

Change Log Version 3.05 2025-September-24

PLEASE NOTE!!! THIS UPDATE WILL DELETE YOUR MODEL LIST WHEN UPGRADING FROM VERSION 2.01 OR EARLIER. IT IS HIGHLY RECOMMENDED THAT YOU BACK UP YOUR MODELS BY EXPORTING THEM ALL TO A MICRO SD CARD BEFORE APPLYING THIS UPDATE (NOT AVAILABLE ON DX5C AND DX5 RUGGED). SEE UPDATE INSTRUCTIONS FOR MORE INFORMATION [HERE](#).

NOTE: DX5 PRO VERSIONS 2.03 TO 3.01 ARE NOT ABLE TO EXPORT/SHARE MODEL FILES. THIS WILL NOT AFFECT YOUR ABILITY TO COMPLETE THIS UPDATE.

New Features

- Added 12-channel support.
- Added new Combo Switches and Logical Switches. Please refer to the Spektrum Wiki for details. <https://wiki.spektrumrc.com/spektrum>
- Added new Digital Switch Setup and Analog Switch Setup. Please refer to the Spektrum Wiki for details. <https://wiki.spektrumrc.com/spektrum>
- Trimmers now support 4- and 5-position options to take full advantage of Logical Switch capabilities.
- Added Emergency Brake (Throttle Cut) to allow a sudden throttle brake for drift car purposes.
- Added Curve Mixing (see below).
- Added Servo Balance function to allow multiple servos to track tightly together regardless of physical geometry and centering.
- Added access to 16 mixes. The mix menu has changed from a list of the canned steering mixes, canned throttle mixes, and four programmable mix to be a scroll list including all those mixes plus an additional 12 free programmable mixes.
- Added proper support of the GPS module in the Spektrum Sky™ Remote ID module.

Improvements & Corrections

- Corrected flashing values and incorrect values for the RPM on the Telemetry screen when the ESC is the RPM data source.
- Change the names of auxiliary channels so the number matches the channel number. For example, the old Aux1 is now named Aux3 because it is sent out on channel 3.
- Corrected highlight box boundaries for Switch option on the Telemetry File Setting screen.
- Changed the Mix screen to use the terms Source and Target to replace Master and Slave.
- Changed the way mixes are numbered. The first mix is now named "Mix 1" instead of "Mix 0."

Special Note

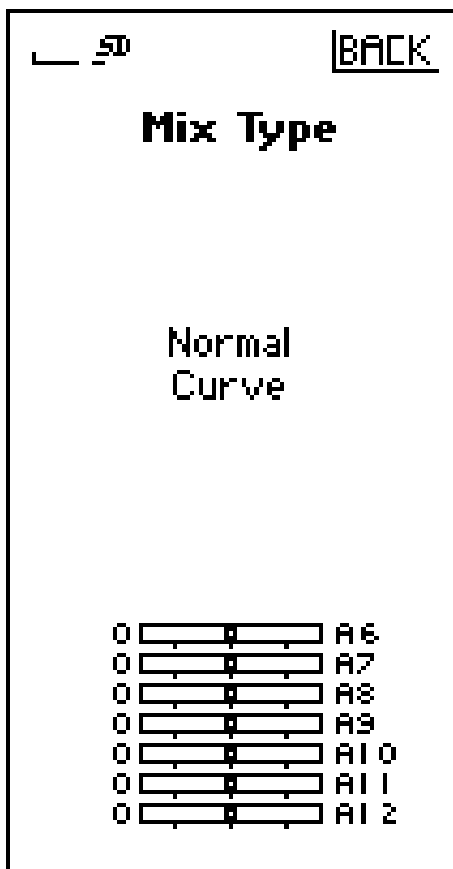
When you upgrade your radio to version 3.04 or higher, if you ever decide to go back to 3.03 or earlier, you will lose all models in memory. The upward process, from version 2.02 or higher to version 3.04 (and higher), will properly preserve all your models. It's only going backwards that would lose them.

If you are on version 3.05, you can go back to 3.04 safely without an issue. It's just the 3.03/3.04 boundary that matters.

