

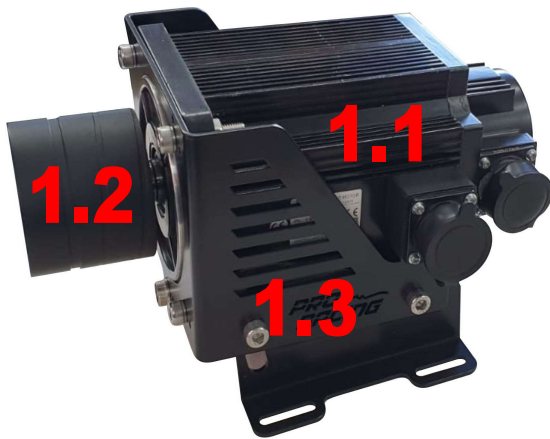
## MANUAL DE INSTALAÇÃO DO DIRECT DRIVE

### 1 Lista de itens:

- 1.1 Servo Motor com Encoder
- 1.2 Adaptador 70mm eixo motor
- 1.3 Suporte Motor padrão Pro Racing
- 1.4 Controladora Direct Drive
- 1.5 Cabo potência Motor com 3 metros + Botão de Emergência
- 1.6 Cabo Encoder com 3 metros
- 1.7 Cabo Energia Controladora Direct Drive
- 1.8 Cabo mini USB controladora
- 1.9 Parafusos Fixação + Porcas

### 1.9 Parafusos

- 4 un. M8 X 35
- 4 un. M8 X 16
- 8 un. Aroela M8
- 8 un. Porca M8
- 4 un. M6 X 40
- 8 un. Aroela M6
- 4 un. Porca M6
- 6 un. M5 X 10
- 2 un. M6 X 16



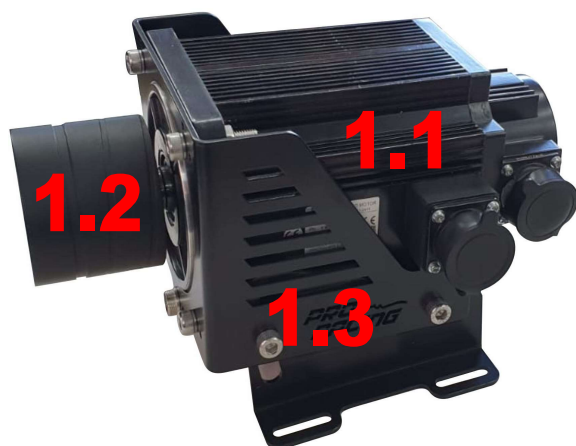
## Check Liste de Produtos a enviar Pedido

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## 2 Instalação e Montagem

2.1 Primeiramente deve ser feita a montagem do suporte do motor no cockpit, com os parafusos que acompanham, assim será possível posicionar ele em seu cockpit para fazer a furação caso necessário. Furo com broca de aço rápido 8mm. o suporte permite articulação angular de 0 a 20 graus e movimento horizontal até 3 cm. o motor pode ser instalado em qualquer sentido, sendo recomendável devido questão estética e não atrapalhar a visão deixar o sentido da saída dos cabos para os lados, em qualquer sentido.



**110V - 240V**

**IMPORTANTE:** Na controladora direct drive deve ser selecionado na chave seletora a voltagem que será ligada, podendo escolher a faixa de 127 ou 220v antes do primeiro uso conforme o indicativo ao lado.

2.2 Após a instalação do motor no cockpit, pode colocar o cabo de potência no motor, geralmente na primeira instalação o plug fica virado para a parte traseira, encaixar e apertar com a rosca, a outra ponta do cabo, o plug verde será ligado na controladora.

