

Power Editor

Additional Injector Driver



INSTRUCTION MANUAL

E84770-K00020-00
July 2024
Ver. 3-1.01

1. INTRODUCTION

Thank you for your purchase of Power Editor R Additional Injector Driver.

- This manual indicates items that require attention in order to install this product safely and lists precautions to avoid any possible damage and/or accidents.
- This product was designed based on installation onto a specific factory vehicle or a vehicle using other HKS products. The performance and/or safety cannot be guaranteed if this product was installed onto other inapplicable vehicles.
- Contact HKS dealer for any lost parts, replacement, and this manual.
- HKS will not be responsible for any damage caused by incorrect installation and/or use of this product.
- This product works only with a vehicle with DC12V negative ground.
- The specifications of this product are subject to be changed without notice.
- This manual is subject to be revised without notice.

Product	Power Editor R Additional Injector Driver
Code Number	42999-AK018
Use	Driving additional injectors (High resistance type)
Application	Vehicles with additional injectors (High resistance type)

2. Safety Precaution

The following precautions for use of this product are to prevent possible accidents and/or injuries and for proper use.

⚠ WARNING : Indicates risk of serious injury and/or possible death.

⚠ CAUTION : Indicates risk of serious injury or property damage.

⚠ WARNING

- Make sure to work on the vehicle in a well-ventilated area to prevent possible explosion or a fire.
- Make sure to hold connectors when removing them to avoid possible damage to other electronics parts and/or a fire caused by disconnection or a short circuit.
- Stop using the product if any unusual situation is noticed. Consult the dealer immediately. Failure to do so may cause an electric shock, burn out, or damage to the vehicle.
- Make sure to work on the vehicle in area where a vehicle can be parked safely.

⚠ CAUTION

- Do not install this product by yourself.
- Do not modify, disassemble, and/or remodel the product and attached parts to avoid any damage to the unit and/or harness.
- To avoid possible malfunction and damage to the engine, install the unit away from excessive heat or water/moisture.
- Make sure all connections and wiring are not disconnected, short circuited, or incorrect. If so, it may cause an electric shock, burn out, or damage to the vehicle.
- If any unusual noise, scents, and/or vibrations are noticed, consult the dealer immediately.
- If any unusual noises, scents, and/or vibrations are noticed while driving, please refer to a factory repair manual.
- This product does not include boost updater.
Please perform the actual vehicle settings for each vehicle.
- Desorption of the connector, please go always hold the connector.
 - If you pull the cable, there is a possibility of disconnection.
- Before an automobile inspection and/or repair, it is necessary to remove this product.
- Daily maintenance on the vehicle is the responsibility of the owner.

