

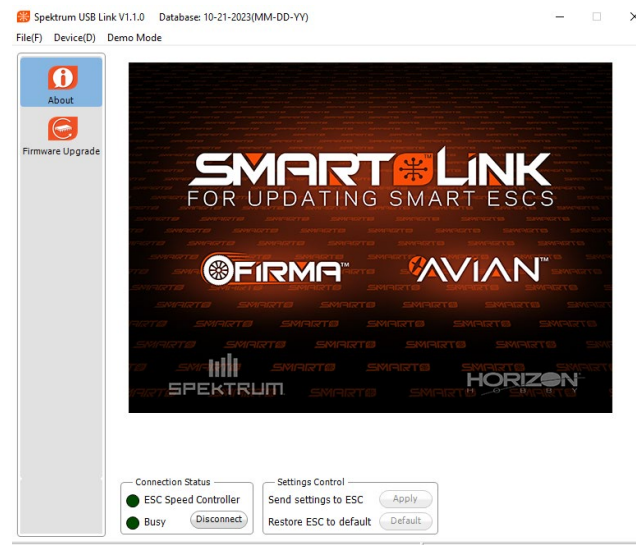
Spektrum Firma ESC Update Instructions

Items Needed to Perform Updates and Program your Spektrum Smart ESC

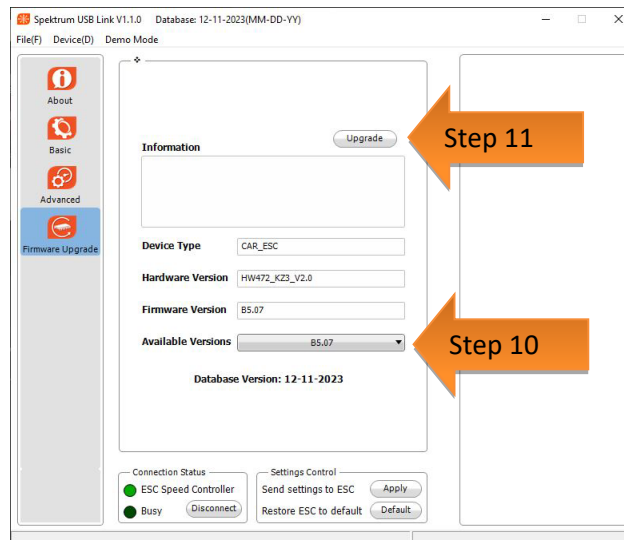
- Desktop or Laptop computer running Windows 7 or higher
- Spektrum Smart ESC Programmer (SPMXCA200)
- Micro USB to USB Cable (included with SPMXCA200)
 - This is a USB-C to USB on the V2 SPMXCA200
- Male to Male Servo lead (included with SPMXCA200)
- Battery to Power the ESC

Connecting your Spektrum Smart ESC to the SmartLink PC App

1. Restart your computer
2. [Download the latest Spektrum SmartLink updater app here](#)
3. Once downloaded, extract the .ZIP file to a location that you can easily find, we suggest the Desktop
4. Locate and open the Spektrum USB the Spektrum USB Link.exe
5. You will see this screen



6. Connect your Firma Smart ESC to your SPMXCA200 Programmer via the ESC port
 - A. Plug male to male servo lead into your ESC fan port (85A and Higher Firma Surface ESCs)
 - B. Plug into the designated 3 Pin ESC program port on ESC's without a fan port.
7. Connect to your SPMXCA200 Programmer to your PC with the micro USB cable (USB-C to USB)
8. Power on your Firma Smart ESC
9. The SmartLink app will connect to your Smart ESC
10. Go to the "Firmware Upgrade" tab and select the top version from the "Available Versions" drop down box
11. Click the "Upgrade" button to perform the update



12. Once the “Upgrade” button has been selected to install the update on your Smart ESC, a progress bar will appear on your computer screen. Please allow the update to finish then click “OK” to save the settings. You can disconnect and use your Smart ESC with the updated firmware now.

Note: When a Firmware upgrade is performed, all settings on your Smart ESC will return to the defaults, please confirm the proper settings for your model before use.

13. Restart your ESC for the firmware version to be applied
14. Plug any disconnected fans back in

Spektrum Firma ESC Programming Instructions



BASIC

- **Running Mode** – Select between Forward and Brake (Fwd/Brk) or Forward, Reverse and Brake (Fwd/Rev/Brk) (* Default)
- **LiPo Cells** – Select between Auto-Calculation (* Default)– 8S LiPo Cutoff.
- **Low Voltage Cutoff** – Select between Auto Low – Auto Intermediate (*Default - Auto High)
 - **Auto (Low)** - Low cutoff voltage, not very easy to get the LVC Protection activated, is applicable to batteries with poor discharge capability.
 - **Auto (Intermediate)** - Medium cutoff voltage, prone to getting the LVC Protection activated, is applicable to batteries with ordinary discharge capability.
 - **Auto (High)** - High cutoff voltage, very prone to getting the LVC Protection activated, is applicable to packs with great discharge capability.
- **BEC Voltage** – Select Between 6.0V (* Default) and 8.4V
- **Brake Force** – Select between 25% - 100% or Disabled



ADVANCED

- ❓ **Reverse Force** – Available settings and default depend on ESC model
- **Start Mode (Punch)** – You can adjust the throttle punch from level 1 (very soft) to level 5 (very aggressive) as per the track, tires, grip, your preference etc. This feature is very useful for preventing tires from slipping during the starting-up process. In addition, “level 4” and “level 5” have strict requirement on battery’s discharge capability. It may affect the starting-up if the battery discharges poorly and cannot provide large current in a short time. The car stutters/cogs or suddenly loses power in the starting-up process indicating the battery’s discharge capability is not adequate. Upgrade to higher C rating battery or you can reduce the punch or increase the FDR (Final Drive Ratio) to help.
- ❓ **Timing Mode** - Available settings and default depend on ESC model
Usually, low timing value is suitable for most motors. But there are many differences among structures and parameters of different motors so please try and select the most suitable timing value according to the motor you are just using. The correct timing value makes the motor run smoothly. And generally, higher timing value brings out higher output power and higher speed/rpm. **Note: After changing the timing setting, please test your RC model. Monitor for cogging, stuttering and excessive motor heat, if these symptoms occur, reduce timing.**