see the translator their to help the students and adults to be able to communicate. As for student to student communication this would be done using a translation app or white board of some sort.

[<G8><T17>](#)

Answered by committee

Teams in need of accommodations should reach out to their REC Foundation regional managers via email. To identify your region's managers, visit <https://events.vex.com/support>. Clause A of rule [<G8>](#) allows Team members to use devices in airplane mode during a Match.

1698: Where is the Driver Station

13-Oct-2023

G8

Figure 2 has a orange colored line outside of the field but it is not labeled. Is this supposed to be the Drivers Station (DS). I was at an event where the DS was behind the perimeter where the robots start (between goals I and II). Is this a safe assumption?

[<https://content.vexrobotics.com/docs/23-24/viqr-fullvolume/online-manual/image/TopView-DS.png>]

(<https://content.vexrobotics.com/docs/23-24/viqr-fullvolume/online-manual/image/TopView-DS.png>)

[<G8>](#)

Answered by committee

Yes, the orange line in Figure 2 is the Driver Station.

1588: Regarding gloves on G8C

15-Jul-2023

G8

In rule [<G8>](#), clause C states that you may not bring materials that simplify the game challenge, although the note right under clause c states that personal belongings such as gloves or earplugs are allowed. With that being said, would it be legal to wear gloves that enhance grip when loading the match load triballs onto a robot? Thank you for your time, 1239E

Answered by committee

As stated in your question, clause C of rule [<G8>](#) specifically makes gloves legal for use during a Match. Per rule [<S1>](#), you should ensure that your actions don't damage Triballs. If a Head Referee determines that you've damaged a Triball (e.g., leaving residue, markings, or dents) you may receive a Disablement or Disqualification for the Match.

1550: Exception to <G8> during match-loading

15-Jun-2023

S1 G8

<G8> prevents leaving the alliance station during gameplay. However it would seem that encouraging leaning over an area of a field prone to defense would , and over lengths longer than the average arm length of a competitor would offer a contradiction via <S1>. Given this does <S1> take priority over <G8>, allowing teams to temporarily leave the alliance station to match load. Thank you for your time. 334V

Answered by committee

Thank you for your question. As specified in rule [<G8>](#), Drive Team Members are required to remain in the Alliance Station during a Match (except in situations permitted by the rules or by the season's official Q&A; for example, [Q&A 1520](#), which allows a Drive Team Member to leave the Alliance Station to interact with a Robot that has not moved during the Match). However, the game manual does not specify the exact size and position of the Alliance Stations, and events are not required to mark the boundaries of the Alliance Station.

For the purposes of Match Load entry in Over Under Matches, Drive Team Members may introduce Match Load Triballs from any position along the field wall in front of their Alliance Station, but should not move around a corner of the field to access the area beyond the Match Load Zone. Teams should consider this limitation a constraint of the game, and should identify designs and strategies that allow them to safely introduce Match Loads within reach of their Alliance Station if placing them onto Robots.

1547: Clarification on G8c

15-Jun-2023

G8

<G8c> prohibits use of any devices that "simplify[s] the game challenge during a match", with the exception of strategic aids, or personal accessories. This phrase is unclear. The following are two example devices with the intent to clarify whether they meet the GDC definition of "simplify the game challenge".

A simple mechanical mechanism, such as a ramp, that allows drive team members to legally load their robot more rapidly. Is this ever legal, if so in what situations is it not? Could this use legal vex electronics, could this use non-legal electronics?

A simple mechanism for teams to organize the match the loads amongst the alliance members, and for further storage, additional to any provided by the event. Is this ever legal, if so in what situations is it not?

Thank you for your time, 334V

Answered by committee

Thank you for your question. We believe our response to [Q&A 1538](#) addresses your question.