

Operating instructions

GEWO ALPHA NEXXT

Table tennis robot



GEWO[®]
THE BETTER WAY TO PLAY

Features

- State-of-the-art 3-wheel ball guide technology for any form of spin
- Hard foam wheels with special coating for long durability
- Memory for 22 exercises, 10 pre-programmed exercises
- Programmable or random ejection of balls with different spin, speed, direction and trajectory
- Spin settings from empty balls to extreme rotation (90 different spin combinations)
- Natural timing of the balls within an exercise thanks to AFC (Automatic Frequency Control)
- Includes handy remote control to start and stop exercises
- Integrated catch net for easy ball return
- Ejector head can be adjusted to 4 different heights to realistically simulate even more game situations.
- Easy transport thanks to low weight of 6 kg
- 30 months warranty (see section „Warranty“)

Important notes!

- Please read this user manual carefully.
- The robot may only be connected to 100 V - 230 V power supplies.
- The wheels rotate at high speed. Do not touch them during operation!
- Only use the GEWO Alpha Nexxt in dry rooms.

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1. Delivery scope & assembly

Delivery scope

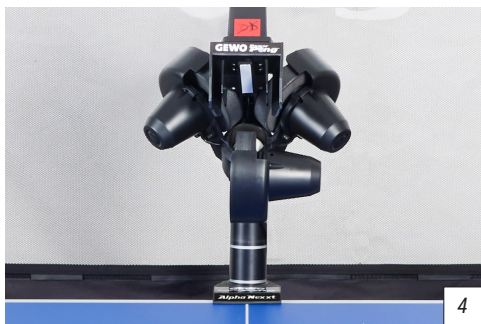
Robot incl. power supply, power cable and power supply unit (Input: 100~240 V, Output: 24 V), remote control, GEWO Alpha Nexxt Controlboard

Other parts included: Allen key (2 and 4 mm) for ejection discs, fitting piece for ejection wheels, replacement rubber rings for ball catcher net, Velcro strip, white replacement steel strip for the deflector plate, table bracket for the control board

Assembly



1. Place the robot on the table tennis table and fold down both sides of the net until they snap into place at about 45° (*picture 1*). Then turn the retaining hooks out to about 20 cm apart (*picture 2*).



2. Carefully loosen the locking screw behind the ball tube (*picture 3*), while holding the head with the other hand, turn the head 180° so that the ejection points exactly towards the centre line (*picture 4*). Pull the head upwards until the second ring can be seen slightly above the guide tube. Then tighten the locking screw again to fix the height.

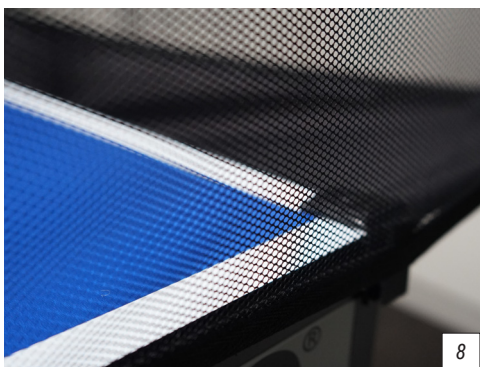
⚠ CAUTION: Do not overtighten the screw or damage to the tube may occur.

3. Now lift the robot with both hands and angle it slightly so that the retaining hooks can be guided under the table frame. Guide the robot to the edge of the table and then set it down carefully (*picture 5*). Connect the cable of the ejector head to the interface of the base (*picture 6*).



! **ATTENTION:** The GEWO Alpha Nexxt robots are preset for tables with a 25 mm surface. To ensure a good grip and a clean ball ejection even with thinner surfaces, the retaining hooks are equipped with a height adjustment at their upper end. If necessary, turn the adjustment heads upwards enough to compensate for the difference in surface compared to the 25 mm of the standard setting.

i **TIP:** If necessary, you can attach the longest of the Velcro straps supplied to the back of the table surface to additionally fix the robot head to the table.



