For Mini-Z MB-010VE 2.0 Series models

Mini-Z Buggy VE 2.0 setup Manager Manual

KYOSHO®
THE FINEST RADIO CONTROL MODELS

Instruction Manual

This product is used to connect Mini-Z Buggy MB-010VE 2.0 series models to a personal computer, and it can adjust Brake and throttle settings with a special software program .

* Default setting is standard.

● System Requirements
・Computer with Microsoft Windows 7 and later.
・Computer with at least one available USB port (1.1 or 2.0)
・Internet connection for downloading the software.

* Microsoft Windows 7 and later (proper function cannot be guaranteed if using with an emulator)

* Microsoft Windows 7 is the registered trademarks of Microsoft in the U.S. and other countries.

* KYOSHO CORPORATION accepts no responsibility for any consequences resulting from the use of this product. By using this product the user accepts full responsibility.

● Before Use
・KYOSHO CORPORATION accepts no responsibility for any consequences resulting from the use of this product. By using this product the user accepts full responsibility.
・Even if KYOSHO CORPORATION receives a report relating to malfunction or other issues, it gives no undertaking to repair, modify or add functionality to the product.
・Company or organization names, and product names referred to in this instruction manual are the trademarks or registered trademarks of the respective companies or organizations.
・When used with Mini-Z ASF 2.4GHz series models, this software is provided at no charge. However, the copyright of this software is owned by Scorpion Power System Corporation and therefore unauthorized copying, sharing or reverse engineering or similar activities are prohibited.
・Modifications may be made due to improved display screen performance.

● Required for Operation

・Mini-Z Buggy MB-010VE 2.0 chassis (No.32291)

・Brushless setup cable (No.82081)

or

・Brushless setup cable 2.0 (No.82082)

●Preparations required before use
◆Downloading the Software and USB driver

●NOTICE

· The software is subject to change for upgrade work. Download the latest software with referring "How to download" on the next page.

◇Special Software Program and USB driver

Special Software Program · · · · · · · · · · ·

Mini-Z_Buggy_VE2.0_Setup_Manager
Windows インストーラー パッ...
（Refer to p8 for installation instructions）

USB Driver · · · · · · · ·

PL2303_Prolific_DriverInstaller_v1.5.0
Setup.exe
For VE Setup Cable (No. 82081)
（Refer to p2 for installation instructions）

or

VE2.0_USB_Driver
圧縮 (zip 形式) フォルダー
For VE Setup Cable 2.0 (No. 82082)
（Refer to p5 for installation instructions）

There are two types of USB drivers. Please download the appropriate driver referring to the item code of the setup cable you use. Access below URL and download the software on your computer. After downloaded, please check above both software is in same folder.

· Mini-Z Buggy support page
http://www.kyosho.com/mini-z-buggy-support/
（Above URL may be subject to change.）

◆Install the USB driver (Case by VE setup cable No,82081)
（This enables the VE setup cable to work on your computer）

· Plug the Brushless setup cable into the USB port on the computer. The USB adapter may not function properly if using a USB hub or a USB extension cable.
· If there is more than one USB port on your computer, try to use the same USB port for the USB Adapter each time. Using a different port may require the software driver to be re-installed.
· These instructions relate to standard computer screen settings and may differ according to your computer setup or customized screen settings.

1. After the download double click the software icon (PL2303_Prolific_DriverInstaller_ v1.5.0 Setup.exe)on downloaded folder.

· Install window is displayed, click Next " .

2
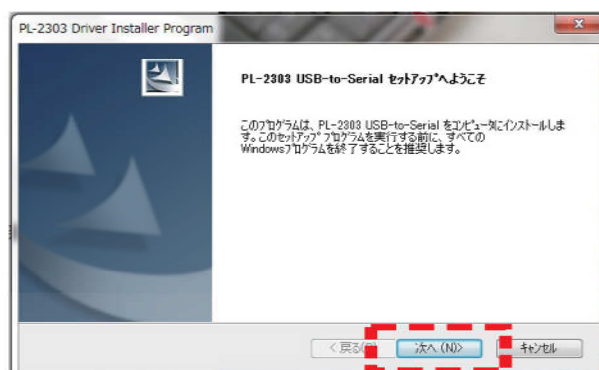
2. Finish the install as display, install will be success when the below displayed .
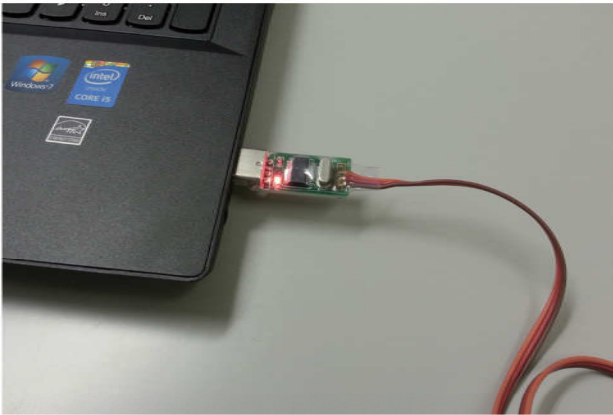
・The installation may take a few minutes to finish. After installation is complete, the screen shown below is displayed.
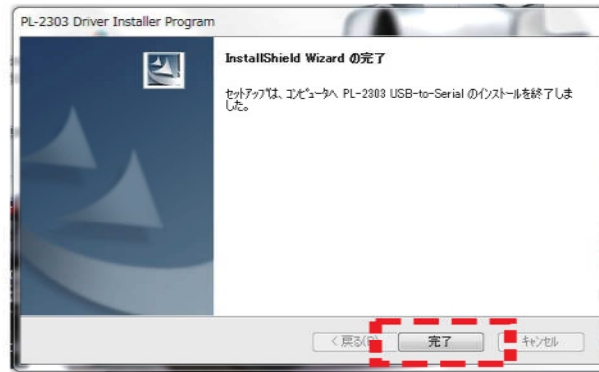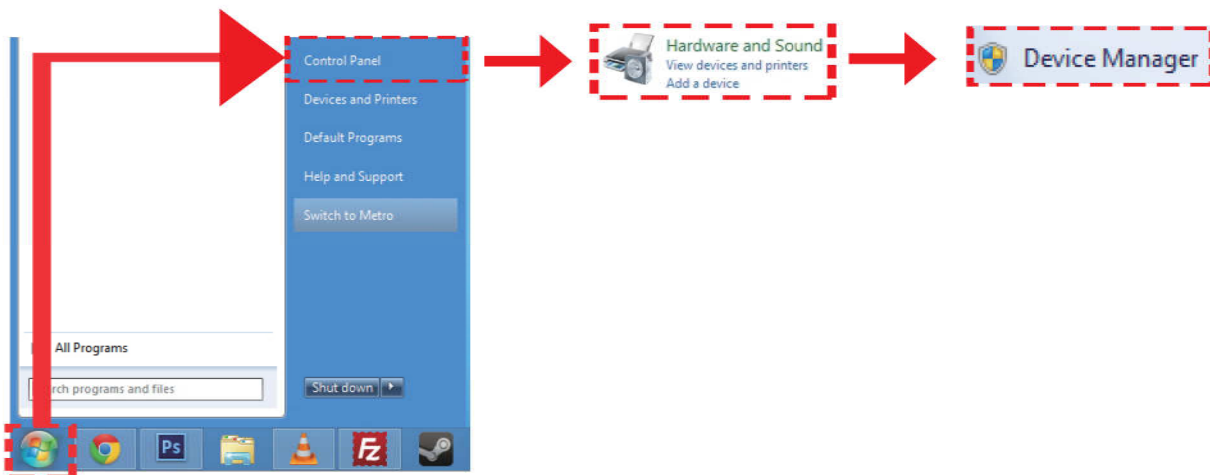

