

**Nisbie user manual**  
**Version 1.8**

Created by: <http://www.buyobd.com>

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## **1. Diagnostic scan tool introduction:**

### **1.0 NISBIE introduction**

1. It works like Nissan Consult or Consult II.
2. It communicates to PC, Android smart phone and tablet via USB or Bluetooth interface.
3. It works on all Nissan cars having grey 14pin DDL, usually near driver side fuse box.
4. The models are usually built from model year 1989 to 2000 and some between 2000~2005. Such as Cefiro, Sentra, Infinity, Maxima, 300ZX, Z32, Maxima, 240SX, S13, S14, Skyline, SR20DE, SR20DET, RB20, Altima, Fairlady.
5. The exclusive 6-pin adapter extends the support up to year 2010 on certain models. The adapter is not compatible with existing Nissan Consult 4-wire adaptor.
6. Compact size smaller than Consult RS232 version.
7. LED indicators show communication status.
8. If car has both DDL and DLC sockets. The data streaming is faster via DDL than via DLC.
9. For true OBD2 compatible vehicles having K-line or CAN bus protocol, please select scan tool such as ELM327 or ELM327 compatible instead

## 1.1 Scan tool and diagnostic interface

Symbol	Diagnostic Interface	Protocol	Model Years	Scantools available
✓	DDL 14pin	Consult-I	1989~2000	Consult-I Consult-II GST Consult RS232 Nisbie USB Nisbie B2V10 ~ B3V23
*	DLC 16pin	Consult-I Consult-II	2000~2006	Consult-II GST Nisbie B3V20 ~ B3V23 Nisbie B3V30 Nisbie B4V31
†	DLC 16pin	Consult-II OBD2 (Protocol K or CAN)	USDM: 1996+ EUDM: 2006+ JPDM: 2006+	Consult-III Consult-IV ELM327 RS232/USB/Bluetooth/WiFi OBDlink series Vgate iCar series

## 1.2 Nissan genuine diagnostic scan tool

日產/尼桑原廠診斷儀(Nissan diagnostic scan tool) :

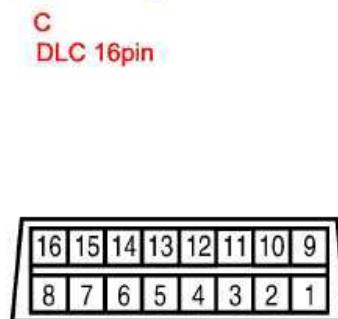
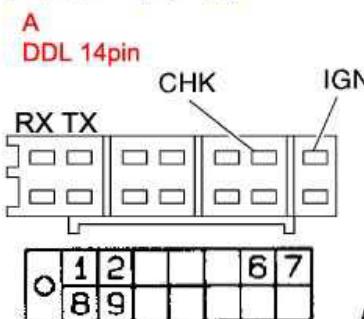
A: Consult

B: Generic Scan Tool (GST)

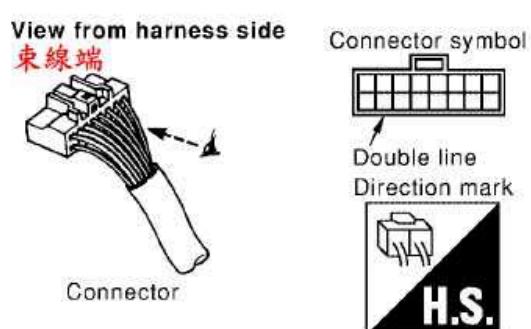
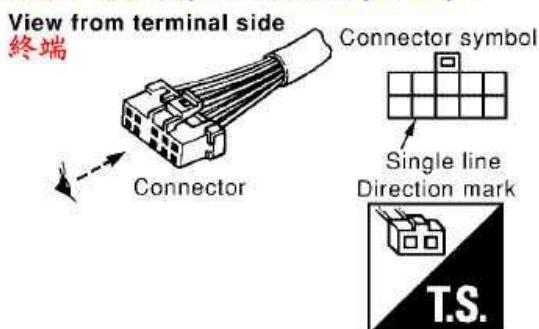
C: Consult-II



汽車診斷母座-束線端(Vehicle diagnostic socket-view from harness side) :



插頭方向定義(Connector symbol) :



Consult-II and Consult-III adapter

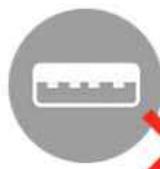
DLC interface	<p><b>Harness side view:</b></p> <p><b>Terminal side view:</b></p> <p>J1962F</p> <p>OBD2 J1962 汽車端診斷母座</p>									
Adapter	<p><b>OBD2 DLC 16pin to Nissan DDL 14pin</b></p> <p><b>Pin Assignment</b></p> <p>4 - 8 : Ground 7 - 2 : Tx 15 - 1 : Rx 16 - 7 : IGN</p> <p><b>DLC 16pin female to Scan tool</b></p> <p><b>DDL 14Pin male to car</b> This adaptor does not provide the necessary "CLK" signal for some vehicles.</p>									
DDL interface	<p>View from car terminal side</p> <table border="1"> <tr> <td>1 RX</td> <td>2 TX</td> <td>8 GND</td> <td>9 CLK</td> <td>6 CHK</td> <td>7 IGN</td> <td>12</td> <td>13</td> <td>14</td> </tr> </table>	1 RX	2 TX	8 GND	9 CLK	6 CHK	7 IGN	12	13	14
1 RX	2 TX	8 GND	9 CLK	6 CHK	7 IGN	12	13	14		

### 1.3 Nissan Consult RS232

	Nissan consult RS232
Launch	2000.01
Spec	Interface: DDL Interface: DB9 RS232 for PC Power: 12V Dimension: mm Net Weight: g Sleep: not available Hot swap: No
Photo	
User Interface	Left to right : LED Red (Power)

#### 1.4 Nisbie USB

VER 1.0	Launch: 2012.05
Spec	<p>Interface: mini USB B            PCB: Version 1.0            Power: 5V 80mA            Dimension: 85x50x28mm            Net Weight: 85g            Sleep: not available            Hot swap: No</p>
Photo	
Front User Interface	<p>Left to right :            LED Red (Power)            LED Green (TX)            LED Green (RX)            Connector (mini USB type B)</p>
USB cable:	<p>Type: USB 2.0 to mini USB            Connector head: Nickel coated            Wire gauge: 28AWG (data) + 24AWG (power)            Length: 120cm / 135cm / 150cm            Coating: PVC            Color: black</p>