4. Now fold down the ball net completely.

5. Pull the side ball nets along the side edge of the table to your net. First pass the rubber loop under the net set (picture 7) and then fasten the rubber loop to the adjusting screw of the respective net post.

6. Then attach the corner caps to the edges of the table and connect the Velcro strip of the net to that of the respective holder at the corners of the table to provide additional stability (picture 8).

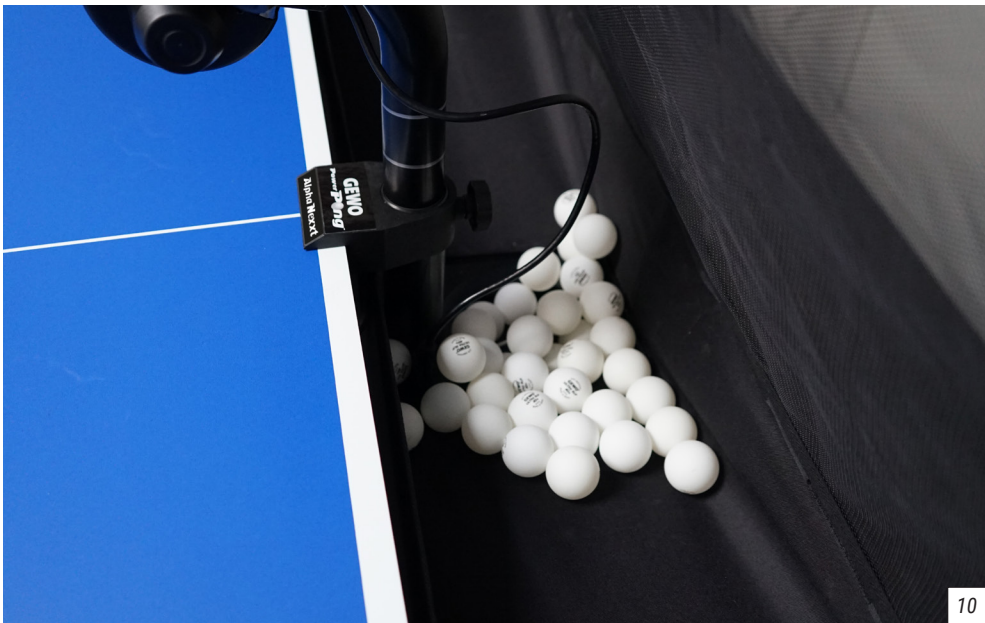
i **TIP:** If necessary, the two short Velcro strips can be additionally attached to the corner caps to give the net even more support.

7. connect the power supply unit to your mains and connect the plug to the connector on the side of your robot (picture 9, next page).

8. Connect the control box to your robot using the connection cable. Now you can clamp the table bracket to your table at a suitable place and hang the control box there.
9. Fill at least 50 clean table tennis balls into the ball collection area (*picture 10*) before you start playing.