Curve Mixes

Click on "Mixing" on the Function List. Select a mix to edit (the Steering and Throttle options at the top do not apply to this change).

When you select a mix, if the mix has not yet been configured it will prompt you with another screen to select Normal or Curve mix. If the mix has already been defined (that is, the Switch is configured) then it will jump straight to the appropriate editor. If you wish to change a mix type between Curve and Normal, first change the Switch to Inhibit, press BACK (L button), then select the mix again to get the screen below.



└─ 50 ─┐ BACK

Mix Type

Normal
Curve

0 A6
0 A7
0 A8
0 A9
0 A10
0 A11
0 A12

When you select a Normal or Curve mix here, the screen will change to the appropriate mix editor. The Normal mix editor is unchanged.

SD
BACK

3456789012345

Inhibit > Inhibit

P1: X -150% Y +0%
P2: X +25% Y +1%
P3: X -18% Y +0%
P4: X -7% Y +0%
P5: X -51% Y +0%
P6: X -91% Y +3%
P7: X -80% Y +0%

Trim: Inh Expo: Inh

Switch: Inh

□
□ □ □

Mix Name

You may give your mix a name of your choice. This name will be shown on the Mixing menu when you return to it. It is edited in the standard manner.

Input

The master input is to the left of the > symbol (it's an arrow).

When first entering the screen, you may select the master input and a switch. When the switch is in a position that makes the curve active, the curve is displayed on the graph portion at the top, and the curve point fields are editable. If the curve cannot be edited, then a diagonal line is shown at the top.

If you exit the screen with master input set to Inhibit, the mix to be cleared out and you will be able to select Normal or Curve again.

You cannot edit the X and Y points when the curve mode is not active. This is determined by the Switch entry and the boxes and status mark shown at the bottom of the screen.

Output

The output (right side of the > symbol) is the channel that the mix will be applied to.

Vertical Bar

The vertical bar in the graph box shows the position of the controlling input. If the Trim is set to Active (only available/visible for Throttle and Steering master) then the bar indicates input + trim. If Inactive or Trim is not an option, then only the input control is used to show the bar position.

Switch

The Switch field defaults to On when an input is selected. This will cause the mix to show as Active on the menu, whether it is actually fully configured or not. The channel processing system is actively evaluating the mix.

The switch options are all switch inputs except trimmers which are already in use. This prevents the selection of, say, the throttle trimmer as a switch here. Once the switch is selected (closing click) the display of switch positions will be updated to show the actual options available. NOTE - if you

Spektrum™ DX5C, DX5Rugged, DX5R, DX5 Pro RaceWare™



select a switch but have the "1" position turned off, then subsequently select On, the "1" position will automatically be forced to active.

Trim

The Trim option controls if the trimmer's position is included in the mix calculation as part of the offset. If it is set to Active, then the analog input plus the trim input will be used to calculate the output. If it is set to Inactive, or if it is not shown, then only the analog input will be used.

The Trim option is only shown when the master is Steering or Throttle. All other inputs will cause it to be hidden and inactive.

Expo

The Expo option controls if the curve is smooth or follows the hard edges of the line segments.

X and Y Coordinates

A curve mix is always a 7-point mix.

The X and Y coordinates are used to draw the shape of the curve. X is horizontal, Y is vertical.

The left-most X coordinate is fixed at -100%, and the right-most at +100%. This is necessary for the proper operation of the mixing math. The other points may be move in 1% increments between the adjacent points. So for example point 2 can travel from -99% (because of -100% at the left side) up to -34% (because point 3 is at -33%). You may move the inner points between these bounds.

The Y points may be adjusted from -125% to +125%.

General Comments

Pressing the CLEAR function (R button) when editing will set the value to a mid-point between the adjacent points, or to the adjacent limit (+/-100%) for the left and right edge points.

Enabling Expo on certain curves may cause intermediate areas to exceed the adjacent setpoints and may in fact extend beyond the graph area. This is mathematically allowable and the system will handle these properly by clipping the outputs as necessary while retaining the beyond-the-limit intermediate values. If the line goes above or below the graph box, that is acceptable as it accurately represents what the math will be doing. Downline operations such as Absolute Travel will prevent bad data from going to the servos.

