

ATHLETE INTELLIGENCE



CUE SPORT SENSOR User Manual

About Athlete Intelligence

Athlete Intelligence is a sports data and analytics company that creates actionable insights to help athletes reach their pure potential

By using our Athlete Intelligence Platform in tandem with innovative wearables, coaching and sideline staff can use in-game and practice data to:

-  Create Coachable Moments
-  Improve technique and skills
-  Aim to reduce the chance of injury

Stop Guessing, Start Monitoring

Since 2015, Athlete Intelligence has been on the field with some of the top teams and most prestigious research institutions globally, constantly looking at innovative ways to gather data, and communicate it in the most meaningful way to drive behavior changes in athletes leading to safer outcomes.

At Athlete Intelligence, we strive each day to elevate athletics. With a main goal of building better athletes, we accomplish this by providing Coachable Moments allowing staff to manage safety, improve technique, and enhance performance. Using integrated technology, athletic staff, for the first time, has an objective view of what happens during games and practices to better analyze and adjust player behavior.

It is recommended to read the user manual thoroughly prior to use. If you need any assistance at all, please contact our Customer Support Team directly at (425)372-7811 or by e-mailing support@athleteintelligence.com

Table of Contents

Athlete Intelligence Overview

Getting Started

Athlete Intelligence Platform

 Athlete Intelligence Web Platform Icons

 Player Management

 Team Management

 User Accounts

 AI Sport Mobile App

CUE Sport Sensor Set-up

 CUE Sport Sensor

 Provisioning CUE

 Assigning to an Athlete

 Data Syncing

 Helmet Placement

Frequently Asked Questions

Getting Started

Prior to using your CUE Sport Sensor, please follow the below steps to properly set-up, update to the newest firmware, and assign your device to an athlete(s) and team(s).

Please make sure you first followed the prompts from our 'Welcome' e-mail and have successfully created your account, a team, and athlete(s). ***If this step has not been completed, please note you will not be able to assign a device to an athlete in the mobile app if a team or athlete has not been created.***

iOS Set-Up

1. From the iOS App store, search and download both, '**ai sport app**' and '**ai firmware.**' ***Please note ai firmware will only need to be run as a background app.***
2. Using the credentials created for the online portal, login to the **ai sport app**
3. Either follow the in-app prompt upon initial login or click on admin>provision CUE.
4. From the provision CUE page, click **Scan** or scroll the screen down to refresh the page until **unknown CUE** appears. Select the CUE you would like to connect to. **NOTE: you can identify which CUE you have connected to by watching the CUE and seeing three blue lights flash.**
5. Continue with the in-app prompts to update firmware and assign to athlete.

Android Set-Up

1. From the google play store, search and download the '**ai sport app**'
2. Using the credentials created for the online portal, login to the **ai sport app**
3. Either follow the in-app prompt upon initial login or click on admin>provision CUE.
4. From the provision CUE page, click **Scan** or scroll the screen down to refresh the page until **unknown CUE** appears. Select the CUE you would like to connect to. **NOTE: you can identify which CUE you have connected to by watching the CUE and seeing three blue lights flash.**
5. Continue with the in-app prompts to update firmware and assign to athlete.

