

SPEKTRUM®

DX3R
PRO RACING SYSTEM



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SD-3C, LLC

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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 a 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 and NOT a toy. 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, Inc. 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.



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WARRANTY REGISTRATION

Visit www.spektrumrc.com/registration today to register your product.

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INTRODUCTION



The DX3R PRO is Spektrum's advanced pro level racing system designed by top level racers. Featuring DSM2™ 2.4GHz technology, the DX3R PRO offers the fastest possible response rate with optimized ergonomics and real time telemetry.*

Spektrum™ technology offers a bulletproof radio link that's immune to internal (noisy motors/ESCs, etc.) and external interfering sources. No longer will you have to wait for a frequency or worry about someone else being on the same channel. With Spektrum, when you're ready to race there's nothing stopping you!

* Requires a DSM telemetry compatible receiver and sensors (sold separately).

SYSTEM FEATURES

- Easy to read backlit LCD
- 50-model memory
- Right- and left-hand compatible, plus drop-down wheel adaptors for optimized ergonomic control
- Vibrating and tone alerts
- DSM2 2.4GHz second-generation technology offers the fastest possible response rate
- Automatic Braking System (ABS) and Traction Control
- One-touch, easy-to-use programming
- Six assignable switches allow functions like timers, on-the-fly expo adjustment, throttle and brake trimmers, steering rate, steering override, etc. to be freely assigned to your preference
- Programmable Steering Rate override
- On-the-fly throttle and steering exponential adjustments
- All switches can be programmed to operate in either direction
- Real-time telemetry
- Four programmable timers: Up, Down, Integrated and Rolling Lap
- 128 x 64 high-resolution dot-matrix screen
- Graphically supported Travel Adjust and Expo curves
- Selectable frame rates of 5.5, 11 and 16.5ms
- Two programmable mixes
- Adjustable trim steps
- Digital servo monitor displays graphic and digital servo positions
- Calibration screen allows recalibration of steering and throttle positions for the ultimate in accuracy

INSTALLING THE BATTERIES

The transmitter requires 4 AA batteries. Brand name alkaline batteries provide over 15 hours of run time.



Remove the battery door and install 4 AA batteries. Make sure the polarity of each corresponds with the diagram in the battery holder. Replace the battery door.

You can also use optional NiMH 1.2-volt AA rechargeable batteries (SPM9525), which you can recharge using the charge jack (not available on all transmitters) below the transmitter's on/off switch and Spektrum's optional charger (SPM9526).

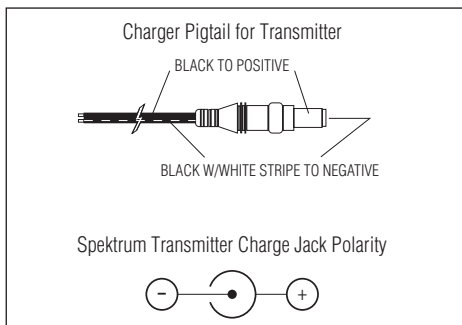


⚠ WARNING: Charge only rechargeable batteries. Non-rechargeable batteries may burst causing injury to persons and/or damage to property, and they may cause fire. Dry location use only.

CHARGING (NOT AVAILABLE ON ALL TRANSMITTERS)

Note: DX3R Pro transmitters with part numbers that end in E or FR do not have charge jacks.

All Spektrum charge jacks are center pin negative. Before using a charger, make sure the connector is center pin negative, you can use a voltmeter for this. Also, the DX3R PRO uses four cells. When charging, use a charger designed for four cells (4.8-volt battery pack).



CHARGING SAFETY PRECAUTIONS AND GUIDELINES

Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

If the transmitter voltage drops below 4.0 volts or the battery alarm goes off, change the batteries or recharge them (if using rechargeable batteries) immediately.

Read all safety precautions and literature prior to use of this product.

- Never leave battery and charger unattended during use.
- Never allow minors to charge battery packs without adult supervision.
- Never attempt to charge dead or damaged batteries.
- Never charge a battery if the cable has been pinched or shorted.
- Never allow batteries or charger to come into contact with moisture at any time.
- Never charge batteries in extremely hot or cold places (recommended between 50–80 degrees Fahrenheit) or place in direct sunlight.
- Always use only NiMH rechargeable batteries. Chargers cannot charge batteries such as “heavy duty,” “alkaline battery,” or “mercury battery.”
- Always properly connect charger and battery.
- Always disconnect the battery and charger after charging, and let them cool between charges.
- Always inspect the battery before charging.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Always make sure you know the specifications of the battery to be charged or discharged to ensure it meets the requirement of this charger.
- Always constantly monitor the temperature of the battery pack while charging.
- Always end the charging process if the charger or battery comes hot to the touch or starts to change form during the charge process.

IDENTIFYING BUTTONS, SWITCHES AND CONTROLS



- | | | |
|--|--------------------------------------|--|
| 1: Antenna | 2: Backlit LCD Screen | 3: Switch D/Steering Rate |
| 4: Switch E/Brake | 5: Button F/Rolling Lap Timer | 6: Charge Jack
(not available on all transmitters) |
| 7: Switch A/Throttle Trim | 8: Switch B/Steering Trim | 9: Switch C/Aux 3 Linear |
| 10: Rolling Selector | 11: Battery Door | 12: On/Off Switch |
| 13: Throttle Trigger | 14: Steering Wheel | 15: Steering Tension Adjustment |
| 16: SD Card Reader (under grip) | 17: Steering Wheel Dropdown | |

Note: The switches listed on the previous page are the factory default functions assigned to each switch. You can program each switch to one of twelve functions including:

- Inhibit
- Aux 3-channel, 3-position (for reverse, neutral and forward transmissions)
- Aux 3-channel, 2-position (for reverse and forward transmissions)
- Aux 3-channel, linear (for mixture control)
- Brake (adjustable full brake position)
- Throttle exponential (allows on-the-fly throttle expo adjustments)
- Throttle trim (coast brake position)
- Steering override (overrides steering rate when activated)
- Steering exponential (allows on-the-fly steering adjustments)
- Steering Rate
- Steering Trim
- Idle Up
- R.O.S.S. (switch F only)

See page 15, 16 for system information and assignments for more details.

RECEIVER COMPATIBILITY

The DX3R PRO features DSM2 technology but is also compatible with Spektrum DSM marine and surface receivers. For the fastest response rate, use the system with a DSM2 receiver like the SR3100. This combination gives the lowest possible latency/quickest response rate.

COMPATIBLE SPEKTRUM RECEIVERS

DSM2

- SR3100- 3-channel DSM2 Pro - SPMSR3100
- SR3520- 3-channel DSM2 Micro Pro - SPMSR3520

DSM

- SR3000- 3-channel Standard - SPM1200
- SR3001- 3-channel Pro - SPM1205
- SR3500- 3-channel Micro Race - SPM1210
- SR300- 3-channel Sport - SPMSR300
- SR3300T- 3-channel with Telemetry - SPMSR3300T

Notice: The SR3000HRS (SPM1202) receiver is for use with Spektrum's Futaba HRS compatible module system only and is not compatible with the DX3R PRO.

Marine

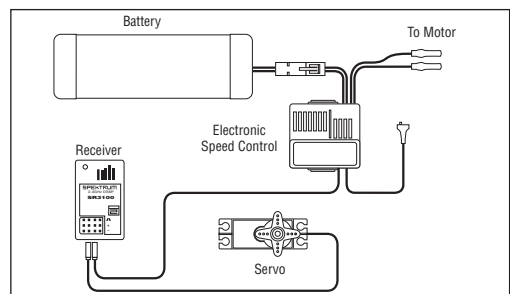
- MR3000- 3-channel Marine - SPMMR3000
- MR200 - 2 channel Sport - SPMMR200

Marine compatible transmitters can be identified by the following logo located on the transmitter.

