Cycloboost

Programming guide for Goldenmotor controllers

Version 3 ~ 28/08/2012
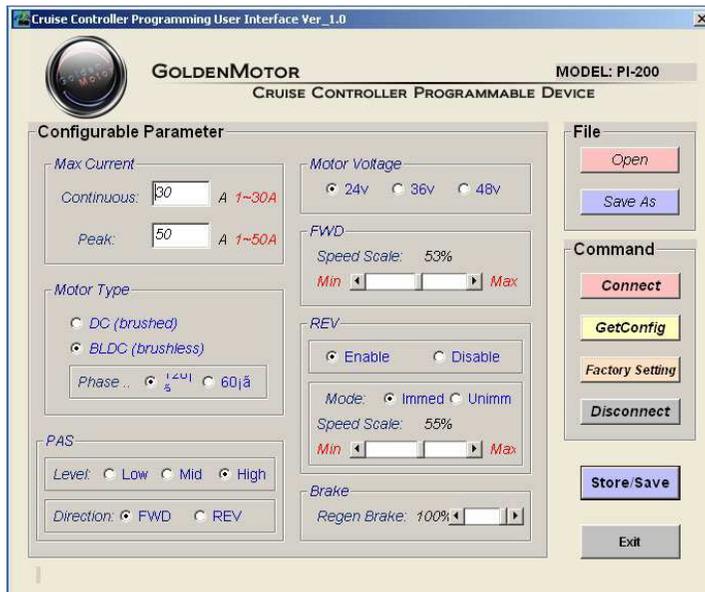
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1   Before beginning

1.1 Technical support

In spite of all our efforts, there may still be some technical information difficult to understand. Cycloboost is at your disposal to make it clearer and to guide you if you need it :

You can contact us @ support@cycloboost.com

1.2 Caution

Before programming your controller, it is necessary to **disconnect the battery.**

- Heat shrink battteries : disconnect the power cable
- Aluminium cased batteries: turn the key to cut the power

1.3 Software compatibility

The programming software is compatible with Windows 2000/XP/Seven.

1.4 Responsability

Cycloboost is not responsible for a wrong use of this software. Anomalies due to a bad programming are not covered by Cycloboost.

For kits conform to the European norms (see **Directive Européenne 2002/24/EC**), these changes can entail a cancelling of the conformity to these rules.

The use of this software is under your full responsibility.

2   Programming steps

We recommend to read these chapters carefully before programming your controller.

The steps must be followed in the order described below :

1)   Connecting the programming cable : **see chapter 3**

2) Launching the software : **see chapter 4**

3) Connection of the software on the controller : **see paragraph 5.1**

4) Saving the internal data of the software : **see paragraph 5.2**

5) Programming the controller **see chapter 6**

6) Saving the data in the controller : **see paragraph 5.6**

7) Disconnecting the controller **see paragraph 5.7**

Trick : Only change one parameter at a time if you want to check its impact on your vehicle.

3   Connecting the programming cable

3.1 Connection to the controller

3.1.1   External controller
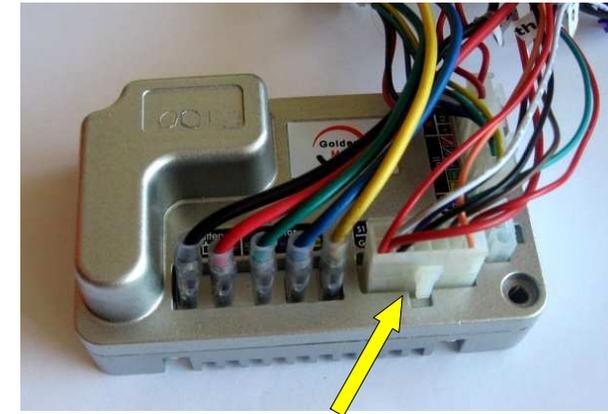
Disconnect the white plastic connector (12 pins)
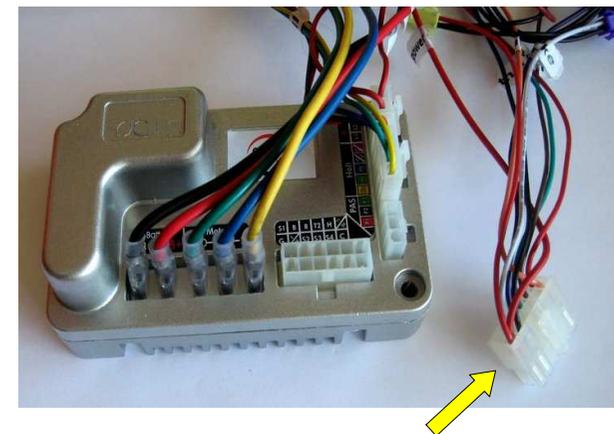
White plastic connector (12 pins) disconnected
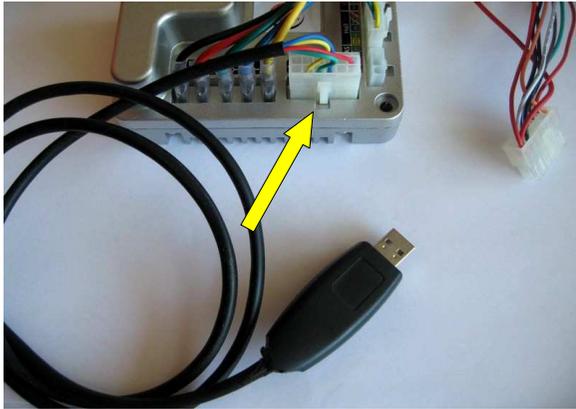
Connect the white plastic connector (12 pins) of the programming cable to the controller.

