

2023-Dec-XX

Version 3.12A

Changes are in comparison to version 3.12 (2023-Nov-23).

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- This version corrects incompatibilities with the Forward Programming mode of the Spektrum FC6250HX heli flight controller.

2023-Nov-21

Version 3.12

Changes are in comparison to version 3.10 (2023-May-15). Version 3.11 was not released to the public.

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

New Features

- **Remote ID** – Transmitters now support the new Spektrum Sky™ Remote ID device which provides compliance with the FAA for Remote ID. When reporting as a telemetry device, the Sky status is shown on the Main Screen as a check mark (“searching for GPS”) or an animated up arrow (“ready for takeoff”) or an airplane (“flying”). The status is also shown on the GPS status screen which you can access simply by moving the roller to the right.
- After exporting the Sound Categories to SD card, the screen now tells you if this succeeded or failed.
- The Timer start position for Throttle and Throttle Out can now be set by moving the stick to the appropriate position while the field is open for editing.
- **Servo Cycler** – On radios with more than two sequencers, sequencer 3 is now defaulted to a repeating cycler that can be used to test servos or to provide infinite repeating. You have full control of the configuration, including the ability to turn the cycling off at will.

Corrections & Improvements

- Corrected display of R and L receiver fades. They were swapped.
- Corrected ESC alarming for situations where no data is provided for certain fields.
- Improved screen refresh so that you no longer will see the wrong color for certain portions of the display when changing screens. This was especially evident when toggling quickly between the main screen and the Monitor screen.
- Improve some prompt positions on Forward Programming screens.
- The Center Tone speech now functions correctly for all speech items. Previously there were problems with certain timer-related speech elements.
- The Wireless Trainer setup screen no longer slows down to a snail’s pace.
- The automatic removal to old telemetry log files now properly retains only the newest 5 files plus the current one.

- When you download an update over WiFi but do not immediately install it, the file is now saved for later installation. The name is in the format “AirWare_<version>_SPMTX.SAX” and can be manually selected for installation from the SD menu.
- The current channel monitor number of channels displayed will now be retained correctly through a power cycle. You select this by selecting the monitor on the Servo displays.
- The System Setting for channel monitor display now sets the default monitor to use for new models.
- In Multi-Rotor mode, the throttle channel is now referred to as “Motor” instead of Throttle Cut and Throttle Curve.
- The Flight Mode screen is fixed to properly show only valid navigation options.
- V-Tail differential now functions properly.
- Channel Assignment functions in Multi-Rotor models are now properly configured in both Camera and Racer operating modes.
- Miscellaneous improvements to Smart ESC/Smart Battery telemetry alarms.
- **NX20 Only** – Sequencers 6-8 did not transfer their names correctly when assigned to a channel. They all showed as Sequencer 5 instead of their correct number.
- **NX20 Only** – Default Channel Input Configuration Screen correctly shows all channels for current configuration.
- **NX20 Only** – It is no longer necessary to power up the student radio after powering on an NX20 instructor radio when using wireless trainer.

2023-April-11

Version 3.10

Changes are in comparison to version 3.08 (2022-November-22). Version 3.09 was not released to the public and its changes are included as part of 3.10.

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- In complex wing types with flap and crow programming, the right aileron would jump in the wrong direction and take a long time to come to the right position. This now behaves correctly.
- AR10360T orientation images are corrected in Forward Programming.
- Combo and Logical switch screens now properly select the first option when pressing CLEAR to start over.
- Sound quality on Warning screen has been improved.
- Flight Mode position icons A1-B5 have been changed to match the IX radios use of 0-9.
- WiFi download quality has been improved.
- Horizon addresses have been added to the About/Regulatory screen sequence for EU compliance and customer information.

New Features

- **Delete All Telemetry** – The Telemetry menu now includes a Delete All option to make it easier to start over.
- **New Radio Power-Off** – Power Off now has two operating modes: a short press followed by a confirmation screen, or the long press that has been all along. The setup for this is at the bottom of the first System Settings screen.
- **Receiver Status on Power-Off** - When you power off the radio without first turning off a telemetry receiver, the radio will warn you and provide the power confirmation screen before shutting down. This is active whether the confirmation screen is enabled or not.
- **Telemetry Log File Auto Switch** – If you have configured Throttle Cut and then set up telemetry logging, if you use the same switch for both then the radio automatically configures the logging so that it only logs when the throttle stick is active.
- **Inhibited Channel Position** – On the Channel Input Assignment screen, when a channel function is set to Inhibit you can define a fixed position for the output by

pressing the FN button. This will pop up a window allowing you to set the fixed servo position.

