

# Instruction Manual

### **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 or www.towerhobbies. com and click on the support or resources 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:

**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.

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

**NOTICE:** Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of 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 attempt disassembly, use with incompatible components or augment product in any way without the approval of 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. This is not a toy.

### **SAFETY PRECAUTIONS**

- Always ensure all batteries have been properly charged prior to using the model.
- Always check all servos and their connections prior to each run.
- Never operate your model near spectators, parking areas or any other area that could result in injury to people or damage of property.
- Never operate your model during adverse weather conditions. Poor visibility can cause disorientation and loss of control of your model.
- Never point the transmitter antenna directly toward the model. The radiation pattern from the tip of the antenna is inherently low.
- If, at any time during the operation of your model, you observe any erratic or abnormal operation, immediately stop operation of your model until the cause of the problem has been identified and corrected.

### **CHARGING WARNINGS**

**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.

- NEVER LEAVE CHARGING BATTERIES UNATTENDED.
- NEVER CHARGE BATTERIES OVERNIGHT.
- 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 (5–49° C). 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 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 [5–49° C]) or place in direct sunlight.

# WARNING AGAINST COUNTERFEIT

PRODUCTS: If you ever need to replace your Spektrum receiver found in a Horizon Hobby product, always purchase from Horizon Hobby, LLC or a Horizon Hobby authorized dealer to ensure authentic high-quality Spektrum product. Horizon Hobby, LLC disclaims all support and warranty with regards, but not limited to, compatibility and performance of counterfeit products or products claiming compatibility with DSM or Spektrum technology.

**NOTICE:** This product is only intended for use with unmanned, hobby-grade, remote-controlled vehicles. Horizon Hobby disclaims all liability outside of the intended purpose and will not provide warranty service related thereto.

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# **AVC®** (Active Vehicle Control) Steering Gain Throttle Gain **Priority Binding Drive Modes Launch Control Launch Control** Launch Curve **Launch Control Tips** Light/LED Flashlight **Light Bars Mappings Mixes Sleep Mode** Quick Sleep **Telemetry Telemetry Gauges Timers** PHYSICAL ADJUSTMENTS Throttle Tension

Throttle Tension
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1-Year Limited Warranty
Warranty and Service
Contact Information
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IC Information
Compliance Information
for the European Union

### **BOX CONTENTS**

The iXSR radio system is supplied with the following:

- Spektrum iXSR Transmitter
- Foam Carry case
- USB-C charge/data cable
- 5° steering angle adapter
- Smaller steering wheel
- 32° steering limiter
- Stiffer steering spring
- Softer throttle spring
- Left hand steering covers (2)
- Larger Rubber Grip

### **HOW TO USE THE MANUAL**

The manual for the iXSR is an interactive **.pdf** document, optimally viewed in the .pdf viewer app on the Android.

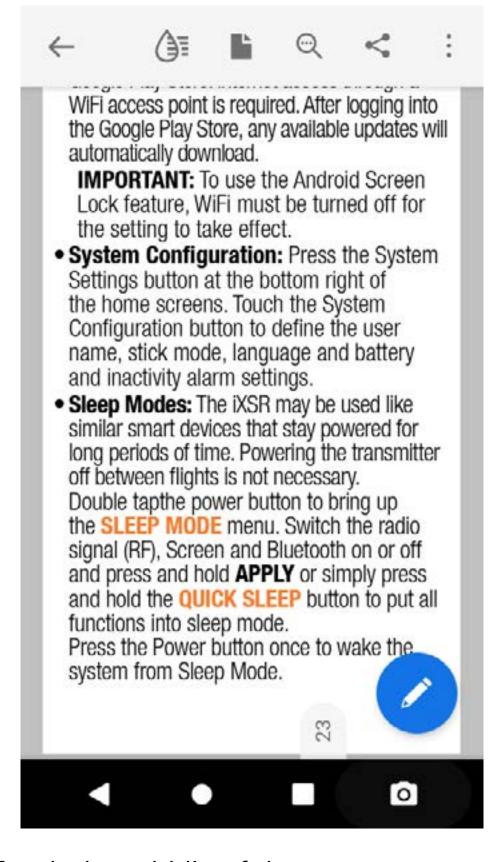
To access the manual from the Spektrum RaceWare app:

- From the Setup screen, scroll to the bottom of the page and touch the App Settings icon.
- 2. At the bottom of the App Settings page, press the Manual button.

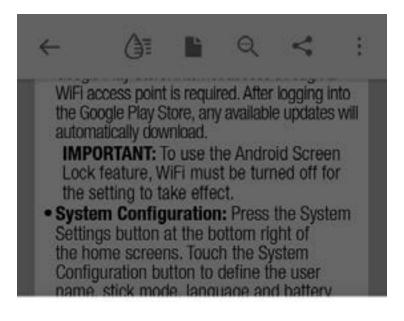
**TIP:** Long-press the Manual button to download the latest version of the manual. A dialogue appears prompting to download the latest Manual. Touch **PROCEED** to download the latest version of the manual.

3. The manual opens in the .pdf viewer.

### **NAVIGATING THE PAGES**



- 1. Touch the middle of the screen once to access the reader app toolbars.
- 2. Touch the page icon (**L**) to set the viewing mode.



# VIEW SETTINGS Continuous Pages Page-by-Page Reading Mode Night Mode Night Mode

- Select Page-by-Page for best viewing results.
- 4. After the viewing mode is set, touch in the center of the screen to enter full-screen mode.
- 5. Touch toward the far right side of the screen or swipe left to go the next page. Touch toward the far left side of the screen or swipe right to go to the previous page.



### RETURN TO SPEKTRUM RACEWARE APP

To return to the Spektrum RaceWare app:

- 1. Swipe from the bottom of the screen to access the Android navigation tools.
- 2. Touch the **Overview** icon.
- 3. Touch the Spektrum RaceWare app in the list of running apps.



### USING THE TABLE OF CONTENTS

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Steering

Throttle and Brake/Reverse

Auxiliary (AUX) Channel Setup

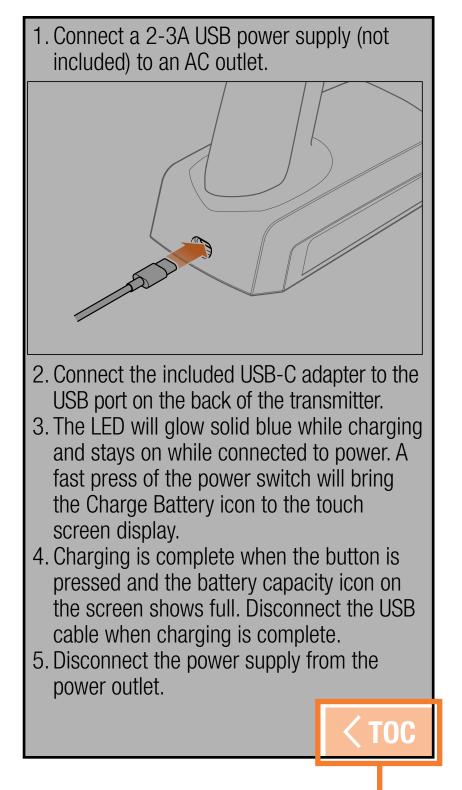
### **SETUP SETTINGS**

### **Alerts**

Idle Up Alert

Timer Alert

The Table of Contents is fully interactive. Touch an entry to go directly to that page.



Return to the Table of Contents

At the end of each manual section, touch the **TOC** button to return to the Table of Contents.



# **CHARGING**

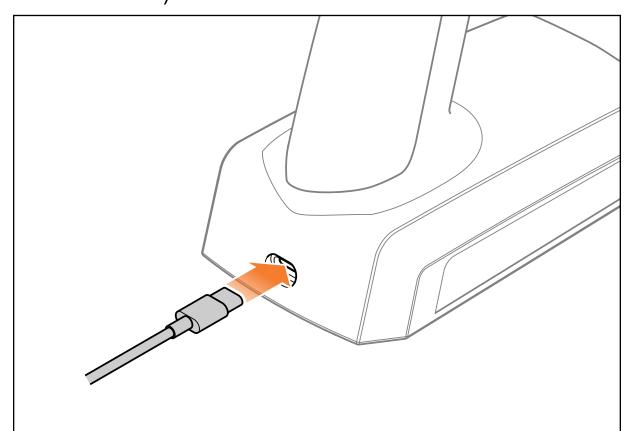
For optimum charging results, the built-in charger requires a USB power supply capable of at least 2-3A output. Using a power supply with a lower output will result in very long charge times or the transmitter not charging if it is powered on while attempting to charge. The first time the transmitter is charged, the charge time may be 6-7 hours. Charge the transmitter when the low battery alarm sounds. See the **Audio Events** section for information on setting the low battery alarm level. Always charge the transmitter on a heat-resistant surface.

**CAUTION:** Never change the low voltage limit for Li-lon batteries below 3.3V. Doing so could over-discharge the battery and damage both battery and transmitter.

**CAUTION:** Never leave a charging battery unattended.

**CAUTION:** Never charge the battery outside of the transmitter. Charging the battery outside of the transmitter may interfere with the battery monitoring system, which can give false low battery warnings.

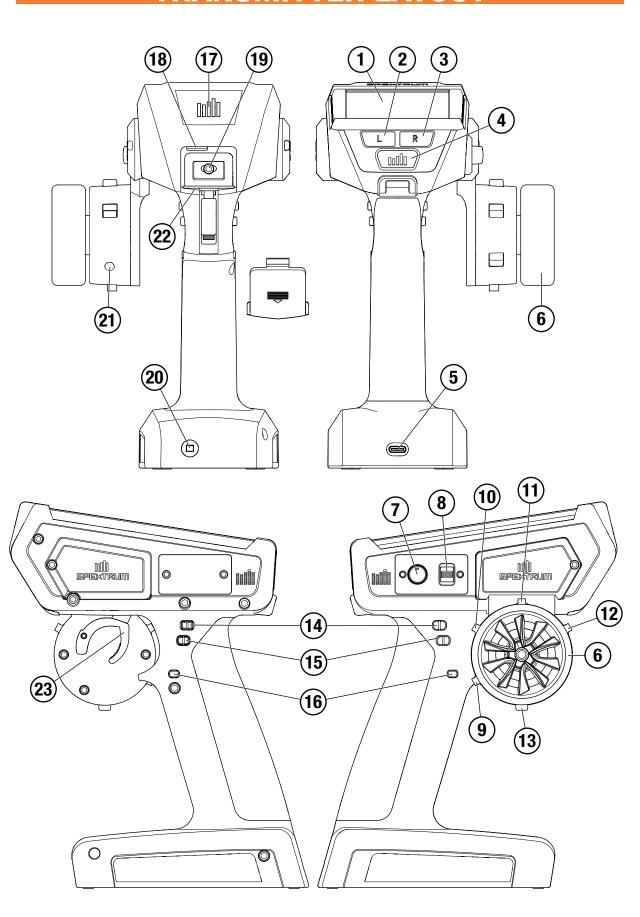
1. Connect a 2-3A USB power supply (not included) to an AC outlet.



- 2. Connect the included USB-C adapter to the USB port on the back of the transmitter.
- 3. The LED will glow solid blue while charging and stays on while connected to power. A fast press of the power switch will bring the Charge Battery icon to the touch screen display.
- 4. Charging is complete when the button is pressed and the battery capacity icon on the screen shows full. Disconnect the USB cable when charging is complete.
- 5. Disconnect the power supply from the power outlet.



### TRANSMITTER LAYOUT



Function	
1	Touch Screen
2	Button L
3	Button R
4	Power Button
5	Charge Port
6	Steering Wheel
7	Rotary Knob
8	Switch I
9	Trim Button A
10	Trim Button B
11	Trim Button C
12	Trim Button D
13	Button E
14	Trim Button F
15	Trim Button G
16	Button H
17	RF LED
18	Micro Memory Card Port
19	Trigger Position Adjustment Screw
20	Flashlight LED
21	Steering Tension Adjustment Screw
22	Trigger Tension Adjustment Screw
23	Trigger (Throttle/Brake)

### ANDROID OPERATING SYSTEM

The iXSR transmitter is built on the Android operating system and features a large color touch screen display. Navigate the iXSR using the same actions and gestures as those used to operate any other Android device.

To navigate, use your finger to tap, swipe and drag icons and menus found on the display.

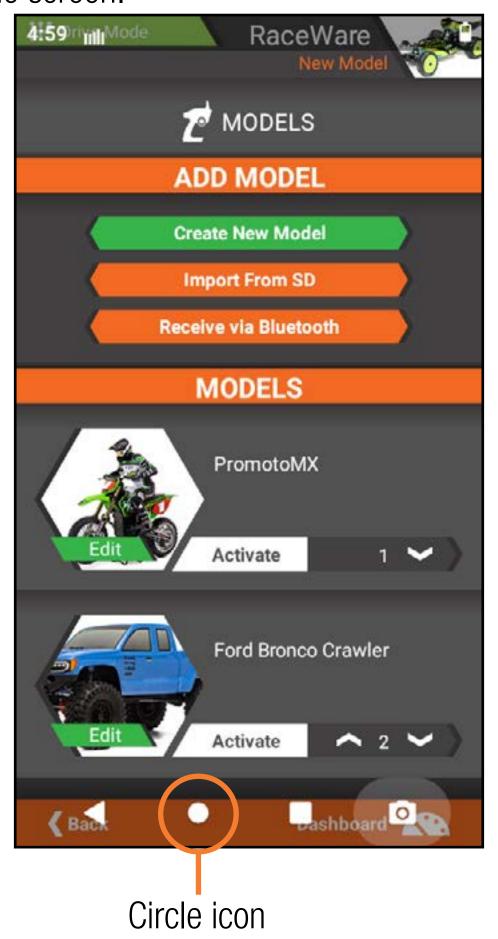


### **ANDROID NAVIGATION ICONS**

The Spektrum Raceware application hides the Android home screen navigation icons. To access the navigation icons, swipe up from the bottom or down from the top edge of the screen as shown.



Press the circle icon to go to the Android home screen.



