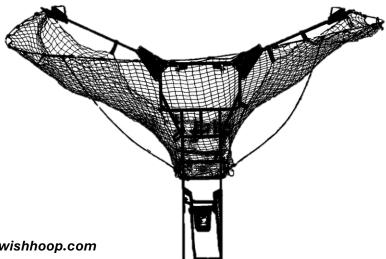


Swish Hoop®

Twister

Automated Rebounding Machine





User Manual v1.0

Contact Swish Hoop® for help: support@swishhoop.com

User Manual

Swish Hoop® Twister™ – Automated Rebounding Machine*

This **User Manual** for the Twister™ Automated Rebounding Machine describes how to use, care for and troubleshoot the system. It does not include assembly, folding or unfolding instructions. Please consult the following documents for those instructions:

Twister™ Assembly Instructions, which includes:

- First Time Assembly Instructions
- Folding Instructions
- Unfolding Instructions

For additional assembly help, also see https://swishhoop.com/twister-assembly

Warnings

⚠ WARNING – THE TWISTER SYSTEM ADDS WEIGHT TO THE BACKBOARD, WHICH MAY REQUIRE ADDITIONAL COUNTERBALANCE WEIGHTS TO BE ADDED TO A MOBILE BASKETBALL GOAL, SO THAT IT DOES NOT FALL FORWARD DURING USE

⚠ WARNING – THE TWISTER IS AN AUTOMATED MACHINE WHICH MAY MOVE AT ANY TIME. STAY CLEAR OF THE RAMP AND OTHER MECHANISMS TO AVOID INJURY.

⚠ WARNING – THE TWISTER WILL NOT SUPPORT THE WEIGHT OF A PERSON AND MAY RESULT IN INJURY IF A PERSON OF ANY SIZE PULLS OR HANGS ON THE SYSTEM.

⚠ WARNING – TO AVOID INJURY, READ AND UNDERSTAND THIS TWISTER™ USER MANUAL BEFORE OERATING THE SYSTEM.

This device complies with Industry Canada's license-exempt RSSs and 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.

Change or modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment. Cet appareil est conforme aux normes d'exemption de licence RSS d'Industrie Canada. Son utilisation est soumise aux deux conditions suivantes: 1. Cet appareil ne doit pas provoquer d'interférences, et 2. Cet appareil doit supporter toute interférence,y compris celles pouvant provoquer un fonctionnement non souhaité de l'appareil.

Contains FCC ID: 2ABU6-MS88SF2 Contains IC: 20896-MS88SF2

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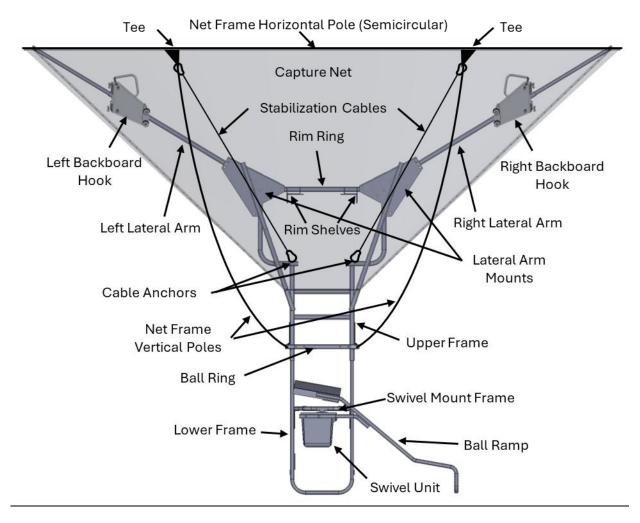
^{*} Patents pending: www.SwishHoop.com/patents

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Component Terminology



What's in the Box?

- Rim Ring (1)
- ® Left Lateral Arm (1)
- © Right Lateral Arm (1)
- Upper Frame (1)
- © Stiffening Bars (2)
- © Lower Frame (1)
- © Swivel Unit (1)
- ® Ball Ramp (1)
- ① Left Backboard Hook (1)
- ① Right Backboard Hook (1)

- ® Net Frame (1)
- ① Net Frame Extensions (4)
- ® Stabilization Cable (2)
- © Carabiner Clips (4)
- ® Cable Anchors (2)
- © Net Clips (18)
- ® Short Hook-and-Loop
- Straps (10)
- © Long Hook-and-Loop
- Straps (14)

- ① 35mm Screws (8)
- © 55mm Screws (8)
- **W** Nuts (14)
- ⊗ Hex Wrench (1)
- ① Wall Charger (1)
- ② Charging Cord (1)

Assembly Instructions

User Manual

System Requirements and Compatibility

Congratulations! You are the owner of the world's most advanced, transportable, basketball-rebounding system. The Twister™ returns made and missed shots to any court location, allowing you to get up many more shots without convincing someone else to spend hours rebounding for you.