3.1.2   Internal controller : Magic Pie kit

Connect the black plastic connector of the programming cable in the space of the existing one, the one used to connect the throttle.

3.2 Connecting to the PC

During the first connection to the USB port, your PC is going to detect a new external device.

You do not need a pilot. Click on « **ok** » or close this window.

Connect the USB plug of the programming cable on the USB port of your PC.

4   Launching the programming software

4.1 Launching the software

Once the controller is connected to your PC, you can launch the programming software.

The software is available for free here :

http://www.cycloboost.com/media/PI200Setup.zip

Discompact the archive **PI200Setup.zip** in the file you want and double click to execute it.

Note : Under Windows Seven, you can execute the programme as administrator.

You will see this window.

Click on « **OK** » to see the programming interface.

<div align="center">Programming interface</div>

Important : before programming your controller, carefully read chapters 4 and 5.

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For kits conform to the European norms (see **Directive Européenne 2002/24/EC**), these changes can entail a cancelling of the conformity to these rules.

The use of this software is under your full responsibility.

4.2 Error message during programming

During the programming, you can see an **error message**.

The trick is, after reconnecting, to click first on **STORE/SAVE**.

Then you can do a **GET CONFIG** or **FACTORY SETTING**.

5 Administration functions of the software

Important : this chapter describes all of the administration functions of the software. **Read it carefully** before programming your controller.

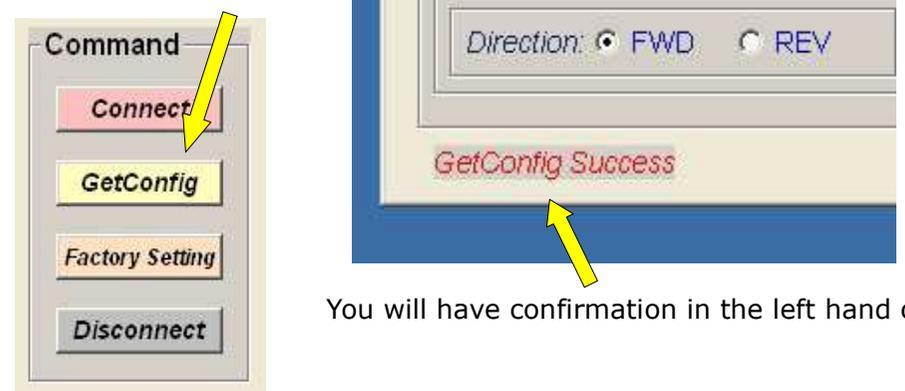## 5.1 Connection of the software on the controller

Click on « **Connect** »

You will have confirmation in the left hand corner

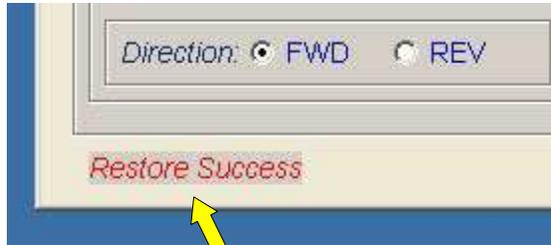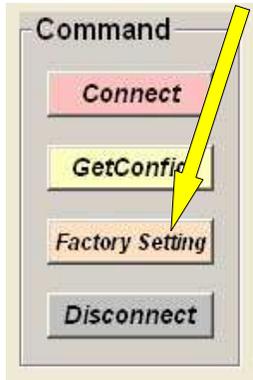## 5.2 Saving the internal data of the controller

Click on «**GetConfig**»

You will have confirmation in the left hand corner

5.3 Restoration of the factory's parameters

This has to be done only as a last resort, only if you do not know how to programme your controller anymore.

