

EXER·FLY

PLATFORM SENSOR & APP MANUAL

About Exerfly

With the Exerly app, you can get statistics such as the energy, power, speed, time and force exerted by you during exercises. This feedback is helpful to see if you are progressing in your goals.

The sensor is a rotational sensor that measures rpm, time, angle at 250Hz and from this data and the inertia of the flywheel, we can calculate many statistics.

The Exerfly app connects via WiFi to the Exerfly Platform.

The Exerfly App is a special type of app that works anywhere your web browser works. It's available on Android, iPad, iPhone, Windows, Mac and Linux and updates automatically.

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Downloading the App

The Exerfly App is a special type of app that works anywhere your web browser works. It's available on Android, iPad, iPhone, Windows, Mac and Linux. In most cases you will need to have Google Chrome installed first to download and use the Exerfly app, except IOS which uses Safari.

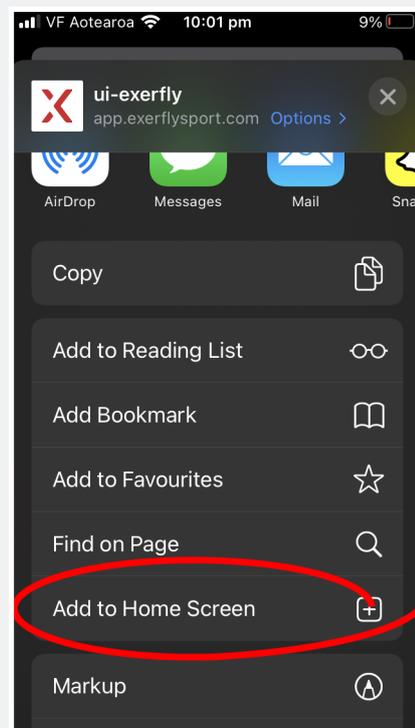
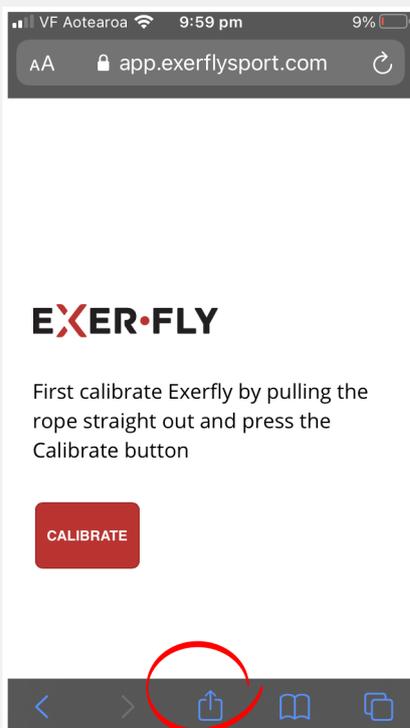
Instead of downloading it from the App Store, you visit the website <https://app.exerflysport.com> and install it from there, or you can just use/view it in your web browser.

iOS (iPhone/iPad)

Using **Safari Web Browser** only

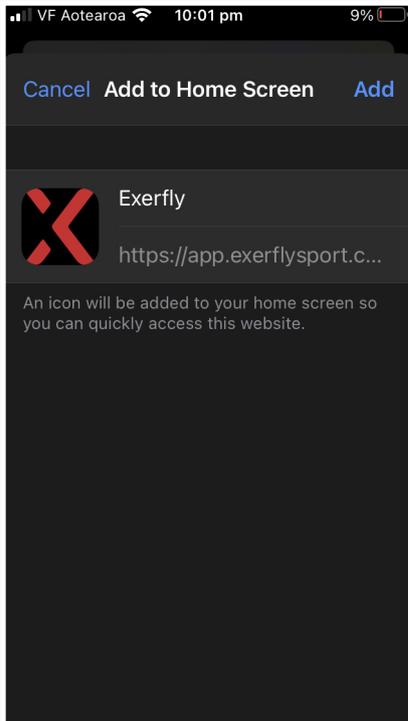
1. Open Safari and go to <https://app.exerflysport.com>
Click the Share button at the bottom of the screen.