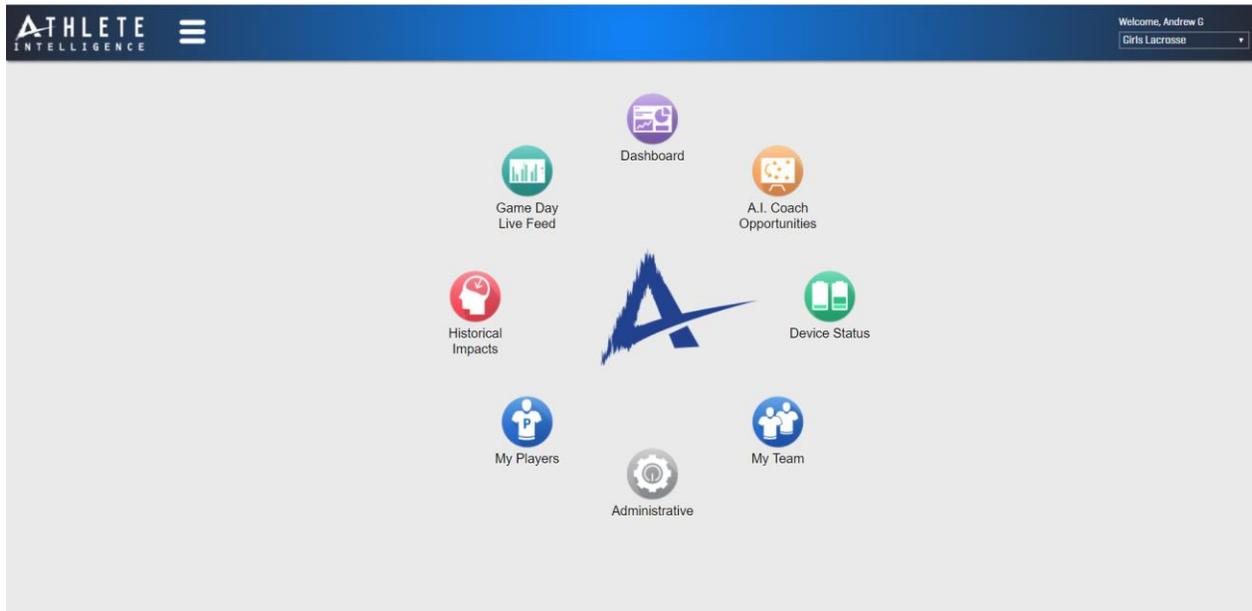
Athlete Intelligence Platform

The Athlete Intelligence Web Platform is the website you will use for account, team, and player management. All player impact data and analytics are located within the AI Web Platform, which is accessible from any computer.

To login to the [AI Platform](http://www.AthleteIntelligence.com), select “Log In” on the upper right-hand corner of the Athlete Intelligence website (<http://www.AthleteIntelligence.com>).



Athlete Intelligence Web Platform Icons



Dashboard

View unique player and positional impact data reports for your team to analyze trends, patterns, and behaviors experienced by your athletes.

A.I. Coach Opportunities

View the Athlete Intelligence Coachable Opportunities for your team, empowering coaches to use the data to drive change in athlete behavior.

Device Status

View your device battery levels (*For MouthGuard use only*).

My Team

Edit and customize your team info, mobile alerts, and import roster

Administrative

View and edit your account, manage users, access tools, export impact data, and view full account settings

My Players

Add, edit, and view players for your team

Historical Impacts

Access all impacts for your team from any customizable date range

Game Day Live Feed

Today's impacts – access all of today's impacts and today's alerts here

Player Management

Players can be created, edited, and removed from the **My Players** tab on the AI Platform. Once a player is created, you may assign a device to start receiving impact data for that player.

Changing a Player's Team

To assign an existing player to a different team in your account, select Edit Player on the desired athlete. In the Edit Player page, click on the team drop box on the upper right-hand corner. Select the team you'd like to change the athlete to.

ATHLETE INTELLIGENCE

Welcome, Andrew D
A.I. Football

Edit Player

First Name: * Chris
Middle Name:
Last Name: * Jenkins
Birthdate: * 01/27/1995
Birth City: Edmonds
Birth State: Washington
SSN (Last 4): * 0000
Email:


Weight: 215
Neck Size (in.): 0
Gender: Male
Custom Threshold (g):
Device(s): [Edit Devices](#)
Equipment: [Add Equipment](#)
Team: * A.I. Football
Jersey: * 57
Primary Position: Linebacker
Other Position(s): [Edit Secondary Positions](#)
Active Team:

[Upload Image](#)
* Required Field

[Cancel](#) [Save](#)

Current Selected Positions:
Primary: Linebacker

Current Selected Devices:
SN: 6EP3 - VID: Cue-F557E5AD4051A7AB - Cue

Select Additional Teams

Player not currently in team: A.I. Lacrosse
Do you like to add this player to A.I. Lacrosse ?