- **Battery Charge Status** – the new Battery Charge Status screen appears near the bottom of the Function List to allow you to see what is happening when your radio is charging. This screen is also available on the scroll.
- **Vario Rate of Climb** – Min/Max values for the rate of climb have been added to the Min/Max screen.
- **Alternate Trimmers** – the top trimmers (LT/RT) may be used as alternates for the normal axis trims. This function is available from the Trim Setup screen.
- **Telemetry Status on List** – If you enable telemetry using the Ticker Tape option in the Function Bar, a new screen appears on the scroll list. This screen shows the status of the tickered data at one glance. If you hold down the FN button, you can scroll through the list and click an item to modify its alarm settings.

2022-November-09

Version 3.08.00

Changes are in comparison to version 3.07.17 (2022-November-04)

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- Removed the color-based RF status indications from the Telemetry Warning screen. The warning system now operates identically to version 3.06 and earlier. This affects both Spektrum and Crossfire operating modes.
- Improved sound quality while the Warning screen is displayed.
- When on the Telemetry File Settings screen, if the Enabled mode is changed to No then you can exit the screen using the roller to select the BACK icon, rather than needing to press the BACK button.

2022-November-04

Version 3.07.17 Public Beta

Changes are in comparison to version 3.07.14 (2022-October-25)

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- Improved the Telemetry Warning screen such that
 - The Frame alarm controls whether the Warning screen will show up for changes. The red/yellow/green status is based upon the change in frame rate over time (this part is unchanged).
 - If the alarm is set to Inh, then the Warning screen will not pop up for Frame alarms. If another sensor generates an alarm, then the background will still be colored red/yellow/green as appropriate.
 - If the alarm is set to Tone, Vibe, or Voice then the Warning screen will be displayed and the color will be shown.
 - When RF is good and other faults have been cleared the display no longer takes 5 seconds to go back to the previous screen. It will immediately go away.
 - When the RF is not the cause of the alarm, there will be no display showing the frames and holds status. Previously, there was always a show of Frame and Hold status.
 - When RF is off or resets while the receiver is on (going into and out of forward programming, or into and out of the system setup), when the RF comes back on there may be a momentary (5sec) yellow and/or green screen that will go away on its own. This does not impact operation or flight control.
- Corrected an issue in Forward Programming which could cause parameters that have limits on both negative and positive sides to lock at the maximum positive and not be changeable. For example, if the range of an input was -90 to +90, it would lock at +90.

2022-October-25

Version 3.07.14

Changes are in comparison to version 3.06 (2021-July-13)

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

New Features

- **Increased Micro SD Card Compatibility** - Micro SD cards over 32gb may be used. When cards are 32gb or smaller, they must be in FAT or FAT32 format. When larger than 32gb, the cards must be in exFAT format. Cards must be SDHC or SDXC type. “Ultra Capacity” (SDUC) cards are not compatible.
- **Simplified Flight Log Data Feedback** – While connected to a telemetry capable receiver, users will be presented with simplified Flight Log screen that will pop up to warn users of potential connection issues.
 - The screens are color coded to help make it simple to understand at a glance.
 - Additionally the screen will display the current # of Holds (H) and # of Frame Losses (F)
 - Green - RF is functioning OK.
 - Yellow - RF has recently had a few frame losses in a short period of time.
 - Red - RF has recently had some major frame losses in a short period of time.
 - The screen will clear automatically after 5 sec or the user can press the Clear button to clear the screen.
- **New Channel Name customization menu** - All channels can now be named by the user to help identify what special functions are assigned to which channels. “Channel Name” is a sub menu with in the “Servo Setup” menu . Note that if you change a wing/tail/swash type or change a receiver port assignment, the custom channel names will be erased. We suggest setting the channel names LAST.
- **Format SD Card Option** - New “Special Functions” feature for the SD Card menu allows the user to format the SD card. This will be helpful to recover the internal SD card when errors develop from accidentally powering off while data is being saved. NOTE: If you format the internal card, the contents need to be replaced for Audio, BNF and Templates to be available. You may download the replacement files from <http://www.SpektrumRC.com/NXreload>. Once downloaded, copy and paste the folders to the root directory using the Access Internal Storage option in the USB Settings menu.
- **Improved Crossfire telemetry support** – Auto-Config will now assign available telemetry sensors when using TBS Crossfire Module. Not all Crossfire telemetry

sensors are supported. Also added signal strength bars for Crossfire RF status as well as color-coding for warning screen.

