Spektrum™ AirWare™ Change Log

For DX Gen2 Transmitters

2024-Aug-6

Version 2.11

Changes listed below are since 2024-Mar-21.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- GPS processing for distance, degrees, speed, and altitude are now properly calculated.
- Sailplane V-Tail yaw response in AS3X is now corrected.
- Added Sky Remote ID module status icon to the Heli, Sailplane, and Multirotor main screens.
- Restored functionality of the Trim Setup screen to allow full access to trim steps 0 (no trim) to 10.
- Corrected orientation images for AR10360T for orientations 1/5 and 9/13.
- **DX6e/DX8e Only** – Telemetry is now captured correctly, enabling use of all telemetry and Forward Programming.

Audio System Changes (Voice output models only)

- No changes since Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2024-Mar-21

Version 2.10

Changes listed below are since 2022-Jan-25.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

New Features

- **Remote ID** – Transmitters now support the new Spektrum Sky™ Remote ID device which provides compliance with the FAA for Remote ID. The status is shown on the GPS status screen which you can access simply by moving the roller to the right.

Corrections & Improvements

- GPS now correctly responds to MSL/AGL setting on the display.
- Corrected ESC alarming for situations where no data is provided for certain fields.
- Corrected Taileron Differential behavior.
- Corrected Channel Input Assign screens in multi-rotor models.
- Improved Smart Battery reporting by filtering out bogus “new battery” messages and bad data packets.
- Added note that Tail Type changes require Forward Programming to Relearn Servo Settings for proper behavior (text change).
- Improved French Forward Programming screens by abbreviating text so it fit the display properly.
- Fixed issue with losing ability to add Switch Change Reports after deleting/disabling one from the middle of the list.
- Corrected missing signal strength data on Flight Log screen.
- Cleaned up garbage pixels on Telemetry Warning screen.
- Changed default alarms/settings for Smart Batteries to 4.0V (was 4.1V).
- Added missing charge status on Smart Battery screen.
- Corrected display of R and L receiver fades. They were swapped.
- **DX6e, DX8e Only** – Corrected Timer alarm behavior so that if you inhibit the alarm, then later enable it, it enables correctly. Previously it would show enabled but remain silent.

Audio System Changes (Voice output models only)

- No changes since Sound version 1.09 (2016-Oct-12)

- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2022-01-25

Version 2.09

Changes listed below are since 2021-Feb-15.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- The Dual Rate/Expo screen did not properly display curves after setting the switch to Inhibit on another axis; this has been corrected.
- Restored Sailplane Flight Mode setup screen third switch and Priority entry.
- Improved telemetry for Smart ESC and Smart Batteries.
- Properly displays all text on TextGen and clears the screen when none is being received.
- Backlight will now stay on while on the TextGen screen. This will ease configuration of ESCs, Flight Controllers, and other products which use TextGen for programming.
- When using an analog input for volume control, the BACK button access to volume change is disabled.
- Corrected some French translations in Forward Programming.
- Added support for new receivers in Forward Programming.
- **DX6e, DX6 Only** – The Servo screens only show 6 channels, correcting and error in v2.08 which showed an inaccessible 7th channel on some screens.
- Transmitters will no longer display Forward Programming when bound 22ms RF mode. Please note that 22ms RF mode is different from 22ms servo mode (Servo mode is selected on the Frame Rate screen). 22ms RF mode is only used by some older legacy receivers and European (EU) version of the DX6G2 and DX7G2 radios.

Audio System Changes (Voice output models only)

- No changes since Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

For DX Gen2 Transmitters

2021-Feb-16

Version 2.08

Changes listed below are since 2020-Sep-11.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Corrected servo “glitch” problem with older 22ms DSM2 and DSMX receivers.
- Reduced possibilities of “System Fault” errors occurring during model save operations.
- Added Forward Programming support for AR631 and other upcoming receivers.
- Radios no longer speak “Student/Instructor has control” when in System Mode or when importing/exporting files.
- Multirotor Digital Switch Setup showed incorrect channel assignment for the selected switch.
- Metric GPS distance is now displayed properly.
- 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.
- Radios always save the latest changes to a model when exporting.
- Enabled reverse travel capability for analog flap control.
- If the user pressed BACK on the Aircraft Type or Sailplane Type screens while a field was open, channel assignments could have been invalid. BACK will now close the field from editing, allowing a second BACK press to return to the System Menu.
- Swapped the Channel Input Assign and Receiver Port Assign screens. This will simplify BNF model configuration per the manuals.
- 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.