2. Tap the icon **Add to Home Screen**.

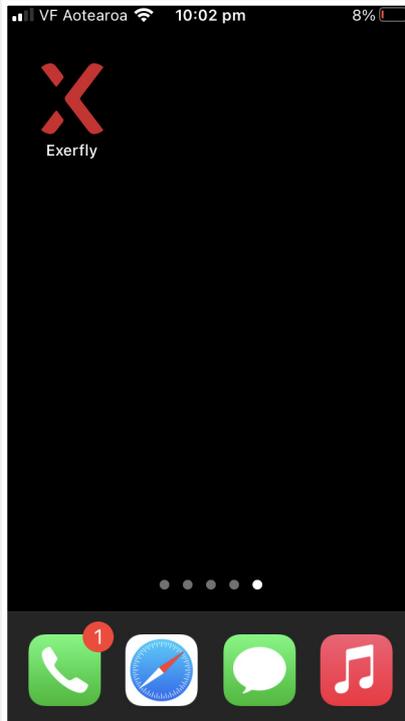


iOS (iPhone/iPad) cont.

3. Tap **Add** in the upper-right corner.



4. The Exerfly Icon now appears on your Home screen.



5. When you click the icon, the app will launch.

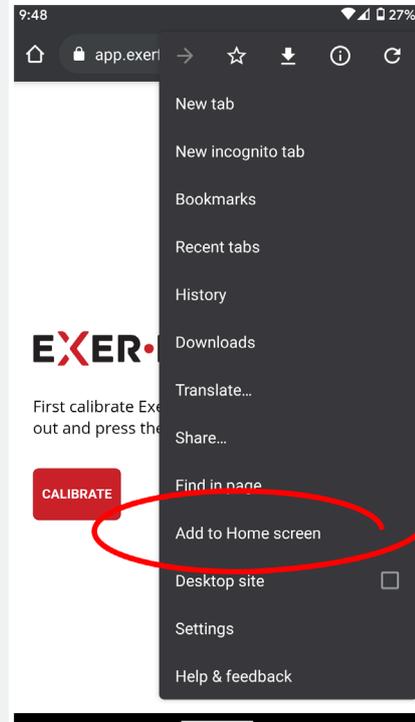


Android

1. Open your web browser and go to <https://app.exerflysport.com>

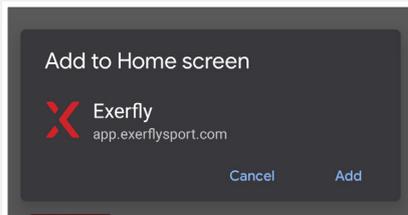


2a. Click the menu (3 dots) and select **Add to Home screen**.



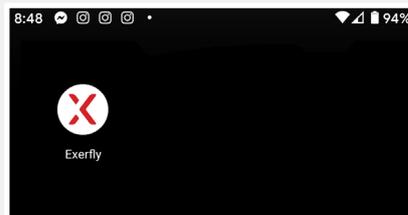
Or in some browsers, a prompt will appear at the bottom of the Web Browser window Add Exerfly to Home screen.

2b. Tap the prompt.

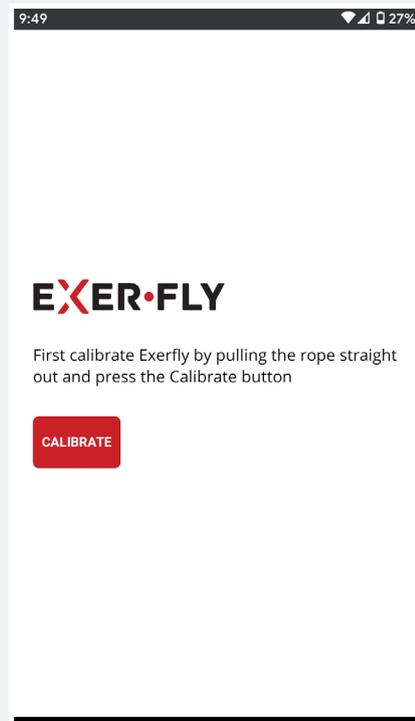


3. Tap **Add** when the popup appears.

The Exerfly Icon now appears on your Home screen.



