# spinfire

# Spinfire Tennis & Padel Ball Machine Manual



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# Safety Warnings

This ball machine is designed and tested to offer safe playing conditions, provided it is operated in strict accordance with the following safety warnings. Failure to comply with the following instructions may result in serious personal injury or property damage.



### WARNING!

- **Keep clear of the ejection point.** Do not stand in front or near the mouth of the machine. Balls may eject unexpectedly.
- Keep young children away from the machine when turned on.
- Keep physically and mentally impaired persons away from the machine when turned on.
- Adult supervision is recommended at all times.



### **MOVING PARTS INSIDE!**

Do not insert body parts or foreign objects into the mouth of the machine. In the event of a ball jam, the operator should not put their hand or any foreign object into the machine whilst it is turned on. Injury could occur if hands or clothing are caught in the mechanisms. Always turn the machine off in the event of a jam or machine failure.



### FINGER TRAP!

- Do not insert your fingers or hand into the carousel area when the machine is on. The machine must be turned off when touching the carousel as it presents a finger/hair/loose clothing hazard.
- Do not fill or refill the machine while it is firing balls.



### DO NOT USE IN WET WEATHER!

- The machine should not be used in wet conditions.
- The charger(s) & AC Adaptor are only to be used indoors.



### **ELECTROCUTION!**

- Always use and store the machine in a dry environment.
- Do not spray with water.
- If the battery charger or AC adaptor is wet, do not pick it up. If the battery charger or AC adaptor is picked up when wet, a person could be exposed to hazardous voltages.
- Disconnect the machine from any AC adaptor or battery before making any repairs.
- If any power cables are damaged, cease using them & arrange a replacement.
- Connect any charger or AC adaptor to 110 250V mains power outlet installed by a qualified electrical contractor with suitable protection such as an RCD.



### LITHIUM LIFePO4 BATTERY!

If your machine has an internal or external battery:

- Only use a 12V certified lithium battery charger, with a maximum output of 5A.
- For the machine's battery indicator to work correctly, your machine must be configured under the settings menu for a lithium battery.
- Keep sparks and flames away from the battery (i.e. no smoking).
- Keep young children and animals away from the battery.
- Do not use the battery if it has swollen or expanded.
- Do not use the battery if any liquid has escaped.
- Only use a 12V battery with this machine (approved by your distributor).
- When replacing the battery, the terminals should be wrapped with electrical tape or a heat shrink sleeve.
- **Never short circuit the battery terminals**
- Keep battery away from exposure to heat, high voltage and direct sunlight.
- Never incinerate, crush or disassemble the battery.
- Don't overcharge or over discharge.
- Don't knock, throw or impact the battery.
- Don't operate the battery beyond the voltage, current and temperature.
- Never throw the battery into water.
- Do not connect the battery in series or parallel.
- A Lithium LiFePO4 battery has a Battery Management System (BMS) which prevents charging at temperatures under 0°C and above 65°C. The battery cannot be used at all below 20°C and above 75°C.



### **HEAVY!**

Practice correct lifting techniques. The machine weighs up to 24 kg / 54 lbs (2 person lift) with an internal battery or 18 kg / 40 lbs (1 person lift) with an external battery. The gross weight of the packing

box is 29 kg / 64 lbs (2 person lift).



### FIRE HAZARD!

- Keep your machine clean. Contaminants such as dust & leaves inside your machine could present a burn hazard. Please vacuum out your machine from the mouth on a regular basis.
- A multi-purpose/dry chemical extinguisher should be used to extinguish any flames.



### REMOTE CONTROL CONTAINS BUTTON/COIN CELL **BATTERY!**

- Button/coin cell batteries are hazardous and must be kept out of reach of children at all times, whether the battery is new or used.
- These batteries can cause severe or fatal injuries in 2 hours or less if swallowed or placed inside any part of the body.
- If it is suspected a button/coin cell battery has been swallowed or placed inside any part of the body, seek medical attention immediately.



### **EMERGENCY STOP!**

The master switch is located at the bottom of the control panel. This switch should be used to cut off power to your machine in an emergency. Set the rocker switch to position "O" which is the middle selection.



### TENNIS, PADEL AND PLATFORM TENNIS BALLS ONLY!

Only use tennis, platform tennis or padel balls with this machine. Low compression & pressureless balls are acceptable too, as long as they are the same size as a standard tennis ball. Using other balls such as cricket balls will damage your machine and will not be covered under warranty.

### **Before First Use**

When you first open your box, you may notice some cosmetic scratches on your machine, particularly in the ball carousel pit at the top of the machine. This is perfectly normal and part of the manufacturing process. You may also notice some yellow ball fluff inside your machine or on the throwing wheels. This is also normal as each machine is tested with balls as part of our quality control process (wheels are wiped down afterwards, but it's difficult to remove all traces of ball fluff).

There is also a 3 position master power switch at the bottom of the control panel which is turned off for transport. This will need to be turned on to the correct power source before you can power on the machine (please turn this off after each use). The 3 positions are:

0	Off
LEFT	Internal Battery
RIGHT	External Battery or AC Adaptor

# **Assembly**



To assemble your machine, first simply remove it from the box. You can safely pick up the machine using the handles at the top front and top back.