Audio System Changes (Voice output models only)

- No changes since Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

For DX Gen2 Transmitters

2020-Sep-11

Version 2.07

Changes listed below are since 2020-Aug-24.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Corrected a bug that was only present in version 2.06. This bug could cause gyro correction direction issues when using Forward Programming devices.
- Corrected issue when using TextGen devices that would not populate on main telemetry screens.
- Restored ten Flight Modes in Sailplane Model Type.
- Eliminated inconsistencies in Heli mode when Governor or Gyro is partially configured when model is saved.

Audio System Changes (Voice output models only)

- No changes since Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Thank you to **Riccardo** and **i_am_mark_evans** for your input

Spektrum™ AirWare™ Change Log

2020-Aug-24

Version 2.06

Changes listed below are since 2020-Jan-15.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Fixed audio reporting of servo position in Heli Warning screen. Thanks to **JayW129**.
- Telemetry dBm alarm point was not being exported. Thanks again to **JayW129**.
- Fixed problem with not resetting trimmer modes when used as flap system inputs in Acro mode.
- Added Priority Monitor control to the Telemetry Settings screen so that developers using SRXL2 can see that their telemetry data is sent properly.
- Removed “TextGen” as an option on the Telemetry devices list. If TextGen is being provided by your Flight Controller or ESC, it will appear automatically on the list of roller screens, making configuration simpler. Otherwise, it will automatically be hidden.
- Improved telemetry support for AR637T receiver. The old AS3X status screen is not used by the new receivers, and the new screen will automatically show on the list of roller screens for receivers that provide it, making configuration simpler.
- GPS location remains displayed on the LCD after signal loss. Note that this can cause the display of invalid location data if the GPS signal is not being received. Once it is received, it continues to display the last known position until the transmitter is power cycled or the model is changed.
- Disallowed Forward Programming mode for helicopter models when throttle safety settings (Hold mode or Throttle Cut) have been configured but are activate. You must engage Hold mode or use Throttle Cut to enter Forward Programming now.
- Non-axis channels which are reversed were incorrectly disallowed as Gain channels for Forward Programming. Thanks to **SilentPilot**.
- Fixed a Curve Mix of GER > anything. It would not show the value of the gear input device on the curve.
- New models default to the B switch controlling channel 7 (AUX2) for improved SAFE support in Acro model type (except DX6e, DX6, DX10T and DX18T).
- Properly support FM for top trimmers in Heli mode. Thanks to **Doug G**.

- Hide the old-style AS3X screen if new-style data is being provided. Remove from sensor list also.
- Properly (clearly) label Smart battery power-on low voltage setpoint as such.
- Assume a Smart Battery is attached when an ESC reports data. The screens are automatically hidden if data times out or ESC reports that it doesn't have individual cell data from batteries.
- Don't populate normal telemetry devices when Smart ESC/Batt attached.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2020-Jan-15

Version 2.05

Changes listed below are since 2019-Dec-19.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Adjust Smart Battery automatic alarm voltage set points to avoid premature alarms.
- Enable Forward Programming support for open-stock AR637T receivers.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

For DX Gen2 Transmitters

2019-Dec-19

Version 2.04

Changes listed below are since 2019-Oct-31.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Expanded Forward Programming to support AR410T, AR620T, AR637T, AR6610T to the latest capabilities. Note that you must update the receiver firmware to take advantage of the new capabilities.
- Add support for Spektrum FC6250HX FBL controller.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2019-Oct-31

Version 2.03

Changes listed below are since 2018-November-07 (last date all were updated). Some radios had an interim factory version 2.02 dated 2019-Apr-09 (see next page).

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Special Notes

- The default Throttle Cut setting is changed from -130% to -100% for all model types.

