

# uvim-W User Manual



BEAUTIFUL WORLD  
GREEN IT UP!

- **Product Name : uvim-W**
- **Part Number : JAS-U2-2018**
- **Serial Number : UW1AC00001(example)**
  - **Position 1~2 : Product Name**
    - UW, uvim-W
  - **Position 3 : Wireless option**
    - WiFi + Bluetooth : 1
    - WiFi : 2
    - Bluetooth : 3
  - **Position 4 : Year**
    - 2018 : A, 2019 : B
  - **Position 5 : Month(hex, 1 ~ C)**
    - Jan : 1, Feb : 2, Sep : 9, Oct : A, Nov : B, Dec : C
  - **Position 6~10 : Serial Number**

# uvim-W Communication Module Components



BOX



uvim-W  
Communication  
Module



USB Cable



Diagnostic  
Cable

# uVIM Special Feature

- uvim-W(Universal Vehicle Interface Module - Wireless)
- Power input by USB, DLC or DC.
- Communicate by USB port and wireless(WIFI, BT) of PC
- CAN Communication Function
  - CAN 2.0B
  - J1939 data acquisition is possible.
- K-LINE communication is possible.
  - ISO-14230, ISO9141-2
- RS-232 communication is possible.
- Data recording function is possible.

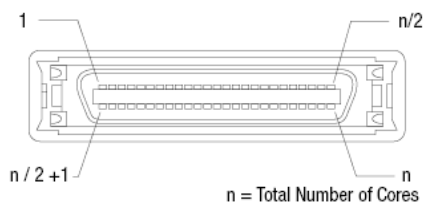
# Components – uvim-W Specification

No	Item	Specification
1	CASE	<ul style="list-style-type: none"> <li>● Color : BLACK</li> <li>● Material : PLASTIC &amp; RUBBER</li> <li>● Size(mm) : 125(L) X 85(W) X 27(H)</li> </ul>
2	CPU	<ul style="list-style-type: none"> <li>● STM32F405VG</li> </ul>
3	Indication	<ul style="list-style-type: none"> <li>● 5x LED</li> <li>● POWER/DLC/USB/WIRELESS/RECORD</li> </ul>
4	Power	<ul style="list-style-type: none"> <li>● Vehicle Power(12V ~ 24V)</li> <li>● DC Input(6 ~ 35)</li> <li>● Reset Switch</li> </ul>
5	Internal Battery	<ul style="list-style-type: none"> <li>● 552030, 280mA/3.8V</li> </ul>
5	Internal Memory	<ul style="list-style-type: none"> <li>● 8MB Flash</li> </ul>
6	PC Interface	<ul style="list-style-type: none"> <li>● USB2.0</li> <li>● Bluetooth Class1</li> <li>● WiFi 802.11 b/g/n (Omega Module)</li> </ul>
7	Vehicle Interface	<ul style="list-style-type: none"> <li>● CAN 2.0B                             <ul style="list-style-type: none"> <li>- High Speed CAN 2x</li> <li>- Single Wire CAN 1x</li> </ul> </li> <li>● K-LINE 1x                             <ul style="list-style-type: none"> <li>- KWP-2000, 9141-2</li> </ul> </li> <li>● L-LINE 1x</li> <li>● VPW/PWM 1x</li> <li>● RS-232 1x</li> </ul>
9	Environment	<ul style="list-style-type: none"> <li>● -10 ~ 60°C, Humidity below 90%</li> </ul>
10	Cable Connector	<ul style="list-style-type: none"> <li>● Vehicle's Diagnostic Connector/Cable</li> <li>● PC Communication Cable : USB Cable(Type A – mini-B)</li> </ul>

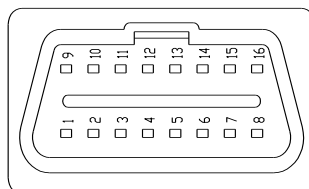
# Components - Cable

## 16 PIN Main Cable

- ❖ Length : 100cm
- ❖ Material : PVC



3M Connector



OBD2 Connector

3M Connector	Communication Type	OBD2
1	CAN1,2-H	6
2	CAN1,2-L	14
3	K-line/CAN2 H,L,Single	1
4	K-line/CAN2 H,L,Single	13
5	K-line/CAN2 H,L,Single	7
6	K-line/CAN2 H,L,Single	8
7	K-line/CAN2 H,L,Single	9
8	K-line/CAN2 H,L,Single	
9	K-line/CAN2 H,L,Single	12
10	K-line/CAN2 H,L,Single	
11	L-line	15
12	J1850-H	2
13	J1850-L	10
14	RS-232 CH1 Tx	
15	RS-232 CH1 Rx	
16		
17		
18	GND Open/Short	
19	B+ +	16
20	GND	4
20	GND	5