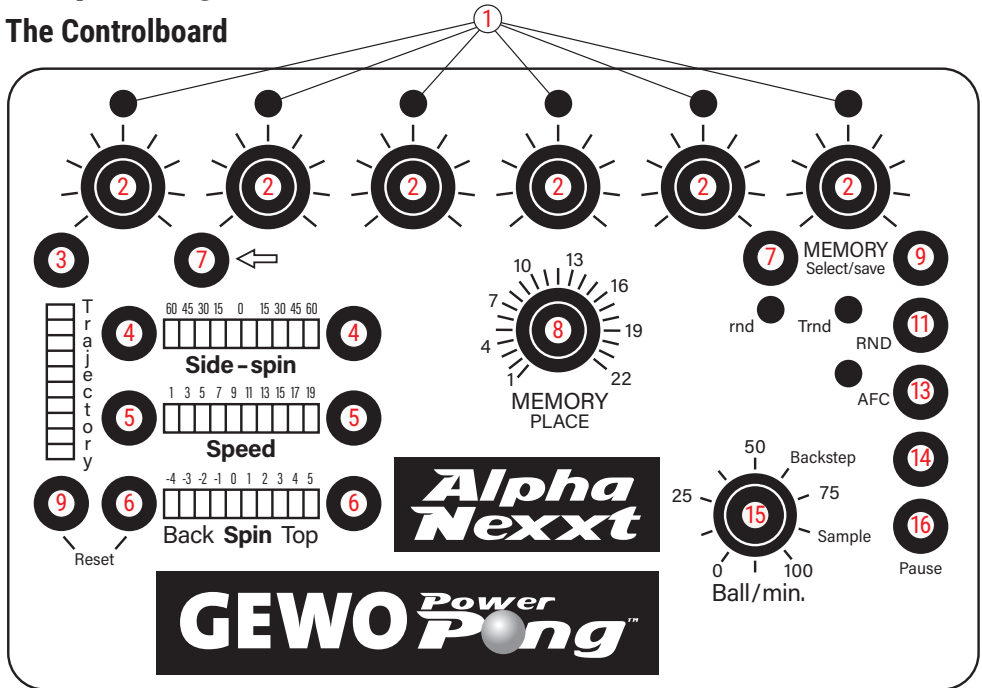
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2. Operating

The Controlboard



- ① **Ball LEDs:** A flashing LED indicates which ball is currently selected. Permanently lit LEDs indicate that a corresponding ball is programmed at the court for the selected exercise.
- ② **Ball placement control:** For adjusting the balls placement to the left or right.
- ③ **Flight height button:** Adjust the height of the ball ejection.
- ④ **Side spin buttons:** Adjust the sidespin for a ball.
- ⑤ **Speed buttons:** Adjust the speed for a ball.
- ⑥ **Spin buttons:** Add topspin or undercut to the ball.
- ⑦ **Ball selection buttons:** Adds additional balls to an exercise or deletes balls already created.
- ⑧ **Memory control:** Selects the memory location.
- ⑨ **Memory button:** Saves active exercises and recalls saved exercises (see section „Memory mode“).
- ⑩ **RND LEDs:** Indicate which random setting is active.
- ⑪ **RND button:** Activates the random mode (see section „Random functions“).
- ⑫ **AFC LED:** Indicates whether automatic frequency control (AFC) is active.
- ⑬ **AFC button:** Activates the automatic frequency control (AFC) (see section „AFC function“).
- ⑭ **Backstep button:** Takes over ball settings for another ball.
- ⑮ **Ball/min control:** Adjusts the ball ejection speed of the robot.
- ⑯ **Sample button:** Ejects a sample ball with the currently selected settings.

Adjusting the head height

To simulate the real game as well as possible, the robots of the GEWO Power Pong Nexxt series offer the possibility to adjust the head height. To do this, hold the ball tube firmly with one hand and loosen the large black locking screw with the other hand (*picture 11*). Then the tube can be adjusted to a different height by gently pushing or pulling it. To select another height, make sure that one of the silver rings at the transition of the lower tube is slightly visible before you tighten the screw again.



⚠ CAUTION: Do not overtighten the screw, otherwise the tube may be damaged. Tighten the screw only at the 4 marked positions. Incorrect head height can lead to ball blockages, incorrect ejections or other problems.

Starting and centring the robot

As soon as the control board is connected to the power, the „Ball 1“ LED should start flashing. If you now turn the „Ball/min“ control (15) higher, the GEWO Alpha Nexxt robot will directly start to pull balls to the ejection head. The ball ejection speed can be set between 0 and 100 balls per minute and can be adjusted even during play.

To ensure that the first balls played are ejected along the centre line, turn the first ball placement control to the centre. If the balls do not land on or near the centre line of the table, stop the exercise by setting the „Ball/min“ control (15) back to 0, loosen the black locking screw on the tube of the robot head and carefully turn the head in the required direction. Now tighten the locking screw again and repeat the steps until the balls land as close to the centre line as possible.

