IIC

Intelligent Ignition Controller

Thank you for purchasing TECHTOM IIC-460.
Please read this manual carefully before installation and operation of product.
We highly recommend to get installation done by professional.
If you have problem with the product please contact your dealer or Technosquare for tech support.

!WARNING!

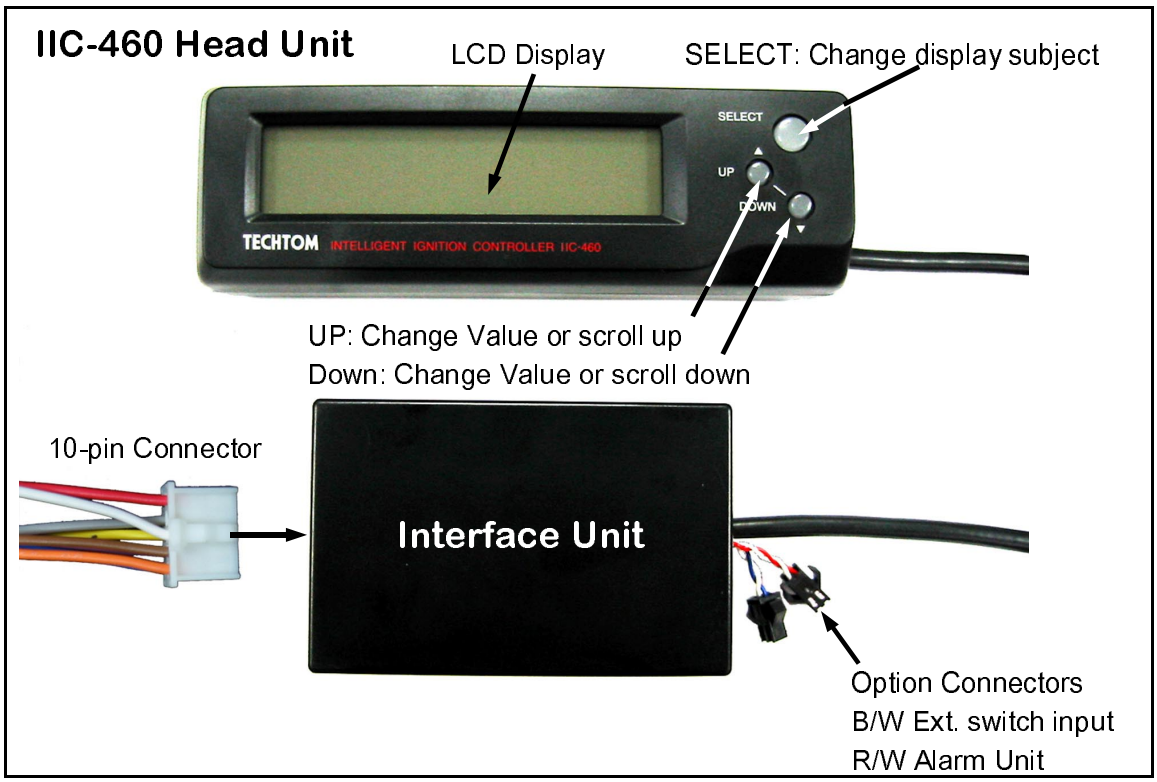
- This product is for Racing use only.
- NEVER use this product on emission controlled vehicle equipped with catalytic converter.
- DO NOT disassemble the units.
- DO NOT place units on or near heat source
- DO NOT leave in direct sunlight
- AVOID contact with water.
- Misusage of this product will cause damage to the engine and drive train.

I Contents of IIC-460

Package contains following items

IIC-460 Head Unit x1	Tap Connector x10
IIC-460 Interface Unit x1	Cable Ties x2
Cables with connector x1	Heat resistant hook and loop tape
Ext. switch cable with connector x1	

2 Overview of IIC-460



3 Head and Interface Unit Installation

1. Find a suitable location for IIC-460 head unit. The location should be easy to access and easy to view, but doesn't obstruct driving.
2. Secure the IIC-460 head unit by using hook and loop tape (included) or double sided tape. Make sure the mounting surfaces are clean. After attaching head unit, do not move tape for about 24 hours.
3. Find a location for interface unit near the ECU and secure the cable to the interface unit by using cable ties. Make sure the cable does not obstruct driving.