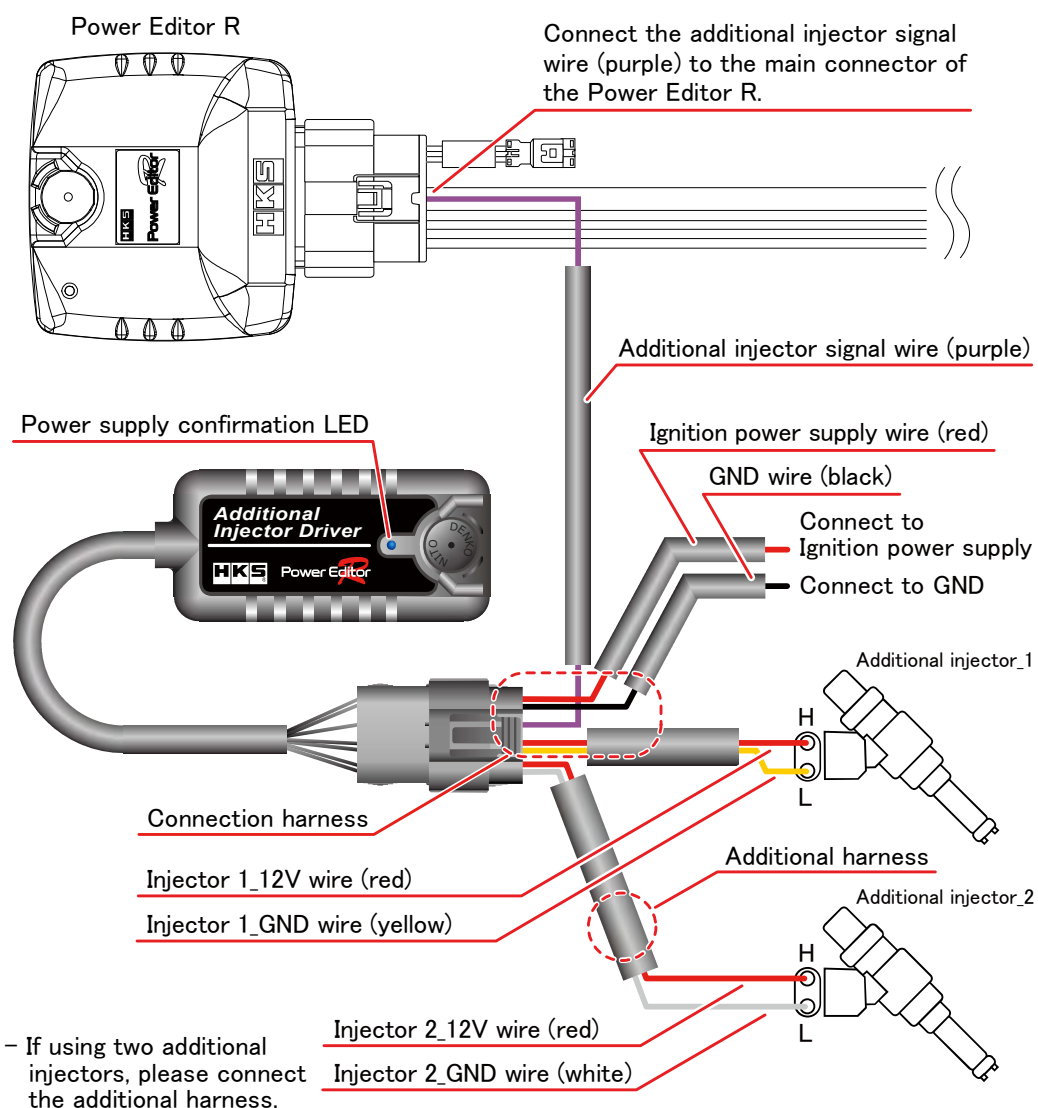
3. Product Features

- An additional injector can be driven with this optional part for Power Editor R.
 - By using the included additional harness, two additional injectors can be driven.
 - Please use a “high resistance type” additional injector.
 - To use this product, the firmware version of the Power Editor R itself must be “PER_FW.002” or later.
- If the firmware version of your Power Editor R is “PER_FW.001”, please contact the retailer where you purchased it.
- The first release version of Easy Writer [Ver.2.3.6.6] is not compatible with this product, so please download the latest version from the HKS website (<https://www.hks-power.co.jp/index.html>) and use it.

4. Parts List

1	2	3	4
Additional Injector Driver 1pc.	Connection harness 1pc.	Additional harness 1pc.	Retainer removal tool 1pc.
5	6	7	8
Tie wrap (small) 5pc.	Tie wrap (medium) 5pc.	Tie wrap (large) 2pc.	Tie wrap (extra large) 2pc.
9	10	11	12
Splice terminal 5pc.	Heat shrink tube 5pc.	Double-sided tape 2pc.	Instruction Manual (JP/ENG) 1pc.

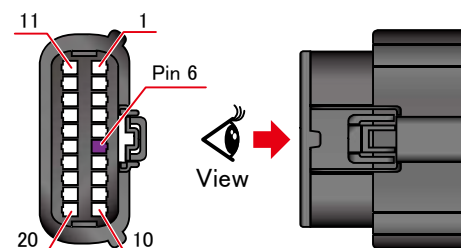
5. Additional Injector Driver Wiring Diagram



6. Connection to Power Editor R

- Connect the additional injector signal wire (purple) of the connection harness included with this product to pin 6 (additional injector signal) of the Power Editor R connector.