⚠ ATTENTION: If the robot has not been properly centred before playing, it is possible that balls will not land on the table during some exercises!

Ball settings - placement, trajectory, speed and spin

If you want to adjust a ball, first select the ball using the two **selection buttons** (7). When you have selected a ball, the corresponding **LED** (1) starts to light up and the respective selected ball settings become visible.

Now you can make 5 different settings for your ball:

The placement of the ball can be adjusted using the **6 knobs** (2) under the ball **LEDs** (1). The more the knob is turned to the left, the further the ball is ejected into the left side of the table; the more the knob is turned to the right, the further the ball goes into the right side of the table.

The „**trajectory**“ can be changed using the buttons on the left side (3). To increase or decrease the trajectory, press and hold the respective button. The further down the trajectory is displayed, the flatter the flight curve. Particularly low settings are suitable for impacts.

The speed of the ball can be adjusted with the „**Speed**“ buttons (5). Values from 1 (very slow) to 19 (very fast) are available for this. The combination of trajectory and speed is decisive for the length of the ejected ball.

With „**Spin**“ (6) the undercut or overcut of the ball can be adjusted. The setting 0 corresponds to no spin, -4 to strong undercut and 5 to strong topspin.

The „**Sidespin**“ buttons (4) add sidespin to the ejected balls. Here, the setting 0 again corresponds to no spin. The values on the left side from 60 (very strong) to 15 (light) correspond to left sidespin, while the values on the right side from 15 (light) to 60 (very strong) correspond to right sidespin.

When a ball has been set with the help of the various sliders, the settings made can be tested with the „**Sample**“ button (16) at the bottom right. If you tap on the sample button, the robot ejects exactly the selected ball once, so that you can check whether the set ball actually corresponds to your expectations.

To transfer the selected settings to another ball in the exercise, you can press the „**Backstep**“ button (14). With the help of the backstep button, you can create exercises very quickly without having to completely reset each ball.

If you want to delete a ball from an exercise, use the „**Back**“ selection button (7).

Memory mode - saving, playing and editing exercises

Saving exercises

To save an exercise, first turn the „**Memory**“ control (8) to the position where you want to save the exercise. Now press and hold the „**Memory**“ button (9). When the LEDs on the control board start flashing, the exercise has been saved.

Editing and playing saved exercises

If you want to play a stored exercise, turn the „**Memory**“ control (8) to the desired position and briefly touch the „**Memory**“ button (9). If you now turn the „**Ball/min**“ control (15) higher, the robot starts to play the selected exercise.

When saved exercises are called up, changes can only be made to the placements, ball frequency and the placements, the ball frequency and the random and AFC modes.

If you want to adjust **spin**, **flight** height or **speed**, first press the „**Backstep**“ button once and then make the desired changes.

 **ATTENTION:** Changes to saved exercises must be saved again on the same memory location, otherwise they will be lost.

 **TIP:** The 10 preset exercises are located in memory locations 13-22.

Random functions - scatter mode and random order

The GEWO Alpha Nexxt provides you with two different random functions to choose from.

1. **„rnd“**: By tapping the **„RND“** button (11) until only the **„rnd“** LED is lit up (picture 12) the scatter mode is activated. With this function, the balls of the selected exercise can vary within a radius of 20 cm around the actually set ball. This function offers the decisive advantage that a realistic game can be simulated better. In the actual game situation, balls do not always come back precisely. The scatter function can also be selected for exercises that consist of only one ball.
2. **„Trnd“**: Pressing the **„RND“** button (11) until only the **„Trnd“** LED is lit (picture 13) activates the random mode, where the set balls of the selected exercise are ejected in random order. In this way, irregular exercises can be created to improve reactions. For this function, it is necessary that the selected exercise consists of more than one ball.
3. **„rnd“ & „Trnd“**: When both LEDs light up (picture 14), the selected exercise is played in random order and the balls are scattered in a 20 cm diameter. This function is also only possible for exercises with at least two balls.