Corrections & Improvements

- Added support for SMART ESCs and Batteries.
- **DX20 Only** - In Acro mode, the wingtype “6 Aileron” was not compatible with tail type “Dual Rudder.” This is now corrected.
- **DX6e, DX8e Only** – Access to Forward Programming has been enabled, and the version number is now the same as the other radios.
- **DX6e, DX8e Only** – Imported files with Voice warnings can now have the warning changed to Tone. Thanks to **Jim P**.
- Added extra capabilities to Forward Programming to support new receiver capabilities.
- Speaking signal strength status no longer automatically speaks QoS (Frames/Holds) data. Thanks to **Johan510**.
- On radios without voice, turning off the timer in Throttle Out mode would always generate a tone, whether configured to or not. This is fixed. Thanks to **Jogibossi**.
- On radios with voice, the 64th entry in a category is now available. Thanks to **Jyunte**.
- No longer announces Timer Reset event for timers that are already in the reset state.
- Resetting the altitude report using the CLEAR button (Vario or Altimeter screens) now properly logs the altitude zero-set to the telemetry log file.
- Improved capture rate of telemetry. In earlier versions it was possible to sometimes lose a significant number of telemetry messages as the telemetry log file size increased or had a large number of extents. This version reduces it to

almost 0. You can reduce it to truly be 0 by logging to a clean SD card, and keeping the log file to just a few flights.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2019-APR-09

Version 1.23 (DX6e, DX8e)

Version 2.02 (DX6 Only)

Changes listed below are since 2018-November-07.

Version 2.02 is a factory-only update for now, and will be released as 2.03 with other changes in the future.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Speaking signal strength status no longer automatically speaks QoS (Frames/Holds) data. Thanks to **Johan510**.
- On radios without voice, turning off the timer in Throttle Out mode would always generate a tone, whether configured to or not. This is fixed. Thanks to **Jogibossi**.
- Improved capture rate of telemetry. In earlier versions it was possible to sometimes lose a significant number of telemetry messages as the telemetry log file size increased or had a large number of extents. This version reduces it to almost 0. You can reduce it to truly be 0 by logging to a clean SD card, and keeping the log file to just a few flights.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2018-Nov-07

Version 1.22 (DX6e, DX8e)
Version 2.01 (All others)

Changes listed below are since 2018-March-09.

For info on earlier versions not found in this document, please visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Corrections & Improvements

- Signal strength readings reported by AR410/AR620 will now display properly. Thanks to **fizzwater**.
- GPS no longer reports “GPS acquired” multiple times during a flight. The CLEAR button only resets the ‘home’ position when viewing the GPS status screen. Previously it could be cleared by loss of telemetry data, or by pressing CLEAR from any other sensor screen. Thanks to **stall warning** and others.
- Corrected import compatibility issue with Elevon models when importing from the iX12.
- Disable telemetry alarms when in Forward Programming mode.
- **DX10t, DX18t only:** The right stick 3-position switch properly reports as Switch T for inputs. It was previously reporting for changes to switch K. Thanks to **dieselfreak**.
- **DX10t, DX18t only:** Switch I is now correctly supported as a 3-position switch.
- **18-channel only:** DX20 models imported into a DX18 will force the output mapping into DX18 mode, that is, X+1 and X+2 are output on channels 11 & 12 respectively.
- **18/20-channel only:** DX18-class and DX20 radios now properly export their DX18 compatibility configuration.
- **18/20-channel only:** In certain circumstances, X-Plus channels were centered and not transmitted according to the inputs assigned to them.
- **DX6e only:** Trim Setup Screen enabled.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09 (2016-Oct-12)
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

Version 1.21 (DX6e, DX8e)

Version 2.00 (All others)

Changes listed below are since 2017-July-11.

For more info visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Special Notes

- In the Telemetry menu, some sensors may not be reported properly on the display or audibly after updating. If this occurs for you, please remove the sensor from the Telemetry list, then re-add it using the Auto-Config function on the Setup sub-menu. *If you made this change to your model since October 2015, you do **not** need to make it again.*
- With this version, we have begun to note in this change log the screen names of users who reported issues with previous versions, mostly since version 1.20. Spektrum very much appreciates the feedback we get from our users via RCGroups, Facebook, e-mail, and other social media venues, and we believe we can make this even better as we acknowledge our loyal customers for their helpful comments. We made a good faith effort to connect the corrections to the original reporter; if we missed you, please accept our apology in advance.

