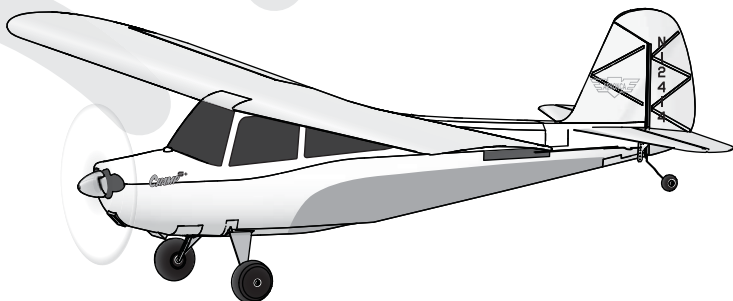


Champ S+

Instruction Manual • Bedienungsanleitung • Manuel d'utilisation • Manuale di Istruzioni



SAFE[®]+

RTF
READY-TO-FLY

BNF
Bind-N-Fly[®] Ready to fly. redefined.

hobbyzone[®]

NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit www.horizonhobby.com and click on the support tab for this product.

Meaning of Special Language:

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.



WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

Safety Precautions and Warnings

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.
- Always keep aircraft in sight and under control.
- Always use fully charged batteries.
- Always keep the transmitter powered on while aircraft is powered.
- Always remove batteries before disassembly.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after use before touching.
- Always remove batteries after use.
- Always ensure failsafe is properly set before flying.
- Never operate aircraft with damaged wiring.
- Never touch moving parts.

Included in the Box

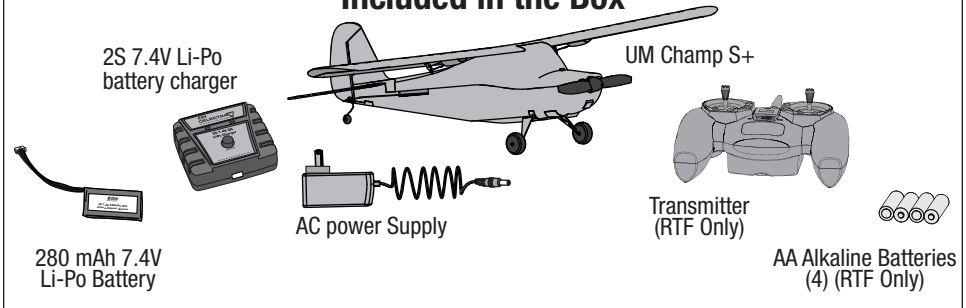
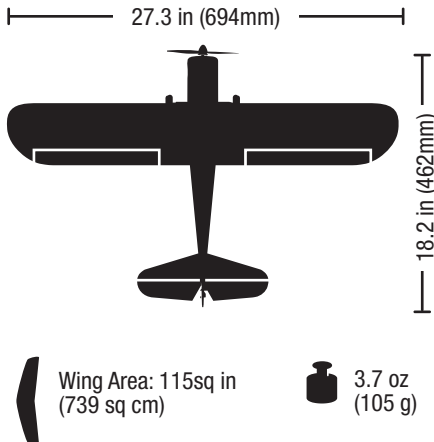


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Specifications



| | | RTF READY-TO-FLY | BNF |
|--|--|---------------------|-----------------------------|
| | Motor: BL180 Brushless Outrunner Motor, 2500Kv | Installed | Installed |
| | Receiver/ESC: DSMX®/DSM2® RX/ ESC unit: Champ S+ | Installed | Installed |
| | (2) 2.3-Gram Performance Linear Long Throw offset Servos | Installed | Installed |
| | Battery: 280mAh 2S 7.4V 30C Li-Po | Included | Included |
| | Battery Charger: Celecra™ 2S 7.4V Li-Po Charger | Included | Included |
| | AC adapter | Included | Included |
| | Transmitter: DSM2/DSMX Transmitter | Included | Required to Complete |

To register your product online, go to www.hobbyzonerc.com

Charging Warnings

The included battery charger (EFLUC1007) has been designed to safely charge the Li-Po battery.



CAUTION: All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in a fire, personal injury and/or property damage.

- By handling, charging or using the included Li-Po battery, you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120° F. Do not store the battery or model in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.

- Always charge batteries away from flammable materials.
- Always inspect the battery before charging.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always constantly monitor the temperature of the battery pack while charging.
- **ONLY USE A CHARGER SPECIFICALLY DESIGNED TO CHARGE LI-PO BATTERIES.** Failure to charge the battery with a compatible charger may cause a fire resulting in personal injury and/or property damage.
- Never discharge Li-Po cells to below 3V under load.
- Never cover warning labels with hook and loop strips.
- Never leave charging batteries unattended.
- Never charge batteries outside recommended levels.
- Never charge damaged batteries.
- Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F or 5–49° C) or place in direct sunlight.

Charging the Flight Battery

Your aircraft comes with a 2S 7.4V 280mAh 30C Li-Po battery and a 2S 7.4V Li-Po battery charger that requires use of the included AC power supply or the optional 12V (11V–14V) DC power cord (EFLUC1008).

Refer to the charging warnings. It is recommended to charge the battery pack while you are inspecting the aircraft. The flight battery will be required to confirm proper aircraft operation in future steps.

Battery Charging Process

NOTICE: Charge only batteries that are cool to the touch and are not damaged. Look at the battery to make sure it is not damaged e.g., swollen, bent, broken or punctured.

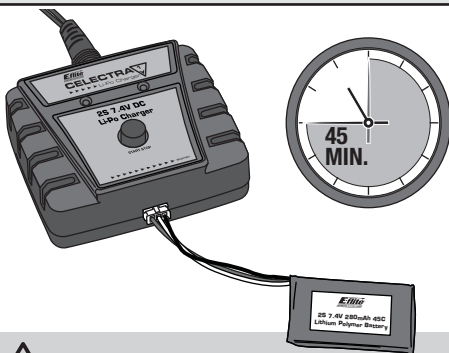
1. Gently press the battery connector into the charge port located on the front of the charger. The connector of the battery is specifically designed to allow it to fit into the charge port one way to prevent reverse polarity connection. However, check for proper alignment and polarity.
2. Press the button on the charger. The red LED will illuminate, indicating charging has begun.

Charging a fully discharged (not over-discharged) 280mAh battery takes approximately **45 minutes** at the charger's 300mA charge rate. The included battery can be charged at a rate of up to 3C (840mA).

Always disconnect the flight battery from the charger immediately upon completion of charging.

LED Indications

1. Green LED blinking Standby
2. Blinking Red LED at varying speeds Charging
3. Red and Green LED blinking simultaneously Balancing
4. Solid Green LED Full Charge
5. Red and Green LED flashing rapidly Error



CAUTION: Overcharging a battery can cause a fire.



CAUTION: Only use a charger specifically designed to charge this Li-Po battery. Failure to do so could result in fire, causing injury or property damage.



CAUTION: Never exceed the recommended charge rate.

RTF Transmitter

READY-TO-FLY

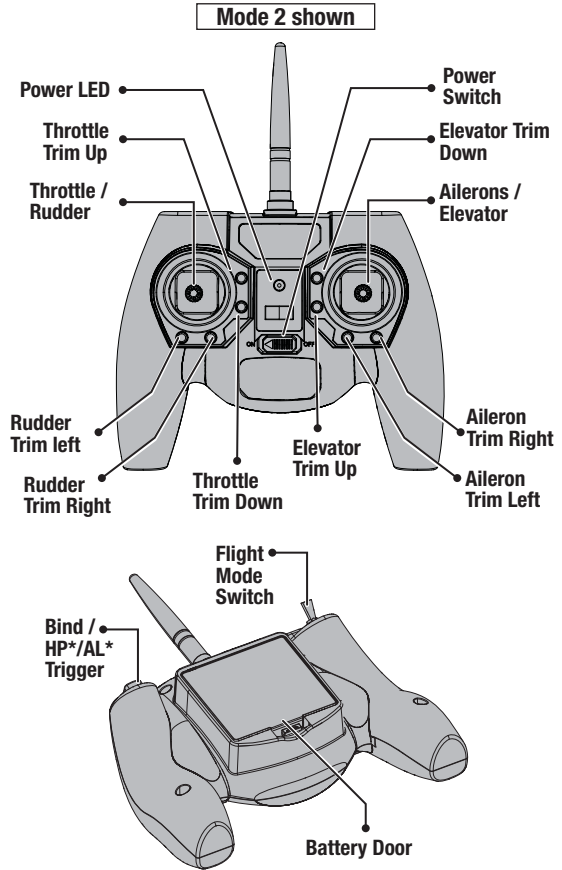
The included transmitter comes pre-bound to the aircraft.

Low Battery Alarm

When the battery voltage drops too low, an alarm sounds and the LED flashes. The batteries must be replaced immediately. If this happens while flying, land your aircraft as soon and as safely as possible.

