

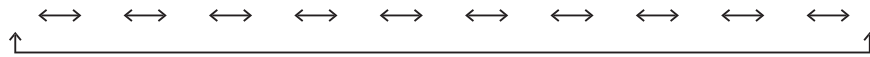
Operation(for customer)

1.Set-Up Mode(Screen for setting units and display data parameters)

Confirmation

Be sure to make preparatory settings. The unit will not operate properly without settings being made. Set up while the vehicle is stopped.

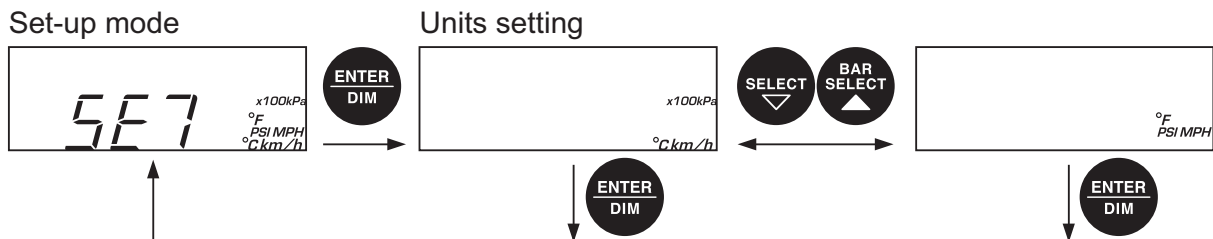
When changing the factory settings shown below, pressing the SET UP(ENTER) button for more than 2 seconds after the opening mode has completed will bring up the setting mode for units. In set-up mode, the item to be set changes each time the SELECT or BAR SELECT buttons are pressed. When adjustment of a particular setting is needed, press the ENTER button. To quit the set-up mode, press the SET UP(ENTER) button for more than 2 seconds.



Item	Factory Setting	Item	Factory Setting
Units	kPa、 、 km/h	Bar Display	ON
Speed Pulse	4	Warning Buzzer	ON
③Number of Cylinders	4	⑨Auto Warning	ON
Warm-Up	Water Temp. 40 (104 F)/ Oil Temp. 60 (140 F)	Illumination Control	Manual
		Control Out	Water Temp. 80 (176 F)/ Oil Temp. 100 (212 F)
Special Display	ON		
Tachometer Warning	1 7 0 0 0、 2 }		

Setting of Units

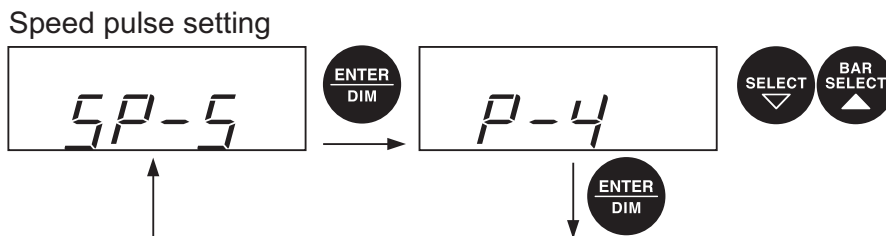
Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select units (kPa、 、 km/h or PSI、 °F、 MPH), then press ENTER to set the desired units.



Setting of Speed Pulse

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select the speed pulse number, then press ENTER button to set the selection.

2 ↔ 4 ↔ 8 ↔ 16 ↔ FREE(Free pulse setting)



<Speed pulse number>The speed pulse number differs by model of vehicle. Consult your local car dealer if you are not certain of the speed pulse number for your vehicle.

<Free pulse setting>For vehicles having a speed pulse outside 2, 4, 8, 16 pulse, the speed pulse can be set by switching to the "FREE" screen by pressing and holding the ENTER button for more than 2 seconds. After the screen changes to pulse set screen(SET.P blinks), press ENTER button while the vehicle is moving at 60km/h or 40MPH.

Ask fellow passengers to set up. Do not set up at the wheel.