4 Cable Connections

1. Disconnect negative terminal from battery to avoid short.
2. Find an ECU connector diagram for the car you are going to install product into.
3. Connect the corresponding cable to the ECU wire harness by referring the Color Cable Connection Assignments and example diagrams. (fig. 1 or fig. 2)
4. Check for connection and short circuit before re-connecting battery.
5. Connect 10-pin connector to the interface box. (push them in until you hear a click sound).
6. Turn the ignition key to the "on" position, but do not start engine. Make sure IIC gets power. If it doesn't, turn the power off and check connection again.
7. Proceed to Set-Up section.

5 Setting Up IIC-460

The first time IIC-460 is used in vehicle, it must be set up for your engine's specs. This is done BEFORE starting the engine.
Each parameter can be set by inputting code numbers then choosing a value.
Follow the step below and refer to code number list to set the parameters.

1. Turn ignition key to ON position while holding SELECT button.

```
ENTER CODE
CODE= 0000000000
```

2. When this screen appears, release SELECT button quickly.

```
ENTER CODE
CODE= 2334104000
```

3. Set code number by using SELECT, UP, and DOWN button.
UP: Increase number
DOWN: Decrease number
SELECT: Move to next

```
CRANK ANGLE
120
```

4. Hold SELECT button for a few seconds, releasing it when parameter item and current setting appears.

```
CRANK ANGLE
360
```

5. Chose the item value with UP/DOWN button.

```
ENTER CODE
CODE= 0000000000
```

6. Hold SELECT button until this screen appears again.
If you need to set other setting item, go back to step 3.

Code Number List

Setting Item	Code Number	Setting Value (*-Default)	Description
CRANK ANGLE	2334104000	120*/180/360	Set the type of crank angle sensor. (Refer to your vehicle's repair manual.)
IGNITION SIGNAL	4269000000	1/2/3/4/6*	Number of ignition signals controlled by ECU. This number must be same as the number of IGT signals.
SPEED PULSE COUNT	3140000000	4/8/16/32/48*/64/96/128	Number of pulse count from speed sensor to switch from REV1 to REV2. In another words, this value controls amount of wheel spin.
ALARM UNIT	4041434547	ON/OFF*	Set this to "ON" when you connect AL-100 (Alarm Unit) option.
REV3 FUNCTION	0353857750	ON/OFF*	Set this to "ON" to activate REV3 function by Ext. switch. REV3 will be activated by closing Ext. switch. REV1 and REV2 will be overriden while REV3 is active.

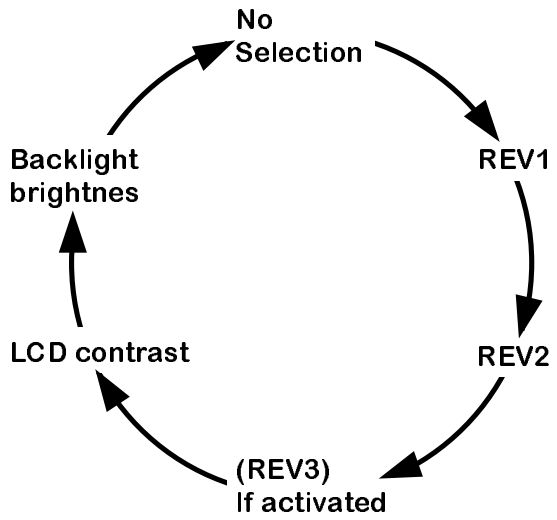
6 Operation of IIC-460

After completing IIC-460 set-up, start the engine.
The following screen will appear after the initialization screen. (rpm is example, may vary by current setting)

```
*REV1    6000 rpm
 REV2    7000 rpm
```

REV1—— Launching RPM (when car is not in motion)
REV2—— Normal driving RPM
* (asterisk mark) indicates REV currently in effect.

Selecting the item to adjust



Choose the item to adjust by pressing SELECT button. Arrow points to selected item.
Each time SELECT is pressed, the arrow will move to next available item.
REV3 will be available only if activated.

-NOTE-
If you press UP and Down button at same time, IIC-460 will show Tachometer and currently used REV.

Adjusting REV

Choose the REV you want to adjust then hold down select button until cursor starts to blink at 100 rpm position.
Adjust rpm by using UP / DOWN button.
(Number increases or decreases faster if you press and hold UP / DOWN button.)
After setting the REV, press and hold SELECT button until arrow disappears.
Adjustment can be done in real time while REV limiter is activated.

Cursor

```
→REV1    6000 rpm
 REV2    7000 rpm
```

-NOTE-
REV can be set in 2000 ~ 12000 rpm range.
In order to set REV higher than stock REV limiter, you need to remove stock REV limiter by reprogramming the ECU.