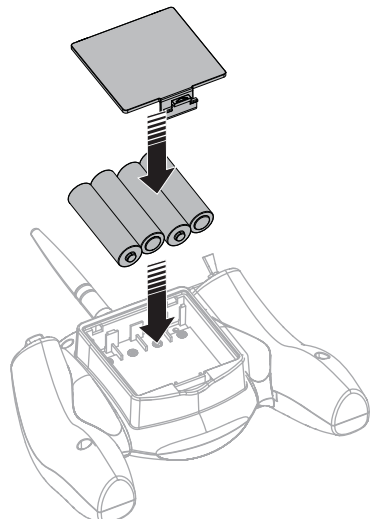
*(HP) = Holding Pattern

*(AL) = AutoLand



Transmitter Batteries Installation

Remove the battery cover. Install the four included batteries (noting proper polarity) and reinstall the battery cover.





BNF AIRCRAFT ONLY

Transmitter Setup

IMPORTANT: The installed receiver has been programmed for operation specifically in this aircraft.

To operate the SAFE® Plus system in this aircraft, set up your optional DSMX®/DSM2® transmitter using the chart below.

- SAFE Flight mode is selected using Channel 5 signal (high, middle, low)
- Holding Pattern and AutoLand are selected using Button I (channel 6, Aux 1)

IMPORTANT: A transmitter with a 2-position Channel 5 switch will only allow the use of position 0 (Beginner Mode) or position 2 (Experienced Mode) flight modes. If possible assign Channel 5 in your transmitter to a 3-position switch to operate all 3 flight modes (refer to your transmitter's manual).

Refer to your transmitter's manual for more information about transmitter setup.

Non Computerized Transmitter Setup (DX5e)

| Transmitter | SAFE Plus mode switch | SAFE Plus Flight Modes Supported |
|---|-----------------------|---|
| Throttle, Aileron, Elevator and Rudder in Normal Position | | |
| DX5e (2 pos switch) | CH 5 switch | 0 Beginner 1 Experienced |
| DX5e (3 pos switch) | CH 5 switch | 0 Beginner 1 Intermediate 2 Experienced |

Computerized Transmitter Setup

(DX6, DX7 (Gen 2), DX8 (Gen 2), DX9, DX18 and DX20)

Start all transmitter programming with a blank model (do a model reset), then name the model.

DX6
DX7 (Gen2)
DX8 (Gen2)
DX9
DX18
DX20

1. Go to the SYSTEM SETUP

2. Set MODEL TYPE: AIRPLANE

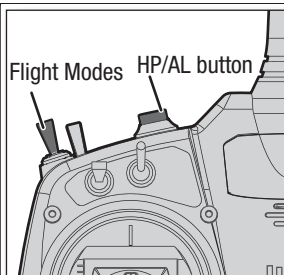
3. Go to CHANNEL ASSIGN:

click NEXT to go to Channel Input
Config: GEAR: B, AUX1: i

4. Go to the FUNCTION LIST

5. Go to SERVO SETUP: Reverse AUX1

Resulting in:



Switch B operates the 3 SAFE Plus modes (0 beginner/1 intermediate/2 experienced)
Button I commands Holding Pattern/Autoland

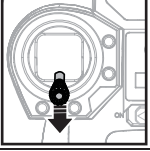
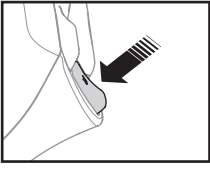
Binding



Re-Binding the RTF Transmitter

READY-TO-FLY

Your Champ S+ RTF transmitter comes pre-bound to the aircraft. If you ever need to re-bind your aircraft, follow this binding table.

| Binding Procedure | |
|---|---|
| 1. Make sure the flight battery is disconnected from the aircraft. | 4  |
| 2. Ensure the transmitter is powered OFF. | |
| 3. Connect the flight battery to the aircraft and turn the aircraft upright. Both ailerons will go up. Set the aircraft upright on its wheels. | |
| 4. Make sure the transmitter controls are at neutral and the throttle is in the low position. | 5  |
| 5. Put your transmitter into bind mode by holding the red HP/AL button while powering ON the transmitter, after two seconds release the button. | |
| 6. After 5 to 10 seconds, the ailerons will return to center, indicating that the receiver is bound to the transmitter. If the ailerons do not return to center, refer to the Troubleshooting Guide at the end of the manual. | |
| IMPORTANT: The transmitter controls will not operate yet, as the aircraft is still searching for GPS lock. | |
| 7. Disconnect the flight battery and power the transmitter off. | |



Bind-N-Fly™ Ready to fly, redefined.

Binding Your Optional Transmitter

For a list of compatible DSMX®/DSM2® transmitters, please visit www.bindnfly.com.

CAUTION: When using a Futaba® transmitter with a Spektrum DSM® module, you must reverse the throttle channel and rebind. Refer to your Spektrum module manual for binding and failsafe instructions. Refer to your Futaba transmitter manual for instructions on reversing the throttle channel.

Binding Procedure

Refer to your transmitter's unique instructions for binding to a receiver.

1. Make sure the flight battery is disconnected from the aircraft.
2. Ensure the transmitter is powered OFF.
3. Connect the flight battery to the aircraft and turn the aircraft upright. Both ailerons will go up. Set the aircraft upright on its wheels.
4. Make sure the transmitter controls are at neutral and the throttle is in the low position.
5. Put your transmitter into bind mode by holding the HP/AL button while powering ON the transmitter, after two seconds release the button.
6. After 5 to 10 seconds, the ailerons will return to center, indicating that the receiver is bound to the transmitter. If the ailerons do not return to center, refer to the Troubleshooting Guide at the end of the manual.

IMPORTANT: The transmitter controls will not operate yet, as the aircraft is still searching for GPS lock.

7. Disconnect the flight battery and power the transmitter off.

For subsequent flights, power ON the transmitter for 5 seconds before connecting the flight battery.

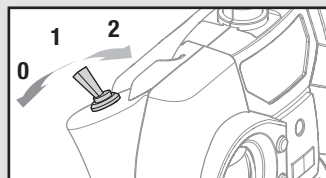


Technology Flight Modes

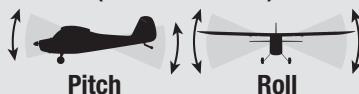
Beginner Mode

(with automatic self-leveling):

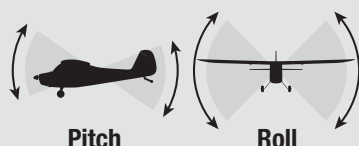
- Below 20 ft (10m), pitch (nose up and down) and roll (wing tips up and down) angles are limited to help you keep the aircraft airborne. Release both sticks for self-leveling.
- Above approx. 20 feet (10m), pitch and roll control are increased slightly.
- At any time release both sticks to activate Panic Recovery mode for self-leveling.



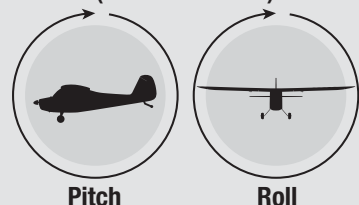
Beginner Mode (Switch Position 0)



Intermediate Mode (Switch Position 1)



Experienced Mode (Switch Position 2)



Experienced Mode:

- Unlimited Flight Envelope. No pitch or roll angle/control limits.
- At any time switch to beginner mode and release the control sticks for self-leveling.

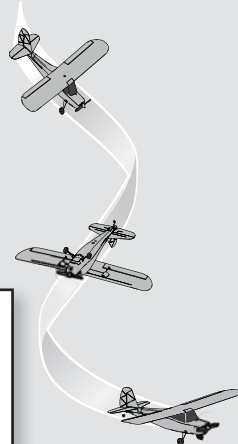
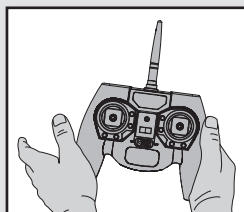
Panic Recovery:

If you feel you have lost control of the aircraft, switch to beginner mode and release the control sticks. The SAFE technology will automatically return the aircraft to stable flight (wings level with a slight climb when the throttle is at 100%/full power).

Always fly at a safe altitude, as Panic Recovery may cause the aircraft to lose some altitude when leveling the wings.

When the aircraft regains stable flight, return to the control sticks and resume flying. The aircraft will return to its current flight mode.

NOTICE: If the aircraft is upside down when the sticks are released, sufficient altitude is required for the aircraft to return to straight and level upright flight.



Virtual Fence

The Champ S+ comes out of the box with the Virtual Fence feature turned ON. This feature prevents unwanted flyaways by limiting the aircraft to a 450 ft (137m) flying radius (Virtual Fence). If the aircraft reaches the 450 ft boundary, the SAFE Plus technology will take over and fly the aircraft back into the flying radius. The aircraft will always position itself to re-enter the flying radius flying towards you. Once back in the flying radius, it will wag its wings twice to indicate that it is returning control to the pilot.