You should find this manual, a charger or AC adaptor and a remote control in the box. If you have ordered an external battery, AC adaptor or fast charger, they may also be in the box.

You can attach the hopper either upright for play mode, or upside down for portability/storage. To attach the hopper, simply align it correctly and then push down on it until it locks into place.



Hopper upside down for portability & storage

# **Packaging**

We recommend you keep your box in case you need to ship your machine back to the supplier at a future point in time.

# **Battery and Charging**

You may have received a Lithium LiFePO4 battery or a Sealed Lead Acid (SLA) Battery with your machine depending on the configuration you ordered. Alternatively, you may have ordered an AC only machine without any battery, to run from a standard power socket (if this is the case, please skip this section relating to the battery and charging).

Your machine should last between 3-8 hours, depending on the settings you are using (this assumes you are using the standard 18Ah or 20Ah size).

The machine should arrive to you with some charge in the battery, however, if you have time, we encourage you to charge the machine before its first use.

A Lithium LiFePO4 battery has a Battery Management System (BMS) which prevents charging at temperatures under 0°C and above 65°C. The battery cannot be used at all below 20°C and above 75°C.

# **Internal Battery**

If you have an internal battery, simply plug the charger into the charger jack on the rear of the machine and plug the other end into a wall socket. Any master switch position will work.

If you have an SLA battery, it should be charged at least once per month, even if it has not been used. This will maintain the life of the battery. For Lithium LiFePO4 batteries, it is recommended that you charge and discharge your battery once every 3 to 6 months.

### **External Battery**

If you've ordered your machine with an external battery, you have the advantage of easily charging the battery separately from the machine (your machine is also 6 to 7 kg (13 – 15 lbs) lighter than internal SLA battery machines). Your external battery has two plugs, one for connecting to the machine (male) and the other is for connecting to the charger (female). Please do not connect these together and always disconnect the battery from the machine when not in use. There is no need to remove the battery from the bag while charging.

If you have an SLA battery, it should be charged at least once per month, even if it has not been used. This will maintain the life of the battery. For Lithium LiFePO4 batteries, it is recommended that you charge and discharge your battery once every 3 to 6 months.



When replacing the battery, please wear protective glasses, clothes & gloves. Please also use electrical tape or similar to cover the battery terminals after installation. Do not smoke or keep the battery near a flame source. The battery is completely sealed, but in the event of damage where acid is exposed to the skin or eyes, rinse with water and visit your doctor. Avoid short circuiting the battery so as not to cause a fire.

The external battery cable includes a 32V 15A fuse built into it (note: 32V is correct for our 12V battery). If you are required to replace this, they can be purchased from local electronic stores or your Spinfire distributor. We also include one spare inside the battery bag's pocket.

# **Standard Charger**

If you ordered a Lithium LiFePO4 battery, please ensure you use our standard lithium charger. If you ordered an SLA battery, please ensure you use our standard SLA charger.

Your machine comes with a standard charger (unless you purchased an AC machine) which charges the machine safely in 10 hours (assumes an 18Ah or 20Ah sized SLA or LiFePO4 battery). This charger is the safest charger to use for your machine and will provide the longest battery life. It is also a "smart" charger, meaning it will not damage your battery if left on for long periods of time.

The charger has a red light when charging and a green light when charging is complete. If after 10 or more hours, your charger light does not turn green, please disconnect the charger and turn on your machine. If the battery bar indicator shows 4 bars, then your machine is charged and ready to play. You can ignore the light on the charger.

If the charger's light flashes green, this can indicate that the charger itself is faulty. However, we recommend you try charging your battery for 24 hours, leaving the green light flashing. If within this 24 hours the green light stops flashing, you will find it has restored itself and will function normally going forward.

Your charger should only be used in a dry environment. As the charger itself can get hot during charging, we recommend you position the machine and transformer away from combustible items.

Please note, this charger cannot be used to provide direct power to the machine. If you wish to run directly off AC, you need to purchase a separate AC Adaptor.

# **Optional Fast Charger**

If you ordered a Lithium LiFePO4 battery, please ensure you use our fast lithium charger. If you ordered an SLA battery, please ensure you use our fast SLA charger.

The fast charger can charge your machine in 5 hours (instead of 10 with the standard charger). The fast charger is a "smart" charger, meaning it will not damage your battery if left on for long periods of time. However, as a precautionary measure, we recommend you unplug the charger once charging is complete. If after 5 or more hours, your charger light does not turn green, please disconnect the charger and turn on your machine. If the battery bar indicator shows 4 bars, then your machine is charged and ready to play. You can ignore the light on the charger.

Please note, fast chargers reduce the lives of SLA batteries slightly, so it is always recommended to use the standard charger unless you have time constraints. Lithium LiFePO4 battery lives are not reduced by fast chargers.

Your charger should only be used in a dry environment. As the charger itself can get hot during charging, we recommend you position the machine and transformer away from combustible items.

Please note, this charger cannot be used to provide direct power to the machine. If you wish to run directly off AC, you need to purchase a separate AC Adaptor.