### ANDROID HOME SCREEN ELEMENTS

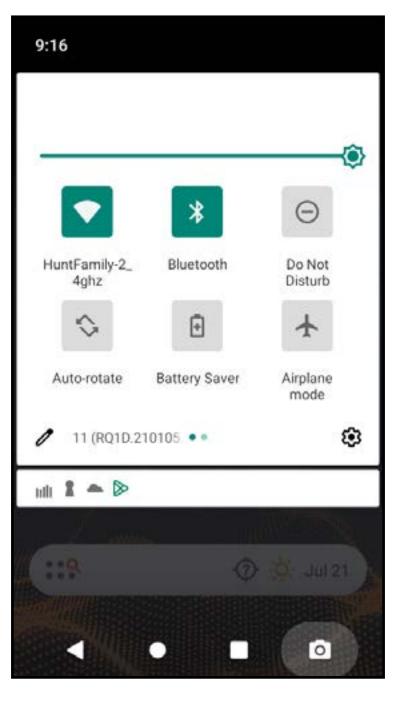
- **Search All Apps:** Enter a search term to find a desired application on the system.
- Back: Return to previous screen.
- **Home:** Return to the home screen.
- Overview: Allows switching between any currently running applications by scrolling left or right through the apps.
   Close an app from the active list by swiping up.



### **NOTIFICATION SCREEN**

- 1. Swipe down from the top of the screen once to exit full screen mode and bring the home screen navigation icons to the front.
- 2. Swipe down a second time to open the Notification Screen for quick access to:
  - Brightness
  - WiFi

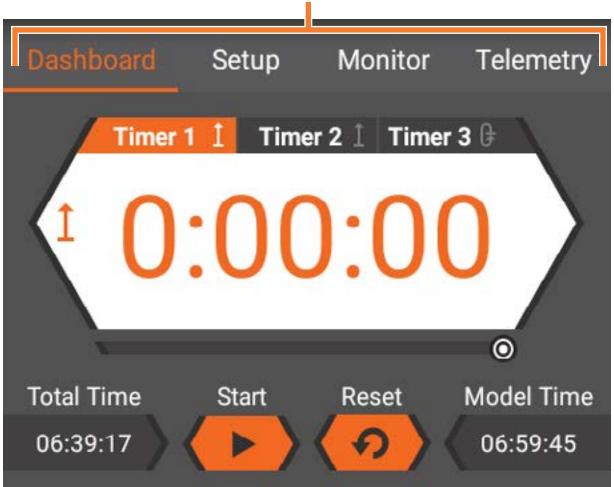
- Bluetooth
- Settings



### **IXSR MAIN SCREENS**

The RaceWare application features 3—4 main menu screens, depending on the receiver selected during model setup. Touch on the navigation tabs located along the top of the screen, or swipe left or right to change screens.

Navigation Tabs



**TIP:** Some screens display more information than can fit in the window. Drag up or down to view all content.



### **Dashboard**

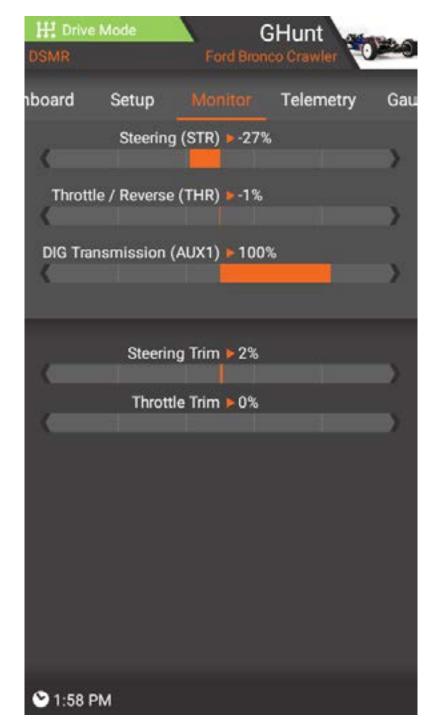
The Dashboard is the home screen for the iXSR. Information shown on the dashboard includes:

- Timers, Start and Reset
- Trim positions
- Steering rates
- Braking rates



# Setup

Setup is the second navigation tab. The majority of model setup takes place within the setup screen. The setup screen also contains short cuts for Model Setup and App Settings.



### **Monitor**

Monitor is the third navigation tab. This screen displays the position of the steering wheel, throttle/brake, trims and the position of any AUX channels.



# **Telemetry**

When using the iXSR with a telemetry capable receiver, the telemetry tab will appear in the fourth tab position. Telemetry displays all available information including signal strength, temperature, rpm and receiver voltage.

**IMPORTANT:** TELEMETRY is only available if you are using a telemetry capable receiver.



### **BASIC OPERATION**

The iXSR transmitter is based on an Android operating system. All RC related functions are handled by the Spektrum RaceWare $^{\text{TM}}$  application.

- Power On: Press and hold the power button for several seconds to power on the iXSR transmitter. The transmitter is designed to prevent inadvertently powering on from a touch to the power button. After the transmitter is on, the Android operating system will take approximately 1 minute to boot up. The Spektrum RaceWare app will automatically launch. Do not attempt to open other applications while the Spektrum RaceWare app is launching. When the application has finished launching, the Spektrum RaceWare Dashboard will be displayed. The Android operating system may then be accessed to utilize other apps.
- Navigation: To navigate around the iXSR, use your finger to tap, swipe and drag icons and menus found on the touch screen display.
- Power Off: Press and hold the power button for several seconds to access the shutdown menu. Select either "Power off" to power off the iXSR or "Restart" to restart the system.

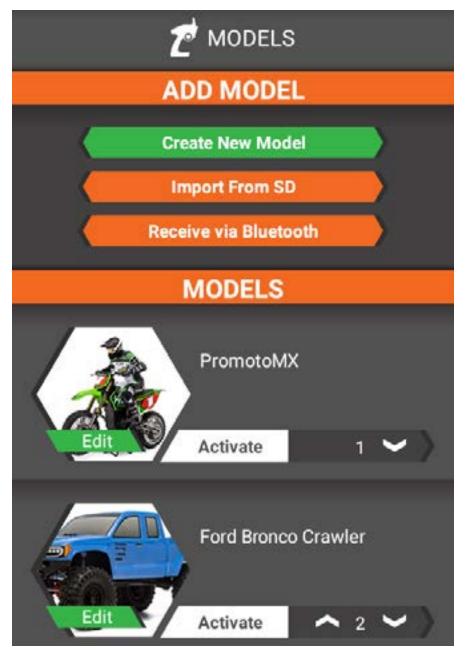
• WiFi Connection: Swipe down twice from the top of the screen and click on the WiFi icon to connect to an available WiFi network. Spektrum RaceWare app updates and firmware updates for the radio hardware are available through the Google Play Store. Internet access through a WiFi access point is required. After logging into the Google Play Store, any available updates will automatically download.

**IMPORTANT:** To use the Android Screen Lock feature, WiFi must be turned off for the setting to take effect.

- Sleep Mode: The Sleep Mode screen is accessible by double clicking the power button. Select the desired sleep options and long touch Apply, or long touch on Quick Sleep to put all functions in sleep mode. Press the power button once to wake the system.
- Screen Sleep Mode: Tap the power button once to put the screen to sleep. The radio will continue to transmit RC control signals.

# **MODELS MENU**

The Models menu is accessed by touching the current model image in the top right corner of the touch screen.



### From the Models menu:

- Create a new model
- Import a model from a memory card
- Select a different model
- Edit the properties of any saved model



### **CREATE NEW MODEL**

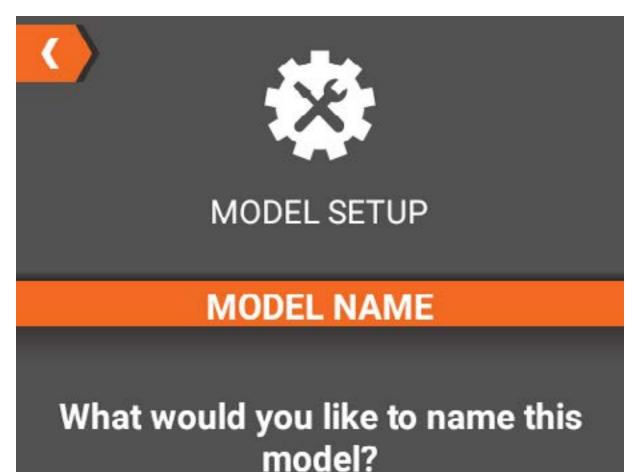
Some options in the model creation process will vary, depending on the equipment used and setup options chosen.



To create a new model, from the Models menu:

- 1. Touch the Create New Model button.
- 2. Follow the on-screen prompts to complete the model setup.
- Once a selection is made press NEXT to move to the following page or PREVIOUS to go back a page.

The model setup process for the active model can be accessed anytime after the initial setup by scrolling to the bottom of the Setup screen and selecting Model Setup.



New Model

Setup options include:

#### **User Name**

Tap in the name field to access the keypad. Enter a user name using up to 20 characters. After initial setup, the name can be changed in the App Settings screen.

#### **Model Name**

Tap in the name field to access the keypad. Enter a model name using up to 20 characters.

# **Receiver type**

Select from a list of compatible Spektrum DSMR® Receivers.

#### **AVC® TECHNOLOGY**

Activates or deactivates AVC technology in this model. This menu is only available if an AVC receiver was selected in RECEIVER TYPE.

# **Power System**

Select either electric or gas/nitro engines.

# Remote Onboard Starting System (ROSS)

Select either active or not used if an onboard starting system is available. This menu is only available if the gas/nitro engine option is selected in Power System.

#### **Throttle And Brake**

Select either a single channel or independent channels for the throttle and brake. This menu is only available if the gas/nitro engine option is selected in Power System.

#### Reverse

Select either reverse capable or no reverse. This menu is only available if an electric power system is selected in Power System.

#### **Motors**

Select either a single motor or front and rear motors (MOA). This menu is only available if an electric power system is selected in Power System. The next menu asks to select a receiver channel for the front motor.

### **Steering**

Select either a single servo or dual steering setup. Depending on options selected, front and rear steering will be available. The next menu asks to select a receiver channel for the rear steering.

# **Auxiliary Features**

If there are additional receiver channels available in which to add additional functions, select the desired AUX channel and select Next. Enter a name for the function being added (e.g. Winch, Lights).

# **RX Output Map**

Once all options are complete, the RX Output Map menu shows the current receiver connections. Double check that all options have an assigned channel and the various components are connected to the receiver properly.

#### **Finish**

After confirming the receiver connections and selecting Next, finish the model setup by selecting Save Settings.

# **Binding**

After saving the model settings, the last option is to bind your model to the transmitter. See the BINDING section for more information.

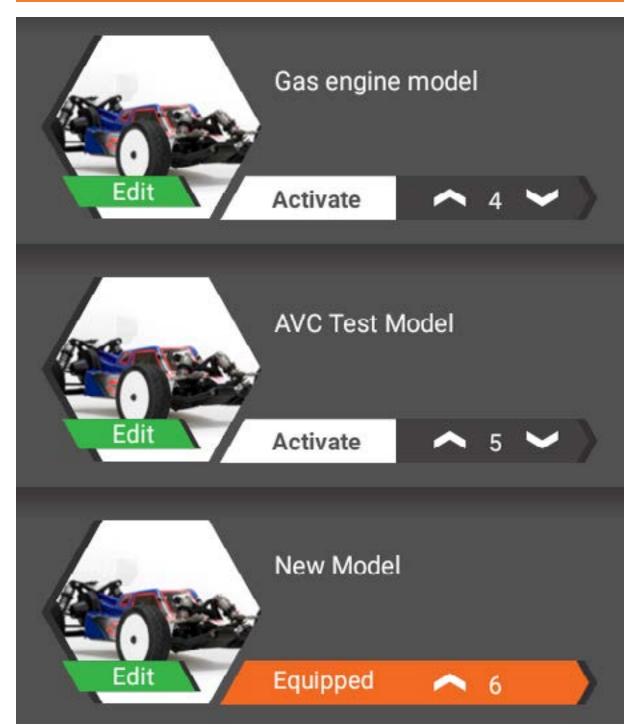
### **IMPORT MODEL FROM A MEMORY CARD**



- 3. Insert a micro memory card (not included) into the memory card port located under the removable cover on the front of the transmitter, as shown.
- 4. Raceware will prompt you to select the memory card and select a folder. This prompt will only happen once for a given memory card.
- 5. Select the model(s) you wish to import from the list of models in the active folder.
- 6. Select Import.

The models are added to the models list. To activate the imported model, select Activate next to the model's image in the models list. The model will activate, and the screen will change to the dashboard.

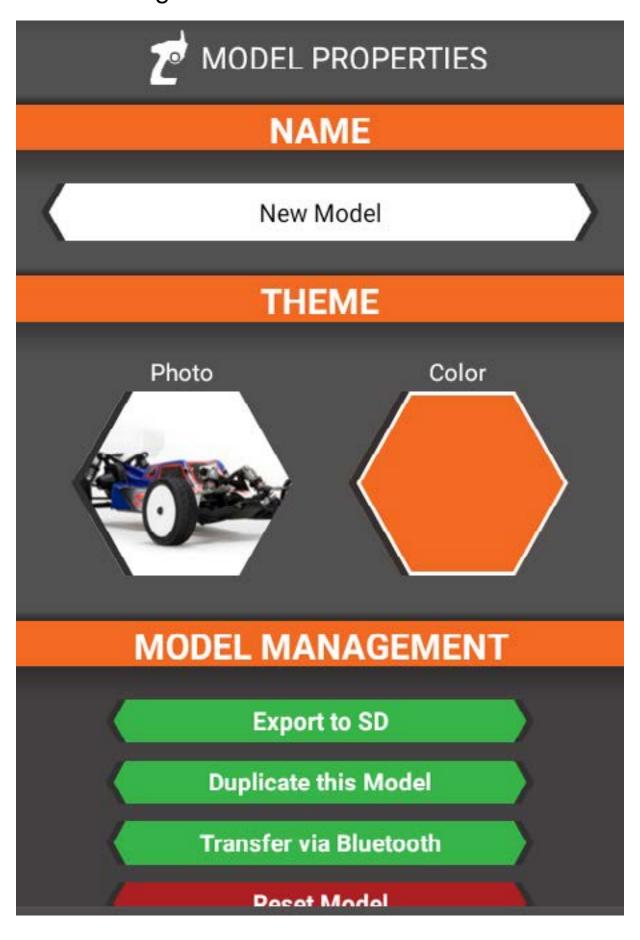
#### SELECT A DIFFERENT MODEL



To select a different model from the models list, touch Activate next to the desired model image. The model is equipped and the screen changes to the Dashboard for the selected model.