Virtual Fence OFF

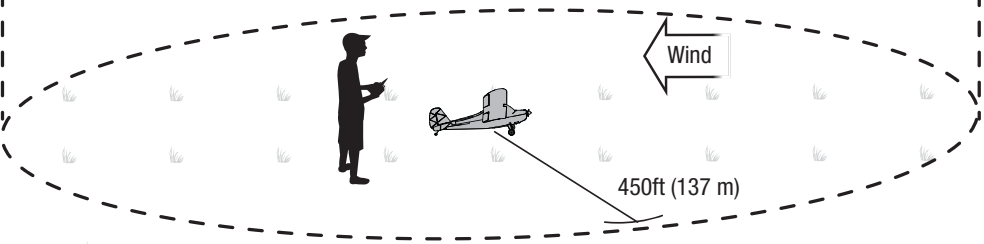
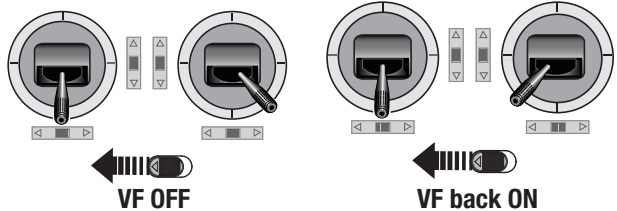
(Not recommended when using RTF Transmitter due to range limitation.)

For flying without the restriction of the Virtual fence (and within the range of your transmitter) the Champ S+ Virtual Fence feature can be deactivated. When the Virtual Fence is turned OFF, the 450 ft (137m) boundary has been removed.

The aircraft's Holding Pattern and AutoLand features will still function.

Turning Virtual Fence OFF or ON

1. Power ON the Transmitter.
2. Power ON the aircraft.
3. Place aircraft on its wheels.
4. Hold the transmitter sticks as shown until it establishes GPS lock.



Emergency GPS OFF

GPS

In the rare occasion that the aircraft loses GPS signal while in flight and a flyaway appears to be happening, the Emergency GPS OFF option can be used by pressing and holding the trigger while toggling the flight mode switch 5 or more times. This will disable all GPS features (Virtual Fence, Holding Pattern and AutoLand) and allow pilot to manually control the aircraft.

IMPORTANT: If you experience GPS signal loss, perform a compass calibration before your next flight.



Holding Pattern (HP)

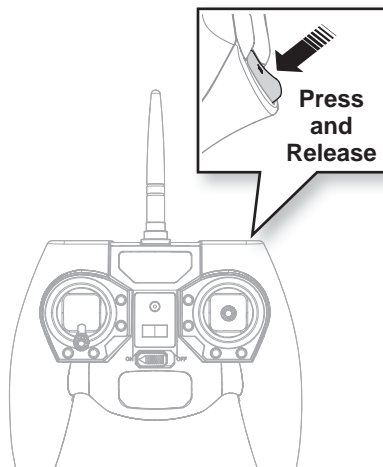
If at any time the aircraft seems too far away, or you would like to “pause” the flight, press and release the HP/AL button on the transmitter.

The aircraft will return to the initialization point/location and begin to fly a circular pattern at an altitude of approximately 65 ft (20m).

When the aircraft is in HP, it flies fully autonomously. The transmitter sticks have no control.

NOTICE: As a safety precaution, the Holding Pattern feature can not be initiated when your aircraft is below an altitude of approximately 20 ft (6m).

To deactivate HP and regain control, press and release the red HP/AL button again or change the flight mode.



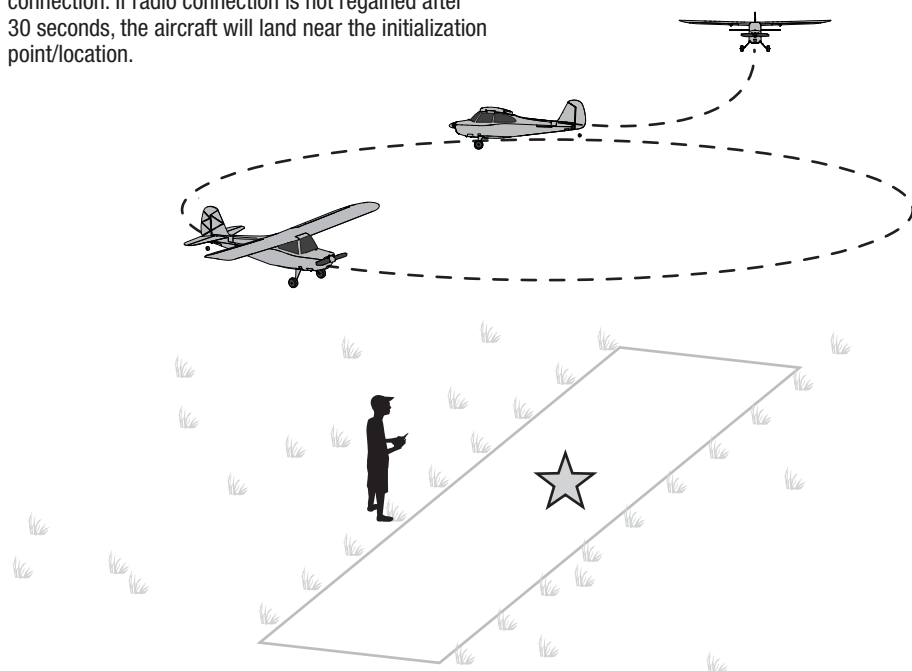
GPS



IMPORTANT: If your aircraft does not respond immediately to a Holding Pattern command the GPS signal may have been lost. Release both transmitter sticks and slowly reduce throttle to gently glide the aircraft to the ground.

Failsafe

If at any time the aircraft loses radio connection, the aircraft will activate HP until it re-establishes radio connection. If radio connection is not regained after 30 seconds, the aircraft will land near the initialization point/location.



AutoLand (AL)

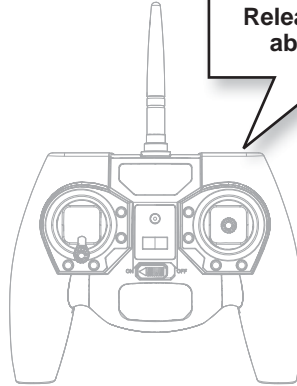
When you are ready to land or your flight timer has signaled, press and hold the red HP/AL button on the transmitter for 4 seconds.

The aircraft will instantly respond and begin an upwind landing approach to return to the initialization point/location. The aircraft will land into the wind near your initialization point/location and come to a complete stop.

When AutoLand is activated, you can still control the aircraft to avoid obstacles like trees or poles. Once clear of the obstacles just let go of the control sticks and the AutoLand feature will take over and resume the landing.

At any time you can abort a landing by pressing and releasing the HP/AL button or by changing the flight mode.

If you want to takeoff again after landing pull the throttle to low position and then press the red HP/AL button again to deactivate AutoLand.



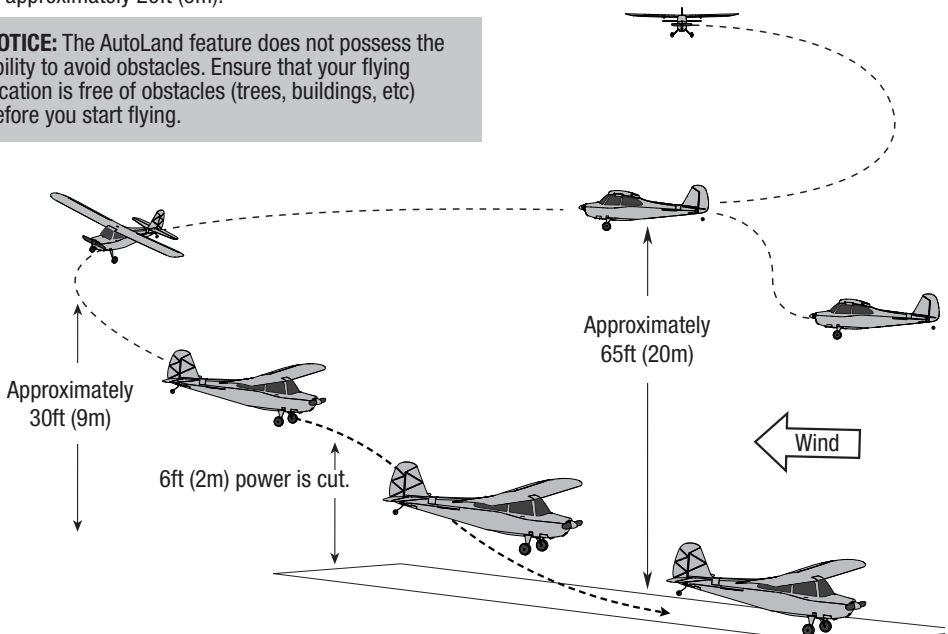
GPS



IMPORTANT: If your aircraft does not respond immediately to an AutoLand command, the GPS signal may have been lost. Release both transmitter sticks and slowly reduce throttle to gently glide the aircraft to the ground.

IMPORTANT: The AutoLand feature can not be initiated when your aircraft is below an altitude of approximately 20ft (6m).

NOTICE: The AutoLand feature does not possess the ability to avoid obstacles. Ensure that your flying location is free of obstacles (trees, buildings, etc) before you start flying.



