

# von-STD(JTBT2200) Manual Instruction

BEAUTIFUL WORLD  
GREEN IT UP!

# von-STD(JTBT2200) Information

- **Certified Business Name:** Jastec Co.,Ltd.
- **Device (model):** Wireless data communication system wireless transmitter(JTBT2200)
- **Manufactured date:** April, 2012
- **Manufacturer/country :** Jastec Co.,Ltd./Korea
- **Certified code :** JS0
- **A radio interference of this wireless module is not providing a service related the safety of life.**

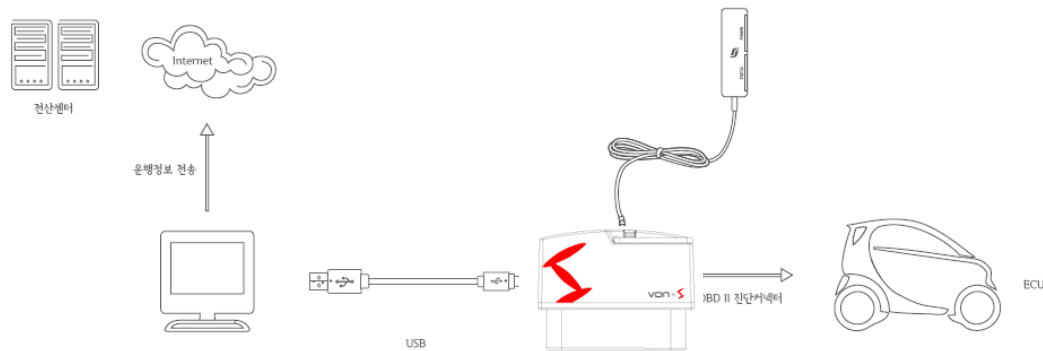
# Cautions For Safety

**We kindly recommend you to be fully aware of using a product accurately and for safety of user. All liabilities by uncomplying cautions are not supposed to be responsible to manufacturer.**

1. This product into water or prolonged exposure to moisture can cause failure resulting in no charge for broken A/S.
2. Do not disassemble or repair this product if the label seal is broken or damaged, free A/S will not be received.
3. Do not separate or equip OBD II module while driving vehicle or ignition off. – This causes to car accident and defective of it.
4. Please note that on the surface of the product carefully to avoid strong detergent or chemicals.
5. This product works under the proper temperature -30~+80°C.
6. Do not impact the product. It's the cause of product defective.
7. Using other products rated voltage is the cause of the crush. Rated voltage state must be sure to use the product.
8. After parking vehicle in a safe place, install OBD II module then drive.
9. When installing or removing product on the vehicle as the vehicle peripheral device could be due to injury, Please be careful.
10. Incorrect installation of the product by the vehicle's shock and vibration and can cause data loss, after the installation, please check it properly.
11. Products by shock or vibration of the vehicle is released from the car because it can cause data loss if the installation status checks on a regular basis. This product is equipped with a breakdown of the car by the impact of accidents, damage, of driving record, we are not responsible for missing.
12. Jastec Co.,Ltd provides cable, please use the original cable.

# 1. von-STD(JTBT2200) Descriptions

## 1.1 Overview



von-STD(JTBT2200) as vehicle driving logs tracker designed to collect a vehicle driving information from ECU(Electronic Control Unit) By OBD standard protocol communication and can be saved a driving logs by connecting to PC.