The Twister™ system is designed to be mounted to a conventional basketball rim and backboard. It should not be used stand alone, with an undersized rim or with a backboard less than 36 inches (91 cm) or greater than 72 inches (183 cm) in width. See the *First Time Assembly Instructions* for instructions on how to adjust the system for different backboard types and sizes.

The weight of the Twister™ needs to be supported by the basketball goal system onto which it is installed; thus, it should only be attached to a strong, stable system that is in good repair. It is not designed to support any additional weight including the weight of a person. See the *warnings* and *cautions* on page 2 of this **User Manual**.

Quick Start Guide

It is recommended that you read the Operating Procedures section of this User Manual. The following is a short summary of the basic procedures to get Twister $^{\text{m}}$ up and running.

- 1. Make sure the Swivel Unit is fully charged. Charge it by plugging the included wall charger into an outlet and using the included charging cable to connect the charger it to the back of the Swivel Unit. When the system is fully charged, the indicator light will change from red to green.
- 2. Follow the *First Time Assembly Instructions* to configure the system and place it on a hoop.
- 3. Press the power button on the back of the Swivel Unit for one second, then release it. Both the touchscreen and power button should illuminate to indicate the system is on.
- 4. The system "wakes up" in its offline mode with the default program selections of "Wings" and shot number of "1" at each location. This may be changed by tapping the "PROGRAM" or "WINGS" text on the touchscreen.
- 5. Start shooting. The Twister™ senses when the ball has been collected and returned down the Ball Ramp and will sequence the Swivel Unit to deliver the ball to the next court location.

Overview of the Twister™ Product

Swish Hoop® Twister™ is the world's most advanced, transportable, basketball-rebounding system. The Twister™ returns made and missed shots to any court location, allowing you to get up many more shots without convincing someone else to spend hours rebounding for you.

The Twister™ is made from aircraft-quality aluminum and fiberglass materials, making it strong, lightweight and collapsible. It can be used indoors or outdoors, as it is water resistant and rechargeable battery operated. Although waterproof, it is not recommended that the system be left outdoors in below-freezing temperatures or heavy rain. To maintain its waterproof seal, Swivel Unit disassembly should not be attempted.

The system collects basketballs shot towards a goal in a large funnel-shaped Capture Net, whether the ball makes or misses the goal. It then transfers the ball through a lower Ball Ring to a Ball Ramp, that utilizes gravity to propel the ball back to the player. The Ball Ramp is on a motorized swivel so that the ball may be returned to different court locations, with the swivel angle being controlled in three different ways:

- 1. Manually: Player may position the ramp angle in a powered-down system by manually moving it to any angle desired.
- 2. Internally (Offline Mode): The internal motor positions the ramp angle prescribed by pre-set programs selected by the player.
- 3. Remotely (Online Mode): The system may be connected through Bluetooth to a mobile device (phone or tablet) running the Swish Hoop Player app for executing more complex drills, which wirelessly sends Ball Ramp motion commands to the system, which then moves its gearmotor to the desired swivel angle.

There are 12 different "Offline" drills (Programs) that are accessible through the system's touch screen. Each Program automatically delivers rebounds to one or multiple court locations in sequence. When connected to the Swish Hoop® Player App, the system has expanded access to over 300 expertly video-demoed "Online" drills and workouts, for highly effective training regimens. Combining the system with a Swish Hoop® Basketball Training System (sold separately), it will also track your shots (makes and misses) and generate shot charts with stats for each player and each shooting location on the court.

The following subsystems comprise the Twister™:

- Ball Capture Net a funnel-shaped string Capture Net and fiberglass Net Frame
- 2. Foldable Frame the metal "backbone" of the system
- 3. Ball Ramp an angled track that propels rebounded balls back to the user
- 4. Swivel Unit a motorized swivel that steers the Ball Ramp
- 5. Ball Sensor an optical detector that senses when the ball is moving down the Ball Ramp and counts rebounded shots
- 6. Battery System a rechargeable battery within the Swivel Unit that enables the system to be used without electrical connections. The battery is permanently installed and may not be changed.
- 7. Wireless Communication a Bluetooth system that allows the system to be run from the Swish Hoop Player app
- 8. Touchscreen Interface a user-friendly graphical interface that enables online/offline operation and program selection. It also displays a shot count and (when connected to the Swish Hoop Shot Monitor sensor sold separately) shooting stats.

