# rFactor 2

## This is a "short" Tutorial about how to add DRS Zones to a Track.

(Because English is not my native Language, be warned for some Terms ☺)

To be able to add/define DRS Zones for a Track, you need the following Plugin:

**Download LapDistance Plugin**

Extract it into the Folder ..\Bin32\Plugins of your rFactor2 Installation.

It is only 32 Bit, so you also have to check the checkbox "Force 32-Bit" in the Launcher Settings Tab as long as you use it.

If you don't already have it, install the Track for that you want to define one or more DRS Zones.

Start the Single Player and enter this Track.

If you drive on the Track, you can see Distance Values displayed in the Message-Window.
Screenshot:
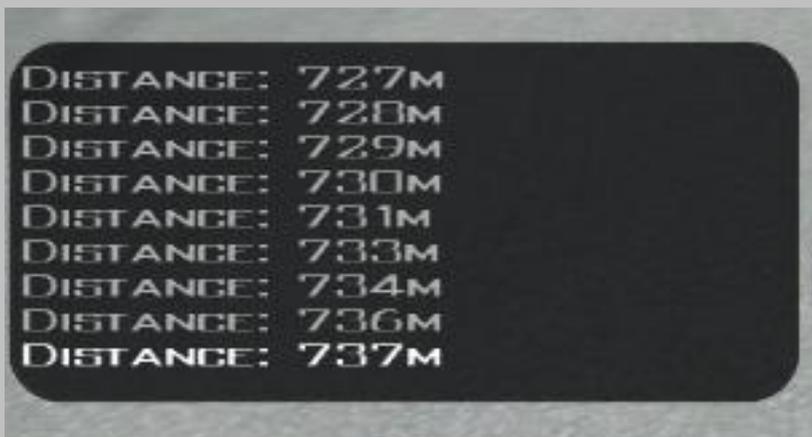


These Values show the Distance, in Meters from the Start/Finish Line, that you have on Track.

Do cross the Start/Finish Line one time, to make sure that no negative Values are shown.

Now you can start to get the Distance-Values that you need.

There are 3 of them.

One for the Position on Track, where the Distance between 2 Cars is taken, to allow the chasing Car to use DRS in the next DRS Zone, if the Distance is close enough.

This is the Activation Point for the DRS.

The other two Values are taken for the Start and the End of the DRS Zone.

So drive around the Track and write down the Distance Values for these 3 Positions.

**NOTICE**: You can have/define more than just one DRS Zone.

Now you have to get these Values as DRS Zone(s) into the Tracks Files.

To give an Example, i'll use the Track ISI_Montreal_2000 V 1.01.
What you need, is the File that has the File-Extension "GDB".
To get it, you have to extract one of the MAS Files of the Track, that are stored in the Folder
..\Installed\[Trackname]\[Version Number]
Normally the GDB File is packed in a MAS File with a not so big Size.
Sometimes you simply can extract the MAS File that is named like the Layout of the Track.
In Case of Montreal it's the "Montreal_2006.mas" File.

Extract the whole Content to a new Folder and open the GDB File with a Text-Editor.

What you have to enter into the GDB File, is the following:

```
  RearFlapZone
{
  MinimumCrossings=A
  TimeThreshold=B
  DetectionLapDist=C
  ActivationLapDist=D
  DeactivationLapDist=E
}
```

A= Number of crossings of the Activation Point (DetectionLapDist), before DRS gets enabled
B= Distance (Time in Seconds) between two chasing each other Cars, to enable DRS
C= Point where this Distance (B) is taken
D= Beginning of the DRS Zone
E= End of the DRS Zone

For A and B you can use whatever Value you like. It depends on your Needs.

For C, D, and E you have to enter the Values that you have written down before.

So it could e.g. look like this:

  RearFlapZone

```
{
  MinimumCrossings=3
  TimeThreshold=1.0
  DetectionLapDist=3148
  ActivationLapDist=3929
  DeactivationLapDist=5367
}
```

**NOTICE**: If the Start/Finish Line is inside of a DRS Zone, the End Value of the DRS Zone can of course have a lower Value than the Beginning Value!

It could look like this then:

```
  RearFlapZone
{
  MinimumCrossings=3
  TimeThreshold=1.0
  DetectionLapDist=3148
  ActivationLapDist=3929
  DeactivationLapDist=437
}
```

There are two other Lines/Values that should be added also.

It's:

RearFlapWetTreshold=**X**
RearFlapZoneSessions=**Y**

**X**= Maximum Track Wetness allowed for rear Flaps to be used (in any Session)

**Y**= Allowed Session (add the Numbers: 1=Test, 2=Practice, 4=Qualy, 8= Warmup, 16=Race)

For **X** normally is used the Value 0.5

For **Y** you can define in which Sessions the DRS will be allowed, by adding the Numbers of the Sessions.

If you e.g. want to allow it in all Session, add all Numbers. The Result is 31.

So you use:

RearFlapZoneSessions=**31**

If you want to allow it only in Qualy and Race, add 4+16. The Result is 20.

So you use:

RearFlapZoneSessions=**20**

And so on…

The Final Entry for one DRS Zone could e.g. look like this:

```
RearFlapWetTreshold=0.5
RearFlapZoneSessions=20

  RearFlapZone
{
  MinimumCrossings=3
  TimeThreshold=1.0
  DetectionLapDist=3148
  ActivationLapDist=3929
  DeactivationLapDist=5367
}
```

If you want to use 2 or more DRS Zones, just add another Entry RearFlapZone.
It would e.g. look like this then:

```
RearFlapWetTreshold=0.5
RearFlapZoneSessions=20

  RearFlapZone
{
  MinimumCrossings=3
  TimeThreshold=1.0
  DetectionLapDist=148
  ActivationLapDist=629
  DeactivationLapDist=1867
}
  RearFlapZone
{
  MinimumCrossings=3
  TimeThreshold=1.0
  DetectionLapDist=3148
  ActivationLapDist=3929
  DeactivationLapDist=5367
}
```

When you are ready with your work, you have to repackage the Track or Build an Update of it.
Both Options have their Pros and Cons. It's your Choice.