

# Power Editor



## INSTRUCTION MANUAL UNIVERSAL HARNESS KIT

E89671-K00130-00  
December 2023  
Ver. 3-1.01

### 1. INTRODUCTION

Thank you for your purchase of Power Editor R.

- 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
Code Number	42018-AK001
Use	Boost up of turbocharged vehicle
Application	UNIVERSAL HARNESS KIT

### 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

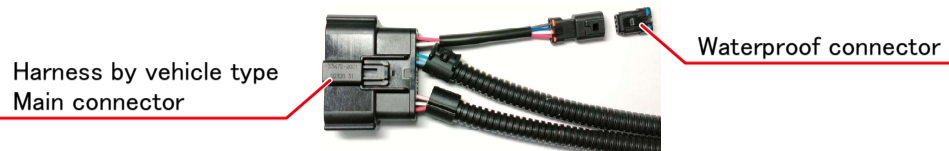
- Make sure to work on the vehicle in a well-ventilated area to prevent possible explosion or a fire.
- Make sure to hold connectors when removing them to avoid possible damage to other electronics parts and/or a fire caused by disconnection or a short circuit.
- Stop using the product if any unusual 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.
- Description 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

- By connecting this product between Pressure sensor and Manufacturer's original connector, boost can be easily raised.
- Even after installing this product, you can return to the normal state by connecting the "return connector" instead of the Power Editor R main unit.
- You can change the data for the boost up of the main unit by connecting to the personal computer with USB harness included in the product and using Easy Writer for Power Editor R. Easy Writer for Power Editor R is downloaded from the HKS homepage.
  - When connecting the USB harness, remove the waterproof connector inserted into the connection harness.
  - After completing the settings and disconnecting the USB harness, connect the waterproof connector or map switch harness.



### 4. Parts List

1  Power Editor R 1pc.	2  Connection harness 1pc.	3  Harness for map change over switch 1pc.	4  USB harness 1pc.
5  Harness for additional signal wire 7pc.	6  Waterproof plug 7pc.	7  Corrugated tube 4m.	8  Y-manifold 6pc.
9  Tube clip 10pc.	10  Splice terminal 14pc.	11  Heat shrink tube 14pc.	12  Return connector 1pc.
13  Tie wrap (small) 5pc.	14  Tie wrap (medium) 5pc.	15  Tie wrap (large) 4pc.	16  Tie wrap (extra large) 2pc.
17  Double-sided tape 1pc.	18  Tie wrap base 4pc.	19  Screw M4 4pc.	20  Instruction Manual (JP/ENG) 1pc.

### 5. Power Editor R LED display

[LED for operation confirmation]

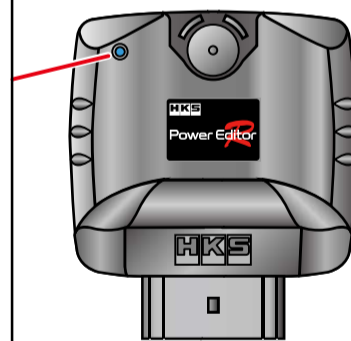
Off: Power off

Lights up: Power ON (normal operation)

Blinking continuously: data is corrupted  
(When it Blinking continuously, the boost will not increase and the operation will be the same as in the normal state.)

[When using the map changeover switch]

When switching to map A, the LED flashes once  
When switching to map B, the LED flashes twice



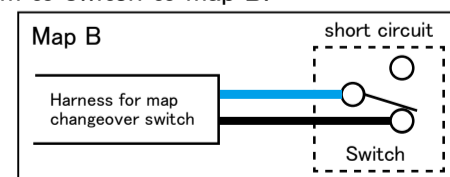
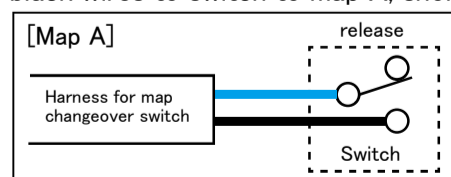
[About maps A and B]

- There are two maps, A and B, and you can switch between them using the changeover switch.