◆Confirm COM port setting
（Checking the Brushless setup cable has been properly installed）

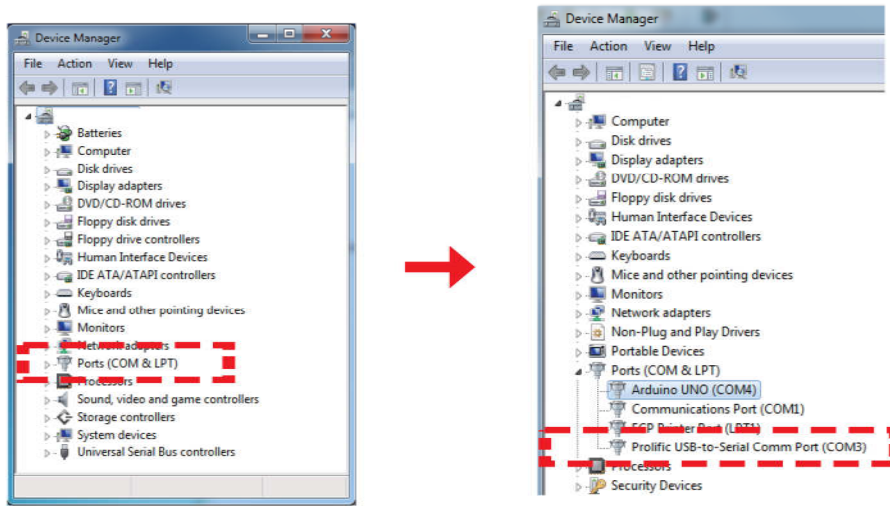1. Connect the VE setup cable to the USB Adapter.

2. Click : Start > Control Panel > Hardware & Sound > Device Manager and then Device Manager window is displayed.
・Depending on your computer's settings, some option may not be displayed.

3. Double-click 'Port' and confirm that 'Prolific USB-to-Serial Comm Port (COM"X")' is displayed.

· 'X' indicates the number that the software will use. Write it down as it will need to be referred to later. These instructions use the number 3 as an example for 'X', but your computer or USB port may assign a different number. Make sure to check the port number used on your computer.
· If the Brushless setup cable is not installed correctly, it will not be displayed. In this case, repeat the 'Brushless setup cable connection and driver installation'.

●If the USB driver is still not recognized after redoing "Connecting the VE Setup cable and reinstalling the driver," follow the steps below to select the appropriate driver software.

1. Open the device manager after completing the driver installation.
   Open "Ports (COM&LPT)," and you'll find Prolific USB-to-Serial Comm Port (COM "X") showing an error.
   Note: "X" depends on your PC or the USB port being used.

2. Right click on it and choose "Update Driver" in the popup menu.

3. Click "Browse my computer for driver software" and then click "Let me pick from a list of device drivers on my computer."
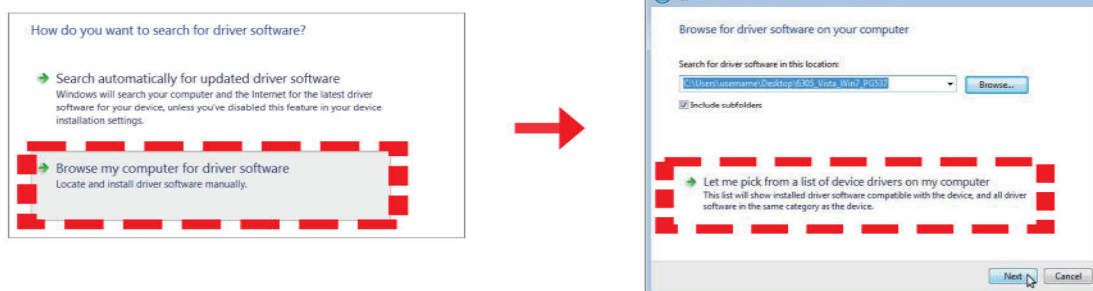

4. Select "Prolific USB-to-Serial Comm Port Version 3.4.25.218(2011/10/7)" in the list and click "Next."
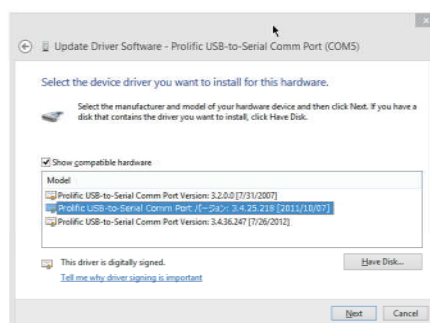
5. The driver will be updated (rolled back).