4. Open up the app.

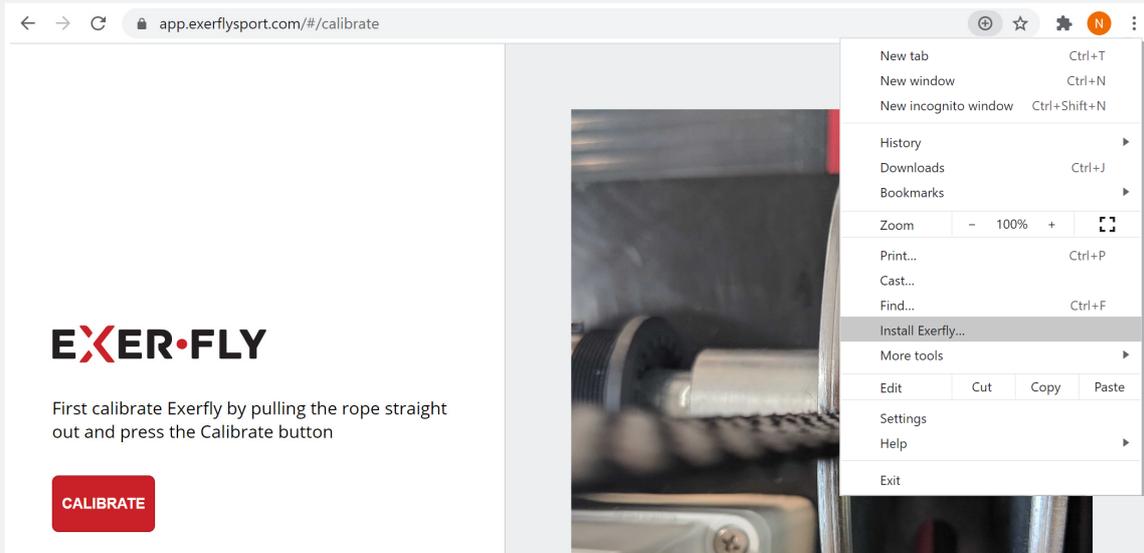


Windows and Mac

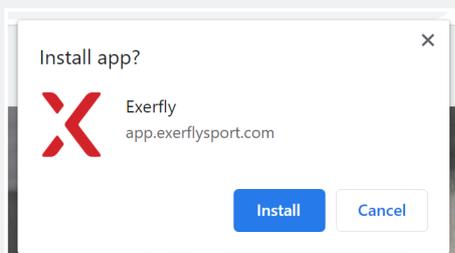
You can run this from the app, or your web browser at <https://app.exerflysport.com>

Google Chrome

1. Click the **circular plus icon** in the right side of the URL window or select the **menu (three dots)**.



2. Click Install button.



3. The Exerfly app shortcut will be shown on the desktop.



Connecting to the power

Plugging in to the power

1. Plug the supplied power cable into the power socket under the Platform under the same side as the on/off button on the front of the Platform.
2. Turn on the switch and it will turn red.



3. Press the on/off button on the front of the Platform.



After about 20-30 seconds you'll hear a double beep. You are now ready to setup the Wifi connection and use the app.

Note: Every time you want to use the sensor/app, you will need to plug into the power and wait the 20-30 seconds until you hear the double beep, then connect to the Exerfly Wifi connection on your phone/computer.

Connecting to the Exerfly Sensor

Step 1. Download App

Make sure you've completed downloading the App from <https://app.exerflysport.com>
The Exerfly App works on Windows, Mac and Linux desktops/laptops, and Android and IOS phones/tablets. In most cases you will need to have Google Chrome installed first to download and use the Exerfly app, except IOS which uses Safari.

Step 2. Plug in Power

Connect the power cable to the Exerfly Platform. After about 20-30 seconds, you'll hear 2 short beeps. Now the Exerfly Platform is ready to connect to the app.

Step 3. (You only need to do this once)

Exerfly uses WiFi to connect, and there are two modes of operation to choose from.