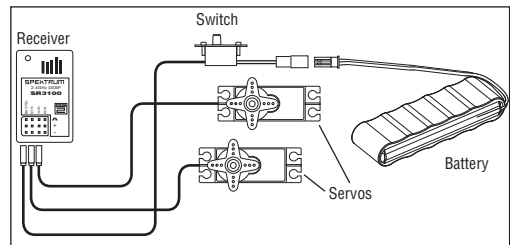


RECEIVER CONNECTION AND INSTALLATION

Typical Electric Installation



Typical Gas Installation



RECEIVER POWER SYSTEM REQUIREMENTS

Inadequate or intermittent power to the receiver that does not provide the necessary minimum voltage during operation is the number one cause of control failures with Spektrum systems. Some power system components that affect the ability to properly deliver adequate power include:

- Receiver battery pack (number of cells, battery construction quality, connector and state of charge)
- The ESC's capability to deliver current to the receiver and servos in electric vehicles
- The switch harness, battery leads, servo leads, regulators etc.

All Spektrum receivers have a minimum operational voltage of 3.5 volts. If the voltage drops below 3.5 volts, the system will cease control until power is regained.

RECOMMENDED POWER SYSTEM TEST GUIDELINES

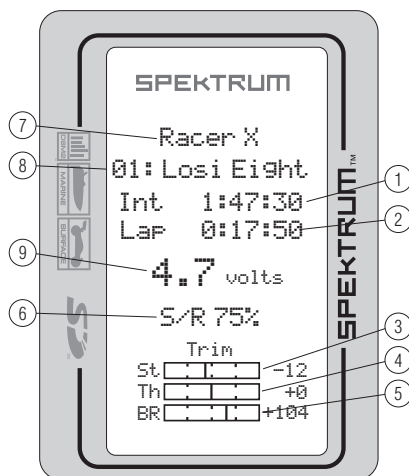
If you are using a questionable power system (e.g. small or old battery, ESC that may not have a BEC that will support the servo's current draw), you should use a voltmeter to perform the following test.

Plug the voltmeter into an open channel port in the receiver. With the system on, load the servos (apply pressure with your hand) while monitoring the voltage at the receiver. The voltage should remain above 4.8 volts even when all servos are loaded. For gas vehicles, tap and twist the receiver battery pack while watching the voltmeter. Some battery packs have poorly welded tabs that give only intermittent power. Such a defect shows up during shock and vibration, so this test verifies the battery construction is good.

TYPICAL RANGE

Your system's range can vary greatly due to your installation and the environment. In most cases you should be able to have full control of your vehicle to the limits of sight. Typical telemetry range is 100–200 feet and will vary depending on the operating environment. If range issues exist, you can optimize your installation by extending the receiver's antenna as vertically as possible. Locating it as high in the vehicle as practical and also route the antenna away from any onboard electronics.

MAIN SCREEN



The information displayed on the screen is as follows.

- | | |
|--|-------------------------------|
| 1: Timer A | 5: Brake Trim or Aux Position |
| 2: Timer B | 6: Steering Rate |
| 3: Steering Trim | 7: User Name |
| 4: Throttle Trim | 8: Model number and name |
| 9: Transmitter (Tx) voltage (flashes and alarm sounds when low battery is reached) | |

While driving/racing you should have the main screen or telemetry screen displayed.

TO ACCESS THE MAIN SCREEN

Any time the transmitter is turned on the main screen appears.

From the List screen, the first function at the top of the List screen is Main. Using the roller, highlight the Main function and press the roller to access the Main screen.

Pressing and holding the rolling selector for more than 3 seconds from any screen - returns the display to the Main Screen.

Note: When the battery voltage drops below the preset value in the System function (preset to 4.0 volts), an alarm sounds and the voltage reading flashes.

LIST

The List screen displays all the available functions. To access a function, highlight it with the roller. Then press the roller to enter the function.

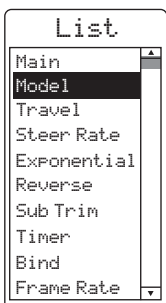


TO ACCESS THE LIST SCREEN

From the main screen, press the roller to access the List screen.

From any other screen, a back arrow ← is located at the top of each programming screen. Highlight this arrow with the roller and then press the roller to return to the List screen.

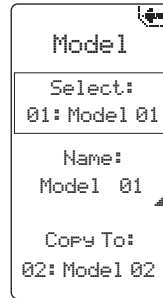
MODEL



- From the list screen, highlight the Model function.
- Press the roller to access the Model screen.

Model Select:

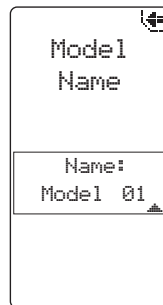
Allows you to store and select up to 50 model memories.



- In the Model screen use the roller to highlight the Select function.
- Press the roller to access. The box will flash, indicating the Select function is active.
- Use the roller to select the desired model memory (models 01 thru 50).

Model Name:

Allows you to give the selected model a name with up to ten characters.

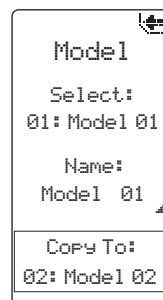


- In the Model screen use the roller to highlight the Name function.
- Press the roller to access.
- Use the roller to select the desired model name character position by placing the cursor below the desired position.
- Press the roller to access that character or number; then use the roller to change to the desired letter or number.

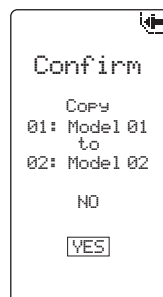
- Press the roller to move the cursor to the next field.

Model Copy:

Allows you to copy a model memory internally to a different model memory. For example, you can copy model 01 to model 50.



- Highlight the Copy To function.
- Press the roller to access. The box will flash, indicating the Copy To function has been selected.
- Use the roller to select the model you choose to copy to (models 01 thru 50).

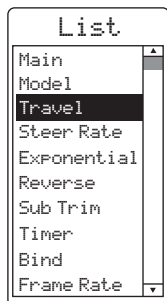


- Press the roller. The confirmation screen shown to the left appears. If the selected model is correct, use the roller to highlight YES and press the roller to copy from the current model to the selected model.

Note: This will erase the selected model's memory.

TRAVEL

The Travel screen (travel adjust or endpoints) allows independent travel adjustment of the servo throw in each direction of all three channels—steering, throttle and auxiliary.



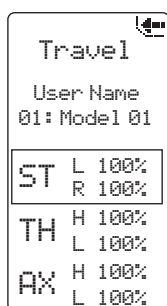
- From the list screen, highlight the Travel function.

Changing Values Equally:

- Press the roller. The Travel screen will display.
- Rotate the roller to highlight the channel you wish to adjust.

ST= Steering
TH= Throttle and brake
AX= Auxiliary channel 3

- Press the roller to enter the highlighted channel's travel function.
- Rotate the roller to highlight the values at the bottom of the screen. Press the roller to select both. The boxes highlighting the values should be flashing.



- Rotating the roller wheel will now adjust both the right and left values simultaneously.
- Press the roller to set the desired value.

Changing Values Independently:

- To adjust the right or left values independently, rotate the wheel left or right for steering and aux,

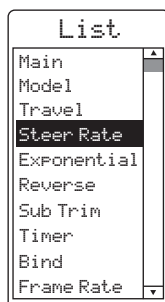
or move the trigger forward or backward for throttle. The left and right values can now be adjusted independently.

- To highlight both values again, press the roller once and both values will be highlighted.

STEERING RATE

Steering rate (dual rate) allows you to make on-the-fly steering travel adjustments using any of the programmable grip trimmers (A, B, C, D or E). The Steering Rate screen also offers a Steering override function that allows you to access a second steering rate (normally 100%) at the touch of a button or

trimmer. This is especially helpful for oval racers that program minimal steering throw to desensitize steering during racing but require maximum steering angle to drive out of a crash or get turned around on the track. The user name, model number and model name are also displayed in this screen.

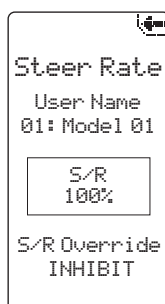


- From the List screen, highlight the Steering Rate function.

- Press the roller to access.
- Use the roller to select the S/R function or the S/R Override function by placing the box around the desired function.