# **AC Adaptor**

The AC Adaptor is an optional accessory, but it can be used as your primary power source (you can order a machine without any internal or external battery). Simply plug the AC Adaptor into your machine and turn the master switch to External Battery/AC.

Note, if you do have an internal battery, the AC Adaptor can still be used. It will not damage the internal battery.

Your AC Adaptor should only be used in a dry environment. The Spinfire AC Adaptor has been tested to work perfectly with our machine and we do not recommend substituting it with a compatible model. Please disconnect it from the machine when not in use. If using an extension cord, please ensure it is a good quality, thick cord, at least 16 gauge.

# **Software Updates**

When you first turn on your machine, the control panel screen will display the current software version installed. You can update your software via the phone app under settings, or with a USB key and we recommend you run the latest software at all times to benefit from improvements and bug fixes. To check what the latest version of software is, along with instructions on how to install it via USB, please visit this page:

https://www.spinfiresport.com/kb/upgrading-the-machines-software-usb

### **Customer Care**

### Caution

This machine was designed to be used on a tennis court, platform tennis court or padel court and in no other circumstances. Only tennis balls, platform tennis balls or padel balls must be used, no other balls should be ejected from the machine. Never stand in front of the machine unless you are on the other side of the net (more than 7 meters (8 yards) away). Even when the machine is paused, never stand in front of it as balls can eject at any time. Children should be supervised at all times and taught never to stand in front of the machine.

Do not use the machine in rain and avoid using wet balls. We recommend the use of pressureless balls to give your machine the best performance. Using a combination of new and old balls will give inconsistent results. Normal pressurized tennis balls are fine to use if all balls are consistent and have good pressure.

### Maintenance

You can vacuum out the inside of your machine to remove ball fluff. Depending on the amount of fluff, it may be necessary to remove the machine's cover to do this. The outside of the machine can be wiped down with a mild detergent, however, please be careful not to get water inside the machine. The throwing wheels should be wiped down after every use to prevent any build up of residue from the balls. If you play on a porous surface like clay or en tout cas, we recommend you wipe the insides of your throwing wheels monthly (a build up of clay can cause your wheels to become unbalanced). We also recommend for safety and performance that the throwing wheels are replaced every 5 years.

Due to vibrations, the screws in the control panel and on the base of the machine can become loose over time, so please check these regularly and tighten them if required. If you do need to purchase replacement control panel screws from the local hardware store, they are 304 Stainless Steel Phillips Head screws, M4 x 12mm with a 9mm head diameter. You can contact your local distributor for spares if you need them.

# Storage

We recommend that your machine is stored inside/under cover in a dry environment and preferably in a Spinfire cover to protect it from debris. Do not leave your machine on court even with the protection of a cover as heavy rain may damage your machine. Do not store your machine in direct sunlight or inside a car (unless in shade) and always keep it upright. Safe storage temperatures are -15°C to +50°C (5°F to 122°F). Extreme temperatures can damage the machine circuitry and battery.

If you are storing for a long period of time, it is recommended you charge your SLA battery every 1 month. If you have a Lithium LiFePO4 battery, it is recommended to store the battery with 30%~50% state of charge (SOC). The battery should be charged and discharged once every 3 to 6 months and stored in an environment of 0°C ~ 25°C as much as possible to reduce irreversible capacity loss during battery storage. After finishing a charge or discharge, the battery needs to rest for 30 minutes. The procedure should be to charge the battery until full, then set it aside for 30 minutes, then discharge it by running your machine until it's flat, then set it aside for another 30 minutes, then charge it for approximately 2 hours with a standard charger to 30% ~ 50% SOC.

# **Transportation**

To transport the machine, simply slide out the handle at the front of the machine (underneath). Lift the machine by the handle until it rests on the rear wheels. Make sure that the machine is tilted enough not to drag on the bottom of the machine and never tilt it all the way back so that it stands upright (the remote control can fall out of the pocket). Simply pull the machine to your destination. Never move the machine while it is on. We offer an optional lid to allow you to wheel the machine while balls are in the hopper.



To transport in your car, please make sure the machine is always kept upright. Laying it on its side can cause internal damage and void your warranty. Do not store the machine in your car when external temperatures exceed 30°C (86°F). The machine with a 20Ah SLA battery weighs 24 kg (53lbs) (or 18 kg (40lbs) with an external battery) and should be lifted carefully with the use of the handles.

# **Usage**

The machine should be placed on the baseline of the tennis court, preferably in the center, however you can place it in varying locations if you wish (note features like oscillation may not work as well when the machine is not positioned in the center). For Padel courts, it should be placed anywhere along the rear wall. Please add the balls into the hopper before you begin, do not add them while the carousel is turning as this can cause ball jams. The maximum capacity is 150 balls. Please do not overfill the hopper as the excess weight can damage the feeder motor.

### **Control Panel**



### **Power**

Press and hold the POWER button to turn on or off the machine (hold it for approximately 3 seconds). Note, the master switch at the bottom of this control panel must be positioned to the correct power source before you can turn on your machine. It has 3 positions with O being off. Position it to the left if you have an internal battery and wish to power it from this source. Position it to the right if you have an external battery or AC adaptor and wish to power it from this source. This switch should be returned to the off (middle O) position when transporting or storing the machine.