标准 USB  
12×4.6mm

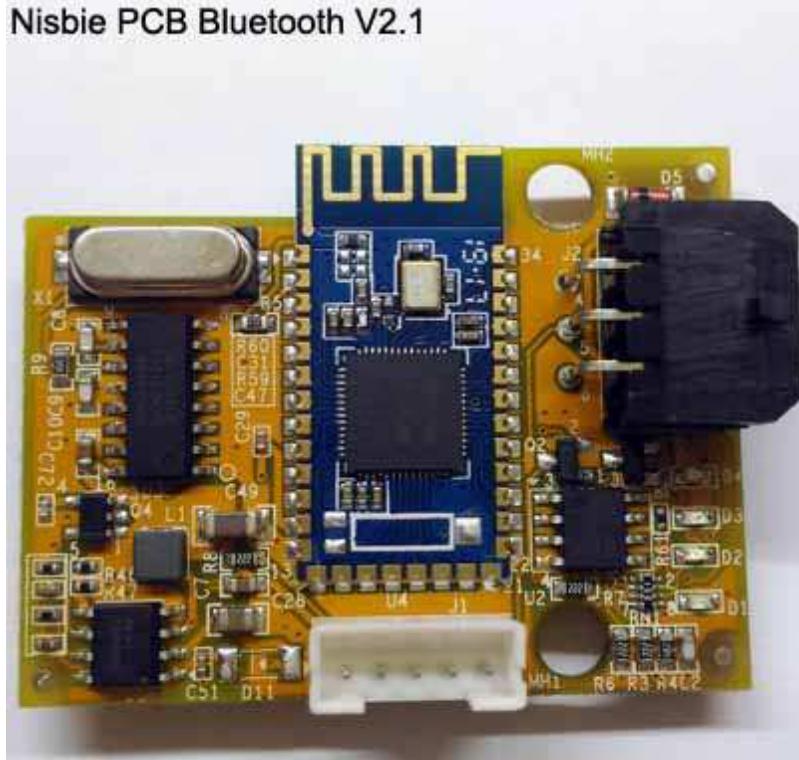


Mini USB2.0 5P  
7×3.2mm

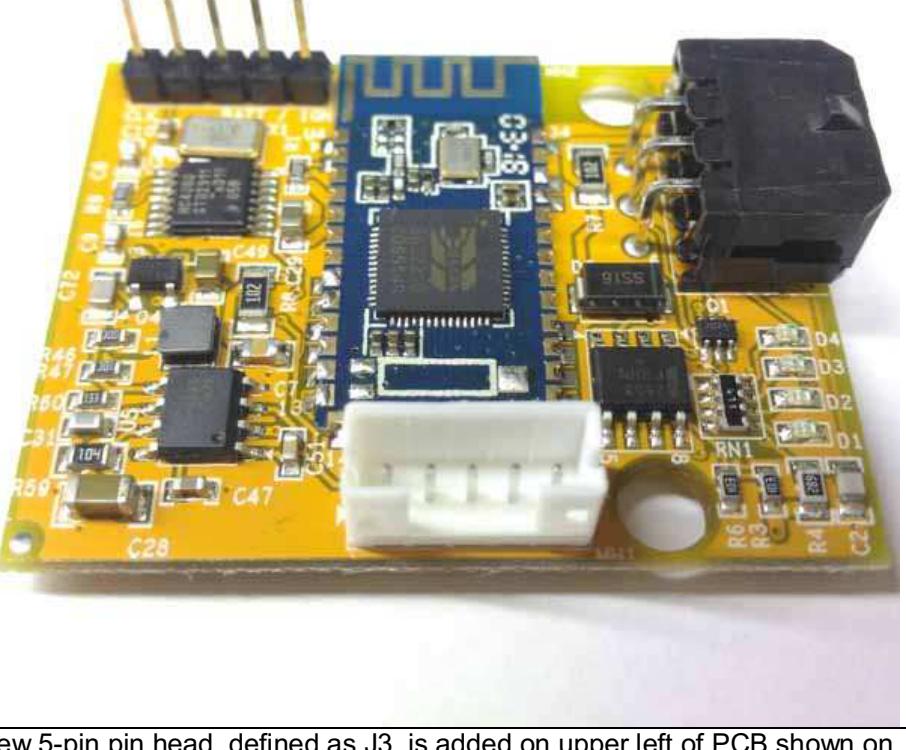


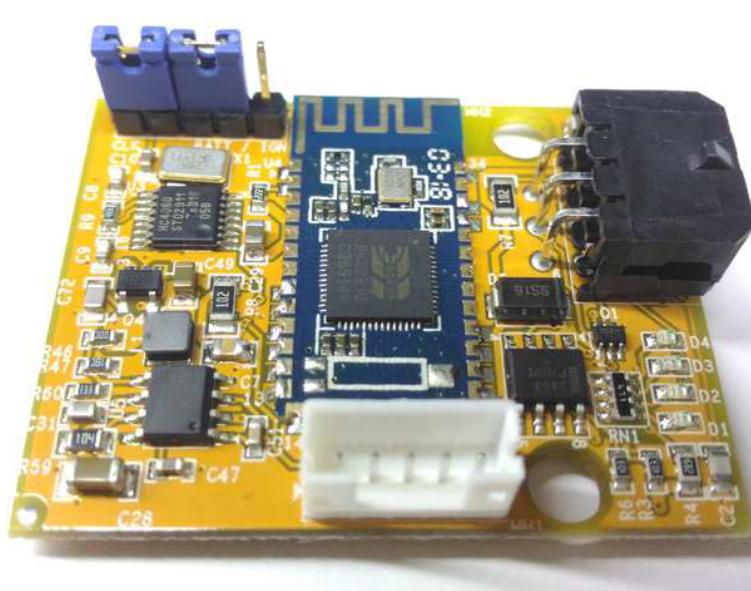
Micro USB2.0  
7×2mm

## 1.5 Nisbie Bluetooth BT2V10 ~ BT3V22

Photo	
User Interface	Left to right : LED Red (Power) LED Green (TX) LED Orange (RX) LED Blue (Bluetooth) Connector (for DDL to OBD2 adapter type 2)
Improve	1. From Bluetooth 2.0 to 3.0 2. BT3V21: Enhance over voltage protection 3. BT3V22B: UART signal amplified 4. BT3V22C: Solve few smart phone compatibility issue.
PCB	<p>Nisbie PCB Bluetooth V2.1</p> 

## 1.6 Nisbie Bluetooth BT3V23

Photo	Ditto
Front User Interface	<p>Left to right :</p> <p>LED Red (Power)</p> <p>LED Green (TX)</p> <p>LED Orange (RX)</p> <p>LED Blue (Bluetooth)</p> <p>Connector (6-pin DDL to OBD2, <b>compatible to adapter type 3 only</b>)</p>
LED status	<p>D1: Power Red On (Always)</p> <p>D2: RX Green ON when ECU receives data</p> <p>D3: TX Orange ON when ECU sends data</p> <p>D4: Bluetooth Blue OFF (smart phone paired but app not connected)</p> <p>Bluetooth Blue ON (smart phone paired <b>and</b> app connected)</p>
Improve	<ol style="list-style-type: none"> <li>1. More robust electronic components</li> <li>2. Add control pin J3 to select power source, and enable/disable CLK.</li> <li>3. Save power when Nisbie is not in use, even device is power on.</li> <li>4. Signal is more clear for smart phone, reduce the possibility of losing connection relatively to PCB BT2V10~BT3V22.</li> </ol>
PCB	NISBIE-BT30V23  
PCB-J3	<p>The new 5-pin pin head, defined as J3, is added on upper left of PCB shown on above photo:</p> <p>Jumper connected on left 2 pins =CLK Enabled = CLK power on and CLK signal sends out to ECU = default</p> <p>Jumper disconnect from left 2 pins =CLK Disabled = CLK power off, no CLK signal out.</p>

	<p>= If CLK is not needed, or CLK conflicts with CAN bus signal)</p>
PCB-J3	<p>Right 3 pins (<b>BATT</b>, <b>/</b>, <b>IGN</b>):</p> <p>Jumper disconnect from right 2 pins  = NISBIE power from <b>IGN</b> (right 2, <b>/</b> and <b>IGN</b>, pins connected  = as default.  = Apply to all Nissan vehicles with DDL diagnostic interface.</p> 
	<p>Jumper disconnect from left 2 pins  = NISBIE power from <b>BATTERY</b> (left 2 pins, <b>BATT</b> and <b>/</b>, connected).  = Apply to Frontier, since the OBD2 connector has no IGN available.</p> 

## 1.7 Nisbie Bluetooth BT3V30

Spec	Interface: DLC type A male interface: Bluetooth 3.0 PCB: Version 3.0 Power: 12V 80mA Dimension: 70x45x25mm Net Weight: 42g Sleep: not available Hot swap: No Power button: select power between BATT or IGN. Power button: select power between BATT or IGN.
Photo	
User Interface	Left to right : LED Red (Power) LED Green (RX) Push-push button in = power source from BATT (shown in above photo) out = power source from IGN (Nisbie is off when car key is at OFF position) LED Orange (TX) LED Blue (Bluetooth)
LED status	Power Red On (Always) RX Green OFF (idle) TX Orange OFF (idle) Bluetooth Blue On (Bluetooth unpaired, app idle) Bluetooth Blue On (Bluetooth paired, app does not connects) Bluetooth Blue Off (Bluetooth paired, app connects)
Improve	Direct interface of OBD2, no adapter needed for car models 2000+. Add push-push button for selectable power source IGN or BATT. OBD2 connector is gold plated.
Adapter	No adapter available from DLC to DDL. For few Nissan car model 2000+ may use standard Nissan Consult-II 4-wire adapter.

## 1.8 Nisbie Bluetooth BT4V31

Spec	Interface: DLC type A male interface: Bluetooth 4.2 PCB: Version 3.1 Power: 12V 80mA Dimension: mm Net Weight: g Sleep: available Hot swap: Yes Power button: select power between BATT or IGN.
Photo	Coming soon !
User Interface	
LED status	
Improve	More smart of upgrade from Bluetooth 3.0 to 4.2. BLE5.0 ready. longer communication range LED brightness lowered.
Adapter	

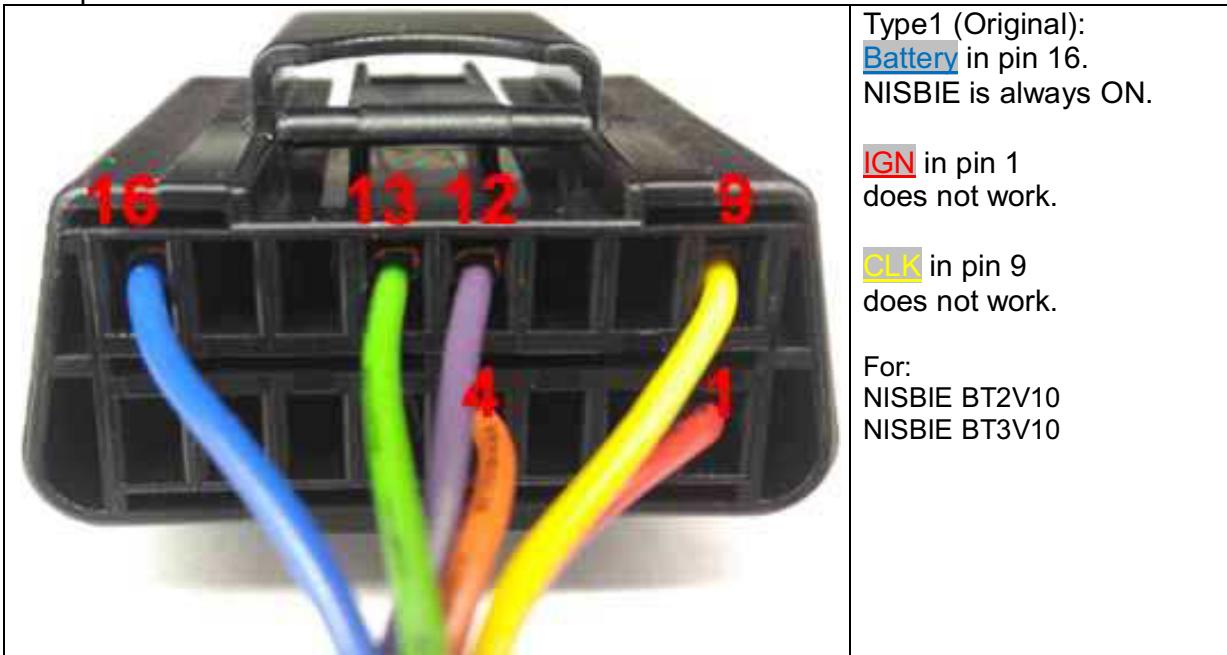
## 1.9 Version history

Nisbie Version	1.0	2.0	2.1	2.2	2.3	3.0	3.1
PCB version	BT2V10	BT3V10	BT3V20	BT3V22A BT3V22B BT3V22C	BT3V23	BT3V30	BT4V31
Launch date	2015.08	2016.02	2017.07	2017.11	2018.06	2018.06	TBD
Status	end	end	end	end	active	new	planning
Bluetooth Interface	BT2.0 class 2	BT3.0 class 2	BT3.0 class 2	BT3.0 class 2	BT3.0 class 2	BT3.0 class 2	BLE4.2 class 1
SSID	HC05	NISBIE	NISBIE	NISBIE	NISBIE	NISBIE	NISBIE
Certificate	None	None	None	None	None	None	CE (EU) FCC (USA) IC (Canada) KC (Korea) NCC (Taiwan) SRRC (China) Telec (Japan)
Broadcast Range (in meter)	10	10	10	10	10	10	60
Pairing	1234	1234	1234	1234	1234	1234	1234
Car diagnostic interface	DDL	DDL	DDL	DDL	DDL	DLC	DLC
Power active	12V 120mA	12V 120mA	12V 120mA	12V 120mA	12V 80mA	12V 80mA	12V
Dimension (unit: mm)	85x50x28	85x50x28	85x50x28	85x50x28	85x50x28	70x45x25	
Net Weight	85g	85g	85g	85g		42g	
Power saving	Bluetooth sleep	Bluetooth sleep	Bluetooth sleep	Bluetooth sleep	Bluetooth sleep	Bluetooth sleep	
Hot swap	No	No	No	No	No	No	Yes
Maximum Voltage input	18V	18V	18V	18V	18V	18V	36V
Over Voltage protection	no	no	15V	15V	15V	15V	15V
Under voltage protection	No	No	No	No	No	No	9.0 Volts
Over Current protection	no	no	100mA	100mA	1A	1A	1A
Serial numbers starts				BT3V22B: 0900 BT3V22C: 1055	1271	N/A	

## 1.10 Nisbie Bluetooth 6-pin adapter

DLC Pin	OBD2 DLC definition	Nissan DLC definition	Wire color	remark
1		CHK		
2	Bus+ SAE J1850			
3				
4	Ground			
5	Ground	GND	Orange	
6	CAN-H			
7	K-line			
8	Ignition	IGN	Red	Power source for Nisbie
9	ABS			
10	Bus- SAE J1850			
11				
12		TX	Purple	
13		RX	Green	
14	CAN-L	CLK	Yellow	Conflict: only few 2000+ models If car can link without this pin, leave it unplugged.
15	L-line			
16	Battery	Battery	Blue	If car can get power from IGN, leave this pin unplugged and wrap it with tape for isolation.