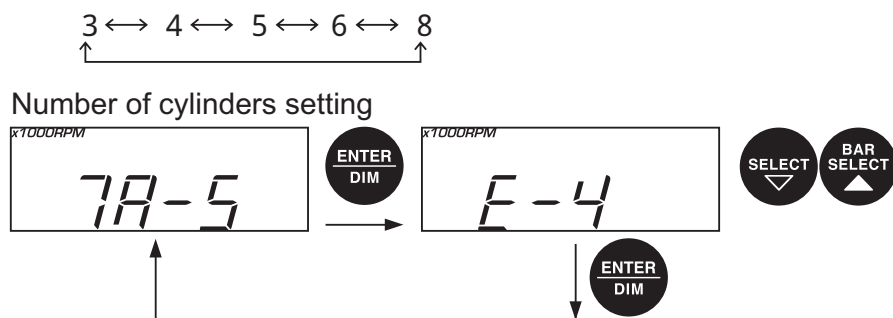
It may be unable to be adapted for some models of vehicle.



NOTE: The pulse free setting needs to be done again if units are changed.

Setting of Number of Cylinders

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select the number of cylinders, then press ENTER button to set the selection.

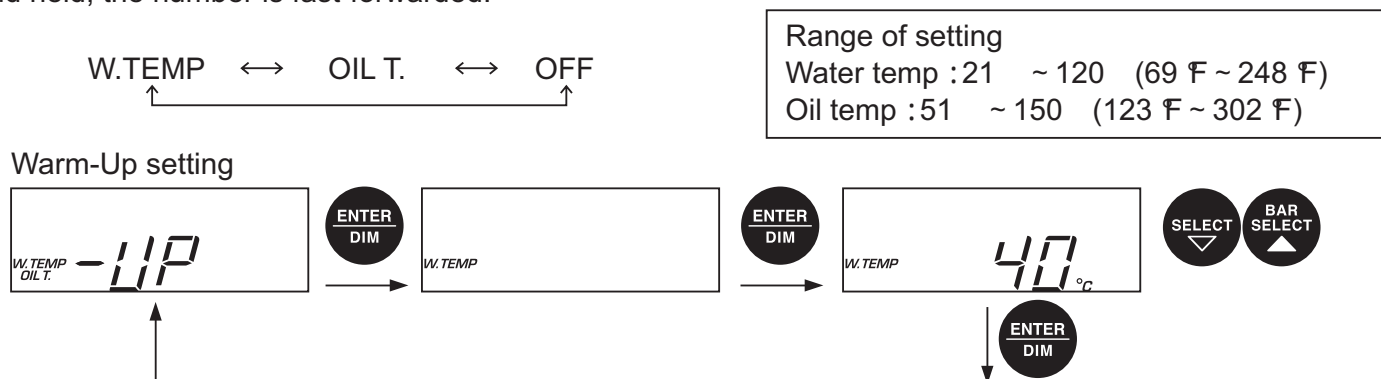


Set 2 rotary engine at 4 cylinders and 3 rotary engine at 6 cylinders.

NOTE: If the Defi-Link Display VSD CONCEPT is linked with the Defi-Link System, the setting of Defi-Link Control Unit II (or Defi-Link Control Unit) is prioritized.

Setting of Warm-Up

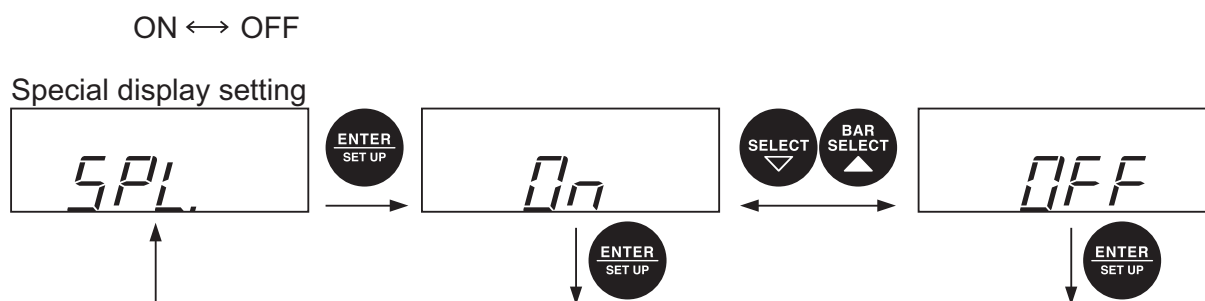
Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select water temperature, oil temperature, or OFF. Then press ENTER button to set the selection. Use SELECT/BAR SELECT button to set the desired temperature. If SELECT/BAR SELECT button is pressed and held, the number is fast-forwarded.



