



Electric wheels

Series 300 & 10''

Instruction manual [EN]

Version A - 14/11/2022 – Translated from French






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1. Preamble

1.1 Important information about the manual

	Important information – Read carefully
	Additional information
	Necessary tools

1.2 Important notice

 	<p>CE Marking: within the European Economic Area, the machine equipped with an <i>ez-Wheel</i>® electric drive shall be and remain compliant with the Machinery Directive 2006/42/EC.</p> <p>The <i>ez-Wheel</i>® electric wheel is a partly completed machine as defined in the Machinery Directive 2006/42/EC. This product is intended to be incorporated into an application and may under no circumstances be put into operation before the application has been declared in conformity with the provisions of Directive 2006/42/EC.</p>
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2. Safety instructions

2.1 Precautions for the use of *ez-Wheel*® products

This instruction manual contains the instructions to be followed for the installation and the maintenance of the *ez-Wheel*® products.

All mechanical drawings that could serve for the installation of *ez-Wheel*® products are available on request.

All the accessories mentioned are available in the *ez-Wheel*® product guide.

	<p>Do not use <i>ez-Wheel</i>® products for other purposes or in other conditions than those mentioned in the technical documentation.</p> <p>Read and make sure you have understood the manual before using <i>ez-Wheel</i>® products. Observe all the warnings and usage instructions in this manual.</p> <p>Keep this manual for reference throughout the life of the product.</p> <p>In the event of loss, you can obtain a copy of this manual on the ez-wheel.com website under "Download center".</p> <p>If the product is transferred to another owner, make sure that the manual is transferred as well.</p> <p>The characteristics, descriptions, and illustrations in this document are applicable at the date of publication.</p> <p>ez-Wheel reserves the right to make any modifications and revisions to this document without prior notice.</p> <p>Product users obtain their own information on these modifications.</p>
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Precautions for the use of the wheel:

Always use a suitable charger.

Do not submerge the wheel.

Do not open the wheel.

Do not expose to a heat source.

Do not expose to fire.

Do not insert pieces of metal into the connector.

The product must under no circumstances be modified without authorization from ez-Wheel.

Do not try to change the technical performance of the wheel.
The product should not be subjected to use beyond the technical performance specified by ez-Wheel.
Inappropriate use results in cancellation of the warranty.
Opening of the wheel results in cancellation of the warranty.

i Precautions for the use of the wireless interface box ezR44IN/x:

Make sure the metal housing is locked before use.
The back of the box with the connectors is not waterproof. It should not be oriented in such a way that it is exposed to rain and runoff.
Use 1.5V alkaline batteries or 1.2V AA size rechargeable batteries.
Do not connect the box to any device other than the actuators recommended by the dealer.

i Precautions for the use of the tiller head ezRTH/x:






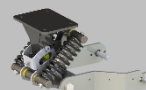

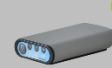


Do not open the tiller head.
Do not insert pieces of metal into the connector.
The product must under no circumstances be modified without authorization from ez-Wheel.

2.2 Precautions for the use of the batteries



The user must not open the wheel under any circumstances and does not have access to the batteries.
The wheel contains Ni-MH batteries, which are subject to restrictions covering transport and the safety of the user.
All information and regulations concerning these batteries can be provided on request.

3. ez-Wheel® product overview and compatibility

	Series 300				Series 10''
					
	Wheel Ref. ezW300I/WR	Wheel Ref. ezW300I/CCR	Wheel Ref. ezW300F/ST/W	Wheel Ref. ezW300M/ST/W	Wheel Ref. ezW10R/W
Integration devices					
 Bracket Ref. ezMCS/H	✓		✓	✓	
 Bracket Ref. ezMCS/H/CC		✓			
 Anti-rotate ring Ref. ezMAR	✓	✓	✓	✓	✓
Interfaces and directional controls					
 Interface box¹ Ref. ezR44IN/W	✓		✓	✓	✓
 Interface box² Ref. ezR44IN/U		✓			
 Tiller head Ref. ezRTH/W	✓		✓	✓	✓
 Tiller head Ref. ezRTH/W/IP	✓		✓	✓	✓

¹ **Wireless /W** communication

² **Serial Link /U** communication

4. Before use

- i** In order to optimize the power consumption of your wheel and not damage the integrity of the batteries, we have included a mode which totally deactivates your system after one week of non-use.
- i** For any system remaining inactive for at least this duration, before any use of your application involving rotation of the wheels, even without electrical assistance, it is essential that you put the system back into operation by pressing the **ON/OFF** zone on the wheel label.



If your system has more than one wheel:

- Perform the operation on all the wheels.
- Always charge the wheel before a prolonged shutdown.
- i** Refer to point "7. Charging the **ez-Wheel®** products"
- ⚠** Never leave an unused wheel totally discharged. It is recommended to recharge **ez-Wheel®** 300 and 10" Series wheels every 90 days.