Pressing BACK (L button) returns you to the Mixing menu, with the last-selected mix highlighted.

If you have Trim set to Active and change the input master, the trim will be set to Inactive and must be changed back. Select your master input first.

Change Log Version 3.04 2025-April-15

PLEASE NOTE!!! THIS UPDATE WILL DELETE YOUR MODEL LIST WHEN UPGRADING FROM VERSION 2.01 OR EARLIER. IT IS HIGHLY RECOMMENDED THAT YOU BACK UP YOUR MODELS BY EXPORTING THEM ALL TO A MICRO SD CARD BEFORE APPLYING THIS UPDATE (NOT AVAILABLE ON DX5C AND DX5 RUGGED). SEE UPDATE INSTRUCTIONS FOR MORE INFORMATION [HERE](#).

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New Features

- Support for DSMR+ (12-channel)
- When the Travel value exceeds 100%, this is now shown properly on the Monitor screen. In past versions the cursor would go beyond the box.
- Channel names for auxiliary channels are now based on the channel number. Channel 3 is now Aux3 (AX3) rather than Aux1 (AX1) as it was in the past.
- Two new servo-related functions have been added to the Function List – Absolute Travel (Abs. Travel) and Channel Name. Absolute Travel provides a hard limit that will never be exceeded by mixes or Travel. This is useful to prevent servo damage from over-control. Channel Name allows you to provide unique names to each channel.
- The Channel Assign screen allows you to specify the input for each function and channel assignment on a single screen, greatly simplifying configuration of complex models.
- Import/Export supports all new features, including telemetry settings.
- The default servo display is now 12 channels. To avoid clutter and confusion, you may select the mini monitor at the bottom of the servo screens and certain other screens to limit the view to only the channels you need for your system.
- The AVC screen no longer immediately overrides auxiliary channel settings.
- Tilt telemetry and G-Force sensors are now available when your receiver supports them. This can be useful for crawlers. Note that the sensor will auto-config into place, but you will manually need to edit the settings to get it to show on the roller list. This is in contrast to all other sensors, which will automatically display on the roller list when auto-configured into place.

Improvements & Corrections

- Change the names of auxiliary channels so the number matches the channel number. For example, the old Aux1 is now named Aux3 because it is sent out on channel 3.

Special Note

When you upgrade your radio to version 3.04, if you ever decide to go back to 3.03 or earlier, you will lose all models in memory. The upward process, from version 2.02 or higher to version 3.04, will properly preserve all your models. It's only going backwards that would lose them.

Change Log Version 3.03 2025-April-15

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New Features

- Support for LMT 2.0 – when you bind to an LMT 2.0 model, it automatically converts the existing model to the basic LMT configuration, saving you from entering settings from the manual or downloading a file off the web.

Improvements & Corrections

- Changed ESC reported voltage telemetry to require a longer period of voltage below the alarm threshold before starting the alarm signal. This prevents the alarm from starting with a high current spike.
- Changed RPM/Speed filtering to make it more instantaneous.
- Changed the receiver-reported voltage telemetry to delay the same as the ESC-reported voltage.
- Changed default Smart Battery maximum cell voltage to 4.3V.

Change Log Version 3.02 2025-February-20

PLEASE NOTE!!! THIS UPDATE WILL DELETE YOUR MODEL LIST WHEN UPGRADING FROM VERSION 2.01 OR EARLIER. IT IS HIGHLY RECOMMENDED THAT YOU BACK UP YOUR MODELS BY EXPORTING THEM ALL TO A MICRO SD CARD BEFORE APPLYING THIS UPDATE (NOT AVAILABLE ON DX5C AND DX5 RUGGED). SEE UPDATE INSTRUCTIONS FOR MORE INFORMATION [HERE](#).

NOTE: DX5 PRO VERSIONS 2.03 TO 3.01 ARE NOT ABLE TO EXPORT/SHARE MODEL FILES. THIS WILL NOT AFFECT YOUR ABILITY TO COMPLETE THIS UPDATE.