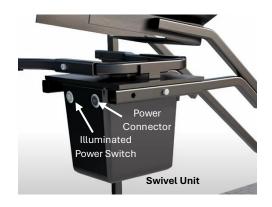
Twister™ Interfaces

The interfaces for the Twister™ include: an Illuminated Power Switch, a Power Connector, a Touchscreen, a Charging Indicator, and a Reset button.

Illuminated Power Switch

The Illuminated Power Switch is located on the rear side of the Swivel Unit and is used to power up and power down the Twister™. When the system is powered up, the switch will be illuminated blue. When it is powered down, the illumination will be off.

To change the state of the system (turn it on or off), the button must be depressed for a full second, then released.



Power Connector

The Power Connector is also located on the rear side of the Swivel Unit and is used to connect the power cord for battery recharging. The system may be run with or without the charging cord connected to the Power Connector. The charging voltage is 5 volts DC, which is available from a standard USB charging system.

Touchscreen

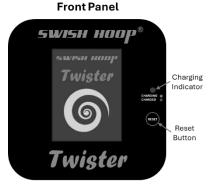
An illuminated touchscreen serves as the main user interface for the Twister™ (see the section Touchscreen Interface for details on the various screens that are available). The touchscreen

responds better to small area touches, such as with a fingernail rather than a wider fingertip. Be careful not to use sharp objects that might pierce the protective plastic overlay or damage the screen.

Charging Indicator

When the Charging Cable and Wall Charger are delivering power to the Power Connector on the Swivel Unit, a Charging Indicator light on the front panel will show the status of the battery charge. A red light means the battery is not fully charged and is in the

process of being charged. A green light means the battery is fully charged and is no longer undergoing charging.



Reset Button

A Reset Button may be found to the right of the touchscreen on the front panel of the Swivel Unit. The Reset Button is ordinarily not used unless there is a fault in the system which remains unresolved after power cycling using the Illuminated Power Button.

Operating Instructions

Once the Twister™ has been assembled, attached to a basketball goal system and powered up (see the document **Assembly Instructions**), there are two different modes under which it may be operated:

- Offline Mode: The system operates independently, without connecting to other devices. In the
 offline mode, users may choose to run various internal programs that automatically position the
 Ball Ramp based on the number of shots that are sensed by the ball sensor. See Offline Mode
 Operation below for a description of the various internal programs.
- Online Mode: The system operates solely from instructions sent by a remote wireless device (such as a smartphone or tablet). See *Online Mode Operation* below for a more detailed description.

Alternatively, the system may be powered down and operated in a manual mode, wherein users may position the ramp angle by manually moving it to any angle desired.

Powering Up the System

To power up the system and enable all functions, the power button at the rear of the Swivel Unit should be pressed for a full second, then released. This will illuminate both the power button and the touchscreen, indicated the system has been powered up.

Powering Down the System

To power down the system and disable all functions, the power button at the rear of the Swivel Unit should be pressed for a full second, then released. This will extinguish both the power button and the touchscreen illumination, indicated the system has been shut down.

If the system remains idle (no shots are taken and no touchscreen interactions) for 30 minutes, a system idle error will be initiated, and the Twister™ will automatically power itself down.

Offline Mode Operation

When there is no wireless mobile device connected, the Twister™ runs in an **Offline Mode**. The following sections describe the various touchscreen menus and how to run the system in this mode.

Touchscreen Menu Navigation

Battery Indicator

In the upper right corner, each screen shows a percentage (graphical and numeric) of remaining charge on the rechargeable battery within the system. When the charging cord is attached and the system is being charged, The battery graphic changes to a green animated battery icon.

SHOT COUNT 6 PROGRAM SINGLE CONNECT

Home Screen

The Home screen is the first screen after the system is powered up. It displays the number of shots (Shot Count) that have been taken since the previous Shot Count reset, the current offline program that is selected and an option to connect to a remote wireless device running the Swish Hoop® Player App (switch to Online Mode).

Shot Count Reset Screen

The Shot Count Reset screen is accessed by tapping the Shot Number on the Home screen ("§" in the above example screen). There are two options for the user on this screen. Tapping "0 COUNT" button will reset the Shot Count number to zero. The "BACK" button will return back to the Home Screen.

Connecting Screen

The Connecting Screen is accessed by tapping the CONNECT button on the Home screen. After that button is tapped, the Twister™ system becomes visible to Bluetooth-enabled wireless devices. While it is attempting to connect, it displays the Bluetooth symbol ≯ and the word "CONNECTING".