Adjusting Display

Display adjustment can be done by following mode.

Contrast ADJ ——Adjust contrast of LCD display.
Dimmer ADJ ——Adjust brightness of backlight of LCD display.

7 REFERENCE 1

Color Cable Connection Assignments

10-pin Connector	
RED	ECU Power (+12V)
BLACK	ECU GND
WHITE	Crank Angle Signal
GRAY	Speed Signal
BROWN	IGN Signal No.1
ORANGE	IGN Signal No.2
YELLOW	IGN Signal No.3
GREEN	IGN Signal No.4
BLUE	IGN Signal No.5
PURPLE	IGN Signal No.6

By using the included tap connectors, connect wires according to the chart.
Ignition signal wires must be used in order of their numbers.
If your application has 2 ignition signals, then use IGN Signal No.1 (Brown) and IGN Signal No.2 (Orange).
If your application is 6 CYL direct ignition, then use all No.1 to No.6 signals.

!CAUTION!
This IIC-460 is designed to be used with "OPEN COLLECTOR" type ignition system ONLY, which can be found on the most of the Nissan and Mitsubishi ignition systems. Connecting IIC-460 to the wrong ignition system will cause serious damage to your ECU and Igniters. For Toyota application, please use IIC-460T model.

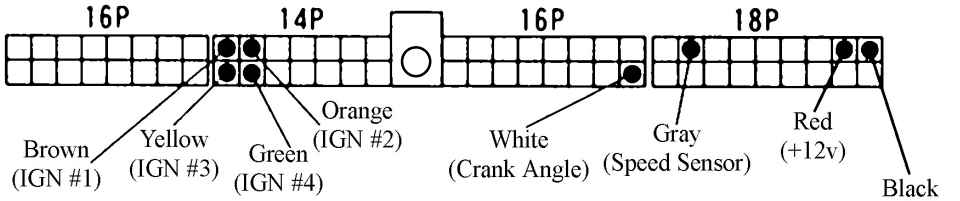
REFERENCE 2

ECU Connector Pin Configuration Diagram

The following diagrams show popular ECU Pin configurations.

NISSAN

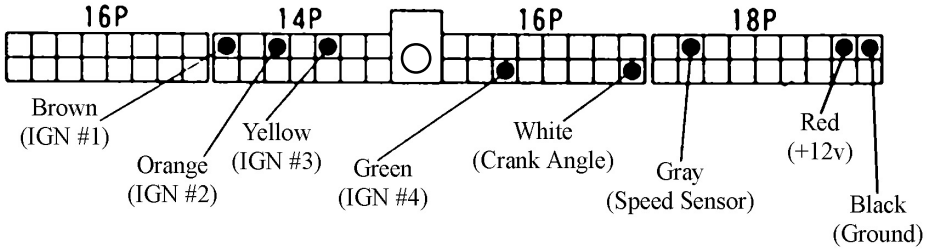
Model : Silvia / 180sx
Chassis : PS13 / RPS13 before minor change
Engine : SR20DET



Blue(IGN#5) and Purple(IGN#6) are not used for this application

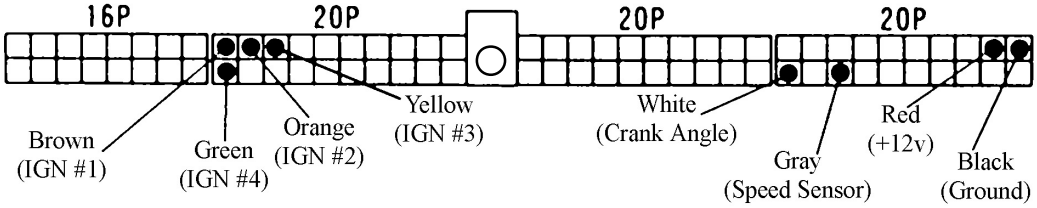
Model : 180sx After minor change
Chassis : RPS13
Engine : SR20DET

