

FI CON TYPE-E Instruction manual

Product number 05-04-0111

Adaptation model Z125 PRO (BR125H-A02621 ~)

Thank you very much for purchasing our products.
Thank you so you will comply with the following matters at the time of use.
Before installation, please check your always kit contents.
If there is a point of notice event, Please contact us the dealer of purchase.
◎ If the description, such as photos or illustration different with this part.

■ feature

- Can be attached to a genuine ECU with a couplar on.
- Various 3D correction maps for our special engine parts are initially set and can be easily upload with personal computer or smartphone.
The built-in map can be finely adjusted for each opening throttle and engine speed.
- Fuel control adjusting can be made while monitoring your PC or smartphone with bluetooth.

● Please read carefully before use

- ◎ The use of ignoring the instructions that are written in the instruction manual, if an accident or damage has occurred, we can not assume any responsibility for compensation.
- ◎ This product installation and use, when a problem occurs to after market goods, guarantee other than this product, also can not assume any in any such matters.
- ◎ If it was the case or mounting that has been processed like a product, it will not be covered under warranty.
- ◎ It is not possible to inquire of the combination of other manufacturers.
- ◎ This product is the above-mentioned vehicle exclusive goods. Is not possible attached to the other vehicle. Please note.
- ◎ Repair parts should apply in repair part number. Addition, any questions, please contact us to purchase.
- ◎ During installation, it prepares the tool or the like, do the work with care in accordance with the mounting procedure.
In addition, this manual and Honda genuine service manual are intended for those who have a basic skills and knowledge.
If no experience of mounting, etc., who preparation of such a tool is insufficient, we recommend that it is your request to the shop with a technical credit.
- ◎ The computer or smartphone require the following conditions.
 - Windows 7/8/10 (Without RT/MOBILE)
You must be connected to the internet to install our software (free).
Your computer has built-in Bluetooth or external Bluetooth adapter.
 - iOS iPhone4s or later, iPad 3rd generation or later iOS8 or later.
You need to connect to AppStore to install our paid application.
 - Andoroid Andoroid OS 4.2.2 or later. Bluetooth function baitt.
You need to connect to Google play to install our paid application.

● Precautions on usepurchased dealer.

◎ Not compatible parts

H.I.D kits and LED headlights kit made other than Takagawa. :The ballast / inverter (voltage converter) generates high-voltage noise that adversely affects the digital circuit, and may cause product failure or malfunction.

Do not use an performance ignition device (ignition coil or plug wire) as it may cause malfunction or product failure due to increased radiation noise associated with increased ignition voltage. It is possible to use it with Takagawa's hyper ignition coil. Do not use other performance generator or similar products, it may cause a malfunction due to insufficient power generation or voltage waveform.

◎ This product is not waterproof / drip-proof. If rain or water is applied, water may enter the main unit and cause malfunctions.

Be careful when rain or washing. If water gets into the main unit, stop using it immediately.

◎ The outer case of this product is made of resin. To prevent deterioration, moto cover is ideal on the bike for a store or long time parking.

If left on under severe conditions such as in hot weather, deterioration or deformation of resin or rubber parts may be considered.

◎ Never disassemble or modify the products.

We will not accept inspections and repairs if you disassemble it.

◎ Please do not give a strong shock or transmit a strong impact. There is a risk of irreparable failure or damage to the main unit case due to internal parts falling off or breaking due to impact.

◎ If there is stubborn dirt, clean it slowly with a small amount of neutral detergent in water.

Do not use volatile substances (such as thinner or alcohol) or compounds may cause deterioration of the resin part or cloud the panel.

⚠ Caution When the handling of ignoring this display, property damage and human shows the assumption of what injury.

- When performing the work, etc., be sure during the cold (when the engine and the muffler is cold). (It may cause burns.)
- When performing the work, it should be made to prepare the tools for the job. (Breakage of parts, it may cause injury.)
- Do the work must always specified torque using a torque wrench. (Damage of bolts and nuts, and cause of dropout.)
- The product and the frame, might have edges or protrusions. Please go to protect your hands when you work. (It may cause injury.)
- Be sure to each part inspection before operation, check the loosening of the threaded portion, be sure to securely tighten the specified torque if there is loose. (It may cause detachment of the parts.)

