



EDR TOOL

Technical documentation for reading Emergency Data Records from Airbag Control Unit in

RIMAC-NEVERA[®]

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1 GENERAL INFORMATION

1.1 PURPOSE

Purpose of this technical documentation is to explain in detail on how to read Emergency Data Records that are stored in Airbag Control Unit during a crash event.

The documentation is useful for understanding the basics. If at any time you have any concerns, please refer to the Continental manuals or consult with the author of this documentation.

1.2 SCOPE

1. Equipment (Hardware)
2. Software (EDR-Tool "Program")
3. How to connect with laptop to the vehicle using OBDII port and making sure everything is valid.
4. Reading EDR data
5. Exporting EDR data

2 Technical documentation

2.1 What is EDR?

2.1.1 Emergency Data Recording

- Emergency Data Records is stored vehicle data in the time of crash. It acts and behaves like a black box in the aircraft industry. The point of this is to trace back what happened in the time of crash.
- EDR data is accessible with and OBD2 port reader (Mandatory by homologation).

2.2 Equipment (Hardware)

1. Airbag Control Unit



Figure 1 ACU Correct Hardware

- This is the Airbag Control Unit that you'll be reading EDR data from.
- You could check the serial number of hardware with the Software tool mentioned in this documentation and later match it with serial number on the top of the physical hardware.

2. Vector Canalyzer or any similar CAN tool



Figure 2 Vector Canalyzer

- You'll need this device so you can connect to the CAN network or to the OBD2 port.

3. OBD2 to DB9 adapter



Figure 3 OBD2 to DB9 adapter

- You'll have to use this adapter if you have any of the CAN related tools as mentioned in point 2.

2.3 ACU EDR TOOL

1. Download the tool from this location: *(insert location)*
or
Use the online EDR tool: *(insert location)*
2. Connect your EDR reading device to OBD2 port on the vehicle.
3. Start "Bugatti Rimac EDR Tool" program. (Check the images below)
 - a. Select the Interface you are using;
 - i. Vector XL
 - ii. Peak USB
 - iii. NI-XNET
 - iv. Kvaser
 - b. Select the channel you are connected to on the Interface.
 - c. Read EDR data
 - d. Your data is ready
 - e. Export to PDF
 - f. Read PDF exported data