# Components - USB CABLE



- Length : 150cm
- Material : PVC

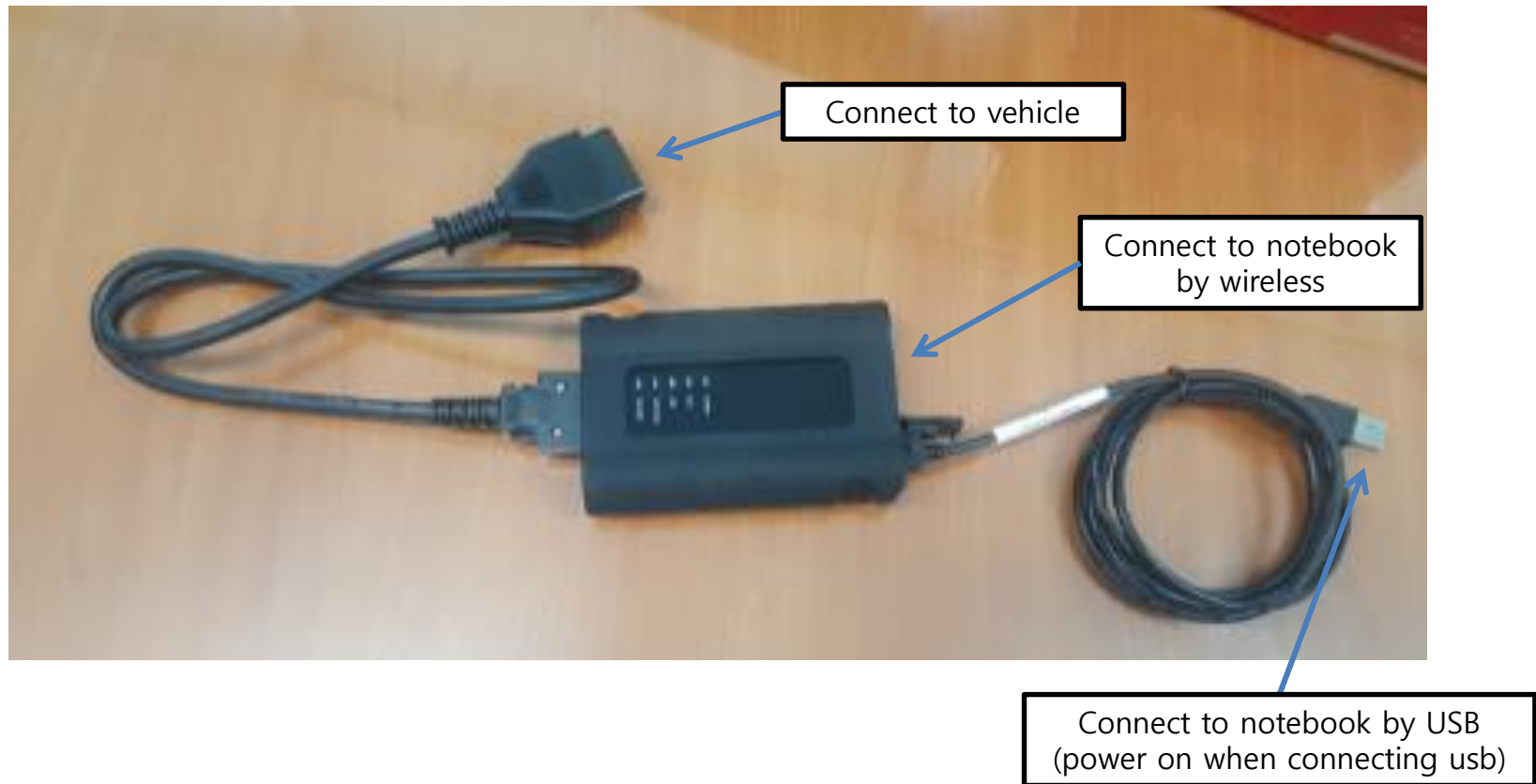
# Components - BOX



- Size :32 X 23 X16 cm
- Material : Aluminum
- Weight : 2kg
- Product Name : SMATO N007S-R