6. Make sure that the error is disappeared in the device manager.

7. Change the device installation settings so that the device driver will not be updated automatically.

Type "device installation settings" in the search box in the Start menu, and select No, let me choose what to do, select Never install driver software from Windows update, and then click Save Changes in the Device Installation Settings window.
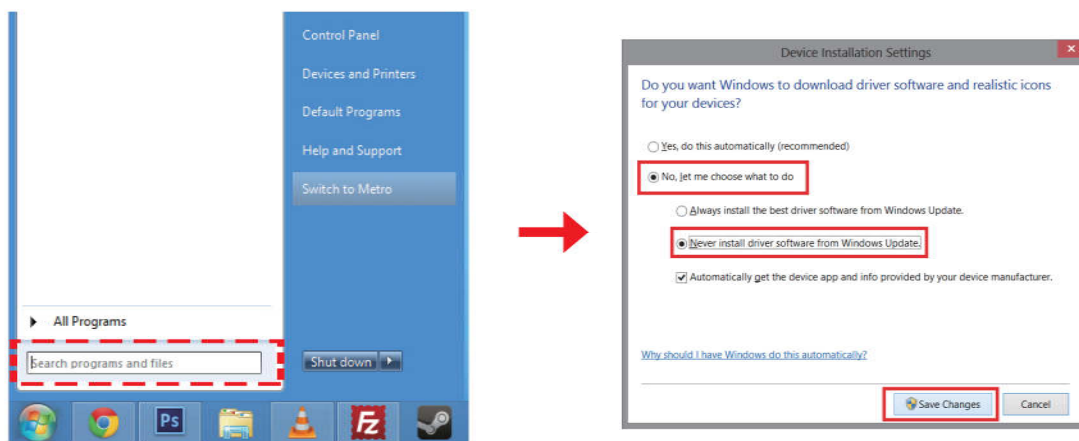

◆Install the USB driver (Case by VE setup cable 2.0 No,82082)
（This enables the VE setup cable 2.0 to work on your computer）

・Plug the Brushless setup cable into the USB port on the computer. The USB adapter may not function properly if using a USB hub or a USB extension cable.
・If there is more than one USB port on your computer, try to use the same USB port for the USB Adapter each time. Using a different port may require the software driver to be re-installed.
・These instructions relate to standard computer screen settings and may differ according to your computer setup or customized screen settings.
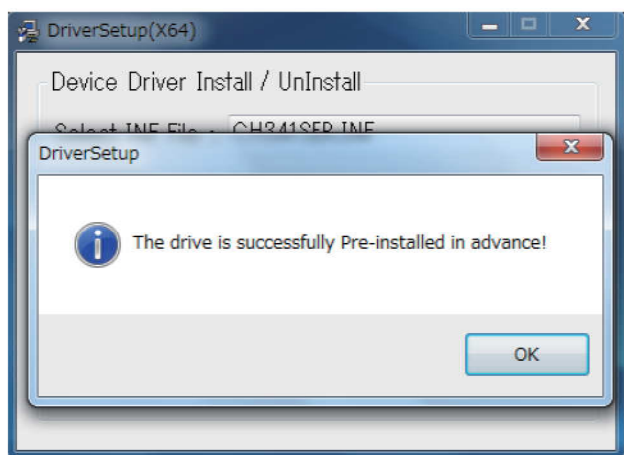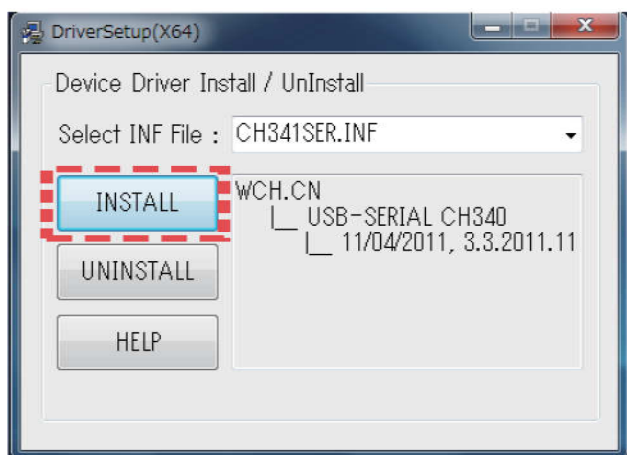
1. Unzip the downloaded zip file　（ ▓ VE2.0_USB_Driver 圧縮 (zip 形式) フォルダー ） to a folder of your choice.
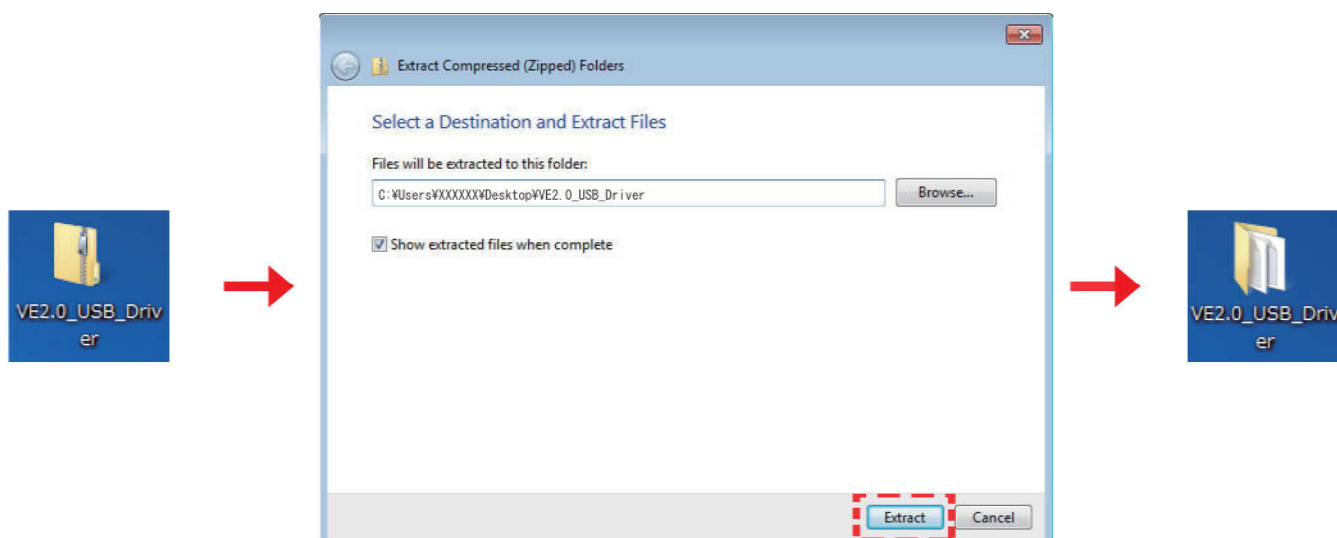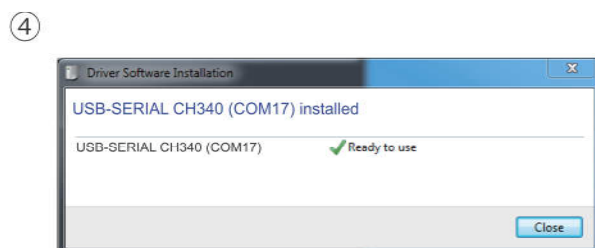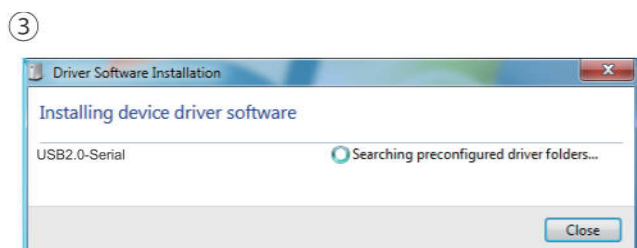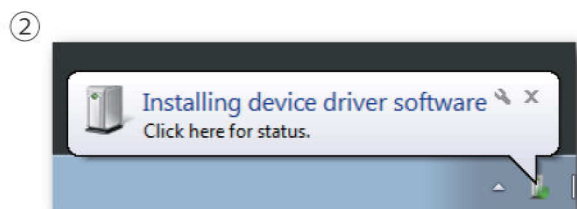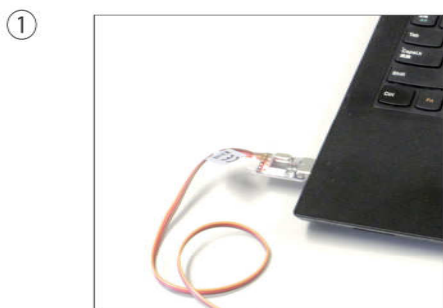
2. Open the unzipped folder (VE2.0_USB_Driver) and then open "CH341SER." Then, double click "SETUP" application.
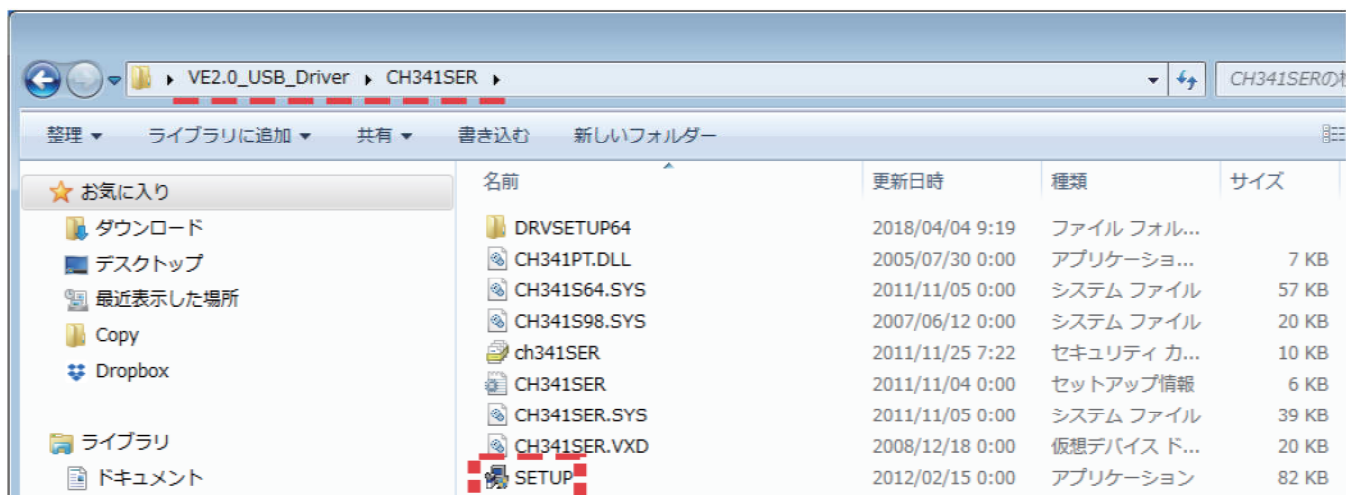
3. A new window (left image) will open. Click "INSTALL." When the installation is finished, a message (right image) will be shown.