⚠ Warning When the handling of ignoring this display people died, shows the contents of the serious injury possibility is assumed.

- During operation, when an abnormality occurs, immediately stop the vehicle in a safe place, please stop running. (It may lead to an accident.)
- When performing the work, do the work safely stabilize the vehicle in a horizontal location.
(There is a risk of injury vehicle collapsed while working.)
- Inspection, maintenance, the instruction manual or, inspection methods such as service manuals, to protect the way, should be done correctly. (unsuitable inspection and maintenance, there is a risk that result to an accident.)
- When carrying out the inspection and maintenance, etc., if found damaged parts, replace the damaged parts to avoid possible to reuse the parts. (There is a risk that lead to accidents Continued use.)
- Plastic bags of product packaging, you can either be stored in a place that is out of reach of children, it should be discarded.
(When the children or wearing, there is a risk of suffocation.)

SPECIAL PARTS
TAKEGAWA

CONTACT Address : 3-5-16 Nishikiorihigashi Tondabayashi Osaka JAPAN
TEL: +81-721-25-1357 FAX: +81-721-24-5059 e-mail: english@takegawa.co.jp URL: http://www.takegawa.co.jp
Please contact with your name and country name provided. (Only English please)

- Ⓞ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.
- Ⓞ Please be informed that we shall be held harmless against any claim against us whatsoever arising out of use of the products in racing and the like.
- Ⓞ Keep this manual stored until this product is discarded.

Product content



Number	Product content	Quantity	Item Number
1	FI CON TYPE-e	1	_____
2	Cable tie, 150mm	3	00-00-0135 (10 pcs)
3	Cushion 2	1	00-00-0299

※ Please order in the repair parts are always repair part number. If it is not the part number order, you may not be able to order. Please be forewarned.
It should be noted, In the case of parts that can not be separately shipment, please order a set part number.

■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

■ Introduction

This product is developed on the assumption that the genuine DFI system is operating without any problems.

If there is a problem or malfunction in the DFI system itself, it may not operate properly or perform properly even if this product is installed, and it may cause other parts to malfunction, including this product. Make sure that there is no problem with the DFI system before installing and using it.

In addition, work by using a maintenance stand like a horizontal a safe place, start then fully stabilized to the vehicle.

▲ NOTE

The contents of the exterior parts removal work in this manual are only an overview with details omitted. If you are unfamiliar with the exterior removal work, please take to motorcycle shop to do the work. Be sure to follow the instructions and procedure specified torque follow the manufacturer's genuine service manual.

Also be careful to not damaged any parts when the exterior is removed.

■ List of FI CON TYPE-e function

• Preset MAP

You can select 8 preset fuel adjustment maps that have been set according to the engine specifications. You can easily change the settings using your PC or smartphone.

• Fuel injection duration adjustment

It can be adjusted between a maximum increase value of 5000 μ s and a maximum decrease value of 7500 μ s on each 500rpm engine speed and every 5% throttle opening angle.

• Simultaneous monitor with engine temperature display function

The dedicated software for PC or smartphone has a simultaneous monitor function In addition to the tachometer screen and throttle opening graph screen that are very convenient for setting, the fuel injection rate of the engine temperature injector is also digitally displayed.

• Real search function

Connect to a PC or smartphone with the engine started. Information of the running engine is reflected on the screen of the computer or smartphone at the same time. The reading speed / throttle opening is reflected in the mass of the fuel map graph, and that high-lighted to make the adjustment point clear and very convenient for setting.

• Rev limit function

You can set the Maximum engine speed. It's other than that limiter-cut, it can be set even at low speed. It can be used effectively when you don't want to increase the engine speed, such as tuning engine rev measures and break-in.

• Pit lane limiter function

In addition to the above rev limit function, if you do not want to increase the engine speed such as pit lane speed regulation etc., the limiter can be operated only when the "ON" by connecting the additional bottom switch (to the white lead in the spiral tube of the main unit and grounding the body)

※ Please provide extending wire to the switch.

• Tachometer output lead wire.

1 revolution, 1 pulse, 5 volts is output in purple lead wire in the spiral tube of the main unit.

※ When installing, the bracket harness needs to be modified.