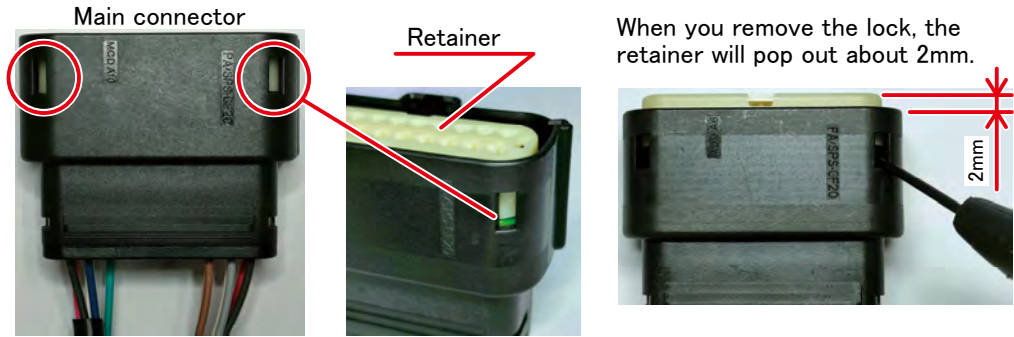
- A waterproof plug is inserted into pin 6 of the Power Editor R.
Remove the waterproof plug and connect the additional injector signal wire.



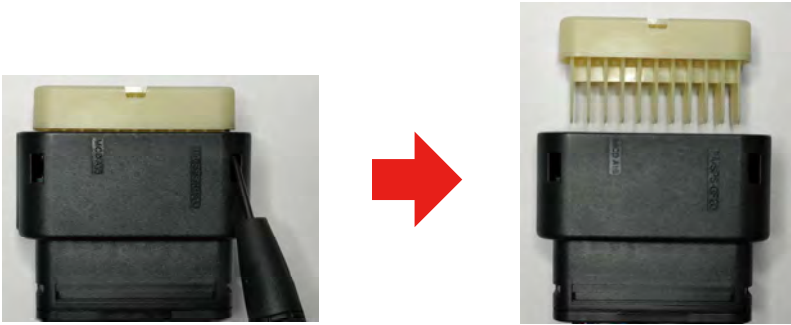
Power Editor R connector pinout

Pin	Function	Pin	Function
1	Power supply (sensor 5V)	11	GND
2	Voltage input (1ch)	12	Voltage output (1ch)
3	Voltage input (2ch)	13	Voltage output (2ch)
4	Voltage input (3ch)	14	Voltage output (3ch)
5	Voltage input (4ch)	15	Voltage output (4ch)
6	Additional injector signal (Waterproof plug)	16	– (Waterproof plug)
7	Airflow pulse input	17	Air flow pulse output
8	Rotation signal input	18	Vehicle speed signal input
9	USB D–	19	USB D+
10	USB 5V	20	USB GND

1. Unlock the retainer that is fitted to the main connector of the connection harness.
- Use a precision screwdriver (–) to lift the retainer and release the lock.
 - It will be easier to release the lock by using two precision screwdrivers and lifting both the left and right sides at the same time.



2. Remove the retainer.
- Lift the retainer further to unlock it and then remove it completely.



3. Remove the waterproof plug from pin 6.
- While pressing the waterproof plug inserted into pin 6 with a precision screwdriver, release the lock tab and remove the waterproof plug.



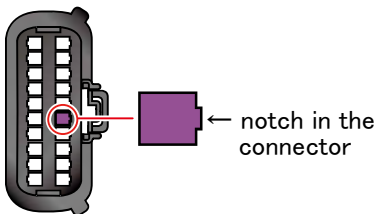
- It will be easier to remove the waterproof plug if you turn the precision screwdriver (–) and pull the tabs of the lock apart.