4. Connect the VE Setup Cable 2.0 to your PC and wait until the device driver installation completes. When installation is done, a message (image 4) will be shown. Please note that installation may take a few minutes.

①

② Installing device driver software
Click here for status.

③ Driver Software Installation
Installing device driver software
USB2.0-Serial   Searching preconfigured driver folders...
Close

④ Driver Software Installation
USB-SERIAL CH340 (COM17) installed
USB-SERIAL CH340 (COM17)   Ready to use
Close

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◆Confirm COM port setting
（Checking the VE setup cable 2.0 has been properly installed）

1. Connect the VE setup cable 2.0 to the USB Adapter.

2. Click : Start > Control Panel > Hardware & Sound > Device Manager and then Device Manager
   window is displayed.
 ・Depending on your computer's settings, some option may not be displayed.

3. Double-click 'Port' and confirm that 'Prolific USB-to-Serial Comm Port (COM"X")' is displayed.
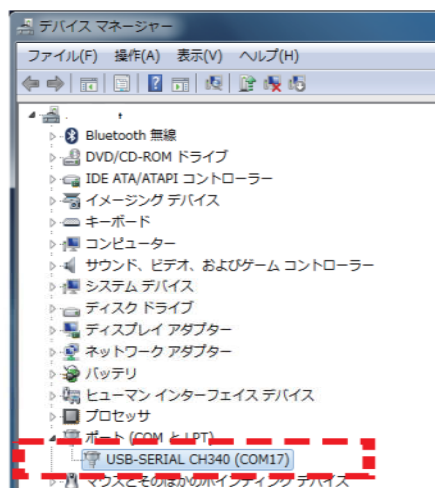
 ・'X' indicates the number that the software will use. Write it down as it will need to be referred to later.
   These instructions use the number 17 as an example for 'X', but your computer or USB port may
   assign a different number. Make sure to check the port number used on your computer.
 ・If the Brushless setup cable is not installed correctly, it will not be displayed. In this case, repeat the
   'Brushless setup cable connection and driver installation'.

# ◆Install the Special Software Program

1. After the download double click the software icon ([icon] Mini-Z_Buggy_VE2.0_Setup_Manager Windows インストーラー パッ...) on downloaded folder.
 ・Install window is displayed, click Next " .
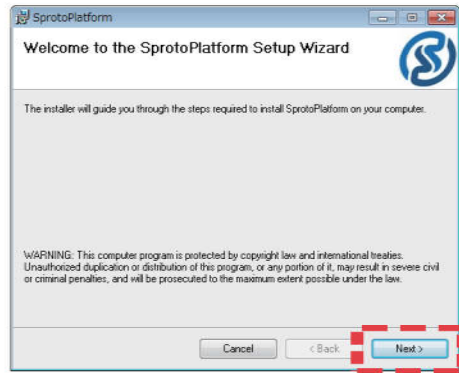
2. Finish the install as display, install will be success when the below displayed .
 ・The installation may take a few minutes to finish. After installation is complete, the screen shown below
   is displayed.
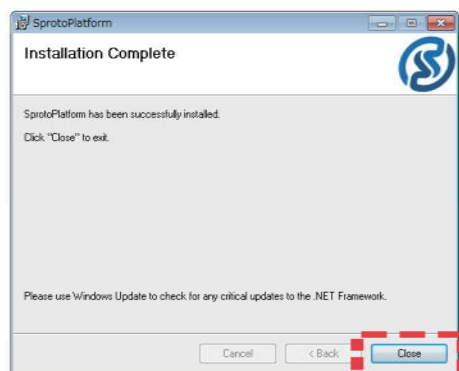
3. Confirm that the saved folder is indicated by the icon below.