• Digital acceleration pump

This product monitoring the speed of the accelerator opening by TPS signal. When the rider wants quick acceleration and the throttle is opened quickly, injection asynchronously the increase injection other than that set value. The similar function as the acceleration pump of the racing carburetor.

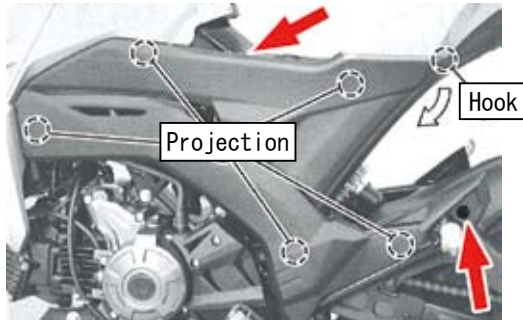
▲ Warning

As a rule, settings should be made in a factory equipped with a chassis dynamometer O₂ sensor. Never setting with your smartphone while you riding.

■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

■ Removal of exterior parts and others

- Turn off the ignition switch.
- Remove the seat and side / frame cover referring to the Kawasaki genuine manual.
Remove the screws and bolts as indicated by the arrows.
Remove the hook at the rear end of the side / frame cover and the projections (5 places) on the back and remove it from the vehicle body.



- Remove the coupler of the stock ECU unit and attach the FI controller TYPE-e.

▲ NOTE

Do not turn on the ignition while working. If it is turned on during work, the engine warning light will light up.
Be sure to attach FI con TYPE-e before turning on the ignition key.
※ If the engine warning light comes on, refer to the genuine manual to reset or consult your dealer.



- Use the attached cushions and zip-ties as appropriate with reference to the image and place the FI con TYPE-e body.
※ Caution: the case will be distorted if it interferes strongly with other parts when mounting the main body, as the inside will be damaged



- Install the side / frame cover and seat in reverse order.

■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

■ How to use FI CON TYPE-e

- Please download the instruction manual from our website (<http://www.takegawa.co.jp>) to check the detailed operation method.
 - Open the FI CON in the SERVICE column on the left side of the screen and download the operation manual.
- ※ This manual supplements only the explanation of FI con TYPE-e.
※ Be sure to check notes and troubleshooting.
※ Always check the instruction manual included with the kit.



※ Instruction manual links to external site.

※ The instruction manual is the same as the DiLTS JAPAN ENIGMA instruction manual, so it also describes the functions that are not used in this product. Be careful.

※ Please download the smartphone app from our website. However, you cannot use the downloaded application on the DiLTS JAPAN website.

※ You can download PDF file manual.

※ This product is coporated and produced with DiLTS JAPAN, and the instruction manual is made by DiLTS JAPAN.

● Table of Contents for Downloaded Instruction Manual

1. Before using ENIGMA (P.1 ~ 2)
Important information
2. ENIGMA performance overview (P.3 ~ 5)
Function of FI CON TYPE-e
3. Installation / deletion of PC software (P.6 ~ 15)
Instructions for installing PC software.
The specifications can be downloaded(free)from our website (<http://www.takegawa.co.jp>).
4. How to use ENIGMA operation software (P.16 ~ 27)
How to operate FI CON TYPE-e.
FI Con TYPE-e has different fuel MAP increase / decrease values than that previous model.
Additional display of the injection opening and closing rate to the real monitor screen.
These changes are described in this manual.
5. How to set the bluetooth on Windows PC (P.28 ~ 33)
Connect with PC and FI con TYPE-e via Bluetooth.
6. USB connection settings (P.29 ~ 49)
How to connect the ENIGMA USB version (does not use it with this product).
7. Bluetooth settings on Android cellphones (P.50 ~ 56)
Connect with Android cellphone and FI Con TYPE-e with Bluetooth.
8. Bluetooth settings for iphone (P.51 ~ 62)
How to connect the iphone and FI CON TYPE-e with Bluetooth.
9. Communication connection with ENIGMA (P.63 ~ 64)
How to operate FI con TYPE-e on PC or smartphone.
10. Correct TPS throttle position sensor error and synchronize with ENIGMA (P.65 ~ 66)
Adjustment of the throttle position sensor.
11. Set the Rev-limter / Rev limit cut (P.67 ~ 69)
This product sets the rev-limiter at 11000rpm.
How to set the rev-limit below 11000rpm and the pit lane limiter
12. Digital acceleration pump setting (P.70 ~ 72)
Required setting for the digital acceleration pump when the throttle opens fast and quick.
Acceleration pump MAP is not available for this product. Please read well this section before use.
13. Tips on fuel settings (P.73 ~ 74)
Please refer to this tips on modifying and creating a fuel map.