85% **=**1/2 ** CONNECTED

PAUSE

CANCEL

Connected Online Screen

Once the Twister™ connects to a mobile device running the Swish Hoop® Player App, it shows the Connected Online Screen, which includes the Bluetooth symbol and the word CONNECTED (indicates the Twister™ is now operating in Online Mode). See the section **Online Mode Operation** below for additional details for this screen.

Program Selection Screen

The Program Selection screen is accessed by tapping the word PROGRAM or the name of the program that is running (in the example Home Screen shown above, this is "<u>SINGLE</u>"). There are six different program types that may be selected, which are accessed by tapping the left ◀ or right ▶ arrow buttons on the sides of the screen. These arrow buttons will cycle through the six program types in the following order when tapping the right arrow (order is reversed when the left arrow is tapped:

1. WINGS – This program alternates returning the ball to the left- and right-wing locations on the court, with the motion occurring after the system has counted the "alternate number" of shots (chosen on the following screen) at each location.

- CORNERS This program alternates returning the ball to the left- and rightcorner locations on the court, with the motion occurring after the system has counted the "alternate number" of shots (chosen on the following screen) at each location.
- 3. ELBOWS This program alternates returning the ball to the left- and right-elbow locations on the court, with the motion occurring after the system has counted the "alternate number" of shots (chosen on the following screen) at each location.
- 4. LEFT This program alternates returning the ball to the left-corner and left-wing locations on the court, with the motion occurring after the system has counted the "alternate number" of shots (chosen on the following screen) at each location.
- 5. RIGHT This program alternates returning the ball to the right-corner and right-wing locations on the court, with the motion occurring after the system has counted the "alternate number" of shots (chosen on the following screen) at each location.
- 6. SINGLE This program returns the ball to the same location each time. There is no alternating of multiple locations and no associated "alternate number". This screen allows the user to input the desired location by tapping the desired location on the court graphic on the screen. There are seven different locations that may be chosen: Left Corner, Left Wing, Left Elbow, Center, Right Elbow, Right Wing and Right Corner. Once the desired court location is displayed (green dot on the court graphic), the SELECT button at the bottom of the screen should be tapped to complete the selection. If the BACK button is tapped, then the selected program will revert back to the previously selected program. Once the SELECT button is tapped, there are no further selections necessary. The Program Starting Screen (see below)

is then shown and in about 2 seconds, the Twister™ will move the Ball Ramp to the angle

Alternate Number Selection Screen

associated with the chosen location.

When the selection of any of the first five programs is completed (WINGS, CORNERS, ELBOWS, LEFT, or RIGHT), the Alternate Number Selection Screen is shown, allowing the user to select the number of returned balls to each court location before the system moves to the next location. The following numbers are accessed using the left ◀ or right ▶ arrow buttons on the sides of the screen: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100. Tapping the GO button at the bottom of the screen stores the selected Alternate

Number and initiates the drill (see Program Starting Screen below). Tapping the BACK button returns to the Program Selection Screen and undoes both the Program and Alternate Number selections.



Program Starting Screen

After either the GO button on the Alternate Number Selection Screen is tapped, or the SELECT button on the SINGLE Screen is tapped, the Twister™ displays the Program Starting screen that warns the user that the system is about to move the Ball Ramp. This screen displays the program name, the number of shots to be taken at each location (for programs other than SINGLE), the court diagram where the shots will be taken and the blinking word **STARTING**, which warns users that Ball Ramp motion is imminent and they should stay clear. In about 2 seconds, the Twister will then move the Ball Ramp to the first location in the program.



Example Use Case - Offline Operation

As an example use case, we assume a user would like to practice their corner shooting, taking 5 shots from the first corner, then changing to the other corner for the next 5 shots, etc. They would also like to get a count of their shots starting from zero. For this use case, we assume the Twister™ has already been attached to the hoop system (see the document *Assembly Instructions*). The following steps should be followed:

- 1. If the Twister™ system is off, press the power button for 1 second, then release.
- 2. **Home Screen** Assure the battery has sufficient charge or plug in the power cord if it does not.
- 3. **Home Screen** If the underlined number on the Home Screen is not 0, tap it to get to the Shot Count Reset Screen
- 4. **Shot Count Reset Screen** In the case where the shot count needs resetting, tap the button 0 COUNT, then the BACK button to return to the Home Screen
- 5. **Home Screen** Tap the word PROGRAM (or the underlined program name)
- 6. **Program Selection Screen** Tap the right or left arrow button on the screen until the program CORNERS is reached
- 7. CORNERS Program Screen Tap the SELECT button
- 8. **Alternate Number Selection Screen** Tap the right or left arrow button on the screen until the number 5 is showing. Then tap the GO button
- 9. **Program Starting Screen** Get out of the way while this screen is shown to avoid a collision with the rotating Ball Ramp
- 10. **Home Screen** Move to the left corner of the court (where the Ball Ramp is aimed) and start shooting. The Home Screen will keep count of the shots. Note that the Ball Ramp will not move to the right corner until *after* the 5th shot has been returned to the left corner position, so it may be convenient to take a 6th shot from the left corner, then move to the right corner to receive the ball there for the next shot. From that point forward, the Ball Ramp will move every 5 shots.

Online Mode Operation

When the Twister™ is connected through Bluetooth to a mobile device (phone or tablet) running the Swish Hoop Player app), as described below, it follows the drills selected within the app and delivers the ball to the appropriate court location (swivels the Ball Ramp to the correct angle) for the next shot.

To connect the system through Bluetooth with a mobile device that is running the Swish Hoop® Player app, the CONNECT button on the Home Screen is first tapped, then on the mobile device the screen SETTINGS>DEVICES is opened in the app and the Twister name should be listed under the "Swish Hoop Returners" heading (note the Twister name may be a random string of letters and numbers). Tap the Twister name and the dot to the right of the name should turn green when the systems are connected to one another.



Once the Twister™ is connected, the Connected Online Screen displays two numbers that mirror the stats that are displayed on the Player App screen on the connected mobile device: the first number is the number of made shots, and the second number is the number of attempts.

In the Online Mode, the Twister™ does not count or display the number of cumulative shots across multiple drills, as it does in the Offline Mode. Tapping the PAUSE button at the bottom of the screen sends a message to the connected device to pause any drill that may be running. The Connected Online screen does not permit a disconnection between the Twister™ and mobile device. This may



only be done on the mobile device using the Settings>Devices screen on the Swish Hoop® Player App (see the section below **Using the Swish Hoop® Player App with the Twister**).

Using the Swish Hoop® Shot Monitor with the Twister™

The Swish Hoop® Shot Monitor is a shot tracking sensor that accurately measures makes, misses and swishes. It comes as part of the Twister™ PRO system or may be purchased separately in either the Swish Hoop® Basketball Skills Trainer LITE or PRO products. The Shot Monitor saves tracking data to the Swish Hoop® Player App, which is available for mobile devices from either the Apple App Store or the Google Play Store.

When used with the Twister®, the Shot Monitor and Player App expand the number of drills/programs that may be used with the Twister™. After the Twister™ is connected to the mobile device running the Player App, the app takes control of the Twister™ and can position it to any location (angle) required for a selected drill.

The Twister™ can work with any shooting drill selected within the Player App, but the Ball Ramp will not change its position if the chosen drill does not have defined shooting locations (such as Shoot Around mode).

Attaching the Swish Hoop® Shot Monitor to the Rim Net with the Twister™

To configure a hoop with both a Twister™ and Shot Monitor, the Twister should be attached first (see the Twister™ *Assembly Instructions*), and then the Shot Monitor. To attach the Shot Monitor to the rim net, use the telescoping Swish-STIC that comes with the Shot Monitor to position the



Shot Monitor behind the Twister[™] frame, in front of the backboard, and under the basketball rim. The Shot Monitor should be attached to the rim net under one of the rim net hooks.

Using the Swish Hoop® Player App with the Twister™

To connect both the Twister and Shot Monitor to the mobile device running the Swish Hoop Player App, first, open the app and navigate to the Settings>Devices screen.

With the Auto Connect slider near the top of the Devices app screen in the OFF position, press the GO button and the name of the Twister should appear (as long as the CONNECT button was tapped on the Home Screen) under the SWISH HOOP RETURNERS heading. If the dot to the right of the Twister name is not green, tap the dot (or Twister name) and the dot should turn green, indicating that

the mobile device is connected to the Twister. The same process should be used to connect a Shot

Monitor (listed under the SWISH HOOP SHOT MONITORS heading), so that a green dot also appears next to the Shot Monitor name. On most of the other screens within the app, connection to both the Shot Monitor and Twister devices will be indicated with the grey colored net and ball logos at the top of the screen turning white (grey indicates no connection and white indicates a connection).