1. Router WiFi (Recommended)

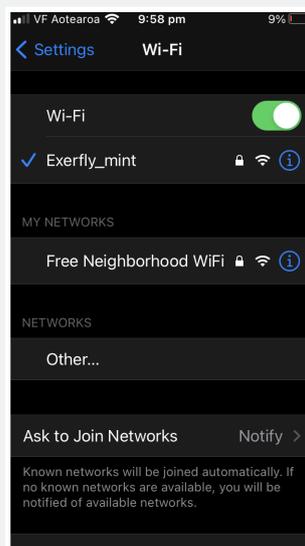
One Time Setup: This mode connects to an existing WiFi network and gives the Exerfly a local IP address. This method can be used if there is a local WiFi connection available and all devices are able to connect to that WiFi connection too. It will work for all devices and only needs to be setup once.

First, connect to the WiFi connection Exerfly_XXXX where XXXX will be the name of your business.

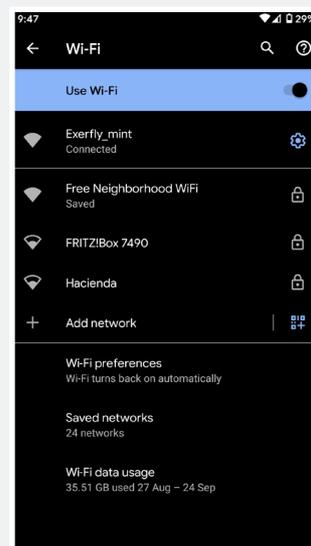
Windows



iOS

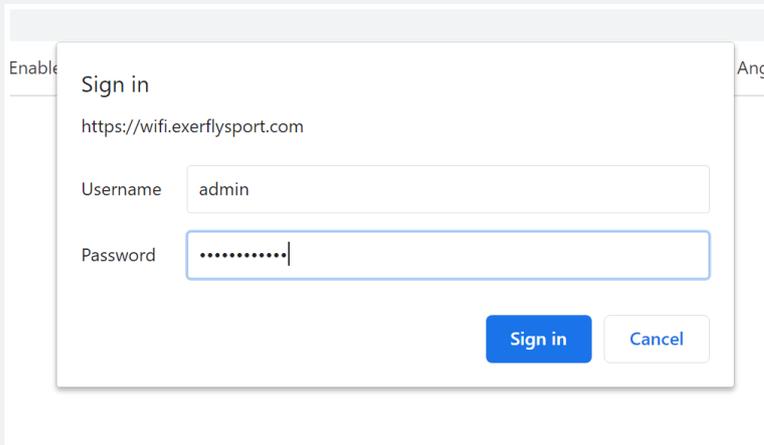


Android



Connecting to the Exerfly Sensor cont.

Now go to <https://wifi.exerflysport.com> to take you to the Exerfly WiFi Portal.
Enter the username **admin** and password **spinthewheel**.



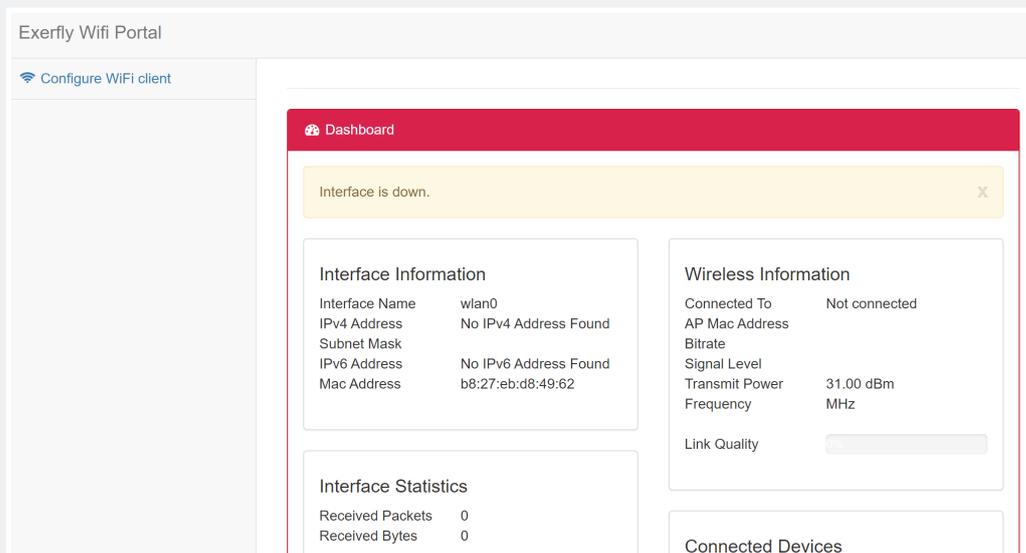
Sign in

<https://wifi.exerflysport.com>

Username

Password

Click the link on the left side **Configure WiFi client**.