Corrections & Improvements

- Factory Reset no longer locks up the radio after completion.
- DX imports of Timer 2 settings will now correctly set the clear key to default or non-default values.
- Accessing the WiFi menu repeatedly will no longer lock up the WiFi module.
- The “battery not charged for flight” warning no longer recurs erroneously.
- Backing out of WiFi automatically reloads model correctly.
- Added “Tail Type” to the reasons for needing to relearn settings in Forward Programming.
- Corrected roll issue in Taileron tail types when used with Flaperon wings.
- Improved some German translations in the WiFi screens.
- The display now shows a WiFi error code when unable to connect.
- Ignore invalid airspeed data when sensor is starting up.
- The WiFi access point list is now fully scrollable and selectable.
- Allows properly adding Switch Change Reports at the end of the list after one in the middle is deleted by changing the switch to Inhibit.
- Alarm on Frame Loss data when it changes rapidly, in addition to the old method based on the absolute number.
- When “Monitor” is assigned to My List function it now is properly selectable.
- Eliminates reboots when doing an Import All after a Delete All Models function has been used.
- Displays transmitter battery voltage using two decimal points instead of just one. This also affects alarms, which are now adjust with better resolution.
- The Legacy and Black/Red/Gold palettes are now usable in the new keyboard editors.
- Improved WiFi connection reliability.
- Revised messaging on the System Fault screen to help users resolve it themselves without having to contact Customer Support.
- Corrected Smart Battery cell display screen to correctly show the temperature for the selected battery.
- When using FPV trainer mode, if you leave the switch set to On then there will be no alarm when there is a loss of signal from the head tracker. With other switches or in other trainer modes the “No student” alarm will work as normal.
- The BACK button no longer allows adjustment of the volume when it is set to use an analog input.
- Corrected translations and display of French text in Forward Programming.

- No longer displays Bind option on the Function List when RF is disabled (such as when using the serial port or simulator mode).
- On the Multi Rotor main screen, the dots for the trim center are no longer displayed when trims are turned off.
- The Curve Mix RESET option is now available when a mix is INH > xxx, making it easier to clear out a mix to start over.
- Default values for speeds in the Sequencers have been corrected.
- Multirotor Channel Input Assign now goes properly to the Multirotor version of the screen instead of the Acro/Sail/Heli version.
- No longer displays random text on the WiFi Connecting screen.
- Automatically creates a telemetry log file on the internal drive in a folder named AutoLog. This can be inhibited by changing the “Enabled” mode in the Telemetry File Settings menu from Auto to either Yes (logs based on the user settings) or No (no logging). The default is Auto. The filename for auto-generated log files is based on the model number, name, and the date. **Please note only the five most-recent log files will be retained.**
- Fixed the Center Tone list and settings. Note that in Sailplane, you configure the throttle stick using Spoiler regardless of spoiler/throttle settings in your model. In other model types, Spoiler is not available, and Throttle is configured directly.
- Erase Credentials option has been added to the WiFi Utilities menu to enable easier access to it. You no longer need to connect to WiFi to be able to clean up the settings.
- Changed the dual receiver pack labels from A/B to 1/2.

2021-July-13

Version 3.06

Changes are in comparison to version 3.05 (2021-June-22).

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- Calculations for the Dual Rates/Expo function have been improved to provide higher resolution across all settings and model types
- Sub Trim has been corrected for imported DX models to allow full range editing. In earlier versions it was limited to 225 steps when it should have been 450. The actual displacement remains the same.
- When displaying the TextGen screen (used for Smart ESC configuration and some third-party products), the backlight no longer turns off after a few seconds; it remains on as long as the TextGen Screen is displayed.
- The Ticker Tape function no longer shows “LAPTIMER” in unassigned slots.
- The Ticker Tape function now allows the addition of Flight Log data such as Frame Losses (F), Holds (H), and receiver fades (ABRL).
- Corrected Tx Low Voltage Alarm behavior so that the warning screen includes the Low Voltage status and immediately alarms instead of waiting several seconds.