5. Integration of the ez-Wheel® products

- i** Although it is possible to integrate **ez-Wheel®** wheels directly on a machine, it is recommended to use bracket-type integration accessories. These accessories allow the optimization of the ground/rolling area contacts and guarantee safety and comfort of use.

5.1 Mounting of the wheel on the axle

- Check that the application on which the wheel is going to be mounted has a axle with a diameter of 16 mm, of which the length corresponds to the thickness of the wheel, for each wheel
- Position the wheel on the axle and make sure that the hexagon zone of the wheel is correctly inserted in that of the application (XC 18 steel or equivalent hardness).



Positioning of the **ezMAR** anti-rotate ring

The integration of the **ezMAR** anti-rotate ring is strongly recommended. Its design is specifically studied to deform in case of excessive effort, and thus preserve the wheel.

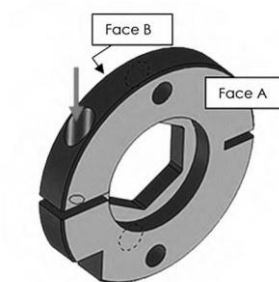
- Remove the M3 screw from the **ezMAR** ring with a 2.5 mm Allen key.
- Position the hexagon zone of the **ezMAR** clamp on the wheel axle.

i It is possible to use a mallet for this operation, but the wheel axle must not be damaged in any circumstances.

i Face A of the clamp should be against the wheel.

- Tighten the M3 side screw with an Allen key to ensure that the clamp is locked around the hexagon zone.

- ✂ M3x12 CHC screw
- ✂ 2.5 mm Allen key
- ✂ Mallet





- Check that the tiller head is switched off: all lights are off.
- Inspect the general condition of the wheel and check for damage.
- Check the condition of the wheel: press the **ON/OFF** zone of the wheel and check that the **OK** light is green.




5.2 Mounting of the wheel to the application via an integration bracket

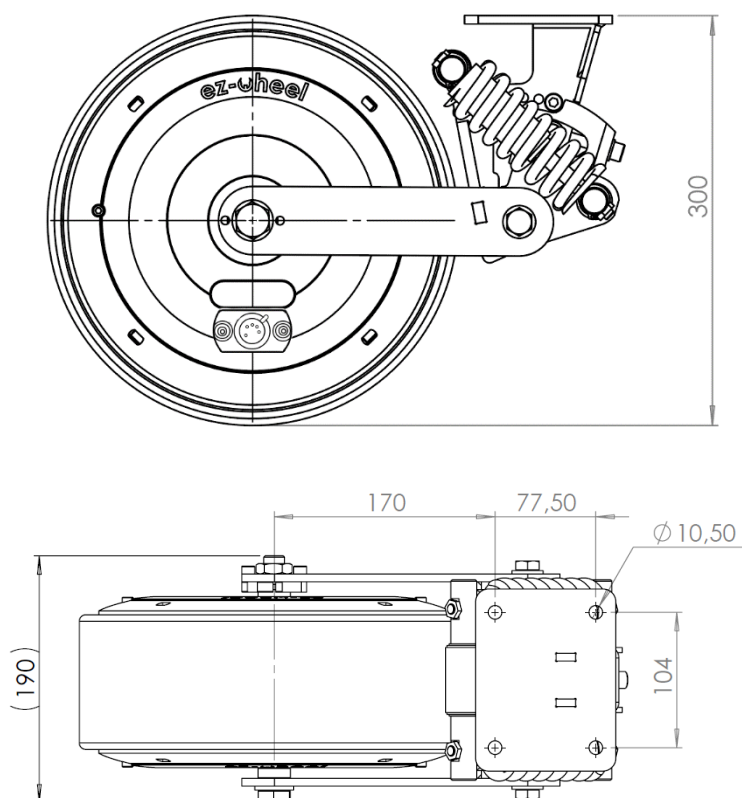
The **ezMCS/H** suspended bracket serves for mounting **Series 300** autonomous wheels on applications requiring less than 100 Kg of load on the wheel.

Brackets available on the ez-Wheel® product guide:

Reference	Visual	Wheel compatibility
ezMCS/H		<ul style="list-style-type: none"> ✓ ezW300I/WR ✓ ezW300F/ST/W ✓ ezW300M/ST/W
ezMCS/H/CC		<ul style="list-style-type: none"> ✓ ezW300I/CCR

5.2.1 Size of the bracket/wheel assembly

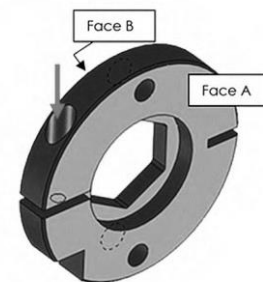
 Refer to 2D drawings available on request from your dealer.