Exerfly Wifi Portal

[Configure WiFi client](#)

Dashboard

Interface is down. ✕

| Interface Information | |
|-----------------------|-----------------------|
| Interface Name | wlan0 |
| IPv4 Address | No IPv4 Address Found |
| Subnet Mask | |
| IPv6 Address | No IPv6 Address Found |
| Mac Address | b8:27:eb:d8:49:62 |

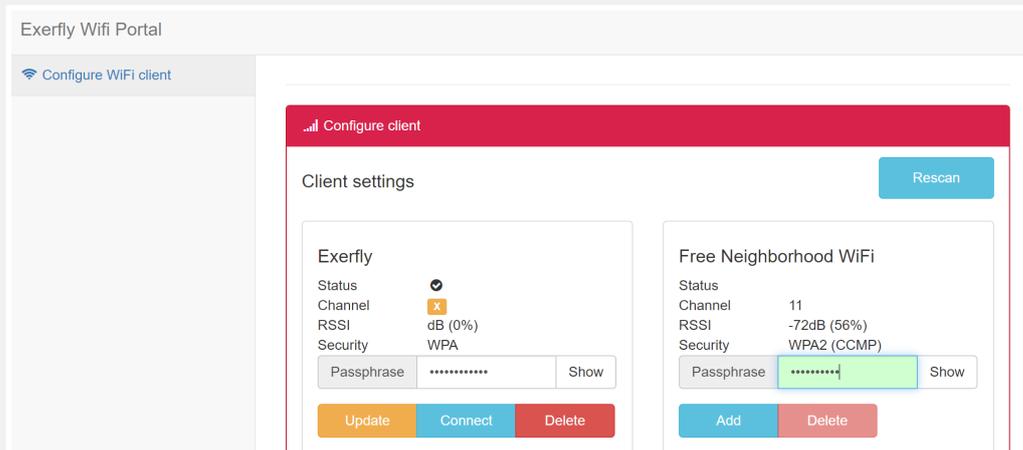
| Wireless Information | |
|----------------------|-------------------------------|
| Connected To | Not connected |
| AP Mac Address | |
| Bitrate | |
| Signal Level | |
| Transmit Power | 31.00 dBm |
| Frequency | MHz |
| Link Quality | <input type="text" value=""/> |

| Interface Statistics | |
|----------------------|---|
| Received Packets | 0 |
| Received Bytes | 0 |

Connected Devices

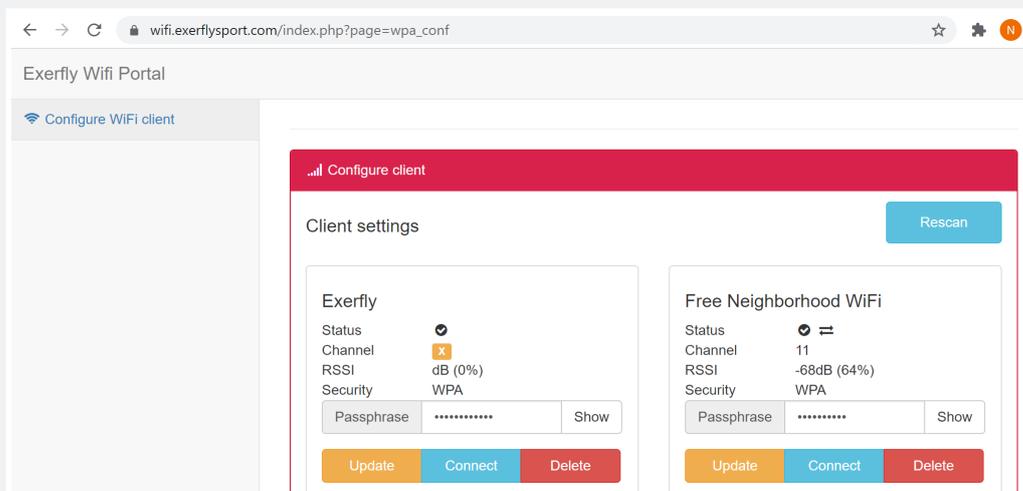
Connecting to the Exerfly Sensor cont.