[Setting example]

Map A	For city driving
Map B	For circuit driving

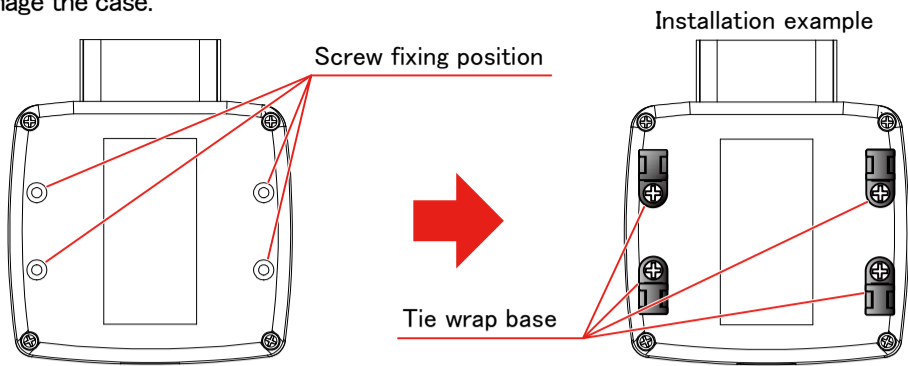
- Connect the harness for the map changeover switch and release the blue and black wires to switch to map A, short them to switch to map B.



- When using map B, a map changeover switch is required.
  - A map changeover switch is not included in the package, so please prepare one as needed.

## 6. When using a tie wrap base

- When using the tie wrap base, be sure to use the included screws M4. If you use screws that are the wrong size, the tie wrap base may come off easily or damage the case.

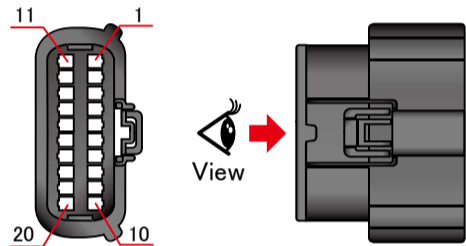


## 7. Power Editor R feature list

No.	Function	quantity	remarks
1	Voltage correction	4ch	Input/output: 0V-5V
2	Pulse frequency correction	1ch	Input/output: 0V-5V, 250Hz-15KHz
3	Rotation signal input (map axis)	1ch	Input: 0V-5V or 0V-12V
4	Vehicle speed signal input (map axis)	1ch	Input: 0V-5V or 0V-12V
5	Throttle signal input (map axis)	1ch	Input: 0V-5V, shared with voltage correction channel
6	USB communication	1 port	Exclusive use due to shared port
7	Map A/B switching		

## 8. Preparing the connection harness

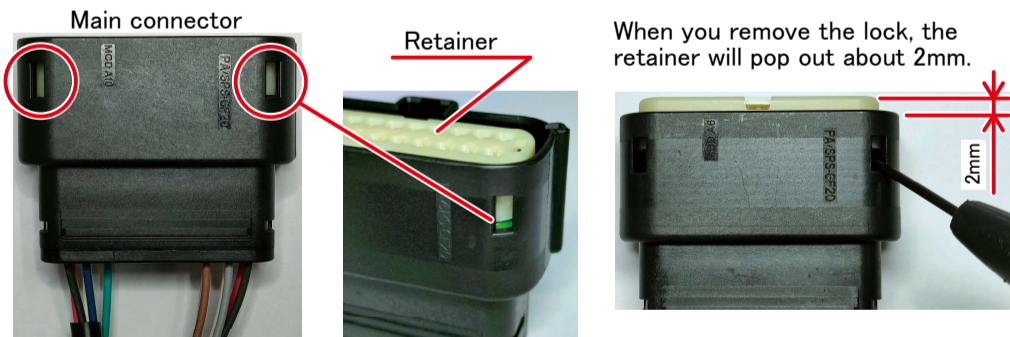
- The connection harness is completed by installing harness for additional signal wire or waterproof plugs. Complete the connection harness according to the desired specifications.
  - One or two precision screwdrivers (-) with a tip of 2 mm or less are required for this work.