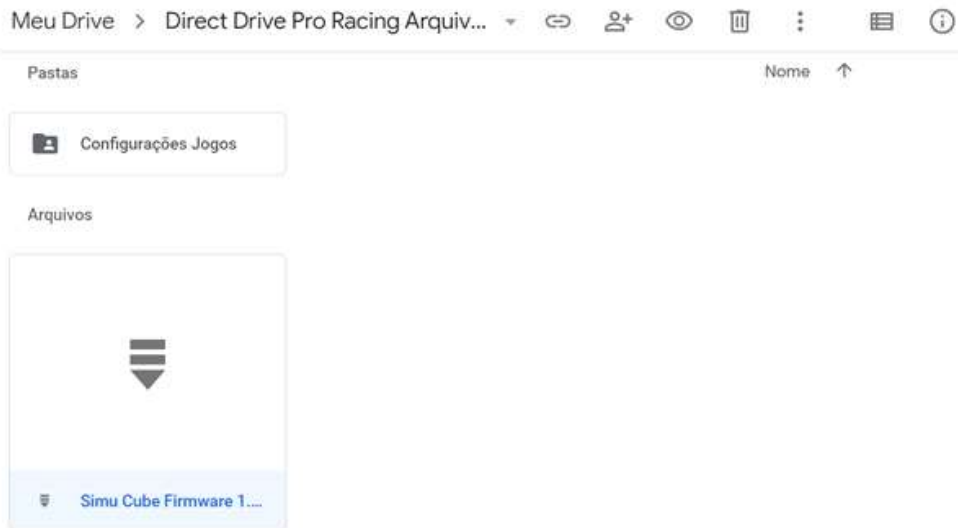
2.3 O cabo de encoder ligado na parte traseira do motor no sentido para trás do motor será ligado no plug DB15 da controladora.

2.4 O cabo micro USB deve ser ligada na controlado ao lado do plug RJ45, sendo essa conexão de recebimento do FFB do simulador, o outra saída USB é para configurações extras de motor que apenas utilizado na primeira instalação feita antes do envio, ou seja, sempre será utilizada apenas o saída micro usb ao lado da conexão RJ45.

2.5 Cabo de Força de energia padrão 3 Pinos, deve ser ligada em um filtro de linha com **ATERRAMENTO**.

#### 3.1 Link para download.

[https://drive.google.com/drive/u/1/folders/1SeuSalrcLo3HJA\\_YxgNE8pwpYOSDWnBD](https://drive.google.com/drive/u/1/folders/1SeuSalrcLo3HJA_YxgNE8pwpYOSDWnBD)