Find the WiFi network you use and enter the password for it.



Click **Connect**. You may need to click the 'Rescan' button. You're all setup!

Note: Do not delete the WiFi point named Exerfly.



After setup: For all users

In this mode, users connect to the WiFi connection Exerfly_XXXX where XXXX will be the name of your business. Enter the password **spintthewheel**.

Users will now be connected to the Exerfly sensor and also the business WiFi at the same time.

Connecting to the Exerfly Sensor cont.

2. Direct Wifi (Not recommended for Windows or Android, but suitable for IOS)

Look for the WiFi connection Exerfly_XXXX where XXXX will be the name of your business and connect to it. The password is spintthewheel . You may be prompted to ask if you really want to connect since there's no worldwide internet connection with the Exerfly, the connection is just to the Exerfly itself. On Android, confirm that you do want to keep the connection.

Known Issues: Android users will lose their 4G connection while connected in this mode. It's an unfortunate downside with Android phones. IOS devices do not have this issue. Windows users may find their connection drops occasionally to favour a connection with an internet connection.

Step 4. Run App

Tap on the Exerfly app on your screen to launch it, or use it from within the web browser at <https://app.exerflysport.com>

NOTE: Everytime you want to use the app, you will need to connect to the Exerfly WiFi point 'Exerfly_XXXX' and if needed, with password 'spintthewheel'.

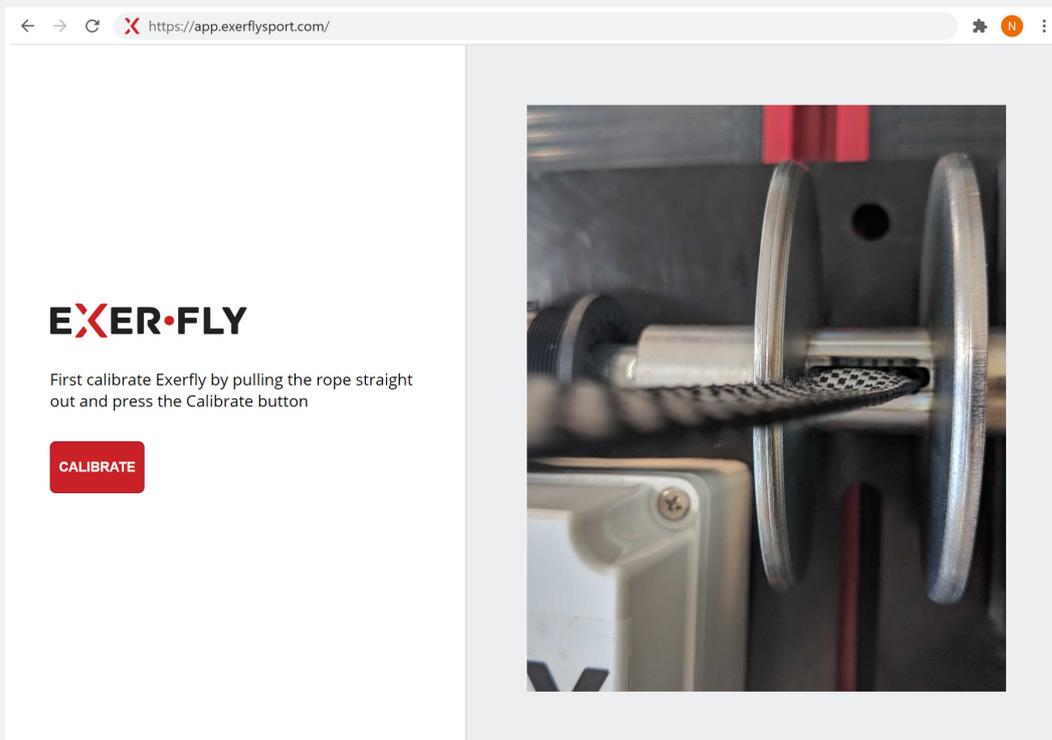
Using the app with the Exerfly sensor

You are now ready to use the app to get feedback on your exercises. You'll need to enter details of your warm-up reps, reps and flywheel inertia into the app and press the START button. Statistics are shown in real-time after each rep.