NOTE: This function operates when the Defi-Link Display VSD CONCEPT is linked with the Defi-Link System and the temperature sensor is connected.

Setting of Special Display

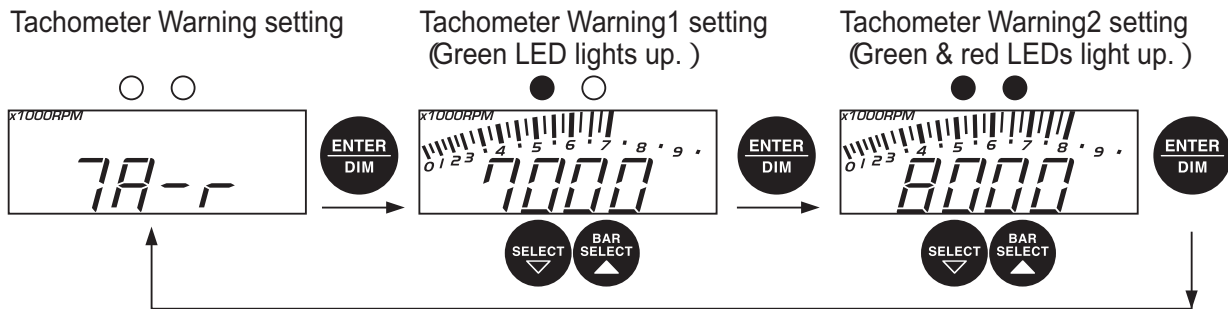
If ON is selected, the engine speed is displayed in digital when speed is 0km/h or 0MPH for more than 10 seconds. Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select ON or OFF.



Setting of Tachometer Warning

Press ENTER button when the following figure is displayed. Green LED is lighted up. Use SELECT/BAR SELECT button to set the desired warning1 value. Press ENTER again. Green and red LEDs are lighted up. Use SELECT/BAR SELECT button to set the desired warning2 value. If SELECT/BAR SELECT button is pressed and held, the number is fast-forwarded.

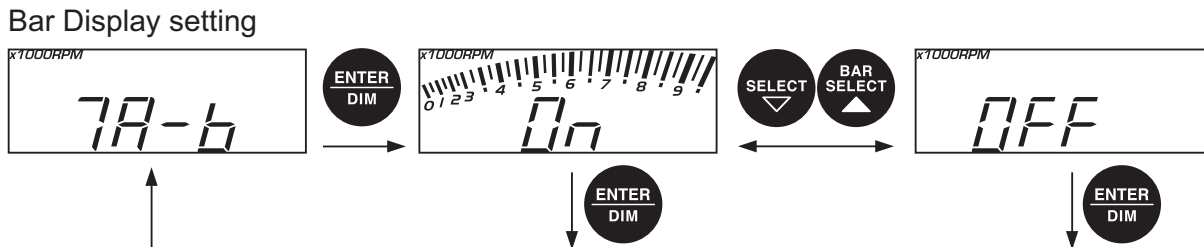
Range of setting
Tachometer Warning 1 :1,000RPM ~ 9,900RPM
Tachometer Warning 2 : larger value than warning1 ~ 9,900RPM



NOTE: If the Defi-Link Display VSD CONCEPT is linked with the Defi-Link System, the tachometer warning2 cannot be set. The setting value of the tachometer warning of Defi-Link Control Unit II(or Defi-Link Control Unit) is applied as a tachometer warning2. Please set up the tachometer warning of Defi-Link Control Unit II(or Defi-Link Control Unit) higher than the tachometer warning1 value. If the value is set lower than the warning1, the warning1 will be invalid.

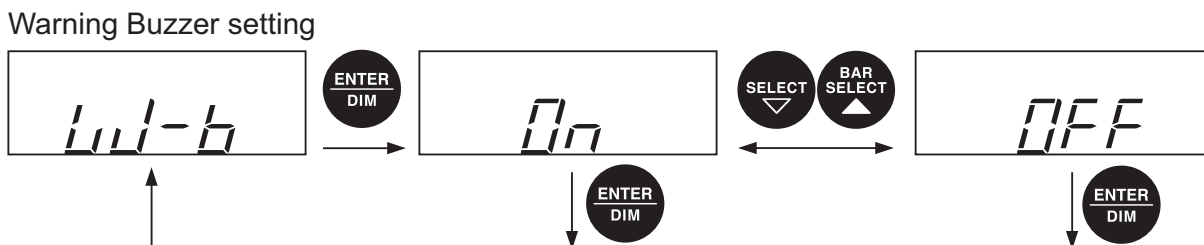
Setting of bar display

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select ON or OFF of the bar display.