New Features

- **Except DX6e, DX8e:** Forward Programming is enabled. At this time the only product it works with is the AS3000-equipped PowerSafe receiver product line (update your receiver too). Other product updates will be released shortly which utilize it as well.
- The SD menu now includes the ability to create folders, delete files, and rename files. This will reduce your need to access a PC for these simple but important SD management tasks needed to help maintain proper backups of your models on the card.
- In order to make it easier to register your radios, on power-up the radio now automatically writes the serial number XML file that is used during the website registration. Note that the radio will overwrite an existing file for this radio type, but leave intact files for other radio types.
- After every import, the Validate All Models tool is run in the background to ensure that corrupted models are properly eliminated.

- Flight Pack Capacity is expanded to support both A and B datasets from a single sensor. Thanks to **Kambalunga** for noting that we were only supporting Channel A data.
- Added support for modern aircraft gyros. Enable the option “3-Axis Gyro” on the Aircraft Options screen. This setting then allows access to a new Function List menu by the same name. The function allows access to assign a channel to control gyro gains, with an optional trim using the Left and Right trimmers (trim available on DX9 and higher).
- Added support for improved telemetry Text Generator.
- Added support for telemetry Attitude/Magnetometer device.
- **DX9 Only:** On the System menu is a new option called Serial Port Setup. This allows the enabling of a Crossfire RF system. The Crossfire support including information regarding the hardware modification is documented at https://www.spektrumrc.com/ProdInfo/Files/SPMR9910_Crossfire_Instruction.pdf If you are not a Crossfire user, this menu does nothing for you and should be ignored.
  NOTE: *If you installed version 1.21.07 Crossfire Beta, this version has an improved conversion function which may require trim and travel adjustments in your models.*
- **Except DX6e, DX6, DX7:** Add Jet Central support as part of the Turbine telemetry capabilities.
- **DX10t, DX18, DX18QQ, DX18G2, DX18t, and DX20 only:** The X-Plus channel scheduling algorithm has been improved to provide lower latency by never transmitting unused X-Plus channels. To best take advantage of this, when adding functions on X-Plus channels start with XP+1, then XP+5, then XP+2, then XP+6, and so on.
- **Non-Tray Radios only:** On the Range Test screen, pressing the trainer switch to change between High and Low modes causes the normal click sound.

Corrections & Improvements

- In Helicopter mode, the radio was using the Elevator Dual Rate/Expo settings for the ailerons instead of the Aileron settings. This could cause a very different feel for your model if this applies to you. ***Please verify that your helicopter Dual Rate and Expo settings behave as you expect before flying it again.***
- Non-Speech radios now honor the Tone/Inh settings for Timer Start/Stop sounds.
- In order to improve compatibility when importing to older versions of radios, it does not export VTX data when VTX is disabled or a default configuration.
- VTX interface allows access to all channels, as regional compliance is now enforced by the VTX hardware.

- The VTX control screen now accepts telemetry feedback from the VTX device or flight controller. When the telemetry data is being received, the VTX screen shows a “Status” column to allow the user to confirm operation. Thanks to **AndWho**.
- Some Flight Pack Capacity channel B data was displaying incorrect fields. Thanks to **AndWho**.
- Mixing FLP > anything now works properly. In v1.20 it was using the throttle stick as the input instead of the time-controlled Flap System flap output. Thanks to **ricardo forte**.
- The Telemetry Signal Loss alarm now sounds after about 4-5 seconds vs. the nearly-instantaneous alert in version 1.20. Thanks to **pgoelz**.
- The radio will not trigger a Telemetry Signal Loss alarm when going into System Mode. Previously it would do that even though RF was disabled.
- Changed the text editing screen to use bold characters in the helper text, fixed the >-< (delete) and <+> (insert) characters for proper display, and corrected the left/right asymmetry issues in the 1.20 Public Beta version. This also eliminates the “jumps” that could happen when moving between different categories of characters. Thanks to **LenAlessi**, **davidmc36**, and others.
- The text editor is now easier to use. Instead of forcing you to scroll to the right set of characters every time, the radio instead inserts the last character on the left into the current position when you are changing at the end of the name. This should be a big time-saver, since most of the time you will be working with similar characters for adjacent positions of a name. Thanks to **davidmc36**, **LenAlessi**, and others.
- Corrected an issue that could cause a multi-rotor to have incorrect throttle outputs when changing from a model that had a lot of throttle trim offset. Thanks to **jayar**.
- When creating new models, the default display for signal strength is changed to % Range mode.
- Editing the Signal Strength alarm point now works properly for all display modes. In the past, you could get different results from different modes.
- The Vario screen now displays the altitude correctly. Thanks to **pgleesonuk**.
- The GPS module now reports negative altitude correctly. Thanks to **WMF Flyer**.
- GPS speed, distance, and altitude data now requires more satellites before recognizing the incoming data as valid. This will add very little time to the startup process, but should prevent or reduce the number of instances when extremely high and unreasonable values are spoken. Thanks to **Kambalunga, kallend,** and others.
- Receiver voltage was incorrectly being spoken when it should have been saying “No Data” after timing out.