- Press the roller to access S/R or S/R Override; then use the roller to change to the desired Steering rate value.

- Press the roller to set the value.



Note: You can assign the adjustable S/R to any of the trimmers (A, B, C, D and E). It defaults to trimmer D. This trimmer works in unison with the S/R Rate screen. You can

adjust the value using the assigned trimmer from either the S/R Rate screen or the Main screen. If you don't want an on-the-fly adjustable Steering rate, you can inhibit the S/R trimmer. See Switch Select on page 15 for more details.

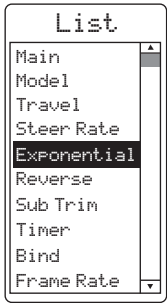
Note: In order for the S/R Override to operate, you must assign it to a switch or trimmer. The default position for this function is inhibited. See Switch Select on page 15, 16.

EXPONENTIAL

With Exponential you can affect the response rate of the steering, throttle and/or brake.

Typically positive Exponential is used for steering, reducing steering sensitivity around neutral and making it easier to drive the car at high speeds in a straight line. But exponential still allows for the maximum turning radius.

The DX3R PRO's Exponential function (Expo for short) allows independent Expo values in each direction of all three channels—steering, throttle and auxiliary. A graphic illustration displays the effect of exponential adjustment.



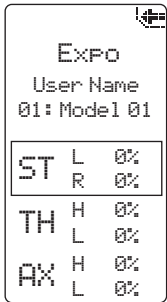
- From the List screen, highlight the Exponential function.
- Press the roller to enter the Exponential function. The Expo screen will display as shown.

Changing Values Equally:

- Rotate the roller to highlight the channel you wish to adjust.

ST= Steering
 TH= Throttle and brake
 AX= Auxiliary channel 3

- Press the roller to enter the highlighted channel's travel function.
- Rotate the roller to highlight the values at the bottom of the screen. Press the roller to select the values.



- Rotating the roller wheel will now adjust both the right and left values simultaneously.

Changing Values Independently:

- To adjust the right or left values independently, rotate the wheel left or right for steering and aux, or move the trigger forward or backward for throttle. The left and right values can now be adjusted independently.

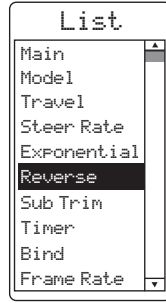
right values can now be adjusted independently.

- To highlight both values again, press the roller once and both values will be highlighted.

Note: Positive and negative Expo values are available. A positive Expo value results in the center being less sensitive (desirable most of the time) while a negative value increases the sensitivity around center (normally not used).

REVERSE

The Reverse function (servo reverse) establishes the servo's direction relative to the channel's input (e.g., a right steering input should result in a right steering angle at the car). Reverse is available on all three channels.

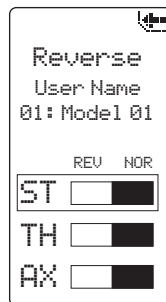


- From the List screen, highlight the Reverse function.
- Press the roller to access the Reverse function. The following screen appears.

- Use the roller to select the channel you wish to reverse.

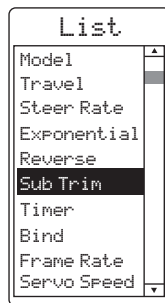
ST=Steering
 TH=Throttle
 AX= Auxiliary

- Press the roller to highlight that channel and the surrounding box will flash. Rotate the roller to change to the desired servo direction (REV or NOR).
- Press the roller to set the value.



SUB-TRIM

The Sub-Trim function corrects for minor angular inaccuracies that occur when placing the servo horn on the servo. In many cases, the servo horn is not exactly perpendicular to the servo, or in the exact optimum desired position.



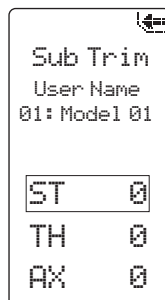
- From the List screen, highlight the Sub-Trim function.
- Press the roller to access the Sub-Trim function. The following screen appears.

- Use the roller to select the channel you wish to reverse.

ST=Steering
 TH=Throttle
 AX= Auxiliary

- Press the roller to highlight that channel. The surrounding box will flash. Rotate the roller to adjust the value and direction of the sub-trim.

- Press the roller to set the value.



TIMER

The DX3R PRO offers four types of timers:

- Int- Internal
- Dn Tmr- Down Timer
- Up Tmr- Up Timer
- Lap- Rolling Lap Timer

Timer A or B can be assigned to one of the four types. Both timers will be shown on the Main screen.

Internal Timer (Default Timer A)

Automatically records the time the transmitter is turned on. To reset the internal timer, rotate the roller to highlight Internal Reset and then press the roller.

Rolling Lap Timer (Default Timer B)

Is programmable from 0:00.5 to 4:59.9 minutes in .1 second increments. The Rolling Lap timer is started via a selectable programmable switch. When the timer expires, an alarm sounds and the Lap timer resets and begins to count down again. To pause the timer, press the button/switch the timer is programmed to. To reset the timer to its preprogrammed value, press and hold the programmed button for more than three seconds. Button F defaults to the timer.

Up Timer

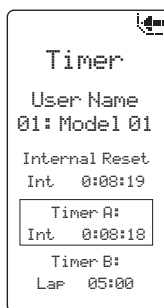
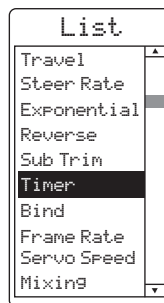
The Up Timer is triggered via a selectable button/switch. It counts up from 00:00 seconds, functioning as a stopwatch. It is useful for timing a fuel run to determine fuel mileage/pit stop strategy or, for electrics, to time the run time of a pack to determine gear ratio and setup information. To pause the Up timer, press the button/switch the timer is programmed to. To reset the UP timer to 00:00, press and hold the programmed button for more than three seconds.

Down Timer

Is programmable for up to 99 minutes and 99 seconds in one-second increments. The Down timer is started via a selectable button/switch. When the down timer expires, an alarm sounds and the timer begins to count up. To pause the Down timer, press the button/switch the timer is programmed to. To reset the Down timer to its preprogrammed value, press and hold the programmed button for more than three seconds.

Note: If Down timer is selected, press the roller again to change the time. Rotate the roller to change the time.

- From the List screen rotate the roller to highlight the Timer function.



- Press the roller to enter the Timer function. The Timer screen will display as shown below.
- Rotate the roller to highlight the desired Timer you choose to program (Timer A or Timer B).
- Press the roller to enter the highlighted Timer function.
- Rotate the roller to select the desired type within Timer A or Timer B:

- Int- Internal
- Dn Tmr- Down Timer
- Up Tmr- Up Timer
- Lap- Rolling Lap Timer

See System on page 15, 16 for details on programming the timers to various buttons and switches.

BINDING

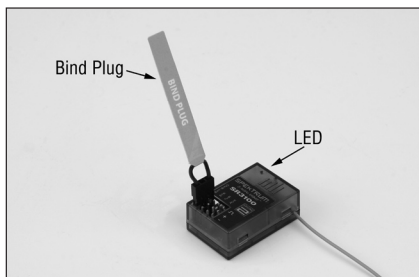
In order to operate you must bind the receiver to the transmitter. Binding is teaching the receiver to recognize the transmitter's specific GUID code.

The DX3R Pro employs ModelMatch so the receiver stores the code assigned to the currently selected model in the transmitter. So when the receiver is bound to a transmitter/model memory, the receiver only responds to the stored transmitter/model memory. This prevents operating a model using the wrong model memory.

FAILSAFE

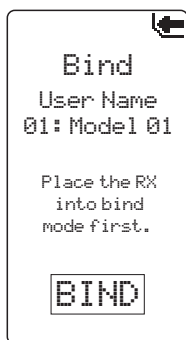
Failsafe positions are also set during binding. In the unlikely event that the radio link is lost during use, the receiver will drive the servos to their preprogrammed failsafe positions (normally full brakes and straight steering). If the receiver is turned on prior to turning on the transmitter, the receiver will enter failsafe mode, driving the servos to their preset failsafe positions. When the transmitter is turned on, normal control is resumed. Failsafe servo positions are set during binding (see binding a receiver below).