■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

• Software for operating FI CON TYPE-e on a PC can be downloaded from our website(free) (<http://www.takegawa.co.jp>).



Please refer to the download manual (P6-15) for installation.

• You can download the app for operating FI CON TYPE-e on your smartphone from our website (<http://www.takegawa.co.jp>) (有料)
 ※ App download links to external site.



Please refer to the download version of instruction manual for the operation.

- Need to configure the Bluetooth settings on your computer or cellphone.
 Please check the download version instruction manual for detail.
- 5. How to set the bluetooth on Windows PC (P. 28 ~ 49)
- 7. Bluetooth settings on Android cellphones (P. 50 ~ 56)
- 8. Bluetooth settings for iphone (P. 57 ~ 62)

This software and the application correspond to English display. Please set the language setting of your computer, Android, iOS terminal to English.

Information on the require operating system is available on our website.
http://www.takegawa.co.jp/user_data/fi_con.php#ficon_e



■ Screen description of FI CON TYPE-e operation software

※ Please refer to the download manual. ((P.18-27)



- Fuel MAP
 FI CON TYPE-e can be adjusted between a maximum increase value of 5000 μ s and a maximum decrease value of 7500 μ s.
- Injection opening / closing rate
 Shows the rate of injector operating time in one revolution.
 We recommend to the upper limit is 95%. 96% or more will cause the injector failed.

■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

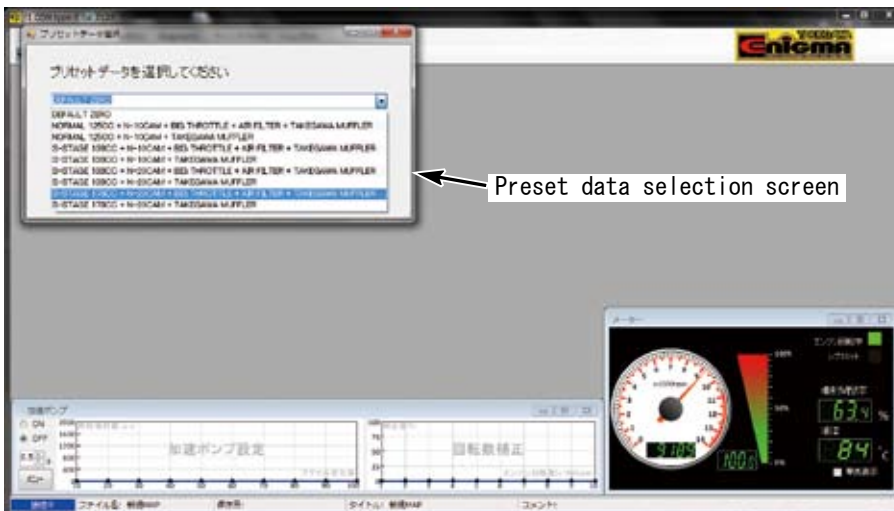
■ MAP selection table by engine specification

- The following setting table is when all our parts are installed.
- Please note that this is a setting that has been tested at our company, so it may not always be the best setting due to external factors such as individual vehicle, outside air temperature, altitude, rider weight.