4. Put the retainer back in place, leaving it protruding about 2 mm.



5. Insert the terminal of the additional injector signal wire (purple) of the connection harness into pin 6 after removing the waterproof plug.

- Align the notch in the connector hole with the protruding terminal of the additional injector signal line, and insert it until you hear a click.



- Once inserted all the way, a lock will be placed inside the connector and it will not be possible to remove it. Please proceed with caution. If you want to remove it again, you will need to completely remove the retainer and then release the lock inside the connector.

6. Push the retainer back into place to lock it in place.

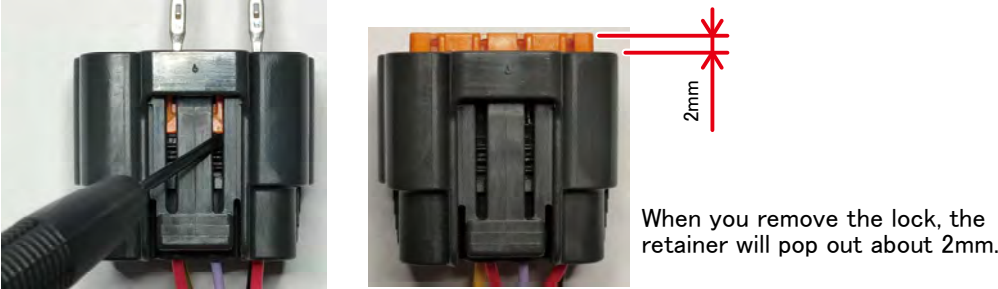
7. When using two additional injectors

If you want to use two additional injectors, connect the additional harness to the connection harness.

1. Unlock the retainer that fits into the connector of the connection harness.
- Insert the included retainer removal tool at an angle into the gap between the terminal inserted in the red frame in the image below and the retainer to loosen the retainer lock.



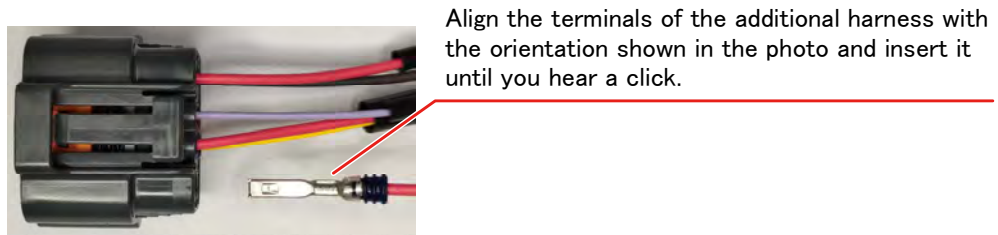
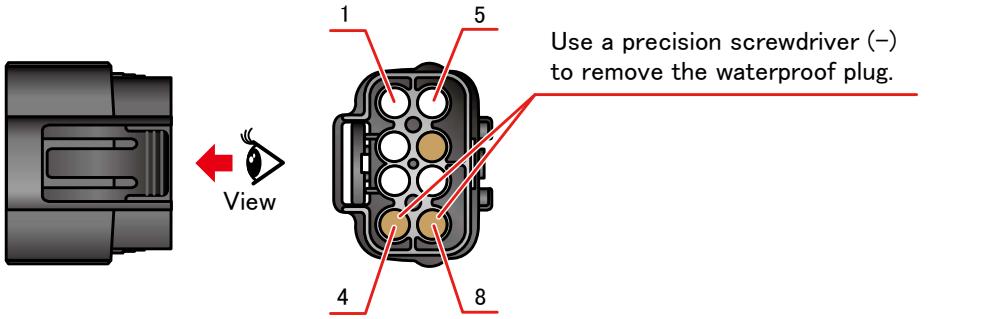
- Use a precision screwdriver (–) to lift the retainer and release the lock.



