

FANTOM

FR-10 PRO ESC - LCD PROGRAM CARD USER MANUAL

The Fantom FR-10 PRO LCD Program Card only applies to the FR-10 PRO 1:10 scale, 2S, 160A brushless ESC.

The LCD Program Card can be used in two ways as follows:

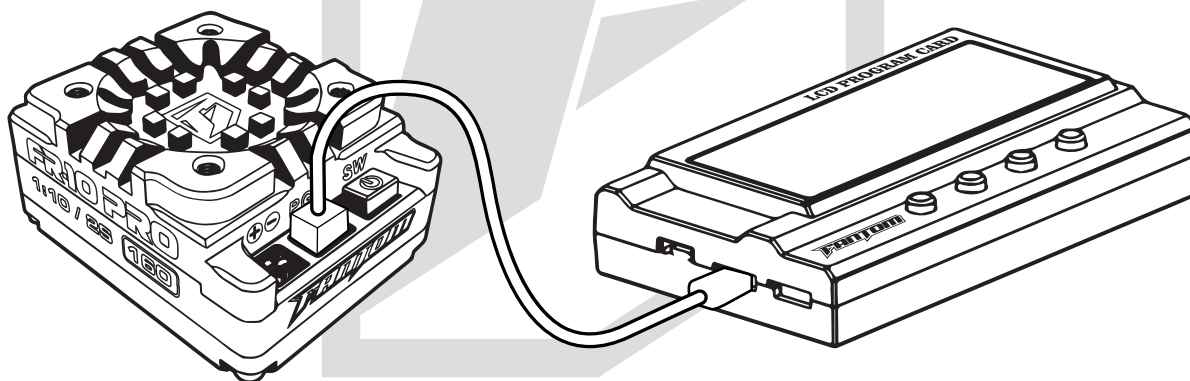
1. As an individual device, connected directly to your ESC, to set the parameters of your FR-10 PRO ESC.
2. As a USB adapter to update the firmware, of your LCD Card and/or your ESC, and set the parameters, of your FR-10 PRO ESC, on a PC.

Specification:

Dimension: 91mm x 54mm x 18mm (L/W/H) Weight: 68g

Power supply: DC 5.0V~12.0V

To use as an individual device, connected directly to your ESC:



1. Disconnect the battery from the ESC.
2. Plug the included signal wire into the PGM port of your ESC (white to the right side) and the other end into the socket of your LCD Card marked with 100 (black to the right side).
3. Connect the battery to the ESC and turn on the ESC.
4. If the connection is correct, "Fantom Racing" will be displayed on the LCD screen. If the data connection between the LCD and ESC fails, please check whether the signal wire is connected correctly and repeat steps 1, 2 and 3.
5. If the connection is established successfully, with "Fantom Racing" displayed on the LCD screen, press any button and the first programmable item will be displayed on the LCD screen. It's ready to customize your ESC parameters now.

Working as an individual device to program the ESC, the function of the buttons are as follows:

"Menu": Use this button to scroll through all the available customizable parameters.

"Value": Use this button to scroll through all the available values, of each customizable parameter.

Working as an individual device to program the ESC (continued)

Note: Keeping the "Menu" or "Value" button held down will scroll through the parameters and values quickly.

"Reset": Use this button to return your ESC to all default settings. After pushing this button, follow immediately with pressing the "OK" button, to confirm that you want to reset all parameters back to the default settings.

"OK": Use this button to save your customized parameters into the ESC. **IMPORTANT:** You must press this button every time you want to save a customized parameter in the ESC. If you don't press the "OK" button, the customized setting will not be saved and updated into the ESC. If you just press the "Menu" button, the customized settings are just saved into the program card; not into the ESC. For example: First, use the "Menu" button to scroll through the available customizable parameters and stop on one that you would like to customize (i.e. cut-off voltage 3.2/cell, etc.). Second, press the "Value" button to scroll through the available values. Third, once your desired value is shown on the screen, press the "OK" button to save the setting into the ESC. Press "Menu" to scroll to the next parameter, and so on.

Note: All default settings are preceded by a "*". For example: G7: BEC Output
*1: 6V

LCD PROGRAM CARD PARAMETER IDENTIFICATION, FUNCTIONS & DESCRIPTIONS

GENERAL (G)

G1: RUNNING MODE – *Forward/Brake, Forward/Brake/Reverse, Forward/Reverse – Use this function to set whether you want forward & brake only, forward and brake and reverse, or forward & reverse only. Most tracks do not allow reverse during racing. The default setting of "Forward & Brake" only is the recommended setting for all racing applications.

G2: LOW VOLTAGE CUTOFF - Disable, *Auto, custom 3.0v to 11.1v (0.1v increments) - Over-discharging a battery will cause permanent damage. To avoid over-discharging the battery, use this function to protect the battery voltage from being discharged too low. The ESC will stop running, once the chosen minimum battery voltage setting is reached during operation. Recommended settings: 1S=3.3v, 2S=6.6v, 3S=9.9v

G3: ESC OVER-HEAT PROTECTION - Disable, 203° Fahrenheit (95° Celsius), *221° Fahrenheit (*105° Celsius), 266° Fahrenheit (130° Celsius) - Over-heating an ESC will cause permanent damage. To avoid over-heating the ESC, use this function to protect the ESC temperature from going too high. The power output of the ESC will drop, once the chosen maximum ESC temperature is reached during operation.

G4: MOTOR ROTATION - *Normal, Reverse - Use this function to change the motor rotation direction (clockwise or counter-clockwise).

G5: RACE MODE - *Stock (Blinky), Modified - Select "Stock" to run in Blinky mode, typically with 10.5T and over stock/spec motors. Most tracks require all stock / spec classes to use "Blinky" mode. Select "Modified" to run modified motors, typically 4.5T to 9.5T motors.

LCD PROGRAM CARD PARAMETER IDENTIFICATION, FUNCTIONS & DESCRIPTIONS (continued)

G6: DEADBAND - 12 steps (1% increments – default = 4%) - Use this function to adjust the sensitivity of the neutral position, of the throttle trigger (throttle and braking). In other words, how much the throttle needs to be pulled or pushed before the ESC will receive input. By changing the value, you can customize how quickly your throttle and braking inputs react from the neutral position. Lowering the value increases the sensitivity. Raising the value decreases the sensitivity.

G7: BEC OUTPUT - *6v, 7.4v - Use this function to set your BEC output voltage to 6v or 7.4v. You can determine the correct voltage setting from your servo manual. **WARNING:** An incorrect BEC voltage setting can cause permanent damage to your servo.

THROTTLE (TH)

TH1: INITIAL POWER LIMITER - 30 steps (*15) - Use this function to control the initial power to the motor. Increasing the value increases the initial power delivery to the motor. Typically set the value higher for high-traction tracks and lower for low-traction tracks.

TH2: THROTTLE RATE - 30 steps (*15) - Use this function to control the overall throttle power feeling. Increasing the value increases the overall power feeling. Typically set the value higher for high-traction tracks and lower for low-traction tracks.

TH3: DRIVE FREQUENCY - 1K, 2K, 4K, 8K, *16K - Use this function to control the response feel of the throttle. Low values provide more aggressive feel. High values provide a smoother feel. Typically use the lower values for spec/stock motors and the higher values for modified motors.

TH4: RPM LOCK - 1% to *100% (1% increments) - Use this function to lock the motor RPM, typically used for drift cars. Leave this at the default setting of 100% for all racing applications.

TH5: THROTTLE CURVE - *Linear, Custom - Use this function to customize the balance between your throttle input and the ESC output. For example, in "linear" mode, if you pull the throttle 10%, the ESC will put out 10% power. If you pull the throttle 50%, the ESC will put out 50% power and so on. In "custom" mode, you can customize the balance between your throttle input and ESC output. For example, you can set it so that when you pull the throttle 10%, the ESC will put out 25% power and so on. The settings can also be reversed. For example, you can set it so that when you pull the throttle 10%, the ESC will put out 5% power and so on. Typically use the linear mode with modified motors and the custom mode with stock motors, to increase the power delivery to the motor.

BRAKE (B)

B1: INITIAL BRAKE - 1% to 20% (1% increments – default = 10%) - Use this function to control the instant brake force to the motor, when the throttle is pushed from the neutral position to the initial brake position. Increasing the value increases the initial brake force to the motor.

B2: DRAG BRAKE - 0% to 100% (1% increments – default = 10%) - Use this function to control the amount of automatic brake, when the throttle is returned from the forward to the neutral position. Increasing the value increases the amount of automatic braking applied to the motor.

LCD PROGRAM CARD PARAMETER IDENTIFICATION, FUNCTIONS & DESCRIPTIONS (continued)

B3: BRAKE FORCE - 0% to 100% (12.5% increments – default = 75%) - Use this function to control the brake force applied to the motor. Increasing the value increases the brake force applied to the motor. The formula for the brake parameters is: $y=ax+b$, whereas "y" is brake force, "a" is brake rate, "b" is initial brake, "x" is the throttle, which means the final brake force is determined by the brake rate and initial brake values.

B4: INITIAL BRAKE RESPONSE - 20 steps (*5) - Use this function to control the initial brake power response to the motor. Increasing the value increases the initial brake response to the motor. Typically set the value higher for high-traction tracks and lower for low-traction tracks.

B5: BRAKE RATE - 20 steps (*5) - Use this function to control the overall brake power feeling. Increasing the value increases the overall brake power feeling. Typically set the value higher for high-traction tracks and lower for low-traction tracks.

B6: BRAKE FREQUENCY - 1K, 2K, 4K, *8K, 16K - Use this function to control the response feel of the brakes. Low values provide more aggressive feel. High values provide a smoother feel.

B7: BRAKE CURVE - *Linear, Custom - Use this function to customize the balance between your brake input and the ESC brake output. For example, in "linear" mode, if you push the brake 10%, the ESC will brake 10%. If you push the brake 50%, the ESC will brake 50% and soon. In "custom" mode, you can customize the balance between your brake input and ESC brake output. For example, you can set it so that when you push the brake 10%, the ESC will brake 25% and so on. The settings can also be reversed. For example, you can set it so that when you push the brake 10%, the ESC will brake 5% and so on. Typically use the linear mode with spec motors and the custom mode with modified motors, to increase the brake power delivery to the higher RPM motors.

B8: OFF BY RADIO - *Yes, No - Select "yes" to enable turning off the ESC by holding the throttle in the full brake position for 5 seconds. Select "no" to disable this function.

BOOST (T)

NOTE: Boost settings T1 through T3 are not accessible when "*Stock (Blinky)" mode is selected in "G5: RACE MODE"

WARNING: Boost is an advanced feature and should only be used by experienced racers. Improper boost settings can cause poor performance and/or permanent damage to your ESC and/or motor, which is not covered under warranty.

T1: BOOST TIMING - 0° to 64° (1° increments – default = 0°) - Use this function to control the maximum amount of dynamic timing the ESC applies to the motor. Boost timing is effective throughout the entire throttle range. Boost timing starts based on the "BOOST TRIGGER LEVEL" setting. Boost timing is not constant but varies based on throttle position, starting from the "BOOST TRIGGER LEVEL" point until full throttle.

T2: BOOST TRIGGER LEVEL - 50 steps (*1) - Use this function to set the throttle position that is required to activate the "BOOST TIMING". Increasing the value increases the amount of advanced throttle that is required to activate the "BOOST TIMING".

T3: BOOST TRIGGER RATE - 10 steps (*1) - Use this function to set the throttle position that is required to activate the maximum "BOOST TIMING" that was set in the "BOOST TIMING" function. Increasing the value increases the amount of advanced throttle that is required to activate maximum "BOOST TIMING".

LCD PROGRAM CARD PARAMETER IDENTIFICATION, FUNCTIONS & DESCRIPTIONS (continued)**TURBO (T)**

NOTE: Turbo settings T4 through T10 are not accessible when “*Stock (Blinky)” mode is selected in “G5: RACE MODE”

WARNING: Turbo is an advanced feature and should only be used by experienced racers. Improper boost settings can cause poor performance and/or permanent damage to your ESC and/or motor, which is not covered under warranty.

T4: TURBO TIMING - 0° to 64° (1° increments – default = 0°) - Use this function to control the amount of dynamic TURBO timing the ESC applies to the motor. Turbo timing is typically activated on long straightaways, to maximize the full potential of the motor. Turbo timing is constant and is activated and deactivated based on the “START RPM”, “TURBO DELAY”, “ACTIVATION METHOD”, “TURBO ON RATE”, and “TURBO OFF RATE” settings.

T5: ACTIVATION METHOD - *Full Throttle, RPM, Full Throttle + RPM - Use this function to control when “TURBO TIMING” is activated. If “Full Throttle” is selected, “TURBO TIMING” will be activated only once the throttle is in the full throttle position and the “TURBO DELAY” time has been achieved. If “RPM” is selected, “TURBO TIMING” will be activated only once the RPM is reached, that was set in the “START RPM” function. If “Full TH+RPM” is selected, “TURBO TIMING” will be activated only once the throttle is in the full throttle position and the RPM is reached, that was set in the “START RPM” function, and the “TURBO DELAY” time has been achieved.

T6: TURBO DELAY - Instant, 0.05 seconds to 1 second (.05 second increments – default = 0.3 seconds) - Use this function to control the delay time required to activate the “TURBO TIMING”, once the activation conditions are achieved, from the settings made in the other functions.

T7: START RPM - 8,000 RPM to 50,000 RPM (1000 RPM increments – default = 20,000 RPM) - Use this function to control the RPM that the motor must achieve to activate the “TURBO TIMING”. If “Full TH” is selected in the “ACTIVATION METHOD” function, the default start RPM is 20,000. If “RPM” or “Full TH+RPM” is selected in the “ACTIVATION METHOD” function, then the start RPM can be customized.

T8: TURBO ON RATE - 10 steps (*5) - Use this function to control how fast “TURBO TIMING” fully comes on. Increasing the value increases how long it takes to ramp up.

T9: TURBO OFF RATE - Instant, 10 steps (*5) - Use this function to control how fast the “TURBO TIMING” RPM ramps off when the throttle is returned to the neutral position. Increasing the value ramps the RPM down faster.

DATA

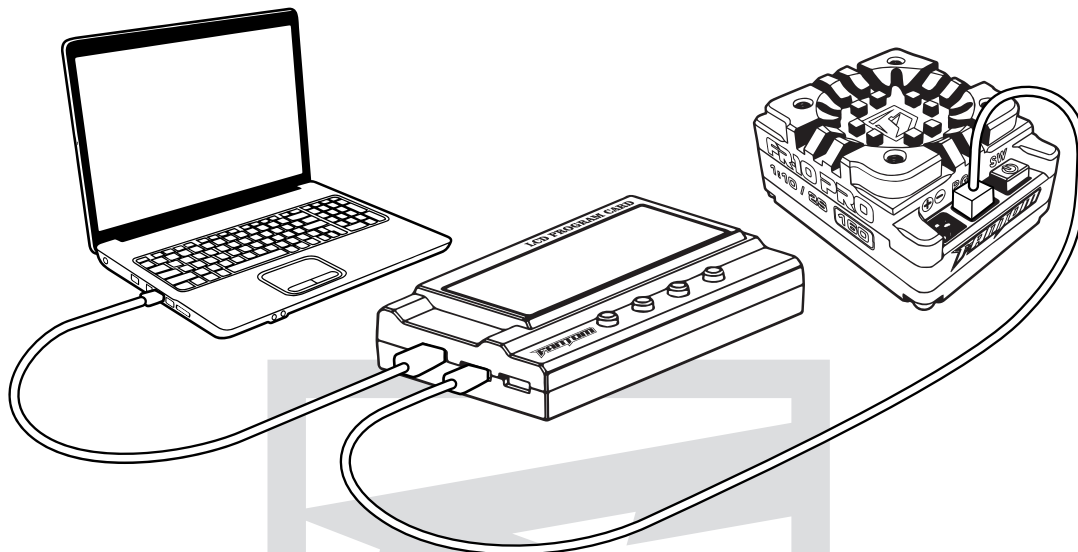
To enter the Data Analysis Mode, at any time, press and hold the Mode and Value buttons together for approximately 2 seconds. In the Data Analysis Mode, your motor RPM, battery low voltage, and ESC temperature can be reviewed, from your last run. Press the Menu button to scroll through the available data readings. Press and hold the Mode and Value buttons together, for approximately 2 seconds, to exit the Data Analysis Mode.

A: MIN BATTERY VOLTAGE - Indicates the minimum battery voltage that was reached during operation.

B: MAX ESC TEMP - Indicates the maximum ESC temperature that was reached during operation.

C: MAX MOTOR RPM - Indicates the maximum motor RPM that was reached during operation.

To use as a USB adapter, to update the firmware, of your LCD Card and/or of your ESC, and set the parameters, of your FR-10 PRO ESC, on a PC:




- First, the Fantom PC Interface app, LCD Card firmware, and ESC firmware need to be downloaded to your computer, by following the next 4 steps.


Note: The LCD Card firmware and ESC firmware only need to be downloaded to your computer if we have released new firmware. This can be determined once you have set up the PC Interface app and connecting your LCD Card and/or ESC and verifying the current firmware installed and comparing it to the latest firmware version listed on our website (instructions below).

1. Download the Fantom PC Interface app here: www.fantomracing.com/downloads
 2. Install the Fantom PC Interface app on to your computer. Supported Windows systems include: XP SP2, Windows 7, Windows 8 and Windows 10.
 3. Download latest Fantom LCD Program Card firmware here: www.fantomracing.com/downloads
 4. Download latest Fantom FR-10 PRO ESC firmware here: www.fantomracing.com/downloads
 5. The above 4 steps only need to be done once, unless we release new updates to the PC Interface app or new firmware.
- Once the Fantom PC Interface app is installed on your computer and the LCD Card firmware is downloaded on to your computer, follow the next 9 steps to check what version firmware is on your LCD Program Card and/or to update it to the latest firmware.
 1. Open the Fantom PC Interface app on your computer.
 2. Plug the included USB cable into a USB port on your computer and the other end into the USB port of your LCD Card.
 3. If the connection is correct, "PC Connect USB Interface" will be displayed on the LCD screen and the "USB" button, on the home screen of the PC Interface app should change from gray to red.
 4. At the top/left of the PC Interface app, click on "Device", followed by "LCD Program Box".

Use as an USB adapter, to update the firmware (continued)

5. This will bring up a new screen, showing that the device is the LCD Card, the current software version and the update option button.
 6. Click on the "Update" button and find the "Fantom LCD Program Card" firmware that you saved to your computer in an earlier step.
 7. Double click on the Fantom LCD Program Card firmware file and the PC Interface app will automatically begin updating your LCD Program Card.
 8. Once your LCD Program Card is updated, a new window will open stating "Update Complete". Click "OK".
 9. Close the PC Interface program and disconnect the USB cable from your computer.
 10. Your LCD Card is now ready to use for updating the firmware of your FR-10 PRO ESC and/or changing the parameters of your ESC, using a PC.
 11. The above 9 steps only need to be done once, unless we release new updates to the LCD Program Card firmware.
- Once the Fantom PC Interface app is installed on your computer, your LCD Card firmware is updated and the latest ESC firmware is downloaded on to your computer, follow the next 12 steps to check what version firmware is on your FR-10 PRO ESC and/or to update it to the latest firmware.
 1. Open the Fantom PC Interface app on your computer.
 2. Plug the included USB cable in to a USB port on your computer and the other end in to the USB port of your LCD Card.
 3. Disconnect the battery from the ESC.
 4. Plug the included signal wire into the PGM port of your ESC (white to the right side) and the other end into the socket of your LCD Card marked with  (black to the right side).
 5. Connect the battery to the ESC and turn on the ESC.
 6. If the connection is correct, "PC Connect USB interface" will be displayed on the LCD screen and the "USB" and "ESC" buttons, on the home screen of the PC Interface app should change from gray to red.
 7. In the menu options, click on the "Firmware" tab.
 8. This will bring up a new screen, showing device, hardware, software version, information, and the update option button.
 9. Click on the "Update" button and find the "Fantom FR-10 PRO ESC" firmware that you saved to your computer in an earlier step.
 10. Double click on the Fantom FR-10 PRO ESC firmware file and the PC Interface app will automatically begin updating your ESC.
 11. Once your ESC is updated, a new window will open stating "Update Complete". Click "OK".
 12. Close the PC Interface program and disconnect the USB cable from your computer and the signal wire from your ESC.
 13. Your ESC is now ready to use, with the default settings, or can be customized by changing any of the available parameters. Your ESC parameters can be changed by using the LCD Program Card as an individual device, by connecting it directly to your ESC, as explained previously, or your ESC parameters can be changed by using the Fantom PC Interface app, using a PC and connecting your ESC to your computer using the LCD Program Card.
 14. The above 12 steps only need to be done once, unless we release new updates to the FR-10 PRO ESC firmware.

Use as an USB adapter, to update the firmware (continued)

- Once the Fantom PC Interface app is installed on your computer, your LCD Card firmware is updated and the latest ESC firmware is installed on your ESC, follow the next 5 steps to customize your FR-10 PRO ESC, by changing any of the available parameters, using a PC.
 1. Plug the included signal wire into the PGM port of your ESC (white to the right side) and the other end into the socket of your LCD Card marked with  (black to the right side).
 2. Plug the included USB cable in to a USB port on your computer and the other end into the USB port of your LCD Card.
 3. Open the Fantom PC Interface app on your computer.
 4. If the connection is correct, "PC Connect USB Interface" will be displayed on the LCD screen and the "USB" button, on the home screen of the PC Interface app will be red and the "ESC" button will remain gray.
 5. Connect the battery to the ESC and turn on the ESC.
 6. If the connection is correct, "PC Connect USB Interface" will be displayed on the LCD screen and the "ESC" button, on the home screen of the PC Interface app will change from gray to red.
- You are now ready to use the PC Interface to customize your ESC.
 1. Click on the General, Throttle, Brake, Boost, or Turbo tabs to open the available customizable options.
 2. Use the "LCD PROGRAM CARD PARAMETER IDENTIFICATION, FUNCTIONS & DESCRIPTIONS" guide, shown previously in this manual, to determine what parameters you would like to customize.
 3. Remember, if you ever get lost, you can always go back to the default setting(s), which are preceded by an asterisk "*".
 4. Once you are satisfied with your changes, click on the "Apply" tab and select "OK" to apply the changes to your ESC.
 5. If you ever want to revert to ALL the original default settings, click on the "Default" tab and select "OK" to change your ESC back to all the original default settings.
 6. The "Data" tab can be selected to view the following information:
 - A: MIN BATTERY VOLTAGE** - Indicates the minimum battery voltage that was reached during the last operation.
 - B: MAX ESC TEMP** - Indicates the maximum ESC temperature that was reached during the last operation.
 - C: MAX MOTOR RPM** - Indicates the maximum motor RPM that was reached during the last operation.

ESC FIRMWARE FLOW CHART (Fantom LCD Program Card required to edit)

SECTION	PROGRAMMABLE ITEM		PROGRAMMABLE VALUE															
Application	Running Mode		Forward / Brake				Forward / Brake / Reverse				Forward / Reverse							
	Low Voltage Cut-off		Disable				Auto(3.3V/Cell)				Custom 3.0v to 11.1v (0.1v increments)							
	ESC Over-heat		203°F / 95°C		221°F / 105°C			266°F / 130°C			Disable							
	Motor Rotation		Normal						Reverse									
	Race Mode		Modified						Stock (Blinky)									
	Dead Band		4%-15% (1% increments)															
	BEC Output		6.0V						7.4V									
Throttle	IP- Limiter		1-30 (1 step increments)															
	Throttle Rate		1-30 (1 step increments)															
	Drive Frequency		1K, 2K, 4K, 8K, 16K															
	RPM Lock		1%-100% (1% increments)															
	Throttle Curve		Linear						Custom (must use PC Interface)									
Brake	Initial Brake		1%-20% (1% increments)															
	Drag Brake		0%-100% (1% increments)															
	Brake Force		0%	12.5%	25%	37.5%	50%	62.5%	75%	87.5%	100%							
	I-Brake Response		1-20 (1 step increments)															
	Brake Rate		1-20 (1 step increments)															
	Brake Frequency		1K, 2K, 4K, 8K, 16K															
	Brake Curve		Linear						Custom (must use PC Interface)									
	Off By Radio		Yes						No									
Timing	Boost	Boost Timing	0-64° (1° increments)															
		Boost Trigger Level	1-50 (1 step increments)															
		Boost Trigger Rate	1-10 (1 step increments)															
	Turbo	Turbo Timing	0-64° (1° increments)															
		Activation Method	Full Throttle					RPM				Full Throttle + RPM						
		Turbo Delay	Instant	0.05s	0.1s	0.15s	0.2s	0.25s	0.3s	0.35s	0.4s	0.45s	0.5s	0.6s	0.7s	0.8s	0.9s	1.0s
		Turbo Timing Start RPM	8,000 RPM to 50,000 RPM (1,000 RPM increments)															
		Turbo On Rate	1-10 (1 step increments)															
		Turbo Off Rate	Instant						1-10 (1 step increments)									

Product Limited Warranty

Fantom products are manufactured to the highest quality standards. Due to the intended use of this product, this product is guaranteed against workmanship and manufacturing defects only. This warranty is in effect for a period of 90 days from the original date of purchase. **The purchase date must be verified by an itemized cash register sales receipt. No hand-written receipts will be accepted. NO EXCEPTIONS.** Warranty coverage is at our discretion upon reviewing the product.

For warranty claims, ship your LCD Program Card to:

FANTOM RACING

15170 Dickson Rd,
White Pigeon, MI 49099

Include the following:

1. Original cash register sales receipt.
2. Your name, return address, day time phone number, and email address.
3. A brief note explaining the problem you are experiencing.
4. Your LCD Program Card well protected inside the box.

If we receive your LCD Program Card without all the information requested above, we will not contact you to retrieve the information, and we will not replace your LCD Program Card until all the information is provided. Unclaimed products after 60 days will be considered abandoned.

Warranty is void if any of the following condition(s) are found, or evidence of the following is determined, but not limited to:

- No sales receipt is provided
- Misuse, abuse, or normal wear
- Physical damage to the case
- Physical damage to the electronic components, plugs, wires, or cables
- Humidity/Water inside the case
- Incorrect wiring
- If modifications have been made
- If attempts to repair have been made, other than by Fantom

IMPORTANT INFORMATION

- No Fantom dealers, distributors, or resellers of any kind, are authorized to repair and/or replace any Fantom products. ALL warranty claims and/or repairs must be handled directly with Fantom.
- Fantom will not reimburse any expenses incurred to return any Fantom product, whether for warranty claim or repair.
- Fantom is NOT responsible for any lost or stolen items once they are in the possession of the shipping company. Fantom is not responsible for items delivered to the wrong address. Fantom will not be responsible for replacing any lost, stolen, or incorrect delivery of any item.
- Before sending your ESC in for warranty review, please review the troubleshooting chart and make sure that you have tried all the actions listed. Also, please double check that all the installation and setup procedures have been done correctly. Upon review of your returned ESC, if we find that no problems exist with the ESC, a \$10 diagnosis fee plus the return shipping cost will be charged.
- The receiver wire is required for diagnosis. If your ESC is returned with a clipped receiver wire, a \$15 service fee will be charged for the replacement, even if your ESC is otherwise covered under warranty.
- This warranty is non-transferable.
- Fantom's liability shall never exceed the product's original cost.
- Because Fantom has no control over the use of this product the purchaser accepts all responsibility and cannot hold Fantom responsible for any damages and/or injury incurred by improper use or improper judgment in using this product.

Fantom Racing reserves the right to change the provisions of this warranty at any time without prior notification. The information provided on our website is based on our experience and is only our opinion. Because there are so many variables, your experience may differ from ours. By no means is any information given as a guarantee to a product's performance, and the purchaser assumes all risk and liabilities.

If we are unable to service a defective product, that is no longer available, your product will be repaired or replaced with a product that equals or exceeds your original item, with all applicable charges applied.

Due to ongoing development, prices, products, availability, and specifications are subject to change without notification.

DISCLAIMER:

By using this product, you agree with and acknowledge that you have read and understand all the instructions and warnings contained in this document and that you agree to take full responsibility and assume all risks associated with the use and/or misuse of this product and related products. You also agree that Fantom Racing owners, employees, affiliates, manufacturers, dealers, distributors, and resellers cannot be held responsible for any damage and/or injury caused from the use and/or misuse of this product. If you disagree with anything written in this document, please return this product. The product must be in brand new condition to be accepted for return.

CONTACT INFO:

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Phone: 269.483.0200

www.fantomracing.com