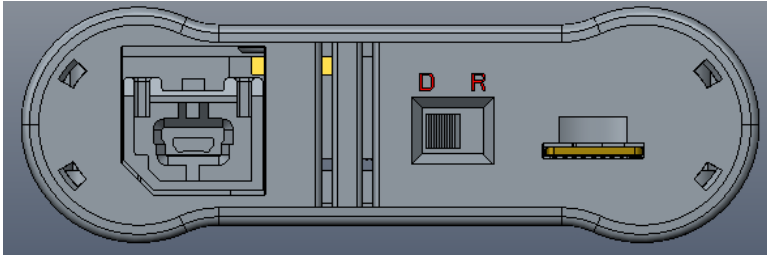


# uvim-W Communicaiton Module Connecting Method



# uvim-W Explanation

## 1. Function Switch



### D(Diagnostic Mode)

- PC interface can be used.(The diagnostic software of PC can communicate with uvim-W).
- The uvim-W can communicate with vehicle and PC software.

### R(Recording Mode)

- PC interface cannot be used.
- The uvim-W can communicate with vehicle and save data to micro SD card.

# uvim-W Explanation

## 1. LED Status

POWER : Indicates power status

DLC : Indicates vehicle interface status

USB : Indicates usb interface status

WIRELESS : Indicates wireless interface status

RECORD : Indicates RECORD mode status.



### 1. Power ON Status

- USB is connected.
- DLC is connected and power is input by DLC.
- Power is input by DC.



### 2. Vehicle interface Status

- When uvim-W communicates with vehicle, DLC led is on.

### 3. PC interface Status

- When uvim-W communicates with USB, USB led is on.
- When uvim-W communicates with Wireless, Wireless led is on.



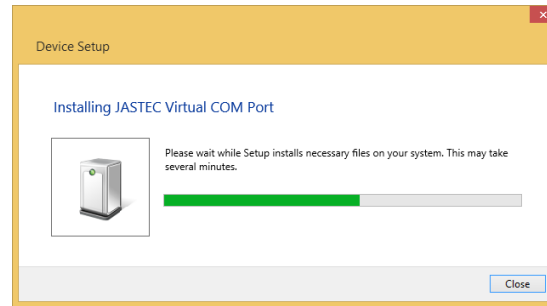
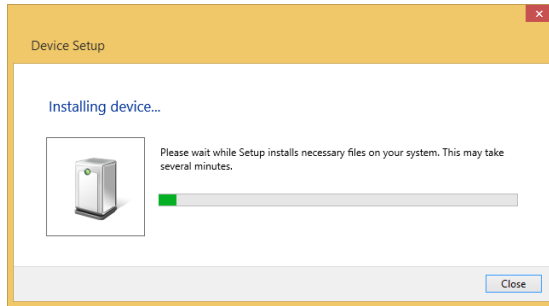
### 4. Record Status

- When uvim-W function switch is "R" and communicates with vehicle, RECORD led is on.

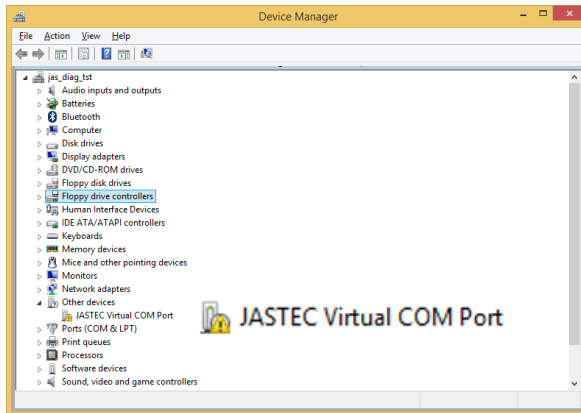
# uvim-W USB Driver Recognition

Windows 7/8/8.1/10

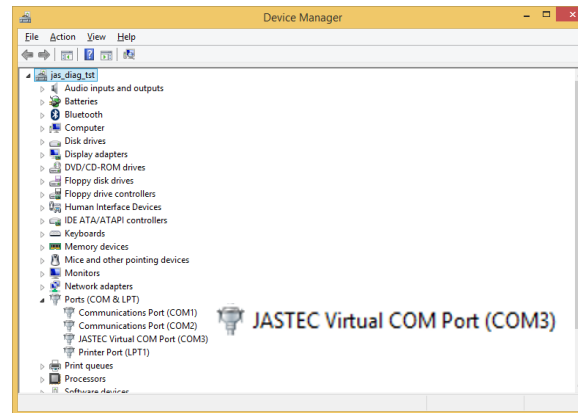
1. Install "Setup\_Jastec\_uVIM\_Driver\_V1.1.exe" and connect uVIM USB Cable with PC.
2. Device Setup is automatically started as below.