- Pins marked with a red circle in the table below have a signal line or waterproof plug installed at the time of shipment.

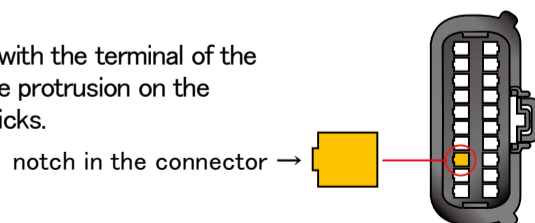
Pin	Function	Pin	Function
①	Power supply (sensor 5V)	⑪	GND
②	Voltage input (1ch)	⑫	Voltage output (1ch)
③	Voltage input (2ch)	⑬	Voltage output (2ch)
4	Voltage input (3ch)	14	Voltage output (3ch)
5	Voltage input (4ch)	15	Voltage output (4ch)
⑥	- (Waterproof plug)	⑯	- (Waterproof plug)
7	Airflow pulse 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

- 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.



- Insert the harness for additional signal wire or waterproof plug into the free pin of the main connector.

- Align the notch in the connector hole with the terminal of the harness for additional signal wire or the protrusion on the waterproof plug, and insert it until it clicks.

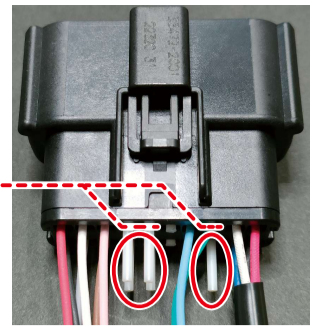


- To ensure waterproof performance, please insert harness for additional signal wire or waterproof plugs into all pins.
- Once it is inserted all the way, it will become locked inside the connector and will not come out. Please work with extreme caution. If you want to pull it out again, you need to completely remove the retainer and then release the lock inside the connector.

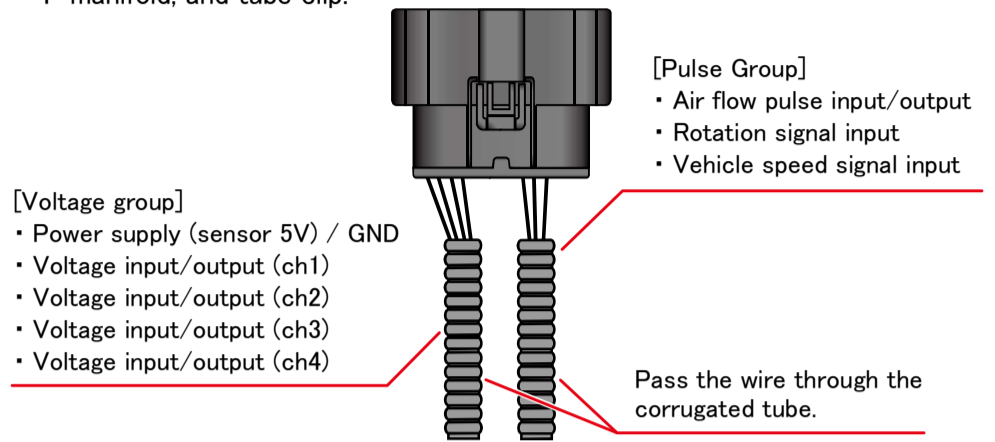
- Push the retainer back to its original position to lock it.

- When the waterproof plug is attached, it will protrude about 9mm from the connector. Make sure to cut at the same level so as not to interfere with the surrounding electric wires.