BINDING A RECEIVER



Note: The SR3100 operates in DSM2 mode only and is compatible with DSM2 transmitters.

1. With the receiver off, insert the bind plug into the Batt/Bind port in the receiver.
2. Power up the receiver. If using an electronic speed controller, plug the lead into the throttle port and turn on the switch. If using a receiver pack, plug the battery lead into any open port noting the polarity. The LED on the receiver will begin flashing.
3. Turn on the transmitter and make sure the transmitter is in the model number you intend to use.
4. Press the rolling selector to access the List screen.
5. Rotate the roller to highlight the Bind screen and press the roller to access this screen.



6. Rotate the roller to highlight BIND.
7. With the steering wheel, throttle stick and Aux channel (if applicable) in the desired preset failsafe positions, press the roller to initiate the bind process and to store the failsafe positions. BIND will flash for a few seconds then the transmitter will beep, indicating the process is complete. The LED on the receiver should now be solid, indicating a successful bind.
8. Remove the bind plug and store it in a convenient place.

Note: The only time you need to rebind is if you desire different failsafe positions or if binding the receiver to a different model memory.

Note: Some Spektrum receivers like the SR3001 use a bind button rather than a bind plug. The binding process is the same with this receiver. However, instead of inserting the plug before powering up the receiver, press and hold the bind button while powering up the receiver to enter bind mode.

FRAME RATE

For compatibility with all types of servos, three frame rates are available.

5.5ms: Gives the fastest response rate; is only compatible with high-performance digital servos. DSM surface receivers output at 11ms and Marine receivers output at 22ms when 5.5ms is selected.

Note: when 5.5ms frame rate is selected only two channels (steering and throttle) are operational.

11ms: Offers good response rates and is compatible with most digital and analog servos (this is the default position). Works with both DSM and DSM2 surface receivers. Marine receivers output at 22ms when 11ms is selected.

16.5ms: This is the least responsive rate and is needed for older analog servos. Works with both DSM and DSM2 surface receivers. Marine receivers output at 22ms when 16.5ms is selected.

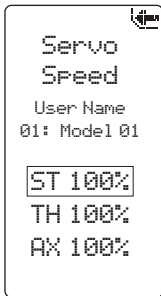
Note: You should always use the fastest response rate the servos can handle. This gives the lowest latency and fastest response. If the frame rate is incompatible with the servo, the servo will move erratically or in some cases not at all. If this occurs, change the frame rate to the next highest value.



- In the List screen, use the roller to highlight the Frame Rate function.
- Press the roller to access.
- Rotate the roller to select and highlight Frame Rate, at the bottom of the screen.
- Press the roller to highlight the Frame Rate function. The box will flash. Rotate the roller to select the frame rate.

SERVO SPEED

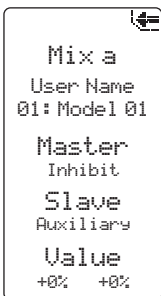
The Servo Speed function allows you to change the speed of any of the three channels—steering, throttle and Aux. from 100% (default) to 1%. The maximum speed is 100% and is fixed by the specifications of the servo itself.



- In the List screen use the roller to highlight the Servo Speed function. Press the roller to access the Servo Speed function. The Servo Speed screen appears.
- Use the roller to select the desired channel then press the roller to access that channel. Rotate the roller to adjust the servo speed.

MIXING

The mixing function allows you to mix any channel to any other channel. Two mixes are available, Mix A and Mix B. Both mixes function identically. The primary or controlling channel is called the master while the channel mixed to is called the slave. The slave channel follows the movement of the master channel. Negative values cause the slave to move in the opposite direction. The trim is active for both the master and slave channels.



- In the List screen use the roller to highlight the Mixing function.
- Press the roller to access.
- Use the roller to select the Mix you wish to adjust, Mix A or Mix B.
- Press the roller to highlight that mix and the surrounding box will flash. Rotate the roller to access that mix function.
- Use the roller to highlight the master or slave channels, then press to access master or slave.
- Use the roller to highlight Value, then press the roller. Adjust the mix values by rotating the roller. Independent values can be adjusted by holding the master channel input (e.g., steering wheel) in the desired direction and scrolling the roller.
- Mixing values and their proportions can be observed in the Monitor screen on page 15.

ABS

Automatic Braking System (pulse brakes) helps prevent brake lock-ups and improves braking performance by pulsing the brakes. The following ABS braking parameters can be programmed:

State: Inhibit or Active

Point: The throttle position that the pulse braking takes place. (0 to 100, default is 90)

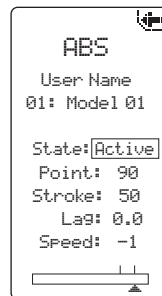
Stroke: The distance the throttle travels during the pulse braking. (0 to 100, default is 50)

Lag: The time delay before the pulsing takes place (0.0 to 2.0 in .1 increments, default is 0.0)

Speed: The pulsing speed or frequency of the pulse braking. (-1 to -30, default is -1)

The graphic bar at the bottom of the screen displays the parameters and shows how ABS will function.

Note: State must be Active to turn on the ABS function.



- In the List screen use the roller to highlight the ABS function.
- Press the roller to access the ABS function. The ABS screen appears.
- Use the roller to select the ABS parameter you wish to adjust.
- Press the roller to highlight that parameter and the associated box will flash. Rotate the roller to adjust that function.

IDLE UP

Idle up (also called high idle) is used to advance the throttle position on a gas car during startup to prevent the engine from dying before the engine is warmed up.

The following Parameters are available:

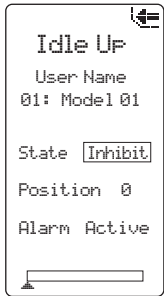
State: Inhibit or Active

Position: Adjusts the throttle position when idle up is engaged (0 to 100, default is 0)

Alarm: Activates an alarm when the idle up is active

The graphic bar at the bottom of the screen displays the parameters and shows how Idle Up will function.

Note: State must be Active to turn on the Idle Up function.



- In the List screen use the roller to highlight the Idle Up function.
- Press the roller to access the Idle UP function. The Idle Up screen appears.
- Use the roller to select the Parameter you wish to adjust. Press the roller to highlight that Parameter. The associated box will flash, then rotate the roller to adjust that function.

Note: Idle Up must be assigned to a button in the System Screen under Switch select in order to operate the Idle Up function. (See page 15, 16 for more details)

TRACTION

Traction Control helps reduce wheel slippage and improve acceleration by ramping the throttle. The following adjustable throttle parameters can be programmed:

State: Inhibit or Active

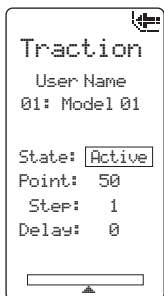
Point: The throttle position that traction control disengages. (5 to 100, default is 50)

Step: The distance the throttle travels during the reduced rate. (1 to 100, default is 1)

Delay: The time after pulling the trigger traction control engages. (0 to 25, default is 0)

The graphic bar at the bottom of the screen graphically displays the parameters and shows how traction control will function.

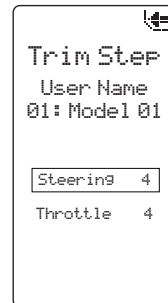
Note: State must be Active to turn on the Traction Control function.



- In the List screen use the roller to highlight the Traction function.
- Press the roller to access the Traction function. The Traction screen appears.
- Use the roller to select the Traction parameter you wish to adjust.
- Press the roller to highlight that parameter and the associated box will flash. Rotate the roller to adjust that function.

TRIM STEP

The Trim Step function allows the user to adjust the sensitivity of the steering and throttle/brake trims. Trim Step affects the amount the servo travels with each click of the trim but has no effect on the total trim travel. In essence, Trim Step changes the number of trim steps available within the trim stroke and has no effect on the total trim travel. Trim Step allows the user to fine-tune the steering, throttle and brake trims to meet the needs of specific applications.