Setting of Warning Buzzer

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select ON or OFF of the warning buzzer.

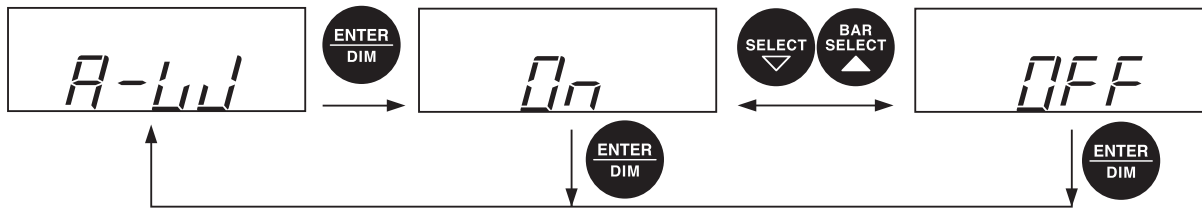


NOTE: If the Defi-Link Display VSD CONCEPT is linked with the Defi-Link System, the warning buzzer of Defi-Link Control Unit II cannot be absorbed.

Setting of Auto Warning

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select ON or OFF of the auto warning function.

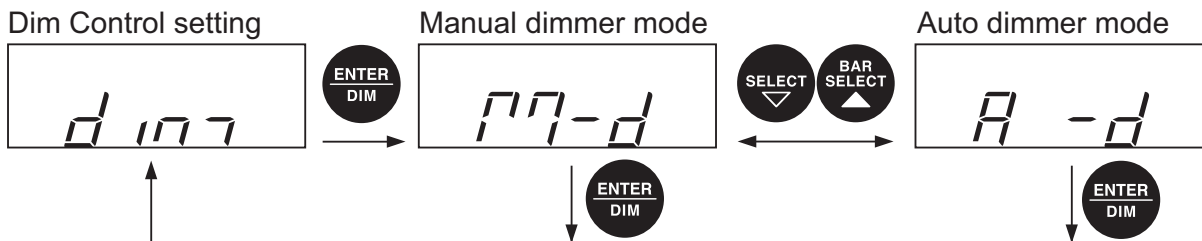
Auto warning setting



NOTE: This function operates when the Defi-Link Display VSD CONCEPT is linked with the Defi-Link System.

Setting of Illumination Control

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select auto or manual of the dim control mode.



When the auto dimmer mode is on, the brightness of the display is adjusted automatically. Press ENTER to Select one from three stages of brightness in the auto dimmer mode during the real mode or the peak mode. When the manual dimmer mode is on, the brightness of the display can be set manually at 5 stages in the real mode or the peak mode.

Setting of Control Output

Press ENTER button when the following figure is displayed. Use SELECT/BAR SELECT button to select water temperature, oil temperature, or OFF. Then press ENTER button to set the selection. Use SELECT/BAR SELECT button to set the desired temperature. If SELECT/BAR SELECT button is pressed and held, the number is fast-forwarded.

W.TEMP ↔ OIL T. ↔ OFF

Range of setting

Water temp 21 ~ 120 (69 F ~ 248 F)

Oil temp 51 ~ 150 (123 F ~ 302 F)

Control Output setting

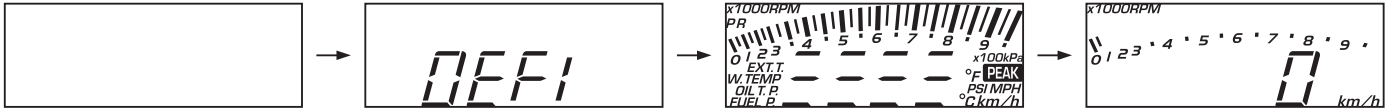


NOTE: This function operates when the Defi-Link Display VSD CONCEPT is linked with the Defi-Link System and the temperature sensor is connected.