Once the Twister[™] has been connected to the mobile device and Player App, there is nothing further that needs to be done for the Twister[™] to follow any of the shooting drills or workouts and automatically return the ball to the proper court location. Just pick a shooting drill or workout and the Twister[™] will return the ball to the next shot location.

Using the Swish Hoop® Personal Scoreboard with the Twister™

The Swish Hoop® Personal Scoreboard is a high-visibility, color, LED display that feeds back shooting stats and guides players through drills, when connected to the Swish Hoop® Player App and Shot Monitor. It comes as part of the Twister™ PRO system or may be purchased separately in the Swish Hoop® Basketball Skills Trainer PRO product. The Scoreboard displays information that comes from the Swish Hoop® Player App, which is available for mobile devices from either the Apple App Store or the Google Play Store.

Attaching the Scoreboard to the Twister™

The Swish Hoop® Personal Scoreboard may be directly connected to the Twister's Swivel Unit using the Scoreboard Mounting Bracket, which is supplied with the Twister™ PRO system or may be purchased separately.

With the Scoreboard Mounting Bracket not yet connected to the Twister™ system, first fit the two upper metal screws on the back of the scoreboard to the keyway-shaped holes on the mounting bracket. As a second step, slide the top legs of the Scoreboard Mounting Bracket into the back side of the Swivel Unit square tubes (the front side of the same tubes has the Ball Ramp legs extending from it).

Scoreboard

Mounting Bracket

Depress the spring buttons and allow them to snap into the tubes to lock the bracket in place. The top of the scoreboard should be just under the bottom of the Swivel Unit enclosure, which will keep the scoreboard from being jostled out from the bracket. To remove the scoreboard, depress the spring buttons, slide the bracket backwards to remove it, then slide the scoreboard upwards, out from the keyway holes.

Using the Swish Hoop® Player App with the Combined Scoreboard/Twister™

Follow the directions above in the section **Using the Swish Hoop® Player App with the Twister™** but also make sure a Personal Scoreboard is connected as a third device (listed under the heading Swish Hoop Personal Scoreboards in the Settings>Devices screen). On other screens in the app, all three icons (net, scoreboard and ball) at the top of the screen should be illuminated white.

Returning to Offline Mode from Online Mode

To sever the connection between the mobile device and the Twister™ and put it back into Offline Mode, one of the two following methods may be used:

- 1. Reset the Twister™. Press either the RESET button on the front of the Swivel Unit or the power button for one second on the back of the Swivel Unit. Press the power button for one second a second time to power up the system again, which will put it in Offline Mode.
- 2. Open the Swish Hoop Player App on the mobile device and navigate to the Settings>Devices screen. With the Auto Connect slider near the top of the Devices app screen in the OFF position, tap the green dot next to the Twister name, which should disconnect it and turn the dot red.

Example Use Case – Online Operation

As an example use case, we assume two players would like to practice 3-point shooting on the left side of the court: left corner, wing and slot, so they choose the "3 Spot 3 Shot Pop Outs Left 3PT" drill. This drill has nine shots total for each player, with 3 from the corner, 3 from the wing and 3 from the slot (all behind the 3PT line). They would like to alternate players after 3 shots (both players will shoot at the same location before a location change). The players are using a Twister™ PRO system that includes both a Shot Monitor and a Personal Scoreboard. For this use case, we assume the Twister™ and the Shot Monitor have already been attached to the hoop system and the Personal Scoreboard is attached to the Twister. The following steps should be followed:

- 1. If the Twister™ system is off, press the power button for 1 second, then release.
- 2. **Home Screen** Assure the battery has sufficient charge or plug in the power cord if it does not.
- 3. **Home Screen** Tap the CONNECT button to initiate Bluetooth connection with the mobile device and the Swish Hoop Player App.
- 4. To enable Bluetooth connections, tilt the Shot Monitor by making a shot and press the reset button on the side of the scoreboard.