Indoor Flight / GPS OFF

Indoor Mode will need to be activated before indoor flight can happen. The GPS system will not be able to establish a GPS lock if activated while indoors. The aircraft will be unresponsive searching for a GPS signal.

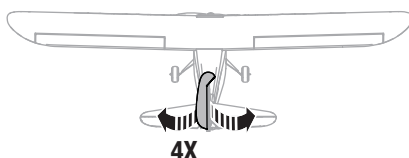
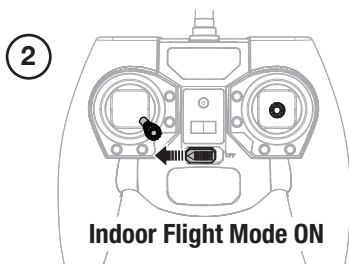
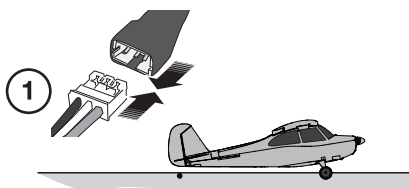
When Indoor Mode is turned ON the GPS features are OFF, meaning Virtual Fence, Holding Pattern and AutoLand are deactivated. However, the SAFE flight modes (Beginner, Intermediate and Experienced Modes) are fully functional.

Turning ON Indoor Mode

1. Turn on the Transmitter.
2. Connect a fully charged flight battery to the aircraft to begin the aircraft's initialization process, then place the aircraft upright on the ground.
3. Put the transmitter sticks into the position as shown.

The aircraft will indicate that it is in Indoor mode by waving the rudder back and forth 4 times. It will wave its rudder every time a new battery is connected while in Indoor Mode.

Once the aircraft is in indoor mode, it will remain in indoor mode until the mode is turned OFF.

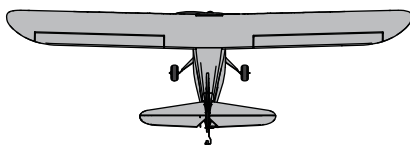
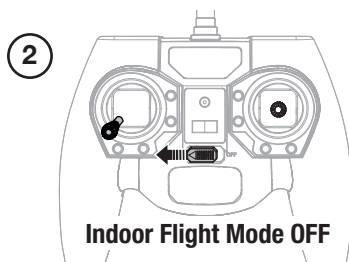
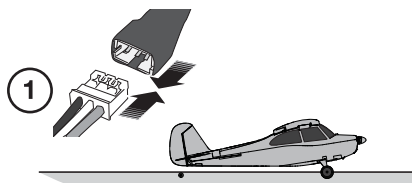


Turning OFF Indoor Mode

1. Turn on the Transmitter.
2. Connect a fully charged flight battery to the aircraft to begin the aircraft's initialization process, then place the aircraft upright on the ground.
3. Put the transmitter sticks into the position as shown.

The aircraft will indicate that it is no longer in Indoor mode by not waving the rudder.

Once Indoor mode is turned OFF it will remain in OFF until the mode is turned ON.

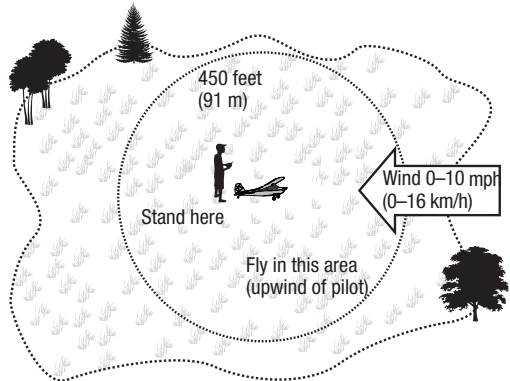
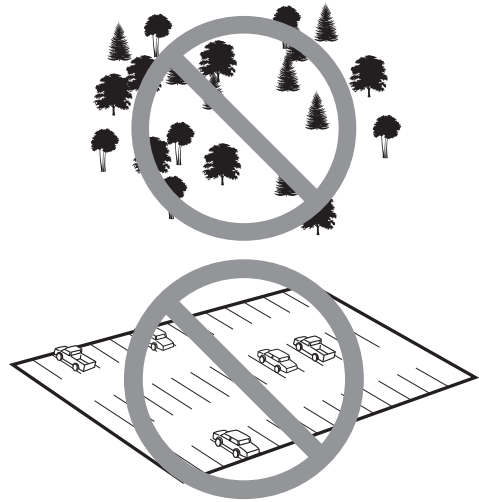


Flying Tips

- Consult local laws and ordinances before choosing a location to fly your aircraft.
- Always make deliberate and steady control stick movements for smooth control of your aircraft.
- Keep your aircraft in plain sight and up wind.
- Always avoid flying near houses, trees, wires and buildings.
- Always avoid flying in areas where there are many people, such as busy parks, schoolyards or soccer fields.

Champ S + Flying Tips

- Sensor Assisted Flight Envelope (SAFE® Plus) technology is designed as flight assistance, not an autopilot. The pilot is always in control and required to fly the aircraft at all times.
- Start in Beginner mode (Flight Mode switch position 0). As you learn and become more confident, change modes to advance your flying skills.
- Fly your aircraft outside in no greater than light winds up to 10 mph (16 km/h).
- Always takeoff or launch your aircraft directly into the wind if possible.
- For indoor flight, put the aircraft into Indoor Mode and fly the aircraft inside in a large gymnasium.



Preflight Checklist

| ✓ | |
|---|---|
| | 1. Find a safe and open area. |
| | 2. Charge flight battery. |
| | 3. Set up your transmitter to support SAFE® Plus technology (BNF only). |
| | 4. Install flight battery in aircraft. |
| | 5. Perform Control Direction Test. |

| ✓ | |
|---|---|
| | 6. Perform SAFE Control Direction Test. |
| | 7. Plan flight for flying field conditions. |
| | 8. Set a flight timer for 10 minutes. |
| | 9. Have fun! |

Battery Installation

1. Open the battery hatch and place the battery so that it is centered in the battery compartment.

2. Power on your transmitter, then wait 5 seconds.

3. Connect the battery to the aircraft, noting proper polarity.

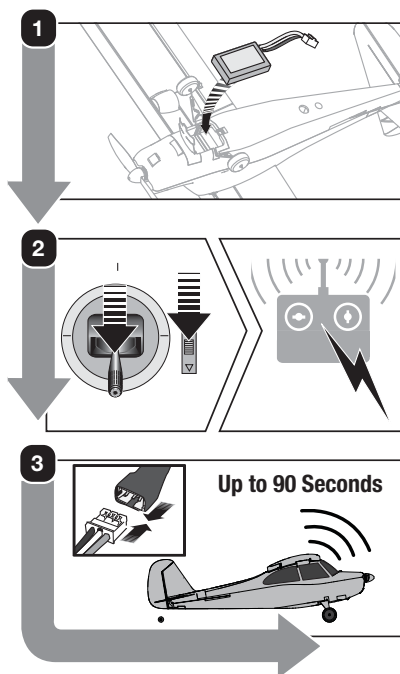
Both ailerons will go up, indicating that the aircraft is powered up. The aircraft will not connect to the transmitter or start to seek for GPS lock until it is upright on the ground and motionless.

When the aircraft is placed on the ground and is motionless (in the desired takeoff location) it will connect to the transmitter. The ailerons will return to center to indicate transmitter connection.

IMPORTANT: This sets the location for AutoLand.

Allow up to 90 seconds for the aircraft to establish GPS lock. GPS lock will be indicated by several tones and the transmitter will be given control.

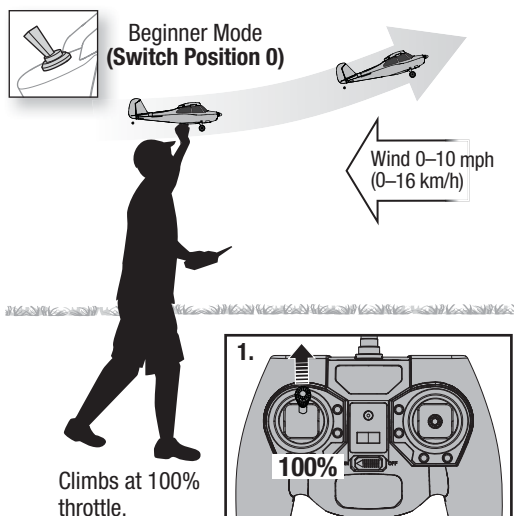
IMPORTANT: Try to keep the aircraft as still as possible when establishing GPS Lock.



Takeoff

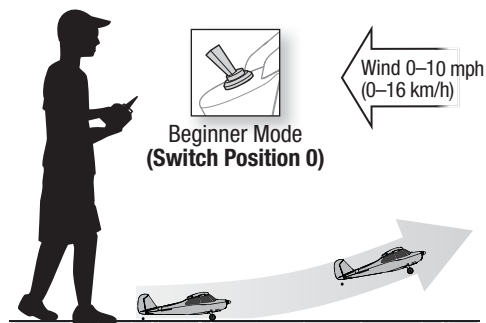
Hand Launch

1. For your first flights, place the aircraft in Beginner mode.
2. Place the aircraft on its landing gear in the center of your flying area facing into the wind and secure the aircraft from taking off. Advance the throttle to 100% then back down to 0% to set the landing direction (heading) for the AutoLand feature.
3. Pick up the aircraft and advance the throttle to 100% and with the nose level or slightly up, launch it into the wind with a light toss. Slowly pull back on the elevator to gain altitude.