Model : Silvia
Chassis : S14 after minor change / S15
Engine : SR20DET



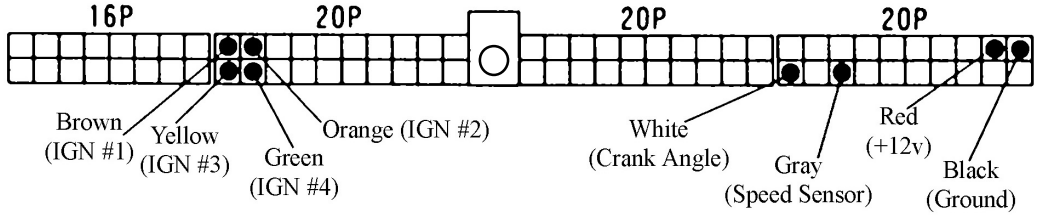
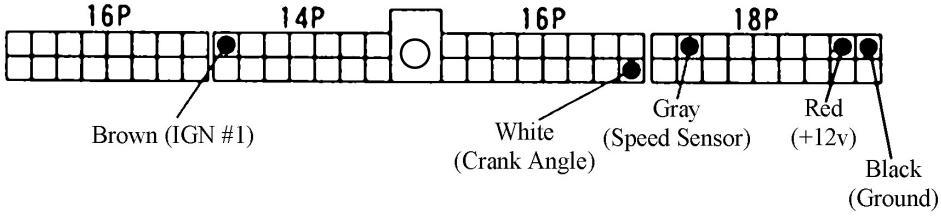
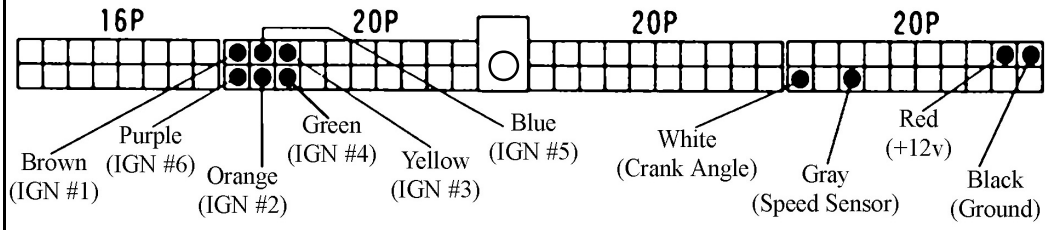
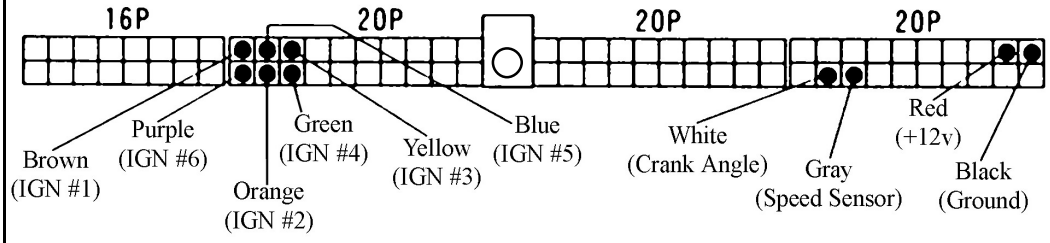
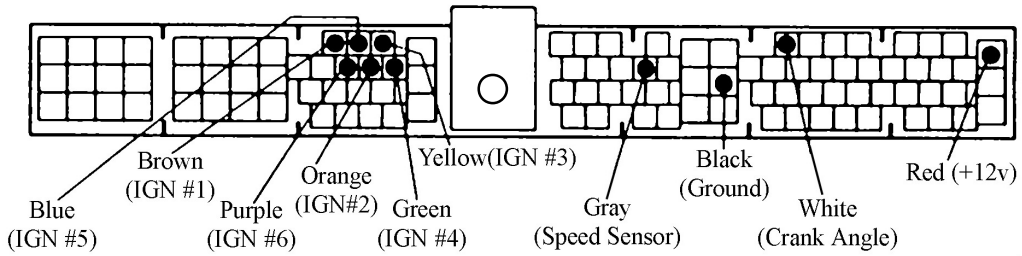
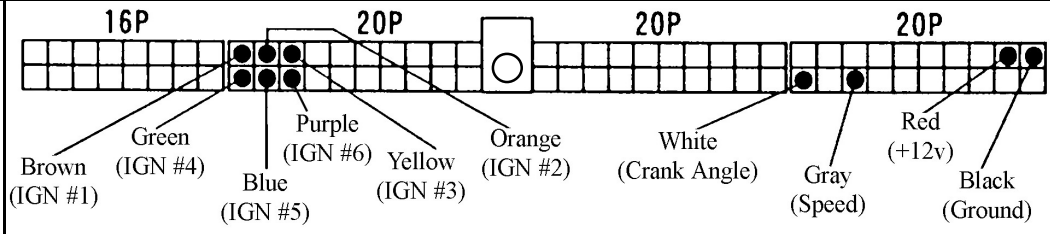
Blue(IGN#5) and Purple(IGN#6) are not used for this application