New Features

- Motorcycle mode now includes Servo Travel adjustment.
- Motorcycle mode now includes Launch Control.
 - **Motorcycle Launch Control is not available on DX5C and DX5 Rugged**
- **DX5Pro Only (SPM5025 / SPMR5025 Versions)** – Adds support for SLT. This includes:
 - SLT selected on the Frame Rate/Bind screen. The Frame Rate options are now 5.5, 11, 22, and SLT.
 - Refer to your receiver's instructions for putting the receiver into bind mode. It varies with receiver type.
 - A new Vehicle Type screen has been added near the top of the Function List to help you select the settings needed for several types of Horizon Hobby vehicles with SLT receivers.

Improvements & Corrections

- **DX5C/DX5Rugged Only** – Changes to 4WS and aux channel assignments can now be un-done without losing access to the channel.

Change Log Version 3.01 2023-September-26

PLEASE NOTE!!! THIS UPDATE WILL DELETE YOUR MODEL LIST WHEN UPGRADING FROM VERSION 2.01 OR EARLIER. IT IS HIGHLY RECOMMENDED THAT YOU BACK UP YOUR MODELS TO A MICRO SD CARD BEFORE APPLYING THIS UPDATE. SEE UPDATE INSTRUCTIONS FOR MORE INFORMATION.

New Features

- Added new screen for Motorcycle to allow reversing the steering channel and adding a variable Throttle Rate control via OTF. To access this screen, go to the Motorcycle Setup screen and select NEXT (twice for DX5C/DX5Rugged).
- The Throttle Rate value may now be displayed on the main screen in real time in place of one of the other monitors. On newly-created motorcycles it will default to replacing the AX1 monitor. If you are working with an existing bike model, you may select this using the Function menu System Settings > Trims.
- When creating a new bike model, the display will show throttle limit % (TH%) and MS6X gain (M6X) on the bottom monitors. These can also be enabled manually by selecting them on the trim display setup screen. They are at the end of the list.
- F input is not tied to Steering Rate any more when you create a new Motorcycle model.
- **DC5C/DX5Rugged Only** – Drive Mode is now available on the main screen display. It has always been available on the Dx5R/Pro.

Improvements & Corrections

- Trimmer assignments for motorcycle inputs will no longer accept invalid inputs such as the steering wheel or throttle.
- You may now change a trim back to Inhibit for throttle or steering. Note that doing so will make the channel act as if the trim is centered; it will not remember the last trim position you set it to.
- The original release of Motorcycle support had the drive mode names and behaviors swapped for Off-Road Mode and Wheelie Mode. This update will correct the names (if you haven't already changed them) for existing bikes, and will name them correctly for newly-created bikes.
- When changing trim step size, the trim output and step size were not correctly changed to preserve trim output value.
- **DX5C/DX5Rugged Only** – The Pot is not available as an input.
- **DC5C/DX5Rugged Only** – Correct the NEXT/PREV flow on Motorcycle screen.
- **DX5R Only** - When setting up Expo on switch I, it was impossible to de-select positions properly.

Change Log Version 3.00 2023-June-28

PLEASE NOTE!!! THIS UPDATE WILL DELETE YOUR MODEL LIST WHEN UPGRADING FROM VERSION 2.01 OR EARLIER. IT IS HIGHLY RECOMMENDED THAT YOU BACK UP YOUR MODELS TO A MICRO SD CARD BEFORE APPLYING THIS UPDATE. SEE UPDATE INSTRUCTIONS FOR MORE INFORMATION.

New Features

- Motorcycle Mode is included for support of the Losi Promoto-MX bike. Create a new model in your radio, bind it to your motorcycle, and then do normal things like setting the name, etc. in order to begin using it. Consult the bike manual for more information.

Improvements & Corrections

- Fixed ESC telemetry to properly hide information when not available and to properly report speed/RPM.
- Added EU compliance screens.
- Fixed text on several screens that was cut off by display size on earlier versions.
- Improved AVC auto calibration.

ProMoto Update Notes

Create a new model before you bind to the motorcycle.