#### **EDIT MODEL PROPERTIES**

To edit the properties of any model, from the models list, touch the Edit tab on the desired model image.



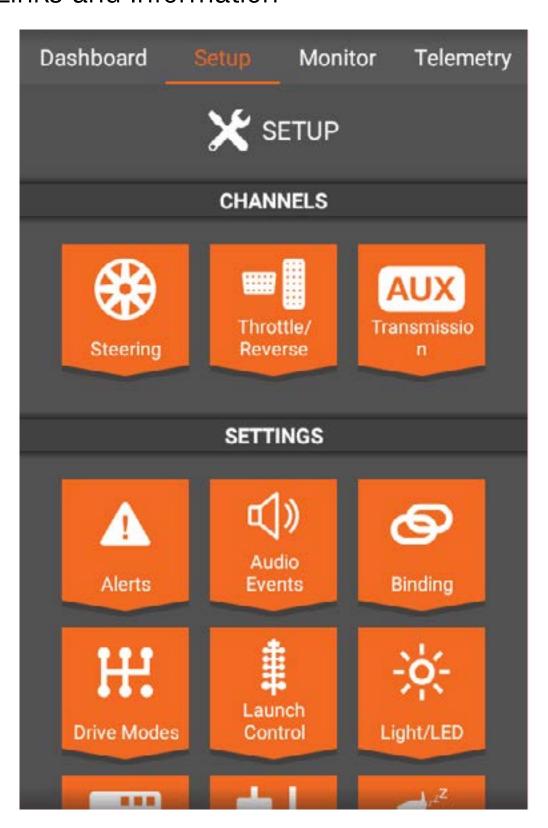
Within the Model Properties menu you can:

- Change the model name.
- Change the model theme, including changing the photo to one of the stock images or an image from a memory card and changing the model theme color.
- Export the model to a memory card.
- Duplicate the model.
- Transfer the model via Bluetooth to transfer a model directly to another transmitter.
- Reset the model. Resetting the model begins the model setup procedure.
- Delete the model.

# **SETUP MENU**

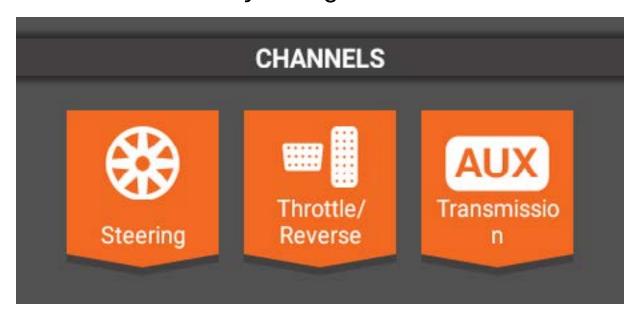
The Setup menu allows for editing of all model settings. The screen is divided into three sections:

- Channels
- Settings
- Links and Information



#### **CHANNELS**

The Channels section includes links to the specific channels, based on the options chosen during model setup, including Steering, Throttle/Brake/Reverse, and any Aux channels currently being used.



#### **STEERING**

The steering screen allows for programming of all steering functions of each steering channel, including:

- Travel
- Subtrim
- Reverse
- Steering Curve
- Steering Speed

- Steering Rate
- Steering Override
- AWS Mode
- Trim

If dual steering was selected during the model setup process, choose which steering channel you wish to program by selecting under Channel Properties on the Steering screen.

# **On-the-Fly Button**

Several functions allow for selection of an on-the-fly button. By assigning a button you can easily adjust a function while driving the vehicle. This is ideal for functions such as steering rate or speed, allowing you to fine tune the feel of your vehicle. If the On-the-Fly Button option is available in the programming section, tap the bar and select a button to which to link the function.

### STEERING CHANNEL PROPERTIES

### **Steering Travel**

Allows independent adjustments of the right and left steering end points.

Adjustment range is from 0 to 150%.

Make large adjustments by dragging the slider left or right and fine tune by touching the + or - buttons at the ends of the scale.



### **Steering Subtrim**

Use subtrim to correct minor inaccuracies in servo arms and linkages.

**IMPORTANT:** Use minimal subtrim values. Subtrim offsets the entire stroke including the center and endpoint positions.



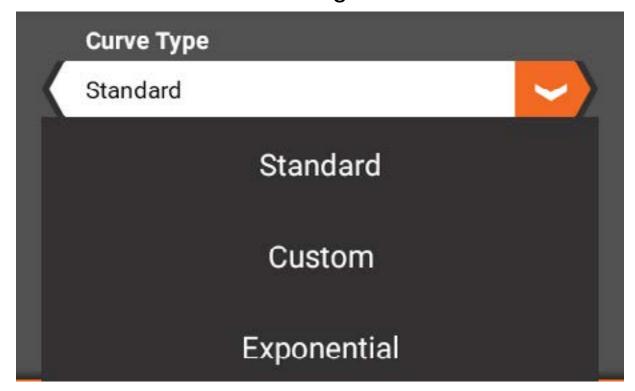
# **Steering Reverse**

Use reverse to reverse the servo output direction. Select either Normal or Reverse.



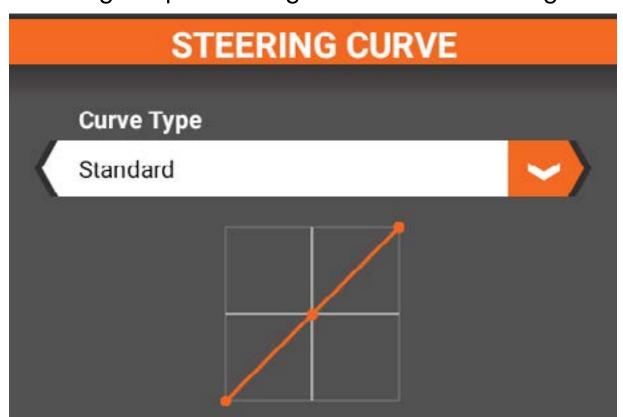
#### STEERING CURVE

Steering response is adjustable using an EXPO or Custom steering curve.



# Standard (default)

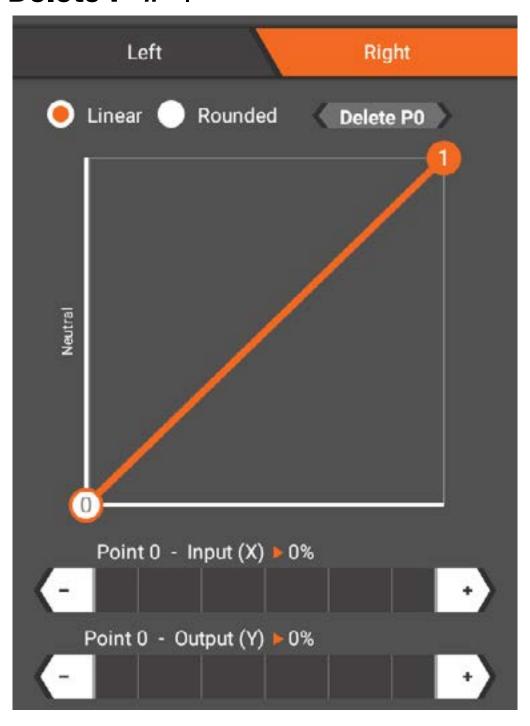
The standard curve option provides linear steering output throughout the travel range.



#### **Custom**

The custom curve option allows for up to 7 points to be added to the steering curve, which can be adjusted to custom tailor steering response throughout the travel range.

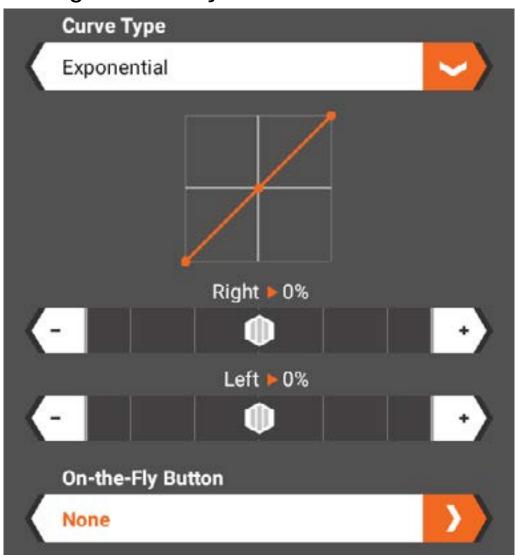
- Tap on the line to add points.
- Adjust the point position by tapping on a point and using the sliders below.
- Delete a point by tapping on it and selecting
   **Delete P-#>**.



### **Exponential**

The right and left steering exponential values can be adjusted independently. Adjust the values large amounts by touching and dragging the slider right or left. Fine tune the value by touching the + or - buttons on the ends of the scale.

- Positive (+) exponential values decrease steering sensitivity around neutral.
- Negative (—) exponential values increase steering sensitivity around neutral.



Select an On-the-Fly Button if desired.

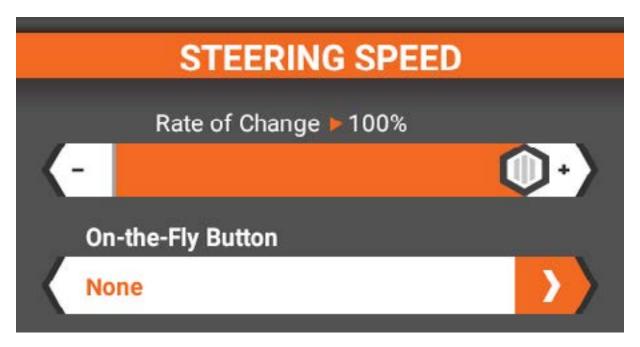


#### STEERING SPEED

Steering Speed allows adjustment of the servo transit time to prevent overly sensitive steering response.

Adjust by dragging the slider in this menu or assign an on-the-fly button to allow easy adjustment while driving.

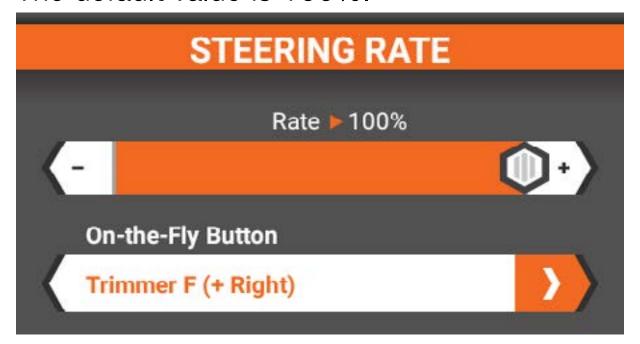
The default value is 100%.



#### **STEERING RATE**

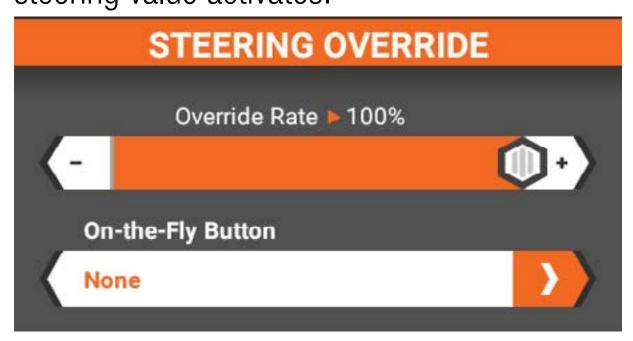
Steering rate allows for on-the-fly adjustments of steering travel.

Steering rate is assigned to Switch F but can be changed to any available trimmer/switch. The default value is 100%.



#### STEERING OVERRIDE

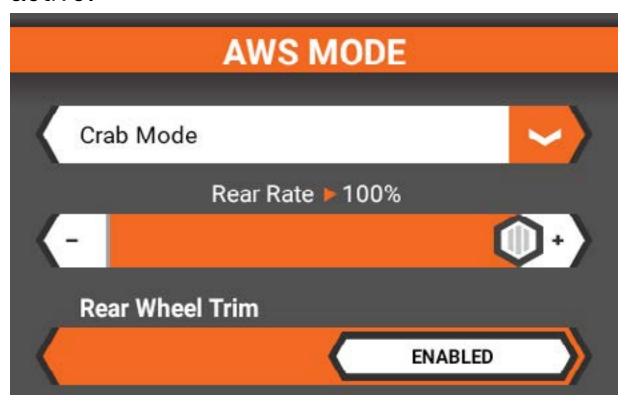
Steering override allows you to bypass the steering rate to momentarily give you a higher or lower rate. This feature is useful if you normally run a lower steering rate and need a little "extra" to get out of a situation. Adjust the slider to program the desired override rate, either higher or lower than the programmed steering rate. Select an on-the-fly button to activate the override. When the button is pressed while driving, the override steering value activates.



#### **AWS MODE**

AWS (All Wheel Steering) Mode supports 4 types of all wheel steering:

- **AWS (Opposed):** The front wheels turn one direction, and the rear wheels turn the other. The rear steering rate is adjustable.
- Crab Mode: Both front and rear wheels turn the same direction. The rear steering rate is adjustable.
- Front: Only the front wheels turn.
- Rear: Only the rear wheels turn.
   Drive Modes must be selected when AWS is active.

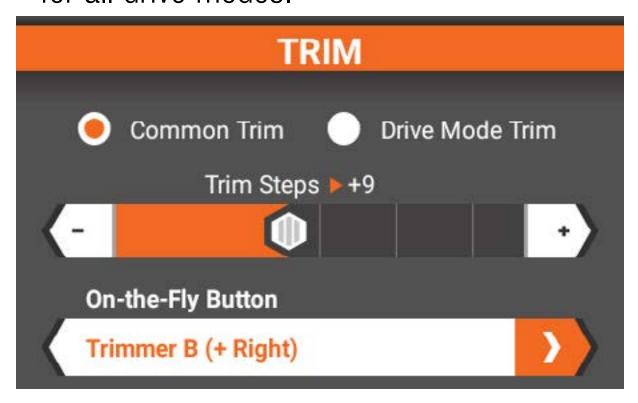


#### **STEERING TRIM**

Steering trim adjusts the steering neutral position. The number of steps each press of the trim button affects the steering trim, as well as the button assignment, is adjusted in this menu. The default value is +9 and is assigned to Switch B.