# 1. von-STD(JTBT2200) Descriptions

## 1.2 Specifications

In-vehicle Protocol	ISO 9141-2, ISO 14230-4(KWP-2000), ISO15765-4(CAN) J1850(PVM/VPW) protocol supported, physical communication standard followed and high credibility being with vehicle DB.
32 bit main processor	Boasting fast and stable performance ARMv7 Cortex-M3 CPU has adopted.
Stability real-time operating system	System,hardware,applications,databases,data communications and other resources efficiently and reliably manages the real-time operating system is used based on Tiny.
USB communication	USB Full-Speed (12Mbps) high data transmitter function supported.
Low power consumption and saving	Standby power consumption in driving conditions with low start-off when the vehicle's power-saving features built in to prevent battery discharge.
Firmware update support	Firmware and vehicle DB program to communicate with a PC via USB connection to upgrade is easy and fast..
Mass storage space	Large amounts of information and operating data in real time on a high-capacity memory and high data reliability by applying non-volatile memory can be saved.
Data communication	High-speed communications, the processor transfer, processing speed and large memory capacity by combining features such as vehicle driving record data in real time and to minimize the error.
Smart design	Due to small and light for easy installation and occupies less space, it doesn't interfere with the operation easier you can determine.

# 1. von-STD(JTBT2200) Descriptions

## 1.3 Functions

Driving logs record	Saving vehicle information.
	Collecting and saving driving logs information. Vehicle identification information / module certification / module serial number information / driving data starting time and ending time / ignition On and Off time / Accumulated driving distance / module connection and disconnection time / driving information transmitting time / acceleration pedal or throttle valve open angle
Module operating check and alarm	Display [indicator] : power display lamp[POWER –blue] / status display lamp[STATUS -red]
Driving information security	Encoded saving data to not modify a driving recorded information.
Driving information upload	USB transmitter preferred.
Power saving function	Automatically power will be off when ignition off.
Self diagnostic	Supporting self diagnostic function through OBD II module operating check (Indicator).
Firmware upgrade support	Supporting firmware upgrade

# 1. von-STD(JTBT2200) Descriptions

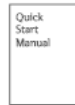
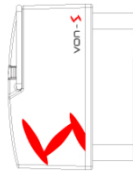
## 1.4 Specification

Specification	
CPU	32 bit ARMv7 Cortex-M3
Memory	4 MB Internal Flash Memory
LED	Display LED
Vehicle protocol	CAN[Control Area Network]: ISO 11898 / ISO 9141-2 / ISO 14230 [KWP 2000] / SAE J1850 (PWM / VPW)
Connector type	SAE J1962 OBD-II 16Pin Standard Connector
Power	DC 12V vehicle, USB 5.0 V support
Power consumption	Max power consumption: $\leq 500\text{mW}$ low [stand-by] : $\leq 400\text{mW}$ [saving mode] : $\leq 30\text{mW}$
Case	Color: Black, Material: ABS
Size	[W]48mm X [D]28mm X [H]25mm
Weight	39 g
Operating temperature	-30 ~ 80°C

External interface specification	
USB	USB 1.1(2.0 Compatible) VCP(Virtual COM Port) Supported
Bluetooth (JTBT2200)	Bluetooth v3.0 Class 2 2.4GHz ISM band Frequency range: 2,402 ~ 2,480MHz Data Rates: 1 Mbps

# 1. von-STD(JTBT2200) Descriptions

## 1.5 Composition



Quick Start Manual



프로그램 설치 CD



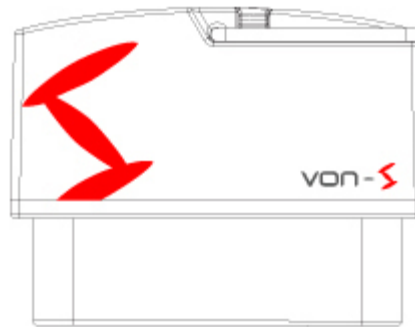
USB 케이블

Name	Function
OBD II module (body)	Connection to vehicle OBD II connector.
USB cable	Use for uploading the driving logs data by PC connection.
Quick Start Manual	Quick guide manual
Program installation CD	von-S PC Manager installation program, included in user's manual.



