



# rFactor Driver Swap Guide

Kevin White and Jim Pejsa

## Overview

This guide describes the rFactor v1.250 driver swap feature which makes possible running on-line endurance events where driver teams join and can change drivers during the race.

The driver swap feature includes the following options:

- Swap occurs automatically during a pit stop (swap on pit), or the swap can be initiated at any time with a key command (hotswap).
- Team drivers of a vehicle may each use their own individual setup, or all drivers may be required to use a common setup.

These options are configured using settings found in the dedicated server's multiplayer.ini file.

We use the Howston vehicle and the Essington Grand Prix track that come with rFactor as examples in describing the swapping functionality. The following sections describe the preliminary setup required by drivers, the procedures to join the server and to perform swapping, and settings used to configure the dedicated server.

## Preliminary Setup for Driver Swapping

### Key Mappings

Several special keys are used to accomplish the driver swapping procedure. This guide refers to the default key mappings as found in a clean, unaltered rFactor install. You will need to check your own key mappings and change them if necessary. All of the key mappings are found by navigating to the Customize, Settings, Controls page.

Passenger Select – **E key** (need to re-map from default **P key**)

Use: Toggles between being a Spectator and being a Passenger in the car.

By default, Passenger Select is mapped to the P key; this mapping should be changed since rFactor also maps this key to the Pause function. We changed the mapping to the E key.

Driver Hot Swap – **W key**

Use: If hotswaps are allowed, driver presses the W key to transfer control to the passenger.

HUD Tachometer – **5 key**

Use: Toggles the tachometer on and off.

The tachometer fuel display shows a driver the current amount of fuel in the tank.

## HUD Multi-Function Display (MFD) – **6 key**, **ENTER key** and **ARROW keys**

Use: The 6 key toggles the HUD MFD on and off. The ENTER key and ARROW keys are used to select and make changes to the MFD screen.

The MFD pit settings screen is used by the current driver to select the passenger's name who will become the new driver. If the current driver leaves his own name displayed, a pitstop will occur with no driver swapping. The refueling load may also be changed here if desired.

The ENTER key is used to cycle through the available MFD screens to navigate to the pit settings screen; the ARROW keys are used to scroll and make changes to settings on the screen. Note that with some vehicles you will need to scroll down to see the driver name select line in the display.

## Creating a Setup

The procedure drivers follow to create a setup varies depending on whether they are required to use a common setup or if they are allowed to have individual setups.

### Common Setup:

If the server option is set so that team members are required to use a common setup, the setup loaded by the first driver will be transferred (except for steering lock and brake pressure) to the other driver(s) when a swap occurs. Since drivers are free to have their own settings for steering lock and brake pressure, each driver must create a setup with the desired values for these two settings. Drivers should create this setup off-line, save it in the track's setup folder, and assign it as the default by clicking the Assign button.

### Individual Setup:

If drivers are allowed to each have their own personal setup, the procedure is somewhat more involved. Drivers need to create a setup off-line, save it using the proper name, and assign it. The setup must then be copied to the vehicle folder.

For the Essington track, the proper name is **ESSINGTON\_LONG.svm**.

In general, the required proper name for the setup is found in the track's gdb file. You can open the file in Notepad and look for the following entry:

```
SettingsAI = ESSINGTON_LONG.svm
```

You can find the track gdb file by navigating to:

```
rFactor\Gamedata\Locations\Essington\Essington_Long\ESSINGTON_LONG.gdb
```

Once the setup is created, you will name it ESSINGTON\_LONG and save it in the Essington Long track setup folder. Assign it as the default setup by clicking the Assign button.

The setup file ESSINGTON\_LONG.svm which you just created resides in your rFactor\UserData\playername\Settings\Essington Long\ setup folder. The setup file now needs to be copied and pasted to the vehicle folder, which in our example is rFactor\Gamedata\Vehicles\Howston\.

This allows for a swapped in driver to load what is seen by rFactor as the AI setup taken from the vehicle folder. Note that if you join as a Spectator without first having assigned the ESSINGTON\_LONG setup as the default, you can still do so at any time by selecting the setup and clicking the Assign button. Spectators will find the Load setup button is disabled, but rFactor will use the setup assigned as the default.