3. After Device Setup is completed, check the status of JASTEC Virtual COM Port from Device Manager.



<Picture 1>



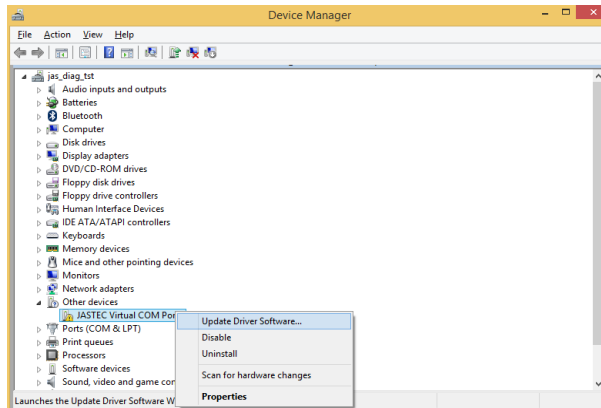
<Picture 2>

If it shows like picture 1 from Device Manager, you need to re-start driver updates.

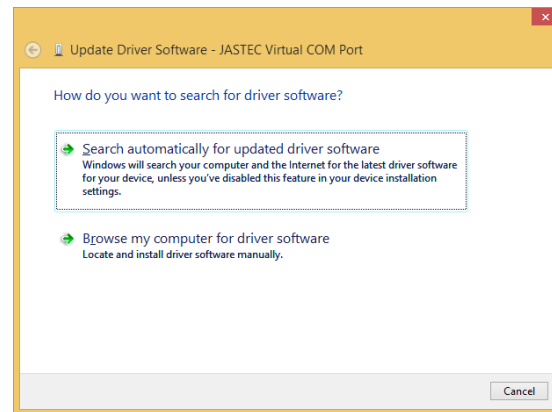
If it shows like picture 2 from Device Manager, it means that driver has installed.

# uvim-W USB Driver Recognition

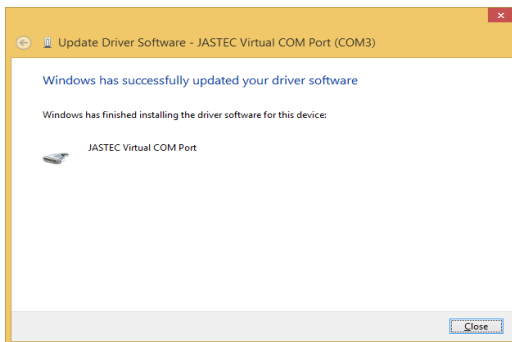
4. In case of JASTEC Virtual COM Port is shown as yellow exclamation mark from Other devices, you need to re-start driver update.



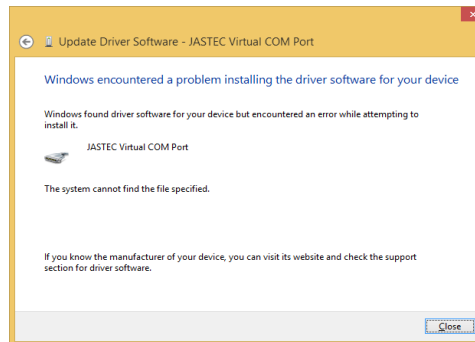
5. When you select Update Driver Software, Driver Searching screen will be shown. At this time, click 'Search automatically for updated driver software'



6. Check the status of installation of Driver



<Picture1>



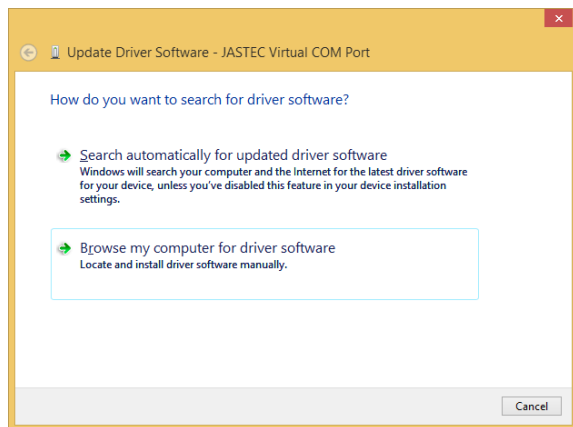
<Picture 2>

If it shows like picture 1, it means that driver has installed.