# 1. von-STD(JTBT2200) Descriptions

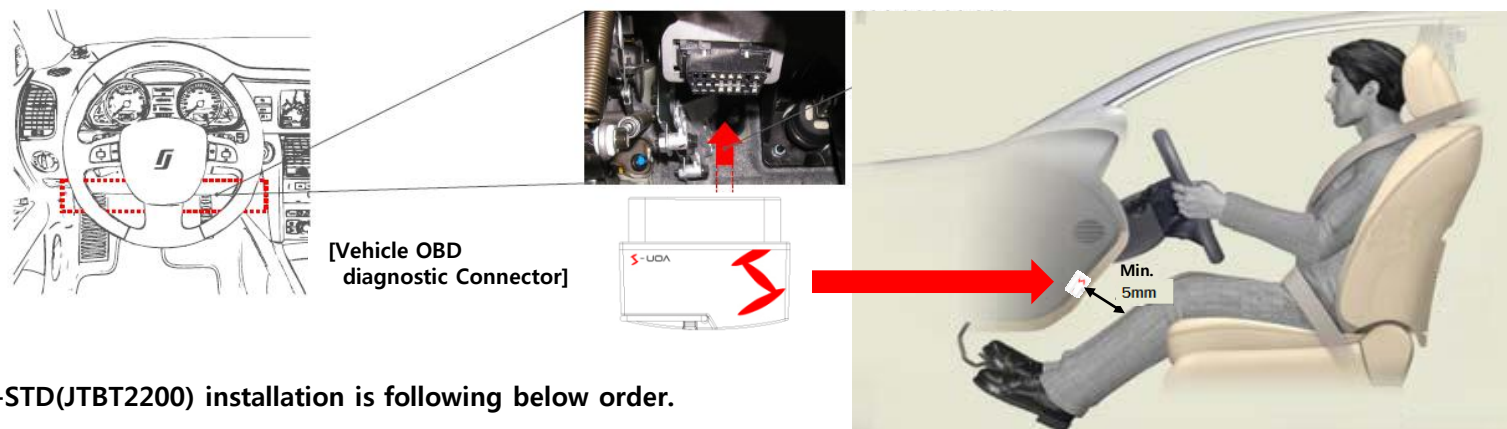
## 1.6 Body description



Front display LED	Red/Blue/White display LED
OBD connector	Connect to vehicle OBD diagnostic port with SAE J1962 OBD-II 16Pin standard connector.
Rear display LED	Operating LED

## 2. Product Instructions

### 2.1 von-STD(JTBT2200) installation



**von-STD(JTBT2200) installation is following below order.**

1. von-STD(JTBT2200) installation requires after vehicle parking in safety area.  
**\*\* Caution : A side brake or foot brake should be locked and shift also checked on the parking position.**
2. Please check vehicle engine should be off when if ignition on
3. von-STD(JTBT2200) shall be installed in front of driver seat and must be located to ensure a separation distance of 5mm or more between the antenna and the driver/passenger to comply with FCC RF exposure requirements.
4. Check the position of vehicle OBD diagnostic connector.

## 2. Product Instructions

5. Connect vehicle OBD diagnostic connector and von-STD(JTBT2200) connector.
6. Green LED of von-STD(JTBT2200) will be blinked every 1 second.
7. Red or Green LED lamp will be continually blinked within 1 minute after ignition on.
8. After checking normal installation, green LED lamp blinks every 1 second after ignition off and All LED lamps will be turn off later [saving mode]

### 2.2 LED display status

STATUS	Blue LED	Red LED
ECO driving! (GOOD)	ON	OFF
Normal driving! (NORMAL)	ON	ON
Bad driving! (BAD)	OFF	ON
Wait for connection	Blink (1 second interval)	OFF
Error	OFF	Blink (1 second interval)
Sleep	OFF	OF

\*\* Caution : Please contact to customer service center when you have a problem.