Sproto platform

●Calibration of the ESC

Before use, follow the steps below to have the ESC recognize the throttle end point for proper operation.

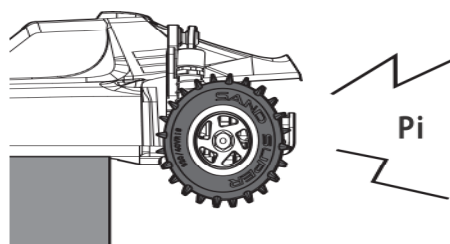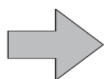1. Set the throttle trim to the center and reset all throttle parameters of the transmitter. Please refer to the manual of the transmitter for resetting parameters.
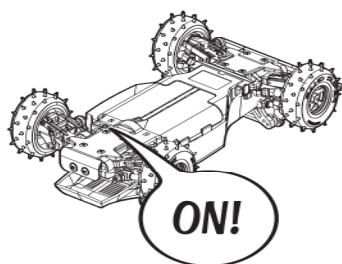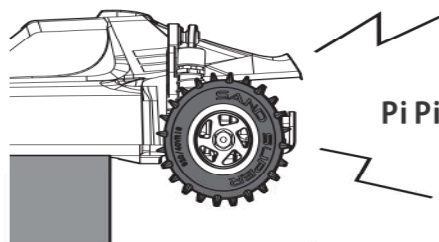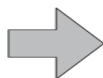
2. Turn on the transmitter.

ON!
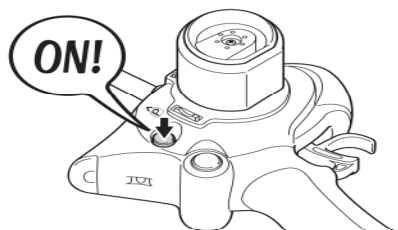
3. Push the throttle trigger to the full brake position and hold it.

Reverse
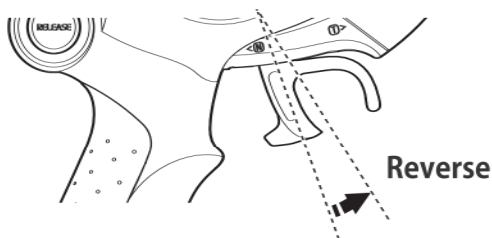
4. Turn on the chassis and wait a few seconds for a single beep.

ON!

Pi

5. Immediately after the beep, pull the throttle trigger to the full throttle position and hold it. Calibration is done when you hear a double beep.

Forward

Pi Pi
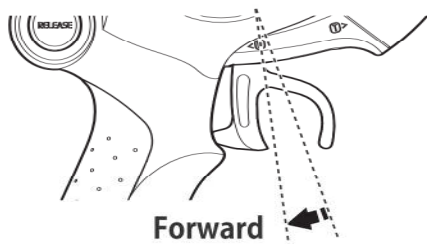
① Raise the tires off the ground and check that all controls are responding.

●How to connect the model to the computer and use the software

1. Connect the VE setup cable (or VE Setup Cable 2.0) to the USB Adapter.
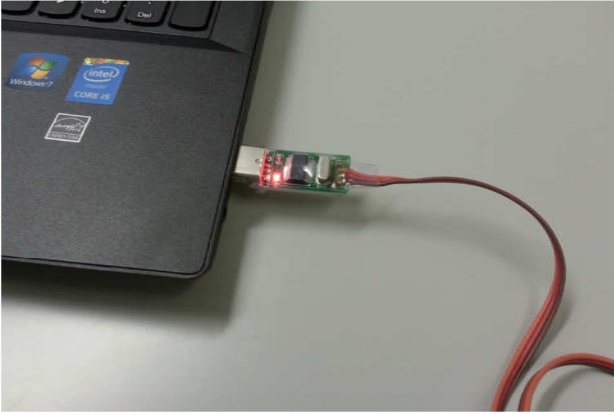
2. Pull out the connector from the socket on the ESC PCB, and connect the VE setup cable (or VE Setup Cable 2.0) to the socket.
   ・The connectors are designed to prevent reverse connection. If connection seems too tight, disconnect and check the direction of the connectors, then re-connect.
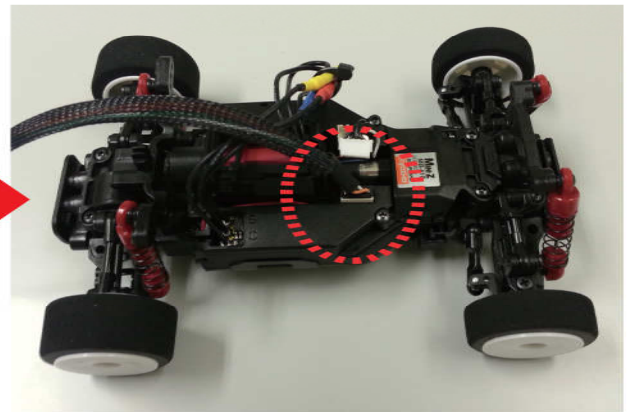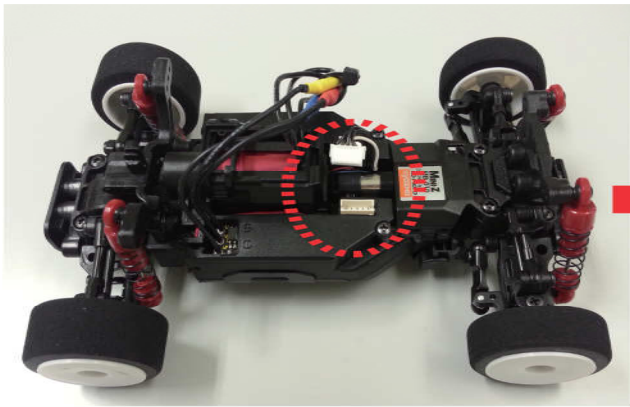
3. Turn ON.
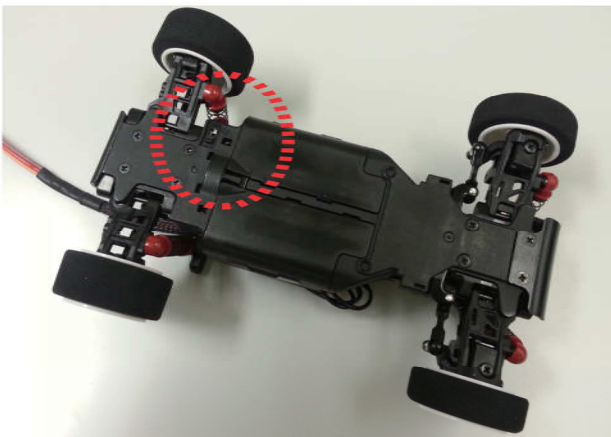
4. Start the software program that was installed. Double-click "Sproto platform" icon.
   * It may take time to start up to confirm the update to the server.