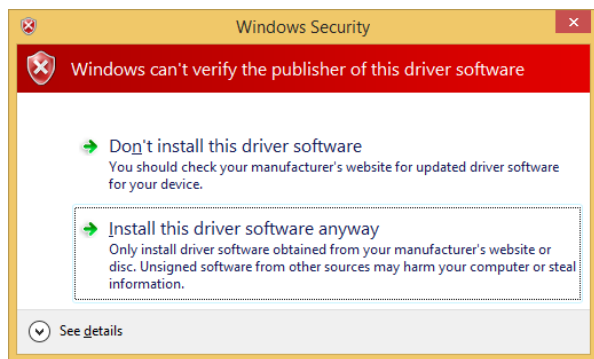
If it shows like picture 2, you need to re-start 'Update Driver Software' (step 4).

# uvim-W USB Driver Recognition

7. This time, click 'Browse my computer for driver software.'



9. When you click 'Next' button from above screen, 'Windows Security' will be shown as below. At this time, click 'Install this driver software anyway.'

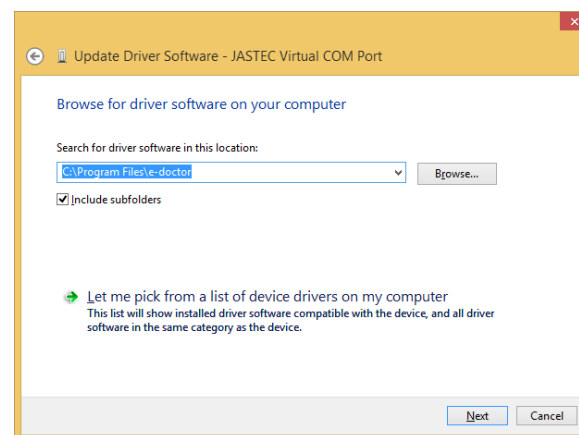


8. Click the folder that Diagnosis Program is installed from 'Browse for driver software on your computer'.

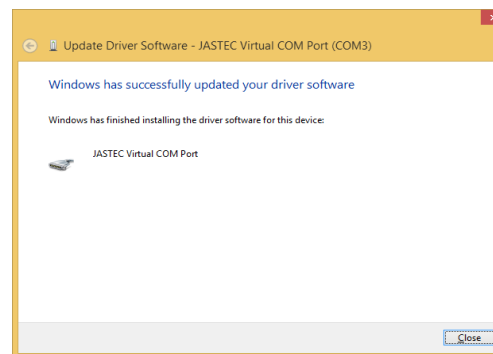
Diagnosis program installed location is as below.