! ATTENTION: Please note that random settings cannot be saved. If you want to start your saved exercises in any random mode, you have to select the desired random option again each time..



AFC function – Automatic frequency control

The **automatic frequency control (AFC)** can only be activated if several different balls are set within an exercise. With the AFC function, the robot ensures that the time intervals between the individual balls with different speed and spin are adjusted to create a more natural ejection tempo. For example, if a slow serve is set before several fast topspin ejections in a drill, the robot automatically ensures that there is a slightly longer pause between serve and topspin to get closer to reality. To activate the automatic frequency control, press the **„AFC“** button (13). The AFC is switched active when the red **„AFC“** LED lights up (picture 15).

! *NOTE: Please note that the AFC setting cannot be saved.*

If you want to start your saved exercises with automatic frequency control, you have to select the AFC function again each time.



Remote control - pairing, operation and battery replacement

Your GEWO Alpha Nexxt robot also includes the small handy remote control in the shape of a car key. The remote control should be connected directly to your GEWO Alpha Nexxt robot when it is delivered. If you want to recalibrate your remote control, simultaneously tap the two selection buttons <- and -> (7) for a longer period of time on the controlboard. A countdown of 10 seconds will start. Within these 10 seconds, press one of the 4 buttons on your remote control. As soon as the 10 seconds have elapsed, your remote control is ready to start.

The remote control offers the following functions:

1. Pressing the „**START**“ button starts the exercise displayed on the Controlboard.
2. Pressing the „**+**“ button increases the speed of the ball by 5 balls per minute.
Pressing the „**-**“ button decreases the speed accordingly. If the buttons are not pressed individually but held down, the speed adjustment is faster.
3. Pressing the „**STOP**“ button stops the exercise being played.




Battery replacement

If your remote control stops working properly, you may need to replace the remote control batteries. The remote control is powered by **two 3 V, CR2016 button cells**. You open the remote control by inserting a small coin or slotted screwdriver into the slot at the end of the remote control and then twisting it with some force to open the remote control. You may need to carefully remove the silver metal bracket from the remote control first. Once you have opened the remote control, remove the circuit board with the batteries and gently pull the black battery holder out of the circuit board. Now replace the two old batteries with your new batteries. Make sure that both batteries have the positive side facing up. Then reinsert the battery holder into the circuit board and reassemble the remote control.

3. Dismantling

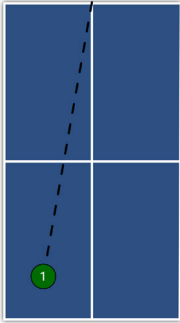
1. Disconnect the robot from the power and roll up the power cable.
2. Loosen the rubber bands that hold the side nets to the table net and place the side nets into the ball collection container.
3. Fold the net up to the first stop of the folding mechanism. Now unhook the robot from the table and place it on the table.

 TIP: If you are only taking the GEWO Alpha Nexxt off the table for a short time, you can leave the balls in the collection net and add accessories such as the cable and remote control after this step.

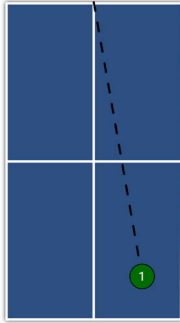
Fold the collection net all the way up and put the robot down.

4. Hold the ball tube firmly just below the ball ejection head, loosen the black locking screw, turn the head 180 degrees, slide the head onto the first ring and tighten the locking screw again slightly. Also turn the two support legs backwards so that they point into the net.
5. Fold the net completely upwards until the Velcro fastener sticks together. Now you can store and transport the robot and accessories in a space-saving way.