Adapter revision





Type 2:

IGN in pin 8.

Power from IGN only.

NISBIE is off when car key is at OFF position.

**Use this configuration if car has both pin 8 and 16 available.**

CLK in pin 14. works.

Battery is open.

Leave it open if your car can get power from IGN.

For :

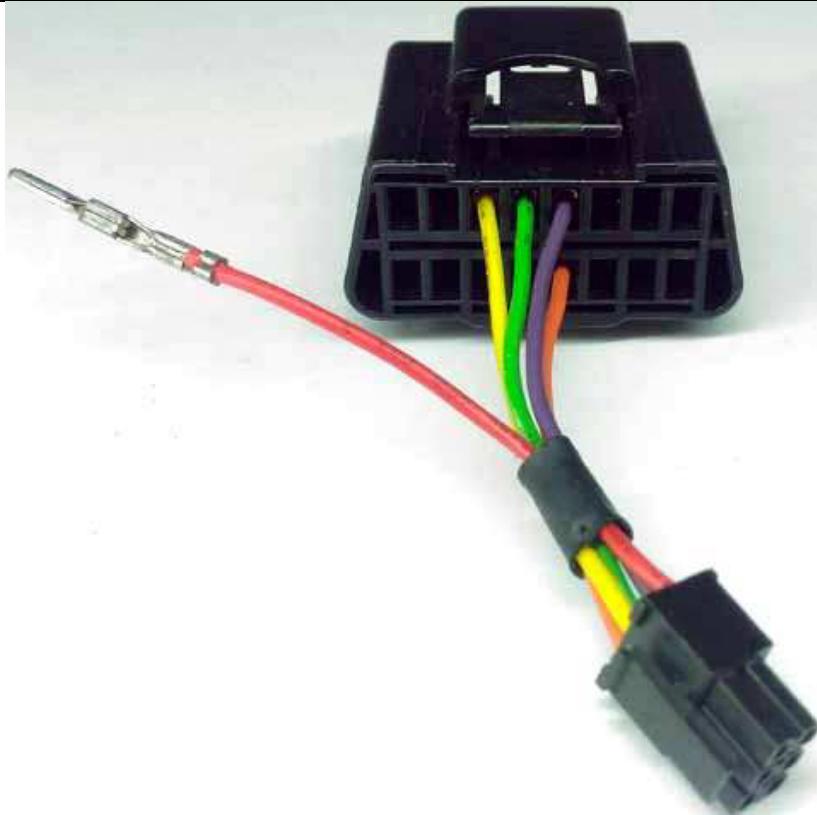
NISBIE BT2V10

NISBIE BT3V20

NISBIE BT3V21

NISBIE BT3V22

NISBIE BT3V22C



Type 2 red:

Read **chapter 8.6** before insertion.

Read insertion guide in next page.

IGN in pin 8:

power when car key is at on position. NISBIE will be off if car key is at off position.

IGN in pin 16:

NISBIE is ON always even unplug car key. Car such as **Frontier** does not have pin 8 available in DLC socket.

For :

NISBIE BT2V10

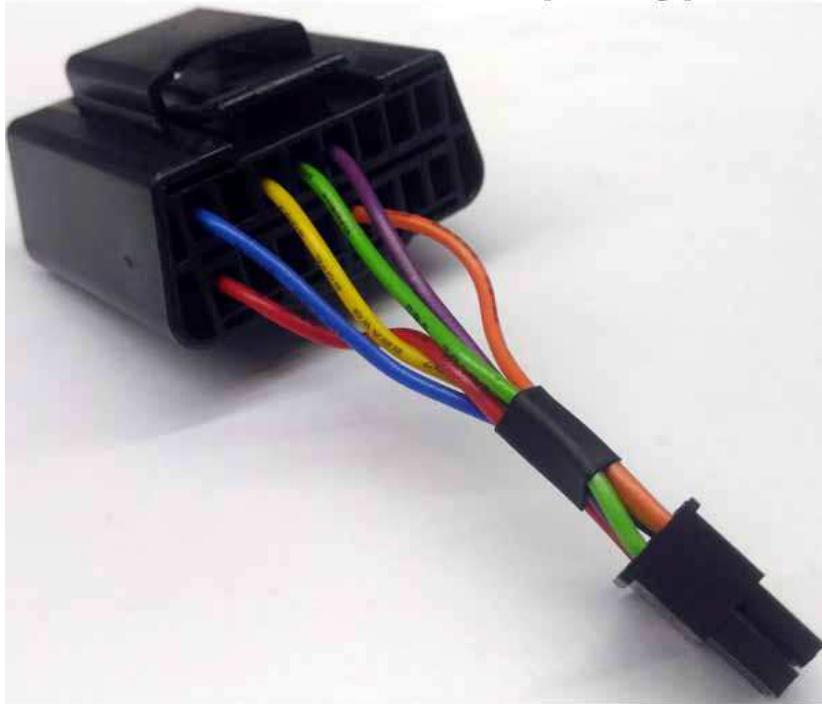
NISBIE BT3V20

NISBIE BT3V21

NISBIE BT3V22

NISBIE BT3V22C

## NISBIE Bluetooth Adapter type 3



Type 3:

[IGN](#) in pin 8.

[CLK](#) in pin 14

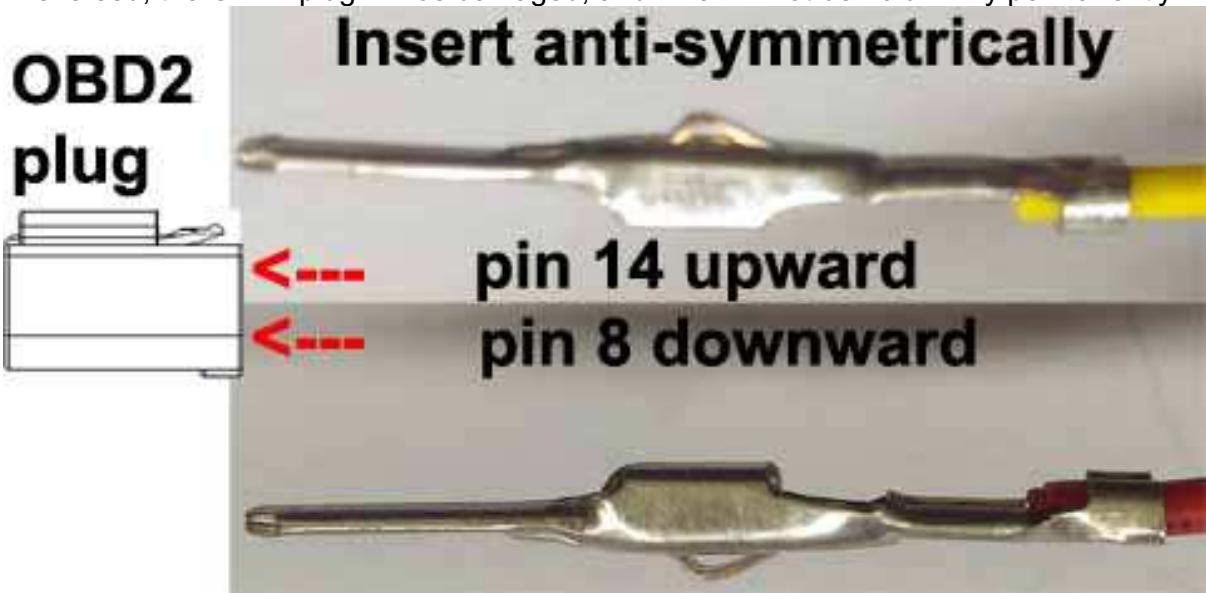
[Battery](#) in pin 16.

For:  
NISBIE BT3V23 only.

### Steps to insert pins:

Follow the pin direction as below photo.

If reversed, the OBD2 plug will be damaged, and wire will not be hold firmly permanently.



## 2. USB driver install

2.1 Download: <http://www.ftdichip.com/Drivers/VCP.htm>

Left side column:

Drivers > VCP Drivers.

**Do not select D2XX driver!**

Right side:

Based on your WINDOWS platform, select suitable VCP drivers to download

Windows XP pro SP2/SP3, recommend version CDM 2.10.00

Windows 7 home/pro, recommend version CDM 2.12.00 or above.

**Do not use Win 7 built in FTDI driver, software may not initialize the link successfully.**

The screenshot shows a web browser displaying the FTDI Chip website at [www.ftdichip.com/Drivers/VCP.htm](http://www.ftdichip.com/Drivers/VCP.htm). The page title is "Virtual COM Port Drivers". The left sidebar has a "Drivers" section with "VCP Drivers" selected. The main content area has two sections: "Virtual COM Port Drivers" and "VCP Drivers". The "Virtual COM Port Drivers" section contains a note about D2XX Direct drivers and links to installation guides. The "VCP Drivers" section contains a note about the software being provided "as is" and disclaiming warranties. It also notes that FTDI drivers are WHQL certified for Windows 8.1. A table titled "Currently Supported VCP Drivers" is shown, listing operating systems, release dates, and processor architectures supported by the drivers.