Calibrate

Each time you turn the Exerfly electronics on, you'll first need to calibrate the Exerfly app/rope. This is so the app where the point is that the rope crosses over for concentric to eccentric movements.

Hold the rope straight out (90 degrees) from the shaft and click the calibrate button. The Settings (Gear icon at top right) also contains a calibrate button.



Language

Change the language of the user interface. This will also change the voice feedback to the selected language.

Using the app with the Exerfly sensor cont.

Warm up reps

These reps are used to get the flywheel moving and are not counted in the statistics for energy, time, force etc.

Reps

Enter the number of reps you wish to complete. The statistics will only count up to the number of reps you enter.

Click the gear icon to choose an option to stop the reps

- After the reps have finished
- if the rep time is greater than x seconds. This is useful in velocity based training where you're trying to do reps within a set time limit.
- If power decreases by more than x percent. This is useful to see when a user is getting too tired.

Inertia

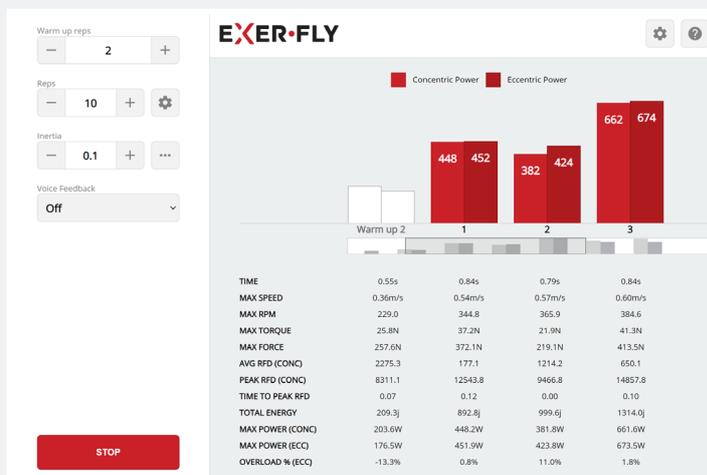
Enter the discs you are using in the options. This will calculate the total amount of inertia loaded on to the Exerfly machine.

Voice Feedback

Choose the option to have a voice spoken to you after each rep. The voice can either say the rep number, or the power of the rep.

START button

This starts the statistics collection and shows a graph of power output.



Using the app with the Exerfly sensor cont.

Statistics

On the same screen you'll see some basic and average statistics for your exercise.

You can scroll left and right on the graph to show the power of each rep.

Force: Total force exerted by the user

Energy: Total energy exerted by the user

Peak Overload: The highest eccentric overload reading

Lowest Overload: The lowest eccentric overload reading

Average Overload: The average of all the eccentric overload readings for all of a users' reps

Avg RFD: The average rate of force development for all reps

Peak RFD: Peak rate of force development for a rep

Time to peak RFD: The time it takes to get to the peak rate of force development

Conc. Peak Power: The highest power exerted by the user in the concentric phase of a rep

Eccn. Peak Power: The highest power exerted by the user in the eccentric phase of a rep

Peak Speed: The highest speed that the user moved through the rep

Slowest Speed: The slowest speed that the user moved through the rep

Average Speed: The average speed through all the reps

Fastest Rep: Time in seconds of the fastest rep

Slowest Rep: Time in seconds of the slowest rep

Average Rep Time: The average time of all the reps

Motor Option

If your Exerfly Platform has been fitted with a motor, then the following instructions apply.

WARNING: Using the Eccentric boost amplifies the energy of the flywheel in the eccentric phase. Improper use could cause significant injury. Make sure you've had ample warmup and conditioning before attempting to use the motor boost. If this is your first time using the motor boost, always start with a low Eccentric Overload Boost % (eg, 1 - 5%) to get the feeling of what you can handle.

Small flywheels can spin very quickly, so it's actually safer to use large flywheels to start with because they spin more slowly.. Begin with a 1.0 kg.m² inertia (large) flywheel at 1 - 5% overload.