[Yes](#)
[No](#)

Active Team

When you have an athlete assigned to multiple teams, it is important you select the Active Team checkbox for that athlete. Under Edit Player, you'll see the Active Team icon. When the box is checked for that specific team, the impact data will go through for the correct team and not the other team the athlete is assigned to.

Active Team: ⓘ

Team Management

Within your Athlete Intelligence account, you may create as many teams as you'd like with a variety of different sports and levels in the AI Web Platform. Upon creation of your account, you must select the dropdown menu on the upper right-hand corner to "Add a Team." Teams may always be changed and added from the Team Select dropdown menu.



Team Info and Thresholds

When creating or editing teams in the AI Platform please fill out the appropriate information regarding team info and impact thresholds.

The screenshot shows a form for creating or editing a team. The fields are as follows:

- Team Name:** * (Required) Text input field containing "Varsity Football".
- Team Type:** * (Required) Dropdown menu with "Football" selected.
- Sub Team Type:** Radio button options: Professional, Varsity (checked), College, Junior Varsity, High School, Junior High School, and Junior.
- Thresholds:** Six dropdown menus with values: Viewable Threshold (g): 15, Mobile Viewable Threshold (g): 50, Alert Threshold (g): 90, High G Count: 3, Time On Field: 30, and Top of Head Count: 3. Each dropdown has an information icon (i) to its right.
- Buttons: "Add Team" and "Cancel" (both in blue rounded rectangles).
- Footer: "* Required Field" in red text.

Team Type – *Sport*

Sub Team Type – *Level*

Thresholds

Viewable Threshold (g) – *Lowest possible impact visible*

Mobile Viewable Threshold (g) – *Lowest possible viewable impact on AI Sport app*

Alert Threshold – *Significant impacts that will send alerts/notifications*

Secondary Alerts

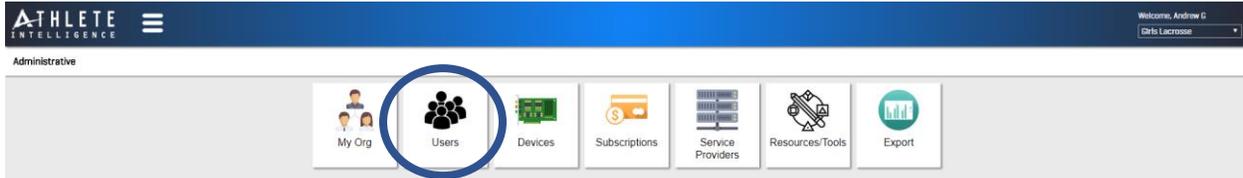
High G Count: alert when athlete sustains this amount of impacts above alert threshold

Time on Field (Vector Mouthguard Only): *alert when athlete has accumulated this amount of time on the field or ice that day*

Top of Head Count: *alert when athlete has taken this amount of top of head impacts*

User Accounts

The Athlete Intelligence Platform allows the creation of multiple users for accounts with various role types. To add, edit, and remove users go Resources/Tools > Users in the AI Platform.



Role Types and Permissions

	Impact Data	Account Management	Team Management	CUE Setup	Player & Team Edit	Battery Status
Admin	✓	✓	✓	✓	✓	✓
Team Admin	✓		✓		✓	✓
Device Monitor						✓
User	✓					✓

Removing Users

To remove a user from your account, select “Edit User” on the desired user and check the “Hidden” box on the bottom of the window. After checking the box hit Edit to save and this user will remain removed.

AI Sport Mobile App

The AI Sport mobile app is the application used for running the CUE Sport Sensors live in real-time. AI Sport is available on all iOS and Android devices in the App Store and Google Play Store.



AI Sport gives you access to the detail of all of today's impacts, as well as player and device management.

Gather Impacts

When running the CUE Sport Sensor in "Offline" mode, you must gather the impacts when the CUE(s) are charged and within range. To gather impacts off the CUEs, navigate to Admin>Gather Impacts. Select the CUE to pull impacts off the device and into your account.



Device Status

To see your battery status of the CUE Sport Sensor, navigate to Admin>Device Status. The battery percentage of your devices(s) will appear in the right column, as well as the last time the CUE transmitted data to your mobile device. Please take note of the last time the CUE connected with your mobile device to ensure if the CUE actively connected.