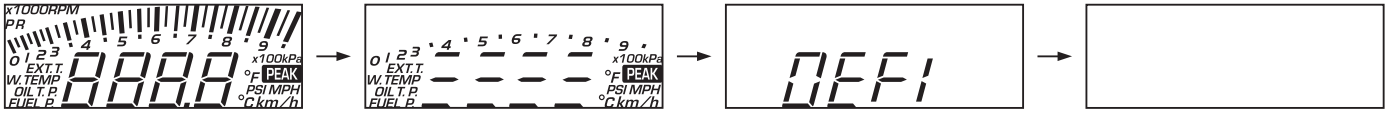
2. Opening and Ending Mode

Opening and ending modes are performed after the ignition key is turned on and off.

Opening mode



Ending mode



3. Operation Mode

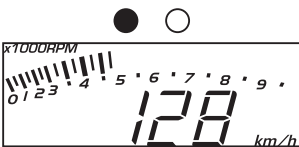
Illumination control

When the auto dimmer mode is selected in the setting of illumination control, the brightness of display is adjusted automatically depending on the outside light. The brightness can be selected from three stages by pressing the DIM(ENTER) button. When the manual dimmer mode is selected, the brightness of display is fixed. The brightness can be selected from five stages by pressing the DIM(ENTER) button.

	BRIGHT ← → DARK	
Auto dimmer mode	A-L 3 → A-L 2 → A-L 1 ↑	
Manual dimmer mode	M-5 → M-4 → M-3 → M-2 → M-1 ↑	

When the Defi-Link Display VSD CONCEPT is used WITHOUT a connection to the Defi-Link System

Real Mode



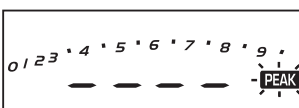
The actual vehicle speed is displayed digitally and the engine speed is displayed in the bar section. When the engine speed exceeds the warning value set as the tachometer warning1 in the setting of tachometer warning, the green LED lights up. When it exceeds the tachometer warning2, the green and red LEDs blink.

Peak Mode



Pressing the PEAK button during Real Mode will bring up Peak Mode. Recorded peak values for speed and engine speed will be displayed. Pressing the PEAK button again during Peak Mode will return to Real Mode.

Peak Reset Mode



During either Real Mode or Peak Mode, the peak values will be reset by pressing and holding the PEAK button for more than two seconds.

Special Display Mode



If Special Display Mode is turned on in the setting of special display and speed is 0km/h or 0MPH for more than 10 seconds in Real Mode, special display will start. In this mode, the engine speed is displayed digitally. When speed is more than 0km/h or 0MPH or when any button of D.C.Unit is pressed, the display will return to Real Mode.

When the Defi-Link Display VSD CONCEPT is used WITH a connection to the Defi-Link System

For operations through shown below, refer to the Operation Manual for Defi-Link Control Unit II(or Defi-Link Control Unit).

Real Mode



The actual data on current speed, engine speed, oil pressure, fuel pressure, oil temperature, water temperature, and exhaust temperature is displayed in this mode. Each time the SELECT/BAR SELECT button is pressed, the displays of the digital and bar section will change in the following order. Data without sensors connected cannot be selected.

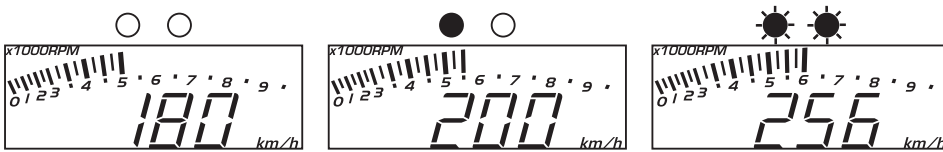


Digital Display Section Speed → Water temp. → Oil temp. → Oil press. → Exhaust temp. → Fuel press.



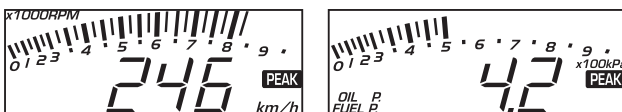
Bar Display Section Engine speed → Oil press. → Fuel press.

NOTE: If "MPH, °F, PSI" is selected in the setting of units, data other than the engine speed is not displayed.