5.2.2 Integration of the anti-rotate ring on the wheel

The integration of the **ezMAR** anti-rotate ring is strongly recommended. Its design is specifically studied to deform in case of excessive effort, and thus preserve the wheel.

- Remove the M3 screw from the **ezMAR** ring with a 2.5 mm Allen key.
 - Position the hexagon zone of the **ezMAR** clamp on the wheel axle.
 - i** It is possible to use a mallet for this operation, but the wheel axle must not be damaged in any circumstances.
 - i** Face A of the clamp should be against the wheel.
 - Tighten the M3 side screw with an Allen key to ensure that the clamp is locked around the hexagon zone.
- ✂ M3x12 CHC screw
✂ 2.5 mm Allen key
✂ Mallet

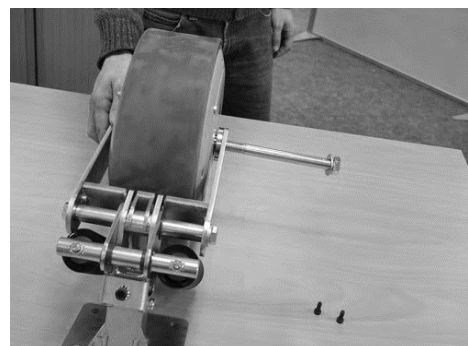


- Check that the tiller head is switched off: all lights are off.
- Inspect the general condition of the wheel and check for damage
- Check the condition of the wheel: press the **ON/OFF** zone of the wheel and check that the **OK** light is green.

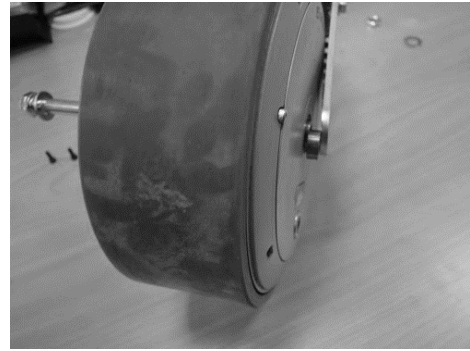


5.2.3 Fitting the wheel to the suspended bracket

- Position the wheel, according to its desired direction of operation and insert the M16 x 180 bolt through the hollow axle of the wheel.
- ✂ M16x180 CHC screw
✂ 16 mm open ended spanner



- Insert the holding ring between the bracket and the wheel on the opposite side from the anti-rotate ring.



- Fix the M16 screw with the M16 nut supplied.

- ✂ M16x180 CHC screw
- ✂ M16 nut
- ✂ 16 mm open ended spanner

- Fix the anti-rotate ring to the bracket with the two M5 screws.

- ✂ M5x12 CHC screw
- ✂ 5 mm Allen key



5.2.4 Adjusting the tension

Releasing the pressure system:

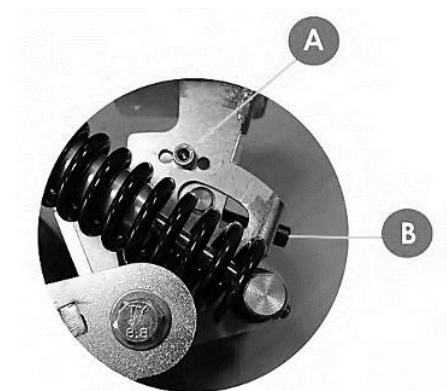
- Unscrew the A tension screw until the tensioner and the B stop screws are no longer in contact.

- ✂ M8x70 CHC screw
- ✂ 6 mm Allen key

Positioning and tightening the adjustment stops:

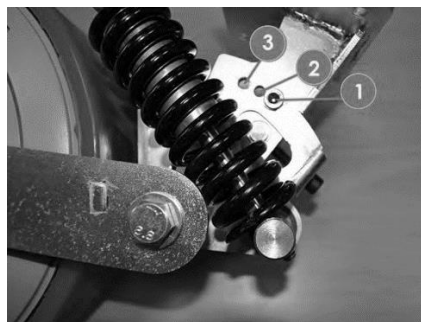
- Position the 2 stop screws in the desired position.
- Screw up and tighten the 2 stop screws.

- ✂ Tightening torque 16 N.m
- ✂ M8x12 CHC screw
- ✂ 6 mm Allen key



Tensioning and tightening the pressure system:

- Screw up and tighten the pressure system tensioning screw.
- ✂ Tightening torque 8 N.m
- ✂ M8x70 CHC screw
- ✂ 6 mm Allen key



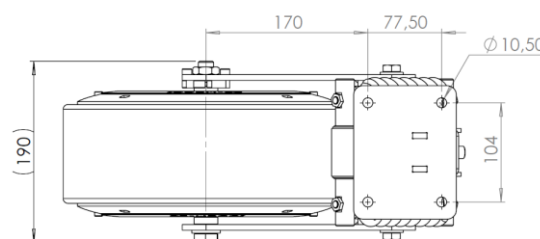
Position of the stop screw according to the load applied to the wheel:

Position 1	Low load position, approximately 50 kg
Position 2	Medium load position, approximately 75 kg
Position 3	High and load position, approximately 100 kg

- i** For most applications, position 1 is sufficient to ensure good grip between the wheel and the floor.
- i** Depending on the nature and the condition of the floor and the total load to be moved, it may be preferable to increase the load on the wheel by using positions 2 or 3.
- i** A relaxation of the system is possible in order to facilitate the installation under bulky machines.