The trim can be set to Common or Drive Mode trim.

- Drive Mode Trim allows for different trim values for each drive mode.
- Common Trim uses the same trim value for all drive modes.



#### THROTTLE AND BRAKE/REVERSE

The Throttle and Brake/Reverse screen allows for programming of all throttle, brake and reverse functions.

- Throttle Curve
- Throttle Trim
- Throttle Rate
- Reverse Rate
- Traction Control
- ABS

- Servo Speed
- Channel Properties
- Travel
- Subtrim
- Reverse

The screen contents varies depending on whether reverse is activated during the model setup process.

### **On-the-Fly Button**

Several functions allow for selection of an on-the-fly button. By assigning a button you can easily adjust a function while driving the vehicle. This is ideal for functions such as throttle or reverse rates, allowing you to fine tune the feel of your vehicle. If the On-the-Fly Button option is available in the programming section, tap the bar and select a button to which to link the function.

#### THROTTLE CHANNEL PROPERTIES

#### Throttle/Brake/Reverse Travel

Allows independent precise adjustments of the throttle and brake/reverse end points.



#### **Throttle/Brake/Reverse Subtrim**

Use sutrim to correct minor servo arm/linkage inaccuracies.

**IMPORTANT:** Use minimal Subtrim values. Subtrim offsets the entire stroke including the center and endpoint positions.



### **Throttle/Brake/Reverse Reverse**

Reverses output direction.

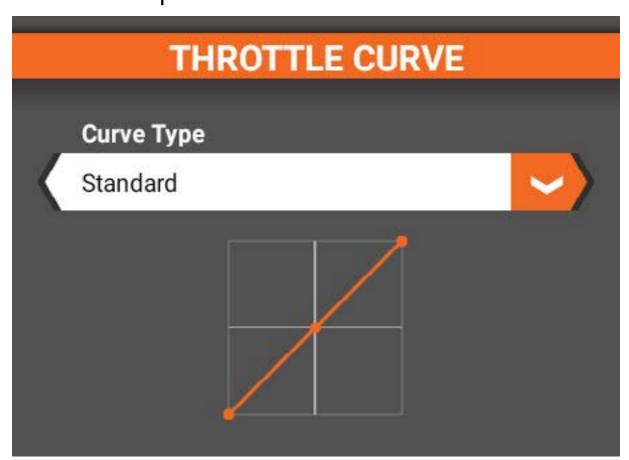


#### THROTTLE CURVE

Throttle and brake/reverse response is adjustable using a standard, custom or exponential curve.

# **Standard (default)**

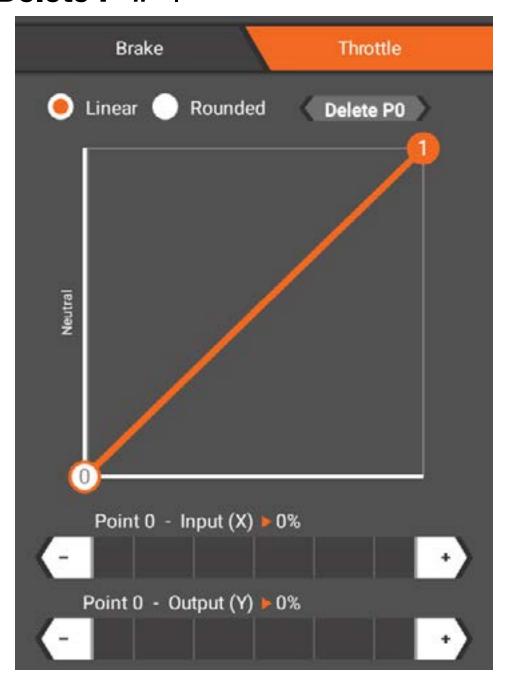
The standard curve is a linear throttle brake/reverse output.



#### **Custom**

The custom curve option allows for separate throttle and brake/reverse curves with up to 7 adjustment points on the curve. These points can be adjusted to custom tailor response throughout the travel range.

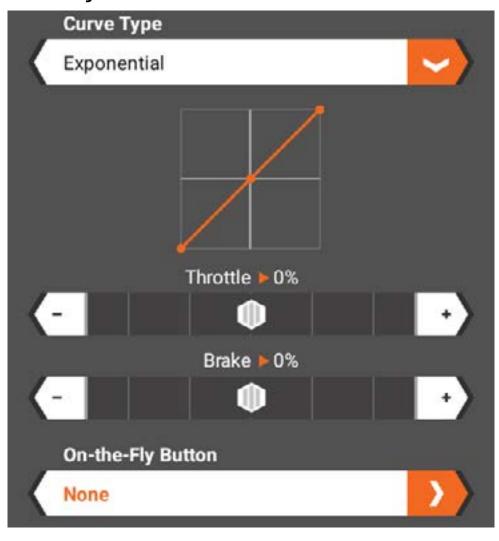
- Tap on the line to add points.
- Adjust the point position by tapping on a point and moving the X and Y sliders below.
- Delete a point by tapping on it and selecting
   **Delete P-#>**.



# **Exponential**

The throttle and brake/reverse exponential values can be adjusted independently. Adjust the values large amounts by touching and dragging the slider right or left. Fine tune the value by touching the + or - buttons on the ends of the scale.

- Positive (+) exponential values decrease throttle and brake/reverse sensitivity around neutral.
- Negative (—) exponential values increase sensitivity around neutral.



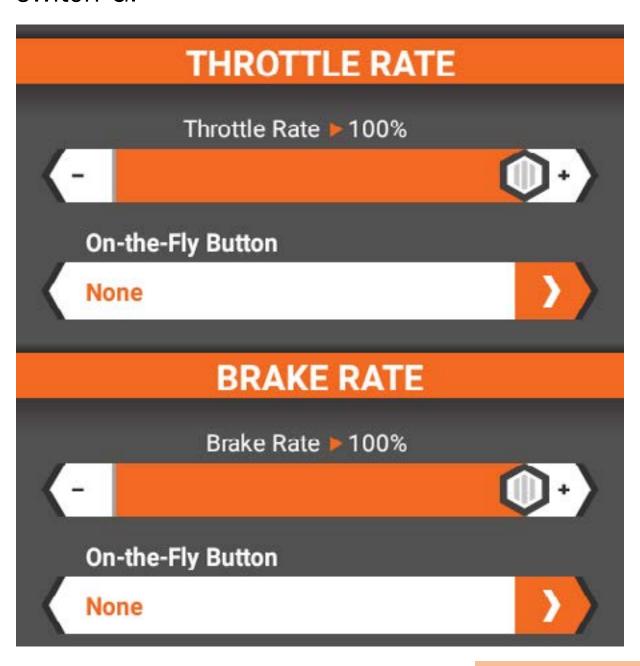
#### THROTTLE BRAKE/REVERSE RATES

Throttle and brake/reverse rate limits the full travel position values.

Adjust the value by dragging the slider or fine tune the value by touching the + or - buttons at the ends of the scale.

Throttle and brake/reverse rates may be assigned to any trim switch.

The brake/reverse rate defaults to trim switch G.



#### TRACTION CONTROL

Traction Control adjusts the acceleration (ramp) rate providing improved throttle control especially on slippery tracks.

- Cutoff Point: Allows the selection of a throttle position where the ramp rate is disengaged when the throttle output is above that point.
- Ramp Rate: adjusts the rate of acceleration (1= slow, 100= fast)
   Traction control can be assigned to any trimmer switch.



#### ABS (AUTOMATIC BRAKING SYSTEM)

ABS helps prevent brake lock-ups and improves braking performance by pulsing the brakes.

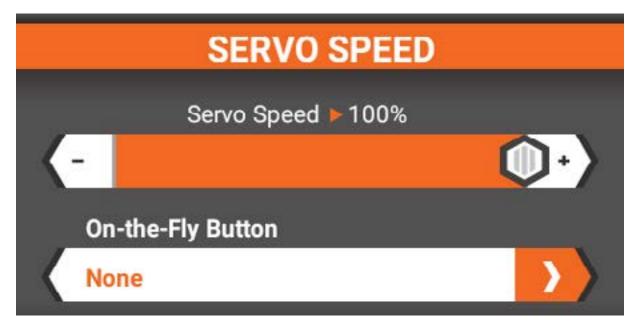
- **Engagement Point:** The throttle position that the pulse braking takes place (0 to 100, default is 60).
- Pulse Width: The distance the throttle travels during the pulse braking (0 to 100, default is 50).
- **Speed:** The pulsing speed or frequency of the pulse braking (0 to 20, default is 10).
- Delay: The time delay before the pulsing takes place.



#### **SERVO SPEED**

Use the servo speed menu to slow the output speed of the throttle servo. Change the servo speed by dragging the slider to make large adjustments and fine tune the value by touching the the + or - buttons on the ends of the scale.

The default setting is 100%, or full speed. Servo speed can be assigned to any trimmer switch or button.

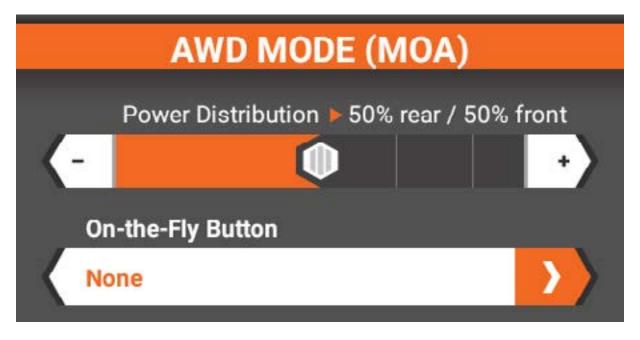


#### AWD MODE- (MOA)

Motor-On-Axle (MOA) programming allows on the fly power distribution from the front to rear wheels.

The adjustment ranges from 100% rear 0% front to 0% rear 100% front.

The default setting is 50%/50%. This setting can be assigned to a trimmer switch, or programmed and attached to drive modes. See the Drive Modes section for more information.

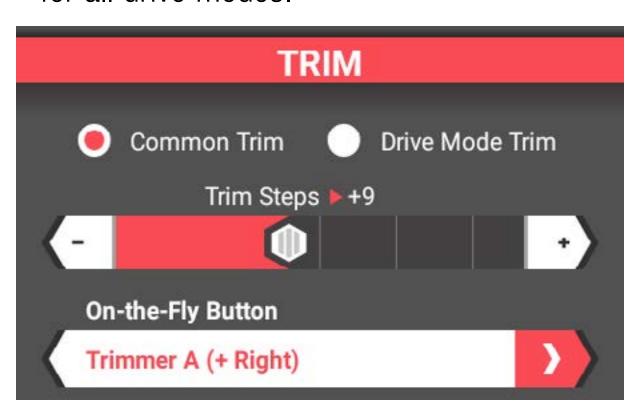


#### THROTTLE TRIM

Throttle trim adjusts the throttle neutral position. The number of steps each press of the trim button affects the throttle trim, as well as the button assignment, is adjusted in this menu. The default value is +9 and is assigned to trimmer A.

The trim can be set to Common or Drive Mode trim.

- Drive Mode Trim allows for different trim values for each drive mode.
- Common Trim uses the same trim value for all drive modes.



#### **IDLE UP**

Used with gas engines, Idle Up advances the throttle's idle position allowing for easier cold engine starting.

Idle up can be assigned to any trimmer or switch.

When idle up is available, an alert can be programmed warning when idle up is active. See the **Alerts** section for information on how to create the idle up alert.



#### **AUXILIARY (AUX) CHANNEL SETUP**

Similar to the steering and throttle brake/ reverse menus, the AUX setup menu allows for programming of any auxiliary channel functions added in the model setup process:

- Travel
- Subtrim
- Reverse

- Input Control
- Servo Speed

#### **CHANNEL PROPERTIES**

#### **Travel**

Allows independent precise adjustments of the throttle end points.



#### **Subtrim**

Used to correct minor servo arms/ linkages inaccuracies.

**IMPORTANT:** Use minimal subtrim values. Subtrim offsets the entire stroke including the center and endpoint positions.



#### Reverse

Reverses the channel output direction.



#### **INPUT CONTROL**

This menu changes depending on which button or switch is selected to control the function.

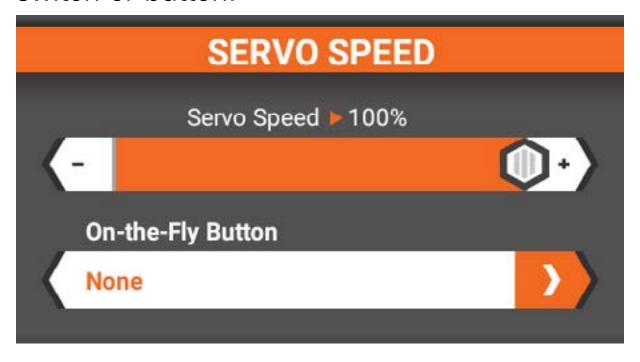
- Select the input switch.
- If the switch selected allows, choose how many positions will be used.
- If the switch selected allows, choose the number of steps for each button press.



### **SERVO SPEED**

Use the servo speed menu to slow the output speed of the aux channel. Change the servo speed by dragging the slider to make large adjustments and fine tune the value by touching the the + or - buttons on the ends of the scale.

The default setting is 100%, or full speed. Servo speed can be assigned to any trimmer switch or button.



## **SETUP SETTINGS**

### **ALERTS**

Select the Alerts menu to enable idle up and timer alerts as well as assign the type of alert desired. Tone, Vibrate, Tone + Vibrate or Voice are the available options.

Available alerts include:

- Idle Up
- Timers 1, 2, 3

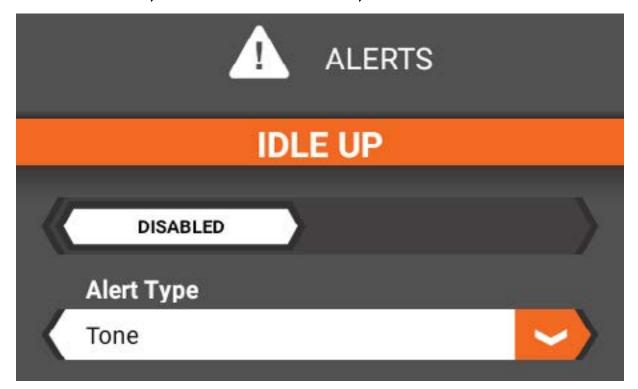


### **IDLE UP ALERT**

The idle up alert is available when the gas/ nitro power option is selected in the model setup process.