Bind at 11ms from the Bind/Frame screen. This will cause the radio to change into motorcycle mode with the following configuration:

Function	DX5R / DX5Pro	DX5C / DX5Rugged
Front Brake Trim (can be placed on any open switch)	Inhibit	Inhibit
Steering Trim	B	B
Front Brake Travel	Inhibit	Inhibit
MS6X Rate (Left to increase, Right to decrease)	Pot/Knob	E
Flywheel On/Off	D	D
Throttle Trim	A	A
Drive Mode	I (3-position switch)	C

Change Log Version 2.03 2022 December 19

New Features

- AVC Auto Calibration – When binding to an AVC receiver with the AVC Auto Calibration update, end point and direction calibration will happen automatically without the need to cycle the controls. Once calibration and initialization are complete, the steering on the model will quickly cycle 2 times, indicating the ready status.

Improvements & Corrections

- Disabled Forward Programming from showing as a menu option when it should not.
- Servos on most old receivers no longer glitch for about 20 seconds at start. If you are having servo glitch trouble after binding, you may need to update the firmware in your receiver.

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Change Log Version 2.02 2022 August 23

New Features

- Launch Control Feature added (DX5R and DX5 Pro transmitter only) ○ This mode allows the driver to control the duration of time it takes to reach full throttle as well as adjusting points in the throttles curve to effectively ramp the throttle to the user's preference. Designed for Drag Racing and Speed Runs.
 - Learn more about this new feature here - <https://bit.ly/DX5RProLC>

PLEASE NOTE!!! THIS UPDATE WILL DELETE YOUR MODEL LIST, NO MATTER THE PREVIOUS FIRMWARE INSTALLED. IT IS HIGHLY RECOMMENDED THAT YOU BACK UP YOUR MODELS TO A MICRO SD CARD BEFORE APPLYING THIS UPDATE. SEE UPDATE INSTRUCTIONS FOR MORE INFORMATION.

Change Log Version 2.01

2022 June 28

Improvements & Corrections

- Reduce possibility of System Fault messages due to erroneous saved model checks.
- Added option to make the Telemetry Priority Monitor hide-able (which is now the default) using a new setting on the Telemetry>Settings screen.
- Corrected display of temperature on the Min/Max screen
- Improved telemetry support for Smart ESCs and Smart Batteries
- Corrected Drive Mode operation for 4WS (4-wheel steering) modes
- Corrected Drive Mode and AUX channel assignment conflicts

Spektrum™ DX5C, DX5Rugged, DX5R, DX5 Pro RaceWare™



Change Log Version 1.09
2021 January 14

New Features

- Improve support for Spektrum Smart telemetry components to all radios
- Enable TextGen for programmable devices such as ESCs
- Enable Priority Monitor for third-party SRXL2-based telemetry
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Improvements & Corrections

- **DX5R/DX5Pro only** – Re-enabled Lap Timer.
- Show Max Altitude on GPS screen for recording jumps and hill climb ascents. Note that GPS altitude is not especially accurate, and is subject to environmental variation.
- Show Max Speed on GPS screen. Pressing CLEAR on this screen will reset speed, altitude, and distance measurements.
- Added a reminder screen to turn off your model before using the Calibrate option.
- Corrected default inactivity alarm settings (new radios only).
- Corrected spontaneous resets when using the Channel Assign function for auxiliary channels.
- Switches I, L, and R are now properly supported for the channel inputs.
- Changed the Smart Battery automatic alarm for new batteries from requiring 4.1V down to 4.0V by default. This prevents inadvertent “not charged” alarms when changing to a new battery that’s still pretty full.

Spektrum™ DX5C, DX5Rugged, DX5R, DX5 Pro RaceWare™



Change Log Version 1.08 2019 November 11

New Features

- Add telemetry support to DX5C
- Add support for Spektrum Smart telemetry components to all radios

Improvements

- Improved RPM & ESC integration with speed functionality
- Add model manipulation functions to utility menu

Corrections

- **DX5R and DX5R/Pro** – The pot input may now be applied to the Aux channels and will stay

NOTE: Versions 1.05, 1.06, and 1.07 were not released to the public. They are factory-only updates.