Spektrum™ AirWare™ Change Log

2018-Mar-09

- It was possible for the Bind Screen to enter a state that only turning off the power switch could recover when certain timing constraints were met. This has been eliminated by changing the sequence of operations, and by adding a 20-second “deadman” timer to report a bind failure. Thanks to **sbstnp**.
- The Digital Switch Setup screen would enter a mode that kept repeating the last two options forever when rolling to the right. Thanks to **Mukenukem**.
- When adding a new model, the channel monitor & related functions are now reset to the default for the transmitter instead of following the previous model.
- Improvements to the Lap Timer system. The Lap Timer is now available in all radios.
- The normal 10-second timeout function was active on screens where it should have been disabled. Thanks to **czorzella**.
- Some settings of Digital Switch Setup were not exported. Thanks to **czorzella**.
- Very long model names resulting in very long export names are no longer mangled when the name is edited. Thanks to **LenAlessi**.
- **DX6e Only:** Do not give option to change the type of Warning on power-up because only Tone is possible in these radios, as they have no vibe and no voice.
- **DX10t, DX18, DX18QQ, DX18G2, DX18t, and DX20 only:** When using the X-Plus Input Config screen, you could scroll beyond the PREV button which was the last available input. Thanks to **davidmc36**.
- **DX10t, DX18, DX18QQ, DX18G2, DX18t, and DX20 only:** When X-Plus is enabled and you change the monitor in one of the menus such as Mix or Throttle Cut to see X-Plus channels, if you go to the Monitor function the display now changes back to the channel monitor setting for this screen. Previously it would have allowed the X-Plus monitor to be shown in two places. Thanks to **davidmc36**.
- **DX10t, DX18t Only:** Switches S & T are functional. Version 1.20 had them blocked from operation. Thanks to **madmao**.
- **Non-speech radios Only:** Timer alerts were not generated properly. Thanks to **GadgetMart**. Note that timer alert behavior in your existing models may need to be changed on the Timer Event Alerts screen.

- High max altitude alarms can now be set properly for alarm points over about 3200 ft.
- Alarm temperature for 6S LiPo telemetry no longer rolls over at extremes.

- Improved spacing on the Integrated Timers screen to allow room for long durations.
- Importing a configuration file which includes a wired trainer setting into a radio which does not have wired trainer capability (DX6e) will change the trainer mode to wireless.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09
- If you previously updated to Sound 1.09 there is no need to update again.

Sound downloads are always found at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html

Spektrum™ AirWare™ Change Log

2017-July-11

Version 1.20

Changes listed below are since 2016-November-15.

To help simplify and better identify Spektrum AirWare updates, ALL current generation Spektrum radios will use the same version number, starting with Version 1.20.

For more info visit

http://spektrumrc.cachefly.net/AirwareChangelogs.html

Special Note

- In the Telemetry menu, some sensors may not be reported properly on the display or audibly after updating. If this occurs for you, please remove the sensor from the Telemetry list, then re-add it using the Auto-Config function on the Setup sub-menu. *If you made this change to your model since October 2015, you do **not** need to make it again.*

New Features

- Added and improved support for telemetry sensors introduced over the past year.
- Support the ability to import/export User Defined telemetry devices model settings, including more fields in the import/export for Flight Log data.
- The barometric altitude sensors can be “zeroed” by pressing the CLEAR button while on the Altitude telemetry status screen. If the Telemetry Log is enabled, when the user uses this function the log will report this event.
- Added a new Telemetry Signal Loss alarm to the Flight Log setup screen. This will generate the desired alarm when the transmitter stops receiving Flight Log data for about 4-5 seconds. On speaking radios, the voice warning is “Telemetry No Data.”
- Added Taileron tail types to Acro mode. These are “always on” tailerons – if you want a switch to turn it on/off, you need to set your Tail Type to Dual Elevator and then create a mix of AIL > LEL.
- In Multi-Rotor mode, the default frame rate is changed to 11ms.
- In Sailplane mode, the Dual Rates/Expo screen allows the user to define curve 4. To inhibit rates and expo, the user must change the switch to Inhibit.
- Spacing on Curve mixes is now possible at about 7% steps. This allows the use of finer spacing between control points.
- The radio now waits 30 Seconds (previously 10 seconds) before reporting low transmitter battery. This helps alleviate users from accidently changing battery type and having difficulty changing back to the correct battery type.