To set up an idle up alert:

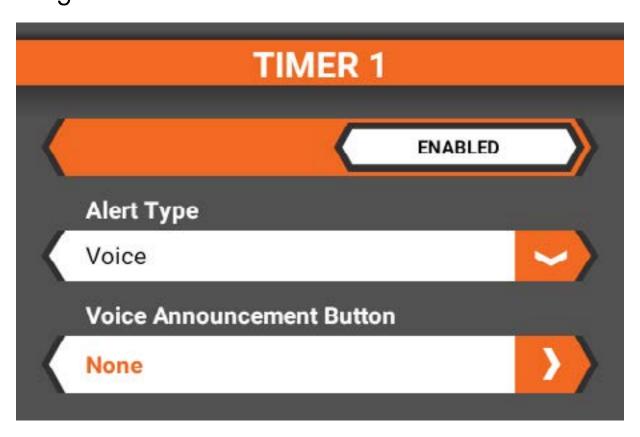
- 1. Ensure idle up is configured in the throttle brake/reverse menu, including assigning it to a button or switch.
- 2. In the Alerts menu, enable the idle up alert.
- 3. Select the alert type. Choose from Tone, Vibrate, Tone + Vibrate, or Voice.



#### **TIMER ALERT**

Alerts are available for timers 1-3 and are enabled by default. The options for each timer are listed individually in the alerts menu.

- 1. Select disabled or enabled for the timer.
- 2. Select the alert type.
- 3. Select the voice announcement button. When depressed, the voice announcement gives the current time on the timer.

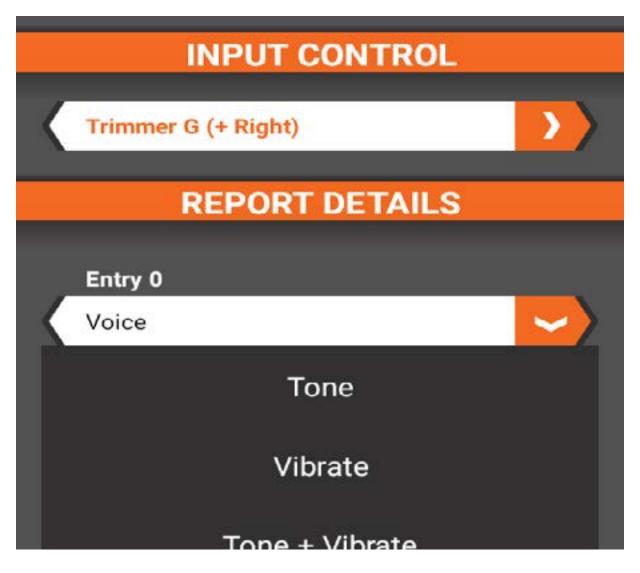


# AUDIO EVENTS REPORTS



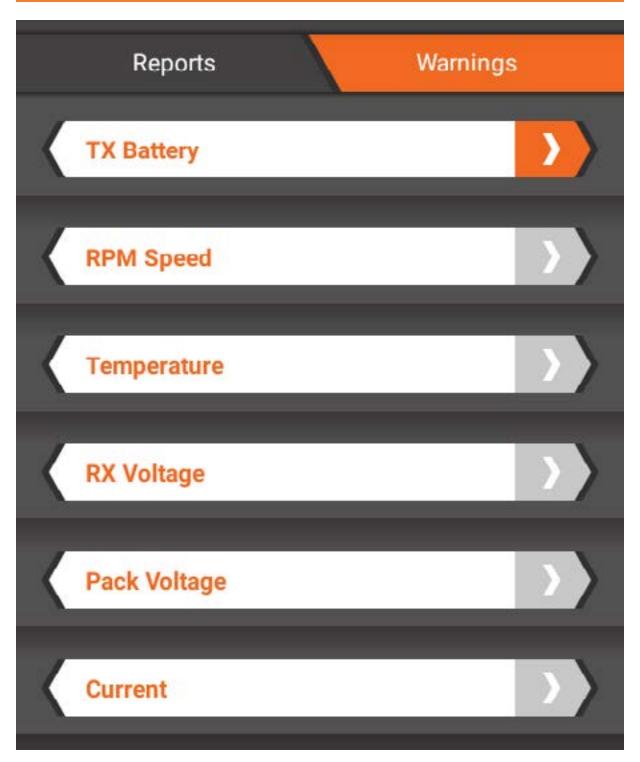
To add a switch report:

- 1. Touch Add Report.
- 2. Touch the new bar.



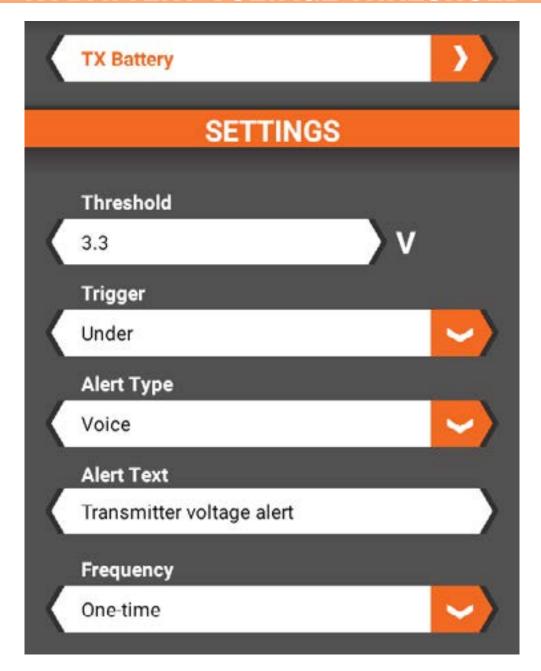
- 3. Touch the bar under Input Control to connect the alert to a button.
- 4. Select the alert type for each switch position; tone, vibrate, tone + vibrate, or voice.
- 5. If voice was selected in the previous step, touch the field beneath the alert type. Either touch the blank field to enter the voice text or touch the Macros button to choose from a list of pre-defined alerts.
- 6. Touch the check mark to accept the text.
- 7. Select <Back to return to the Audio Events menu.

### WARNINGS



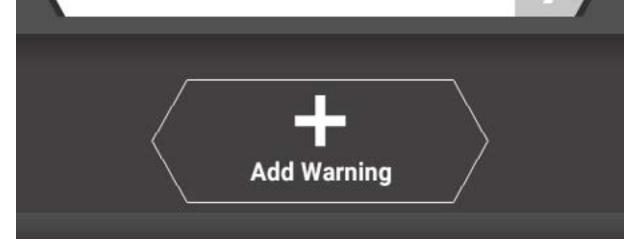
To access the warnings list touch the Warnings tab at the top of the Audio Events menu. All currently programmed warnings are listed. Warnings with grayed out tabs are disabled. Touch any of the warnings listed to enable/disable or change the warning settings.

### TX BATTERY VOLTAGE THRESHOLD



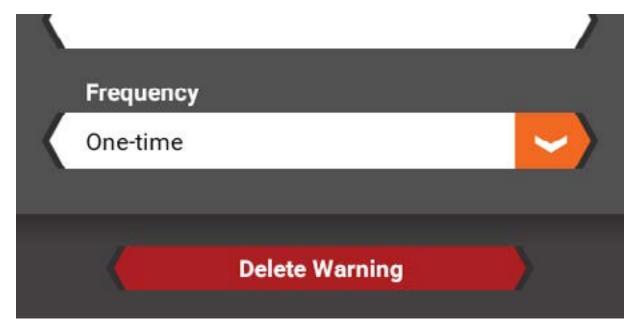
To set the voltage threshold for the transmitter battery warning:

- 1. Select the TX Battery warning bar.
- 2. Touch in the Threshold bar.
- 3. Enter the desired voltage threshold.
- 4. Select any other desired changes for the transmitter battery alert.
- 5. Touch <Back to return to the Warnings list.



## To add a new warning:

- 1. Scroll to the bottom of the warnings list.
- 2. Touch Add Warning.
- 3. Touch the new warning, marked "None" to access the settings.
- 4. Select Enable to activate the warning.
- 5. Select a telemetry type. Types are divided by general category. Touch Save when the desired type is selected to return to the warning settings.
- 6. Enter the desired settings values for the warning.
- 7. Touch <Back to return to the Audio Events menu.



## To delete a warning:

- 1. Touch the warning you wish to delete.
- 2. Scroll to the bottom of the Settings list.
- 3. Touch the Delete Warning button.
- 4. Touch Yes to confirm.

### AVC® (ACTIVE VEHICLE CONTROL)

AVC® technology is available, only when an AVC capable receiver is selected.

### **Enable/Disable**

Turn AVC on or off.



### **STEERING GAIN**

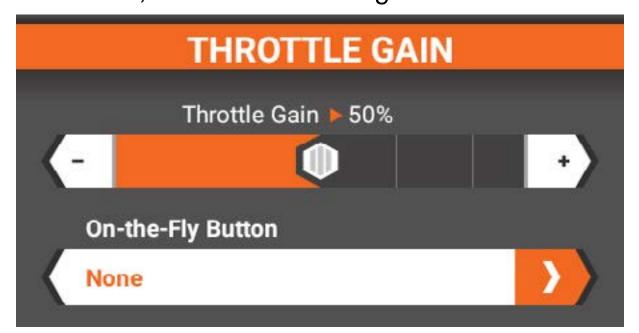
The default value is 50%. As the value increases, the AVC steering stability increases.

If the front wheels begin to shake, the ST Gain value is too high. Reduce the ST Gain value until the front wheels stop shaking.



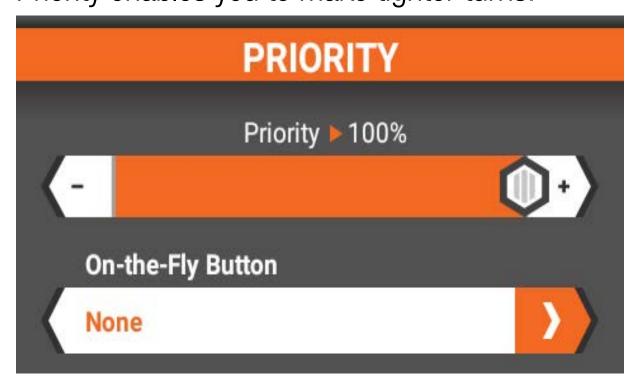
#### THROTTLE GAIN

The default value is 50%. As the value increases, the throttle management increases.



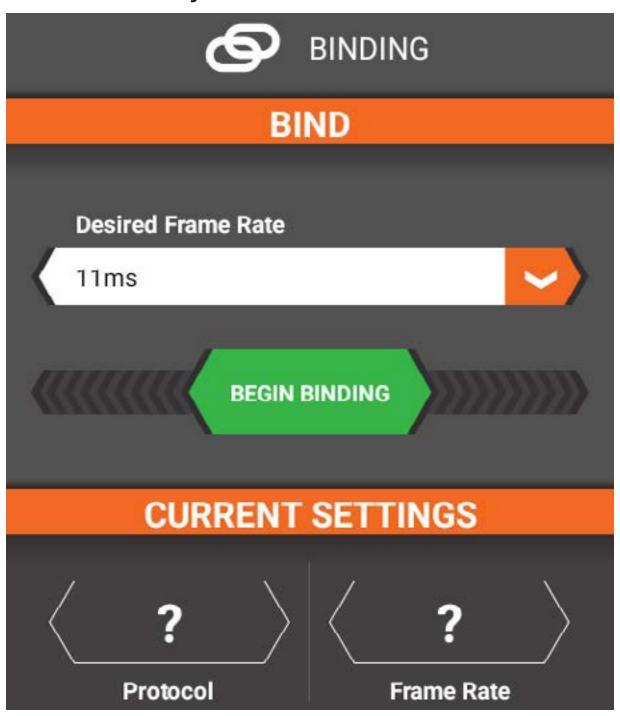
### **PRIORITY**

The default value is 0%, meaning AVC technology is active throughout the steering range. As you turn the steering wheel away from center (neutral), the transmitter controls have priority over the AVC system. Increasing the Priority value decreases how active AVC is as the steering wheel is turned left and right. For example, if you increase Priority to 80%, you reduce the AVC steering control by 80% at full left or full right steering. Increasing the Steering Priority enables you to make tighter turns.



### **BINDING**

Binding is the Process of teaching the receiver the specific transmitter's code called GUID (Globally Unique Identifier) and storing failsafe values. When a receiver is bound to a transmitter/model memory, the receiver will only respond to that specific transmitter/model memory.



### To bind the transmitter to a receiver

- 1. Touch the Desired Frame Rate drop down to select from 5.5ms, 11ms and 22ms.
  - 5.5ms is only available on certain receivers from the model setup procedure. Check your receiver manual for more information.
  - If 5.5ms frame rate is selected in the transmitter, only two channels, Steering and Throttle, are operational. The Aux channels can be used to power a personal transponder or lights.
  - If a frame rate other than 5.5ms is selected, the Aux channels will operate as extra servo channels.
- 2. Following the instructions for your receiver, place the receiver in bind mode.
- 3. Touch the BEGIN BINDING button.

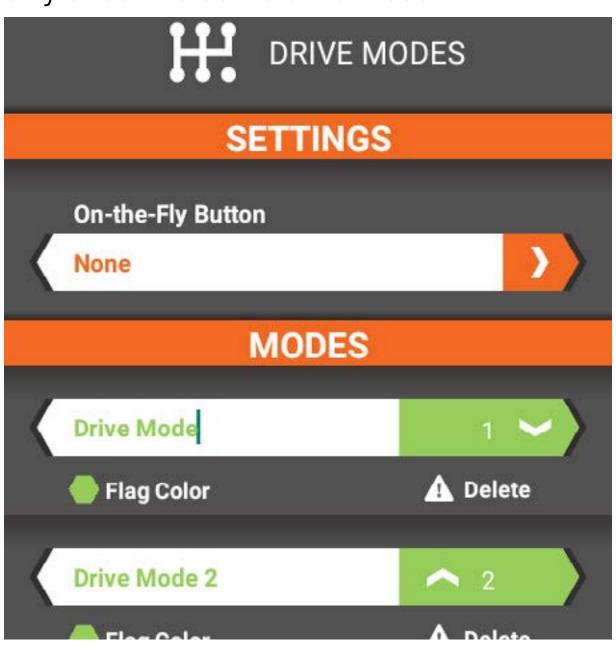
**IMPORTANT:** Re-bind any time you change the frame rate in the transmitter.