Sproto platform

5. Click the button marked with red dotted lines.
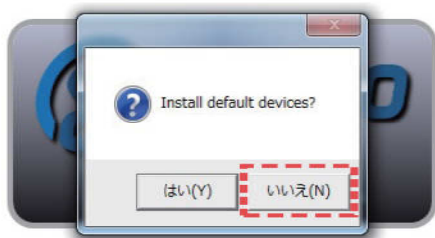
*If the figure below is displayed, please press the cancel button.

6. Please search the application from "Search" item and download it.
   Then click on the red frame part from the "Installed" item.
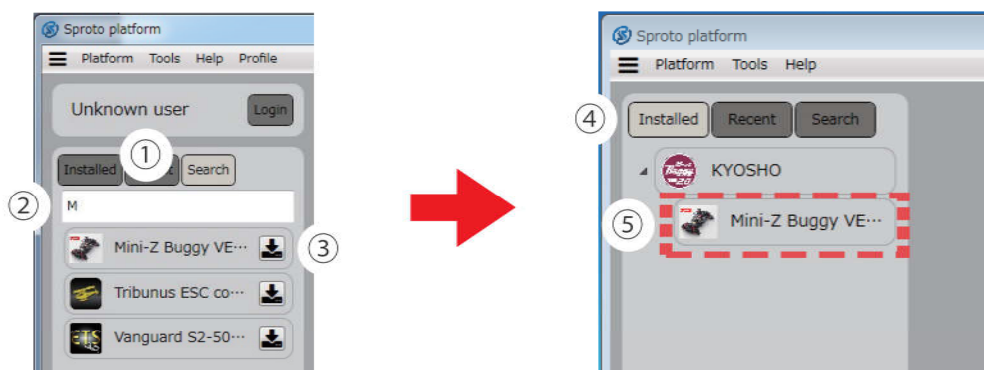
7. Click to button marked with red dotted lines to start connection with the chassis.

Mini-Z Buggy VE2.0 setup Manager

This is PC program for Kyosho MiniZ models.
It allows to adjust the next categories of settings
- Throttle parameters
- Punch parameters
- Brake parameters
- Protection parameters
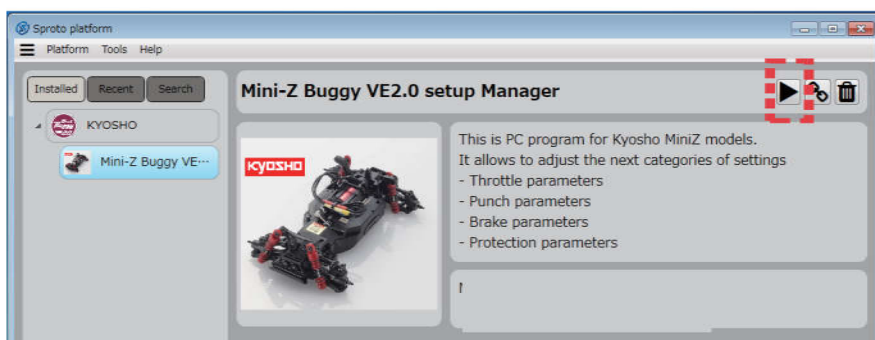
8. When connection is established, the setting parameters below are shown.
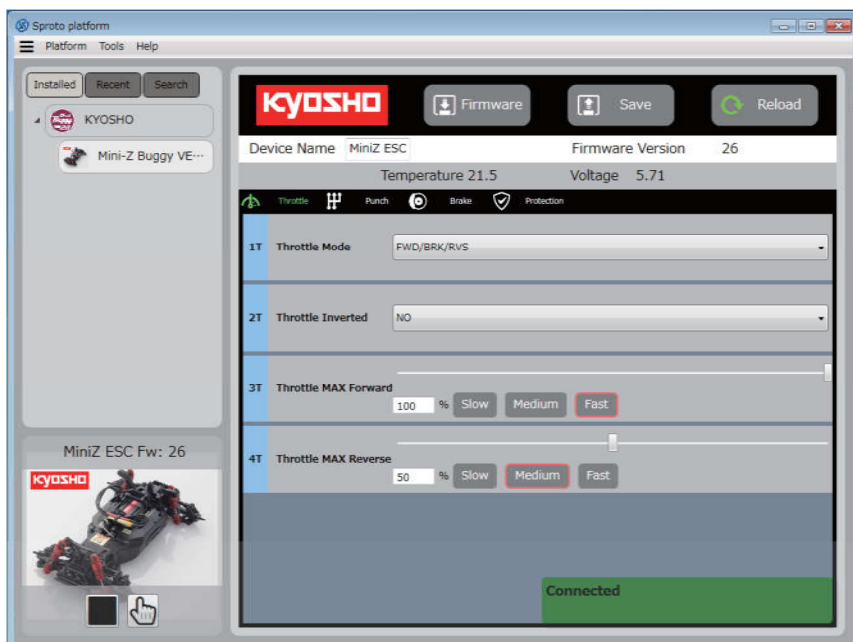
●Explanation of Software Program Interface

◆Screen 1

① Button to close this software

② Console: Screen to check the working of the software

   Check updates: Button to check software updates

③ Button to check the software version

④ Button to make connection with the chassis

⑤ Link button
   ※Linked to a web page for development; not for end customers.

⑥ Button to delete "Mini-Z Buggy VE2.0 setup Manager"

⑦ If you have deleted "Mini-Z Buggy VE2.0 setup Manager" by mistake, it can be searched by title and re-installed.