5.2.5 Fixing the pre-assembled unit on the machine

- Screw the pre-assembled unit to the machine.
- Refer to the drawing of the bracket top plate for the positions of the 4 holding screws.
- Test the complete system and check that the electric drive of the wheel functions properly without skidding on the floor.



- ⚠** The horizontal driving force provided by the wheel is 35 kg maximum.
- ⚠** If, despite the force applied by the suspended clevis, slippage is observed, re-tension the system by increasing the load by one level until the correct traction is obtained.

5.3 Integration of directional controls






ez-Wheel® electric wheels are controlled by the interface in the tiller heads (**ezRTH/W** or **ezRTH/W/IP**) via a wireless communication system.

The wheels and the directional controls are designed to work together according to the configuration described in the **ez-Config®** instruction manual.


- Refer to point "5.4 Setting of the system" of this manual.

5.3.1 Integration of the tiller head

Two tiller head references are available in the *ez-Wheel®* product guide:

Reference		Visual	Wheel compatibility
ezRTH/W			<ul style="list-style-type: none"> ✓ Series 300 ✓ Series 10"
ezRTH/W/IP	 		





The tiller head must be held by the plate situated on the back of the casing.

- Fix the tiller head to the application in such a way as to ensure that it is intuitive and ergonomic for the user to handle.
-  All mechanical drawings that could serve for the installation of the *ez-Wheel®* products are available on request.



5.3.2 Integration of the wireless interface box

Two interface box references are available in the *ez-Wheel®* product guide:


References		Visuals	Wheel compatibility
ezR44IN/W			<ul style="list-style-type: none"> ✓ Serie 300 ✓ Serie 10"
ezR44IN/U			<ul style="list-style-type: none"> ✓ ezW300I/CCR

All mechanical drawings that could serve for the installation of **ez-Wheel®** products are available on request.

All the accessories mentioned are available in **the ez-Wheel®** product guide.



i Do not insert the batteries into the box before having finished the integration procedure of all the products.

- Check the condition of the wheel: press the **ON/OFF** zone on the wheel label and check that the light  is green.

i If the application has several wheels, repeat the operation for all the wheels.



- Check that the actuator chosen is connected to the wireless interface.



- Fix the box to the application.

i The box is attached to the application by M4 screws on its bottom face.

It can be positioned on:

- a chassis, using clamping clips
- a drilled panel to which it is screwed



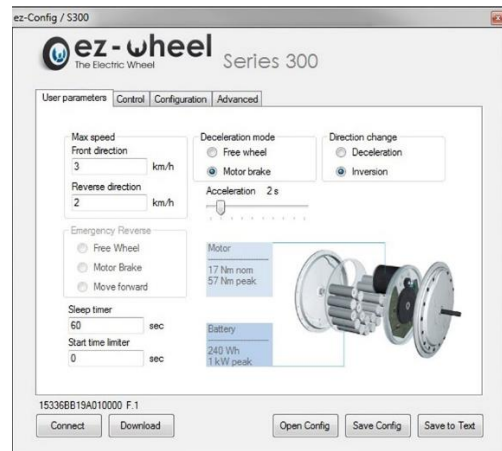
- Check that the box is firmly fixed.
- Connect the actuator selected to the connector on the back of the box.
- Fix the actuator to the application in such a way as to ensure that it is intuitive and ergonomic for the user.



5.4 Setting of the system

A system setting via the **ez-Config**® software is essential to use your **ez-Wheel**® equipment in complete safety.





- Refer to the **ez-Config**® **Series 300 et 10"** instruction manual available on the ez-wheel.com website under "Download center" to get all the compatibility, pairing and setting information.