- 5. **APP Settings>Devices Screen** With the Auto Connect slider OFF, press the GO button and assure all three devices are listed. Tap each to connect and assure 3 green dots are shown. If the Auto Connect slider is ON, then the devices will be automatically connected.
- 6. APP Play>Drills Screen Find the drill "3 Spot 3 Shot Pop Outs Left 3PT" and tap it.
- 7. **APP Drill Detail Screen** Tap the MULTIPLAYER button and find the name of the second player in the Change Players screen. The second player will have needed to give permission to the first player to record stats for him. Tap the back arrow.
- 8. **APP Drill Detail Screen** Tap text on the Alternate line and choose "After each shot type" as the alternating rule in the popup window. Tap the DONE button.
- 9. **APP Drill Detail Screen** Tap the START button, which will open the Session Display screen and start the drill and move the Twister Ball Ramp to the first court location.
- 10. **Scoreboard Screen** The initials of the first player (whose turn it is to shoot) are displayed along with the court diagram showing the left corner shooting location.
- 11. The first player shoots his first three shots from the left corner. The scoreboard, the app screen and the Twister touchscreen all display the shooting stats (makes/attempts for that player) in real time.
- 12. **Scoreboard Screen** The initials of the second player (whose turn it is to shoot) are displayed along with the court diagram showing the left corner shooting location.
- 13. The second player shoots her first three shots from the left corner. The scoreboard, the app screen and the Twister touchscreen all display the shooting stats (makes/attempts for that player) in real time.
- 14. **Scoreboard Screen** The initials of the first player are displayed along with the court diagram showing the left-wing shooting location. The Twister Ball Ramp moves to the left-wing angle.
- 15. The first player shoots his second three shots from the left wing. The scoreboard, the app screen and the Twister touchscreen all display the shooting stats (makes/attempts for that player) in real time.
- 16. **Scoreboard Screen** The initials of the second player (whose turn it is to shoot) are displayed along with the court diagram showing the left-wing shooting location.
- 17. The second player shoots her second three shots from the left wing. The scoreboard, the app screen and the Twister touchscreen all display the shooting stats (makes/attempts for that player) in real time.
- 18. **Scoreboard Screen** The initials of the first player are displayed along with the court diagram showing the left-slot shooting location. The Twister Ball Ramp moves to the left-slot angle.
- 19. The first player shoots his third three shots from the left slot. The scoreboard, the app screen and the Twister touchscreen all display the shooting stats (makes/attempts for that player) in real time.
- 20. **Scoreboard Screen** The initials of the second player (whose turn it is to shoot) are displayed along with the court diagram showing the left-slot shooting location.
- 21. The second player shoots her third three shots from the left wing. The scoreboard, the app screen and the Twister touchscreen all display the shooting stats (makes/attempts for that player) in real time.
- 22. **Session Display Screen** Either player taps the END button to end the session.

System Maintenance and Trouble Shooting

Storage Recommendations

The Twister™ is tested to be water and dust resistant; however, it is not recommended that it be left outdoors in wet or freezing conditions. Store indoors in a dry environment.

Routine Maintenance and Cleaning

There is no lubrication or other regular maintenance requirement for the Twister™.

To clean the system, wipe it with a damp cloth, then dry it. Do not spray the system with a hose or power washer. Avoid the use of solvents and strong chemicals.

Replacement Part Information

The following replacement parts are available. Contact support@swishhoop.com for pricing and ordering information.

Part No.	Name	Description
W0411-G	Swivel Unit	Complete assembly of motor, bearings, seals, electronics,
		touchscreen, rechargeable battery and enclosure
W0411-H	Ball Ramp	Ball ramp including internal spring buttons that secure it in place
W0411-K	Net Frame	Complete assembly of fiberglass poles, bungees, tees, ferrules
		and end toggles
W0411-L	Net Frame Extension	Single piece extension pole to raise Net Frame height
W0411-M	Capture Net	String net
W0411-N	Stabilization Cable	Multi-length stainless cable and two carabiner clips
W0411-Q	Net Clips	S-shaped plastic clips to connect he Capture Net to the Net Frame
		Poles. Sold in sets of 6
W0411-R	Short Hook-and-Loop	30mm long, double sided hook-and-look straps for connecting the
	Straps	Capture Net. Sold in sets of 6
W0411-S	Long Hook-and-Loop	500mm long, double sided hook-and-look straps for connecting
	Straps	the Capture Net. Sold in sets of 6
W0411-	Stainless Hardware	35mm M6 screws (8), 55mm M6 screws (8), M6 washers (24), M6
TY	Kit	locknuts (14), D-ring Cable Anchors (2), hex and nut wrenches
W0411-Z	Scoreboard Bracket	Optional bracket for attaching a Swish Hoop Personal Scoreboard
		(sold separately) to the Swivel Unit
W0411-2	Charging Cord	1-meter-long electronic cord (USB-A to barrel connector) for
		charging the Swivel Unit
W0411-	Ball Ring Cord	2mm diameter, 1-meter-long monofilament cord for Capture Net
DM		anchoring to the Ball Ring, including: 12mm M6 screws (2), M6
		washers (4), M6 locknuts(2)

Error Codes

When the Twister™ encounters an error, the touchscreen will show an error screen which includes the error number, a brief description, and two buttons: BACK and RESET.