Impact Evaluation and Symptoms Checklist

Directly within AI Sport is the Post Impact Checklist and impact detail pages. Under the Impacts tab you can select any individual impact to view hit severity, location, and time. Select the clipboard and you may run a post impact symptoms checklist.



Post Impact Checklist:

Nausea?

Headache?

Blurred vision?

Ears ringing?

Loss of memory?

Loss of consciousness?

Disorientation or confusion?

Balance or motor incoordination?
(stumbles, slow/labored, etc.)

CUE Sport Sensor Setup

The CUE Sport Sensor device must be setup on AI Sport and assigned to an athlete before use. Prior to using your CUE, you must setup your account, create a team & athlete, and download AI Sport.

Provision CUE (Adding a device)

To add your CUE Sport Sensor to your account, you must provision the sensor within AI Sport. Navigate to Admin>Provision CUE to pair and update your CUE Sport Sensor. Scan for CUE's to update and select the CUE you wish to pair with. Follow the in-app instructions to flash your device and add it to an athlete.

Assigning CUE Sport Sensors – AI Sport App

Select the Players tab on the app and select the athlete you wish to assign the sensor to. Select Assign Devices and choose the sensor you wish to assign.

Assigning CUE Sport Sensors – AI Web Platform

On the AI Web Platform, go to My Players and select the athlete you wish to assign the sensor to. Click "Edit" and "Edit Devices" to assign the available sensor to the player.

Data Syncing

The CUE Sport Sensor is designed to work in two different modes, Online Mode and Offline Mode. Online Mode will operate in a live data transfer where Offline Mode (post event) will act in a data download function after collecting data in the form of play.

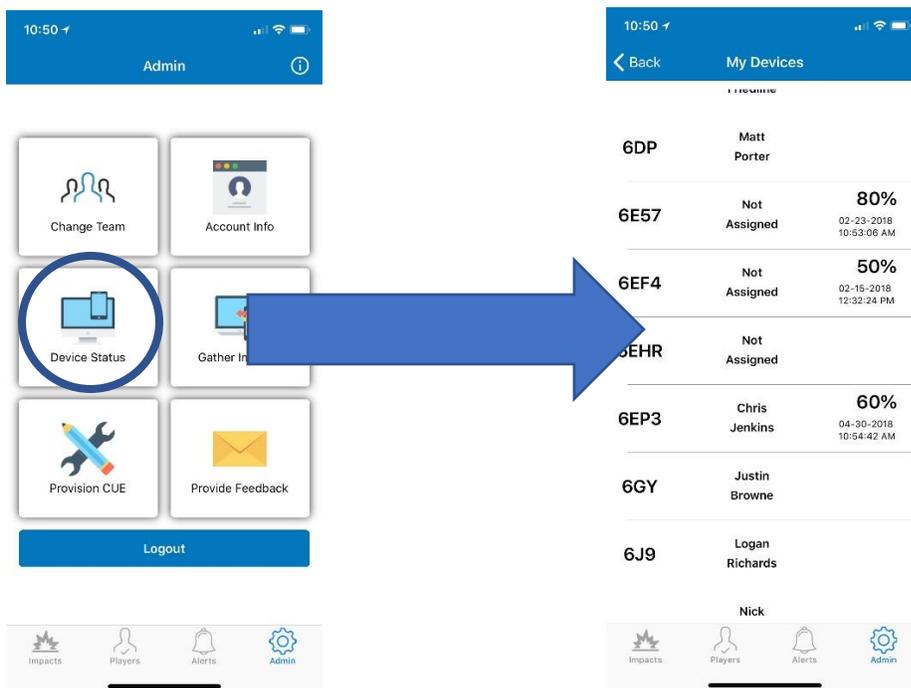
Depending on which mode (online vs offline) you decide to use will determine what information and notifications you will receive. To ensure optimal use of the Athlete Intelligence Platform and mobile app, it is always recommended the devices are used in online mode with internet connectivity.