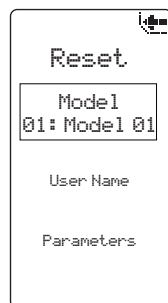


- In the List screen highlight the Trim Step function.
- Press the roller to access the Trim Step function.
- Select the channel you wish to adjust.
- Press the roller to highlight that channel and the surrounding box will flash. Rotate the roller to adjust

the Trim Step value. The adjustment range is from 1 to 20 (very fine to coarse trim steps). The default setting is 4.

RESET

Model Memory and User Name: The Reset function is used to reset the selected Model Memory and the User Name back to the factory defaults.



- In the List screen use the roller to highlight the Reset function.
- Press the roller to access the Reset functions.
- Rotate the roller to select the function you choose to reset.
- Press the roller to access the selected reset function.

Model:

If you selected Model, the box around it should be flashing indicating this feature is active. Use the roller to select the model memory you wish to reset. Press the roller to access the Confirm screen.

- Use the roller to highlight YES; then press the roller to reset.

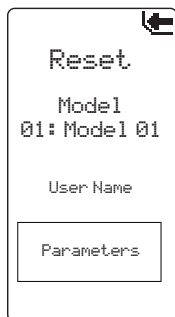
User Name:

If you selected User Name, you will see a Confirm screen asking you to confirm the User Name Reset. Press the roller to select Yes or No.

Parameters:

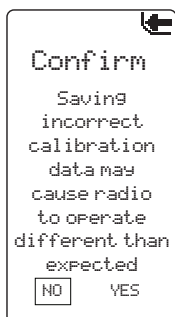
Within Reset, you can use the Parameters function to recalibrate the transmitter's steering and brake potentiometers.

CAUTION: If calibration is not properly completed, the radio will not function correctly. If after calibration the steering or throttle does not function properly (the travel is reduced or no servo travel), you will need to recalibrate the transmitter.



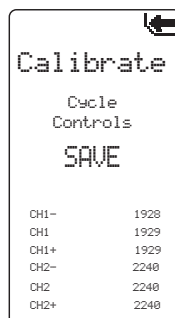
- In the List screen use the roller to highlight the Reset function.
- Press the roller to access the Reset functions
- Use the roller to select Parameters.
- Press the roller to access the Confirm screen.

CAUTION: Once YES is selected, you must complete all the calibration steps described in this section or the radio will not function properly.



- Use the roller to highlight YES then press the roller to reset. The following screen appears.

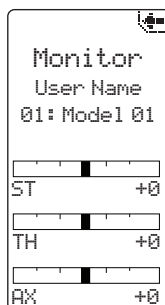
Note: The values will change to correlate with the actual potentiometers.



- Rotate the steering wheel full right then full left; then move the throttle trigger to full throttle and full brake.
- After realigning steering and throttle/brakes, highlight SAVE. Press the roller to save the settings.

MONITOR

The servo monitor displays the servo output positions graphically and digitally. This monitor can be useful in troubleshooting setups, displaying mixing functions and how they interrelate.



- In the List screen use the roller to highlight the Monitor function.
- Press the roller to access the Monitor function. The real-time servo output positions will display.

SYSTEM

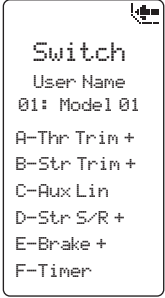
The System function allows you to program the six available switches to a desired function. You can select the user name, adjust the display and set alert types.

Switch Select

The Switch Select function allows you to assign any of the six available switches to one of the following functions.

Inhibit	Switch/button turned off
Aux 3P	Channel three functions as a three-position output
Aux 2P	Channel three functions as a two-position output
Aux Lin	Channel three functions as a linear output
Brake	Full brake trim
Thr Exp	Throttle exponential
Idle Up	Engages idle up
ROSS bnd*	Activates Losi R.O.S.S. to the bind port
ROSS Aux*	Activates Losi R.O.S.S. to the Aux port
Thr Trim	Throttle trim—adjusts the neutral throttle position
S/R Override	Steering override
Str Exp	Steering exponential
Str S/R	Steering rate
Str Trim	Steering trim
Timer*	Activates up, down and rolling lap timers

* ROSS Bnd, ROSS Aux, and Timer can only be assigned to button F.



- Highlight the desired switch/button and press the roller. Use the roller to select the desired function from the list above.
- **Note:** A positive or negative value is available for many of the above functions allowing the reversing of the switch direction.

User Name

You can program a user name with up to ten characters. The name will display on the main screen.



- In the System screen highlight the User Name and press the roller to access the function.
- Use the roller to select the position, then press the roller to access the character.

Display

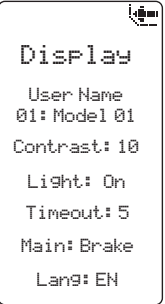
The Display screen allows you to adjust the backlight, main screen, and languages.

Contrast:

The contrast can be set to a value from 0–30, 0 is the lightest, 30 is the darkest, default is 10.

Light:

You can set the backlight to one of three modes: Timer, On or Off.



- **Timer:** The backlight will turn off after a preset delay (set by the Timeout value). Press any button to reset the delay.
- **On:** The backlight never turns off when the transmitter is on.
- **Off:** The backlight is always off.
- Use the rolling to access Light.
- Press the roller and the surrounding box will flash.

- Rotate the roller to the desired backlight mode and press the roller to select it.

Timeout:

The amount of time the light stays on before turning off when Light is set to Timer. The timeout can be set from 1 (default) to 10 seconds.

Main:

You can change the brake percent display at the bottom of the main screen to display the Aux channel position or the dig position, for crawlers equipped with a dig transmission.

- Brake: Brake percent
- Aux: Aux channel position
- Dig: Dig transmission position indicator

- In the Display screen, highlight Main and press the roller.
- Use the roller to select the desired function from the list above. Press the roller to save the settings.

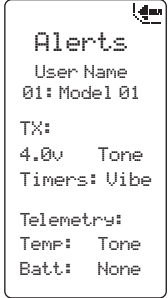
Language:

The DX3R PRO can display the screen text in one of four languages: English (default), German, French, and Italian. Use the roller and select the Language function.

- Press the roller and the surrounding box will flash.
- Rotate the roller to the desired language and press the roller to select it.

Alerts

This function allows the type of alert for each model to be set. The alert type can be none, tone, vibrate, or both tone and vibrate.



- Use the roller and select the Alerts function.
- Press the roller and the Alerts screen displays.
- Rotate the roller to the desired alert and press the roller to select it.
- Rotate the roller to use the alert type and press the roller to select it.

- **Voltage Alert:** The Voltage Alert sets the voltage threshold of the transmitter batteries at which the alarm sounds. The default setting is 4.0 volts. If you wish to change this setting, the first click of the roller will highlight the Voltage Alert value. Rotate the roller to adjust the voltage threshold from 0.0 to 6.5 volts.

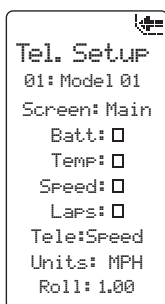
RF Mode

The DX3R PRO has a France RF Mode that complies with French regulations. The RF mode should be set to STD (standard output) and should only be changed to FR (France) when operating your transmitter in France.

- In the System screen highlight RF Mode and press the roller to access the function.
- Use the roller to change the RF Mode.
- Press the roller to set the value.

TELEMETRY*

The Telemetry function is used to select a default screen for displaying telemetry data. It is also used to access the Telemetry SPEED, BATTERY, TEMPERATURE, and LAP settings.



- In the List screen use the roller to highlight Telemetry then press the roller. The Tel. Setup screen appears.

* Telemetry sensors, mounting brackets, and telemetry compatible receivers sold separately.

Screen

The screen functions allows you to choose how the telemetry data screen is accessed. Three options are available:

MAIN: Only the main screen in displayed. The telemetry data screen is hidden.

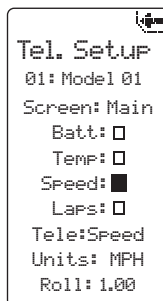
TELE: Only the telemetry data screen is displayed. The main screen is hidden.