The following table describes the various errors that may be encountered.

No.	<u>Issue</u>	Display Message	Description
104	Swivel motion failure	SWIVEL JAM – TRY TO CLEAR	Ball Ramp is unable to reach its final angle Check for any obstructions that might cause a stoppage. Low battery charge detected. Plug charging cord into
106 341	Battery low voltage Battery too low to operate	BATT LOW – PLUG IN CHRGER BATT LOW – SHUTTING DOWN	the unit immediately to continue operation. Extreme low battery charge detected. System shutdown initiated.
342	System inactive too long	SYST IDLE – SHUTTING DOWN	There has been no system activity for 30 minutes. System shutdown initiated.

Troubleshooting – Common Problems and Solutions

Symptom	Solutions
System will not turn on	Make sure rechargeable battery is fully charged. Plug the charging cord into the
	back of the Swivel Unit and the Wall Charger that is plugged into an outlet.
	When the charging indicator light on the front panel of the Swivel Unit turns
	green, the battery is fully charged.
	Make sure the power button on the back of the Swivel Unit is pressed for a full
	second, then released. Too short of a press will fail to power up the system.
System will not turn off	Make sure the power button on the back of the Swivel Unit is pressed for a full
	second, then released. Too short of a press will fail to power down the system.
Display went blank	System requires a reset by either pressing the reset button on the front panel
	or power cycling by pressing the power switch on the back of the Swivel Unit
	for a full second to turn it off, then again to turn it on.
Ball can fall out the	If the String Capture Net does not have correctly positioned hook-and-loop
back of the capture net	straps connecting it to the metal frame, it is possible for a ball to escape
	through a gap. Either reposition the existing straps or add extra ones to make
	the gap small enough where a ball cannot escape. Extra straps are included
	with the product or additional ones may be purchased as spare parts.
Ball gets caught at the	To eliminate any pockets at the front of the string capture net, use pairs of
lower front of the string	short hook-and-loop straps around the two front vertical Net Frame
capture net	poles to pull the string net taught across the front side. Several pairs of
	straps may be needed.
Ball gets caught at the	If the hook-and-loop straps between the portions of the metal frame
lower left or right sides	and the string capture net are not properly adjusted, a ball may get caught
of the string capture	between a steel Stabilization Cable and the Capture Net side. Use sets of long
net	hook-and-look straps to release some of the tension in the sides of the net so
	there is enough slack for a ball to pass through.
Ball bounces out of the	It is possible for any basketball shot, especially long shots, to bounce off the
capture net when it	rim in such a way that it bounces outside of the capture net. To reduce the risk
hits the rim of the goal	of this occurring, choose a higher setting for the capture net. See the <i>Twister</i> ™
	Unfolding Instructions for instructions on how to set the net height.
System turned itself off	There are three reasons for the system to automatically shut down.

	1. If the charge on the internal battery gets too low to operate, the system will give a warning, then shut down. To avoid this, plug in the power cord to recharge the battery.	
	2. If the system is idle for more than 30 minutes, the system will give a warning, then shut down. To avoid this, either take a shot or tap the touchscreen, which will reset the 30-minute idle timer.	
	3. If the system detects an internal fatal error, the system will give a warning, then shut down. If this happens, try power cycling by pressing the power switch on the back of the Swivel Unit for a full second to turn it off, then again to turn it on. If it immediately happens again, contact support@swishhoop.com.	
I cannot disconnect the system from my mobile device	Disconnection may be initiated from the Settings>Devices screen on the Swish Hoop Player app on the mobile device. Just tap the green dot next to the Twister name and it should disconnect. You may also reset the system by either pressing the reset button on the front panel or power cycling by pressing the power switch on the back of the Swivel Unit for a full second to turn it off, then again to turn it on.	

Contacting Support

For additional information about assembly and operation of the Twister™ system or other Swish Hoop products, visit https://swishhoop.com/instructions. For customer service help, email support@swishhoop.com.

Support and Warranty Information

Warranty information

The Twister™ system is covered by a 90-day Limited Warranty (see https://www.swishhoop.com/policies/terms-of-service for the full terms of service).

Servicing Your System

Product service is available by shipping broken or non-working parts to Swish Hoop. Before sending anything to the company, please contact support@swishhoop.com to receive an RMA number that will allow the company to accept your package and initiate a repair.

Contacting Customer Support

For customer service help, email support@swishhoop.com.

Website resources and downloads

These instructions, as well as the assembly instructions, may be found online and downloaded at https://swishhoop.com/instructions