Mode	Impact Severity Alert (team)	Impact Severity Alert (individual)	Impact Count Alert	Battery Charge Status	Top of Head Impact Alert	In-App reporting
Online	✓	✓	✓	✓	✓	✓
Offline						✓

Online Mode

When using your CUE Sport Sensor in online mode, your impacts will automatically be sent to the mobile device. **You will want to make sure you are logged into your mobile application for the data transfer and alerts to function.**

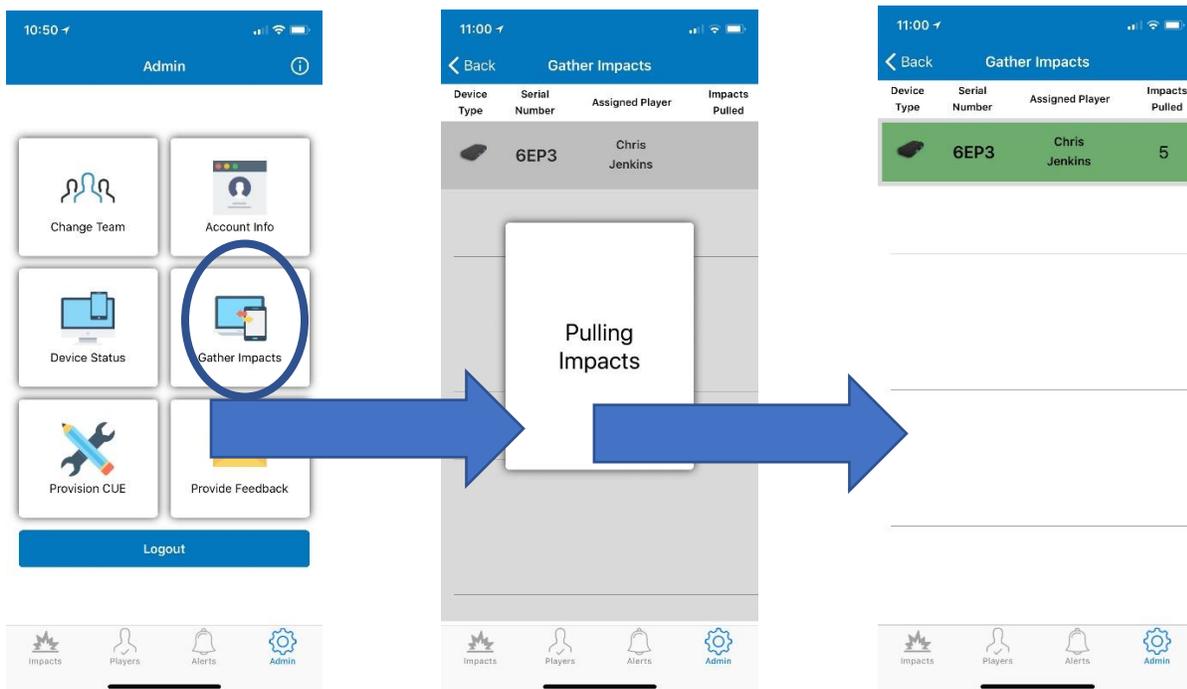
To verify your connectivity between the mobile application and your CUE Sport Sensor(s), go to **admin > device status** and you will notice the devices currently active.



Offline Mode

When using your CUE Sport Sensor in offline mode, you will need to manually connect to each device to pull stored impacts off.

To pull your impacts off the CUE Sport Sensor, go to **admin > gather impacts**, and select the device you would like to gather impacts from. Once complete, you will see the device highlighted in green to signify all impacts have been gathered.



Time Syncing your CUE

It is very important to make sure your CUE stays charged and is synced to your smartphone regularly. Like an alarm clock, when CUE loses power, it also loses its time. If your CUE battery dies, **please sync your device before using it in gameplay**

First, make sure the CUE has power. Then shake it to wake it up. There are two different ways of syncing your device with the AI Sport mobile app to regain the CUE's time:

1.) On AI Sport, go to Admin. Select “Gather Impacts” and select the CUE you wish to pair with. If it pulls 0 or more impacts the device is properly synced and has regained its time.