When the engine speed exceeds the warning value set as the tachometer warning1 in the setting of tachometer warning, the green LED lights up. When it exceeds the tachometer warning2, the green and red LEDs blink. The tachometer warning2 cannot be set in the setting of tachometer warning.

Peak Mode



By pressing the PEAK button of Defi-Link Control Unit II(or Defi-Link Control Unit) during Real Mode, Peak values are displayed. Displayed data will be changed by pressing SELECT/BAR SELECT button. Pressing the PEAK button again during Peak Mode will return to Real Mode.



Digital Display Section Speed Maximum → Speed Minimum → Engine speed → Water temp.
Fuel press. ← Exhaust temp. ← Oil press. ← Oil temp. ←

Note)When displaying the speed minimum value, the unit(km/h or MPH) blinks and the minimum value recorded in Rec Mode is displayed.

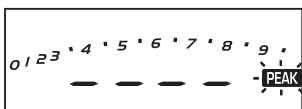


Bar Display Section Engine speed → Oil press. → Fuel press.

NOTE: If "MPH, °F, PSI" is selected in the setting of units, data other than the engine speed is not displayed.

NOTE: When connected to the Defi-Link System, the PEAK button of the D.C.Unit is unavailable.

Peak Reset Mode



When the UP button of the Defi-Link Control Unit II is pressed in Peak Mode(or when the PEAK button of the Defi-Link Control Unit is pressed and held for more than two seconds in any of Real Mode, Peak Mode or Warning Mode), the peak values will be reset.

NOTE: When connected to the Defi-Link System, the PEAK button of the D.C.Unit is unavailable.

Special Display Mode



If Special Display Mode is turned on in the setting of special display and speed is 0km/h or 0MPH for more than 10 seconds in Real Mode, special display will start. In this mode, the engine speed is displayed digitally. When speed is more than 0km/h or 0MPH or when any button of D.C.Unit is pressed, the display will return to Real Mode.

Warning Set Mode

Engine Speed



Oil Temp.



Boost



Examples of display

Pressing the WARN SET button of Defi-Link Control Unit II(or pressing the SELECT button of Defi-Link Control Unit) will bring up Warning Set Mode. To set the warning value, please refer to the operations manual of Defi-Link Control Unit II(or Defi-Link Control Unit).

Warning Mode

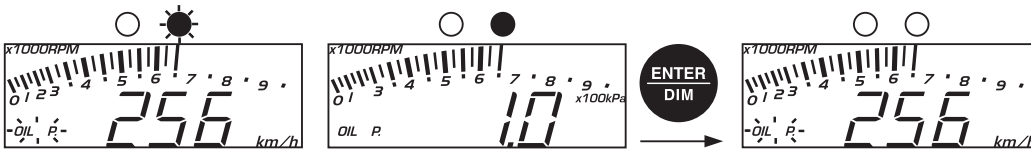
When current values exceed the values set as warnings by using Defi-Link Control Unit II(or Defi-Link Control Unit) and when disconnection or short circuit of sensor wires or sensors are detected, the screen indicates the warning.

Priority is given to the tachometer warnings over other warnings.

Warnings on boost and intake manifold pressure are not indicated.

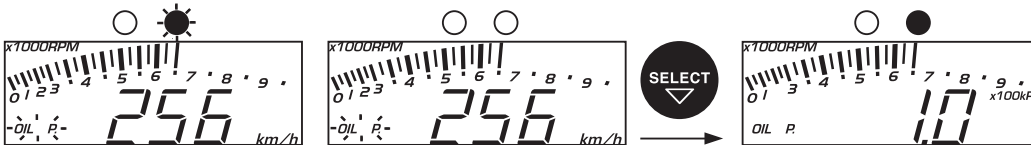
The warning on oil pressure is not indicated while the vehicle speed is under 10km/h(6MPH).

I)If the auto warning mode is turned ON in the setting of auto warning



When a current value exceeds the set value, the red LED and the name of the data blink. A buzzer sounds at the same time if warning buzzer is turned on. One minute later, the red LED and the name of the data stop blinking and start lighting and the current warning value is displayed. When several values exceed the warning set values, the latest warning is indicated. Pressing the ENTER button will return to the last display before the indication of warnings. If the value still exceeds the set value, the name of the data will continue to blink.