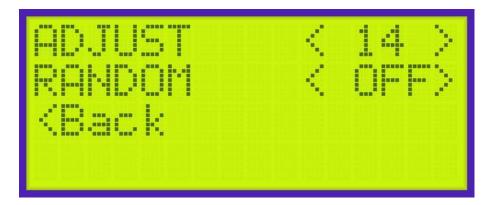


Menu

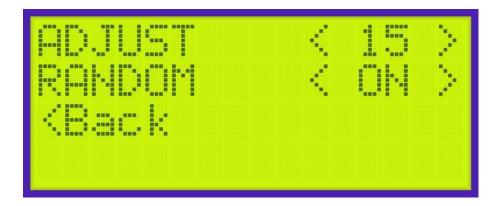
To adjust the interval, ball speed, spin & elevation you need to press the MENU button. Once pressed, a menu option will begin to flash (it will stop flashing after 30 seconds if no selection is made). You can move between the menu items by using the UP and DOWN buttons. You can quickly adjust the settings of each item by pressing the LEFT and RIGHT buttons.



Alternatively, you can press the OK button to edit the value and also add or remove randomness. In the example above, by pressing the OK button on the BALL SPEED row, you will see this screen:



You can then adjust the speed by pressing LEFT or RIGHT on the flashing ADJUST row. To turn on random, simply press DOWN to make the RANDOM row flash, then press LEFT or RIGHT to change the value to ON. Here we have increased the speed to 15 and turned random on:



Now we can move down to the <Back row and press OK to return to the main screen. You'll note that BALL SPEED now has an R next to the value to indicate that random is on.



Once you have finished making your adjustments, press the MENU button again to complete your selection.

You can also scroll down below ELEVATION to access further options, as indicated by the arrows on the side. Here you can see an UP and DOWN arrow in the top right and bottom right corners to indicate you can scroll up and down.



Interval

This sets how often the balls are ejected from the machine. It can be adjusted from 0 – 20 with 20 being the fastest (approximately 1 ball every 2 seconds). You can randomly vary this setting by +/- 0.5s by turning on random (an "R" will appear next to the value to confirm it is activated). The maximum interval during the 2 Line Drill - wide setting is 17 and for the 2 Line Drill - medium it's 19. Note that the balls will

not start ejecting from the machine until you press the FEED (start/stop) button.

### **Ball Speed**

This sets the speed at which the balls are propelled. It can be set from 0 – 20 with 20 being the fastest speed (approximately 80mph or 130km/h) and 0 being the slowest (approximately 20mph or 32km/h). You can randomly vary the speed by +/- 1 value by turning on random (an "R" will appear next to the value to confirm it is activated). Note. slower speeds can be achieved by adding spin.

### Spin

Using this setting, you can add topspin or slice to each ball. It can be set from -10 to +10. When set to -10 you will achieve the highest level of slice. When set to 0 you will have flat balls while +10 represents the highest level of topspin. You can also set mild levels of spin. You can randomly vary the spin level by +/- 1 value by turning on random (an "R" will appear next to the value to confirm it is activated).

### **Elevation**

By pressing the UP and DOWN buttons you can adjust the level of elevation, or you can do it via the menu as described above. It can be set from 0 – 200 with the highest elevation being 200 (use this setting for lobs). You can set the elevation to vary randomly (see "Vertical" Random" below) by turning on random (an "R" or "A" will appear next to the value to confirm it is activated).

### **Horizontal Angle**

You can vary the horizontal angle that balls are ejected to by pressing the LEFT and RIGHT buttons. Note, you can only adjust the horizontal angle when the menu is not flashing.

### Feed start / stop

This allows you to start and stop the feeding of balls from the machine. If you would like to have a 15, 30, 45 or 60 second delay before balls start feeding (to give you time to get to the other end of the court), simply hold the FEED button when turning it on. It will display a list of delay options for you to choose from. This is useful when you don't have the remote control.

### Single Spot

If you simply wish to fire balls to a single location repeatedly, you start by setting your desired interval, speed & spin, horizontal angle and also the elevation height. Then you press the FEED (start/stop) button to begin. We suggest you fire one ball to begin with and then press FEED (start/stop) again to pause the machine. If you are happy with the first ball you fired, then you may begin practice. Otherwise, you may like to refine your settings and fire another test ball until you are happy with the result. You can then press FEED (start/stop) to start balls firing and begin play.

### **Vertical Random**

Press this button to activate one of two vertical randomisation modes: Random or Advanced Random. Note these random modes can be used at the same time as horizontal random and the two line drill.

### Random

In this mode, the machine will alternate between short and deep shots at two different elevation levels. The height adjusts by approximately 4 degrees (20 units), randomly deciding when to fire a higher (deeper) or lower (shorter) ball.

For example, you might receive three deep balls, followed by two short ones, then one deep ball, and so on. The sequence is entirely random.

To use this feature effectively, first set your machine to fire short balls (e.g., to the service line), then activate Vertical Random. The machine will then alternate between the original short depth and deeper positions.