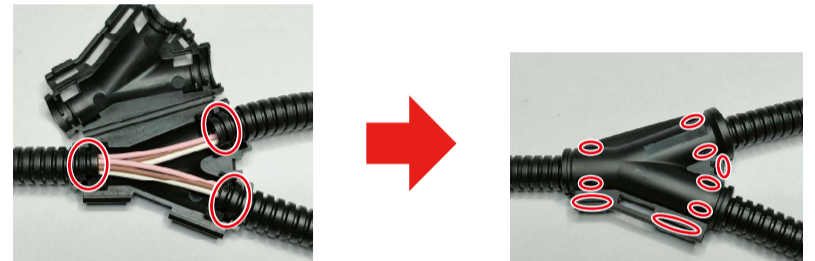
Cut the protruding part of the waterproof plug →



- Divide the wires into [voltage group] and [pulse group] and attach corrugated tube, Y-manifold, and tube clip.



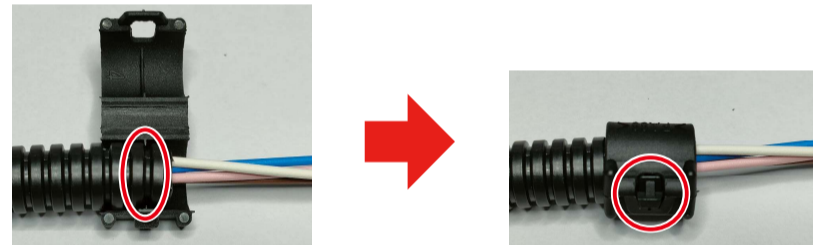
- When branching corrugated tubes, use a Y-manifold.



Attach the corrugated tube so that the groove on the inside of the Y-manifold fits into the groove.

Close the Y-manifold and lock all the tabs (9 locations).

- Attach a tube clip to the end of the corrugated tube.



Attach the corrugated tube so that it fits into the groove inside the tube clip.

Close the tube clip and lock the tab.

- If the tabs easily come off, use silicone adhesive to secure them in place.