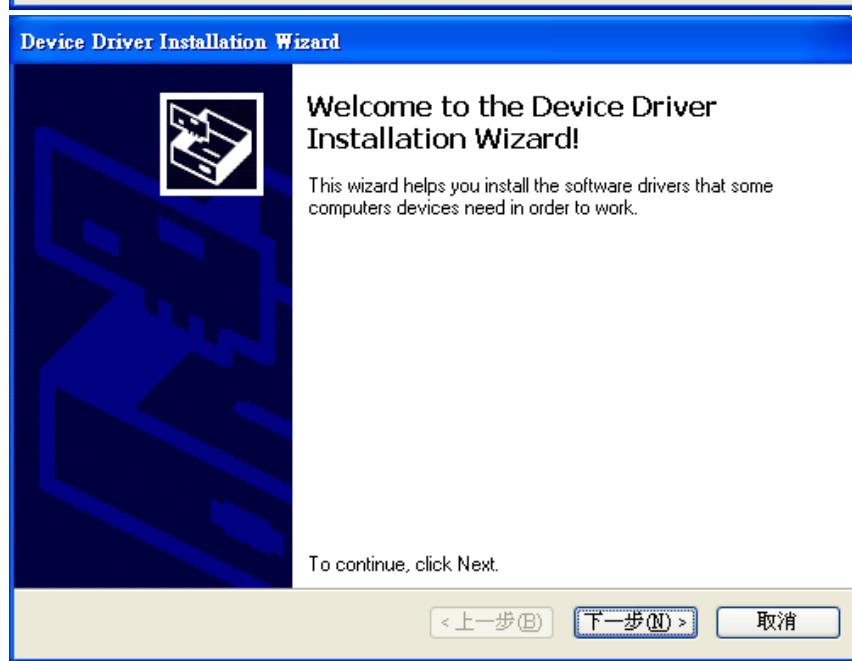
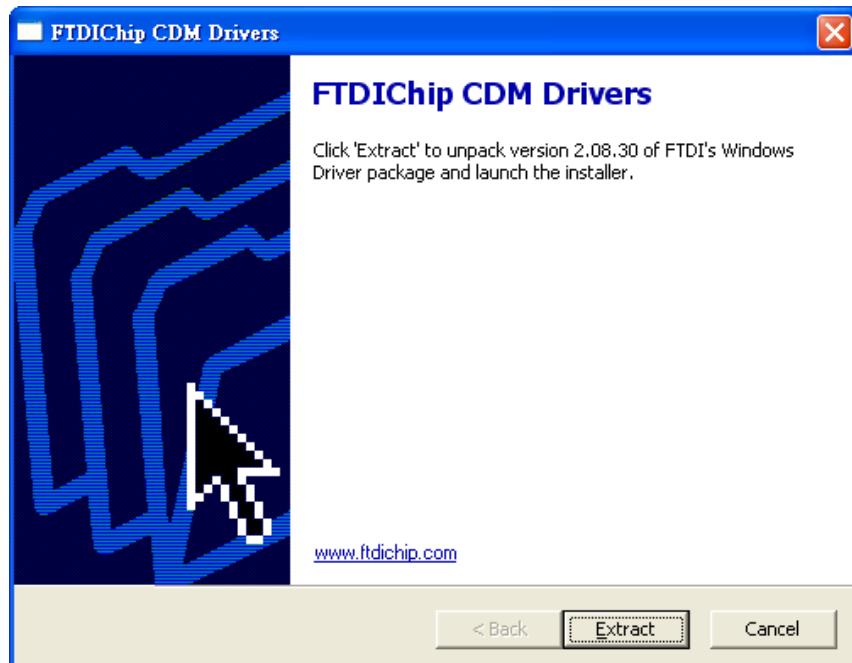
Processor Architecture								
Operating System	Release Date	x86 (32-bit)	x64 (64-bit)	PPC	ARM	MIPSII	MIPSIV	SH4
Windows 8.1	2013-10-21	<a href="#">2.08.30 8.1</a>	<a href="#">2.08.30 8.1</a>	-	-	-	-	-
Windows*	2013-08-01	<a href="#">2.08.30</a>	<a href="#">2.08.30</a>	-	-	-	-	-

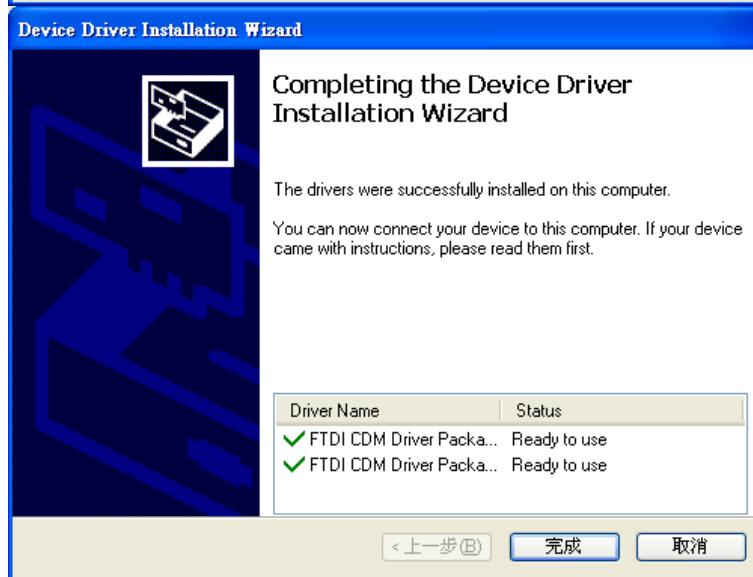
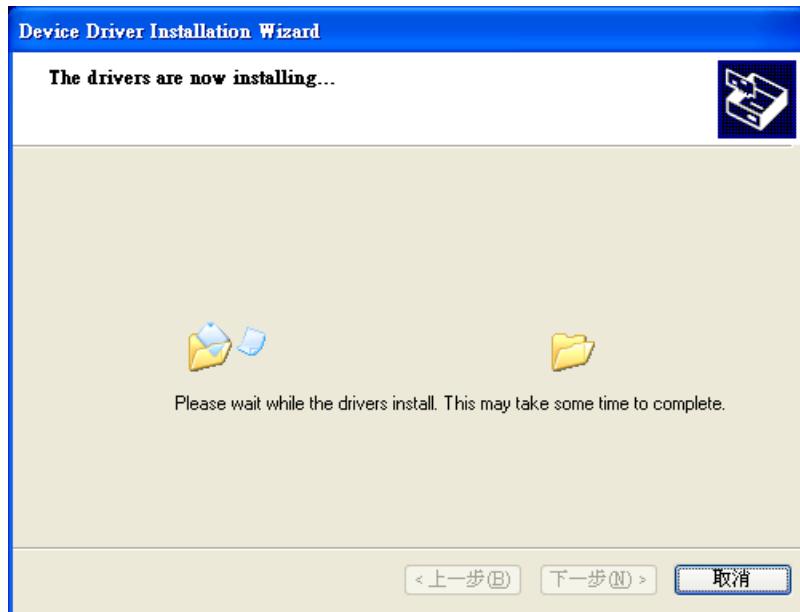
## 2.2 Install

After download, unzip and create a new folder “CDM 2.08.30 WHQL Certified”,

Do not plug Nissan consult before installing USB driver.

Click CDM v2.08.30 WHQL Certified.exe to start installation.





Select the USB driver folder where you unzipped.

## 尋找新增硬體精靈

請選擇您的搜尋和安裝選項。



在這些位置中搜尋最好的驅動程式 (S)

使用下列核取方塊來限制或擴充包括本機路徑和可卸除式媒體的預設搜尋，將安裝找到的最佳驅動程式。

搜尋可卸除式媒體 (軟碟, CD-ROM...) (M)

搜尋時包括這個位置 (O):

C:\ELM327\_1.3\USB Driver Update\CDM 2.04.14\_1

不要搜尋，我將選擇要安裝的驅動程式 (D)

選擇這個選項來從清單中選取裝置驅動程式。Windows 不保證您所選取的驅動程式最符合您的硬體。

Click [Next]

## 尋找新增硬體精靈

精靈安裝軟體時，請稍候...



USB Serial Converter



## 硬體安裝



您正要為這個硬體安裝的軟體：

USB Serial Converter

尚未通過 Windows 標誌測試以確認它與 Windows XP 的相容性。[\(告訴我這項測試的重要性。\)](#)

繼續安裝這個軟體會在現在或將來，使您的系統操作不穩定或受損。Microsoft 強烈建議您立即停止這項安裝，並連絡硬體廠商索取已通過 Windows 標誌測試的軟體。

繼續安裝(C)

停止安裝(S)

Continue (C)

## 尋找新增硬體精靈



## 完成尋找新增硬體精靈

這個精靈安裝了軟體於：



USB Serial Converter

按 [完成] 關閉精靈。

< 上一步(B)

完成

取消

Finish

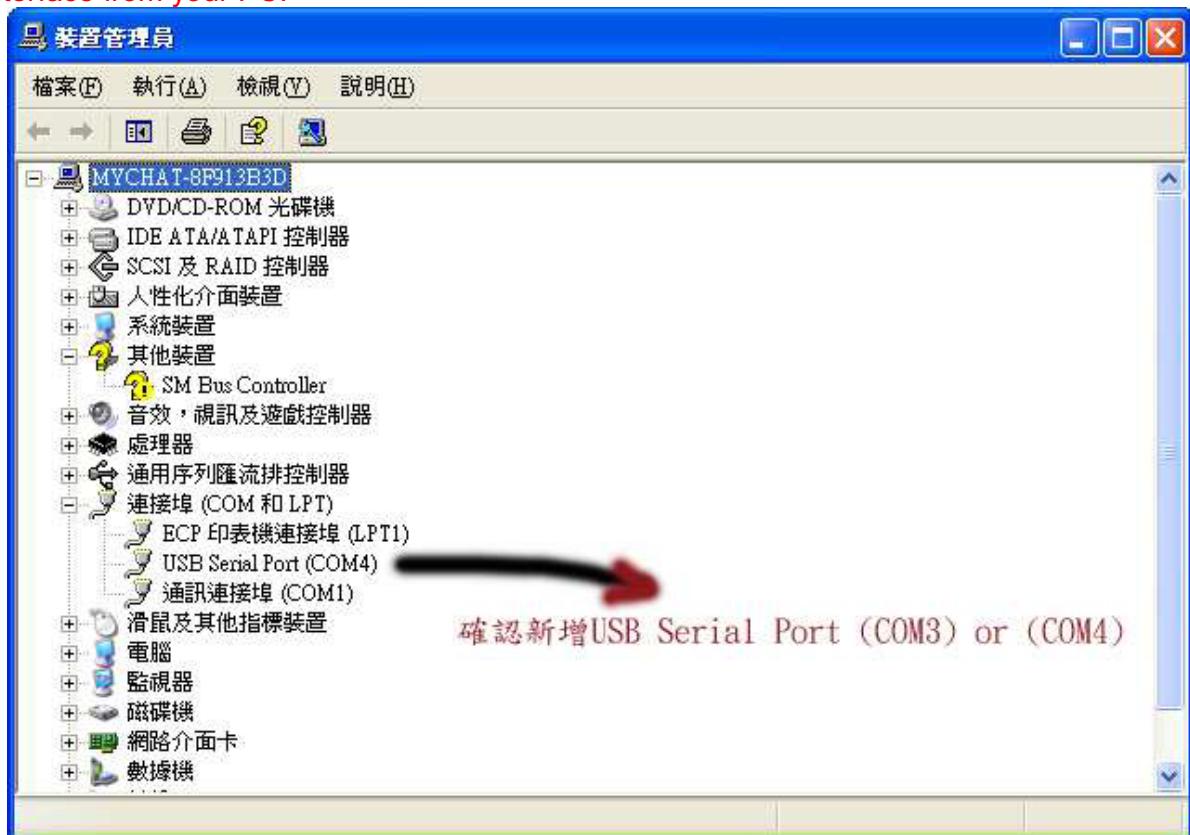


Go to control panel > device manager > confirm [USB Serial Port (COM X)]

(It may be called "FT232R USB UART" in Win 7).