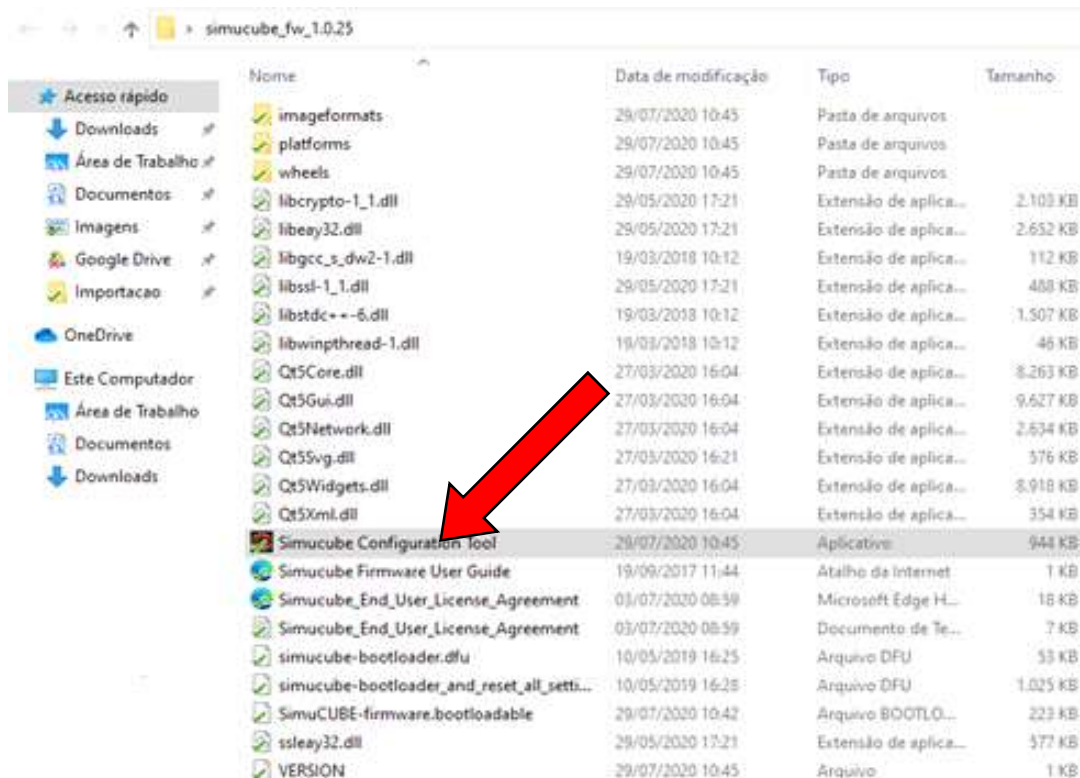


**3.2** Descompactar na área de trabalho, e se preferir alterar o nome da pasta apenas para SIMUCUBE

#### 3.3 Configuração do SIMUCUBE

Agora você irá fazer a calibração do motor definindo o centro, instalando os parâmetros necessários para funcionamento de seu Kit de Direct Drive

**IMPORTANTE:** Não conecte nenhum cabo ao volante até o processo estar finalizado  
**RECOMENDADO:** Sempre que for ligar a controladora é recomendável deixar sem cabo espiral do volante







Overview | Wireless Wheels | Profiles | Hardware Setup | Advanced

**General information**  
 Indexing mode  
 Maximum Motor Current  
 Encoder Counts Per Revolution

**Audible notification beeps**  
 Audible notifications enabled

**Desktop Centering Spring**  
 Centering Spring Strength

**USB Settings**  
 USB Suspend support  
 USB Recovery support

Configure motor, encoder and  
 Configure Analog Inp  
 Configure X12 button i

In reference to initialization


# SIMUCUBE

**Introduction to Motor configuration**

This wizard will help you to configure your motor and encoder. You will also set a centerpoint for your wheel. You will be able to set up your Simucube by selecting a motor configuration file from the provided list or use your existing configuration stored on the IONI drive installed on your Simucube.

**Note:** The wizard will activate the first profile which can't be edited before trying to initialize the wheel. This is to maximize the safety so that the wheel will not start turning after initialization. **It is good practise** to disconnect any USB cables from the wheel rim (if any) and have the E-Stop button close by when running this wizard.

Next Cancel



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In reference to initialization

Select motor configuration


Use existing IONI configuration as-is.  
**Select this if you don't know what you are supposed to do, or know your IONI drive works already, or you have gotten the system from a distributor pre-assembled, or if you have not changed any physical hardware such as the encoder.**

Use a DRC file to configure the motor&encoder  
 Select DRC file

Input the Motor Torque Constant below for maximum output torque estimation. Leave at 0.00 if you don't know this value. The estimated value works correctly only when IONI is configured to use the nominal maximum current.

0,00

Next Cancel



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Select indexing mode.

**Choose the method to use for indexing your wheel.**

Automatic, in reference to position after Initialization.  
Wheel must be approximately centered when Simucube is powered on, wheel will be usable immediately after Initialization is completed. See User Guide for further information.

Manual, in reference to encoder physical index.  
Wheel may be at any position when Simucube is powered on but must be turned enough (maximum 180 degrees in each direction) to detect encoder index point after phasing for wheel to be usable. See User Guide for further information.

**Note:** If you have system with an **Absolute encoder** and you set up to use the commutation sensor (later in this wizard), your wheel will always work without phasing, and this selection makes **no difference** to the operation of the system.

Next Cancel

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In reference to initialization

Warning: Continuing past this page will reset Simucube hardware settings.

When you click **Next** the Simucube will enter configuration mode. The configuration wizard must then be completed fully for the Simucube to operate properly.