Click on «**Factory Setting**»

You will have confirmation at the left hand corner

5.4 Saving the configuration in a file

This has to be done **before everything else**. It enables you to have the possibility of coming back to the original configuration.

Click on «**Save AS**»

A dialogue box opens up, you just neet to give a name to the saving file with the extension **.mxf**
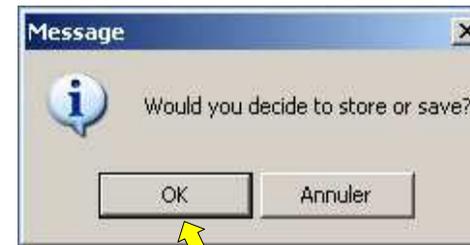
Example of file name :   `configuration_origine.mxf`

5.5 Restoration of the configuration from a file
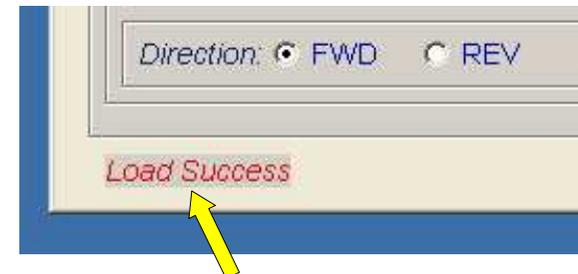
Click on «**Open**» and then choose the file of the previous back-up.
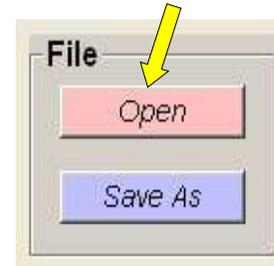
Click then on « **Store/Save** »

Confirm by clicking on « **OK** »

You will have confirmation in the left hand corner

The file parameters are now stored into the controller.

5.6 Saving the configuration in the controller

Make your settings (see chapter 5 about the different settings). Now you just have to save the controller like this :
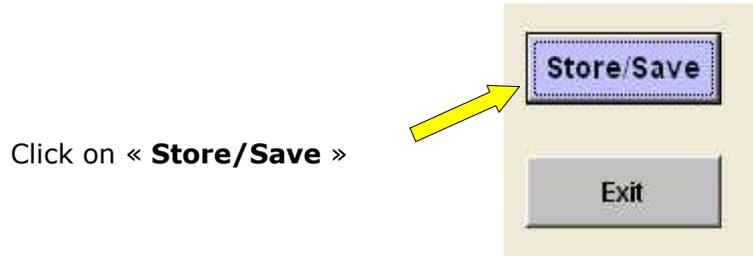
Click on « **Store/Save** »

Confirm and click on « **OK** »
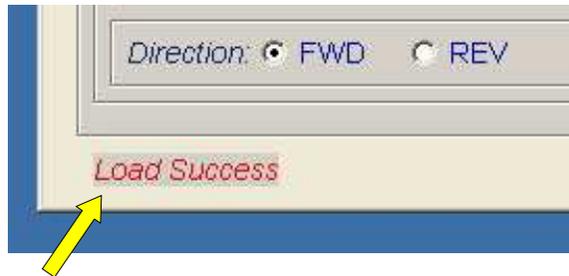
You will have confirmation in the left hand corner

The programming of the file is now stored into the controller.

5.7 Disconnecting the controller

When you have finished, you just need to quit 'properly' the software.

Click on « **Disconnect** »

You will have confirmation in the left hand corner

Click then on «**Exit**»

You can disconnect the programming cable.

6 The programming functions of the software

Important : this chapter describes all the programming functions of the software. Read carefully **before programming** your controller.

6.1 Programming the amperage

This function enables to adjust the **peak amperage** and the **continuous amperage** which will have a direct impact on the **peak** and **continuous power** the controller can deliver :
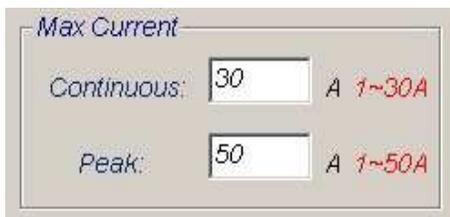
Note :

Power (Watt) = Tension (Volt) x Intensity (Amper)

P = U x I

Examples of settings :

- moteur 250w in 24v : I = 10 A
- moteur 250w in 36v : I = 7 A
- moteur 1000w in 48v : I = 21A

Important : maximum adjustment of the Balade kit equipped with a tiny motor :

- Continuous : 16A
- Peak : 30A

After this limit, the little motor is not covered by the guarantee.