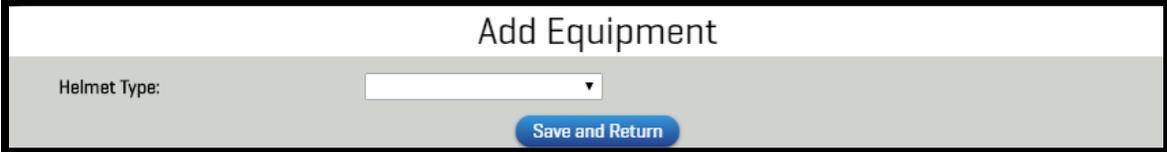
2.) You may also sync your CUE under Admin, “Device Status.” Drag the page downwards to refresh it and check the battery status to see if it has been synced.

Helmet Placement

The installation and placement of your CUE device plays an important role in the accuracy of data collected. The below section will help outline CUE orientation by helmet design.

When mounted in a helmet, always ensure the CUE LED lights face towards the athlete's right ear

For optimal performance, CUE should be mounted in the interior of the helmet between the pads, typically on the top, middle area of the helmet. Depending on your helmet make and model, however, the CUE application can vary. It is important to select your helmet type for your athlete on the AI Platform “Edit Player” page and follow the instructions given.



The image shows a screenshot of a web form titled "Add Equipment". Below the title, there is a label "Helmet Type:" followed by a white dropdown menu with a downward arrow. At the bottom right of the form, there is a blue button with the text "Save and Return".

Once you have selected your helmet type you're ready to apply the mounting bracket:

- 1. Apply the Velcro hook (rough) end to the bottom of the CUE mounting bracket**
- 2. Apply the loop (soft) adhesive in between the pads inside the helmet**

- Depending on the helmet make and model, the CUE will be calibrated differently.

Riddell Speed



Back of Helmet

Front of Helmet

CUE Clip faces from back of helmet to front of helmet.

CUE Sport Sensor will slide into clip so the LED lights aim towards the athlete's right ear.

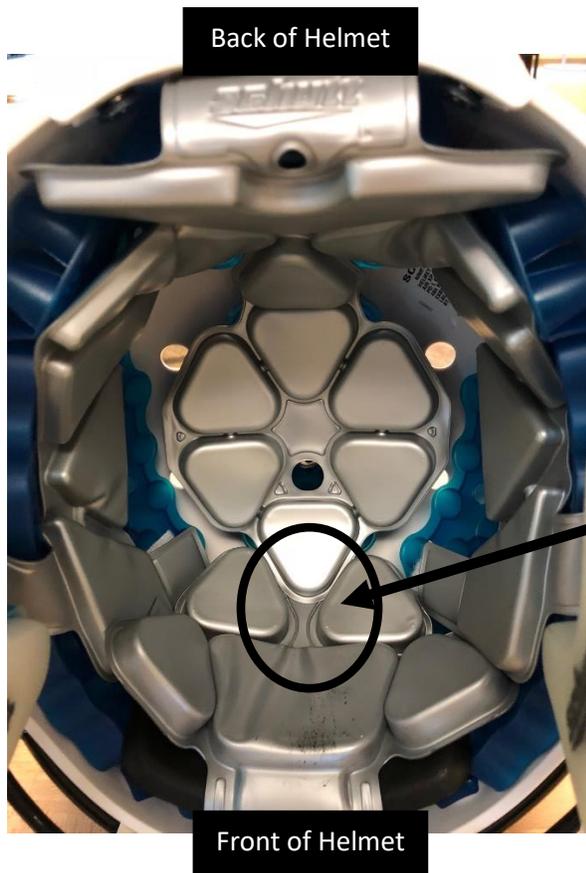
Riddell SpeedFlex



CUE Clip faces from back of helmet to front of helmet.

CUE Sport Sensor will slide into clip so the 'C' is towards the helmet facemask and the LED lights aim towards the athlete's right ear.

Shutt Air XP Q10



The CUE Clip faces from back of helmet to front of helmet.

The CUE Sport Sensor will slide into clip so the 'C' is towards the helmet facemask and the LED lights aim towards the athlete's right ear.