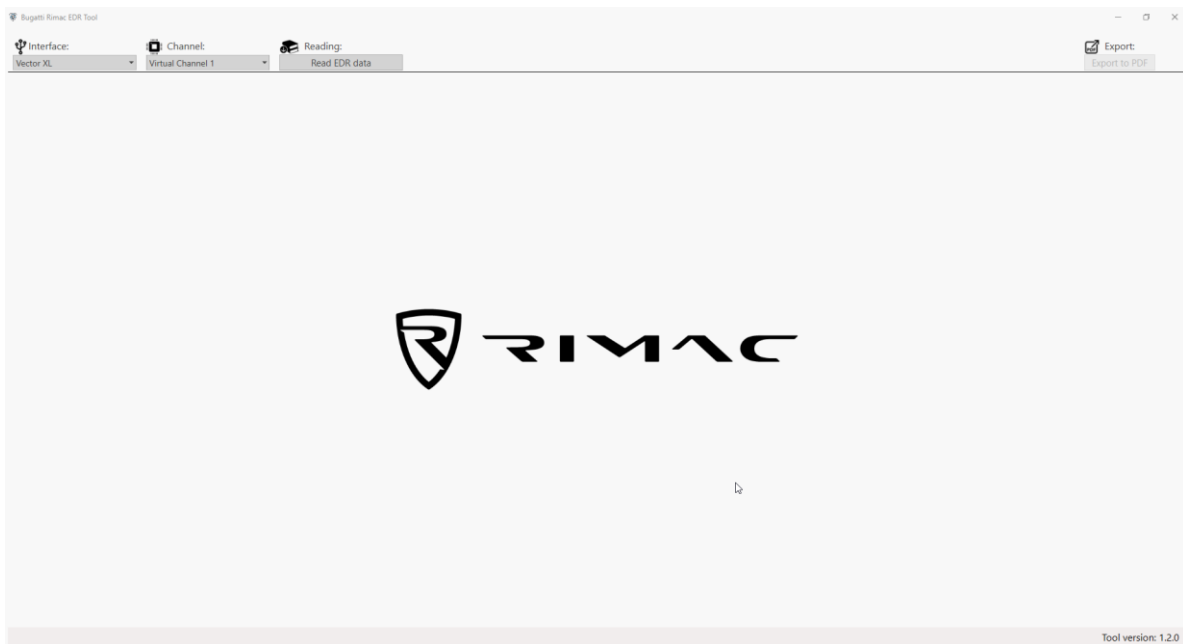


Figure 4 Start the BR EDR tool program

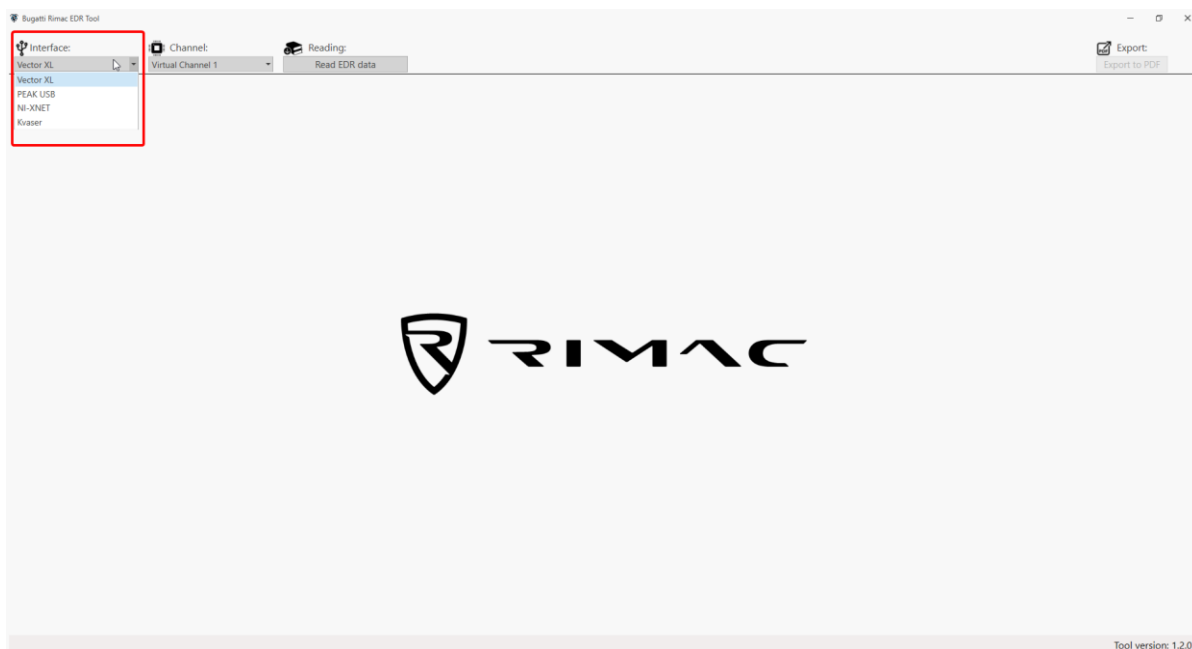


Figure 5 Select Interface

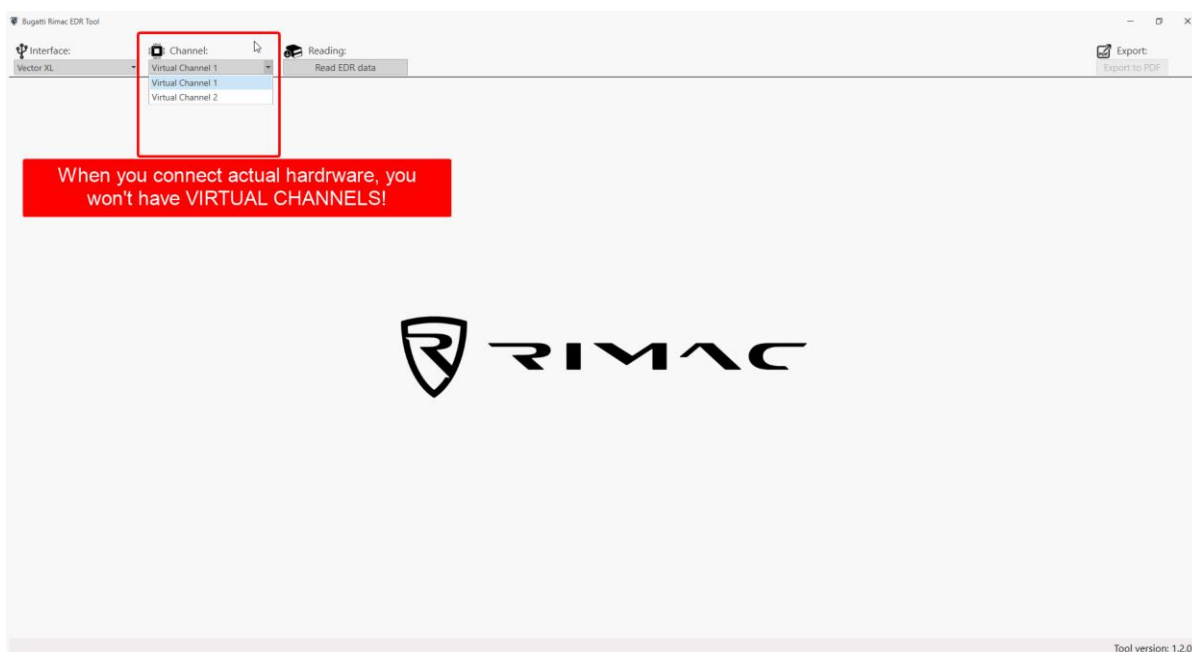


Figure 6 Channels

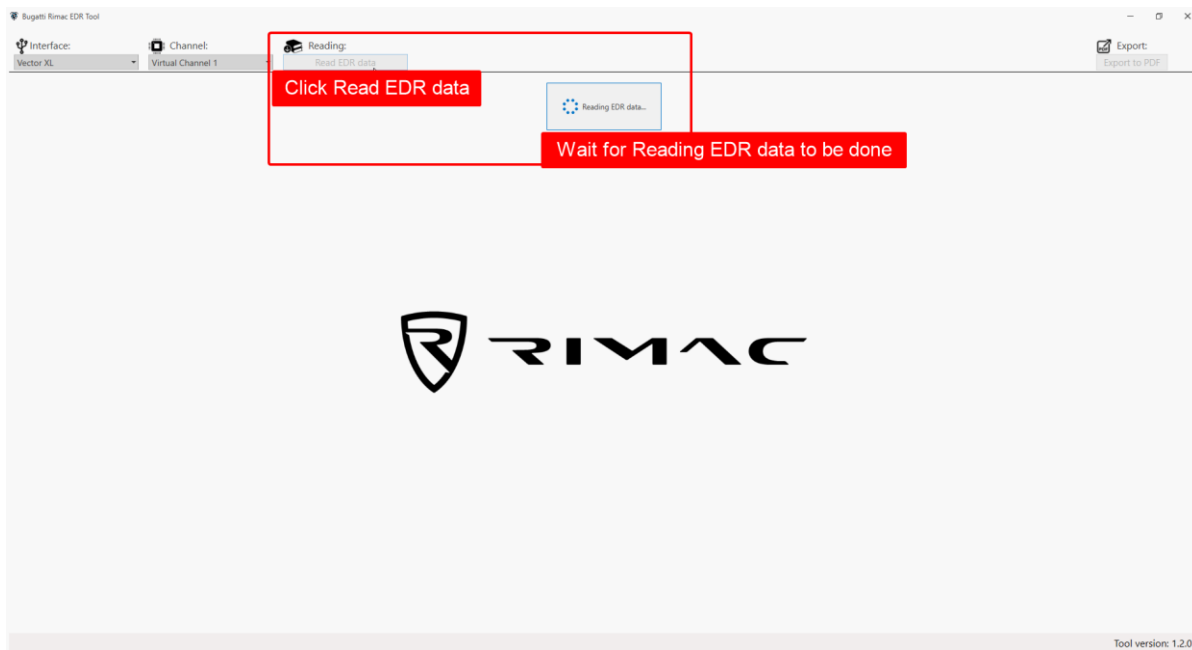


Figure 7 Read EDR data

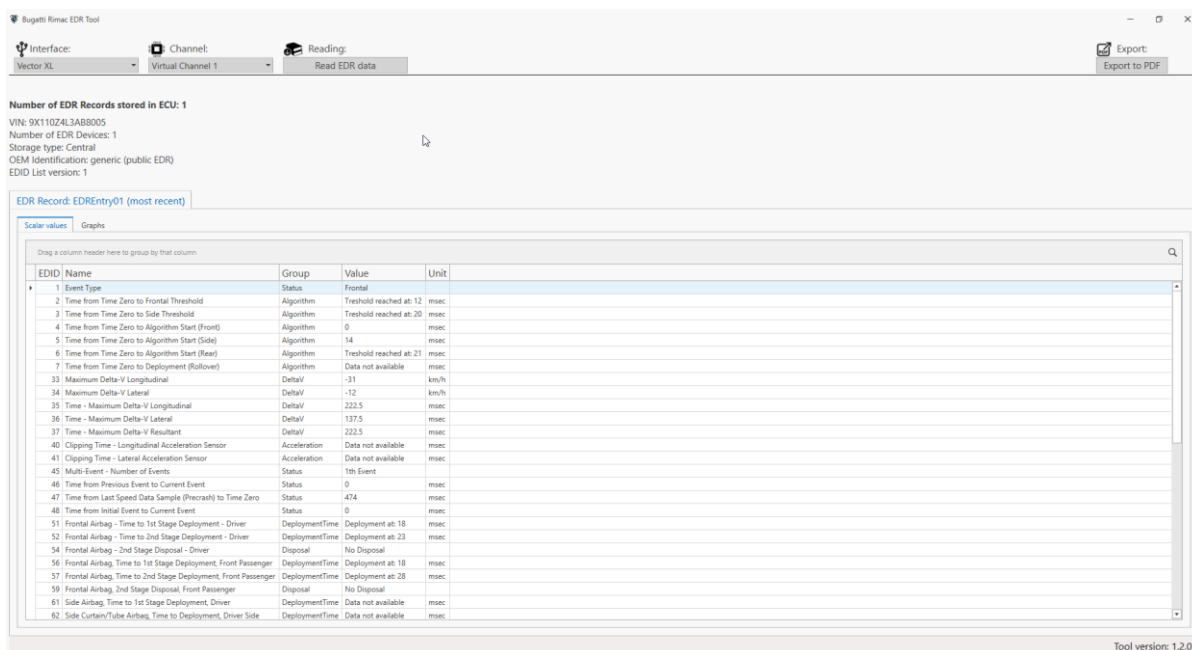


Figure 8 Data is Ready

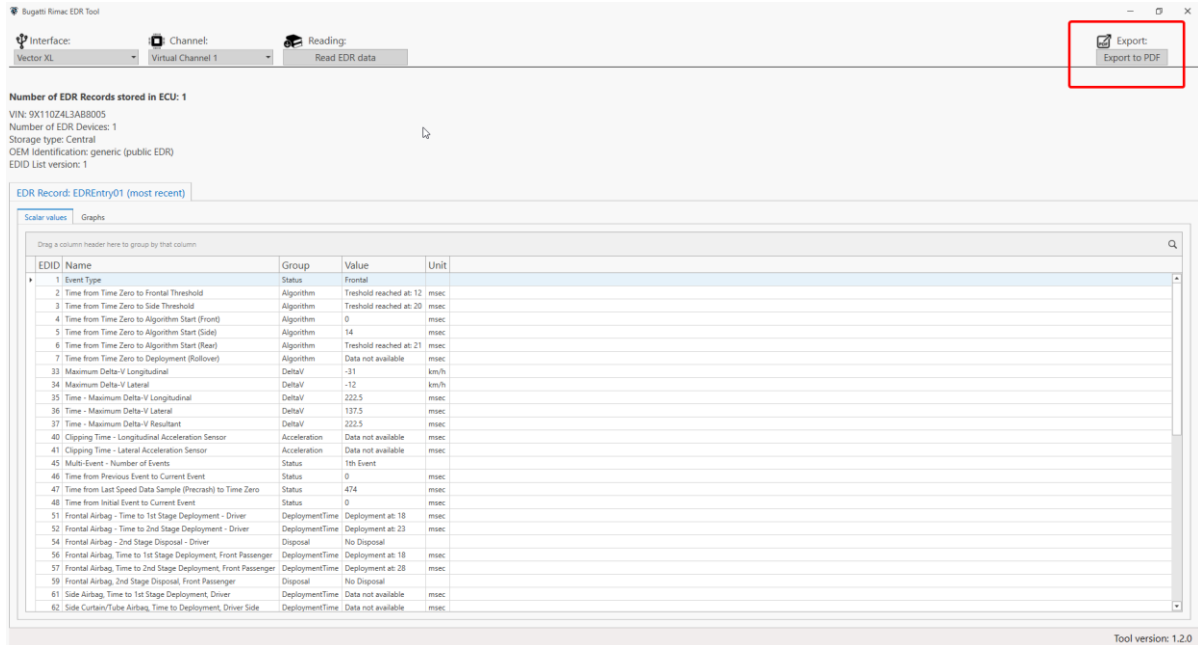


Figure 9 Export to PDF

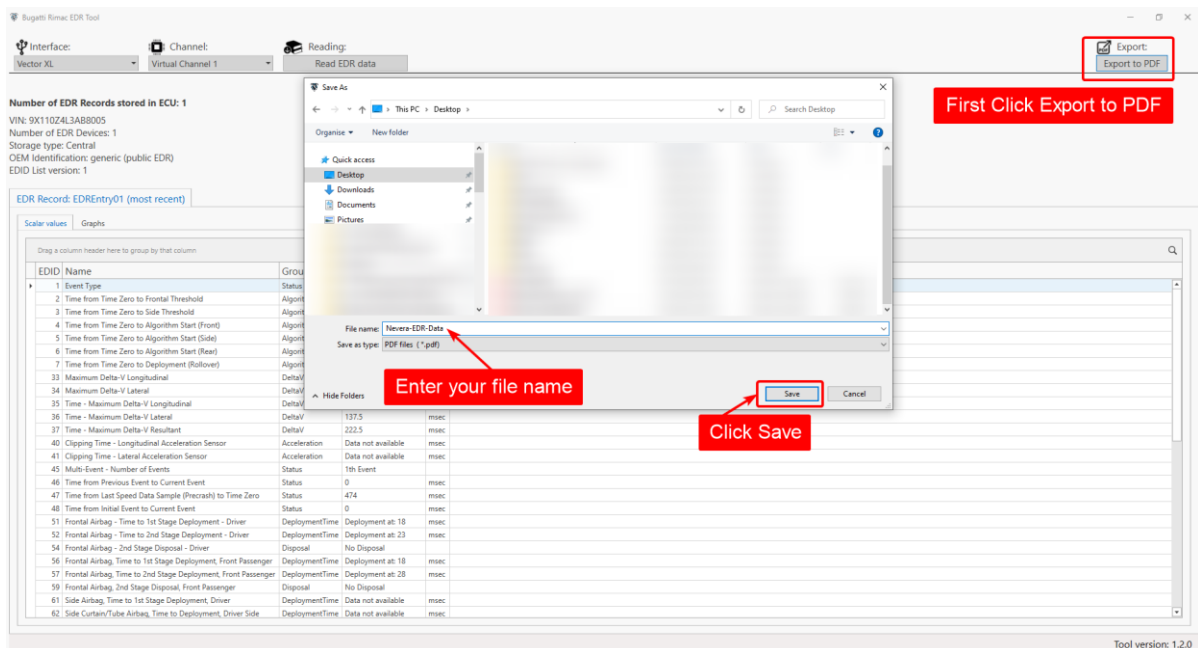


Figure 10 Export to PDF

Menu

Nevers-EDR-Data.pdf

Create

All tools

Export a PDF

Edit a PDF

Create a PDF

Combine files