6.2 Programming the tension of the battery

This function enables to adjust the tension of the battery : 24v, 36v or 48v.

By default, the setting on 24v allows the use of batteries from 24v to 48v.

A setting on 36v only allows 36v batteries, same thing for 48v.

It is recommended to leave this setting in 24v.

6.3 Programming the course of the throttle

This setting enables to adjust the course of the throttle. If you think the acceleration is not progressive enough, lower this value according to your needs.


This also has an **impact on the max speed of the bike**. The more you lower this value, the more the speed will lower.

6.4 Programming the regeneration when braking

This setting enables to adjust the **force of the braking regeneration :** works with **Xtrême** and **Magic Pie kits.**

By default, it is set at **25% to avoid damaging the battery.**

At high speed (**>40km/h**), a higher percentage charges **too quickly the battery** and can damage the **cells of the battery (overcharge) : not covered by the guarantee**.
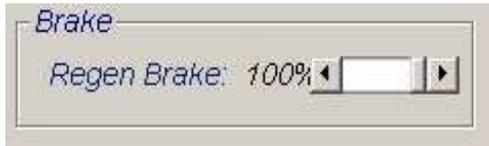
6.5 Activation and programming the reverse

By default, the reverse is activated, even if it is not necessary on a bike. Depending on the controllers, this function may not be activated.

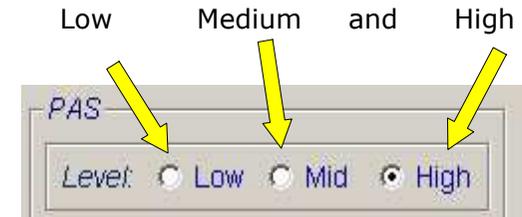**Activation** (Enable)   or   **disactivation** (Disable)
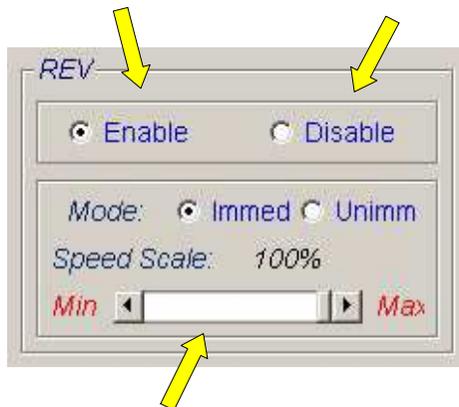
Adjusting the **power** of the throttle.

6.6 Programming the Pedelec

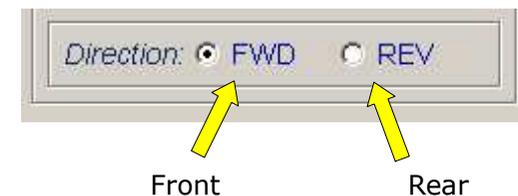This setting enables to change the **force of the assistance when pedalling.**

It works only if you connect a pedelec on the controller.

3 levels of power are available, you need to choose :

Low   Medium   and   High

For a use on road not conform to the European regulations, we recommend to choose **Low**.

The following setting enables to activated the assistance when pedalling according to the direction of rotation of the pedalling.

Front   Rear

This can be useful if you put the pedalling sensor the wrong way around or on the other side of the chainset.

6.7 Programming the type of motor

Do not change this setting. It enables to choose the type of motor, brushed or brushless.

Brushed
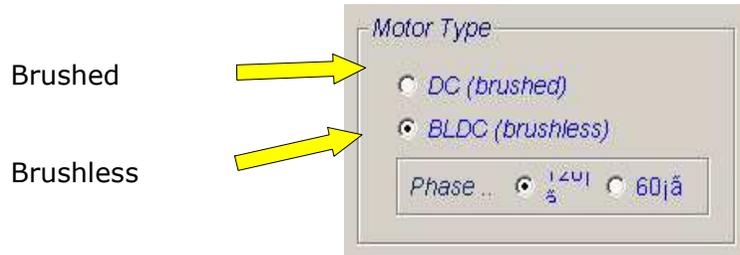
Brushless

You can leave this setting by default (**BLDC (brushless)**), it corresponds to Cycloboost motors.

They are 3-phased motors : 3 phases at 120°.

7 Problem of setting

7.1 One of the steps does not work

- Disconnect everything
- Wait a few moments for the PC to refresh its USB port configurations
- Start over

7.2 You can not connect to the controller

- Make sure the controller is programmable
- Check that Windows has recognized the USB device
- Reboot your PC and start over

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