After complete of diagnose your car,

remember to right click [Disable] the USB serial Port before unplug the Nissan Consult USB interface from your PC.



COM port setting:  
Double click [USB Serial Port (COMX)],  
COM port settings should be 9600, 8, n, 1, n, (**baud = 9600 is fixed for Nissan vehicles**)  
Some software does not allow COM port number too high, usually less than 20.  
Click [Advance[A]...] to lower the COM port number.



### 3. Bluetooth link

#### 3.1 Android:

	Bluetooth 2.0	Bluetooth 3.0
SSID	HC-05	Nisbie
Pairing	1234	1234
COM port settings	must be 9600, 8, n, 1, n	must be 9600, 8, n, 1, n
Steps:	1. Remove car key from vehicle first. Car key works as Ignition pin on interface. 2. Insert interface to car DDL/DLC socket. 3. Insert car key 4. Turn car key to ACC or ON position. 5. LED red is on. 6. Smart phone scan Bluetooth device. 7. Input pairing code 1234. 8. Run software or app. 9. Setup com port if needed. 10. Click [connect] to read vehicle data. 11. LED green flashes. LED orange flashes. 12. If LED red keeps on even after remove car key, remove interface from car then. Interface may drain battery power.	1. Remove car key from vehicle first. Car key works as Ignition pin on interface. 2. Insert interface to car DDL/DLC socket. 3. Insert car key 4. Turn car key to ACC or ON position. 5. LED red is on (power on). LED blue is on. 6. Smart phone scans Bluetooth devices. 7. Input pairing code 1234. 8. Run smart phone app. 9. Setup com port if needed. 10. Click [connect] to read vehicle data. 11. LED blue goes off. LED green flashes. LED orange flashes. If link ok, LED blue flashes at 3hz (=LINKED). otherwise LED blue 12. If LED red keeps on even after remove car key, remove interface from car then. Interface may drain battery power.
Sleep	5 minutes after disconnect	5 minutes after disconnect

#### 3.2. Windows

Example: Windows 7 notebook PC:

Turn on Bluetooth



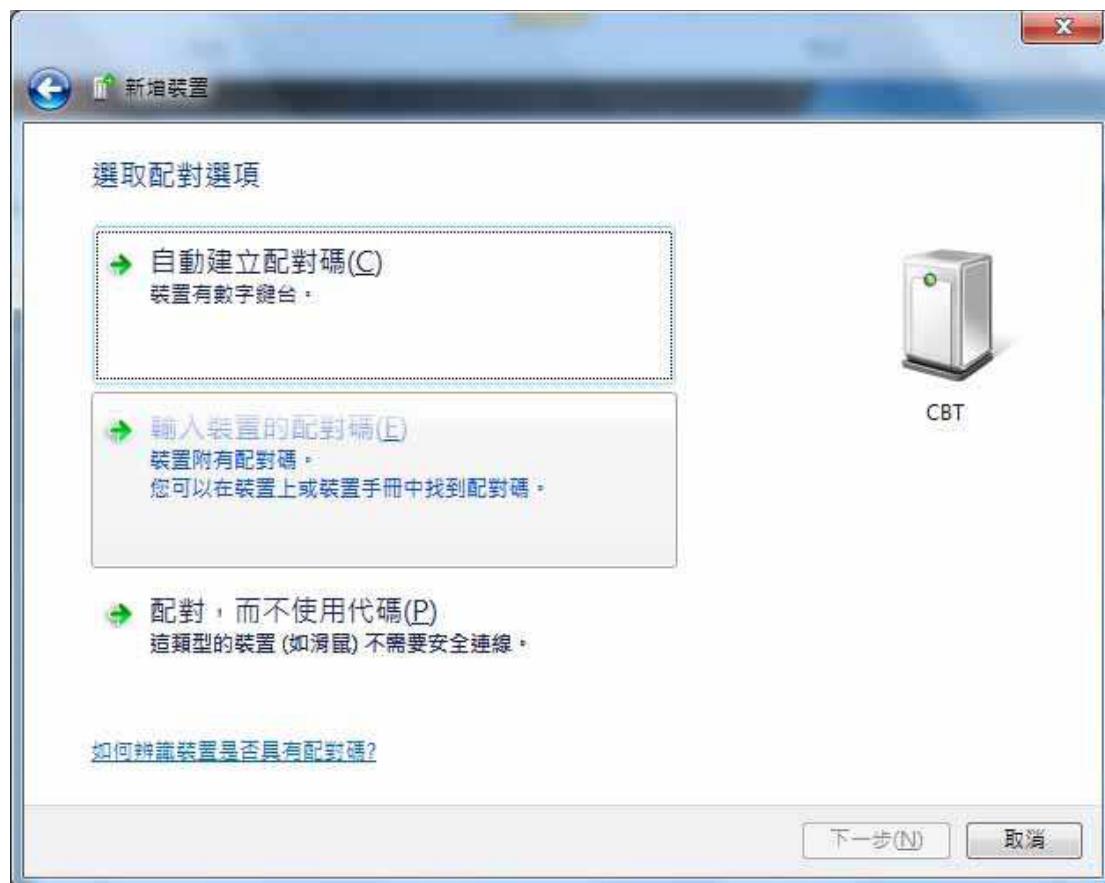
Click [Add Device] 按[新增裝置]



Found [HC-05] or [NISBIE]  
找到 [HC-05], [NISBIE]



Select (E) > Key in pairing code 1234.  
選[輸入裝置的配對碼]：鍵盤輸入 1234



Bluetooth Link Successfully.

藍牙配對完成



## 4. Terminology

### 4.1 Abbreviation:

AAC	Idle Air Valve (unit in %)
Air Flow	A/F ALPHA-B1: 99% = Air fuel ratio is 99% where 100%=14.7:1 (may varies for different engine)
A/F Alpha SL	A/F Alpha Self Learn
B/FUEL SCHDL	the injector pulse time when open (in milliseconds)
Clsd Throttle	Closed Throttle
CVTCS	Continuous Valve Timing Control System, engine technology used by Nissan to reduce fuel consumption and emission output while improving overall engine performance.
DLC	Data Link Connector (OBD2 J1962 standard, 16pin)
DDL	Digital Data Link (OBD1standard, Nissan 14pin socket)
ECCS (eltukusu)	Electronic Concentrated Control System electronic fuel injection system designed to improve fuel economy and to reduce exhaust emission.
ECT	Engine coolant temperature
EGI	Electronic Gas Injector electronic fuel injection system designed to improve fuel economy and to reduce exhaust emission.
EGR valve	Exhaust Gas Recirculation valve
EGR Sol	Exhaust Gas Recirculation solenoid
EGR TS	Exhaust Gas Recirculation temperature sensor
F/B O2 Lean	Front bank O2 sensor Lean
HICAS	(High Capacity Actively Controlled Suspension): is <a href="#">Nissan's</a> rear wheel steering system found on cars ranging from the more recent <a href="#">Skyline</a> and <a href="#">Fairlady Z</a> (300ZX) iterations to smaller models like the <a href="#">Nissan Cefiro</a> (A31), <a href="#">240SX/Silvia (S13 &amp; S15)/180SX</a> and <a href="#">Nissan Serena/Nissan Largo</a> . It is also found on models from <a href="#">Nissan's Infiniti</a> division, such as the <a href="#">Q45</a> , <a href="#">M45/M35</a> and <a href="#">G37</a> . Unlike other four wheel steering systems, HICAS and Super HICAS are fitted to improve handling rather than as a parking aid. Earlier HICAS versions used hydraulics to steer the rear wheels. The hydraulic system was powered by the power steering pump and used speed sensors to determine how much and in which direction to steer the rear wheels. Later versions, called Super HICAS, moved to an electric actuator for the rear steering rack, making the system much lighter. The Super HICAS system also used its own computer to control the system instead of speed sensors. HICAS and Super HICAS rear wheel steering is limited to about 1 degree in either direction. HICAS was introduced on the 1986 Skyline GTS coupes (GTS, GTS-R, and GTS-X). The system was later adapted to work on many models in the Nissan range, beginning with the Passage GT.
HO2S1 (B1)	O2 sensor voltage (bank1)
IACV	Idle Air control Valve
KS	Knocking sensor
LTFT	Long Term Fuel Trim
MAF voltage	Mass Airflow sensor voltage
MAS A/F SE-B1	air/fuel ratio
N-VCT	Nissan Variable Cam Timing automobile variable valve timing technology developed by Nissan.
Throttle V	Throttle voltage
Timing BTDC	Timing Before Top Dead Center
Throttle V	Throttle voltage
TPS	Throttle Position Sensor
VVEL	Variable Valve Event and Lift, is an automobile variable valve timing technology developed by Nissan.