- **DX6e Only:** Added the ability to configure Timer Alerts that allow tones and alarms at user configured timer intervals. Found on the last page of the Timers Menu
- **DX8 and higher only:** Added support for new telemetry sensor offered by Smoke Systems which provides sensor data (Battery voltage G-Force, CutOff) from the Smoke Driver. Available from www.smoke-el.de .
- **DX8 and higher only:** Turbine telemetry support has been completely revised. Includes improved support for taxi tank usage by:
    - Fuel consumption countdown can be reset by:
        - using either the CLEAR button on the Turbine status screen, or
        - linking it to the timer (Timer 1) so that pressing CLEAR on the main screen to reset the timer will also reset amount consumed to 0, or
        - starting the timer before takeoff once the taxi tank is removed.
    - Added alarm for invalid fuel tank size (set the ECU tank size to 1000mL + aircraft tank size)
    - Added alarm for fuel completely gone (< 1% remaining).
    - The Status and Fuel displays are automatically displayed depending on the ECU interface used.
    - In Acro mode the model image is automatically replaced with ECU and receiver battery data. This only occurs when a Turbine sensor is defined.
- **DX20 only:** Added support for Dual Elevator/Dual Rudder when using 6-Aileron wing type.

Improvements

- Properly resets the Left trimmer when changed in Flap System configuration.
- Some import error messages were being displayed with the wrong text.
- Improved resilience when flaky SD cards are inserted while radio is powered on.
- The Digital Switch Setup screen now works properly when there are gaps in the available Flight Modes.
- In Sailplane mode, added FLP(Flaps) as an allowable mix input.
- When selecting FLP as a mix input, the radio now uses the output of the Flap System rather than the input to it. This allows mixes to gradually change according to the speed programmed in Flap System.
- Warning modes are properly saved when exporting a model to the SD card.
- The Lap Timer system has multiple corrections that provide more-accurate timing and display.
- Throttle Cut again allows CLEAR/BACK/Roller and trimmer as throttle-cut inputs.
- Trainer mode no longer resets to 4 configurable channels if a particular sequence was followed.

- Disabling a Gyro assigned channel in Acro mode no longer locks out that channel.
- Corrected translation and spelling in assorted screens.
- Timers with modified “clear” inputs will now export and import correctly. In previous versions the imported model would return to the default CLEAR button.
- Flight Mode alarms no longer trigger after Flight Modes have been disabled.
- Multi-Rotor “Gear” alarms are now properly working based on channel input.
- Restored Flight Mode as allowable sailplane motor control option.
- 11ms Throttle in Multirotor model type is now assigned more predictably.
- **DX10t/DX18t-only:** The default outputs for the 3-position stick-tip switches are now for +100%, 0%, and -100%. This will be set only when a new model is created – existing models are unchanged.
- **DX20-only:** Selection boxes for multi-engine models are located more intuitively.

Audio System Changes (Voice output models only)

- For all languages please use Sound version 1.09
- Version 1.09 adds speech for several new sensors (LiPo Monitors) and Autonomous Mode for GPS-enabled models.
- Signal strength is now spoken. This feature will be further improved in future versions as more receivers support this feature. Only the SPM4649T currently supports Signal Strength in the telemetry. The data can be viewed either as dBm (the way RF strength is measured) or in a distance-relative mode (RSSI Percentage).
- The sound item “Flight Mode” in the past spoke the number of the current flight mode. Now it speaks the name of the flight mode as found in the Spoken Flight Mode setup screen.
- The scroll speed in the All Sounds category has been improved. In the previous two versions it got slower and slower as you moved farther down the list. This is no longer the situation.
- Corrected speaking of 100, 101, 102, etc. in Italian.

Sound downloads are always at this link:

http://spektrumrc.cachefly.net/TransmitterSounds.html