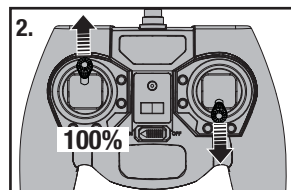


1. For your first flights, place the aircraft in Beginner mode.
2. Place the aircraft on its landing gear in the center of your flying area facing into the wind and secure the aircraft from taking off. Advance the throttle to 100% then back down to 0% to set the landing direction (heading) for the AutoLand feature.
3. Throttle up to 100% and slowly pull back on the elevator to takeoff.

IMPORTANT: The aircraft will only takeoff from smooth surfaces. If flying over rough surfaces or grass that is too long you should hand launch the aircraft.



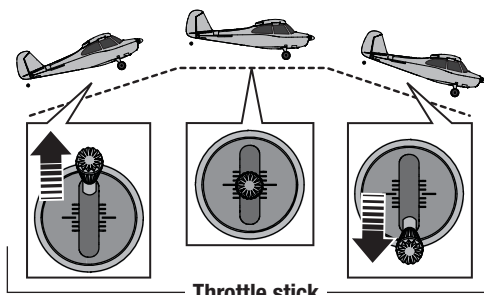
Gently pull back on the elevator stick to lift off of the ground.



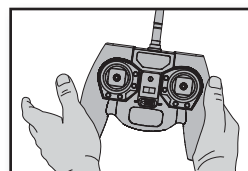
Flying

In Beginner mode, your aircraft will climb at full throttle without use of the elevator stick.

- Set a flight timer for 10 minutes.
- If the motor pulses (LVC), land the aircraft immediately and recharge the flight battery.
- Flying with the nose pointed toward you is one of the hardest things to do when learning to fly. To practice piloting the aircraft, try flying in large circles high off the ground.
- If you lose control, simply release the sticks. The aircraft will level itself when in Beginner Mode.



Throttle stick

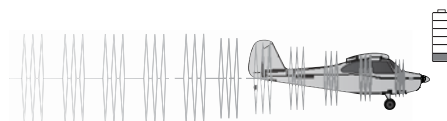


Low Voltage Cutoff (LVC)

LVC is a built in feature to protect the battery from over-discharge. When the battery charge is too low, LVC limits power supplied to the motor. The aircraft will begin to slow and you will hear the motor pulse.

When the motor power decreases, land the aircraft immediately and recharge the flight battery.

Disconnect and remove the Li-Po battery from the aircraft after use to prevent trickle discharge. Charge your Li-Po battery to about half capacity before storage. During storage, make sure the battery charge does not fall below 3V per cell.



NOTICE: Repeated flying to LVC will damage the battery. It is important to set a flight timer to end your flight before you hit LVC.

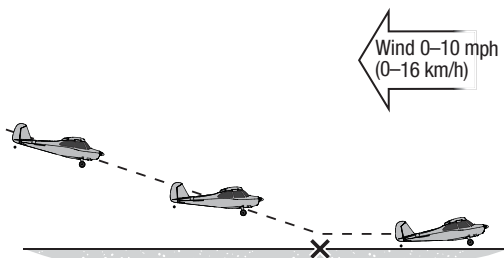
NOTICE: AL and HP Features will not work properly if LVC is activated.

Landing

Press and Hold the **AL button** for approximately 4 seconds to automatically land the aircraft.

To manually land, approach the runway with the aircraft pointed into the wind and the wings level. Slowly lower the throttle to 25%. Near the ground, fully lower the throttle and pull back on the elevator stick to flare.

CAUTION: Never catch a flying aircraft in your hands. Doing so could cause personal injury and damage to the aircraft.



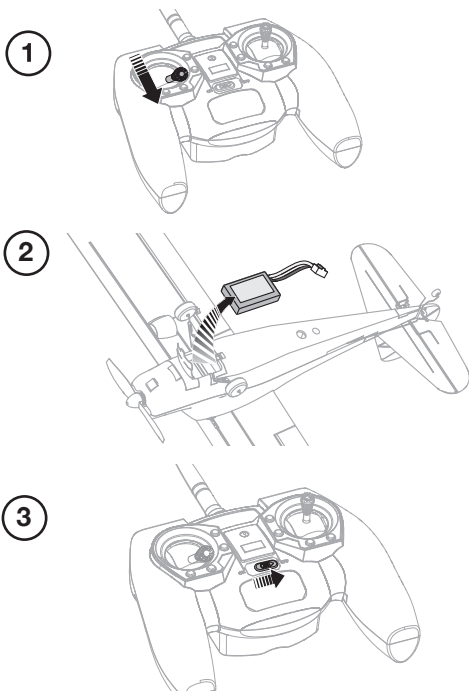
After Flying

1. Lower the throttle stick completely.
2. Immediately disconnect and remove the battery from the aircraft. Keep hands away from the propeller.
3. Power off the transmitter.

NOTICE: When you are finished flying, never leave the aircraft in direct sunlight or in a hot, enclosed area such as a car. Doing so can damage the aircraft.

NOTICE: Always disconnect the battery from the aircraft before powering off the transmitter or injury and damage may result.

CAUTION: Always disconnect the Li-Po flight battery from the aircraft receiver when not flying to avoid over-discharging the battery. Batteries discharged to a voltage lower than the lowest approved voltage may become damaged, resulting in loss of performance and potential fire when batteries are charged.



Repairs

Repair this aircraft using foam safe CA (cyanoacrylate adhesive) glue DYNK0046 or clear tape. Only use foam safe CA glue as other types of glue can damage the foam. When parts are not repairable, see the Replacement Parts List for ordering by item number.

For a listing of all replacement and optional parts, refer to the list at the back of this manual.

NOTICE: Use of foam-safe CA accelerant on your aircraft can damage paint. DO NOT handle the aircraft until the accelerant fully dries.

Appendix

Compass Calibration

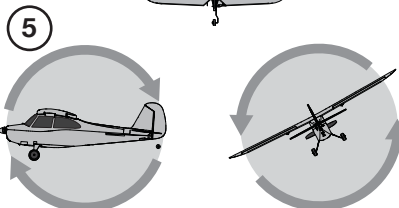
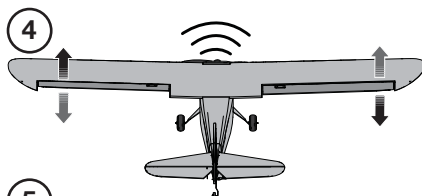
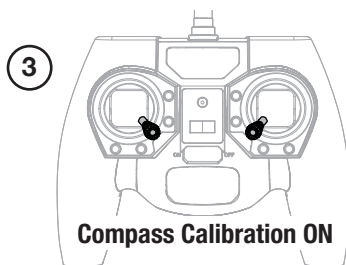
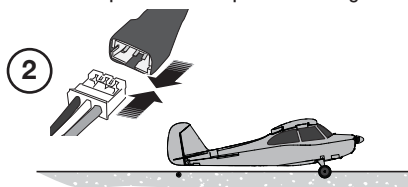
Calibration may be required if the accuracy of the AutoLand feature is poor or a compass error is given.

1. Power ON your transmitter.
2. Connect a fully charged battery to the aircraft and set the aircraft on the ground on its wheels.
3. Hold the transmitter sticks as shown.
4. Within 90 seconds, the ailerons will move up and down continuously, indicating that the aircraft is ready for compass calibration. You can now release the transmitter sticks (Keep the transmitter ON).

IMPORTANT: DO NOT Power OFF the transmitter when in Compass Calibration Mode.

When the aircraft is in calibration mode the throttle is not active.

5. In calibration mode, pick up the aircraft and rotate it two full rotations nose over tail and then turn the aircraft 90° and do two full rotations wing tip over wing tip as shown.
6. Set the aircraft back on the ground on its wheels and turn off the transmitter.
7. Wait until the ailerons stop moving, then disconnect the flight battery.



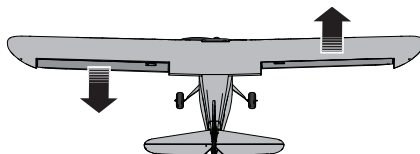
2 Full Rotations

2 Full Rotations



Compass Error

If at any time you experience no throttle response after power up and the ailerons are deflected full right, the aircraft is indicating a compass error. Disconnect the flight battery and perform the compass calibration procedure.