II)If the auto warning mode is turned OFF in the setting of auto warning



When a current value exceeds the set value, the red LED and the name of the data blink. A buzzer sounds at the same time if warning buzzer is turned on. One minute later, the red LED goes out, the buzzer is stopped, and the name of the data blinks faster. The red LED lights up and a buzzer sounds again if the warning data is selected to display in the digital display section by using the SELECT button. When several values exceed the warning set values, the name of data which is being displayed in the digital display section light up and other names blink.

Self-Diagnosis Function



Disconnection(open)

This display means that a wire disruption, disconnection or improper wiring connection has occurred at the sensor or in the sensor wire.



Short circuit

This display means that a short circuit has occurred somewhere at the sensor or in the sensor wire.



Serial error

This display means that communications between Defi-Link Display VSD CONCEPT and the Defi-Link system have been interrupted.



Setting Error of number of cylinders

"x1000RPM" blinks if the number of cylinders of Defi-Link Control Unit II(or Defi-Link Control Unit) is not set or if the METER OUTPUT2 connector of Defi-Link Control Unit II and the LINK connector of D.C.Unit is connected by error.

Rec Mode



When the vehicle is moving at the speed of 1km/h(1MPH) or more, connected sensor data and the speed data are recorded for a maximum of 3 minutes by pressing the REC button of Defi-Link Control Unit II(or Defi-Link Control Unit). "R" is displayed during recording. Data displayed in the digital and bar display section can be changed by pressing SELECT/BAR SELECT button.

NOTE: Even if REC button is pressed in vehicle's stopped condition, the vehicle speed data cannot be recorded and Rec Mode will turn to Play Mode.

Play Mode



When the vehicle speed is 0km/h(0MPH), recorded data are displayed by pressing the PLAY button of Defi-Link Control Unit II(or by pressing the PLAY/REC button of Defi-Link Control Unit during Peak Mode). "P" is displayed during playing of data. Data displayed in the digital and bar display section can be changed by pressing SELECT/BAR SELECT button.

NOTE: Once pause, fast-forward or rewind is performed with Defi-Link Control Unit II(or Defi-Link Control Unit), the recorded speed data cannot be played back. To play back the speed data, Play Mode needs to be started over again. Operation needs to be performed in vehicle's stopped condition. If the PLAY button is pressed in vehicle's running condition, speed data will not be played back but Play Mode will turn to Rec Mode.

Warm-Up Mode



This Warm-Up Mode is available when either a water temperature sensor or an oil temperature sensor is connected to Defi-Link Control Unit II (or Defi-Link Control Unit) and the setting of Warm-Up is completed. After Opening Mode, Warm-Up Mode starts if the sensor data is below the set value. During this mode, leftmost digital segments are lighted in order. If the displayed data is changed by pressing the SELECT button during this mode, the unit of temperature blinks(/ °F). When the temperature reaches the set value, Warm-Up Mode is completed and returns to Real Mode.

Control Output

This Control Output function is available when either a water temperature sensor or an oil temperature sensor is connected to Defi-Link Control Unit II (or Defi-Link Control Unit) and the setting of Control Output is completed. When the temperature reaches the set value, the Control Output signal is read out to the terminal of CONT. OUT of D.C.Unit.

⚠ Caution

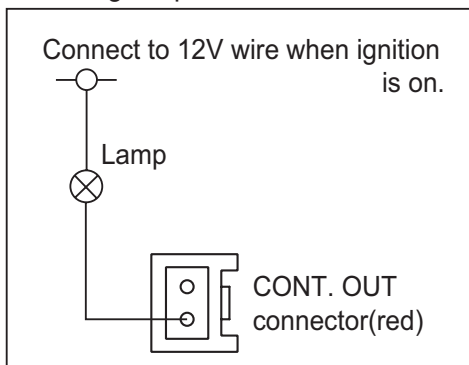
Do not connect anything to the CONT. OUT connector unless this function is used.

Load current of the Control Output is less than 300mA.

When the special display is performed, the Control Output signal is not read out.

Any damages to other products connected to the CONT. OUT connector is not covered by the warranty.

a)Example on direct hookup of a warning lamp



b)Example of how to connect a motor by using a relay and how to load a LED indicator