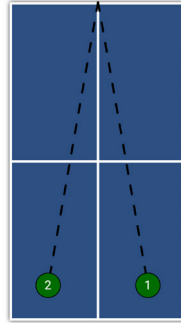
4. Exercises



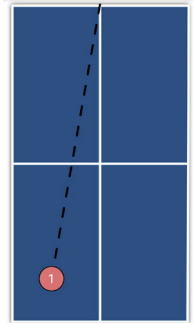
13) Topspin to BH
#Topspin



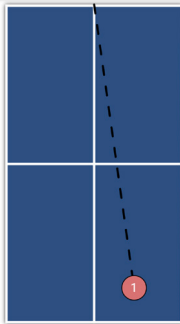
14) Topspin to FH
#Topspin



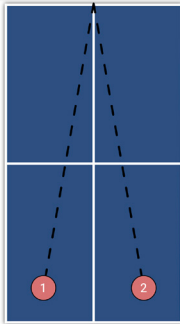
15) Topspin to FH/BH
#Topspin



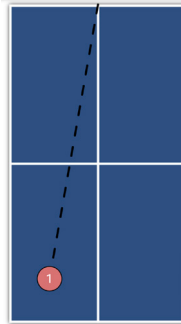
16) Backspin to BH
#Backspin



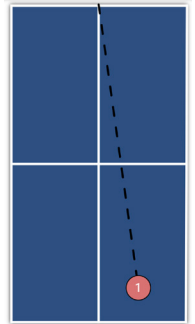
16) Backspin to FH
#Backspin



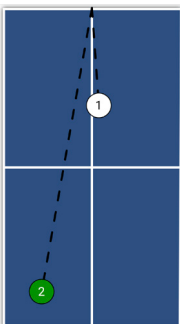
17) Backspin to
BH/FH



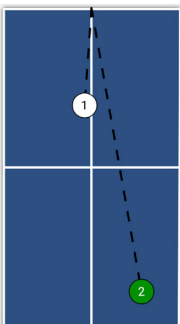
18) Backspin to BH,
Topspin to BH
#Backspin #Topspin



19) Backspin to FH,
Topspin to FH
#Topspin #Backspin



20) Sidespin Serve to FH,
Topspin to BH
#Topspin



21) Sidespin Serve to BH,
Topspin to FH
#Topspin

5. Maintenance & Repair

⚠ WARNING: Before repairing or servicing your GEWO Alpha Nexxt robot, please disconnect it from the power supply.

Precautions

1. Make sure that no other objects fall into the net from where they could enter the machine. Foreign objects in the tube can cause a ball jam and affect the correct functioning of your robot.
2. To guarantee the best possible ejection characteristics and long durability, only use clean balls for your GEWO Alpha Nexxt robot. If you add new balls that are still covered with manufacturing powder, please wash them with warm water and dry them before using them for the first time.
3. The shooting wheels are equipped with a special coating. Please do not use chemicals to clean the wheels.
4. To guarantee long durability, use your robot only in dry and closed rooms and avoid exposing your robot to high temperatures or humidity.



Ball jam

If a ball jam occurs, the robot will first try to correct the problem automatically. If the automatic remedy does not work, please disconnect the robot from the power supply.

In the next step, pull the cable connecting the head and the base unit out of the base unit and loosen the black locking screw to completely separate the robot head from the base unit once. Now remove the remaining balls from the tubes and check if there is a foreign object interfering with the flow of the ball (picture 26). Use a narrow object such as a screwdriver to clear the tubes of any foreign objects. To check the ball intake area at the base unit, carefully tip the base unit onto the table. From the bottom of the base unit, there is a slot through which foreign objects can be pushed out (picture 27).

i **TIP:** *If possible, use a torch to be able to see more.*

Now fill balls into the collection area again, reconnect the robot to the power and check whether the robot ejects the balls correctly again. If the problem could not be solved, please contact customer support.

Checking and adjusting the wheels

The shooting wheels of the GEWO Alpha Nexxt are designed for a service life of about 1000 hours. As the wheels wear, the distance between the wheels gradually increases, causing the balls to be ejected more inaccurately and unevenly. If you notice that the ball ejection becomes imprecise, you should definitely check the distance between the 3 wheels and adjust it if necessary.