Organize pages

Add comments

Request e-signatures

Scan & OCR

Protect a PDF

Redact a PDF

Compress a PDF

Prepare a form

Fill & Sign

View more

This file claims compliance with the PDF/A standard and has been opened read-only to prevent modification.

Enable Editing

Find text or tools

EDR Reader Report

VIN: 9X110Z4L3AB8005

Number of EDR Devices: 1

Number of EDR Records: 1

Storage type: Central

OEM Identification: generic (public EDR)

EDID List version: 1

EDR Record

EDEntry01 (most recent)

EDID	NAME	GROUP	VALUE	UNIT
1	Event Type	Status	Frontal	
2	Time from Time Zero to Frontal Threshold	Algorithm	Threshold reached at: 12	msec
3	Time from Time Zero to Side Threshold	Algorithm	Threshold reached at: 20	msec
4	Time from Time Zero to Algorithm Start (Front)	Algorithm	0	msec
5	Time from Time Zero to Algorithm Start (Side)	Algorithm	14	msec
6	Time from Time Zero to Algorithm Start (Rear)	Algorithm	Threshold reached at: 21	msec
7	Time from Time Zero to Deployment (Rollover)	Algorithm	Data not available	msec
33	Maximum Delta-V Longitudinal	DeltaV	-31	km/h
34	Maximum Delta-V Lateral	DeltaV	-12	km/h
35	Time - Maximum Delta-V Longitudinal	DeltaV	222.5	msec
36	Time - Maximum Delta-V Lateral	DeltaV	137.5	msec
37	Time - Maximum Delta-V Resultant	DeltaV	222.5	msec
40	Clipping Time - Longitudinal Acceleration Sensor	Acceleration	Data not available	msec
41	Clipping Time - Lateral Acceleration Sensor	Acceleration	Data not available	msec
45	Multi-Event - Number of Events	Status	1th Event	
46	Time from Previous Event to Current Event	Status	0	msec
47	Time from Last Speed Data Sample (Precrash) to Time Zero	Status	474	msec
48	Time from Initial Event to Current Event	Status	0	msec

Figure 11 Read PDF exported data