Frequently Asked Questions

Q: *My player received impacts, but they do not show up in the app under, "Today's Impacts."*

A: The impacts we highlight in the mobile app are only those that occur above the viewable threshold. If you would like to see all impacts, you can customize your *mobile viewable threshold* in the Athlete Intelligence Web Platform > My Team > Edit Team Info. Adjusting viewable threshold will allow you to view all impacts over a pre-set g-force.

Q: *I see I am gathering impacts, but I do not see them in the mobile app or Athlete Intelligence Web Platform.*

A: The CUE receives its date and time when it syncs with a mobile device, so in the event a CUE device loses battery charge, it must be re-synced with a mobile device to regain the correct date and time. You can re-sync by going into admin > gather impacts > and select the CUE device you would like to connect to.

Q: *I just set up my CUE and tested impacts. Why am I not seeing impact data?*

A: It may take up to 15 minutes after set-up for the CUE device to sync with mobile and sync with our Cloud storage. You can verify the CUE device has been properly set-up by going to players, and selecting the player you assigned the device to. Under devices, you should see the 4-digit serial number. If you do not see a serial number, the device has not yet synced.

Q: *I just saw an impact occur, but did not get a mobile alert, why?*

A: This can be one of a few reasons. 1) The impact was too low of a force and below the mobile viewable threshold, 2) make sure your *location settings* are turned on to 'always' for AI Sport. You can double check this by going to your phone settings > scroll to AI Sport App > Location Settings, and set to "Always", 3) The device might be out of battery and 4) The device could be out of range momentarily. Once the CUE is back in range, you will receive the impact notification(s).

Q: *Will I be able to view impacts in offline mode?*

A: Yes. In the event a mobile device is not present during practice or game, the CUE will store impacts and can be downloaded following. To download the impacts, login to the AI Sport mobile app > Admin > Gather Impacts, and select the athlete you would like to gather impacts from.

Q: *I have received my CUE, how do I mount it to my helmet/headband?*

A: Mounting is based on sport and helmet type. You may review mouthing and fitting instructions by visiting the Athlete Intelligence Web Platform > Administrative > Resources and Tools.

Q: *How often should I charge my CUE?*

A: We recommend you charge your CUE when not in use. If the battery is dead during competition, it will not store any impacts. When charging, it is recommended that you use a wall charger for quicker charging times.

Q: *How do I reassign my CUE to a different athlete?*

A: You may do this one of two ways either through the mobile app or the Athlete Intelligence Web Platform. On the Athlete Intelligence Web Platform, go into "My Players" and select the player that is currently associated with the CUE. In the player profile, go to "Edit Devices" and uncheck the box next to your current CUE Device. Then, go into the new player's page, "Edit Devices," and select the CUE that you unassigned from player 1. In the AI Sport mobile app, go to "Devices" select the device you would like to assign, then go into, "My Player," and assign the CUE to the new player. *Please note that it may take up to 15 minutes to process this change and update the server.*

Q: *I added a CUE to my player, but when I reopen "My Players," my CUE doesn't appear as a connected device.*

A: It may take up to 15 minutes for the device to sync with the mobile app and the Athlete Intelligence Web Platform. If the problem extends past the 15-minute mark, log out of the AI Sport Mobile App, then log back in. You should now see the CUE device assigned to the athlete under "My Players."

Q: *When I went to gather impacts, the amount of impacts received displayed N/A.*

A: Your CUE may have momentarily dropped out of Bluetooth range of the phone. If your CUE is nearby, and you are still seeing N/A, turn off your phone's Bluetooth, wait ten seconds, and turn it back on. Then, press "Gather Impacts" and your impacts will be displayed.

Q: *When I gather impacts from my CUE device in the mobile app, the number of impacts collected does not match the number of impacts displayed in "Today's Impacts". Why?*

A: Your CUE device is designed to gather and store all valid and invalid impacts when in use. When using the 'Gather Impacts' function, it will transmit every impact on the device, but only display the valid impacts.

Q: *My CUE is giving me a solid blue light, what do I do?*

A: When you see a solid blue light, it typically means the CUE device is attempting to send an impact and has timed out. To fix, use a magnet and run it over the engraved top of the CUE device. Then close out of the AI Sport App, reopen, and gather impacts.