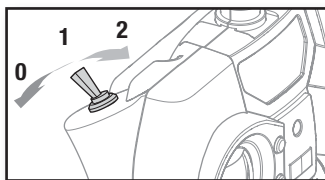


Appendix

Control Direction Test

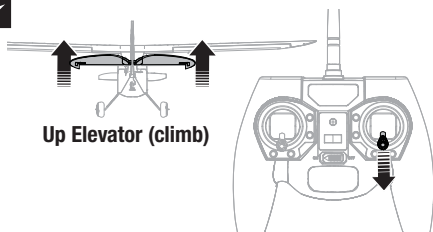
1. Place the aircraft into **Experienced Mode** (switch position 2).
2. Face the aircraft away from you.
3. Restrain the aircraft so it does not escape your control while you are testing your transmitter controls.
4. Move the sticks on the transmitter to ensure the aircraft responds as shown.
5. If the aircraft responds as shown, move the SAFE® mode switch to **Beginner Mode** (Position 0) to prepare to fly.

If the aircraft does not respond as shown, refer to the Binding instructions and Troubleshooting Guide in this manual for more information. If you need more assistance, contact the appropriate Horizon Hobby Product Support department.

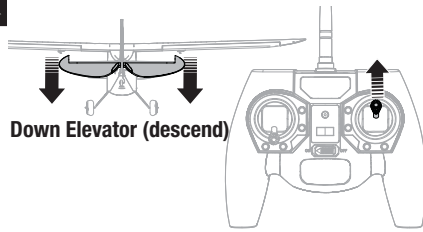


Experienced Mode
(Switch Position 2)

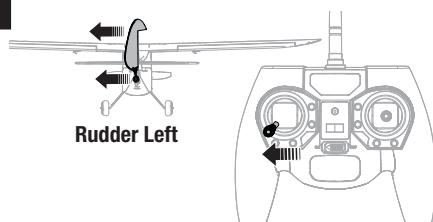
Mode 2 shown



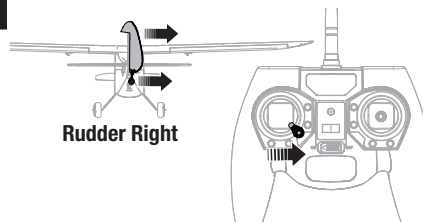
Up Elevator (climb)



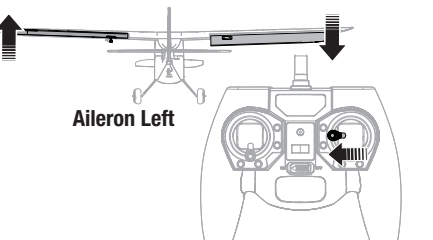
Down Elevator (descend)



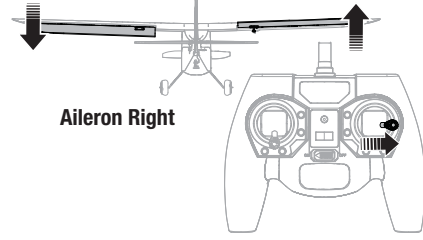
Rudder Left



Rudder Right



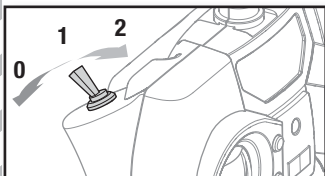
Aileron Left



Aileron Right

Appendix

SAFE® Plus Control Direction Test



Put the aircraft into **Beginner Mode** (switch position 0) and Perform the Control Direction Test to ensure the SAFE® Plus system responds correctly to your aircraft's movements.

Once you are sure the aircraft responds correctly, move the aircraft as shown to ensure the SAFE® Plus system moves the control surfaces in their proper direction.

The rudder moves only while the aircraft is moving. This may prove difficult to see and is not an indication that the system is malfunctioning.

If the control surfaces do not respond as shown, do not fly the aircraft. Contact Horizon Hobby Product Support.

| | Aircraft movement | SAFE Reaction |
|----------|-------------------|---------------|
| Elevator | | |
| | | |
| Aileron | | |
| | | |
| Rudder | | |
| | | |

Appendix

Advanced User Information

Adjusting Trim in Flight

When you are comfortable flying in Experienced Mode, try adjusting the trim in flight. Press the trim buttons on your transmitter to adjust how the aircraft flies.

If the aircraft's nose drifts while the sticks are at neutral (centered) and the throttle is at 50%, press the trim buttons:

- Elevator trim: upper button to stop up drift
- Elevator trim: lower button to stop down drift
- Rudder trim: left button to stop right drift
- Rudder trim: right button to stop left drift
- Aileron trim: left button to stop right roll
- Aileron trim: right button to stop left roll

If you press a trim button until no beep sounds and the aircraft does not fly straight and level, land and manually adjust the trim as described below.

| Direction of Drift | Button to Correct |
|--------------------|-------------------|
| | |
| | |
| | |
| | |
| | |
| | |

Manually Adjusting Trim

Press the trim buttons to return to center (3 beeps will sound), then use a pair of pliers to carefully bend the metal U-Bend:

Only adjust control surfaces to neutral when in Experienced mode.



Narrow for negative adjustment
(Down elevator/aileron or rudder right)



Widen for positive adjustment
(Up elevator/aileron or rudder left)

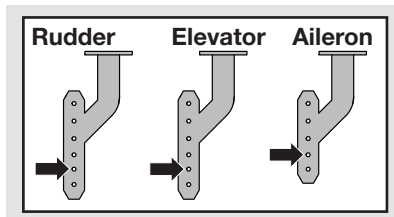
Appendix

Advanced User Information *Continued*

Settings for Control Horns

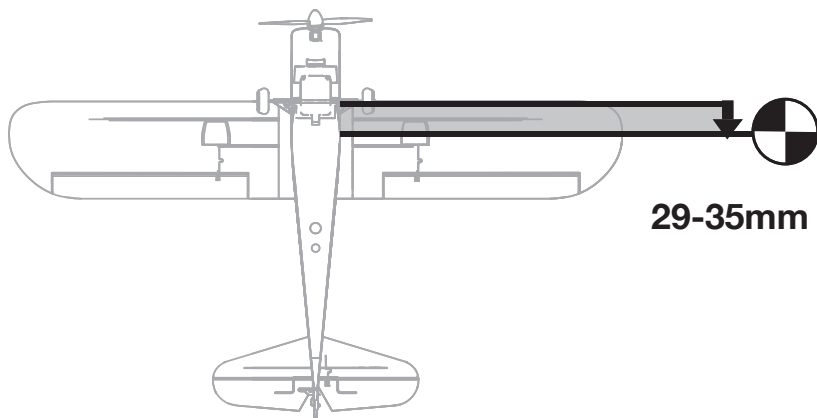
The illustration shows factory settings for linkages on the control horns.

After flying, if you want to modify control throw, carefully adjust the linkage positions for desired control response.



Center of Gravity (CG)

Measure back **29-35mm** from the leading edge of the wing, where the wing meets the fuselage, and place a mark. With the battery installed, balance the aircraft within this CG range.



Motor Service

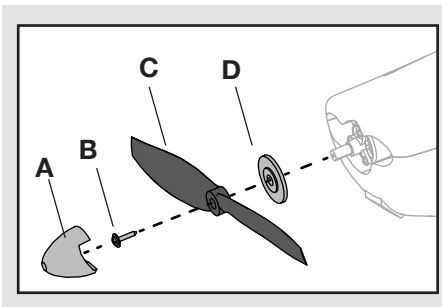
Disassembly

CAUTION: DO NOT handle the propeller while the flight battery is connected to the ESC. Personal injury could result.

Propeller Removal

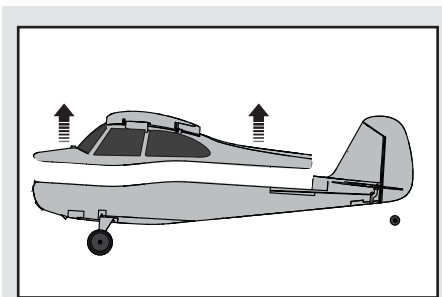
1. Disconnect the battery.
2. Remove the Spinner (A), Prop screw (B), Propeller (C) and Spinner backplate (D) from the propshaft.

Since the propeller and spinner are glued together, glue residue may need to be cleaned from the spinner or propeller when these parts are used again.



Motor Removal

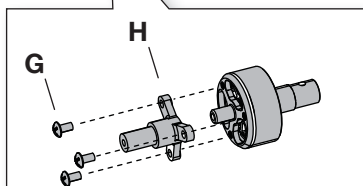
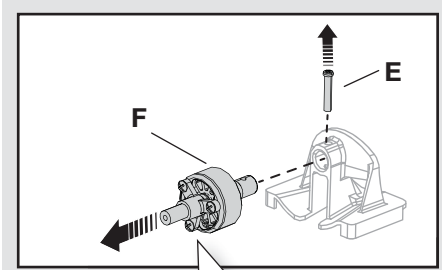
1. Carefully cut the tape and/or decals on the side of the fuselage to remove the top of the fuselage.
2. Disconnect the motor wire connector from the ESC/receiver connector.
3. Remove the screw (E) and motor (F) from the motor mount.
4. Remove 3 screws (G) and the prop adapter (H) from the motor. The motor magnet may attract screws to the motor.



Assembly

Assemble in reverse order.