Spektrum™ DX5C, DX5Rugged, DX5R, DX5 Pro RaceWare™



Change Log Version 1.07 (Factory Only)

Improvements

- Shows estimate of Smart Battery capacity remaining as a percentage instead of number
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Corrections

- Fixes problems with Max Current over 65A not being shown properly
- Fixed display of temperature to properly select C or F. Thanks to **Jose L.**

Spektrum™ DX5C, DX5Rugged, DX5R, DX5 Pro RaceWare™



Change Log Version 1.06 2019 August 9

New Features

- Add telemetry support to DX5C
- Add support for Spektrum Smart telemetry components to all radios
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Improvements

- Improved RPM & ESC integration with speed functionality
- Add model manipulation functions to utility menu
-

Corrections

- **DX5R and DX5R/Pro** – The pot input may now be applied to the Aux channels and will stay
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Change Log Version 1.05

- Factory-only support changes

Spektrum™ DX5C, DX5Rugged, DX5R, DX5 Pro RaceWare™



**Change Log Version 1.04
2018-May-16**

New Features

- ESC telemetry supported.

Improvements

- Corrected issues with timer start/stop/reset so they are properly controlled by the settings made on the screen.
- DX5C and DX5R share the same codebase now, improving updates and features for all DX5 users.

Change Log Version 1.03.07 2017-October-31

New Features

- Lap Timing Support now available – Manual (via a button press) and automatic lap timing (via telemetry input) has been added.
 - Accurately keep track of lap times any time, any where
 - Displays directly to your DX5R on a dedicated Lap Timer display
 - Record lap time information directly to a SD card for later review
 - The telemetry feature works directly with the Spektrum Lap Timing System and requires...
 - A telemetry receiver or module, such as the TM1500
 - 1 Lap Timer Receiver (SPMLT2500)
 - 1 or more Lap Timer Base Unit (SPMLG5000)
 - Having more than one allows racers to accurately keep track of not just lap times, but also speed through a section of the track, like the back stretch, or a complicated turn
 - Each base unit allows an unlimited amount of drivers, easily setup an impromptu race with your friends
- Servo Setup- Servo settings including Reverse, Travel, Subtrim are now split into their own screens allowing direct access to these often used functions.
 - Before you needed to select servo setup and choose one of the options with in that menu, now you can easily navigate to the menu of choice without the extra step

Improvements

- In the 4WS screen, switch selection is now properly available when feature is inhibited.

Change Log Version 1.02.01 2017-July-28

New Features

- **Faster Screen Refresh Rate-** The screen update rate has been improved providing greater responsiveness for programming inputs.

Improvements

- When Traction is disabled within the Traction menu, the previously applied Traction assistance is appropriately reset to zero.
- When Drive modes are assigned to a digital switch, the minimum available drive modes is two and the maximum is five.
- When Drive Modes are assigned to mechanical Switch I, three drive modes are always available.
- When Drive Modes are assigned to a momentary button, two drive modes are available.

Change Log Version 1.01.03

2017- June - 21

New Features

- **Model Import/Export** - Users are now able to share model setting via the micro SD Card and Transfer SD Card menu.
- **Language Support**- German, Spanish and Italian have been added to System Setup menu. Previously only English and French were supported.
- **Alarm Options**- Options for the low battery and inactivity alarms that include Inhibit, Tone, Vibe, Tone and Vibe have been added

Improvements

- In the Systems Settings menu, the scroll function is more intuitively and predictably.
- Drive Modes are now properly added and removed
- Trim box options at the bottom of the main screen are more accurately displayed
- MOA switch assignment is now unassigned when MOA is inhibited
- AWS Screen allows the option to set the Switch setting back to INH
- Drive Mode 1 allows a rate change to be made when Drive Modes are enabled
- AVC switch options now include Inhibit, drive mode and switch I
- Steering Override and OTF is now available on the Steering channel under the Rates Menu
- Switch position set to Toggle a channel now appropriately drives the output channel
- On the MOA screen the switch position indicator is no longer displayed when MOA is inhibited
- Switching between Drive Modes now emits a tone to indicate change
- Drive Mode Names are now being properly displayed on the main screen
- Drive Modes are properly changed using the three position switch
- Drive Mode # is properly shown on the Main Screen
- In the Traction screen, trimmer direction is no longer visible when Traction is inhibited
- Exiting the Model Select screen is now easily done with the BACK button