

MEMBER OF



# Incident Data Recorder Policy

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Version #2

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## The IDR Programme

Motorsport Australia has recently implemented an Incident Data Recorder (IDR) programme. This programme is placing 500 FIA IDR units in automobiles around the country so that Motorsport Australia can start gathering more impact data from incidents.



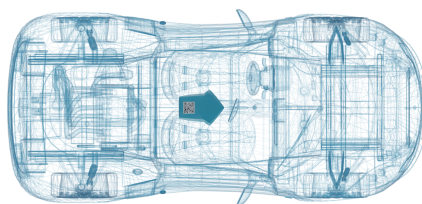
## Distribution of devices

IDR units will be delivered to selected competitors at events, initially at no cost. Motorsport Australia will provide enough IDR's to selected event organisers, who will organise for these units to be fitted to competitor automobiles. The event organisers will return to Motorsport Australia any unused IDR's along with a list of competitors who have had IDR units fitted to their automobiles.

## Installation

The IDR units come with detailed instructions on how to install the IDRs, but in short, the installation process is as follows:

1. The IDR itself comes with a self-adhesive backing, and the competitor peels off the backing sheet and sticks the IDR on the floor of the automobile with the arrow facing forwards. Commonly the IDR will be installed in the middle of the automobile, on the transmission tunnel between the front seats. It must be possible to see the barcode on the IDR for downloading.



2. After the IDR is installed in the automobile, it will need to be activated. The IDR activation is completed using the IDR mobile app, which is available for Android or Apple phones. Instructions on this process are also provided in the IDR kit supplied with each unit. It is worth noting that the IDR unit will still work even if it is not activated, but activation will make the process of retrieving data from an IDR much simpler.
3. The IDR kit also comes with an "IDR INSIDE" sticker inside. It is mandatory for this sticker to be adhered to the main hoop of the safety cage on the driver's side in a prominent location. This sticker will act as a reminder for officials and competitors that there is an IDR inside the vehicle, and to download the IDR whenever an incident occurs.



## When to download?

An IDR must be downloaded when there has been:

- An on-track incident when a driver has been injured and taken to hospital.
- An on-track incident where the automobile is severely damaged.

A damaged automobile at a Circuit will commonly be taken to the scrutineering bay after any significant impact. In these instances, this is where the IDR should be downloaded.

In Offroad and Rally events, an automobile involved in an incident might return to the service park. Where that occurs, the competitor must alert the Chief Scrutineer so that the IDR can be downloaded. If the automobile is not returned to the service park, then the competitor may be contacted and be required to download the IDR.

There is no cost to downloading the data from an IDR, and it takes only a short time to complete the process. If you are unsure about whether to download an IDR or not, it is always worth performing the download. There will be no issues if we receive IDR data that we did not end up needing, so it is always worth downloading the IDR if you are not sure.

## How to download?

The IDR unit is part of a system that includes a secure access officials' mobile application, allowing impact data to be downloaded from the IDR by officials. The downloaded data is stored securely on a cloud server and then distributed to Motorsport Australia.

The App allows the official to not only download the impact data, but also submit supplementary information such as: driver details; automobile details; incident photographs and additional information. Only the download of the data and one photo (of the automobile) is mandatory.

In the background the app timestamps the report and records the geolocation of the incident.

The reporting functionality offered by the app allows Motorsport Australia to gain a better perspective of every incident through more thorough reporting and accompanying impact information, all being held in one database.

More detail for officials is available in this document:

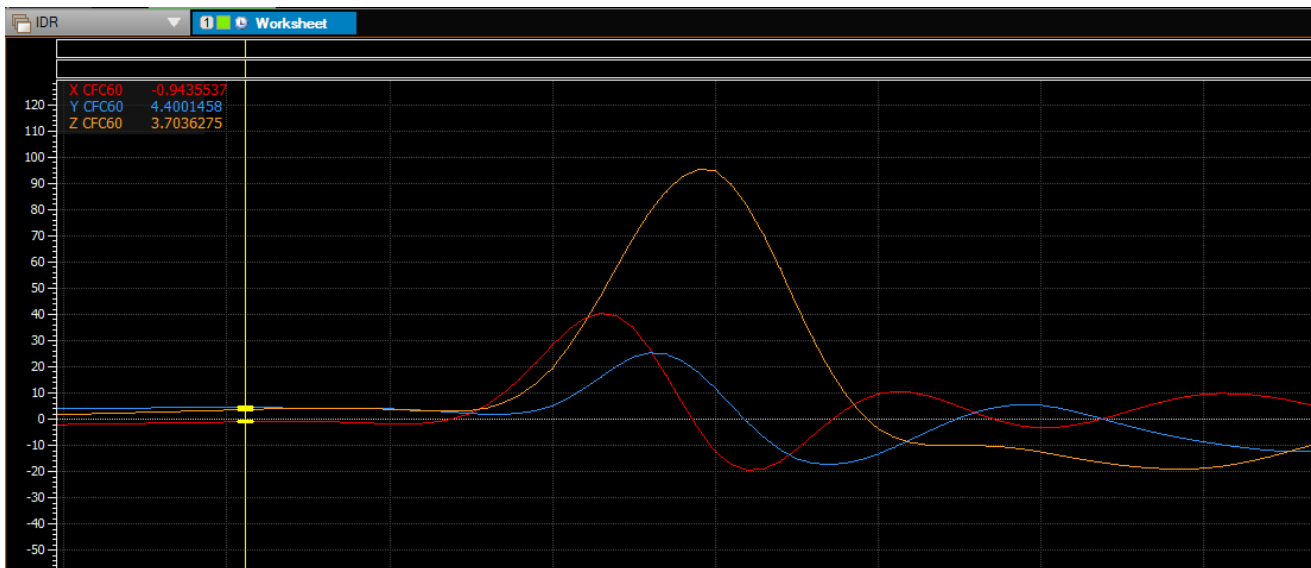
<https://impactdetect.com/wp-content/uploads/2022/08/FIA-IDR-Officials-App-Guide1.2022.pdf>

To be issued an IDR Officials Password, please email your request to:

[riskandsafety@motorsport.org.au](mailto:riskandsafety@motorsport.org.au)

## What data does the IDR record?

This FIA Incident Data Recorder is a low-cost incident data recorder. As such, it does not require external power to work, nor does it require a connection to the vehicle. The only data recorded by the IDR are the forces applied to the sensor, measured in all 3 Axis. Here is an example of the data recorded by an IDR:



In this image, you can see the recorded X, Y and Z forces from an impact being displayed. These three channels are the only channels recorded by an IDR.

## Who should download an IDR?

It would generally be the chief scrutineer who downloads the data from an IDR at an event. The chief scrutineer should decide whether an automobile should have its IDR downloaded and then perform the download. If the chief scrutineer is unavailable to download the IDR, then any official with the IDR software and official's login may download the data. All downloaded IDR data ends up with Motorsport Australia, therefore it is not important which official downloads the IDR.

At times, it may be necessary for a competitor to download the IDR. In this instance, Motorsport Australia will provide a user ID and Password to the competitor to complete the download.

If the data from an IDR is required, but there is no one available to download the IDR, then the IDR may be removed from the vehicle, and shipped back to Motorsport Australia for downloading.

## What do we do with the data?

The data that comes from the IDR is transferred to the FIA database as part of the upload process. When the data arrives at the FIA database, a copy of this data is sent to Motorsport Australia.

This copy of the data is added into the Motorsport Australia incident system, and later into the Motorsport Incident Database.



## How long should I leave an IDR in my automobile?

An IDR is designed to stay in the one automobile for the full life of the IDR unit. Once installed, the IDR should remain in that automobile for the full 2-year life of the unit. If an IDR is removed from an automobile, damaged, or lost, then a replacement unit may be required to be fitted by Motorsport Australia at the automobile owner's cost.

## When should an IDR be replaced?

An IDR should last for 2 years from the time of installation. As there is no simple way to check the battery level of an IDR, they should be replaced every two years regardless of how often the automobile may have been used.

It may also be necessary to replace an IDR if the QR code can no longer be read. The QR Code is the only way to access an IDR and without it the unit becomes unreadable. Due to the importance of the IDR QR code, an IDR should never be cleaned with any solvents or petrol. If cleaning of an IDR is required, only water should be used.

If an IDR has been physically broken or involved in a fire, then the unit should be replaced. The units are quite robust, but it is possible to break them under the wrong circumstances.

If any IDR needs to be replaced, the automobile owner must email to [riskandsafety@motorsport.org.au](mailto:riskandsafety@motorsport.org.au) for a replacement. The replacement units will eventually be charged for, although the cost of a replacement unit is yet to be determined.