Note, that profiles will be not deleted or touched. This will only reset the hardware settings on Simucube. Settings on IONI drive will not be touched, if you did not select a separate DRC configuration file for uploading to IONI.

Next Cancel

## Setup commutation sensors

Possible absolute encoder (BISS B, BISS C or SSI) has been detected. With absolute encoders, it is possible to setup and save automatic commutation sensors.

This means that the wheel is not required to perform the phase search routine at startup and it will be immediately usable.

With this dialog, you can turn this feature on and off. If you click **Next** without doing anything, you will leave the settings for sensors as they are.

**Please disconnect any wheel rim USB cables, as the motor will rotate during the procedure.**

Start automatic commutation setup

Disable previously set automatic commutation settings

Process status:

Automatic commutation setup has been previously performed. You can click **Next** to continue.

Next

Cancel

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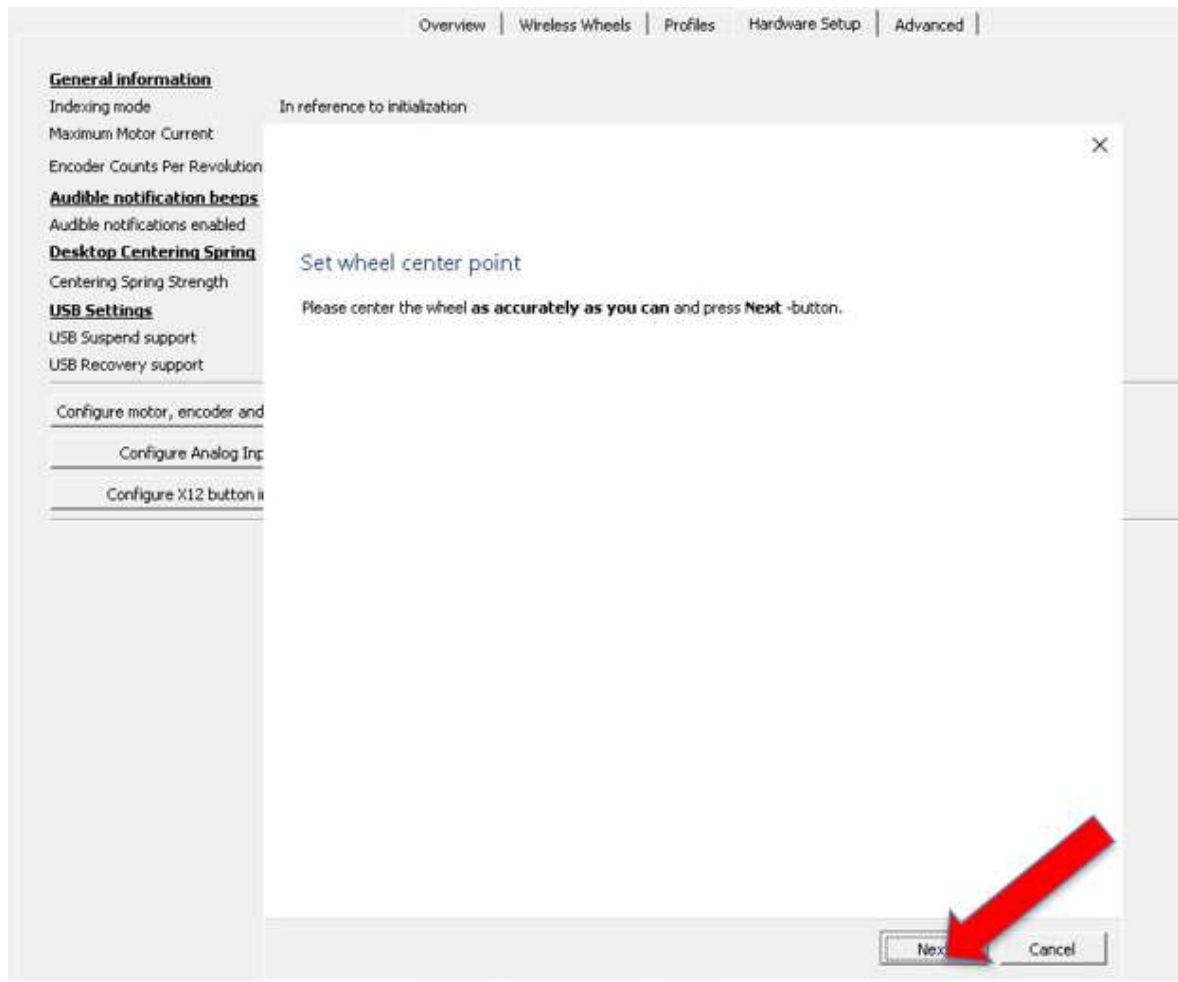
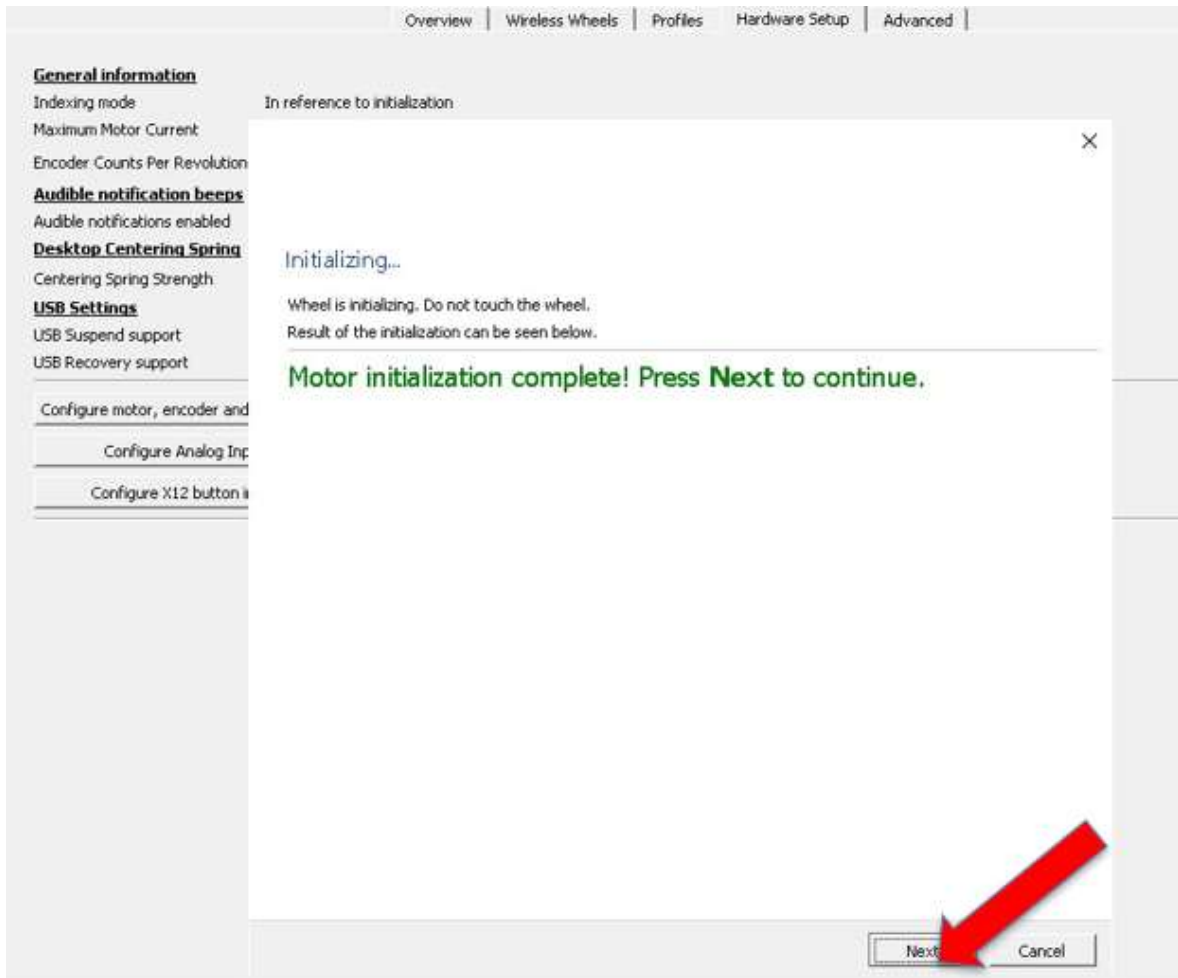
In reference to initialization