If Vertical Random is activated while the machine is already set to fire deep balls, shots may land beyond the baseline.

### **Advanced Random**

This mode uses an intelligent algorithm to vary the elevation based on your selected speed and spin settings.

Ball speed & spin affects court coverage differently:

- Slower balls require greater elevation angles to achieve the same court depth as faster balls
- Faster balls need less elevation to reach the same areas of the court
- Top spin creates a greater 'curve' trajectory whereas slice or negative spin will make balls float more.

The machine adjusts these parameters automatically to maintain consistent court coverage regardless of speed or spin settings.

For optimal experience, use speeds between 11-15 with Top Spin settings of 4-8. While the machine supports speeds from 7-20 and all spin levels, these recommended settings provide ideal court coverage. The Random Speed and Random Spin options can also be used effectively in this mode.

**Note:** If balls are hitting the net or landing beyond the baseline, your machine may need calibration, or you may be using worn or non-pressureless balls.

To disable vertical randomization at any time, select the OFF option.

### **Horizontal Random**

Once pressed, you will enter a menu where you can select *narrow*, medium, wide, off or back. Press OK to make your selection and this will be confirmed by the word ON next to your selection. This random setting fires balls randomly within the horizontal width you choose, where *narrow* is the easiest (a short step side to side) and *wide* is the most difficult (full width of the singles court). You can also combine this with other random settings for more challenging practice. You can turn off this random setting by pressing off or activating a competing setting such as the 2 line drill or moving left or right. To exit this menu. press OK or back or press the MENU button.

### **Random Drill**

To achieve totally random deliveries of varying depths and widths, simply activate both the HORIZONTAL and VERTICAL random settings one after the other. It does not matter which order you choose. You can also randomize speed, spin and interval as described above (an "R" will appear next to the value to confirm it is active).

### 2 Line Drill

Once pressed, you will enter a menu where you can select *narrow*,

medium, wide, off or back. Press OK to make your selection and this will be confirmed by the word ON next to your selection. This setting fires balls alternately to the forehand and backhand at the set width chosen. Narrow is the easiest (a short step side to side) and wide is the most difficult (full width of the singles court). You can also combine this with other random settings for more challenging practice. You can turn off this setting by pressing off or activating a competing setting such as the horizontal random or moving left or right. To exit this menu, press OK or back or press the MENU button.

**Reset to Center** 

This cancels any random or drill settings and returns the machine the

horizontal center.

Please review the settings section in this manual for more information **Settings** 

on how to adjust these settings.

Feed On When this LED is illuminated, the machine is currently feeding balls

> (ie, more caution should be used when standing near the front of the machine). If no balls are fired from the machine for approximately 25 seconds (can be up to 45 seconds), the feeder will pause as a safety precaution. This safety feature can be turned off if required, please

see the settings section of this manual for more information.

The low battery light will illuminate when the battery's charge is **Low Battery** 

getting low. You will have limited time left once this illuminates and you should charge your battery. You also have the 4 bar battery indicator on the right hand side of the LCD. Note, the battery should

be charged after every use.

# **Remote Control**

The remote control has been designed to be as small as possible to fit easily into your pocket. There is also a slot/pocket located on the back of the machine under the control panel for storing your remote. When transporting your machine, be careful not to tilt your machine all the way back into an upright position as the remote may fall out of the pocket. Your remote should sit in the pocket in landscape position rather than portrait.

By default, your remote control will control your machine and any other Spinfire ball machine in its proximity. If this is an issue, you can pair your remote to only control your machine and no other. For instructions on how to do this, please visit

https://www.spinfiresport.com/kb/using-a-pairing-remote-control/.



Feed	Feed on/off
Sleep	Sleep mode on/off to conserve battery while collecting balls. You will hear a 1 second beep when the machine enters sleep mode, a fast double beep when exiting and a beep every 30 seconds while it's sleeping. You may also press the feed button to exit sleep mode. You can replace the sleep function with the Single Ball Fire (SBF) function if you prefer (see below for more details).
Up	Elevation Up*
Down	Elevation Down*  *The elevation can only be adjusted in increments of 2-5 units, depending on how fast you press the button (use the control panel if you want finer control).
Left	Swivel Left
Right	Swivel Right
Reset	Cancels random settings (horizontal, vertical, 2 line drill & random speed, spin & interval) and returns the horizontal alignment to the center.
Interval	Increase or decrease the frequency of deliveries
Speed	Increase or decrease the speed of deliveries
Spin	Increase or decrease the spin level
Horizontal	Horizontal Random (1 = narrow, 2 = medium, 3 = wide, 4 = off). You can also turn on vertical random or advanced random (both will be turned on) to achieve random depth too.
Vertical	Vertical Random (1 = random, 2 = advanced random, 3 = off). These can be activated at the same time as horizontal random or the 2 line drill.
Drill	2 Line Drill (1 = narrow, 2 = medium, 3 = wide, 4 = off). You can also turn on vertical random or advanced random (both will be turned on) to achieve random depth too.