2021-June-22

Version 3.05

Changes are in comparison to version 3.04.01 (2021-Feb-15).

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

New Features

- **3 Keyboard Variants Now Available** - New Keyboard option for naming models, flight modes, etc.
 - Legacy – Original single line input
 - SwiftBoard – Full keyboard with numbers on top
 - RapidBoard – Full Keyboard with number pad on right
- **Updated Menu List Interface** - Function List and System Menu can be either Circular or Bounded, as controlled by new option on System Settings first screen.
 - **Bounded** – Traditional scroll interface, stops at top and bottom of list
 - **Circular** – When the bottom or top of list is reached, scrolling past will bring cursor to top or bottom, respectively.
- **Linked or Independent Flap Speed** - The default is Linked, so all flap speed settings are common. When set to Independent, the times on each position can be separate, depending on switch position.

Corrections & Improvements

- Importing an SPM file with trim values properly import the trims correctly.
- **NX10 Only** - Added “Dual Elevator” tail type to Sailplane mode.
- Importing a DX sailplane file with a motor setting no longer causes the motor setting to be lost.
- Spoiler stick now matches the response rate/ travel with a DX radio.
- Sailplane FLAP > ELE mix now functions correctly. You should see the same behavior with DX and NX radios.
- Camber Preset values previously only moved half of what was expected when compared to a DX radio. They now move correctly.
- Camber Preset and Camber System screens now display correct values in the left column with the “-“ under the “.” and line up properly with the data entry boxes with the value being edited.
- **NX8, NX10 only** - Enabled telemetry for Turbine and PowerBox sensors.
- AR636/7350/9350 AS3X configuration and status display correctly displays the rates.

- Corrected import issues from IX12 model files.
- Heli Throttle/Pitch Curve setup screens now hide the buttons for inactive Flight Modes.
- Heli Gyro and Governor setup screens now position the data entry boxes correctly for all switch and Flight Mode configurations.
- After downloading an update, an instructional message now appears below the INSTALL button informing users to wait 5 minutes to help clarify the expected behavior.
- When a model filename was more than 32 characters long it could show incorrectly on the screen, and it would reset the radio when imported. Now, names that are too long for proper display show up using the 8.3 format that MS-DOS creates instead of the long name, and then imports work correctly.
- In previous versions, it took very large movements of the stick for the inactivity alarm to clear. In the new version, it takes much less.
- PREV icon was shown incorrectly on the Voice Volume Control screen. It has been removed.
- “Trainer” showed as a switch on the Throttle Curve screen. It has been removed.
- FPV Trainer mode does not change between Wired vs. Wireless mode now except when commanded.
- “Flight Controller” text was shown on Multi-rotor Aircraft Type screen when it should not have been there.
- The channel display for the small monitor screens would change for no reason, and would not be retained through a power cycle. This has been corrected.
- Previously pressing the BACK button on the Mix Menu would get you into a loop between a mix and the menu. This has been corrected.
- Imported models with analog volume controls now carry the analog volume control through to the NX.

2021-Feb-15

Version 3.04.01 Public Beta

Changes are in comparison to version 3.03.03 (2020-Dec-23).

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

This Public Beta update has been tested fully by our internal and external beta teams, but there is a chance that users may experience unexpected behavior. If you would like to report any problems with this update, please contact us via email at airware@horizonhobby.com. Please note this email is for feedback only and you will not likely get a response.

Corrections & Improvements

- Corrected servo “glitch” problem with older 22ms DSM2 and DSMX receivers.
- Added a note to the USB mass storage mode screen to remind the user to attach a USB cable to radio and PC.
- Radios no longer speak “Student/Instructor has control” when in System Mode or when importing/exporting files.
- Hides the unused AS3X Gains screen when talking to a new-generation stabilized receiver. The gain data for them is available through the Forward Programming interface.
- Rename/reorganize contents of the BNF folder to fit into 31-char filename limit
- Corrects the availability of the Spoiler Stick in the Center Tones screen in Sailplane mode.
- Includes “< Add New Model from Template>” as on the Model Select list as a new way to create a model.
- The radios do not write excessive stick data to the telemetry log file as they did in previous versions. The writing of the input data is controlled by the Telemetry File Settings menu.
- Properly populate the SSID when auto-connecting to the WiFi.
- Add missing special characters in passwords, such as &, ` , * , and “ for WiFi use.
- When downloading new code from the web, the radio now deletes an old file with the same name to prevent collisions.
- Corrected a problem when using very large values (over 95%) for Crow that could cause glitches on the aileron channels. The movement is now smooth for all values.
- Reduced possibilities of “System Fault” errors occurring during model save operations.