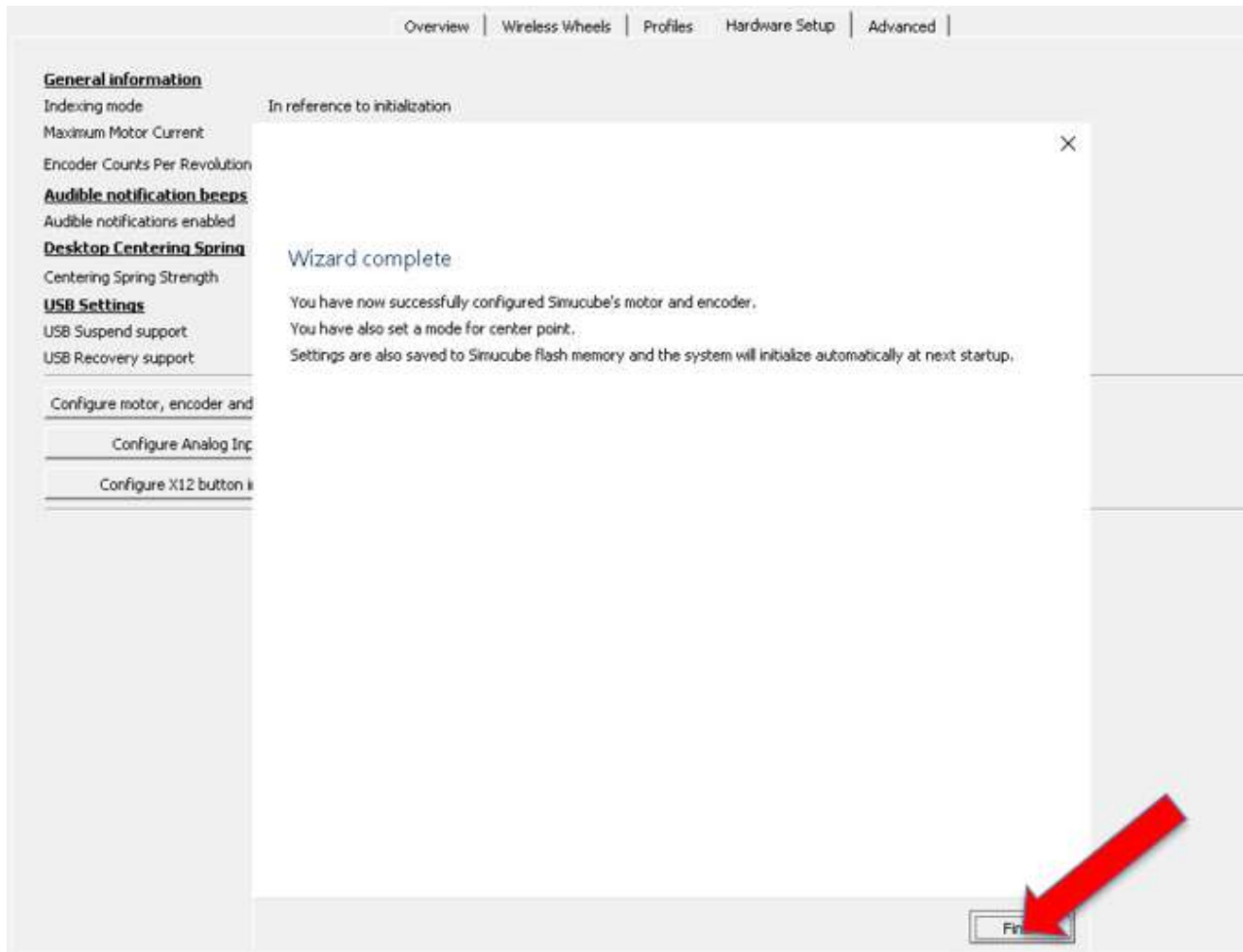
Center the wheel

Please center the wheel and make sure the E-stop is released. When you press **Next**-button, wheel will attempt to initialize.