The remote control uses a radio frequency of 433Mhz to communicate with the machine. It has been designed to work from a range that easily extends the length of a tennis/padel court. If you are experiencing issues with the range of your remote, please try replacing the battery (battery size is a CR 2025 3V). Replace the battery by following the instructions on this page: https://www.spinfiresport.com/kb/the-remote-control-does-not-work/. Please note, CR 2025 3V batteries often vary in quality, so we recommend you use a good quality brand. If your first replacement battery doesn't work, please try an alternative battery brand as this often resolves the issue.

The main cause of range issues (other than battery) is interference from other radio frequencies in the area. If you are able to try another public court at the facility, you may find improved results.

# Spinfire App

Our Spinfire App is available on smartphone and smartwatch for both Apple and Android devices.



Download the Spinfire App https://www.spinfiresport.com/spinfire-app-quide/



Explore the App Guide https://www.spinfiresport.com/spinfire-app/

# **LED Ball Firing Indicator**

An LED light on the front of the machine flashes just before a ball is launched. This visual cue helps you prepare for the shot, much like watching your opponent as they're about to strike the ball. If you prefer not to have this activated, you can turn it off via the settings within the phone app.

### **Tennis or Padel Balls**

Your machine can hold 150 balls. Whilst the hopper can possibly take a larger quantity than this, we recommend you restrict it to 150 balls, which puts less weight on the carousel motor.

We strongly recommend the use of pressureless balls, preferably from a reputable brand. Normal tennis/padel balls are OK too, but they can have varying levels of pressure causing inconsistency, not to mention they go flat quickly and need replacing regularly, making them expensive. Balls can contain an oily coating in the felt which can cause damage to the throwing wheels. Please choose carefully when determining which balls to use in your

machine. We recommend the use of Spinfire Touch balls or a brand thoroughly tested and recommended by your distributor (we do not recommend mixing brands).

Pressureless balls will also allow your machine to perform at its best. Each ball will have a consistent bounce allowing you to consistently hit the spots on the court that you want. Normal pressurized balls go flat quickly when used in conjunction with a ball machine.

### Low Compression Balls

Our machine can handle both orange (stage 2) and green (stage 3) low compression balls. It cannot work with red (stage 1) balls due to their larger size. Note, you may need to adjust the "Ball Fire" sensitivity if your machine is firing balls too quickly, as often these softer balls can be difficult to detect. Please see the settings section below under the sensitivity heading for more information.

### **Manual Mode**

If you experience any alignment (eg, shooting too far to the right) or initialization (Horizontal or Vertical errors) issues, it is likely you can resolve them by starting the machine in manual mode. To do this, please follow these 3 steps:

- 1. Make sure your machine is turned off.
- 2. Manually move the internal mechanism of your machine to the *lowest* possible elevation and to the center of the opening.
- 3. With the master switch on, hold both the POWER and MENU buttons at the same time for 5 seconds to turn on your machine. The LCD should display a message to let you know you have entered "manual mode".

The above steps can be seen in this video: <a href="https://goo.gl/C6zB3J">https://goo.gl/C6zB3J</a> - Note, this video shows the process on the v1 machine, but it's the same steps for the v2. If this resolves your problem, then you can continue to use your machine this way until a permanent solution can be obtained from your Spinfire dealer. Please note that this solution relies on you performing step 2 above correctly. If you do not set the machine to the correct position before turning on the machine, you will find that the calibration may be off target. You will either need to turn the machine off to try again, or physically point your machine in a direction that will achieve the desired results.

# **Settings**

# Sensitivity

Here you can adjust three different sensitivities:

Main Jam - The detection of ball jams between the two throwing wheels, resulting in a top or bottom motor error. If your machine is giving false errors, you may wish to decrease this sensitivity. This value can be adjusted between the range of 0 – 20, where 0 is the least sensitive and 20 is the most sensitive. We recommend only adjusting by one increment at a time and retesting to see if it resolves the issue.

- Ball Fire The detection of balls passing through the throwing wheels (a ball being fired out of the machine). In some cases, your machine may not always detect balls being fired (will result in your machine rapidly firing balls out) or may detect false ball fires (feeder will pause for no apparent reason). In these situations, you may wish to adjust the ball fire sensitivity. This value can be adjusted between the range of 0 - 20 where 0 is the least sensitive and 20 is the most sensitive. In the example where your machine is not detecting ball fires, causing your machine to rapid fire, you would want to increase this value. We recommend only increasing it one increment at a time, then test to see if the issue is resolved.
- Feeder Jam The detection of ball jams within the carousel / ball feeding mechanism. The range is -17 to 20, where 20 is the most sensitive (it will easily detect ball jams and most likely give false positives). In most cases, this menu will be accessed when a machine is detecting ball jams which are not there (false positives), so we would recommend decreasing the sensitivity towards -17. When considering the correct setting, keep in mind that for safety, the machine should detect jams and stop. We do not recommend decreasing it all the way to -17 unless absolutely necessary.

For more information on these settings, head to https://www.spinfiresport.com/knowledgebase.

### Padel

Padel software can now be activated via the app (in settings) or via this control panel menu for those wishing to use their machine on a Padel court. Once activated, a 2nd and 3rd option in the VERTICAL menu is added. The 2nd option is a Vertical Oscillation motion, ranging from 90 to 200. The 3rd option is a drill giving one forehand, one backhand and then a smash/bandeja (the drill continuously repeats). Furthermore the court view will be of a padel court and firing positions will be relative to a padel court's dimensions.