## 2. Product Instructions

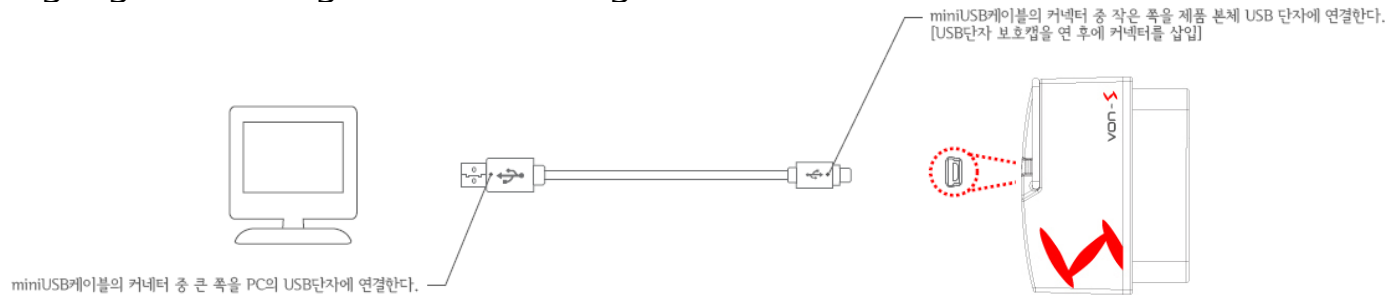
### 2.3 OBD II module separation

- \*\* Caution : OBD II module separation should be performed at safety area after parking.
- \*\* Caution : The separation from vehicle is prohibited if not the purpose of driving data saving or transmitting.
- \*\* Caution : Performing OBD II module separation on ignition on may be caused to data loss or module damaged.

1. Turn vehicle ignition off.
2. Pull OBD II module from vehicle OBD diagnostic connector then separating it.

## 2. Product Instructions

### 2.4 Driving log data saving and transmitting



#### 1. Preparation

1) PC manager program needs to install to save the driving logs data recorded from OBD II module.

\* Tip : A program installation manual is available [3. PC Manager installation manual(31~34 page)]

2) Please separate OBD II module from vehicle. [2.6 module separation (21 page)]

**\*\* Caution : Vehicle data on the status of connecting to vehicle can not be transmitted by USB cable. Please separate OBD II module from vehicle.**

#### 2. Connection

1) OBD II module should be connected to PC USB port by USB cable we provided.

2) USB mode display LED lamp will be blinked if connection is normal.

**\*\* Caution : Don't separate USB cable while PC communicating OBD II module.**

# 3. Warranty & After Sale Service

## 3.1 Before A/S request service

\*\*Caution : Driving logs data should be saved certainly in advance for A/S request if a product's defect checked.

Power and LED status off	Check OBD II module and 16 pin connector connection status.
Not connected to PC	Check PC USB port and OBD II module connection status and PC USB port status.
Not connecting OBD II module to Von-S PC Manager program	Click "connection" icon to connect OBD II module after checking USB connection status to PC.
Not supporting Vista or Window7 to PC	See program installation tips for 3-2 Window Vista / window7 and page 34

# 3. Warranty & After Sale Service

## 3.2 Warranty Service

1. Warranty Period : 1 year
2. Warranty Details
  - 1) Any defective or damage within warranty period can be repaired free A/S service or exchanged as free of charge.
  - 2) Any damage or defective by customer's misuse is not allowed free exchange or free charged A/S service.
3. Exchange and Return
  - 1) An exchange or return is possible within 1 week after purchase if not opening box.
  - 2) A shipping charge against retuning product because of just customer's changed mind may be paid by customer.
4. Others
  - 1) Warranty period is valid only for 12 months from manufacturing date if not checking a purchasing date.
  - 2) Repair charge will be billed even though it's warranty period as below.
    - Defective by user's misuse (impact/flooded/fault)
    - Dismantle or alteration by user's intention.
    - Defective by natural disaster.
    - Repaired not in official After Sales service centre.
  - 3) Please contact to A/S call service centre for repair charges.  
A/S call service : (031-719-5170 Extension : 206)

# FCC Information

## FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

## WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority operate the equipment.

"CAUTION: Exposure to Radio Frequency Radiation.

Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit. The minimum separation distance of 20 cm from the antenna to the body of user required.