Next Cancel







## PROFILES:

**IMPORTANTE:** Antes de criar os Profiles verifique se aba Overview os campos aparecem em verde conforme a imagem abaixo:



## Criando os Perfis:

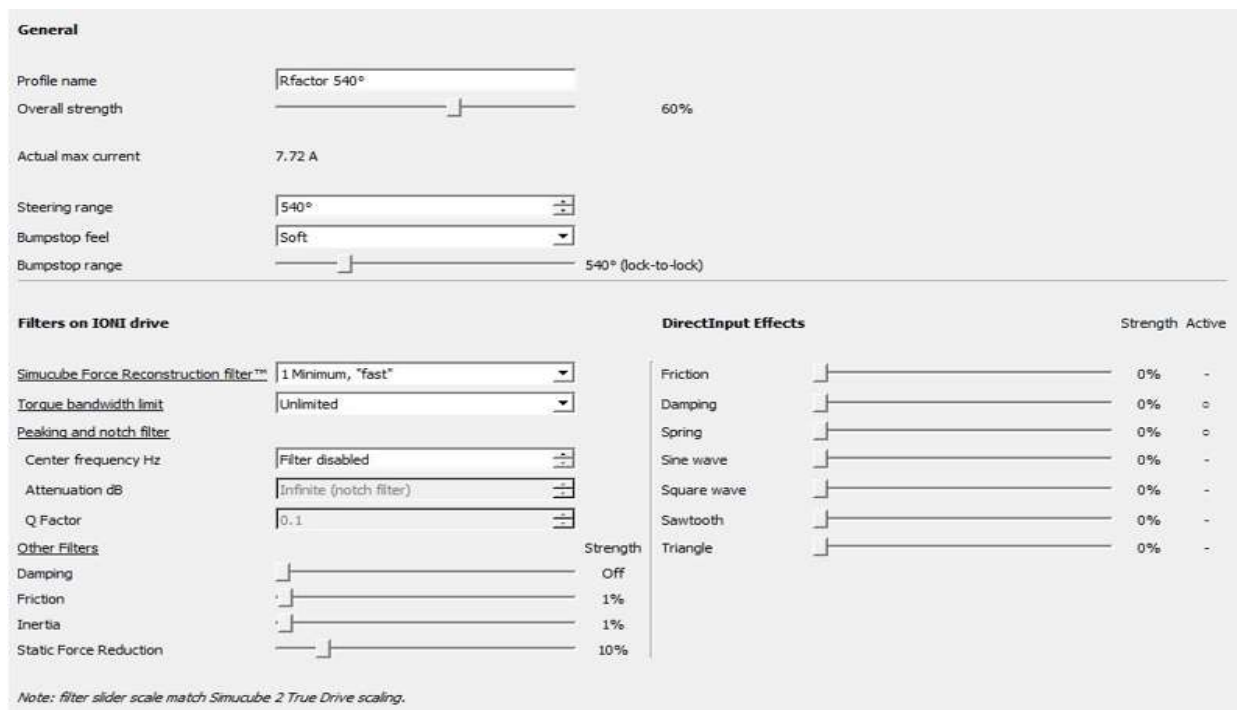
Nessa aba você configura todas as forças e efeitos para cada game criando os perfis para cada jogo.

É necessário a criação de um perfil para que todas as forças e efeitos seja atribuída a seu Direct Drive



- 1 - Clique em Profile
- 2 - Click em ADD
- 3 - Crie seu Perfil ou importe algum perfil já pronto

## Exemplo abaixo RFactor 2



Pro Racing Simuladores

“Seja Você o Piloto”