### **Pickleball**

If you'd like to use your Spinfire Pro 2 Ball Machine for pickleball, a Pickleball Conversion Kit is available for purchase. This kit allows you to modify your machine with specialized pickleball throwing wheels, deflector wires and a chute insert for use with pickleballs. Two kit options are available: the Essential Pack, which includes the key conversion components and the Standard Pack, which adds a dedicated pickleball control panel for a more integrated look. Installation is straightforward, enabling you to switch between sports with ease. Visit our website for more details on selecting the right kit for your needs: https://www.spinfiresport.com/product/spinfire-pickleball-conversion-kit/

# SBF - Single Ball Fire

By enabling this feature, you will now have the ability to fire a single ball. This is useful for coaches who want to give instructions to a student or students and then fire a single ball for them to practice on. The machine will shoot the ball and then pause again automatically. If you activate this feature, it replaces the SLEEP button on your remote control so you will no longer have this power saving feature. To fire a single ball, simply press the SLEEP button on the remote.

This feature can be activated in the Spinfire app on the Settings page.

# Feed Safety

If no balls are fired from the machine for approximately 25 seconds (can be up to 45 seconds), the feeder will pause as a safety precaution. Sometimes, this can cause your machine to pause the feeder for no apparent reason. In these situations, it can be useful to turn this safety feature off while you troubleshoot this issue with your local Spinfire distributor.

### **Datum**

When your machine first turns on, it calibrates itself to find its horizontal and vertical center positions. To do this, it moves down to the very lowest elevation and also horizontally to the left hand side of the machine (when standing behind the machine looking forward). We use nautical terms to help define this side of the machine as the PORT side. In cases where your machine is not aligning itself perfectly in the center, you may like to change this setting from the PORT side to the STARBOARD side which can resolve alignment issues.

### **Ball Count**

The machine has a counter (similar to a car's odometer) which can tell you how many balls have been fired. This can help you understand the amount of usage your machine has had. This data can be lost when upgrading/downgrading software or replacing a motherboard.

### Sealed Lead Acid (SLA) Battery or Lithium Battery

Our machines can be configured to work with a Lithium LiFePO4 battery or an SLA battery. If you switch between the battery types, you will need to adjust your software so that your battery bar indicator will accurately reflect your remaining play time. If you are configuring for Lithium LiFePO4, we recommend the Lithium1 option. Press MENU to save the selection.

We also strongly recommend you use a charger specific for your battery type.

# **Troubleshooting**

Before proceeding with any troubleshooting, please ensure that your machine's software is up to date and that you are using the latest version of the smartphone app. To update your machine's software, go to the Settings page within the app.

We have many support articles & videos showing you how to troubleshoot the various issues you may face with your machine. These can be found online at https://www.spinfiresport.com/knowledgebase.

If you cannot find the answer you need by searching our knowledgebase, please feel free to submit a support request at <a href="https://www.spinfiresport.com/contact/">https://www.spinfiresport.com/contact/</a>.

# **Submitting a Support Request**

When contacting us or any of our dealers for support, please ensure that you inform us of all specific details about your machine including the serial number, model & software version as well as a detailed description of the fault. Any videos you can provide us are considered very helpful.

If you can hear any unusual noises, please be sure to notify us of these and where you believe they are originating from.

# **Warranty**

Should any part fail due to defective workmanship or faulty materials within the warranty period, Fry Developments Pty Ltd (trading as Spinfire) or its distributor will repair or, (at distributor's option), replace the defective part free of charge. The warranty period is country specific, please contact the Spinfire distributor in your country or the place of purchase for details. The SLA battery is only warranted for 6 months from the date of purchase.

### Warranty Administration

Warranty is administered by the authorised distributor that supplied your machine. Please visit our website <a href="https://www.spinfiresport.com/distributors/">https://www.spinfiresport.com/distributors/</a> for the contact details of our Spinfire distributors.

### **Not Covered**

Exposure of the ball machine to the elements should be minimized. Upon completion of play, please store the machine undercover. Damage caused to your machine from being exposed to the elements is not covered under warranty.

This warranty does not cover the purchaser or any other person for damage, malfunction or loss due to the following:

- Lack of maintenance, abuse, neglect, misuse, accident or improper usage of this
- Scratches, dents, corrosion or general wear & tear on the machine.
- Exposure to the elements, insects, weather or hail.
- Unauthorized repairs during the warranty period.
- Acts of God.
- Use on power voltages other than that specified for your machine.

Servicing of this nature is chargeable.

Under no circumstances will Fry Developments Pty Ltd (trading as Spinfire) or their authorized distributors be liable to the Customer or any other person for incidental or consequential damages of any nature, including but not limited to, damage for personal injury or damages to property.