ROLL: The roller is used to switch between the telemetry data and main screens.

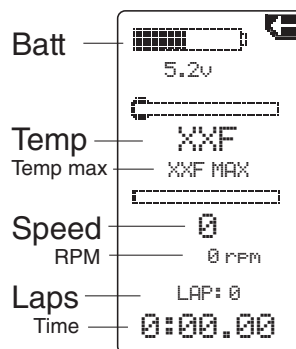
- Rotate the roller and choose your desired default screen.
- Press the roller to select.

GAUGES

You can select which gauges to display on the telemetry data screen. The Batt, Temp and Speed gauges are displayed by default. The Lap gauge can also be added.



- Rotate the roller to highlight the box by each gauge.
- Press the roller to select (solid box) or deselect (empty box) a gauge.



Telemetry Sensor Settings

The DX3R PRO allows you to modify the settings for the Speed, Temp, and Batt sensor.

Tele: Speed

Unit: Select MPH or KM/H display units.

Roll Out: The Roll Out function is the internal calculator that can convert rpm data to mph or km/h. When the Roll Out value is set to 1.0, the default setting, the value displayed on the main screen and stored in maximum speed is true rpm of the shaft gear or flywheel that the rpm sensor is hooked up to. In order to program the unit to display speed in mph, a conversion factor is needed. Following are two methods of determining the conversion factor.

Method A

- Mark the clutch bell that the sensor is reading from with a small reference mark. A marker works well.
- Set the car next to a ruler and at 0" then roll the car forward by hand, counting each revolution of the reference mark. At exactly 10 revolutions stop the car.
- Measure the exact distance the car traveled in ten revolutions and divide this distance by 10 (e.g., 12.0" divided by 10 = 1.20").

- Adjust the Roll Out value until 1.20 appears on the screen. Now all the rpm related functions will display in mph or km/h.

Method B

For this method you either need to know the internal gear ratio (normally provided in the vehicle's manual) or calculate the ratio via the number of teeth on the gears. It is also necessary to calculate the circumference (distance around) of the tire. Once the internal ratio is known, and the circumference in inches determined, divide the circumference by the internal ratio and use this value as the conversion.

To calculate circumference, multiply 3.14 x the tire's diameter in inches.

To calculate internal gear ratio, divide the larger gear by the small gear. With multiple gear transmissions, multiply each of the larger to smaller gear reduction ratios to arrive at the final ratio.

Note: The Telemetry screen displays the maximum recorded speed from the point the receiver was turned on. To reset the maximum recorded speed, turn off the receiver, then back on.

Tele: Temp

Unit: Display Temperature Unit in degrees Fahrenheit or Celsius.

Alert: The Temperature Alert allows you to preset an alert warning when you reach a specified temperature.

Note: The Telemetry screen displays the maximum achieved temperature from the point the receiver was turned on. To reset the maximum temperature, turn off the receiver, then back on.

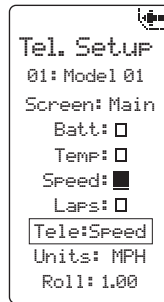
Tele: Batt

Note: The voltage displayed is the receiver voltage. This is especially useful for nitro cars in alerting you to change your receiver pack before your vehicle goes into failsafe due to low battery pack voltage.

Alert: The Battery Alert setting allows you to preset a low voltage warning. When the battery voltage in your receiver drops below the preset voltage, the transmitter will alert you by beeping. Typical recommended preset value is 1.1-volt per cell. However, when using high-current draw servos, reduce that value to .9-volt per cell.

Recommended voltage settings:

- 5-cell 6.0-volt pack = 5.5 volts
- 4-cell 4.8-volt pack = 4.4 volts



- Rotate the roller and place a box around Tele: Speed, then press the roller. The surrounding box will flash.

- Rotate the roller to select the desired sensor setting for adjustment then press the roller.

- Press the roller to select the sensor parameters to adjust.

- Press the roller and a surrounding box will flash.

- Rotate the roller to adjust the value and press the roller to select.

INSTALLING TELEMETRY SENSORS* IN YOUR VEHICLE

*Telemetry sensors, mounting brackets, and telemetry compatible receivers sold separately. The SR3100 receiver is not telemetry compatible.

RECEIVER BATTERY VOLTAGE

Receiver battery voltage is built into the telemetry compatible receiver and no further attachment of sensors is necessary.

Note: The receiver battery must be above 3.5 volts for proper telemetry operation.

RPM/SPEED SENSOR (NITRO) (SPM1452)

An infrared sensor is available to record rpm values that the transmitter unit can convert to actual speed in mph or km/h. The sensor emits an infrared light and a receptor records the reflection vs. the absorption of light. You need to place a reflective or light absorbing decal (provided) on the flywheel to allow the sensor to record rpm. Mounting hardware is available for easy installation.

RPM/Speed Sensor Installation (Nitro)

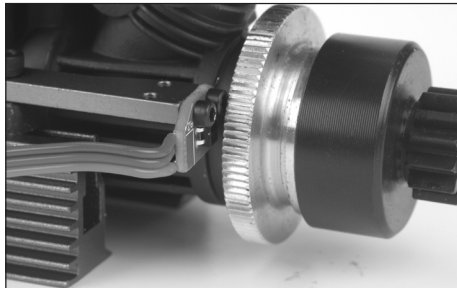
- Choose the correct nitro mount for your engine. Two mounts are available: one for .12–.15 engines (SPM1502) and one for .21–.26 engines (SPM1501).



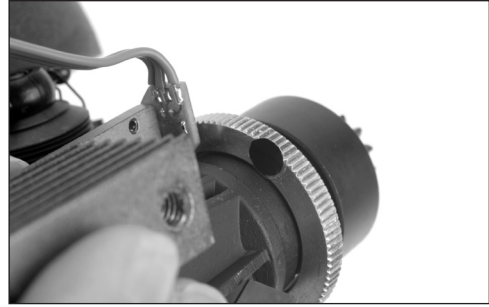
- Using the 2mm screws, attach the sensor to the mount as shown.



- Install the mount under the engine screw and adjust the sensor so it is 1/8" from the flywheel. Depending on your flywheel size, the sensor might have to be mounted in different orientations.



- If the flywheel is reflective (bare metal), place a flat black decal on the flywheel so it passes between the sensor and the flywheel when rotated. If the flywheel is non-reflective, place a reflective decal on the flywheel so that it passes between the sensor and the flywheel when rotated.



Hint: We recommend applying a small amount of CA glue around the edges of the decal to ensure strong adhesion. Only glue the edges and do not cover the top of the decal.

- Plug the sensor into the RPM port in your receiver.

RPM/SPEED SENSOR (ELECTRIC) (SPM1503)

In electric cars and trucks, the rpm sensor is mounted near the spur gear and gets rpm readings directly from that gear. You can program a conversion in the transmitter to give speed in mph or rpm. See the Telemetry Speed Unit section on rpm and speed for more details. A mount is available that allows the rpm sensor to be mounted in many applications. Because of the diverse types of electric vehicles, you may need to fabricate a mount from polycarbonate material for some types of vehicles.

RPM/Speed Sensor Installation (Electric)

- Determine the best method to mount the sensor near the spur gear. The face of the sensor must face the side of the gear. You can tape a mount in place using servo tape then bend it to allow installation in most applications.
- Mount the rpm sensor so the sensor is 1/8" from the side of the gear.
- If the gear is non-reflective, place a reflective decal on the gear so it passes between the sensor and the flywheel when rotated. If the gear is reflective, place a flat black decal on the gear so it passes between the sensor and the gear when rotated.
- Plug the sensor into the RPM port in your receiver.

TEMPERATURE SENSOR (NITRO) (SPM1450)

A temperature sensor loop is available that wraps around the head of the engine to monitor head temperature. This is useful in tuning engines and in preventing damaging over-lean runs.

Temperature Sensor Installation (Nitro)

- Install the loop as shown around the cylinder of the engine. It is best to place the sensor near the point

at which the head meets the cylinder to get the most accurate, consistent readings.