Model : Silvia / 180sx
Chassis : S13
Engine : CA18DE / DET



Blue(IGN#5) and Purple(IGN#6) are not used for this application

NISSAN

Model : Silvia Chassis : S14 before minor change Engine : SR20DET	 Blue(IGN#5) and Purple(IGN#6) are not used for this application
Model : Silvia Chassis : S14 before / after minor change Engine : SR20DE Model : Pulsar GTI-R Chassis : N14 Engine : SR20DET	 Orange(IGN#2), Yellow(IGN#3),Green(IGN#4),Blue(IGN#5),Purple(IGN#6) are not used
Model : Skyline Chassis : R32 / R33 Engine : RB20DE (T) / RB25DE (T) / RB26DETT ECU with this connector configuration	
Model : Skyline Chassis : BNR34 Engine : RB26DETT	
Model : Skyline / Stagea Chassis : R34 / WC34 Engine :RB25DET ECU with this connector configuration	
Model : 300ZX Twin Turbo Chassis : Z32 Engine : VG30DETT	

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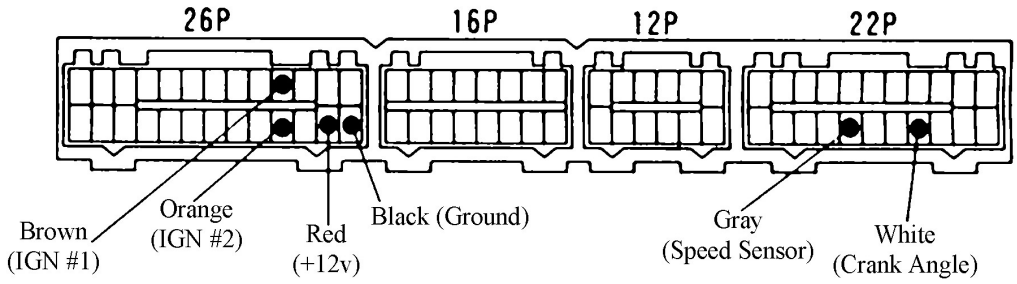
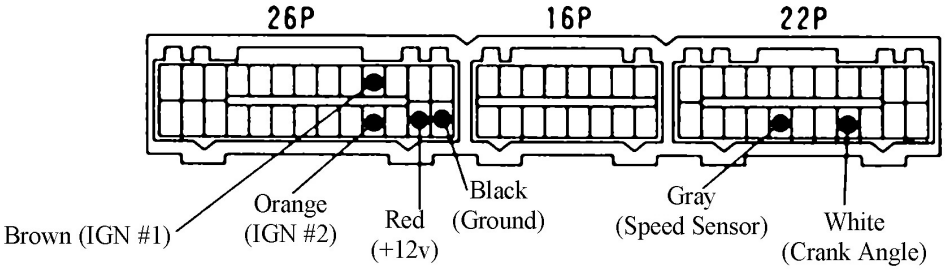
Model : Lancer Evolution IV / V / VI Chassis : CN9A / CP9A Engine : 4 G 6 3	 Yellow(IGN#3),Green(IGN#4), Blue(IGN#5), Purple(IGN#6) are not used
Model : Lancer Evolution I / II / III Chassis : CD9A / CE9A Engine : 4 G 6 3	 Yellow(IGN#3),Green(IGN#4), Blue(IGN#5), Purple(IGN#6) are not used

TECHTOM

Limited 1-Year Hardware Warranty

1. Technosquare, Inc warrants to the purchaser of this product that it will be free from defects in material and workmanship for a period of one (1) year from the date of purchase. If the product should become defective within the warranty period, Technosquare, at it's option, will repair or replace the product, or refund the purchaser's purchase price for the product, provided it is delivered at the purchaser's expense to an authorized Technosquare service facility or to Technosquare.
2. Repair or replacement parts or products will be furnished on an exchange basis and will either be new or reconditioned. All replaced parts or products shall become the property of Technosquare. This warranty shall no apply if the product has been damaged by accident, misuse, abuse or as a result of unauthorized service or parts.
3. Warranty service is available to the purchaser by delivering the product during the warranty period to an authorized Technosquare service facility or to Technosquare and providing proof of purchase price and date. The purchaser shall bear all shipping, packing and insurance cost and all other costs, excluding labor and parts, necessary to effectuate repair, replacement or refund under this warranty.
4. For more information on how to obtain warranty service, write or telephone Technosquare at 22521 Normandie Ave, Torrance, CA 90501, (310) 787-0847.

TECHNO SQUARE

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