1. Place the distance test piece (black roller) between the 3 wheels so that the burrs of the roller are in the gaps between the wheels. If the wheel distance is correct, all 3 wheels should turn slightly. If not all wheels are touching the distance test piece, or the wheels are too tight on the test piece, then the distance should be adjusted (*picture 28*).
2. To adjust the distance, loosen the 4 mm hex screw on the motor cover of one wheel (*picture 29*) and turn the motor slightly in the desired direction until the wheel lightly touches the test piece. Then tighten the hexagon screw again to fix the position.
3. Now proceed in the same way for the other 2 wheels, so that when you carefully move the test piece back and forth, all 3 wheels rotate slightly.

i **NOTE:** *The robot works properly up to a wheel distance diameter of 37 mm. The optimal distance diameter is 35 mm, which corresponds to the diameter of the test piece.*



Replacing the wheels

After long use, the wheels may be so worn that they can no longer be adjusted. If the wheels no longer provide a clean ball ejection, you should order replacement wheels and replace the wheels. To replace the wheels, proceed as follows.

1. Start with the lower wheel. Use a 2 mm hexagonal spanner to loosen the small screw that fixes the shooting wheel to the motor (*picture 30*).
2. Carefully pull the wheel out of its holder and replace it with the new wheel (*picture 31*).
3. Before tightening the screw again, make sure that the wheel can rotate freely and does not rub against the material on any side. As a rule, the wheel must be placed somewhat centrally on the holder for this. Then tighten the screw again and turn the wheel a little again to make sure that the wheel is well positioned.
4. For the two upper wheels, before the wheel can be removed, the set screw must first be completely unscrewed with the 4 mm hexagonal spanner.
5. Now the cable connecting the motor to the power supply should be pulled out as far as possible to ensure more clearance for the motor to rotate. Do not pull too hard on the cable so as not to damage it.
6. Now turn the motor as far away from the ball ejector as possible. Now you can repeat steps 1-3 in the same way as for the lower wheel. You may have to press the foam of the wheels slightly to get past the robot head.
7. After changing the upper wheels, always make sure that you have to readjust the ball distance using the black test piece. And push the two cables back into the motor cover a little so that they are better protected.

i **TIP:** *To avoid uneven ball ejection, we recommend always replacing all 3 wheels at the same time. A different degree of wear between the wheels can have an effect on the ejection behaviour.*

Other maintenance

In case of various problems, a system restart of the robot can lead to a solution. To do this, disconnect the robot from the power supply for at least one minute so that no more processes are running in the buffer. Then reconnect the robot to the power supply as usual.

After a long period of use, the ejector may wear out. If the balls are only ejected very imprecisely, it may

help to remove the white steel strip, carefully clean the ejector with cleaning alcohol and then attach a new steel strip.

2 replacement strips are included with your GEWO Alpha Nexxt robot. If you need more replacement strips, please contact a GEWO dealer.

6. Technical data

Technical specifications: 100~240V, 50~60 Hz AC, Output: 24V, 3A
Suitable for a temperature range of 0~40°C.

Weight: approx. 6 kg with mains

Overall dimensions (with mains): Height 78 cm, depth 32 cm, width 25 cm (folded).
Height 86 cm, depth 160 cm, width 157 cm (assembled)

7. Warranty

30 months manufacturer's warranty

If your GEWO Alpha Nexxt robot experiences any problems during the warranty period that restrict normal operation, please contact your GEWO dealer and describe your problem. We will send you suitable spare parts through your dealer to repair the robot. If the problem is serious, we will provide your GEWO dealer with a replacement product free of charge. Please ensure that you pack the returned robot securely and that it does not receive any further damage during return transport.

This warranty is not transferable and does not cover normal wear and tear or damage caused by improper handling or use of the robot. The warranty is void if the product has been worn, damaged or altered in any way from its original condition.

8. Disposal information



The symbol of the crossed-out wheeled bin means that this product and its accessories marked with the symbol shown above must be disposed of in accordance with the applicable legal regulations and separately from household waste. If you wish to dispose of individual parts marked with the crossed-out dustbin, hand them in at an official collection point near you.

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