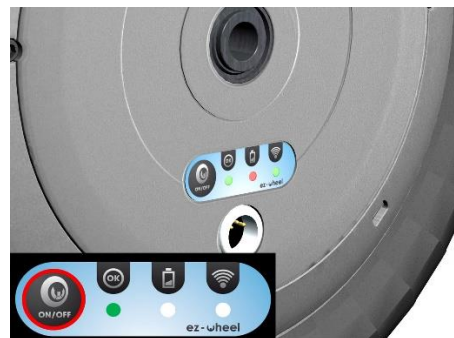




6. Starting up of the equipment

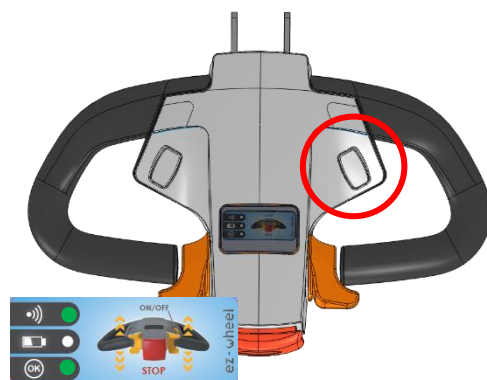
6.1 Starting up of the tiller head



6.1.1 Initial starting up of the tiller head

- Check the condition of the wheel: press the **ON/OFF** zone on the wheel label and check that the light  is green.
-  The indicator  show the battery charge level. Refer to point "8. Display".
-  If the application has several wheels, repeat the operation for all the wheels.



- Press the **ON/OFF** button on the tiller head and check that the light  is green.
- Check that communication is established between the tiller head and the wheel: the light  lights up green on the tiller head.

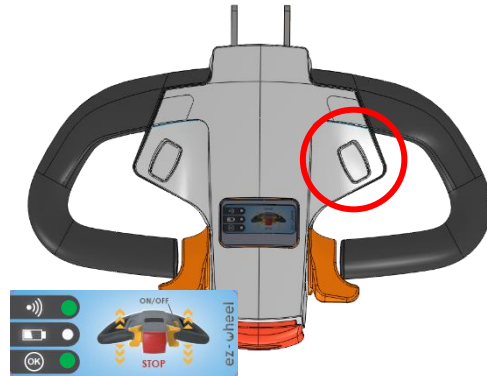


-  It is preferable to recharge the wheels completely before using them for the first time. It is essential to charge the tiller head before using it for the first time.
- Refer to point "7. Charging the **ez-Wheel**® products"
-  If one of these steps does not take place as described, refer to point "11. Troubleshooting" or contact your dealer.

6.1.2 Use of the tiller head

Motor operation is controlled by the tiller head accelerator.

- Press the **ON/OFF** button to put into operation or to switch off the tiller head.
- ❗ The tiller head goes into sleep mode after a few minutes without movement on the accelerator to conserve battery lifespan.
- To restart the system, press the **ON/OFF** button ; wake-up is immediate. It is not necessary to press the **ON/OFF** zone of the wheel at this stage.




6.2 Starting up of the wireless interface box

6.2.1 Initial starting up of the wireless interface box

- ❗ If the interface box is used in wired mode with a serial interface (**ezR44IN/U**), the **WIRELESS** indicator is disabled.

- Check that the actuator chosen is connected to the wireless interface.





- Check the condition of the wheel: press the **ON/OFF** zone on the wheel label and check that the light **OK** is green. (The indicator  show the battery charge level. Refer to point "8. Display").

- ❗ If the application has several wheels, repeat the operation for all the wheels.






- Insert the batteries in the wireless interface box.
- Close and lock the box.
- Refer to point "9.5 Changing the wireless box batteries".



- Press the **ON/OFF** zone of the box label and check that the light  is green.
- Check that communication is established between the box and the wheels: the light  lights up green on the box.



-  It is preferable to recharge the wheels completely before using for the first time. Refer to point "7.1 Charging the wheel".
-  It is essential to recharge the wireless interface batteries before using for the first time
-  If one of these steps does not take place as described, refer to "11. Troubleshooting", or contact your dealer.

6.2.2 Use of the wireless interface box

Motor drive control is via the actuator connected to the wireless box. The procedure for using the wheel therefore depends on the type of actuator chosen.


- To start the box: press the **ON/OFF** zone on the box label.
- To switch off the box: press the **ON/OFF** zone on the box label.
- The box goes into sleep mode after a few minutes without movement on the actuator to conserve battery lifespan.
- To switch the system back on, press the **ON/OFF** zone on the box label ; wake-up is immediate. It is not necessary to press the **ON/OFF** zone of the wheel at this stage.



7. Charging the ez-Wheel® products



7.1 Charging the wheel

7.1.1 Charging the wheel with charging connector

-  Wheels can be charged every time a mains connection is available (if necessary, several times per day). It is not necessary to wait for the battery to be discharged.


- Remove the plug from the wheel connector.
- Check that the connector is not obstructed by dust accumulation or a foreign body. If necessary, clean the connector carefully.




-  Never wash the connector by spraying a jet of water directly into it.
-  Check that the connector is perfectly dry before connecting the charger.




- Connect the charger to the wheel and connect the charger to the mains.
- Use a suitable charger. Contact your dealer for more information on this charger.



The lights  on the wheel and the box should be flashing orange.