2. Remove the waterproof plugs from pins 4 and 8 of the connector, and insert the terminals of the additional harness.

Additional Injector Driver Connector Pinout

Pin	Functions	Line color	Pin	Function	Line color
1	Ignition power supply	red	5	GND	Black
2	Additional injector signal	purple	6	– (waterproof plug)	–
3	Injector 1_12V	red	7	Injector 1_GND	Yellow
4	Injector 2_12V	red	8	Injector 2_GND	White



3. Push the retainer back into place to lock it.

8. Installation Procedure

1. Turn off the vehicle's engine and leave it for at least 10 minutes, then remove the cable terminal from the negative battery terminal.
- Depending on the vehicle, 10 minutes may not be enough and an error may occur. Leave it for an appropriate amount of time.
2. Install and secure the Additional Injector Driver body in the desired location.
- Avoid installing in places that may become hot, such as the engine body, or in places where it may come into direct contact with water.
 - If using double-sided tape to secure, clean the attachment surface and degrease it thoroughly before attaching, and use a tie wrap in addition to securing. If securing only with double-sided tape, it may be dangerous if it comes off due to deterioration over time.
3. Connect the Ignition power supply wire (red) and GND wire (black) of the connection harness to the vehicle.
- The connection on the vehicle side should be connected to an Ignition power supply that can supply 2A per additional injector.
 - Be sure to connect the power supply to the Ignition power supply. Connecting to a constant power supply may cause the battery to run out.
4. Connect the additional injector signal wire (purple) of the connection harness to the Power Editor R connector (see 6. Connecting to Power Editor R).
5. Connect the additional injector to Injector 1_12V wire (red) and Injector 1_GND wire (yellow) of the connection harness.
- Use a high resistance type injector for the additional injector.
6. Please secure each harness with the included tie-wraps to ensure that they do not interfere with driving.
- Avoid routing the harnesses in places that may become hot, such as near the engine body.
7. After checking that all wiring is connected correctly, attach the cable terminal to the battery's negative terminal.

9. Write map data


- Attach the USB harness included with Power Editor R to the Power Editor R's connection harness and connect to a computer.
- Write the map data using “Easy Writer for Power Editor R”.
 - The first release version of Easy Writer [Ver.2.3.6.6] is not compatible with this product, so please download the latest version from the HKS website and use it.

10. Troubleshooting


If this product does not operate normally, please check the wiring etc. by referring to the symptoms below before concluding that it is broken.
If an abnormality occurs such as the check lamp lighting up, remove the Power Editor R main unit and attach the recovery connector included with Power Editor R.

Symptoms	Cause	Measures
The power LED on the Additional Injector Driver unit does not light up even when the Ignition power supply is turned on.	The Ignition power supply wire or GND wire of the connection harness is not wired correctly.	Rewire correctly.
The check lamp lights up even when the return connector is used.	The harness is disconnected or the wiring connection has poor contact.	Correct broken wires and poor connections.
	The connector is coming loose.	Re-insert each connector firmly until it locks.
The check lamp lights up only when the Power Editor R is connected. Or boost does not go up.	Power Editor R main unit is malfunctioning.	Request repair of Power Editor R.
	The written setting data does not match the vehicle.	Perform the current car settings again.
Power Editor R's LED is blinking.	Data writing failed with Easy Writer exclusive for Power Editor R.	Write data again using Easy Writer for Power Editor R.

11. Maintenance

 **WARNING**

- Do not use this product if unusual occurrences should occur to avoid risk of electrical shock and/or fire. Consult with the dealer immediately.

 **CAUTION**

- Do not try to repair the product yourself. Consult with your dealer.
- If any unusual noises, scents, and/or vibrations are noticed while driving, please refer to a factory repair manual.

12. Repair Service

For questions about this product, any optional, lost, defective and/or damaged parts, please contact your dealer.

13. Product Specifications

- Operating Voltage DC10~16[V]
- Operating Temperature -20~100[°C]
- Outer Size 106 × 48 × 16.5[mm]

14. Revision of Manual

Rev. Number	Date	Details
3-1.01	2024/7	1st Edition