## 4.2 Engine type

AB12CDE

Letter	description	category	Example
AB	series of the engine	V - twin engine. D - a diesel engine	CD17 and CD20
12	working volume in liters	number of dividing that by 10	CA18DE gasoline, inline volume of 1.8L
C	the design features of cylinder head	D - engine with 4 valves per cylinder (TWIN CAM or DOHC)	SR20Di RB25DET GA13DS
		V - engine with variable valve timing and four valves per cylinder	SR16VE SR20VET
		no letter D or V - this means that the engine has two valves per cylinder (OEF).	RB20E CD20 VG33E
D	the method of formation of the working mixture	E - multipoint (distributed) electronic injection toliva in gasoline engines	SR16VE, CA18E, RB25DE
		i - a single point (center), electronic fuel injection in gasoline engines (Ci - Central injector); diesels have this letter denotes the electron - driven pump and is the last (but not the second) in the name of the engine.	SR18Di (petrol), ZD30DDTi (diesel).
		D - direct electronic fuel injection into the cylinder - at petrol engines (the system DI - Direct Input); diesels have this letter indicates that the engine with undivided combustion chamber. Both gasoline and diesel engines, with the letter D in the title, was developed after 1995.	VQ25DD (petrol); ZD30DDTi (diesel).
		S - carburetor engine	GA15DS, CA18S, E15ST
		absence of the above letter - the diesel engine with a conventional (mechanical) fuel pump. And all of these engines have been NISSAN with two valves per cylinder and separated combustion chambers	CD17, TD42T, RD28
E	the presence of turbocharging	T - a turbocharged engine	TD42T SR20DET CA18ET
		TT - engine with two turbochargers (TWIN TURBO).	RB26DETT
		i - in diesel engines with electronically - controlled pump	YD25DDTi ZD30DDTi

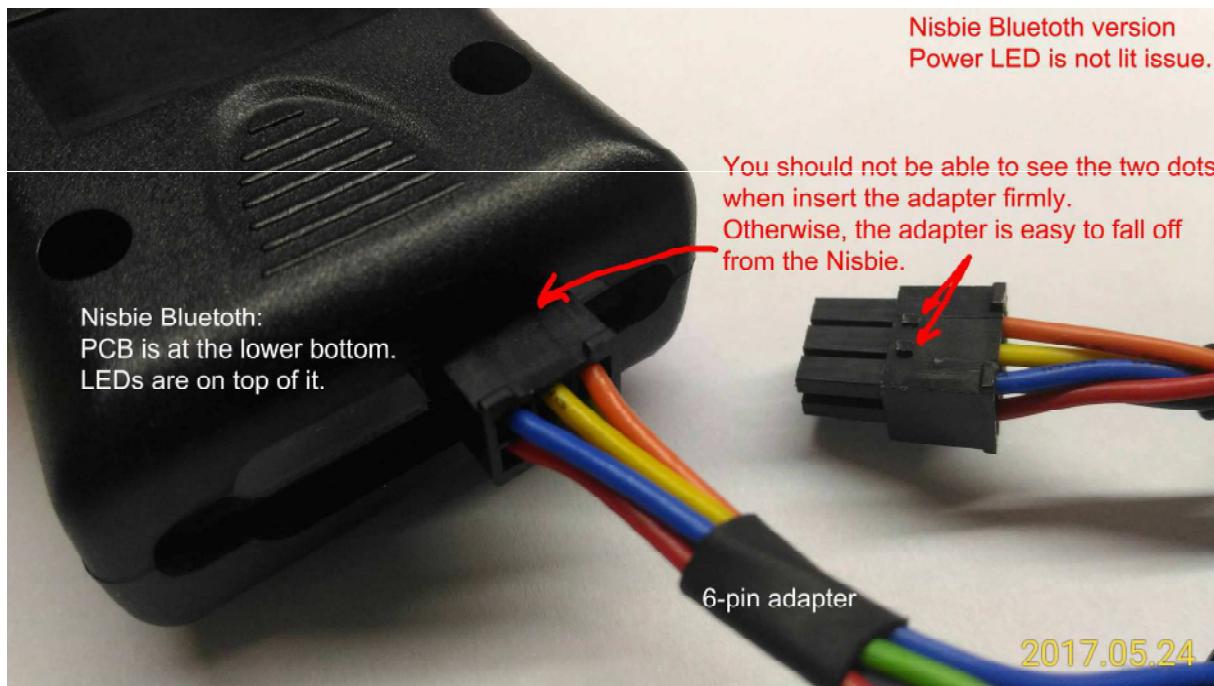
## 5. Trouble code (Nissan 1989-1999 Models)

- 11 Crank Angle Sensor/Camshaft Position Sensor
- 12 Air Flow Meter/Mass Air Flow Sensor
- 13 Engine Coolant Temperature Sensor
- 14 Vehicle Speed Sensor
- 21 Ignition Signal
- 22 Fuel Pump
- 23 Idle Switch
- 24 Throttle Valve Switch
- 25 Idle Speed Control Valve
- 28 Cooling Fan Circuit
- 31 ECM
- 32 EGR Function
- 33 Heated Oxygen Sensor
- 34 Knock Sensor
- 35 Exhaust Gas Temperature Sensor
- 36 EGR Control-Back Pressure Transducer
- 37 Knock Sensor
- 38 Right hand bank Closed Loop (B2)
- 41 Intake Air Temperature Sensor
- 42 Fuel Temperature Sensor
- 43 Throttle Position Sensor
- 45 Injector Leak
- 47 Crankshaft Position Sensor
- 51 Injector Circuit
- 53 Oxygen Sensor
- 54 A/T Control
- 55 No Malfunction
- 63 No. 6 Cylinder Misfire
- 64 No. 5 Cylinder Misfire
- 65 No. 4 Cylinder Misfire
- 66 No. 3 Cylinder Misfire
- 67 No. 2 Cylinder Misfire
- 68 No. 1 Cylinder Misfire
- 71 Random Misfire
- 72 TWC Function right hand bank
- 73 TWC Function right hand bank
- 76 Fuel Injection System Function right hand bank
- 77 Rear Heated Oxygen Sensor Circuit
- 82 Crankshaft Position Sensor
- 84 A/T Diagnosis Communication Line
- 85 VTC Solenoid Valve Circuit
- 86 Fuel Injection System Function right hand bank
- 87 Canister Control Solenoid Valve Circuit
- 91 Front Heated Oxygen Sensor Heater Circuit right hand bank
- 94 TCC Solenoid Valve
- 95 Crankshaft Position Sensor
- 98 Engine Coolant Temperature Sensor
- 101 Front Heated Oxygen Sensor Heater Circuit right hand bank
- 103 Park/Neutral Position Switch Circuit
- 105 EGR and EGR Canister Control Solenoid Valve Circuit
- 108 Canister Purge Control Valve Circuit

## 6. Trouble shooting

Symptom	Possible Cause	Solution
No LED is on	Not insert firmly into DDL socket.	Suggest to remove the DDL from car socket before insert the interface into it.
	The OBD2 adapter is loose from either end.	Check below photo for detail (see Pic. 6.1)
	The DDL socket misfit (extreme rarely)	Return item (see Pic. 6.2)
	the connector inside the interface is loose.	Open case and reconnect cable firmly.
	High inrush current burns the power chip.	Do not plug or unplug the scantool when engine is running. Return for repair or buy new PCB. (see Pic. 6.3)
USB interface not found	FTDI driver version is not correct.	Do not use windows 7 default driver. Update the latest version from FTDI website.
	Conflict with other device	Re-configure the COM port number from windows control panel. (see Pic. 6.4)
Bluetooth not found	Smart phone Bluetooth not compatible	Make sure Windows or Android Bluetooth module version is 2.0 or higher. Updated windows driver, and or Android version.
	The bluetooth module has cold soldering due to shipping vibration.	Return for repair. Or you can solder by yourself.
Software does not read data	Software is not compatible with Windows.	Check compatibility chart below.
	pre-required is not installed	such as Microsoft .net

Pic. 6.1:

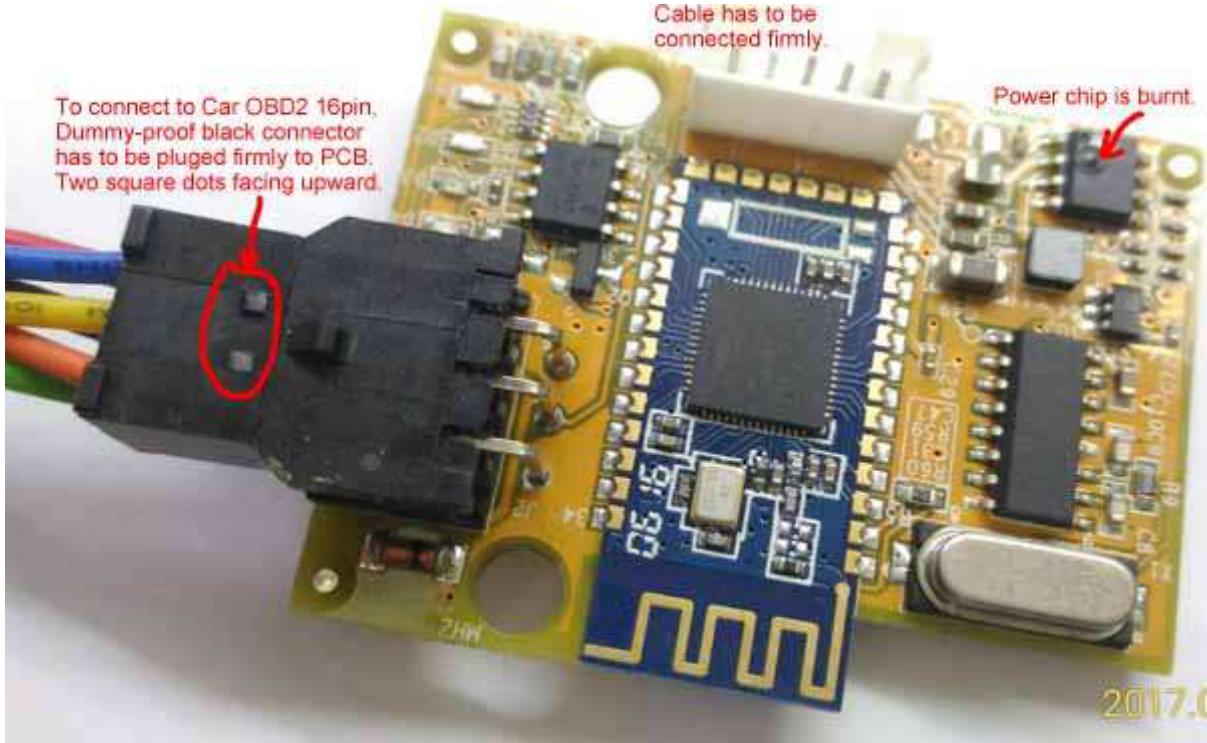


Pic. 6.2 (1993 Nissan 300ZX twin turbo USA)

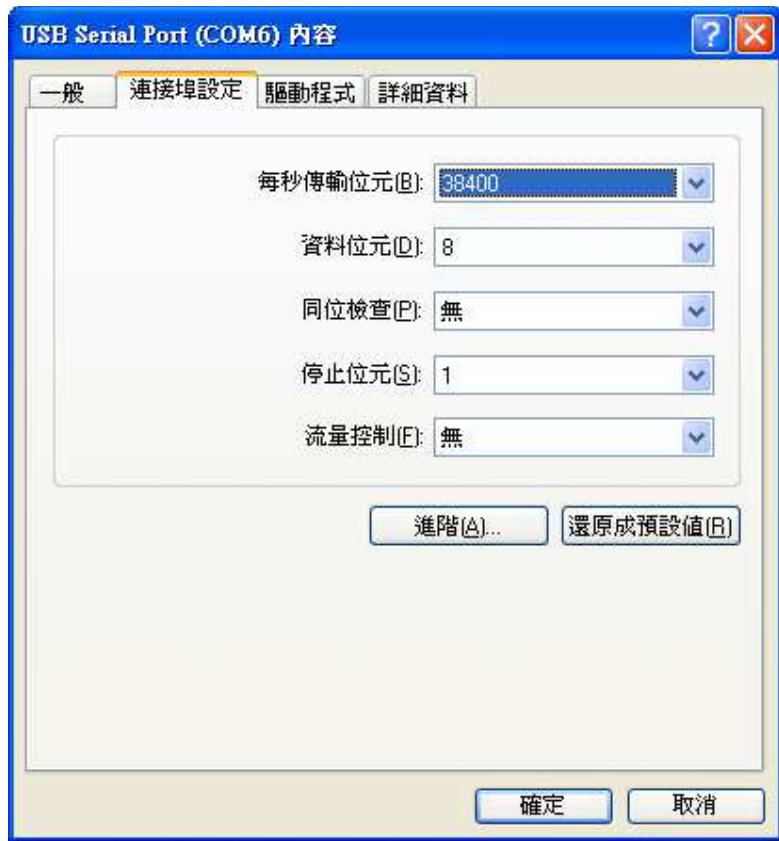




Pic. 6.3



Pic. 6.4:



Baud(B) has to be 9600.