When the wheel is charged the lights  on the wheel will be flashing green.



-  It is impossible to use the wheel when it is connected.
-  When the wheel is charged, disconnect the charger by pressing the lug on its connector and replace the plug on the wheel connector.
-  To disconnect the charger connector, press in the locking lug and pull the connector.

7.1.2 Charging the wheel without charging connector

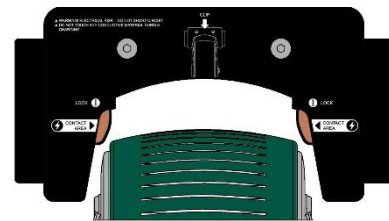
In order to meet the hygiene and watertightness requirements of the food sectors and with controlled atmosphere, the XLR charging connectors of the **ezW300F/ST/W** and **ezW300M/ST/W** products have been removed.

The following charging instructions are only applicable to the **ez-Wheel®** electric wheel series with stainless steel housing: **ezW300F/ST/W** and **ezW300M/ST/W**.

- Check that the housing of the wheel is clean and dry before installing the charger.




- Place the charger on the wheel by applying a radial force on the adapter so that the teeth on both sides of the wheel compress the rubber.
- Connect the charger to the adapter and connect the charger to the mains.



- i** No polarity is required.


The choice of the contact method for charging is left to the integrator, according to the customer's needs.

Several accessories allow the charging of ez-Wheel® stainless steel wheels:

Reference	Visual	Designation
ezCCST/300		Self-holding charge adapter with integrated copper charge contacts, available in the ez-Wheel® product guide.
ezCCT/CU	-	Copper charge contacts to be mechanically integrated in a custom solution, available in the ez-Wheel® product guide.
Specific development	-	Customized development, adapted to the application: pads, coils, rails, clamp, U-shaped design, gutter, etc.

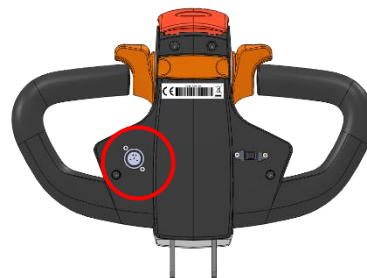
- ⚠** Never create a short circuit between the stainless-steel housings during the charging phase.


7.2 Charging the tiller head


When the light  on the wireless tiller head is red, it is necessary to charge the tiller head batteries.

- Connect the charger to the tiller head and connect the charger to the mains.
- Leave the tiller head in charge for several hours.

When the tiller head is charged, disconnect the charger by pressing the lug on its connector.

















 As a rule, charge the tiller head as often as possible, without waiting for the battery to be completely discharged.









 Use a suitable charger. Contact your dealer for more information on this charger.








8. Display

8.1 Wheel display















		Green	The wheel is working.
		Red	Fault
		Green	The wheel is charged.
		Flashing green	The wheel is charged, but it is connected to the charger. It is impossible to use it.
		Orange	The wheel is at half charge.
		Flashing orange	The wheel is charging.
		Red	The wheel is below 1/3 of its total charge.
		Flashing red	The wheel is completely discharged. It is impossible to use the system. Charging is necessary.
		Green	The wheel communicates with the tiller head.
		Red	The tiller head is not connected.
		Flashing red	The wheel is completely discharged. The communication between the wheel and the tiller head is deactivated.

8.2 Wireless interface box display

		Green	The box is working.
		Red	The batteries in the wireless interface box are discharged.
		Flashing red	One of the wheels connected to the box is in a fault mode.
		Green	The wheels are charged.
		Flashing green	The wheels are charged, but one wheel in the system is connected to the charger. It is impossible to use the system.
		Orange	One of the wheels in the system is at half charge.

		Flashing orange	One of the wheels in the system is at half charge.
		Red	One of the wheels in the system is below 1/3 of its total charge.
		Flashing red	One of the wheels is completely discharged. It is impossible to use the system. Charging is necessary.
		Green	The box communicates with all the wheels in the system.
		Red	The box is not connected.
		Grey	Interface used in serial wire mode.

8.3 Tiller head display

		Green	The tiller head is working.
		Red	The tiller head batteries are discharged.
		Flashing red	One of the wheels connected to the tiller head is in a fault mode.
		Green	The wheels are charged.
		Flashing green	The wheels are charged, but one wheel in the system is connected to the charger. It is impossible to use the system.
		Orange	One of the wheels in the system is at half charge.
		Flashing orange	One of the wheels in the system is at half charge.
		Red	One of the wheels in the system is below 1/3 of its total charge.
		Flashing red	One of the wheels is completely discharged. It is impossible to use the system. Charging is necessary.
		Green	The tiller head communicates with all the wheels in the system.
		Red	The tiller head is not connected.

