

Using the Phx-Link:

Phy LINK	×
Basic Advanced Software	
Basic ESC Settings	
Cutoff Voltage: Custom:	
5.0V	
Cutoff Type:	
Hard Cutoff 🗾	
Brake Type:	
Delayed Soft	
Throttle Type:	
Auto Calibrating	
Soft Start: Send Settings to ESC:	
Soft Update	
USB PhxLink Connection Status	
ESC Connection Status	

1. Install the Phx-Link Windows[™] software and the Phx-Link USB driver

a. To use the Phx-Link, you must first install the WindowsTM software for the Phx-Link, and the driver for the Phx-Link USB adapter. Refer to the Phx-Link installation guide for instructions on installing your Phx-Link and the USB adapter.

2. Connect the Phx-Link USB adapter to your computer

a. Connect the Phx-Link cable to the Phx-Link USB adapter using the small end of the USB cable.

b. Connect the large end of the Phx-Link cable to an unused USB connection on your computer. If the software was correctly installed, you should hear a beep from the computer verifying the connection.

3. Connect your Phoenix controller to the Phx-Link USB adapter

a. If your Phoenix brushless controller has the BEC DISABLED, you will need to have an external battery to power the Phoenix controller. If you have the BEC enabled, you will not need an external battery to power you Phoenix controller.

b. Connect the Phoenix controller RX lead to the USB adapter lead. Make sure you get the polarity right (the colors should match on both sides.)



c. At this point, you should have a GREEN LED on the USB adapter, and a very rapidly flashing RED LED on both the USB and the Phoenix controller. If both the GREEN LED on the USB adapter is on steady, and the both RED LEDs on the Phoenix and USB adapter are flashing rapidly, you have a good connection to the USB. Go on to section 4, Using the Windows[™] software.

d. If you do not have a solid GREEN LED on the USB adapter, try unplugging and plugging back in the Phoenix controller until you get a good solid GREEN LED on the USB adapter. With older software it may take several tries to get a GREEN LED on the USB adapter. (Don't worry – once the software is updated to the most recent version, connecting the USB adapter will be much easier.) It helps to use a quick motion to connect the USB adapter and the Phoenix controller.

(NOTE: It can be especially difficult with the Phoenix-10 micro and the NEW version of the Phoenix-35 or Phoenix-45 to get a good connection with the USB. Also, some older versions of Phoenix controllers DO NOT HAVE the USB compatible software. If you CANNOT get your Phoenix controller to connect to the USB adapter, you may have to return it to Castle Creations for a software upgrade. In particular, any Phoenix controller manufactured before August of 2003 will not be compatible with the USB adapter and will have to be returned for a free software upgrade.)



4. Using the Phx -Link Windows[™] software to upgrade software on your Phoenix brushless controller

a. Start the Phx-Link Windows software by either double clicking the icon on the WindowsTM desktop, or by selecting it through the program listing on the Start Menu.
b. If you have not previously upgraded the software on your Phoenix controller, the program will start, and then will (after a short pause) bring up a message box:

Phx LINK	×
8	Older version of ESC software detected Software MUST be updated before continuing to use Phx-LINK
	(OK)

c. Click Ok. The software should automatically move to the Software page:

Phx LINK	×
ESC Software Version/Update	
ESC Model: Phoenix-10 (micro version)	
Update ESC Software:	
USB PhxLink Connection Status	
ESC Connection Status	

d. **IMPORTANT:** If the ESC Model drop down list DOES NOT MATCH your ESC model, select the correct speed control model BEFORE updating the software.



WARNING: Selecting the wrong model of ESC might cause the software update to fail. However, if this happens, you will still be able to download the correct software. Just make sure you select the correct ESC model before updating the software again.

e. Click the Update Software button to start the update software process. Follow directions when prompted. The update software process may take up to a minute to complete.

NOTE: If your controller loses connection with the USB adapter during update, try unplugging and plugging back in the ESC. If the ESC does not reconnect with the USB adapter, close the Phx-Link WindowsTM software, and start again from the beginning.



5. Using the Phx-Link to change your program settings.

a. After updating the software on your Phoenix controller, the program settings will automatically revert back to the standard default settings. Click on the "Basic" tab on the top of the Phx-Link window to set basic Phoenix program settings. This message box may pop up when you switch to the "Basic" tab:

Phx LINK	×
♪	Program settings are invalid for this version of software. Program Settings will be initialized to their default values.
	ОК

Hit the OK button.

b. The basic settings screen contains five different programmable settings that can be changed on the Phoenix ESC:

Cutoff Voltage:	Custom:
Cutoff Type:	
Hard Cutoff	1
Brake Type:	
Delayed Soft 📃	•
Throttle Type:	
Auto Calibrating	-
Soft Start:	Send Settings to ESC:
Soft	Update

These settings are similar to the settings in your Phoenix ESC manual. To change the settings, use the drop down box to change the setting, and then click the Update button.



NOTE: Setting are not changed until the Update button is pressed.

c. Using the CUSTOM cutoff voltage: There is a setting in the Cutoff Voltage dropdown list that is marked "Custom". If you select the "Custom" cutoff voltage, you may change the cutoff voltage using the spin control to any voltage between 6.0V and 18.0V. Using a custom cutoff voltage will not change the cutoff type, just the voltage at which the cutoff occurs.

6.0 Advanced Settings

a. The advanced settings screen contains five different programmable settings that can be changed on the Phoenix ESC. Click on the Advanced tab to change to the advanced settings page:

Phx LINK	×
Basic Advanced Software	4
Advanced ESC Settings	
Motor Timing:	
Standard Advance	
Current Limiting:	
Normal	
PWM Frequency:	
11khz	
Send Settings to ESC:	I
Update	
USB PhxLink Connection Status	
ESC Connection Status	

Advanced settings should only be used by those who are familiar with their use. To change the settings, use the drop down box to change the setting, and then click the Update button.

NOTE: Setting are not changed until the Update button is pressed.



Identifying your Phoenix controller

If you are unsure as to which version of the Phoenix controller you own, refer to this table to determine the type of controller you own:

Phoenix-10 Versions:

Phoenix-10 Micro:



Phoenix-10 (older version)





Phoenix-25:



Phoenix-35 and Phoenix-45:

Older versions (newer version will auto-detect)







Phoenix-60 and Phoenix-80:





Newer version

Older version

Note that the Phoenix-60 and Phoenix-80 have a large aluminum heat plate between the boards:

