



MS CONNECT™

Instruction Manual

MS Connect by TrakPower is PC based set-up software compatible with TrakPower MS Series electronic speed controls.

The **MS Connect** opens up a new world of tuning options not accessible with manual programming.

New features made available with **MS Connect** include the ability to change low voltage cutoff points, addition of boost and turbo timing adjustments, current limiter, coast and throttle curve adjustments.

MS Connect also makes it possible to keep your MS Series ESC up to date as new firmware versions are released.

TKPM0050



MS Connect software must be downloaded to your PC prior to use. The **MS Connect** adapter and cable included are only hardware. **MS Connect** can be downloaded at the following URL:

trakpowerusa.com/escprogramming/index.html

Download

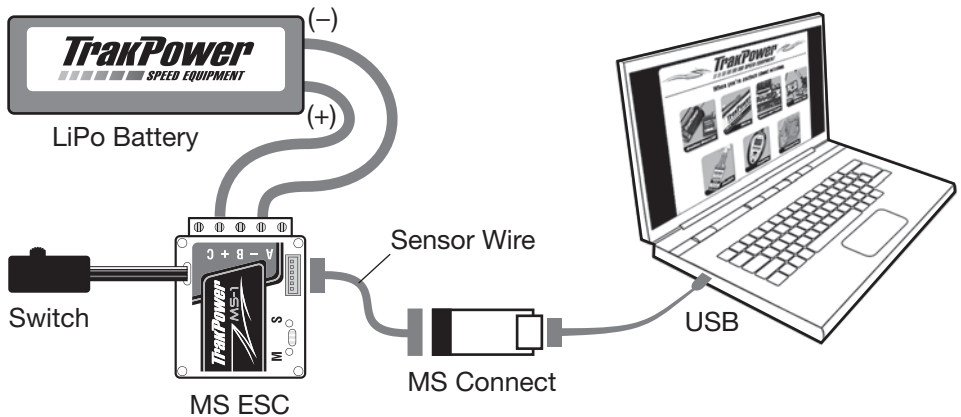
1. On your PC, open the web browser and go to trakpowerusa.com.
2. Click on the **MS Connect** icon on the home page.
3. Locate the following files on the home page under the product description:
 - a. **MS Connect** Product Manual
 - b. **MS Connect** Software File
 - c. **MS Connect** Firmware File
4. Click on each link to download the files.
5. Click “SAVE” to save these files to your desktop or other location for easy reference.

6. You will need to un-zip the **MS Connect** Software file to extract the executable file. Extract to your desktop for easy locating.

NOTE: MS Connect is a self-contained executable file. This means the file runs itself and there is no need for a full installation onto your PC. This results in no drivers or other necessary patches for compatibility.

Connections

1. Connect ESC to laptop via **MS Connect** device as shown in this diagram. The blue LED will flash once the adapter is connected to the cable and to the PC.



2. Open **MS Connect** software by clicking the icon on the desktop.
3. After **MS Connect** opens, the status box will display “Waiting ESC..”. The blue LED will also flash on the **MS Connect** adapter showing that the device is ready to be connected.

NOTE: The **MS Connect** interface will not be functional or accessible until the ESC is linked.

4. Connect the ESC to a battery and turn the power switch on. It is not necessary to have the transmitter on during this process.
5. Press and hold the “S” button on the ESC until “Getting Parameters” is displayed in the window box. Depress the “S” button at this time. The blue LED on the **MS Connect** device will turn solid after the link has been established.
6. **MS Connect** is now connected and ready to program the MS Series ESC.

NOTE: If this is the first time you are using **MS Connect**, the information in the display box will state “Parameter Version not supported”, “Please update

firmware!!". To update the firmware, please refer to the "**Firmware Update**" section that follows.

7. Once parameters have been adjusted with **MS Connect**, click the update button. Reference the "Programming" section for descriptions of each setting adjustment.
8. Disconnect sensor wire from the **MS Connect** adapter and re-install to motor.

Firmware Update

MS Connect features a firmware update utility that keeps your MS Series ESC up to date with the latest firmware releases. Latest firmware releases can be found on the trakpowerusa.com website. To update your firmware, follow these steps:

1. On your PC, open the web browser and go to trakpowerusa.com
2. Click on the **MS Connect** icon on the home page.
3. Click on the "Firmware File" link located just underneath the product description.
4. Save this file to a location that can be easily remembered and accessed. If you already downloaded the file as listed in the DOWNLOAD section of this manual, continue to number 6.
5. Follow the CONNECTION section listed above to link the ESC to the PC via **MS Connect** adapter.
6. Once the blue LED is solid and the ESC is linked to the PC, click the "Firmware Update" tab located on the home page.
7. Find the location where the Firmware File was saved in step 4 above.
8. Select the file and click "open".
9. After selecting the firmware file, an Information box will appear stating "You're going to update ESC's firmware. All parameters will reset to default. Proceed to continue?". Click "OK" to update the ESC's firmware.
10. A blue status bar will show the update progress on the home page. Once updated, the status box will move straight into "Getting Parameters". The firmware update has been completed.



IMPORTANT: The ESC will need to be re-calibrated to the transmitter after firmware has been updated. New firmware flashes the ESC and erases all previously saved settings. Follow instructions provided with the MS Series ESC for throttle calibration procedures.

Programming

MS Connect was designed to be user friendly by making adjustments easy and understandable. To enter different parameter screens, simply click the icon to head to the screen of your choice. Below is a listing of programmable features with descriptions.



Settings

1. **Low Voltage Cutoff:** Cuts power to the motor once the preset voltage level is reached.
2. **Thermal Protection:** Turns the thermal protection on or off.



WARNING: Disengaging Thermal Protection will void the warranty. It is highly recommended to leave the Thermal Protection ON at all times.

3. **Motor Direction:** This changes the direction that the motor turns.
4. **Drive Mode:** Changes between Forward and Brake, Forward and Reverse or Forward and Brake with Reverse Delay.
5. **Neutral Width:** Also known as Dead Band. Determines the amount of trigger travel between neutral and brake, and between neutral and throttle.

Throttle

1. **Start Power:** Commonly referred to as “Punch”. The lower the setting the lower the initial power. The higher the setting the more initial power is present or the more “punchier” throttle feels. This is also used as a traction control setting. For loose tracks, try a lower setting.
2. **Throttle Curve:** Also found in many computer transmitters and referred to as “exponential”. Moving the Throttle Curve into Positive numbers provides a harder throttle response, whereas negative numbers result in softer throttle feel.
3. **Current Limiter:** This limits the amount of current passing through the system. This is an excellent feature that helps maintain control of the vehicle if the system is too powerful for certain conditions.
4. **Coast:** This is the opposite of drag brake. A set amount of forward throttle is applied as throttle is returned to neutral. This allows the vehicle to roll through turns as throttle is released. Note: If using drag brake, coast and drag brake will cancel each other out.



Timing

Boost: Boost is a timing advance adjustment that provides additional timing to the set RPM range. This is typically used for added punch within that given RPM range and has its advantages on certain parts of race tracks. Boost is not always needed but is an excellent power tuning option.



1. **Boost Start RPM:** Sets the start RPM range.
2. **Boost End RPM:** Sets the end RPM range.
3. **Boost Timing:** Adjusts the amount of timing within the set RPM range selected in Boost Start RPM and Boost Stop RPM. Example: Boost Start RPM = 10,000 RPM, Boost Stop RPM = 20,000 RPM, Boost Timing = 20°. This means that there is 20° of Boost Timing in the range of 10,000 RPM and 20,000 RPM.

Turbo: Turbo adds additional timing to the system once the throttle position has reached maximum throttle for a set time.

1. **Turbo Timing:** Amount of advance timing added once throttle has reached maximum.
2. **Turbo Delay:** This time limit is the amount of time needed at maximum throttle position before Turbo kicks in.

Brakes

1. **Drag Brake:** Transforms the speed control's dead band into brakes with a pre-determined frequency and value. This means anytime the trigger is returned to the neutral position, the brakes will be applied at the specific frequency and percentage. **Note:** If using drag brake, coast and drag brake will cancel each other out.
2. **Brake Strength:** Adjusts the overall strength of the brakes. For softer brakes, try a lower setting.



Warranty

TrakPower warrants this product to be free from defects in materials and workmanship for a period of 1 year from the date of purchase. During that period, we will repair or replace, at our option, any product that does not meet these standards. You will be required to provide proof of purchase date (receipt or invoice). If, during the warranty period, your motor shows defects caused by abuse, misuse or accident, it will be repaired or replaced at our

option, at a service charge not greater than 50% of the current retail list price. Be sure to include your daytime telephone number in case we need to contact you about your repair. This warranty does not cover components worn by use, application or reverse voltage, cross connections, poor installation, subjection of components to foreign materials, or tampering. In no case shall our liability exceed the original cost of the product. Your warranty is voided if:

- You allow water or moisture to enter the device.
- You attempt to modify or tamper this device.

Under no circumstances will the purchaser be entitled to consequential or incidental damages. This warranty gives you specific legal rights, and you have other rights which vary from state to state.

For service to your TrakPower **MS Connect**, either in or out of warranty, send it post-paid and insured to:

Hobby Services

3002 N. Apollo Dr. Suite 1
Champaign, IL 61822

(217) 398-0007

E-Mail: hobbyservices@hobbico.com

Internet Address: trakpowerusa.com

In the European Union, send it postpaid and insured to:

Service Abteilung Revell GmbH
32257 Bünde Germany

Tel: 01805 110111 (nur für Deutschland)

Email: Hobbico-Service@Revell.de

Distributed in the EU by Revell GmbH, Bünde Germany

- This product is suitable for people of 14 years and older. This is not a toy!
- **WARNING: CHOKING HAZARD** - May contain small parts. Keep away from children under 3 years.

