## Head Up Display (HUD) User manual

HUD short for Head Up Display. It displays driving datas on the front windshield such as speed, RPM, water temperature, voltage on the car front window glass; avoiding drivers unsafety because of watching the instrument while driving. Drivers can read the driving information instantly, and can always keep the best state on the way with HUD.

Feature:

- 1. Universal: work with car produce after 2003 with OBD II connector
- 2. 3" high definition screen
- 3. Multi-color design, and projection easy read !
- 4. Nano-technology screen plate , eliminate reflection , make projection clear & sharper .
- 5. Full information including speed, engine RPM, cooling water temperature , battery voltage, and Alarm for all these .
- 6. Auto on/off along with Car start/off , protect car battery . (Manual on/off is also available )
- 7. Equipped with Auto brightness sensor . (manual adjustment is also available )

HUD screen function :



- 1. Brightness sensor (pls don't cover by article)
- 2.Engine RPM
- 3.RPM unit (1,000 turn/min)

4.Unit display : Cooling water temperature =>  $^{\circ}C$  or  $^{\circ}F$  , battery voltage =>V, Speed => MPH or KM/H

5.Main display => display number of speed, battery voltage, cooling water temperature.

6.Warning Alarm: Alarm for battery voltage, cooling water temperature alarm, over speed alarm ,RPM alarm, beep sound on/off .

#### HUD starting



1. OBD2 cable input (connector with vehicle OBD II )

2. Power on/off switch

3.Function setting button (can push up, down, inward)

4.Short push function setting button , showing cooling water temperature , battery voltage , or speed.

5.Beep sound on/off: Push function setting button down for 5 sec, all the Alarm function off, again push it 5 sec, Alarm function on .

#### HUD installation

1.Make sure your car use OBDII connector (as picture 2), also use OBD II protocol (normally you will find a stick under engine board (as picture 1) showing OBD II certified, if not, call your car sales for information)

2.Connect the OBD II cable (included in package) to your Car OBD II jack.

3.Connector other end of cable (mini USB connector) to HUD device .



picture 1

## picture 2

Reflection film installation

Please Note: HUD project the display information on the car front windscreen , because the windscreen is double, which will make double image on the windscreen when display. The double image of car will be different. If you can see clear the display information, then there is no need to use the reflection film. If there is a double image, then please use the reflection film.

First, please put the supplied non-slip mats in front of the dashboard, and then put the HUD on it.

Second, please stick the reflection film on the windscreen.

The reflecting film should be pasted right above the host machine and it should be able to reflect the whole display screen.

Methods of pasting the film:

1.Spray some water on the place that the film will be pasted on, and then use a dry towel to clean it;

2. Tear off the back side (marked 1) of reflection film, then paste it to the right place.

3. After you have adjusted the location well, you can use a scratch board or something else flat to slick the film and squeeze the water inside out until there is no bubble or water in it.

4. Tear off the front side (marked 2) of the reflection film. If the film cannot display the whole information, please adjust the non-slip mat.

# The first use of HUD

Start engine and power on HUD, showing the current vehicle voltage and then enter to search ECU state, if the HUD shows speed, rotating speed, indicating that HUD has been installed successfully. (After 1 minute, or if only display the voltage, please check whether HUD, OBD interface, and OBD data cable are correct connection and plug the OBD cable tightly with vehicle OBD interface and HUD. Open HUD switch, and scan again)

### HUD setting

HUD display information is from ECU, because when producing car, there is a difference between vehicle dashboard and ECU, then you can enter the setup mode to fine-tune the HUD display value, in order to achieve exactly the same value as dashboard. We have adjusted HUD according to the general test values at the factory,

if you find HUD display information is different from dashboard, then make the following adjustments:

1.Long press the wave button vertically for 5s

Please enter into the setting mode, there are three button for wave button: Up button (turning the button to upside), OK button (pressing the button vertically), Down button (turning the button to downside), after enter into the setting mode, press the OK button vertically one time, the menu will increase one. Turning the upside button or downside button to increase or decrease the parameter. After finish the adjustment, Long press the wave button vertically for 5s to return to the display interface.

Menu	Function	Adjustment range	Desp.	Factory preset number	Picture show
0	Speed	50-150	If HUD speed is higher than dashboard instrument , low this number (by push down function setting button ) , normally low by 2 one time, then check if it is the same as car instrument . For speed lower than instrument, push up,do the same .	107	
1	Engine RPM	50-150	Start your car, shift to 'P', push oil Pad, see the HUD and do adjustment (push function button down for decrease and up for increase )	117	
2	RPM Alarm	0-75	Factory preset Alarm is 7000 RPM. You can adjust it by push function button up/down .	70	XIDORPM C'F V MPH Km/h

3	Speeding Alarm	30-500	Factory preset speeding Alarm is 94 MPH. You can adjust it by push function button up/down .	94	
4	Brightness	0-2	0 = Auto 1= darker 2=brighter	0	* 1 1 1 1 1 1 1 4 5 6 7 1 1 2 3 KIOORPH * KIOORPH * KM/H * Km/h
5	Speed unit	0-2	0=RPM,1=KM,2=MPH	2	
6	Water temperatur e unit	0-2	0=water temperature 1= (°C), 2= (°F)	2	
7	Power on voltage	110-150	HUD will automatically turns on when voltage above 13.2V,and hud automatically turns off when voltage below 13.2V	132	* * * * * * * * * * * * * * * * * * *
01234 567	Demo state	0-2	0 is normal state,1 is demo state,2 is empty please note, this is for engineering purpose only, and there is no need to adjust this for normal consumers	0	**************************************

### 2.Vertically short press the OK button:

Switch the display information, e.g. water temperature, battery voltage, speed



3. Beep sound on/off:Push function setting button down for 5 sec, all the Alarm function off, again push it 5 sec, Alarm function on .

4. Restore the factory Settings:

try to reset the HUD,slide setting scroll to "L" for 5 seconds, all the LED lights will be turned on,repeat the action for 5 seconds again, all setting will be reset to factory default setting and the HUD should be good.

Specification:

```
Working temperature : -40c—+80c (atmospheric pressure 86 – 106 KPa)
Relative humidity: 10%-95% Noise <=60dB(A)
Alarm beep : >=30dB(A)
Working Voltage : 9V~16Vdc(12Vdc/400mA)
Measurement : 9*5.4*1.2(cm)
Weight : 40g
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Problem	Possible reason	The way to solve
No speed alarm	the function is closed	open the switch of alarm
No RPM speed	The setting value is too	Resetting and opening the
	high or the function is	switch of alarm
	closed	
No display after	The switch is not opened,	Opening the switch and check
starting	voltage is too low,	the plug,set the voltage
	the vehicle is not OBD2	value, change another vehicle
	protocol	with OBD2 protocol
No speed and engine	Not conform to OBDII or	Contacting with auto
speed display	EU-OBD port	manufacturer
Speed is inaccurate	The unit of speed is KM/H	Switching the unit of speed to
		МРН

1.Nothing on screen :

Make sure the HUD power button is on , make sure OBD II is securely connected , start car again !

2. Power on, but screen only show car battery voltage , and off after 30 sec => Car might not use OBDII or EU OBD protocol , check the sticker under engine board or call your car sales to make sure this !

3.Projection is not clear in sun light environment => Make sure you remove the transparent film on HUD screen, HUD projection position is on projection film, or you can adjust brightness as mentioned in Menu

4.HUD crash: try to reset the HUD,slide setting scroll to "L" for 5 seconds, all the LED lights will be turned on, repeat the action for 5 seconds again, all setting will be reset to factory default setting and the HUD should be good.

5.HUD speed is higher/lower than dashboard instrument : see Menu 0 adjustment. 6.HUD cannot be automatically power off: Vertical press in 5 seconds to enter into menu setting, short press 7 times to menu 7,the default parameter is 132, up or down change it to 135 vertical press in 5 seconds to save and exit.

7.HUD cannot be automatically power on: Vertical press in 5 seconds to enter into menu setting, short press 7 times to menu 7,the default parameter is 132, up or down change it to 128, vertical press in 5 seconds to save and exit.