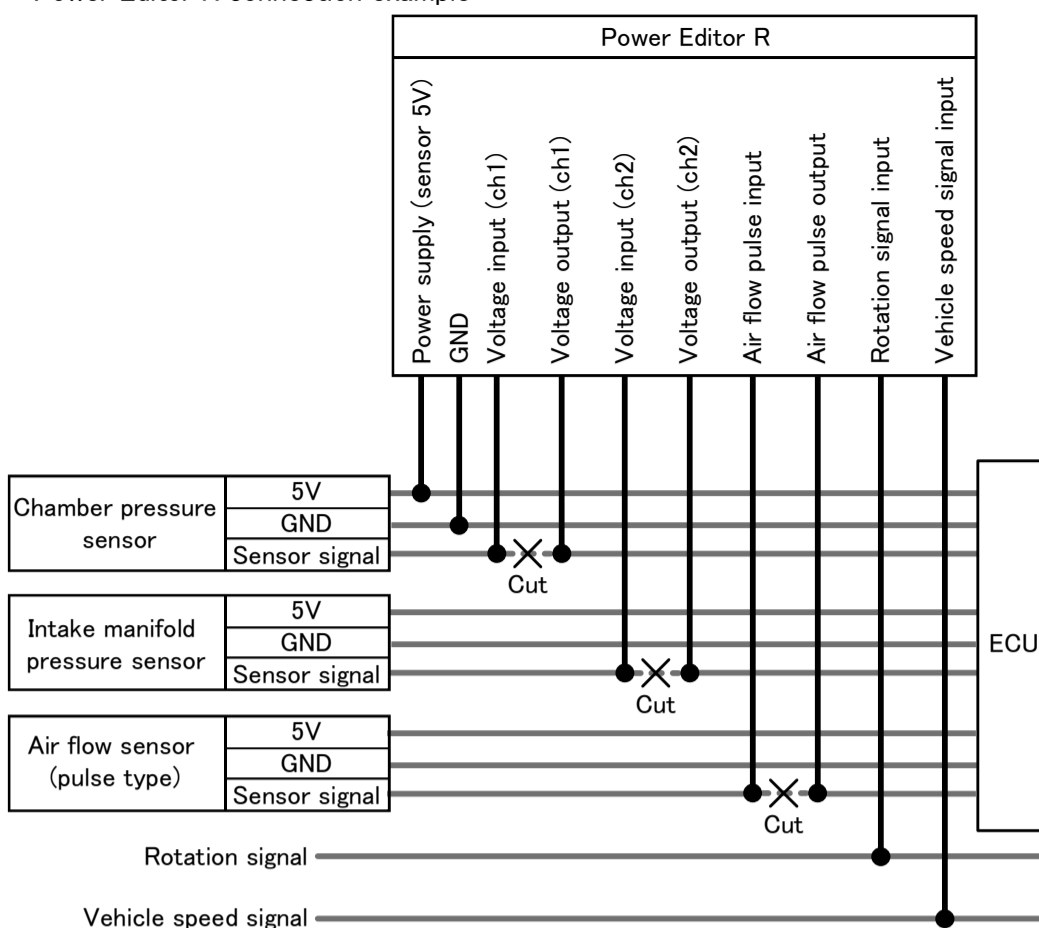
## CAUTION

- When closing the Y-manifold or tube clip, be careful not to pinch the wires.

## 9. Installation procedure

- Turn off the vehicle's engine and remove the cable terminal from the negative terminal of the battery after leaving it for at least 10 minutes.
  - Depending on the vehicle, 10 minutes may not be enough time and an error may occur.
- Install and secure the Power Editor R main unit in any location.
  - Please avoid installing the product in areas that get hot, such as the engine itself, or where it will be exposed to direct water.
  - When fixing with double-sided tape, clean the surface to which it will be attached, degrease it well before attaching it, and use tie wraps to secure it. If you fix it with just double-sided tape, it will be dangerous if it comes off due to deterioration over time.
- Connect the Power Editor R main unit and the connection harness.
- Connect the Power Editor R connection harness so that it interrupt with each sensor's wiring.
  - Use splices to connect, and insulate the connection part with heat shrink tubing.
- Secure the Power Editor R's connection harness with the included tie wrap so that it does not interfere with driving.
  - When routing the harness, avoid places that get hot, such as the engine itself.
- After confirming that all wiring is connected correctly, attach the cable terminal to the negative terminal of the battery.
- Connect Power Editor R to your computer using the included USB harness, and use "Easy Writer for Power Editor R" to write data with the channel to be corrected enabled.
  - If you turn on IG with the channel to be corrected disabled, an error may occur on the vehicle side.
- Turn on IG and check that the LED on the Power Editor R unit lights up.
  - If the LED does not light up even after turning on the IG, please check whether the power supply (sensor 5V) is connected correctly.

• Power Editor R connection example



**10. Writing map data**

- Attach the included USB harness to the Power Editor R connection harness and connect it to the computer.
- Write map data using "Easy Writer for Power Editor R".
  - Please check the instruction manual for "Easy Writer for Power Editor R" for how to create and write map data.

**11. Troubleshooting**

If this product does not operate normally, check the wiring, etc. against the following symptoms before determining that it is malfunctioning.

If an abnormality occurs such as the check lamp lighting up, please remove the Power Editor R main unit and attach the included return connector.

Symptoms	Cause	Measures
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.

**12. 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.

**13. Repair Service**

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

**14. Product Specifications**

- Operating Voltage ..... DC5V~16V
- Operating Temperature ..... -20°C~100°C
- Outer Size ..... 105 × 92 × 35mm

**15. Revision of Manual**

Rev. Number	Date	Details
3-1.01	2023/12	1st Edition