Eccentric overload training is very beneficial but also very fatiguing, so you will likely exhibit muscle soreness over a few days if you are not used to it. This is called delayed onset muscle soreness (DOMS).

The use of the motor overload is not suitable for people with injuries, unfit, deconditioned or elderly people. The Exerfly Platform is still able to be used without using the motor.

The Exerfly Platform uses an automatic wind-in mechanism to get started when using the motor boost.

Eccentric Overload Boost %

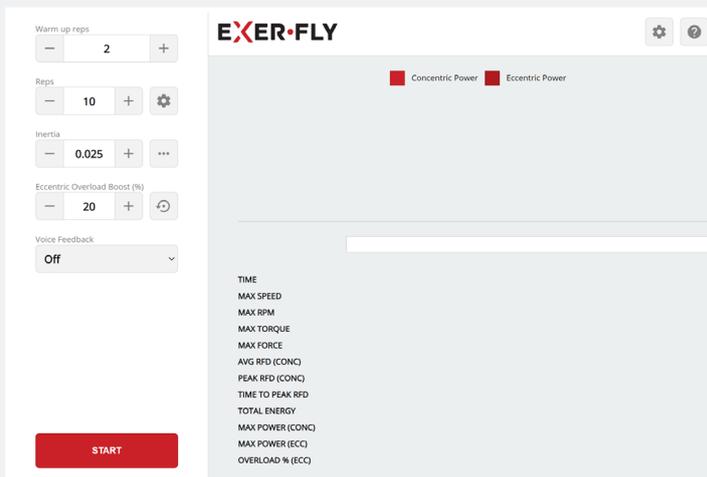
(This option will be displayed if your machine is fitted with the motor).

This feature enables a motor to overload the eccentric phase of your workout. The setting is based on the additional energy given to the flywheel in the eccentric phase of a movement.

This is calculated by measuring the energy in the flywheel during the concentric phase, and then switching on the motor to add extra energy by way of speed to the flywheel in the eccentric phase. So, for example if a user produced X amount of energy in the flywheel in the concentric phase and the Eccentric Overload Boost % was set to 30%, then the motor will speed up the flywheel so the energy is X+30% in the eccentric phase.

Motor Option Cont.

WARNING: Be careful with small flywheels. For small flywheels, use a small number, eg. 1-10% as it doesn't take much energy to spin these very fast. Seriously, be careful.



Getting started

1. Connect to the Exerfly WiFi, and open the Exerfly App. Make sure the rope is 90 degrees to the shaft and press the Calibrate button.
2. The Motor overload is actually separate from the app statistics, so you can use the Eccentric Overload Boost % feature without configuring any other settings such as number of reps etc.
3. Set your Eccentric Overload Boost %. For beginners, set it to 5% and use a large flywheel so it doesn't spin as fast.
4. Make sure you're ready to start the exercise by getting in the right position for your movement.
5. Press the small button with the circular icon to start (this is the Wind-Up button). This will sound a countdown beep and a light will flash - both the sound and the light flash will start slowly and increase in speed for around 8 seconds and then the motor will automatically wind in the rope (so you don't have to wind it in yourself). Wait a second for a double beep/light flash and then you can start your exercise.
6. Take it VERY slowly to start with, and increase the speed as you feel comfortable.

NOTE: You can change the Eccentric Overload Boost % during your exercise to a higher or lower number. If you don't ever press the START button, then you can keep doing infinite reps with the motor and change the boost % as you like.

Motor Option Cont.

NOTE: If you press the START button, then statistics will start to be collected and the motor will be disabled if you either press STOP or you come to the end of your reps. At that point you will need to press the Wind-Up button to enable the motor option.

NOTE: If you decide to abort the training during the Wind-Up, click the STOP button and the motor will be disabled. The countdown will still sound, but the motor won't engage/win-up the rope.

Troubleshooting

Q. I can't connect to the WiFi point

A. Make sure your internet signal is strong enough.

Q. It won't calibrate

A. Make sure you're connected to the Exerfly WiFi access point.

Q. I feel like I'm overloading the motor.

A. Add more flywheels on, and/or increase the % Eccentric Overload Boost to a higher amount.