In case of 32bit OS : c:\Program Files\Wxxx

In case of 64bit OS : c:\Program Files(x86)\Wxxx

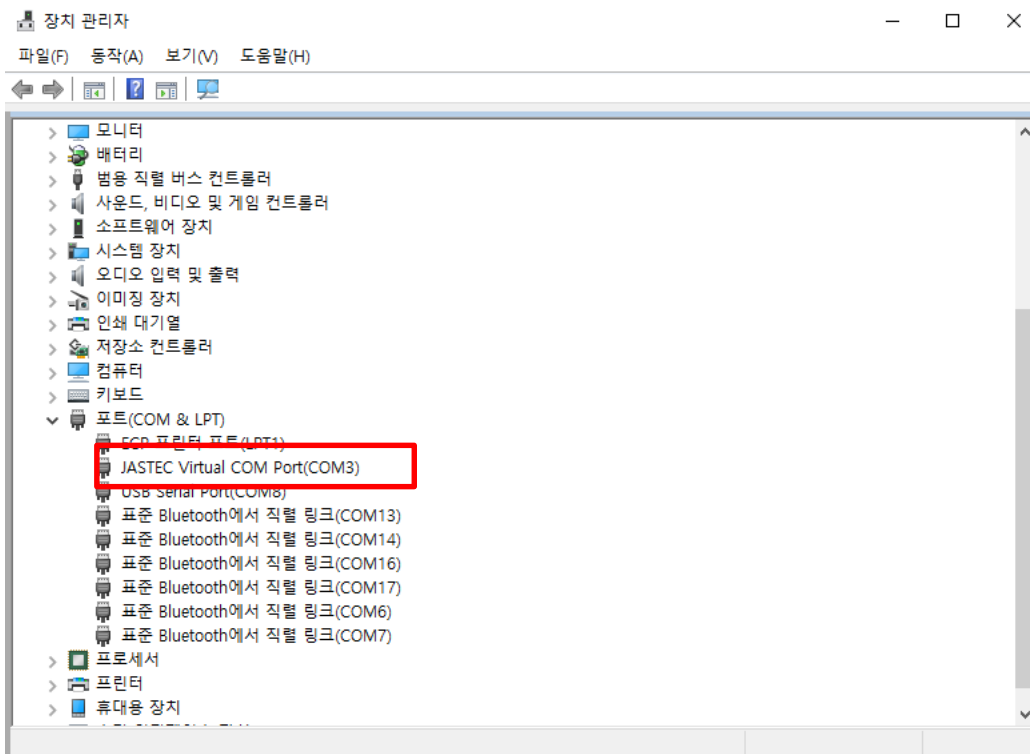


10. If it shows as below, it means that driver is installed.

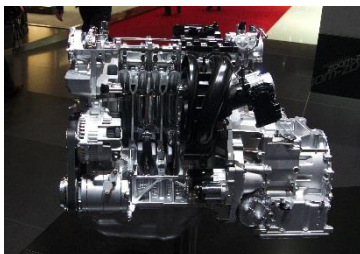


# uvim-W USB Driver Recognition

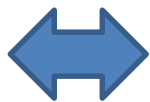
11. Jastec Virtual COM Port is shown in Device manager.



# uvim-W Communicaiton Module Block Diagram



Connect to  
vehicle

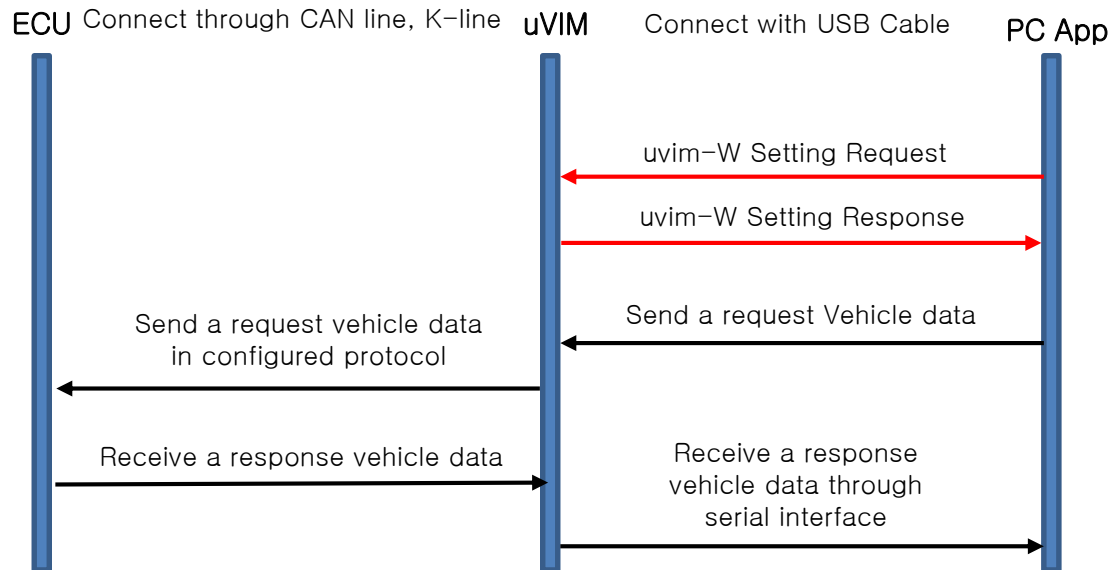


Connect to PC by  
USB or Wireless



# Instruction for uvim-W use

1. Connect uvim-W to PC
  - Connect Wireless(WiFi or BT) or USB.
  - If you connect by USB, process below step.
    - Install a driver (Refer to pg 10) to find a uvim-W driver on PC
    - uvim-W will be identified as Jastec Virtual Comport (refer to pg 13).
2. uvim-W Setting
  - uvim-W will be set to connect to vehicle ECU through serial interface in CAN, K-line Protocol
3. Vehicle Communication
  - uvim-W setting & ECU Communication shall be operated as follows.



**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 interference, and**
- (2) this device must accept any interference received, including interference that may cause undesired operation.**

**This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the 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 instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.**

#### **FCC Part 15.21 statement**

**Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.**

**The antenna(s) must be installed such**

**that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times. This device must not be collocated or operating in conjunction with any other antenna or transmitter.**