9. Maintenance

9.1 Maintenance of wheels with connectors

Concerned references:

- ezW300I/WR
- ezW300I/CCR
- ezW10R/W

The wheel does not require any maintenance other than charging. It should never be opened in any circumstances.

The wheel can be washed with a normal water hose.

Never use a high-pressure cleaner.

Do not expose the connectors, the display or the labels directly to the jet. It is preferable to use a wet sponge.

Do not use solvents or corrosive products.

9.2 Maintenance of the stainless-steel wheels without connectors


Concerned references:

- ezW300F/ST/W
- ezW300M/ST/W

The wheel does not require any maintenance other than charging.
It should never be opened in any circumstances.
The wheel, with a high protection index: **IP69K**, is washable with a high-pressure cleaner in all directions.
Do not use solvents or corrosive products.

9.3 Prolonged shutdown

The wheel should be stored in a warm and dry place.
Charge the wheel before a prolonged shutdown.
Never leave an unused wheel totally discharged.
Remove the batteries from the wireless interface box.

 It is recommended to recharge **ez-Wheel®** products every 90 days.

To put the system back into operation after a prolonged shutdown, refer to point "6. Starting up of the equipment".


9.4 Safety rules in relation to the batteries

The user must not open the wheel under any circumstances and does not have access to the batteries.
The tiller head contains Ni-MH batteries, which are subject to restrictions covering transport and the safety of the user.
All information and regulations concerning these batteries can be provided on request.

9.5 Incorrect use


ez-Wheel cannot be held responsible in any circumstances for any loss caused to the user in the event of unreasonable or inadequate use of the product.

9.6 Changing the wireless interface box batteries


When the light  on the interface box is red the box batteries need charging.

- With the tip of a tool push in the locking point on the side of the box to be able to slide the protective housing towards the back of the box as far as the stop.

The battery compartment is now accessible.

-  Do not remove the safety housing completely.

- Replace the batteries in the box with charged batteries

-  The types of battery to be used are 1.2V accumulators or AA format 1.5V batteries.



- Lock the box by sliding the metal housing towards the front face

- ⚠ The locking point should have returned to its initial position.



9.7 Versions with tyres: changing a tyre

- ⓘ It is recommended to switch off the wireless interface box before handling the wheel: no light should be on.
- ⓘ To replace a tyre and to check the type of tyre to be used, contact your dealer.
- ⓘ All tyres should be fitted with inner tubes.

- Deflate the tyre completely.



- Remove the 4 screws holding the wheel rim flange situated on the circumference of the wheel next to the valve.

- ✂ M5x25 BHC screw
- ✂ 3 mm Allen key

- Remove the two locking screws on the valve side.

- ✂ M5x18 CHC screw
- ✂ 4 mm Allen key

- ⚠ The metal rim flange holding the tyre then has some play.

- Pivot the holding rim flange by hand.



- Remove the holding rim flange.



- Remove the tyre and the inner tube.



- Change the tyre and the inner tube if necessary.

⚠ It is easier to fit the new tyre if the inner tube is pre-inflated.

- Be careful about the direction of the newly fitted tyre: the fitting direction should correspond with the direction of movement of the application.
- Reposition the holding rim flange on the hub.
- Pivot it to put it into its initial position.



- Fit the two locking screws and check that they are properly tightened.

✂ M5x18 CHC screw
✂ 4 mm Allen key

- Refit the 4 screws holding the wheel rim flange and check that they are properly tightened.

✂ M5x25 BHC screw
✂ 3 mm Allen key

- Inflate the tyre.



- ⚠ Do not inflate the tyre unless the locking screws are properly in place and tightened on the holding rim.
- ⚠ Do not overinflate. The inflation pressure should be between 1.5 and 2 bar.

9.8 Versions with solid tyre

- ⚠ The solid tyre cannot be replaced.

In the event of wear that prevents the wheel from being operated, contact your dealer.

10. Contacting your dealer

If an **ez-Wheel®** product appears to be faulty, contact your dealer.

- i** In order to allow the dealer to give you a quick answer, please bring the serial numbers of the **ez-Wheel®** products and accessories.
- i** The warranty conditions for **ez-Wheel®** products are available within the general sales conditions from your dealer.

Before contacting your dealer, please carefully follow the items in point "11. Troubleshooting".

11. Troubleshooting

11.1 Wheel malfunctioning

The appearance of the wheel seems damaged.

- Check that no part of the wheel is missing.
- Check the housing and the rims for damage.
- Check for damage around and on the axle.
- If the product is damaged, contact your dealer.

Charging the wheel does not enable it to be operated.

- Check that nothing is obstructing the wheel connector. If necessary, clean the connector carefully.
- After a long period of storage, if the system does not start, leave it in charge for several hours and follow the procedure for putting the system back into operation.

11.2 Troubleshooting the wheel/wireless interface box assembly

Wireless interface box no longer works normally.