Spektrum™ NX AirWare™ Change Log



- Show RX Pack Capacity using A instead of mA for current.

2020-Dec-23

Version 3.03.03

Changes are in comparison to version 3.02.01 (2020-Oct-26).

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- Flap System now supports custom aileron deflection (aka “Crow” or “Butterfly”) when using wing types 2 Ail/1 Flap and 2 Ail/2 Flap.
- Enabled reversing of an analog input to the flap system.
- Corrected Smart ESC/Battery display for Conscendo ESC EFLA1030E and Spektrum ESC SPMXAE0070.
- Flap System now allows selection of a different speed for each switch position instead of having the same speed for each position.
- Improved reliability of starting a charge when USB power applied.
- **NX8, NX10 only** - Added Analog Volume Control option to Volume settings menu.
- Optionally require the throttle stick to be lowered when releasing the Throttle Cut switch before allowing the stick to control the throttle. This new feature is mutually exclusive of the Delay option, and the screen will automatically change to make that clear.
- Icons for helicopter swash options in Forward Programming are now sized to better utilize the larger screen of the NX radios.
- Added battery charge current display to the charge status screen.
- Improved behavior when going to your My Spektrum account when you haven’t visited to Check for Updates in a long time.
- Delete All Models now correctly makes a single model named “1: Acro” – in the past it was “1: BNF” and was a different default configuration.
- New display color palette option “Legacy” provides a black-on-white display similar to DX radios, including using boxes rather than color to highlight selections.
- When you have not configured the My List screens, if you press the fn button (also referred to as FUNC) it now goes to the My List configuration screen. In the past nothing happened.
- Fixed some messages in Forward Programming so they display correctly.
- Removed duplicate telemetry status screen from Multicopter mode.
- Enabled access to Flap function on the Channel Input Assign screen.

- Corrected the outputs for simulators for button inputs.
- Swap Rx Port Assign and Channel Input Assign screens. This will make it easier for new users to follow the instructions in the aircraft manuals.
- Corrected a Forward Programming issue for reporting Absolute Travel limits to the receiver.
- When downloading an update via WiFi, we now name it to prevent getting stuck after a failed download. The file is named “AirWare_V.VV.VV_SPMTX.SAX” (V = version number).
- When exiting from the Add BNF model functions, it was possible to exit with a corrupt memory image. It now reloads the previous model correctly.
- < Add New BNF > is now an additional way to select a BNF model file as an option from the Model Select list screen.
- Center Tone screen now scrolls the entries properly.
- Center Tone sound/speech options now correctly select the various possibilities.
- Correctly displays a leading 0 in the “Time” section of the WiFi Download progress status screen.

NOTE: In our testing we identified an issue with certain legacy DSMX 6-channel receivers which can cause them to jump all channels except channel 2 (aileron) every 10 seconds. We have identified the issue in versions 3.02 and 3.03 and expect to correct it in the next release. If you are using one of these receivers, you may either re-bind in DSM2 mode (USA only) or use a receiver not on the list.

The affected receivers are: AR6110, AR6115, AR6115E, AR6210, AR400, AR600.

2020-Oct-26

Version 3.02.01

Changes are in comparison to version 3.01 as shipped from the factory.

This change log is available online at

<http://spektrumrc.cachefly.net/NXAirwareChangelogs.html>

Corrections & Improvements

- Forward Programming is enabled. The factory version will tell you that you need to update in order to communicate with the receivers.
- **NX6 only:** The default switch setting for the Aux2 channel is set per the table below. Any models created prior to updating will show an invalid input (switch E) for Sailplane, Helicopter, or Multirotor models.

Model Type	NX6	NX8/NX10
Acro	B	E
Sailplane	B	E
Helicopter	I	E
Multirotor	B	E