# **Conditions of Warranty**

The machine is to be delivered to the Spinfire distributor's service department or authorized service agent and freight charges both ways

- 1. are paid by the owner. No liability is accepted for loss or damage during transit.
- 2. The machine must always be operated and maintained in accordance with the instructions supplied.
- 3. No alterations or repairs have been carried out without obtaining the distributor's prior consent. Such repair or any replacement does not extend the warranty period.
- 4. Proof of purchase must be provided to verify purchase date and establish the warranty period. Only the original purchaser is covered under this warranty.
- 5. The warranty period is calculated from the date of purchase only.

- 6. Where this warranty is inconsistent with any state laws, the statutory rights of the purchaser shall prevail.
- 7. Parts installed from other manufacturers' products will void this warranty.

# **EC Declaration of Conformity**

We confirm that as at the 26th march, 2024, the Spinfire ball machines both conform with the Low Voltage Directive 2014/35/EU, Machinery Directive 2006/42/EC and the Radio Equipment Directive 2014/53/EU. All essential products test suites have been carried out by Shenzhen LCS Compliance Testing Laboratory Ltd and Shenzhen STE Testing Laboratory Co., Ltd.

Test standards	Report number
Radio Equipment Directive 2014/53/EU ETSI EN 301 489-1 V2.2.3(2019-11) Draft ETSI EN 301 489-17 V3.2.6(2023-06) ETSI EN 300 328 V2.2.2(2019-07) EN 62479:2010 EN 50663:2017 EN IEC 62368-1:2020+A11:2020	LCSA11303042EA LCSA11303042EB LCSA11303042EC LCSA11303041S
Machinery Directive 2006/42/EC EN 60204-1:2018 EN ISO 12100-2010	STE24032505S STE24032506S
Low Voltage Directive 2014/35/EUEN 603351:2012+A11:2014+A13:2017+A1:201 9+A14: 2019+A2:2019+A15:2021 EN 62233:2008	LCSA11303040S

# **FCC & ISED RSS Warning:**

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- 1. This device may not cause interference, and
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux dues conditions suivantes:

- 1. l'appareil ne doit pas produire de brouillage, et
- 2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### RF exposure statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating with any other antenna or transmitter.

Le rayonnement de la classe b respecte ISED fixaient un environnement non contrôles et mise en oeuvre de ce matériel devrait avec échangeur distance minimale entre 20 cm ton corps. Lanceurs ou ne peuvent pas coexister cette antenne ou capteurs ave d'autres.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

### **Environmental Considerations**

At Spinfire, we recognize the importance of minimizing our environmental impact. This section provides guidelines for responsible use, disposal, and recycling of your Spinfire tennis ball machine and its components.

# Materials & Sustainability

The Spinfire tennis ball machine is constructed using a combination of materials:

The body, hopper and other similar components are made from recyclable plastic.

- The **internal components** are primarily aluminium, which can be recycled.
- The machine contains electronic components, including a motherboard, DC motors, stepper motors, and a brushless motor.

While the machine is not manufactured from recycled materials, various parts can be recycled or repurposed at the end of their lifespan.

# **Energy Efficiency**

The Spinfire tennis ball machine is designed with an energy-saving sleep mode, which helps conserve battery power while the user collects tennis balls. The machine operates at an estimated 6 amps per hour, with a typical usage time of approximately 3 hours on an 18Ah 12V battery.

# Battery Usage & Disposal

The machine can be powered by an internal battery, external battery, or AC adaptor. Compatible battery types include:

- Sealed Lead Acid (SLA) battery (20Ah 12V)
- Lithium Iron Phosphate (LiFePO4) battery (18Ah 12V)

Batteries should be recycled at local council recycling stations or designated battery disposal points to prevent environmental contamination. Please do not dispose of batteries in regular household waste.

### Lifespan & Maintenance

There is no predefined lifespan for the Spinfire tennis ball machine—some units have been in use for over 14 years and continue to operate efficiently. The machine is designed to allow for ongoing repairs and replacement of components, ensuring longevity and reducing waste.

To minimize waste from tennis balls, we recommend:

- Using pressureless tennis balls, which can last up to two years.
- Using a pressurizer for regular tennis balls to extend their lifespan and reduce landfill waste.

# End-of-Life Disposal & Recycling

At the end of its usable life, customers are encouraged to return their Spinfire tennis ball machine to their local distributor for responsible disposal. The distributor will:

- Assess and strip reusable parts that can be repurposed for repairs.
- Recycle the plastic body and hopper through appropriate recycling programs.
- Send electronic components (motherboard, motors) to an e-waste facility for proper disposal.
- Recycle aluminium components through metal recycling facilities.

This process ensures that as many materials as possible are reused or recycled, reducing waste and environmental impact.

# Packaging & Recycling

The Spinfire tennis ball machine is shipped in 100% recyclable cardboard packaging. Customers are encouraged to:

- Retain the packaging in case future repairs require shipping.
- Recycle the packaging if storage is not needed.

By following these guidelines, customers can help reduce environmental impact while extending the life and efficiency of their Spinfire machine.

# **Manufacturer Details**

The Spinfire series of ball machines are manufactured in China for and on behalf of:

Fry Developments Pty Ltd 122 Dougharty Rd, Heidelberg West, VIC 3081 Australia +61 3 8578 4743 info@spinfiresport.com