- Change the batteries and follow the procedure for putting the system back into operation.

Actuator malfunction

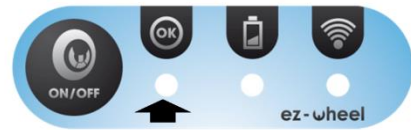
- Check that the actuator wire is not disconnected or cut.


- i** In the event of a problem not described in this chapter, contact your dealer.


Display:

The light  on the wheel is not green.


- Charge the wheel for several hours and put the system back into operation.




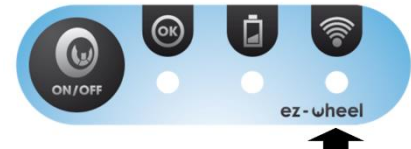
The light  on the wireless interface box is not green.

- Replace the batteries.
- Check the condition of the light  on the wheels.
- Check that the actuator is properly connected.
- If the actuator has an **ON/OFF** switch, or an emergency stop button, check that it is in **ON** position.



The light  on the wireless interface box is not green.


- Identify which wheel in the system is not connected (its light  is not green).
- Press the **ON/OFF** button of the wheel in question.
- Charge the wheel in question.
- Check that the distance between the wheel and the box does not exceed a few meters.
- Check that the environment in which the application is situated is not subject to excessive radiation from wireless communication appliances.



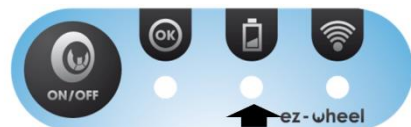
The lights  and/or  on the wheel are flashing red:

- Put the wheel in charge for several hours.




The light  on the wheel does not flash although the charger is connected.

- Check the connections.
- Check the condition of the connector.
- Check the charger fuse, if there is one.
- Check the condition of the mains plug.
- It is possible that the wheel temperature may be too high. In this case, the wheel goes into a safety mode and cuts off the charge. Wait 10 to 20 minutes, the system will operate normally when the wheel temperature has decreased.



11.3 Troubleshooting the wheel/tiller head assembly

Tiller head no longer works normally.


- Put the tiller head in charge and follow the procedure for putting the system back into operation.
-  In the event of a problem not described in this chapter, contact your dealer.

Display:

The light on the wheel is not green:

- Charge the wheel for several hours and put the system back into operation.

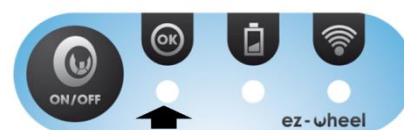
The light on the tiller head is not green:

- Check the condition of the light  on the wheels.
- Put the tiller head in charge.

The light on the tiller head is not green:

Identify which wheel in the system is not connected (its light is not green).

- Press the **ON/OFF** button of the wheel in question and check its display.
- Charge the wheel in question.
- Check that the distance between the wheel and the tiller head does not exceed a few meters.
- Check that the environment in which the application is situated is not subject to excessive radiation from wireless communication appliances.



The lights and/or on the wheel are flashing red:

- Put the wheel in charge for several hours.



The light on the wheel does not flash although the charger is connected:

- Check the connections.
- Check the condition of the connector
- Check the charger fuse, if there is one.
- Check the condition of the mains plug.
- It is possible that the wheel temperature may be too high. In this case, the wheel goes into a safety mode and cuts off the charge. Wait 10 to 20 minutes, the system will operate normally when the wheel temperature has decreased.



11.4 Changing a tyre

It is impossible to refit the holding rim flange after changing a tyre.

- Check for a foreign body in the holding rim flange lugs.
- Check for a foreign body in the hub lugs.
- Check that the holding rim flange has not been deformed during the operation.



11.5 System reset procedure

If any part of the system ceases to operate normally, and if all the previous recommendations have been checked, it is possible to reset the system.

- Check that the charger is not connected to the wheel.
- Press the **ON/OFF** button on the wheel label for 20 seconds.
- Release the **ON/OFF** button and connect the charger to the wheel.
- Leave the wheel in charge for several hours (the wheel lights will light after a few minutes).

12. Product end-of-life

When the product reaches the end of its life, return it to the dealer.

Even though it is at the end of its life, the product must be protected during transport.

- Pack the equipment properly in its original packaging, or an equivalent.
- If the original packaging no longer exists, place the product in a box in good condition, making sure that the equipment is perfectly wedged and close the box with adhesive tape. If more than one piece of equipment needs to be returned, group them together in a single box or group the boxes together.

13. Declarations

13.1 Declaration of incorporation

The declarations of incorporation are available and can be downloaded on the ez-wheel.com website under "Download center".

<https://www.ez-wheel.com/en/resources>

13.2 Declaration of CE conformity

The compliance declarations are available and can be downloaded on the ez-wheel.com website under "Download center".

<https://www.ez-wheel.com/en/resources>