### **DRIVE MODES**

Drive modes allow for different setups for a particular model. For example, you can create one drive mode for racing on a high bite clay track and another drive mode for a dry, loose track. Each model can have several drive modes programmed to a switch or button for on-the-fly changes between modes.

The active drive mode is always displayed in the top left corner of the screen.

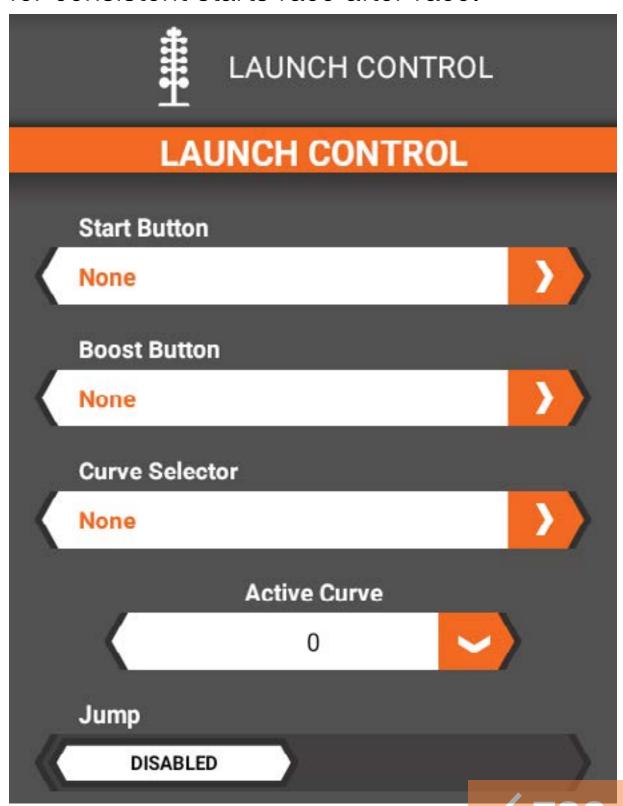
Changes to model setup, trim and timers will only affect the active drive mode.



- Touch the On-the-Fly Button drop down to select a button or switch to enable instant mode changes. The number of drive modes available will change according to which button is chosen.
- Touch the Drive Mode button to change the drive mode name. Type in the desired name and touch the checkmark button to accept.
- Touch Flag Color to change the color of the Drive mode banner. Touch the desired color, and touch Save to accept.
- Touch Delete to delete drive modes
   (a model must have at least 1 drive mode).
- If more than 1 drive mode exists, touch the arrow buttons to re-order the list.

### LAUNCH CONTROL

This feature allows the driver to customize a launch curve to control the duration of time it takes to reach full throttle as well as adjusting points in the throttle curve to effectively ramp the throttle to the driver's preference, allowing for consistent starts race after race.



### LAUNCH CONTROL

### **Start Button**

The start button controls the start of the Launch Control sequence. There are two common ways to use the start button:

• As a hand brake: Press and hold the assigned button to disable the throttle channel. The alert selected for the launch sequence will activate and continue until the sequence runs. With the button held, pull full throttle. When the race starts, release the button. The launch control sequence takes over and runs for the assigned duration. When the sequence is complete, the throttle trigger operates normally.

• As a pre-launch stage: When you are on the starting line, ready to run, tap the button to start the Launch Control sequence. The alert selected for the launch sequence will activate and continue until the sequence runs. When the race starts, pull full throttle to begin the run. The launch control sequence takes over and runs for the assigned duration. When the sequence is complete, the throttle trigger operates normally.

Simply press or hold your start button to restart the Launch Control sequence.

**IMPORTANT:** Once the Launch Control sequence has been started for a run, there is no way to reset it. If for any reason you start the sequence and need to abort the launch, release the throttle trigger, release the start button, then very lightly tap and release the throttle. The sequence will run through using 0 throttle power output.

### **Boost Button**

Boost is a push button/trimmer which, when pressed, adds a percentage of throttle to the output, effectively boosting your throttle output between 0-25%. The value shown is the percentage of throttle added when the button is pressed and held.

### **Curve Selector**

Curve Selector allows the selection of a different launch curve with the touch of the selected switch. This may be configured to as many positions as the selected switch supports. When set to None a total of five curves are available, and the curve selected is specified in the **Active Curve** field. If a switch is selected, the **Active Curve** field is not available. Simply toggle the selected switch to change between curves.

## **Jump**

Enable Jump to automatically display the Launch Control Status screen when the selected start button is pressed. When disabled, access the Launch Control screen by scrolling to it from the dashboard screen or selecting the Launch Control tab from the main screen. The jump action is inactive when RF is disabled.

## **Alert Type**

Add an alert to signify when the Launch Control is active. Choose between tone, vibrate, and tone + vibrate.

### **LAUNCH CURVE**

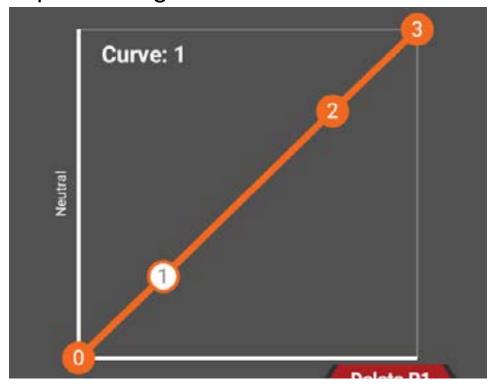
### **Duration**

Select the total duration time of the launch control sequence, up to 5.0 seconds.



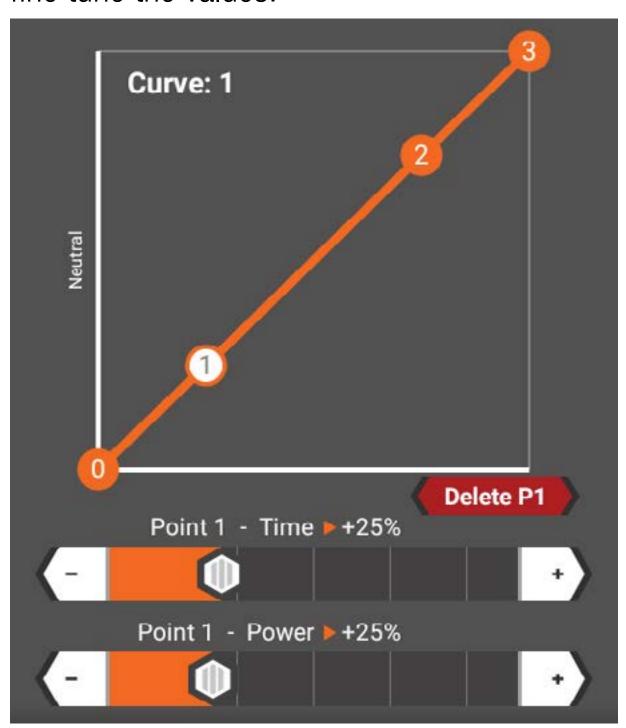
### **Curve**

The default launch curve has 4 points. The first and last points will always be at 0,0 and 100,100 respectively and are not adjustable. The horizontal value represents time as a percentage of the total sequence duration. The vertical value represents throttle power output percentage.



Add up to 4 additional points (8 total) to the curve by touching the the curve where you wish to add a point.

Change the position of the points by first touching the point to be adjusted, then dragging the Time or Power slider to make major value changes and the + or - button to fine tune the values.



### **LAUNCH CONTROL TIPS**

**Start Button:** set to any available switch that is easily accessible.

An easy way to select the switch is to choose the option and press the button/trimmer on your transmitter to automatically change it to the switch of your choice.

Launch control must be activated before every run down the track, so remember to hit the start button before every run.

The fastest starts are achieved by holding down the start button, pulling full throttle, and releasing the start button when the race starts. Continue to hold full throttle until you reach the finish line or the run needs to be aborted. This method reduces the latency between your eyes and the starting tree, but it also allows for less margin of error while driving.

When the launch control duration is completed, launch control is deactivated until the start button is pressed again.

**Boost Button:** Boost is tricky to set ]correctly and use it during the short runs typical to drag racing, but it may be helpful on longer strips or slower vehicles. Like the start button, use a button that is easy to reach.

**Curve:** set to Drive Mode to allow for up to 5 programmable throttle curves. Assign Drive

Mode to an open switch in the Drive Mode menu and select how many drive modes you would like to use, before proceeding to assign it in the Launch Control menu. We use the "I" switch next to the knob as it's easy to toggle at the line and is not easy to accidently change.

**Alert:** This lets the driver know launch control is active without looking at the screen. We suggest the Vibe option to prevent any noise distractions when watching the starting tree.

Curve programming: The ideal curve will give maximum acceleration while minimizing wheel spin. We suggest using all available points in the curve as this allows for smoother response. Timing and power of each point will be determined by making test runs. With sensorless systems it helps to have higher power settings at the start of the curve to help reduce cogging off the start line.

**Duration:** Longer duration makes the car feel and run slower as it takes longer to transit the programmed curve. This is helpful on low traction surfaces like dusty parking lots and streets. Shorter duration is ideal for high traction surfaces that allow for maximum acceleration.

- Low traction: 1.2-1.5s suggested
- High traction: .5-.9s suggested



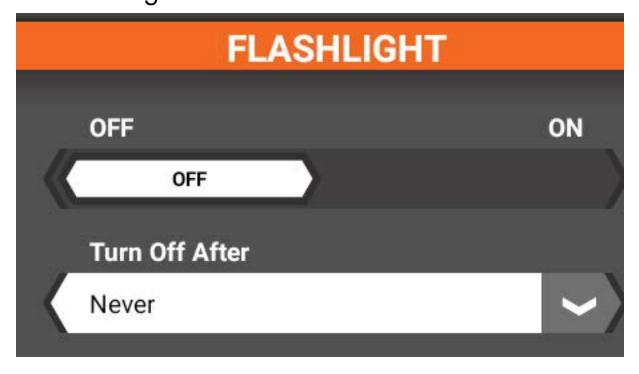
### LIGHT/LED

The Light/LED menu contains the LED flashlight as well as the LED light bar controls.

#### **FLASHLIGHT**

To activate the flashlight, from the Light/LED menu, touch the slider.

When the flashlight is on, select a Turn Off After value to automatically turn the flashlight off, or keep the default value of Never to keep the flashlight on.



#### LIGHT BARS

The RGB color LEDs on the sides of the iXSR are adjustable in the light bars menu. The LED bars are on by default.

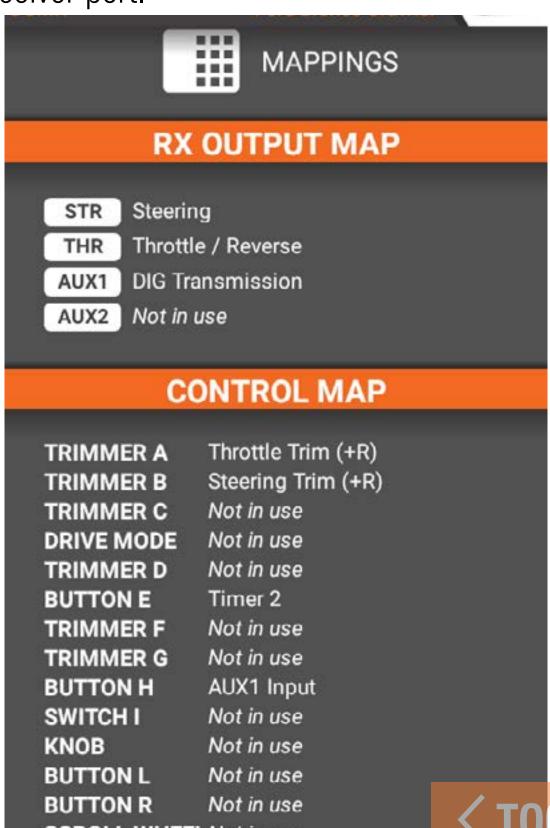
- Turn off the LEDs by touching the slider.
- When the LEDs are on, select a Turn Off
  After value to automatically turn the LEDs
  off, or keep the default value of Never to
  keep the them on.
- Touch in the Color swatch to bring up a color picker. Touch any color in the picker to change the LED color.

Touch < Back to return to the Setup menu.



### **MAPPINGS**

The Mappings menu displays an overview of all transmitter and receiver functions as they are currently setup for the active model. Use the mapping screen to help correctly connect servo and auxiliary equipment to the correct receiver port.



### **MIXES**

A mix connects a source channel to target channel. The iXSR features preset steering mixes (activated in the model setup process) and up to 16 programmable mixes.

- Steering, Throttle/Brake, AUX1, AUX2, AUX3 and AUX4 are available to serve as the target or source channel.
- The availability of the AUX channels will vary depending on the selections made in the model setup process.
- AUX channels 1 and 2 are not available for mixes when the AVC menu in the transmitter is active.

#### To add a mix:

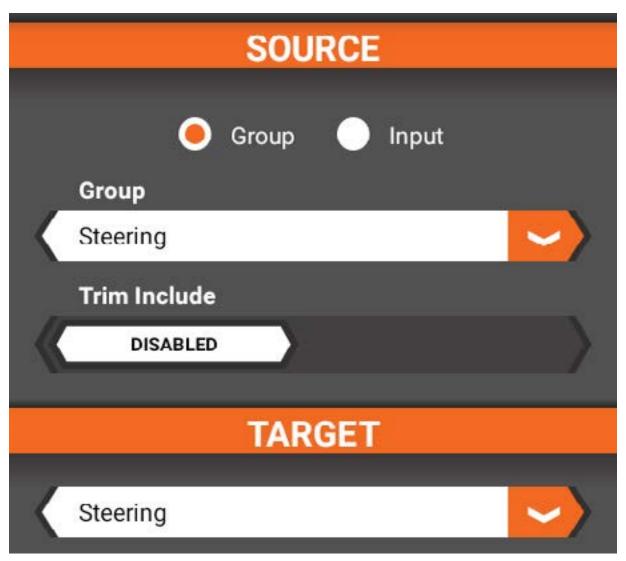
1. From the Setup Settings menu, touch the Mixes icon.