⑧ This mark is shown when there is a software update available. When this mark is shown, click it to update the software.
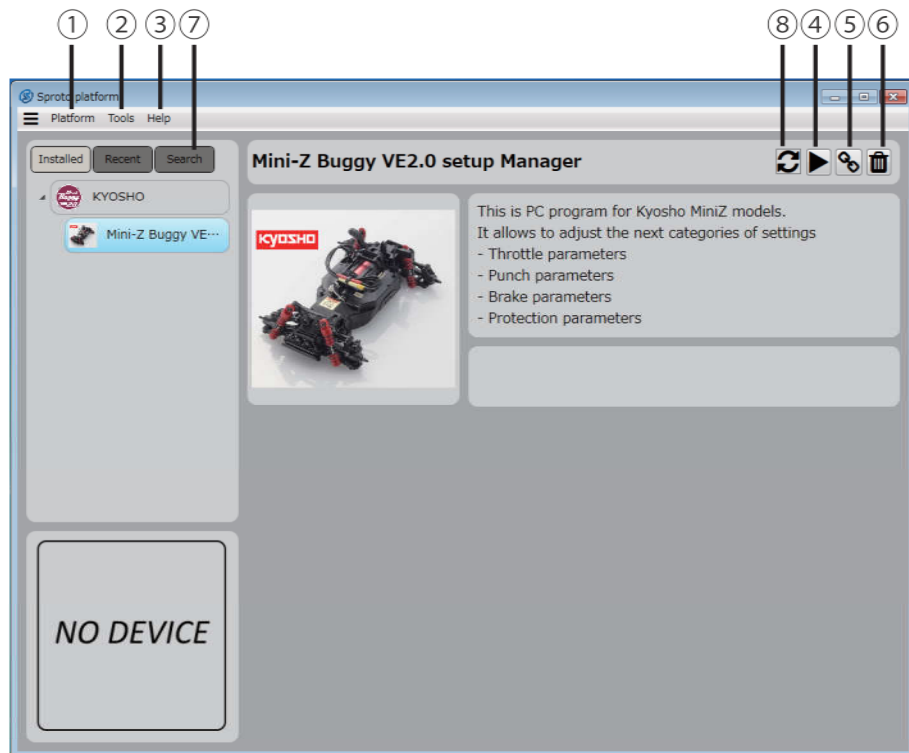
◆Screen 2
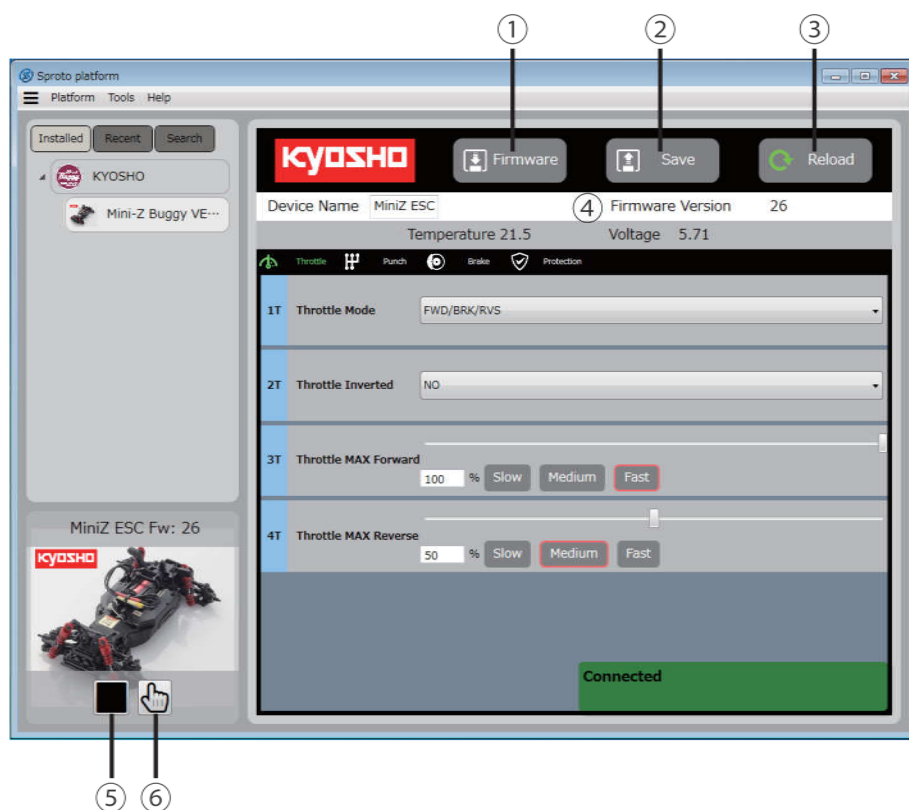
① Button to update the ESC board firmware
   ※Can be used when the color is green

② Button to save changes

③ Button to make connection/reloading with the ESC board

④ Firmware version number

⑤ Button to disconnect the software from the chassis

⑥ Button to return to screen 2 from other screens

●Explanation of setting parameters

・The screen displayed below is the default setting.

Throttle：Setting parameters related to throttle

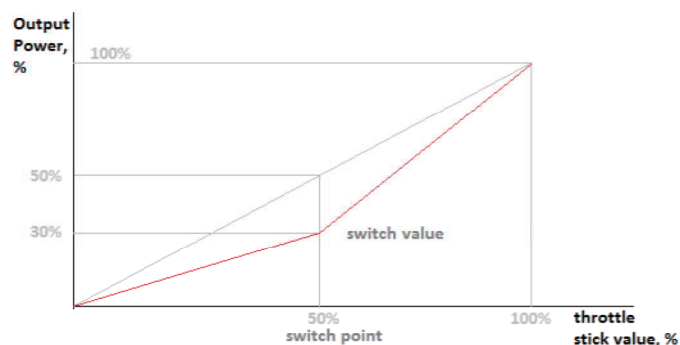|		
	Throttle	Punch	Brake	Protection
1T	Throttle Mode	FWD/BRK/RVS
2T	Throttle Inverted	NO
3T	Throttle MAX Forward	100 % Slow Medium **Fast**
4T	Throttle MAX Reverse	50 % Slow **Medium** Fast

- **Throttle Mode**
  FWD/BRK/RVS : Throttle mode with forward, brake and reverse is applied.
  FWD/BRK : Throttle mode with forward and brake is applied.

- **Throttle Inverted**
  Reverses the throttle forward (NO) /reverse (YES) operation.

- **Throttle MAX Forward**
  Configures the output to the brushless motor connected. The bigger the value is, the higher the output and the top speed will be.

- **Throttle MAX Reverse**
  Configures the output of the reverse side. The bigger the value is, the higher the output and the top speed will be.

Punch：Setting parameters related to acceleration

	Throttle	Punch	Brake	Protection
1Ph	Punch	100 % Low Medium High
2Ph	Switch Point	50 % **Low** Medium High
3Ph	Switch Value	50 % Low **Medium** High

- **Punch**
  Adjusts the acceleration performance. The bigger the value is, the better the acceleration will be. However, it can result in wheel spin on low grip conditions, so it should be adjusted in accordance with the running conditions.