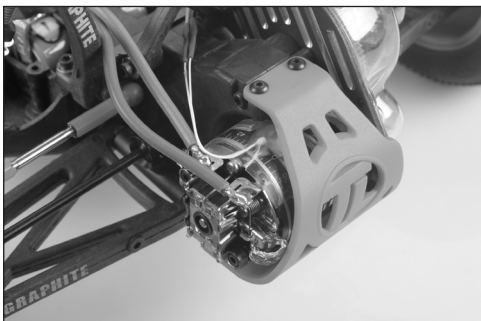
- Plug the temperature sensor into the port marked TEMP in your receiver. The Telemetry screen on the DX3R PRO should now display the room temperature.

TEMPERATURE SENSOR (ELECTRIC) (SPM1451)

A Thermister-type temperature sensor is available that can be taped to the battery or motor to monitor real-time temperature. You can use transparent tape to attach the sensor for temperatures up to approximately 250°F high. High-temperature tape is needed for temperatures exceeding 250°F.

Temperature Sensor Installation (Electric)

- Tape the temperature sensor to the area you wish to monitor (normally the batteries or motor).



- Plug the temperature sensor into the port marked TEMP in your receiver. The Telemetry screen on the DX3R PRO transmitter will now display room temperature.

LAP COUNTER/TIMER (SPM1453)

The lap counter displays the lap time. In order to use the lap timer, an optional lap trigger, onboard telemetry module (SPM1325) and SR3001 receiver (SPM1205) are required for the lap counter. The lap counter/timer system utilizes an infrared sensor in the car and the lap trigger projects an infrared light across the track that triggers the sensor when the car passes. A Lexan mount is provided to allow easy

mounting of the lap counting sensor in your vehicle.

Note: The lap sensor must be mounted in visible sight of the lap trigger. Normally this means just inside the side window. If the windows are painted, it will be necessary to cut a small hole in the body to allow the IR light to trigger the sensor.

Lap Counter/Timer Installation

- Servo tape the lap sensor to the Lexan mount.
- Determine the mounting position that will place the sensor behind the side window.
- Cut and/or bend the Lexan mount to position the sensor in the appropriate position and servo tape the mount in place.
- Plug the lap sensor into the L (lap) port in the telemetry module.

LAP TRIGGER (SPM1330)

The Lap Trigger is placed next to the track and projects an infrared beam of light across the track that triggers the infrared sensor in the car each time it passes. The receiver records each lap time and sends that information to the transmitter where it is displayed. A programmed delay of 2 seconds prevents double lap counts.

Installing the Lap Trigger Battery

Use 3/32" and 5/64" hex wrenches to unscrew the case and install the 9-volt battery as shown. Reinstall the case, being careful not to over-tighten the screws.

Note: A typical 9-volt battery will power the lap timer for 9 hours.

Mounting the Lap Trigger

Mount the lap trigger 8 inches to 36 inches (20 to 91cm) above the racing surface facing outward from the track. Facing the trigger outward keeps the IR beam from crossing the track in more than one lane preventing unwanted false triggering. Hook and loop strips make mounting easy. Only one lap trigger is necessary at each track, as a single infrared beam will trigger the lap timer in all cars.

SD CARD

The DX3R PRO features an SD card reader allowing your transmitter's software to be updated by an SD card (sold separately). Simply download the software (when available) from the Spektrum website and follow the instructions to load it onto your SD card.

To upload the new software to your DX3R PRO:

- Remove the grip
- Insert the SD card
- Turn on your transmitter
- Wait for a few seconds until the main screen is displayed.
- Remove the SD card
- Replace the grip

The transmitter is updated and ready for use.

GENERAL NOTES

As the user of this product, you are solely responsible for operating it in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) that you use.

Safety Points to Obey for Modelers

- Ensure your batteries (both transmitter and receiver) have been properly charged for your model.
- Keep track of the time the system is turned on so you will know how long you can safely operate the transmitter.
- Check all servos and their connections prior to each run.
- Do not operate your model near spectators, parking areas or any other area that could result in injury to people or damage of property.
- Do not operate your model during adverse weather conditions. Poor visibility can cause disorientation and loss of control of your model.
- Do not point the transmitter antenna directly toward the model. The radiation pattern from the tip of the antenna is inherently low.
- Do not take chances. 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 ascertained and corrected. Safety can never be taken lightly.

DX3R PRO Troubleshooting Guide

Problem	Possible Cause	Solution
<ul style="list-style-type: none"> • The system will not connect 	<ul style="list-style-type: none"> • Your transmitter and receiver are too close together. They should be 1 to 4 feet apart. • You are around metal objects. • Your transmitter was accidentally put into bind mode and is not bound to your receiver anymore. 	<ul style="list-style-type: none"> • Move transmitter 1 to 4 feet from receiver. • Move to an area with less metal. • Rebind your transmitter and receiver.
<ul style="list-style-type: none"> • The receiver goes into failsafe mode a short distance away from the transmitter 	<ul style="list-style-type: none"> • Check the receiver antenna to be sure it is not cut or damaged. 	<ul style="list-style-type: none"> • Replace SR3100 antenna (SPM9005) or contact Horizon Product Support • Make sure your antenna is in an antenna tube and up in the air as high as possible
<ul style="list-style-type: none"> • Receiver quits responding during operation 	<ul style="list-style-type: none"> • Inadequate battery voltage • Loose or damaged wires or connections between battery and receiver 	<ul style="list-style-type: none"> • Charge batteries. Spektrum receivers require at least 3.5V to operate. An inadequate power supply can allow voltage to momentarily drop below 3.5V and cause the receiver to brown out and reconnect. • Check the wires and connection between battery and receiver. Repair or replace wires and/or connectors

WARRANTY AND REPAIR POLICY

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship for 1 year from the date of purchase by the Purchaser.

1-Year Limited Warranty

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for all warranty claims.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any Product by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS

OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. 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 this Product, you are advised to return this 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).

WARRANTY SERVICES

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact 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 direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a Product Support representative. You may also find information on our website at www.horizonhobby.com.

Inspection or Repairs

If this Product needs to be inspected or repaired, please use the Horizon Online Repair 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 Repair Request is available at www.horizonhobby.com <http://www.horizonhobby.com> under the Repairs tab. 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 repair. 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 batteries to Horizon. If you have any issue with a battery, please contact the appropriate Horizon Product Support office.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Repairs

Should your repair not be covered by warranty the repair 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 repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair 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 cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for inspection or repair, you are agreeing to Horizon's Terms and Conditions found on our website under the Repairs tab.

Country of Purchase	Horizon Hobby	Address	Phone Number/ Email
United States	Horizon Service Center (Electronics and engines)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 Online Repair Request visit www.horizonhobby.com/repairs/
	Horizon Product Support (All other products)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 productsupport@horizonhobby.com
United Kingdom	Horizon Hobby Limited	Units 1-4 Ploytlers Rd Staple Tye Harlow, Essex CM18 7NS United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Germany	Horizon Technischer Service	Hamburger Str. 10 25335 Elmshorn Germany	+49 4121 46199 66 service@horizonhobby.de
France	Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70

FCC INFORMATION

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.

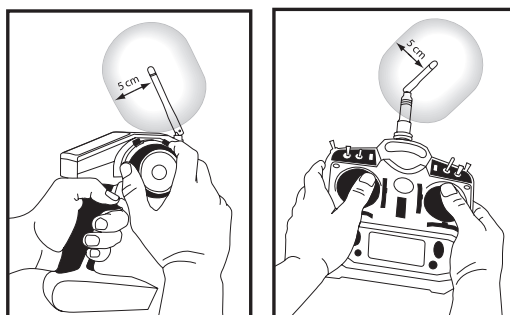
Caution: Changes or modifications not expressly approved by Horizon Hobby, Inc. could void the user's authority to operate the equipment.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

Antenna Separation Distance

When operating your Spektrum transmitter, please be sure to maintain a separation distance of at least 5 cm between your body (excluding fingers, hands, wrists, ankles and feet) and the antenna to meet RF exposure safety requirements as determined by FCC regulations.

The illustrations below show the approximate 5 cm RF exposure area and typical hand placement when operating your Spektrum transmitter.



COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

The following information is for item numbers: SPM3200E



AT	BG	CZ	CY	DE
DK	ES	FI	GR	HU
IE	IT	LT	LU	LV
MT	NL	PL	PT	RO
SE	SI	SK	UK	

The following information is for item numbers: SPM3200FR



AT	BG	CZ	CY	DE
DK	ES	FI	FR	GR
HU	IE	IT	LT	LU
LV	MT	NL	PL	PT
RO	SE	SI	SK	UK



No. HH2010080201

Product(s): Spektrum DX3R PRO Transmitter
Item Number(s): SPM3200E, SPM3200FR

Equipment class: 2

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 60950	Safety
EN 300-328	Technical requirements for Radio equipment
EN 301 489-1, 301 489-17	General EMC requirements for Radio equipment

Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
Aug 02, 2010

Steven A. Hall
Vice President
International Operations and Risk Management
Horizon Hobby, Inc.



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.

APPENDIX

STEERING TENSION ADJUSTMENT

Steering tension is adjusted via the recessed screw located below the steering wheel. Using a small Phillips screwdriver, turning the screw clockwise increases steering tension while turning the screw counterclockwise reduces steering tension.



WARNING: READ AND FOLLOW ALL INSTRUCTIONS

Do not attempt disassembly, use with incompatible components, or augment the product in any way, outside of these instructions. Failure to follow each instruction and precaution could result in damage to the product, property and/or personal injury.

Read ALL instructions. If after reading these instructions you are not confident in your ability to switch configurations, contact the appropriate Horizon Product Support office for assistance.

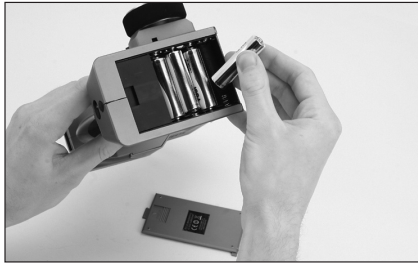


CAUTION: Never turn the radio on when changing configurations.

CHANGING FROM DROPDOWN TO STANDARD WHEEL



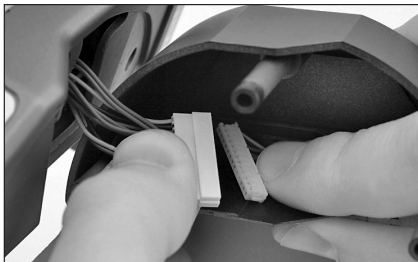
The DX3R PRO comes with the dropdown wheel installed and can be switched to the standard wheel. All the parts necessary to convert to the standard wheel are included. The included 3/32-inch hex wrench and a small Phillips screwdriver will be needed.



1. Remove the batteries from the transmitter. This prevents the possibility of accidentally causing a short during the conversion.



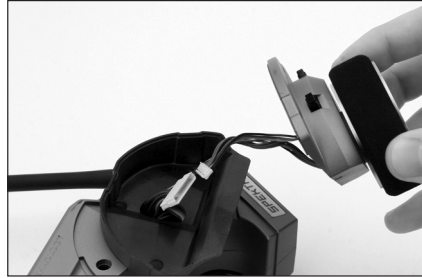
2. Using the 3/32-inch hex wrench, remove the three screws on the front of the steering housing as shown.



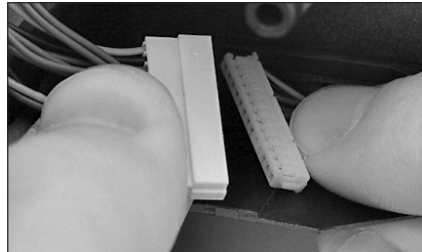
3. Carefully remove the steering mechanism and unplug the steering connector. Also remove the steering shell but leave the backplate.



4. Using the 3/32-inch hex wrench, remove the three screws on the front of the steering dropdown as shown.



5. Select the appropriate Left/Right standard steering spacer and pass the steering wheel mechanism connector through the hole in the shell.



6. Connect the steering wheel mechanism connector to the connector from the transmitter being sure the connection is tight. Note correct polarity.

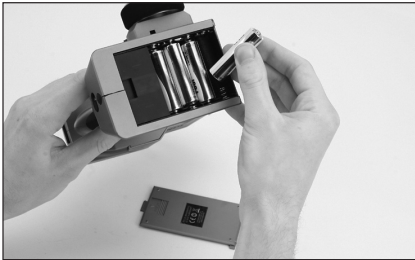


7. Fit the backplate in place and secure the standard steering wheel assembly using the three long cap screws.

CHANGING TO LEFT-HANDED CONFIGURATION



The DX3R PRO comes set up for right-handed use, but you can easily switch it to a left-handed configuration. All the parts necessary to convert to left-handed, including the grip plates, the back cover and the front shell, are included. The included 3/32-inch hex wrench and a small Phillips screwdriver will be needed.



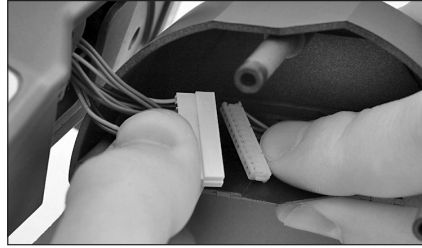
1. Remove the batteries from the transmitter. This prevents the possibility of accidentally causing a short during the conversion.



2. Carefully remove the grip cover by prying with your fingers at the forward edge of the rubber grip.



3. Using the 3/32-inch hex wrench, remove the three screws on the front of the steering housing as shown.



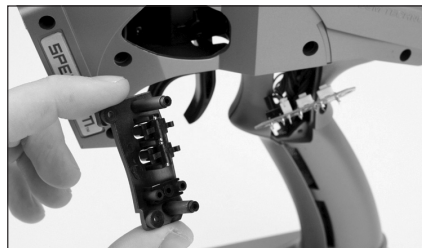
4. Carefully remove the steering mechanism and unplug the steering connector. Also remove the backplate.



5. Using a small Phillips screwdriver, remove the four Phillips screws (two per side) that fasten the grip plates in place. Remove the grip plate that doesn't have the buttons attached.



6. Carefully pull out the grip plate that contains buttons D, E and F. Using a Phillips screwdriver remove the PC board and backplate from the grip plate. Note the positions of the three buttons.



7. Transfer the three buttons (D, E and F) to the other "handed" grip plate (included in the box). The buttons fit in a specific direction so that they fit the external contour of the grip plate.



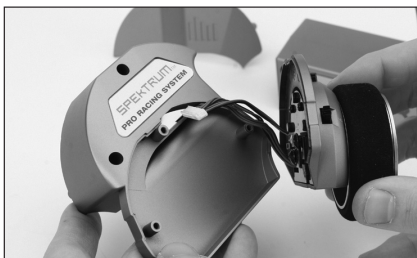
8. Carefully screw the PC board and backplate in place and test that all buttons are depressing properly.



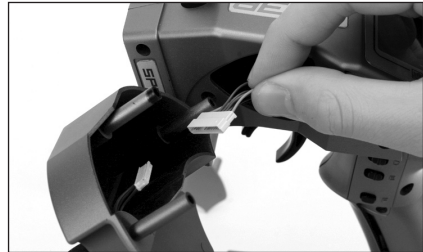
9. Place both grip plates in place and fasten them using four Phillips screws (two per side).



10. Push the steering wheel connector through the transmitter case to the opposite side.



11. Select the opposite "handed" steering shell and pass the steering wheel mechanism connector through the hole in the shell.



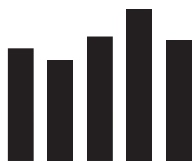
12. Connect the steering wheel mechanism connector to the connector from the transmitter. Make sure the connection is tight. Note correct polarity.



13. Fit the other handed backplate in place and secure the steering wheel assembly in place using the three long cap head screws.



14. Fit the grip in place and reinstall the batteries. Note that the buttons D and E now work in reverse. You will need to change the direction of these switches in the System menu (see page 15, 16).



SPEKTRUM®

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US patent number 7,391,320

Multiple Patents Pending

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