2. Touch Add Mix.



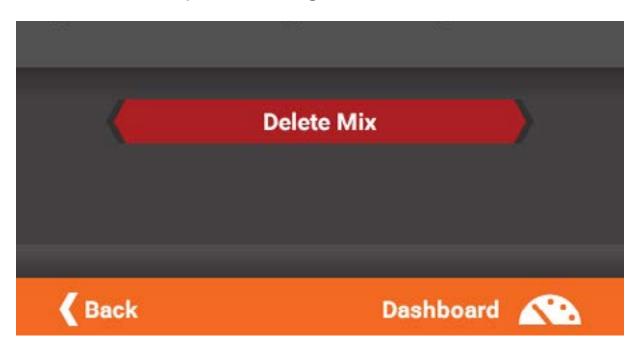
- 3. Touch the new mix to enter the mix options screen.
- 4. Enable the mix.
- 5. Touch the mix name to enter a new name.



- 6. Select the mix source. The source can be either a group (steering, throttle, etc...) or an input (button or switch).
  - If a group is selected, choose to include the source trim or not.
  - If an input is selected, choose the type of switch desired.
- 7. Choose the target channel.
- 8. Use the sliders to enter the mix settings for the target channel.
- 9. Select how the mix is activated. The choices are always active, button, or by drive mode.

### To delete a mix:

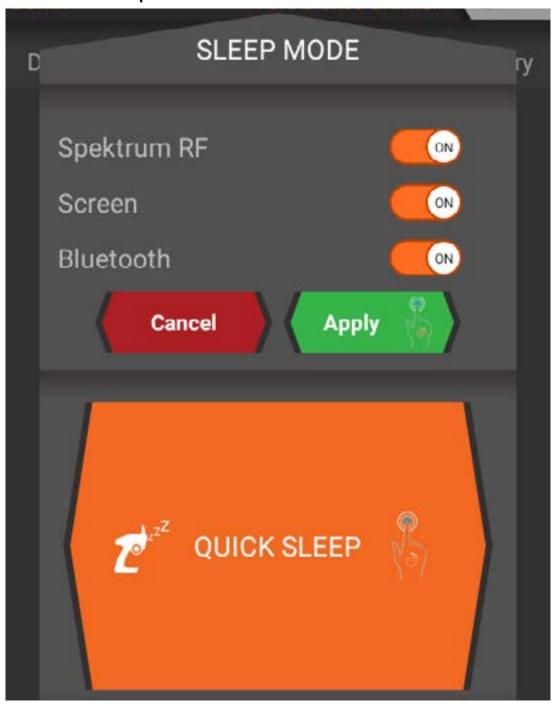
- 1. Enter the mix options screen.
- 2. Scroll to the bottom of the menu.
- 3. Touch Delete Mix
- 4. Confirm by touching Yes.



### SLEEP MODE

The Sleep Mode menu allows you to turn off specific functions of the iXSR or put the transmitter in full sleep mode to conserve the transmitter battery between runs. The following options are available:

- Spektrum RF
- Screen
- Bluetooth
- Quick Sleep



Select Spektrum RF, Screen, or Bluetooth and long press Apply to turn off any of these functions.

Depending on which functions you chose to put to sleep, either rapidly press the power button once to wake the screen, or return to the Sleep Mode menu to power on the RF or bluetooth.

## **QUICK SLEEP**

Long press on Quick Sleep to put the transmitter fully into sleep mode. Rapidly press and release the power button once to wake the transmitter.

#### **TELEMETRY**

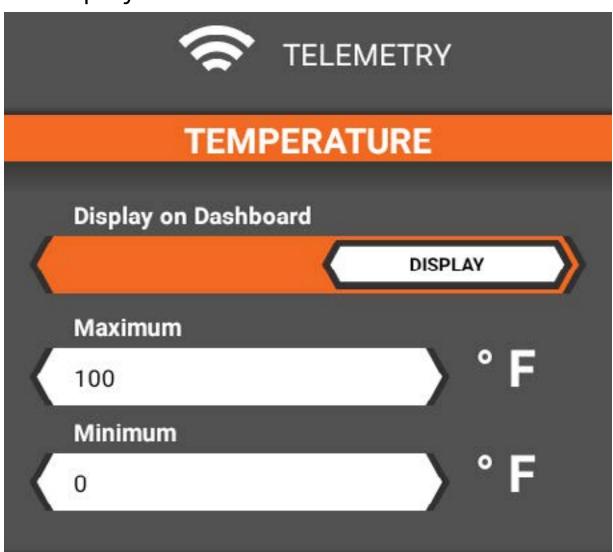
The Telemetry SetUp Screen allows for editing values as well as how the information is displayed on the Telemetry Screen.

### **Available functions:**

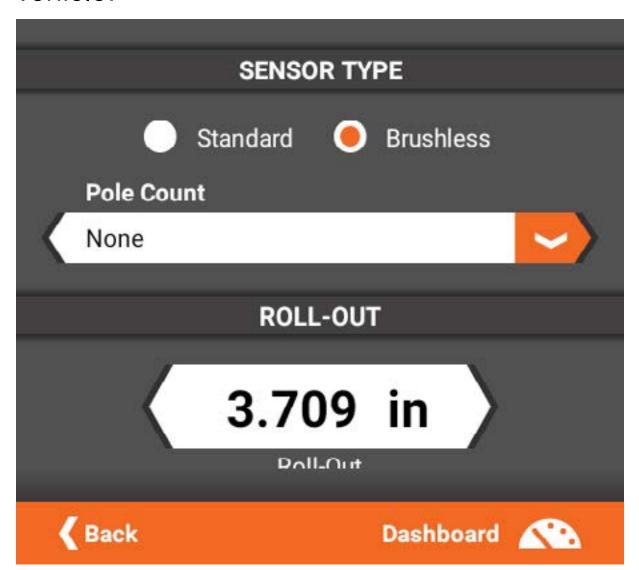
- Temperature
- Receiver Battery
- Speed/RPM
- GPS

For each telemetry sensor listed, tap Display on Dashboard to either hide or display the telemetry information.

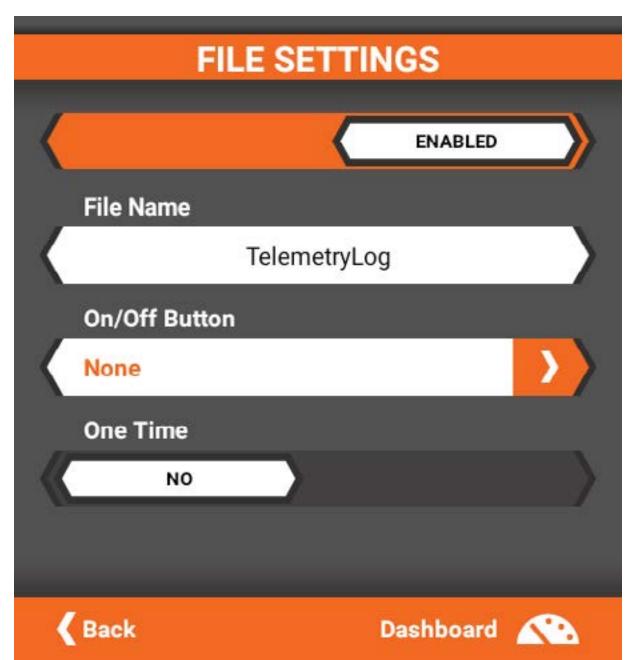
Adjust the minimum and maximum values to be displayed for each sensor.



For the Speed/RPM to display accurately, you must input the sensor type, motor pole count (if using a brushless motor/sensor type), and an accurate roll-out measurement for the vehicle.



To save a log file of your run, enable the File Settings at the bottom of the menu. Select a file name, On/Off button, and designate it as a one time event or not.



#### **TELEMETRY GAUGES**

Add custom telemetry gauge panels to the main screen with the telemetry gauges menu. Up to 6 additional panels can be created, only 1 of which can be displayed on the main screen list. To add a custom telemetry panel:

- 1. Touch the telemetry gauges menu item.
- 2. Touch Add Panel.
- 3. Touch the newly added panel to access the settings.
- 4. Touch the panel name to customize the name.
- 5. Select a layout for the panel.
- 6. Touch a + in the layout grid below to choose a gauge configuration for that grid location. Configuration options include:
  - Gauge name
  - Sensor type
  - Gauge type
  - Gauge style
  - Data range
  - Gauge colors
- 7. After each gauge is configured, touch the Dashboard icon to return to the dashboard screen. Check the appearance of the new panel by scrolling or touching the panel tab at the top of the screen.

## **Gauge Name**

Touch the name to add a custom name.

## **Sensor Type**

Select the desired sensor from the list.

## **Gauge Type**

Touch on the gauge to change the appearance of the gauge. Select from the pre-configured list.

## **Gauge Style**

Select from solid fill, major gridlines or minor gridlines.

## **Data Range**

Input the lower and upper range limits to be displayed for the chosen sensor type.

#### **Edit Colors**

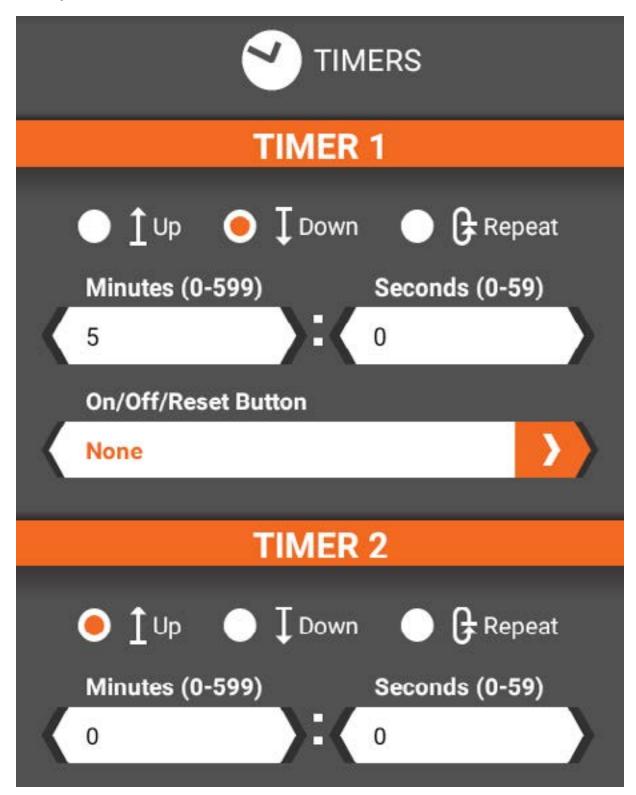
Choose up to 3 colors from the color picker for the gauge. The chosen colors will display from low to high and blend between each on the gauge.

#### **TIMERS**

The iXSR offers 5 timers, all viewable from the dashboard. Pause and reset the timers directly on the dashboard or configure a timer switch or button. Available timers include:

- Total Time
- Model Time
- Up Timer

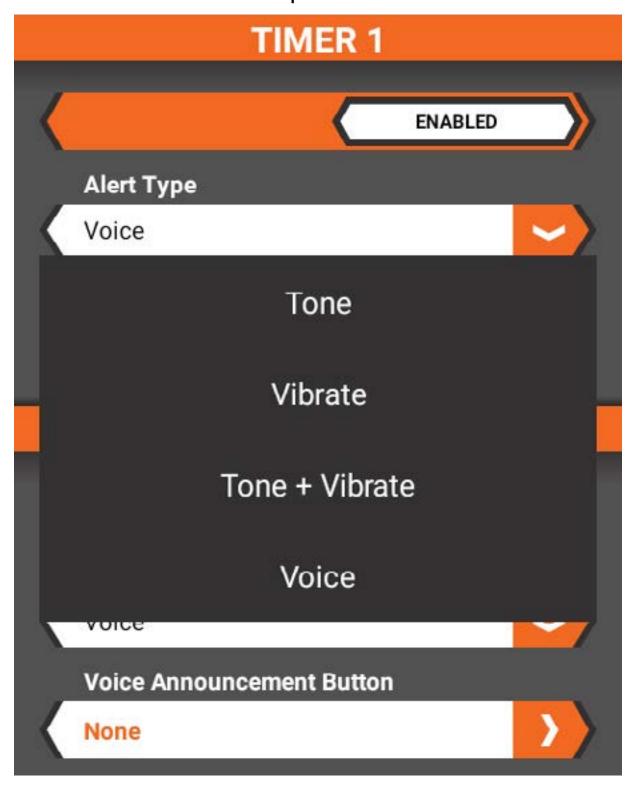
- Down Timer
- Rolling Lap Timer

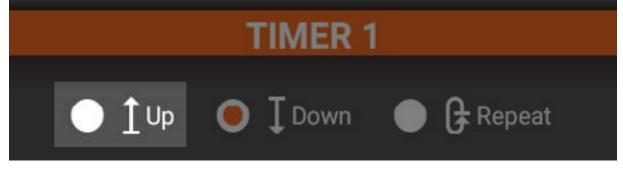


Touch the Timers menu item from the Setup menu to configure the timers as well as to clear the model and total drive times.

Timers 1-3 can be configured to be either an up, down or lap timer.

Configure the Timers Alert type (Tone, Vibrate, Tone + Vibrate or Voice), by going to the Alerts screen in SetUp.

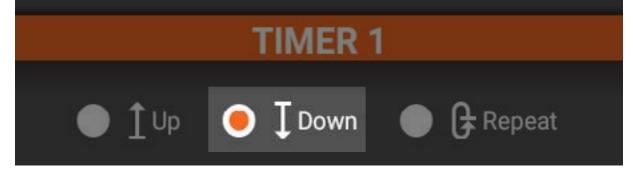




## **Up Timer**

The Up Timer counts up, functioning as a stopwatch when triggered via a selectable button/switch. It is useful for timing a fuel run to determine fuel mileage/pit stop strategy or, for electrics, to time the run time of a pack to determine gear ratio and setup information.

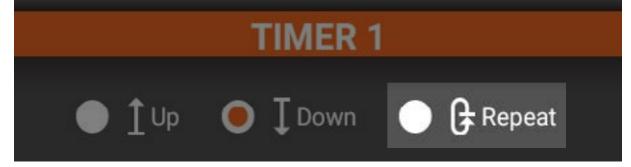
- Select minutes (0-599) and seconds (0-59) by tapping in the appropriate box.
- Select the button or switch to activate, pause and reset the timer.
- This timer can also be paused or reset on the main DashBoard screen.