- Connect the motor wire connector to the ESC/receiver.
- The propeller size numbers (5 x 2.75) must face out from the motor for correct propeller operation.
- Attach the spinner to the propeller using foam safe CA (cyanoacrylate adhesive) Dynamite® foam safe CA, thick DYNK0046.
- Ensure the propeller adapter and motor mount are fully connected to the motor.
- Re-assemble the fuselage using clear tape.



Appendix

Optional First Person View (FPV) Installation

Visit the Champ S+ page at www.hobbyzonerc.com for information about the optional FPV system (sold separately).

FPV compatible systems for this aircraft.

- SPMVS2500 - Camera and Teleporter V4 headset bundle

or

- SPMVA2500 - 25mW FPV Micro camera

- SPMVR1100 - Teleporter V4

or

- SPMVM430 - Spektrum Monitor

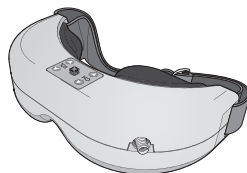
Consult local laws and ordinances before operating FPV (first person view) equipment. In some areas, FPV operation may be limited or prohibited.

IMPORTANT: You are responsible for operating this product in a legal and responsible manner.

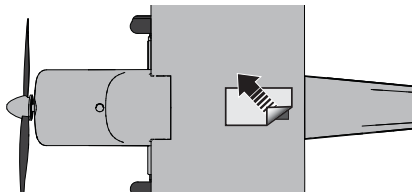
FPV Camera Installation

Refer to the Spektrum™ FPV System instructions for set up and operation.

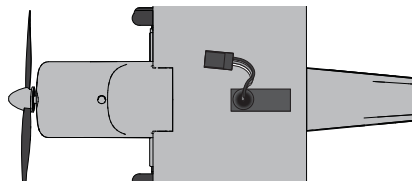
1. Remove the decal on the top of the fuselage to expose the FPV power connector.
2. Carefully pull the FPV power connector out of the hole.
3. Align the red and black wire colors and connect the FPV power connector to the camera unit.
4. Ensure the camera points directly forward. Secure the camera unit on the wing using double-stick tape.
5. Put excess wire in the hole. If desired, cover the hole with clear tape.
6. Connect a flight battery to the aircraft, remove lens cap and test the FPV system.



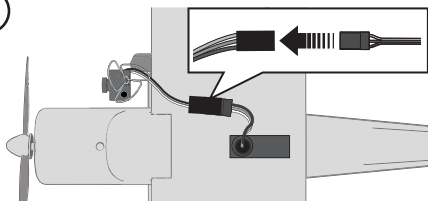
1



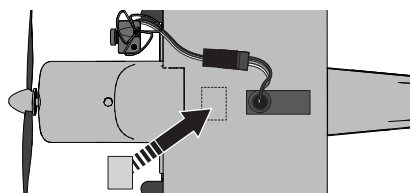
2



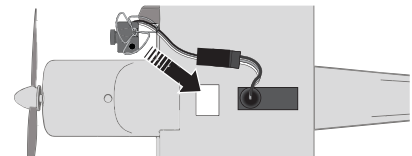
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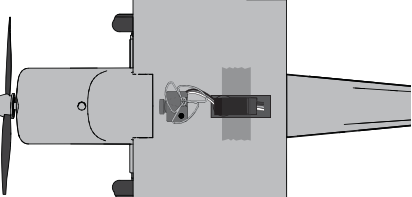
4



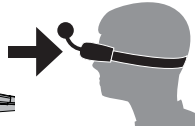
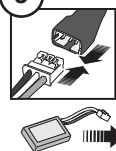
5



6



6



Troubleshooting Guide (SAFE® Plus)

| Problem | Possible Cause | Solution |
|---|--|--|
| Controls oscillate in flight, (Aircraft rapidly jumps or moves) | Propeller is unbalanced, causing excessive vibration | Remove propeller and rebalance or replace it if damaged |
| | The prop screw is too loose, causing vibration | Tighten the prop screw |
| Aircraft does not connect to transmitter after battery is connected | Aircraft is not upright and immobile after battery is connected | Keep the Aircraft upright and immobile for up to 90 seconds after connecting the battery Ailerons neutralize when aircraft is connected to transmitter but controls will not function until it established GPS lock |
| | Aircraft bound to different model memory (ModelMatch™ radios only) | Select correct model memory on transmitter and disconnect and reconnect flight battery to aircraft |
| | Flight battery/transmitter battery charge is too low | Replace/recharge batteries |
| | Transmitter may not be compatible with Spektrum DSMX/DSM2 technology | Use a genuine Spektrum DSMX/DSM2 transmitter |
| | Aircraft or transmitter is too close to large metal object, wireless source or another transmitter | Move aircraft and transmitter to another location and attempt linking again |

Troubleshooting Guide

| Problem | Possible Cause | Solution |
|--|--|--|
| Aircraft will not respond to throttle but responds to other controls | Throttle stick and/or throttle trim too high | Reset controls with throttle stick and throttle trim at lowest setting |
| | Throttle channel is reversed | Reverse throttle channel on transmitter |
| | Motor disconnected from receiver | Open fuselage and make sure motor is connected to the receiver |
| | AutoLand was not deactivated after landing | Deactivate AutoLand by pressing the AL/HP button or changing flight modes and lower throttle |
| Extra propeller noise or extra vibration | Propeller, spinner or motor is unbalanced, causing excessive vibration | Balance parts or replace it if damaged |
| | Prop screw is too loose | Tighten the prop screw |
| Reduced flight time or aircraft underpowered | Flight battery charge is low | Completely recharge flight battery |
| | Propeller installed backwards | Install propeller with numbers facing forward |
| | Flight battery damaged or old. | Replace flight battery and follow flight battery instructions |
| | Flight conditions may be too cold | Make sure battery is warm before use |
| | Battery capacity too low for flight conditions | Replace battery or use a larger capacity battery |

| Problem | Possible Cause | Solution |
|---|---|--|
| Ailerons go up aircraft will not bind to transmitter (during binding) | Transmitter too near aircraft during binding process | Power off transmitter, move transmitter a larger distance from aircraft, disconnect and reconnect flight battery to aircraft and follow binding instructions |
| | Bind switch or button not held long enough during bind process | Power off transmitter and repeat bind process |
| | Aircraft or transmitter is too close to large metal object, wireless source or another transmitter | Move aircraft and transmitter to another location and attempt binding again |
| | Aircraft was not placed upright on its wheels | Place aircraft upright on its wheels after powering up |
| Ailerons go up and aircraft will not respond to transmitter (after binding) | Less than a 90-second wait between first powering on transmitter and connecting flight battery to aircraft | Leaving transmitter on, disconnect and reconnect flight battery to aircraft |
| | Aircraft was not upright, level or motionless | Leaving transmitter on, disconnect and reconnect flight battery to aircraft assuring that the aircraft is upright, level and motionless |
| Control surface does not move | Control surface, control horn, linkage or servo damage | Replace or repair damaged parts and adjust controls |
| | Wires damaged or connections loose | Do a check of wires and connections, connect or replace as needed |
| | Flight battery charge is low | Fully recharge flight battery |
| | Control linkage does not move freely | Make sure control linkage moves freely |
| Controls reversed | Transmitter settings reversed | Adjust controls on transmitter appropriately |
| Motor loses power | Damage to motor or power components | Do a check of motor and power components for damage (replace as needed) |
| Motor power quickly decreases and increases then motor loses power | Battery power is down to the point of receiver/ESC Low Voltage Cutoff (LVC) | Recharge flight battery or replace battery that is no longer performing |
| Motor does not respond after landing | Over Current Protection (OCP) stops the motor when the transmitter throttle is set high and the propeller cannot turn | Fully lower throttle and throttle trim to arm ESC |
| | AutoLand has not been deactivated | Press and release HP/AL button to deactivate AutoLand feature |
| Servo locks or freezes at full travel | Travel adjust value is set above 100%, over driving the servo | Set Travel adjust to 100% or less and/or set sub-trims to Zero and adjust linkages mechanically |

Limited Warranty

What this Warranty Covers

Horizon Hobby, LLC, (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations, or (vii) use that violates any applicable laws, rules, or regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective.

Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As

Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

Law

These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

WARRANTY SERVICES

Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.

Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at http://www.horizonhobby.com/content/service-center_render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into

Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

NOTICE: Do not ship LiPo batteries to Horizon. If you have any issue with a LiPo battery, please contact the appropriate Horizon Product Support office.

Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Service

Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the

expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/service-center_render-service-center.

ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.