- **Switch Point**
- **Switch Value**
  This function modifies the motor output related to a throttle trigger position. It is similar to exponential and motor output characteristics can be adjusted to your liking.

Brake：Setting parameters related to brake

	Throttle	Punch	Brake	Protection
1B	Drag brake	10 % **Low** Medium High
2B	Maximum brake	50 % Low **Medium** High
3B	Braking frequency	4000 Hz Strong Medium **Smooth**

- **Drag brake**
  Configures the drag brake, which is applied when the throttle trigger is released. The bigger the value is, the higher the drag braking force will be. Drag brake is useful to adjust the turn-in characteristics and to control the posture in the air during jumps.

- **Maximum brake**
  Adjusts the maximum brake force. The higher the value is, the higher the brake force and the shorter the braking distance will be.

- **Braking frequency**
 Adjusts the stopping strength while braking.

Protection：Setting parameters for ESC protection

	Throttle	Punch	Brake	Protection
1P	Motor limit Value	0 % Low Medium High
2P	Motor Cut Timeout	0.2 s Slow Medium **Fast**
3P	Max ESC Temperature	50 C* **Normal** High Critical

- **Motor limit Value**
  Amount of motor RPM during ESC protection can be configured. This function is only effective when the ESC temperature reaches the value configured with "Max ESC Temperature."

- **Motor Cut Timeout**
  Configures the motor interruption time when the battery voltage becomes insufficient.

- **Max ESC Temperature**
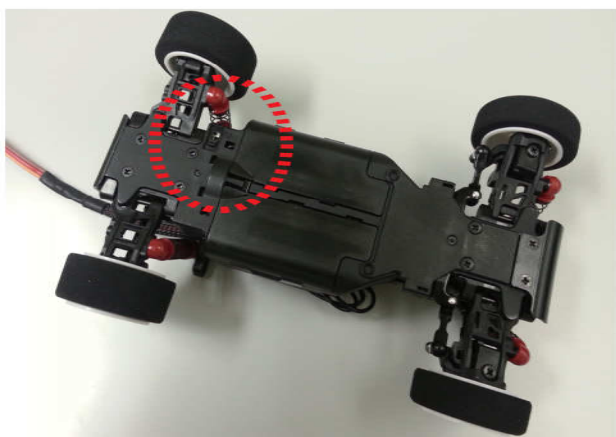 Configures the temperature that the ESC protection function is triggered.

※If the protection function is triggered repeatedly, change the Protection parameters or stop the car and cool down the ESC before restart.

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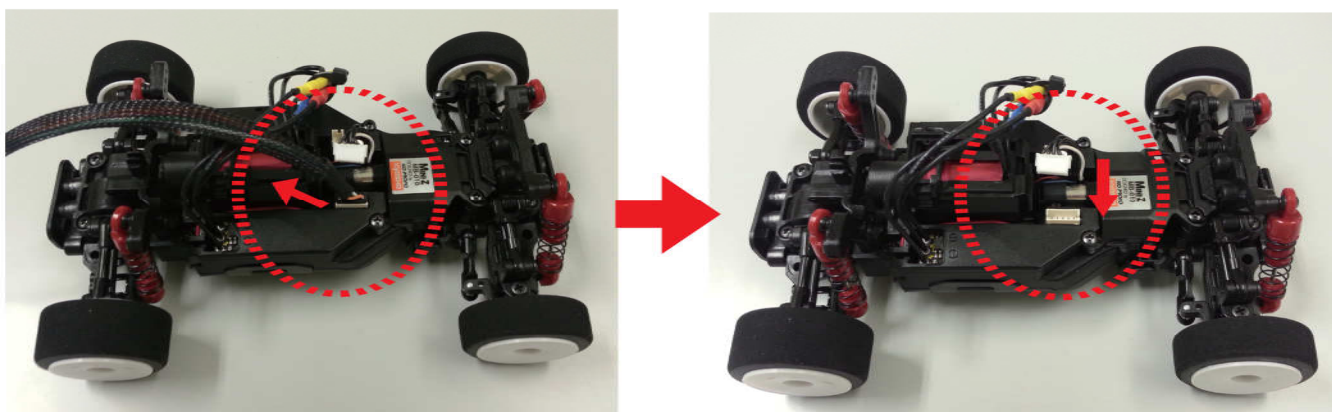# ●How to disconnect the software from the chassis

1. Click the buttons in numerical order to disconnect the software from the chassis.
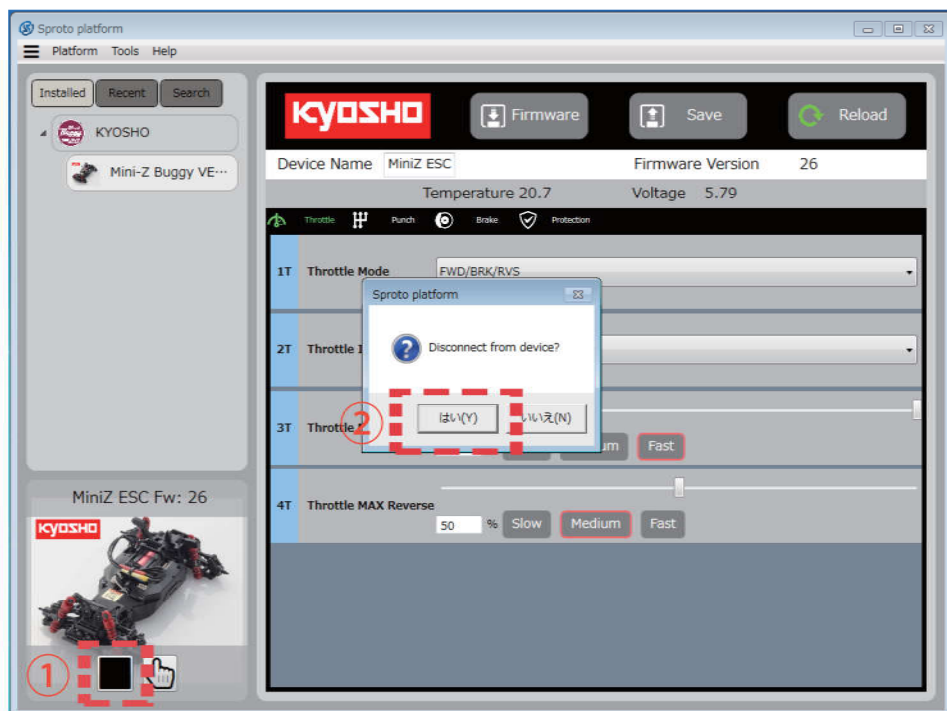
2. Turn OFF.

3. Remove the VE setup cable from the chassis and reconnect the original connector to the socket on the ESC board.

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