#### **Down Timer**

The down Timer counts down, when triggered via a selectable button/switch. When the down timer expires, an Alert will sounds and the timer begins to count up.

- Select minutes (0-599) and seconds (0-59) by tapping in the appropriate box.
- Select the button or switch to activate, pause and reset the timer.
- This timer can also be paused or reset on the main DashBoard screen.



## **Repeat Timer**

Start the Repeat Timer via a selectable programmable switch. When the timer expires, an alarm sounds and the timer resets and begins to count down again.

- Select minutes (0-599) and seconds (0-59) by tapping in the appropriate box.
- Select the button or switch to activate, pause and reset the timer.
- This timer can also be paused or reset on the main DashBoard screen.

## **PHYSICAL ADJUSTMENTS**

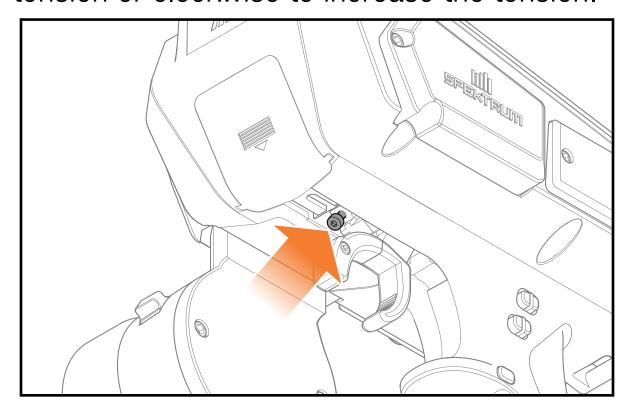
The iXSR is designed to be adjustable to suite a wide variety of driver needs. All control inputs can be configured for left or right handed driving with adjustable angle and spring tension.

## **Available adjustments:**

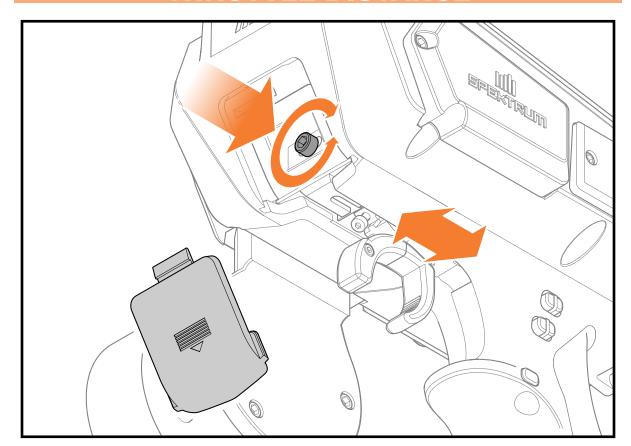
- Trigger and steering tension
- Trigger and steering position
- 5° steering angle adapter
- Small and large steering wheel
- Right- or left-hand steering

#### THROTTLE TENSION

To adjust the throttle trigger tension, using a 1.5mm hex wrench, turn the throttle tension screw counter clockwise to decrease the tension or clockwise to increase the tension.



#### THROTTLE DISTANCE



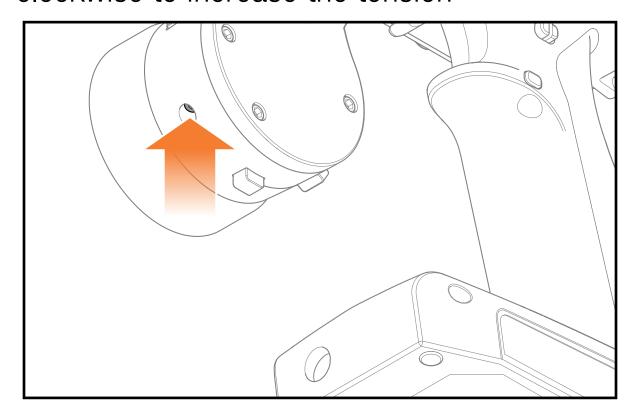
To adjust the throttle trigger forward or bacward:

- 1. Remove the front cover.
- 2. Using a 2mm hex wrench, turn the trigger position adjustment screw clockwise to move the trigger forward and counter clockwise to move the trigger backward.

**IMPORTANT:** Do not turn the adjustment screw past the stopping point of the trigger adjustment range.

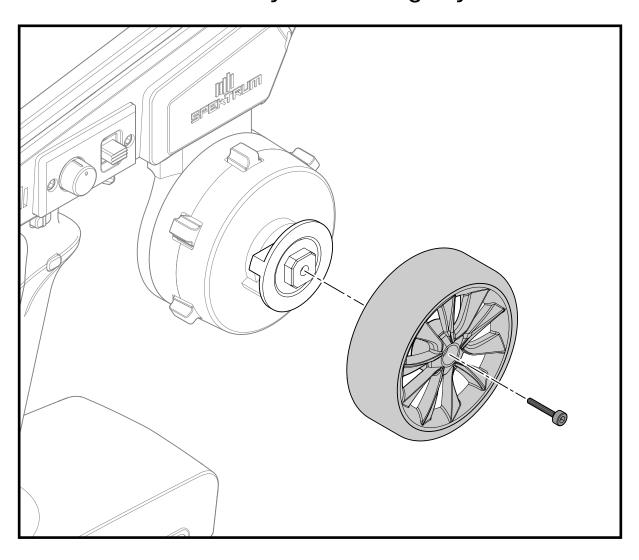
#### STEERING TENSION

To adjust the steering wheel tension, using a 1.5mm hex wrench, turn the steering tension screw clockwise to decrease the tension or clockwise to increase the tension



#### STEERING WHEEL OPTIONS

The iXSR includes two different size steering wheels to better fit your driving style.



To change the steering wheel:

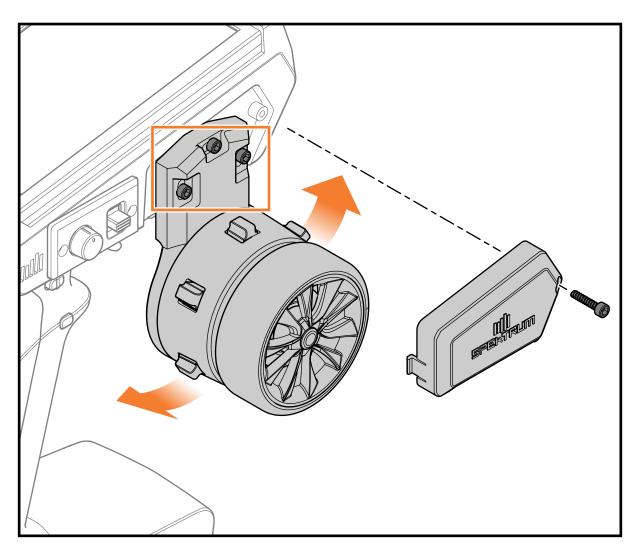
- 1. Using a 1.5mm hex driver, remove the steering wheel retention screw.
- 2. Remove the steering wheel.
- 3. Install the desired steering wheel.
- 4. Re-install the wheel retention screw.

**IMPORTANT:** Do not overtighten the screw.



#### DROPDOWN ROTATION

The iXSR dropdown steering mechanism can be rotated forward or backward to customize the wheel location for a perfect feel.



- With the transmitter powered OFF, using a
   5mm hex wrench, remove the steering mechanism cover screw, and remove the cover.
- 2. Using a 2.5mm hex wrench, loosen the 3 steering mechanism retention screws by 1.5 turns.

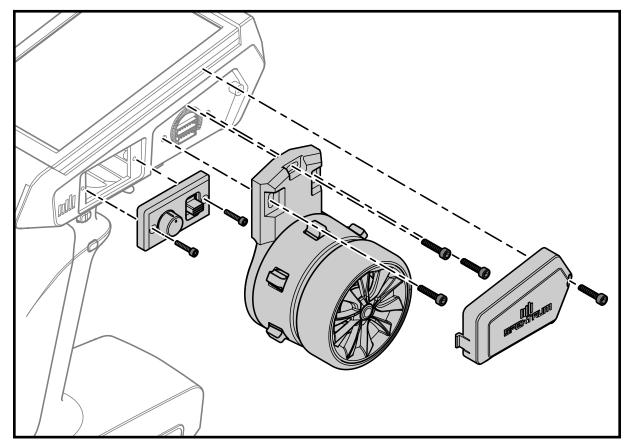
- 3. Rotate the drop down to the desired angle. The mechanism has detents to aid in holding an angle. There are 4 notches of travel from one extreme to the other.

  IMPORTANT: Do not try to force the mechanism to rotate further. Damage to the transmitter or mechanism may result.
- When the desired angle is reached, tighten the 3 retention screws being careful not to pinch any wires.
   IMPORTANT: Do not overtigten the screws.
- 5. Re-install the steering mechanism cover.

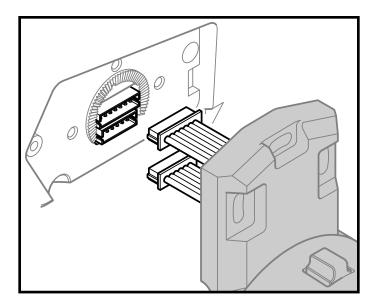
#### CHANGE RIGHT- TO LEFT-HANDED

The iXSR can be configured for either right or left handed drivers. Before beginning, find the alternate side covers included with your transmitter.

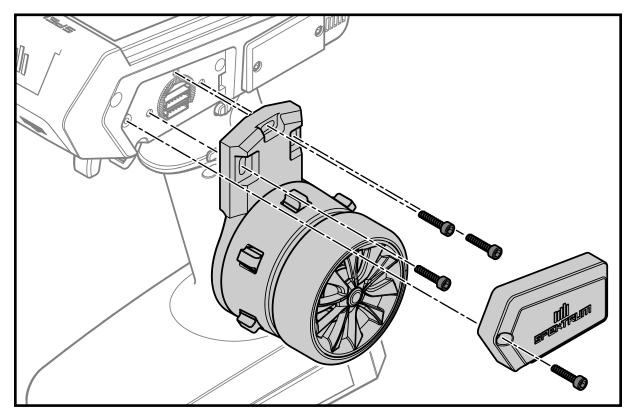
1. Power OFF the iXSR



- 2. Using a 2.5mm hex wrench, remove the front cover screw and remove the cover.
- 3. Using a 2.5mm hex wrench, remove the 3 screws holding the steering mechanism to the transmitter.
- 4. Carefully disconnect the 2 wire connectors from the transmitter board.
- 5. Set the steering mechanism aside.
- 6. Using a 2.5mm hex wrench, remove the back cover screw and remove the cover.



 Connect the 2 wire connectors of the steering mechanism to the board on the other side of the transmitter. Note that one connector has 6 pins and the other has 7.



8. Align the screw holes of the mechanism and the body of the transmitter and reinstall the 3 screws being careful not to pinch any wires. Ensure the detents in the steering mechanism align with the

detents in the transmitter body before fully tightening the screws.

**IMPORTANT:** Do not overtighten the screws.

- Install the steering cover over the steering mechanism. Use the open bottom cover designed for the selected side of the transmitter. The covers are not interchangeable.
- 10. Install the closed bottom cover on the non-steering side of the transmitter.

#### 1-YEAR 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 for a period of 1 years from 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, (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, (ii) repair, or (iii) 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, service and/or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE, REPAIR 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, use 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/servicecenter\_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 to 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 lithium batteries to Horizon. If you have any issue with a lithium 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 without liability to Horizon.

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## WARRANTY AND SERVICE CONTACT INFORMATION

#### **United States of America**

Horizon Service Center
(Repairs and Repair Requests)
servicecenter.horizonhobby.com/
RequestForm/
Horizon Product Support
(Product Technical Assistance)
productsupport@horizonhobby.com
877-504-0233
Sales
websales@horizonhobby.com
800-338-4639
2904 Research Rd
Champaign, IL
61822 USA

## **European Union**

Horizon Technischer Service service@horizonhobby.de Sales Horizon Hobby GmbH +49 (0) 4121 2655 100 Hanskampring 9 D 22885 Barsbüttel, Germany

#### FCC INFORMATION

#### FCC ID: BRWSPMR6420

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and/or antenna and your body (excluding fingers, hands, wrists, ankles and feet). This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## Supplier's Declaration of Conformity Spektrum iXSR 6 Channel Surface Transmitter (SPM6420);

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.

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

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

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

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

Horizon Hobby, LLC 2904 Research Road, Champaign, IL 61822

Email: compliance@horizonhobby.com

Web: HorizonHobby.com

#### **IC INFORMATION**

## IC: 6175A-SPMR6420 CAN ICES-3 (B)/NMB-3(B)

This device contains license-exempt transmitter(s)/receivers(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following 2 conditions:

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

## COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

## EU Compliance Statement: Spektrum iXSR 6 Channel Surface Transmitter (SPM6420);

Hereby, Horizon Hobby, LLC declares that the device is in compliance with the following: EU Radio Equipment Directive 2014/53/EU; RoHS 2 Directive 2011/65/EU; RoHS 3 Directive - Amending 2011/65/EU Annex II 2015/863. The full text of the EU declaration of conformity is available at the following internet address: http://www.horizonhobby.com/content/support-render-compliance.

NOTE: This product contains batteries that are covered under the 2006/66/EC European Directive, which cannot be disposed of with normal household waste. Please follow local regulations.

# Wireless Frequency Range and Wireless Output Power

#### **Control:**

Frequency Band: 2405-2478MHz

Max EIRP: 18.7 dBm

#### 2.4 GHz WiFi:

Frequency Band: 2412-2472MHz

Max EIRP: 8.30 dBm

#### **Bluetooth:**

Frequency Band: 2402-2480MHz

Max EIRP: 8.30 dBm

#### **EU Manufacturer of Record:**

Horizon Hobby, LLC 2904 Research Road Champaign, IL 61822 USA

## **EU Importer of Record:**

Horizon Hobby, GmbH Hanskampring 9 22885 Barsbüttel Germany

#### **WEEE NOTICE:**



This appliance is labeled in accordance with European Directive 2012/19/EU concerning
 waste of electrical and electronic
 equipment (WEEE). This label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.







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SPM6420

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