	MAP name	Engine specifications
1	NORMAL 125CC + N-10 CAM + TAKEGAWA MUFFLER	Normal displacement(Normal piston・HighComp piston) + 10-10 Cam + Normal Throttle + Normal Air filter + BOMBER Muffler
2	NORMAL 125CC + N-10 CAM + BIG THROTTLE + AIR FILTER + TAKEGAWA MUFFLER	Normal displacement(Normal piston・HighComp piston) + 10-10 Cam + ϕ 34 Throttle + Air filter + BOMBER Muffler
3	S-STAGE 138CC + N-10 CAM + TAKEGAWA MUFFLER	S-Stage 138cc + 10-10 Cam + Normal Throttle + Normal Air cleaner + BOMBER MUFFLER
4	S-STAGE 138CC + N-10 CAM + BIG THROTTLE + AIR FILTER + TAKEGAWA MUFFLER	S-Stage 138cc + 10-10 Cam + ϕ 34 Throttle + Air filter + BOMBER Muffler
5	S-STAGE 138CC + N-20 CAM + TAKEGAWA MUFFLER	S-Stage 138cc + 20-20 Cam + Normal Throttle + Normal Air cleaner + BOMBER Muffler
6	S-STAGE 138CC + N-20 CAM + BIG THROTTLE + AIR FILTER + TAKEGAWA MUFFLER	S-Stage 138cc + 20-20 Cam + ϕ 34 Throttle + Air filter + BOMBER Muffler
7	S-STAGE 178CC + N-20 CAM + TAKEGAWA MUFFLER	S-Stage 178cc + 20-20 Cam + Normal Throttle + Normal Air cleaner + BOMBER Muffler
8	S-STAGE 178CC + N-20 CAM + BIG THROTTLE + AIR FILTER + TAKEGAWA MUFFLER	S-Stage 178cc + 20-20 Cam + ϕ 34 Throttle + Air filter + BOMBER Muffler

■ Select preset data • Create new data

- PC
- Select 「New」 from 「Menu」 (at the top left of the screen)
- The preset data selection screen is displayed. Select the MAP by referring to the MAP selection table by engine specification.



- When creating a new MAP, select 「DEFAULT ZERO」 on the preset data selection screen.
- ※ 「DEFAULT ZERO」 will not change the injection time of the stock ECU.

■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

■ Update

・ By selecting the update history of INDEX (at the top of the page), you can see the update history (at the bottom of the page).



・ If there is any change or correction to the fuel MAP, we will guide you through the contents within the arrow mark.



・ If there is any change or correction to the fuel MAP, we will guide you through the contents within the arrow mark.



■ Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

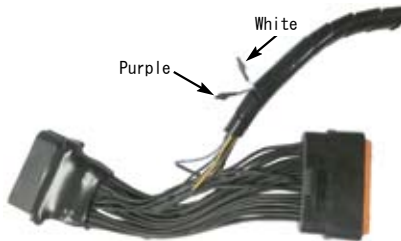
● Android

- Select 「Create New Map」 from the menu button at the bottom right of the screen.
- The preset data selection screen is displayed. Select the MAP by referring to the MAP selection table by engine specification.



- When creating a new MAP, select 「DEFAULT ZERO」 on the preset data selection screen.
- ※ 「DEFAULT ZERO」 will not change the injection time of the stock ECU.
- ※ The display screen may slightly different depending on the model.

■ Body harness



You can use more convenient functions by using the white and purple wire inside the spiral tube.

● Pit lane limiter function

- The pit lane limiter can be used the White wiring (by removing the shrink tube) and connecting it to a switch (separately prepared) and connecting it from the switch to the body ground.
- ※ Please prepare the wiring for extending the switch separately.

▲ Note

Be careful of shorts-circuit when processing. The body will be damaged if short-circuited.

- For details of “pit lane limiter” refer to page 69 of the download version manual.

● Tachometer output service wire

- A purple wire and connect it to the tachometer. (by removing the shrink tube) Table below for compatible products that have been confirmed as of April 2017.

Product number	Product content
05-05-0027	Square LCD Speed & Tachometer SQLST1
05-05-3210	Medium DN Tachometer T2 (White LED)
05-05-0016	φ 48 Small DN Tacho & Thermometer
05-05-0035	φ 48 Small DN Tachometer
05-05-0028	Medium LCD Speed & Tachometer (MLCD ST1)
05-05-0004	Blue LED electrical Tachometer
05-05-0014	Black & Green electrical Tachometer

※ Information and specifications as of April 2017. Subject to change without notice.

- Please check the tachometer instruction manual when installing. Need separate bracket harness.

● iOS

- Select 「Create New Map」 from the menu button (in the upper right of the screen).
- The preset data selection screen is displayed. Select the MAP by referring to the MAP selection table by engine specification.



- When creating a new MAP, select 「DEFAULT ZERO」 on the preset data selection screen.
- ※ 「DEFAULT ZERO」 will not change the injection time of the stock ECU.
- ※ The display screen may slightly different depending on the model you are using.