### **Refueling at Pitsop**

Pitstop refueling amounts are specified in the car setup. An exception to the way refueling is normally done occurs when a driver swap is made. The passenger swapping into the car will receive the Stop 1 fuel load specified in the current driver's MFD. On subsequent stops where no swap occurs, the car will be refueled to the amount specified in the current driver's setup. If a driver manually changes the Stop 1 refueling load using the pit menu screen and then swaps at the next pitstop, that is the amount the new driver will receive.

An exception is that during qualifying and race sessions if the refueling amount specified is less than the amount of fuel currently in the tank, no change in the fuel will occur; fuel can only be added, never removed.

## Driver Swap on Pit Procedure

1. All drivers have created and assigned their setups off-line as described above in the Creating a Setup section. Drivers should also have the **E key** (Passenger Select), **ENTER** and **ARROW keys** correctly mapped.
2. Driver 1, the starting driver, joins the multiplayer server as usual and connects to the session with the team car. If the team is using a common setup, Driver 1's setup will be transferred to the other driver(s) when swapping occurs.

Driver 2 (and Driver 3) need to start the game and navigate to the Multiplayer Settings screen and change Spectate to on. Now Driver 2 joins the multiplayer server with the team car. Upon joining, Driver 2 is now a Spectator. The server does not announce spectators as having joined in the way it does drivers, and spectators will not show up on the driver list in the monitor.

3. Driver 1 starts the race. On the pit lap, Driver 2 (a spectator) becomes a passenger by clicking on his team car in the driver list and then pressing the **E key** (Passenger Select). Driver 2 then clicks the Race button to join the driver on track as a passenger in the car.
4. Driver 1 slows and enters pit lane. Before entering the pit box, Driver 1 navigates to the HUD MFD pit settings screen using the **ENTER key**. Now Driver 1 uses the **ARROW keys** to scroll down the screen and select the passenger's name to be the next driver. Driver 1 needs to make the next driver selection before entering the pit box or the swap will not occur.

When Driver 1 enters the pit box, the swap to Driver 2 is made automatically. After the swap Driver 1 becomes a passenger. Driver 1 should now press the **E key** to become a spectator, and then Esc off the track and back to the monitor.

Note that on the swap pitstop, Driver 2 will be refueled to the Stop 1 amount shown in Driver 1's MFD. Subsequent pit stops by the same driver will fuel the car to the amount in the driver's setup.

5. Process repeats with the next spectator becoming a passenger and then a driver.

## Dedicated Multiplayer Server Settings

Multiplayer.ini file:

```
[Multiplayer Server Options]
Spectators When Closed="1" // whether spectators are allowed to join
closed sessions
Driver Swap Setups="0" // whether vehicle setup is transferred during
driver swaps (except steering lock and brake pressure) ... note that UI
garage is now loaded for vehicle when you become a passenger
```

Set Driver Swap Setups to 0 to allow individual setups saved in the driver's vehicle folder. Set to 1 to require using a common setup transferred during swap.

```
Allow Spectators="1" // Whether to allow spectator clients to join the
server.
Allow Passengers="1" // Whether to allow spectators to join a car as a
co-driver/passenger. If set to 1 and Allow Spectators is set to 0,
spectators will be kicked from the game during the Race Session.
Allow Hotswaps="0" // 0=drivers can only change at pitstops using the
pit menu, 1=Drivers can switch at anytime with the Driver Hotswap key
```

Set Allow Hotswaps to 0 or 1 depending on whether hotswaps are to be allowed. Automatic swap on pit will take place regardless of this switch setting.

```
Allow Spectator Chat="1" // Whether to allow spectators to send chat
messages
Allow Passenger Chat="1" // Whether to allow passengers to send chat
messages
```

DedicatedServer.plr file:

```
[Race Conditions]
MULTI ParcFerme="0"
```

Parc ferme conditions are inconsistent with swapping setups; set this switch to 0 to insure Parc ferme is not enforced.

Enjoy! Please send feedback to [natcc@hotmail.com](mailto:natcc@hotmail.com)

V1.0 2/7/07