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Warranty and Service Information

| Country of Purchase | Horizon Hobby | Phone Number/Email Address | Address |
|--------------------------|---|--|---|
| United States of America | Horizon Service Center (Repairs and Repair Requests) | servicecenter.horizonhobby.com/RequestForm/ | 4105 Fieldstone Rd Champaign, Illinois, 61822 USA |
| | Horizon Product Support (Product Technical Assistance) | productsupport@horizon-hobby.com 877-504-0233 | |
| | Sales | websales@horizonhobby.com 800-338-4639 | |
| United Kingdom | Service/Parts/Sales: Horizon Hobby Limited | sales@horizonhobby.co.uk +44 (0) 1279 641 097 | Units 1-4 , Ployters Rd, Staple Tye Harlow, Essex, CM18 7NS, United Kingdom |
| Germany | Horizon Technischer Service | service@horizonhobby.de | Christian-Junge-Straße 1 25337 Elmshorn, Germany |
| | Sales: Horizon Hobby GmbH | +49 (0) 4121 2655 100 | |
| France | Service/Parts/Sales: Horizon Hobby SAS | infofrance@horizonhobby.com +33 (0) 1 60 18 34 90 | 11 Rue Georges Charpak 77127 Lieusaint, France |



IC Information

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-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."

FCC Information

This equipment has been tested and found to comply with the limits for 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 to an outlet on a circuit different from that to which the receiver is connected.

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.

Compliance Information for the European Union



HBZ UMX Champ S+ RTF (HBZ5400)

EU Compliance Statement: Horizon Hobby, LLC hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the RED, EMC, and LVD Directives.

HBZ UMX Champ S+ BNF Basic (HBZ5480)

EU Compliance Statement: Horizon Hobby, LLC hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the RED, EMC, and LVD Directives.

A copy of the EU Declaration of Conformity is available online at: <http://www.horizonhobby.com/content/support-render-compliance>.

Instructions for disposal of WEEE by users in the European Union



This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

Replacement Parts – Ersatzteile – – Pièces de rechange – Pezzi di ricambio –

| Part # • Nummer Numéro • Codice | Description | Beschreibung | Description | Descrizione |
|------------------------------------|---|---|--|---|
| EFLB2802S30 | 280mAh 2S 7.4V 30C Li-Po battery | 280mAh 2S 7.4V 30C Li-Po | Batterie Li-Po 7.4V 2S 280mA 30C | Batteria Li-Po 280mAh 2S 7.4V 30C |
| EFLUC1007 | Celectra 2S 7.4V DC Li-Po Charger | Celectra 2S 7.4V DC Li-Po Ladegerät | Celectra Chargeur Li-Po 7.4V 2S | Celectra 2S 7.4V DC Li-Po Caricabatterie |
| EFLC4000 | AC to 12VDC, 1.5- Amp Power Supply | E-flite 1,5A Netzteil AC zu 12V DC | Alimentation secteur AC vers 12V DC 1,5A | AC > 12VDC, 1.5-Amp Alimentatore |
| HBZ5457 | RX/ESC unit: Champ S+ | Hobbyzone Empfänger- und Reglereinheit: Champ S+ | Champ S+ - Module RX/Contrôleur | RX/ESC unità: Champ S+ |
| HBZ5458 | GPS Unit: Champ S+ | Hobbyzone GPS-Unit: Champ S+ | Champ S+ - Module GPS | Unità GPS: Champ S+ |
| HBZ5406 | Landing Gear Set: Champ S+ | Hobbyzone Landegestellset: Champ S+ | Champ S+ - Train d'atterrissage | Set carrello: Champ S+ |
| HBZ5420 | Wing: Champ S+ | Hobbyzone Tragfläche: Champ S+ | Champ S+ - Aile | Ala: Champ S+ |
| HBZ5425 | Complete Tail: Champ S+ | Hobbyzone Heck, komplett: Champ S+ | Champ S+ - Empennage complet | Coda completa: Champ S+ |
| HBZ5467 | Bare Fuselage: Champ S+ | Hobbyzone Rumpf, unlackiert: Champ S+ | Champ S+ - Fuselage nu | Solo fusoliera: Champ S+ |
| HBZ5405 | Decal Set: Champ S+ | Hobbyzone Dekorbogen: Champ S+ | Champ S+ - Planche de décoration | Set adesivi: Champ S+ |
| HBZ5407 | Pushrods and Access: Champ S+ | Hobbyzone Gestänge u. Zugriff: Champ S+ | Champ S+ - Tringleries et accessoires | Rinvii: Champ S+ |
| EFLUM180BL2 | BL180 Brushless Outrunner Motor, 2500Kv | BL180 Brushless Außenläufer Motor, 2500Kv | Moteur Brushless à cage tournante BL180 2500Kv | BL180 motore brushless outrunner 2500Kv |
| HBZ5466 | Battery Hatch: Champ S+ | Hobbyzone Akkuabdeckung: Champ S+ | Champ S+ - Trappe batterie | Portello batteria: Champ S+ |
| HBZ5402 | Spinner: Champ S+ | Hobbyzone Spinner: Champ S+ | Champ S+ - Cône | Ogiva: Champ S+ |
| EFLUP050275 | 5 x 2.75 Electric Propeller | E-flite 5x2,75 Luftschraube | Hélice électrique 5 x 2,75 | Elica per elettrico 5 x 2.75 |
| EFLU4067 | Prop Adapter: | Luftschrauben- mitnehmer | Adaptateur hélice | Adattatore elica: |
| SPMSA2030LO | 2.3-Gram Linear Long Throw Offset Servo | Spektrum 2,3-Gram Linear Servo Offset Servo m. langem Ruderweg | Servos linéaires 2.3g course longue | Servo lineare a corsa lunga 2.3g |
| EFLRMLP6 | MLP6DSM Transmitter Mode 2 | E-flite MLP6DSM 6CH Sender 2.4GHz: 180 QX HD | Emetteur MLP6DSM Mode 2 | MLP6DSM Trasmettitore Mode 2 |
| EFLRMLP61 | MLP6DSM Transmitter Mode 1 | E-flite MLP6DSM 6CH Sender 2.4GHz: 180 QX HD M1 | Emetteur MLP6DSM Mode 1 | MLP6DSM Trasmettitore Mode 1 |

Optional Parts – Optionale Bauteile – – Pièces optionnelles – Pezzi opzionali –

| Part # • Nummer Numéro • Codice | Description | Beschreibung | Description | Descrizione |
|------------------------------------|--|---|---|--|
| SPMVA2500 | Spektrum FPV System - Ultra Micro | Spektrum Ultra Micro FPV System mit V-Brille | Système FPV Spektrum Ultra Micro | Sistema Spektrum FPV - Ultra Micro |
| SPMVS2500 | Camera and Teleporter V4 headset bundle | Spektrum Teleporter V4 m. Micro-Kamera 25mW | Pack caméra avec lunettes Teleporter V4 | Sistema videocamera e visore V4 |
| SPMVA2500 | 25mW FPV Micro Camera | Spektrum 5,8Ghz 25mw Micro-Videokamera u. Vtx 5-13V | Micro caméra FPV 25mW | 25mW FPV Micro Camera |
| SPMVR1100 | Teleporter V4 Headset | Spektrum V4-Videobrille mit Head Tracking | Lunettes Teleporter V4 | Visore Teleporter V4 |
| SPMVM430 | Spektrum Monitor | Spektrum Monitor | Moniteur Spektrum | Spektrum Monitor |
| EFLUC1008 | DC Power Cord: | E-flite DC-Anschlußkabel | Cordon d'alimentation DC | Cavo alimentazione DC |
| EFLA700UM | Charge Plug Adapter: | E-flite EFL Ladekabeladapter | Adaptateur de charge | Adattatore spina di carica |
| RTM55R1000 | Phoenix R/C Pro Simulator V5.5 w/ DXe Mode 2 | Phoenix R/C Pro Simulator V5.5 m. DXe | Simulateur Phoenix V5.5 avec DXe mode 2 | Phoenix R/C Pro simulatore V5.5 w/DXe Mode 2 |
| RTM5500 | Phoenix R/C Pro Simulator V5.0 | Phoenix R/C Pro Simulator V5.0 | Simulateur Phoenix V5 | Phoenix R/C Pro simulatore V5.0 |
| | DX5e DSMX 5-Channel Transmitter | DX5e DSMX 5-Kanal Sender | Emetteur DX5e DSMX 5 voies | DX5e DSMX Trasmettitore 5 canali |
| | DX6 DSMX 6-Channel Transmitter | DX6 DSMX 6-Kanal Sender | Emetteur DX6 DSMX 6 voies | DX6 DSMX Trasmettitore 6 canali |
| | DX7s DSMX 7-Channel Transmitter | Spektrum DX7s 7 Kanal Sender | Emetteur DX7s DSMX 7 voies | DX7s DSMX Trasmettitore 7 canali |
| | DX8 DSMX Transmitter | Spektrum DX8 nur Sender | Emetteur DX8 DSMX 8 voies | DX8 DSMX Trasmettitore 8 canali |
| | DX9 DSMX Transmitter | Spektrum DX9 nur Sender | Emetteur DX9 DSMX 9 voies | DX9 DSMX Trasmettitore 9 canali |
| | DX10t Transmitter | Spektrum DX10t nur Sender | Emetteur DX10t DSMX 10 voies | DX10t DSMX Trasmettitore 10 canali |
| | DX18 Transmitter | Spektrum DX18 nur Sender | Emetteur DX18 DSMX 18 voies | DX18 DSMX Trasmettitore 18 canali |



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