## 7. Software

### 7.1 Software compatibility

#### 7.1.1 Compatible to Consult-I:

Hardware list:

Nissan Consult RS232

Nisbie USB

Nisbie BT3V20

Nisbie BT3V30

For Palm PDA:

[PalmZ](#) by [Ztechz forum](#) member MezafitsII

For Mac OS X 10.4:

Consultan 1.01 ECU ROM map loader

For Windows:

App name Version	Description	Win mobil e 2003	Win 98	Win 2000	Win NT	Win XP home 32bit	Win XP Pro 32bit	Win XP Pro 64bit	Win Vista 32bit	Win 7 home 32bit	Win 7 home 64bit	Win 7 home 64bit	Win 8 pro 64bit	Win 10
CalumSult 0.08h	ECU ROM dumping real time graph <i>needs install ".Net framework 1.1" first.</i>						V							
ConZult	For 300ZX Z32 base idle mode simple bar graph		V	V	V		V							
ConZult (Retail)	For 300ZX Z32													
ConZult SX	1990~1999 Z32,A32,S14(a),S15, B13,RNN14,N14,N15, Y10,W10,P10,P11, K11,R32,R33, C23		V	V			V		V	V				
DDL reader 1.0.0.16				V			V						V	
ECUTALK 1.34	Microsoft net compact framework 1.0 SP3.	V												
ECUTALK 1.35	Gauges logging active suspension trip meter <a href="#">Skyline R32</a> <i>needs install ".Net framework 1.1" first.</i>						V			V	V	V		
Nissan Data Scan I 1.2	1989~2000						V							
Nissan <a href="#">Data Scan</a> I 1.52				V			V							
Nissan <a href="#">Data Scan</a> I 1.54							V			V	V			
Nissan <a href="#">Data Scan</a> I 1.6x										V	V		V	
ScanTechNissan 1.51							V							
SRTalk 1.0				V			V							
<a href="#">TECU</a>	Patrol			V			V							

2.53	180SX 200SX 300ZX Pulsar Skyline Maxima											
<a href="#">ZControl</a> 2.0	1990~1994 Z32 ECU editing tool 300ZX TT		V			V						
<a href="#">ZTalk</a> 1.1			V			V						
LiveEdit 2.2 beta5	Nissan ECU tuning 上下載編輯引擎參數圖											
Nistune 0.10.13	ECU Tuning											
Nismo Tronic ECU Tuning	Sentra B13 SR20DE, Sentra B14 KA24DE, 180SX S13 SR20DET 1991~1994											
Z32												

For Android:

App name	Version	Description	Android 4.3	Android 5	Android 6	Android 7	Android 8	Android 9
ECONTool for Nissan ELM327	V2.39	Support Nissan Maxima/Cefiro A32 Active Tests for NC1	V	V	V	V		
NDSI Lite	V1.51		V	V	V			
NDSI	V1.51		V	V	V			
Nisbie	V1.0				V			

### 7.1.2 Compatible to Consult-II:

Hardware list:

VAGCOM 409.1 USB

Nisbie BT4V31

App name Version	Description	Win 2000	Win NT	Win XP home 32bit	Win XP Pro 32bit	Win XP Pro 64bit	Win Vista 32bit	Win 7 home 32bit	Win 7 home 64bit	Win 8 pro 64bit	Win 10	Android 4.3
Nissan Data Scan II				V				V	V		V	
NDSII												V
NDSII Lite												V
ScanTech Nissan OBD2 1.38	ISO 9141 KWP2000 active tests.	V			V			V	V			

## 7.2 Compatibility field test (feedback from users):

Year	Model	Area	Software Test ---compatible	Software Test ---fail	Alternative scantool
1989	Nissan 240SX	USA	ECUTalk, NDSI		
1990	Nissan 300ZX TT	USA	NDSI		
1991	Nissan 240SX SR20DET	USA	<u>NDSI</u>		
1991	Nissan 300ZXTT Z32	Germany	NDSI		
1992	Nissan 240SX	USA	NDSI		
1992	Nissan Maxima SE 3.0 J30	USA			
1992	Nissan Sentra SER 331 2.0 B13	Taiwan	NDSI		
1993	Nissan 300ZX twin turbo	USA	None		None, DDL misfit
1993	Nissan March 1.3 K11	Taiwan	ECUTalk		
1993	Nissan Quest 3.0 V40	Taiwan	NDSI		
1994	Nissan March 1.3 K11	Taiwan	ECUTalk, NDSI		
1994	Nissan Sentra 331	Taiwan	NDSI		
1995	Infiniti Q45		NDSI		
1995	Nissan Sentra B14	Taiwan	ECUTalk		
1996	Nissan AD Resort 1.6	Taiwan	ECUTalk		
1996	Nissan Cefiro 2.0 A32	Taiwan	ECUTalk, NDSI, DDL reader		
1996	Infiniti G20 2.0	Taiwan	ECUTalk, NDSI		
1996	Nissan Primera 1.6 N11 GA16DE	Greece	NDSI Lite		
1997	Nissan Cefiro 2.0 A32	Taiwan	ECUTalk, NDSI		
1997	Nissan March 1.3 K11	Taiwan	ECUTalk, NDSI		
1997	Nissan Primera 2.0 P11	Taiwan	ECUTalk		
1997	Nissan Pulsar 1.6 N15 GA16DE	Taiwan	ECUTalk, NDSI		
1997	Nissan Sentra 1.6 High V	Taiwan	NDSI		
1998	Nissan Avenir 2.0 W10	Japan	NDSI		
1998	Nissan Cefiro 3.0 A32	Taiwan	ECUTalk		
1998	Nissan Sentra 331 1.6 B14	Taiwan	NDSI		
1998	Nissan Skyline 2.5 25GT R34 RB25DE	Australia	NDSI Lite		
1999	Infiniti QX4	Taiwan	ECUTalk, ECON Tool		
1999	Nissan Cefiro 2.5 A32 VQ25DE	Taiwan	NDSI Lite		
1999	Nissan Sentra STA 1.6	Taiwan	NDSI		
2000	Nissan Altima 2.0	USA	NDSI	NDSII	+Nisbie adapter
2000	Nissan Cefiro 2.0 A32	Taiwan	NDSI		
2000	Nissan March 1.3 K11	Taiwan			
2000	Nissan Patrol 2.0 Y61 ZD30DDTi	Australia	NDSI	NDSII NDSIII	BT3V22 +Nisbie adapter, can remove blue wire.
2000	Nissan Sentra 180 1.8	Taiwan	NDSI		
2001	Infiniti I30 A33	Indonesia	NDSI		
2001	Nissan March 1.3 K11	Taiwan	NDSI		
2001	Nissan NRV AD Resort 1.6 Y10 GA16DE	Taiwan	NDSI		
2001	Nissan Sentra 180 1.6		NDSI,		
2001	Samsung SM525V 2.5 A32 VQ25DE	South Korea	ECUTalk DDL reader		
2002	Nissan Cefiro 3.0 A33 VQ30DE	Taiwan	NDSI	ECUTalk	

2002	Nissan Cefiro 3.0 A34 VQ30DE	Philippine	NDSII		Vagcom B4V31
2002	Nissan Cefiro 3.5 A34 VQ35DE	Taiwan	NDSII	<b>NDSI, NDSIII+ELM327</b>	B4V31 VAGCOM
2002	Nissan Pathfinder 3.3 R50 VG33E	Australia	ECUTalk NDSI	<b>NDSII</b>	+nisbie adapter
2002	Nissan Sentra SE-R 2.5 B15 QR25DE	Japan	NDSII (BT4V31)	<b>NDSI</b>	
2003	Nissan Patrol 4.8 GU3 Y61 TB48DE	UK	NDSII (BT4V31)	<b>NDSI, NDSII, Torque Pro</b>	VAGCOM 409.1 Car gauge pro
2003	Nissan Sentra 1.6 QD16	Taiwan		<b>NDSI</b>	
2003	Nissan Serena QRV 2.0 C24	Taiwan	NDSII (BT4V31)	<b>NDSI</b>	<b>ELM327+NDSII</b>
2004	Nissan Patrol 3.0 Y61 ZD30DDTi	Australia	NDSI (BT3V23)		+ nisbie adapter
2004	<b>Nissan Quest 3.5 V42 VQ35DE</b>	<b>USA</b>			<b>ELM327</b>
2005	Infinity FX35	Taiwan			
2005	Nissan March 1.3 K11	Taiwan	NDSI		
2005	Nissan Patrol 3.0 Y61 ZD30DDTi	UK	NDSI, ScanTech	<b>NDSII</b>	+ adapter
2005	Nissan Patrol 3.0 Y61 ZD30DDTi Diesel	Australia	NDSI	<b>NDSII</b>	+ adaptor
2007	<b>Nissan Sentra 200 2.5 B16 QR25DE</b>	<b>Japan</b>	<b>NDSIII</b>	<b>NDSI, NDSII</b>	<b>ELM327</b>
2007	Nissan March 1.3				<b>ELM327</b>
2007	Nissan Patrol 4.8	Australia		<b>NDSI, NDSII</b>	<b>ELM327</b>

\*ELM327 compatible Android app list:

Car gauge pro

NDSIII

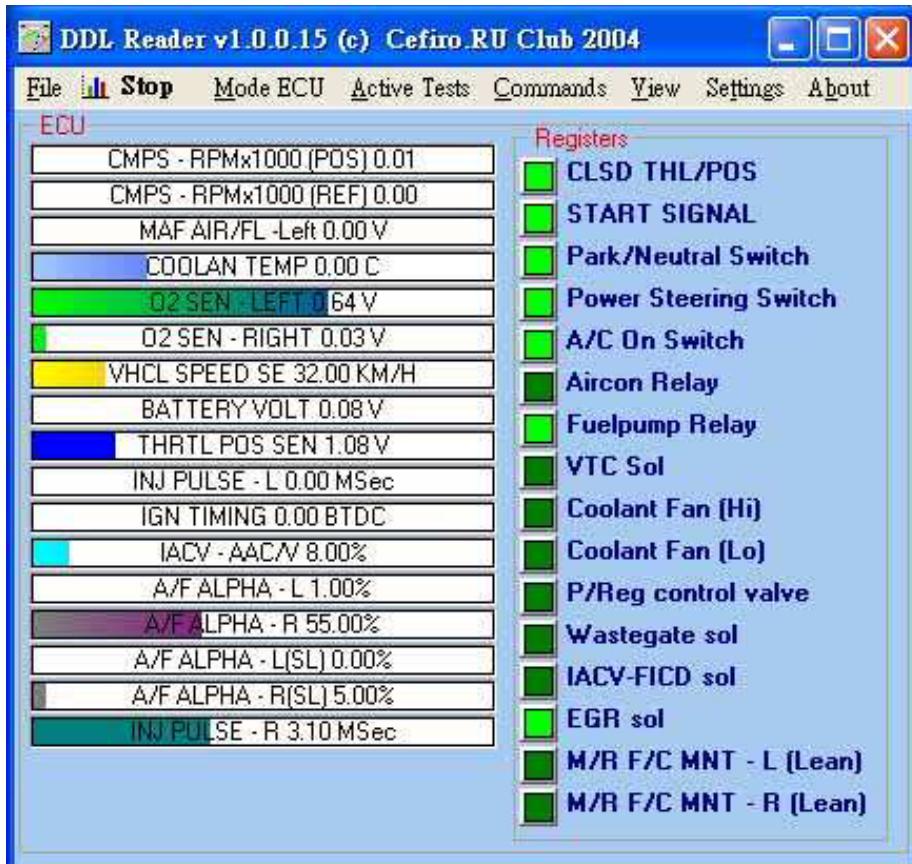
Torque Pro.

## 7.3 Software screenshot

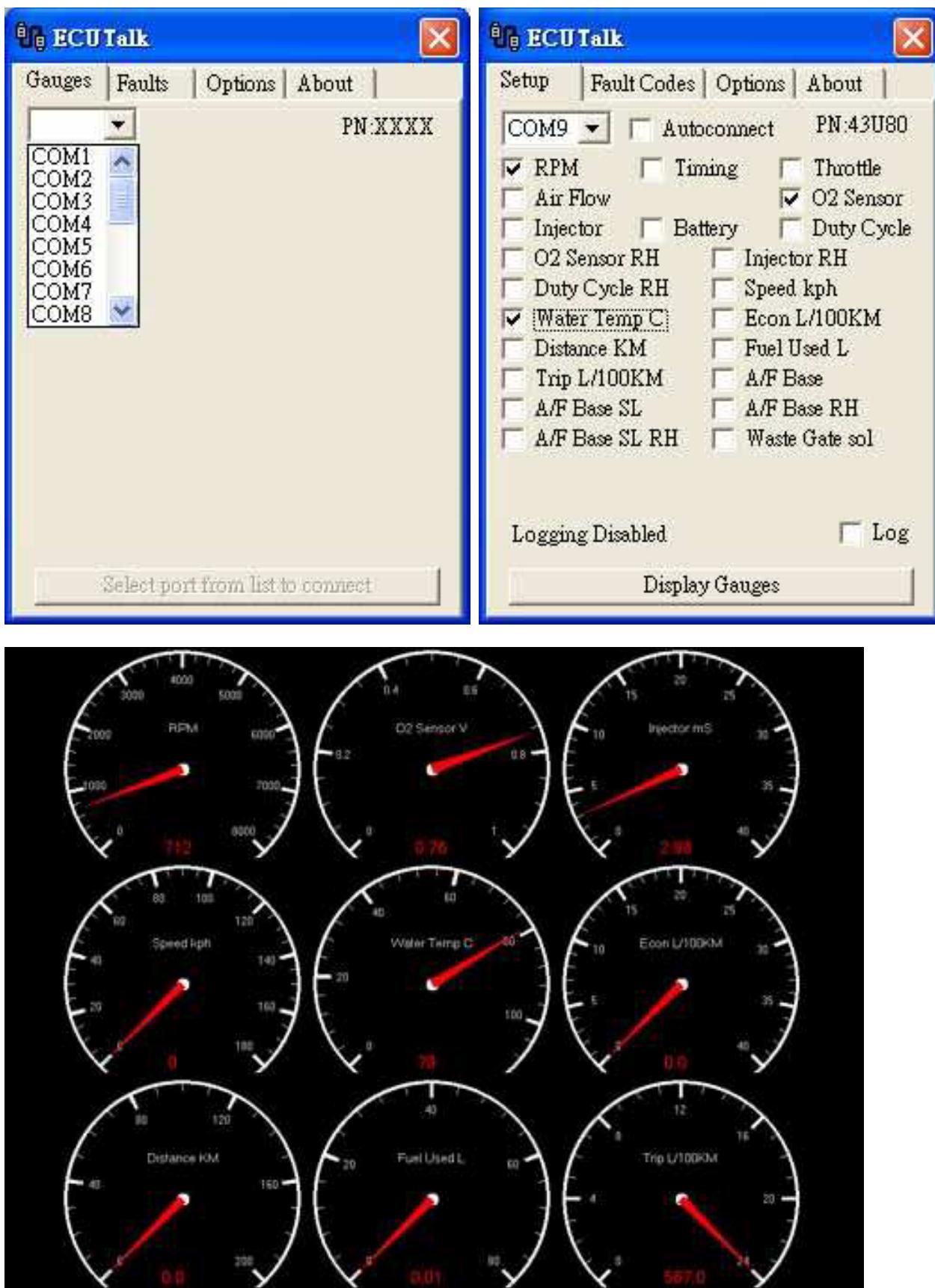
### 7.3.1 DDL reader: Mode AT Auto transmission



Mode ECU:



### 7.3.2 ECUTalk



Check the COM port in control panel, enter correct COM port and select the items for monitoring.

The more items selected, the longer the data refresh rate.

### 7.3.3 Nissan data scan I (NDSI for Windows)

NDSI for Windows: [www.nissandatascan.com](http://www.nissandatascan.com)

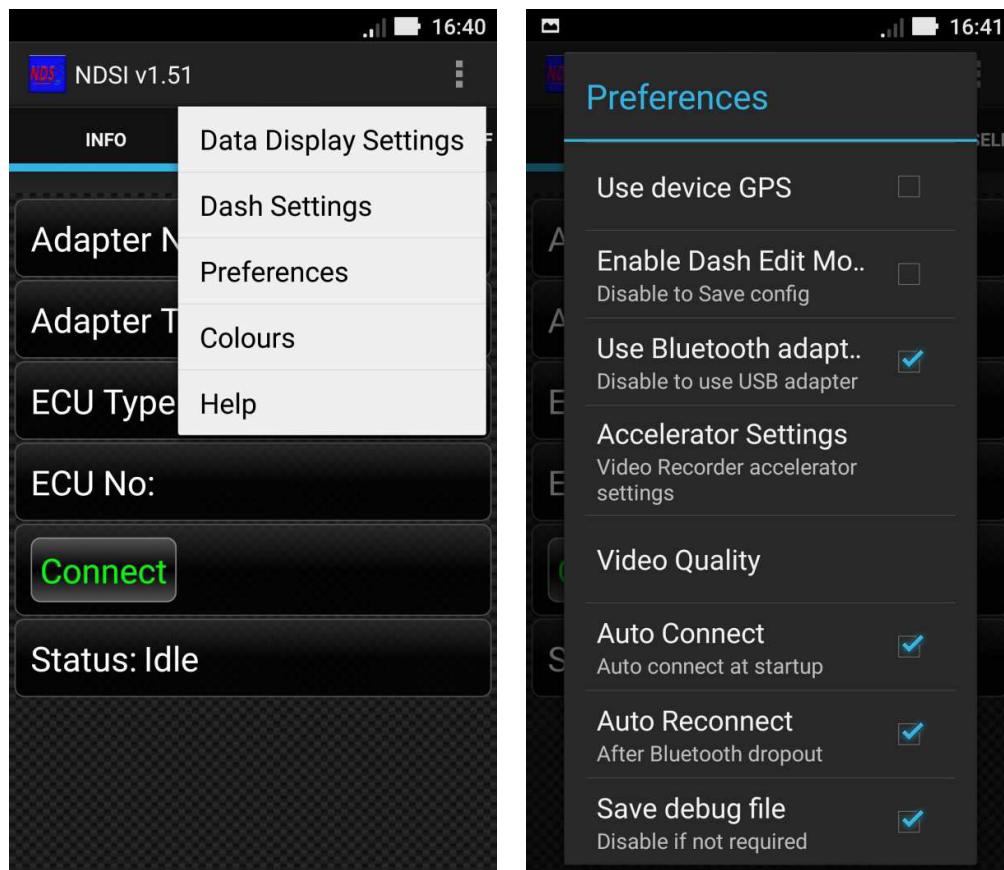


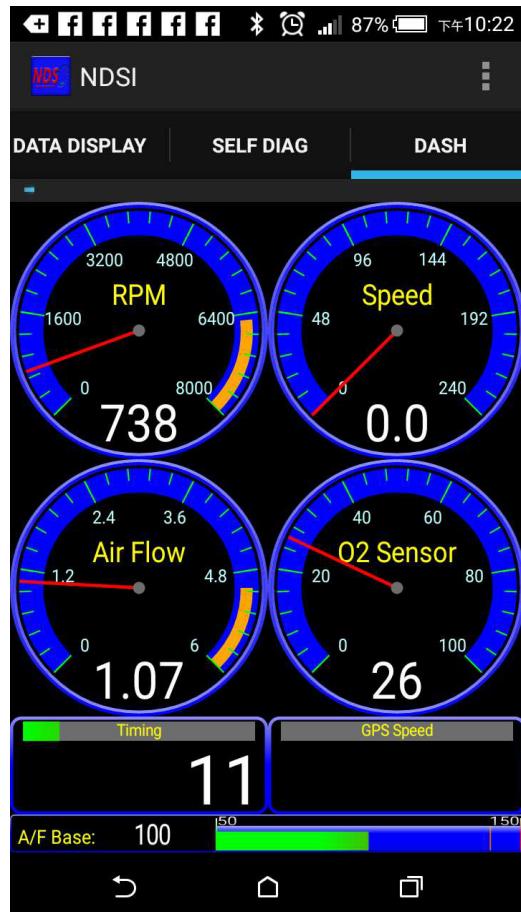
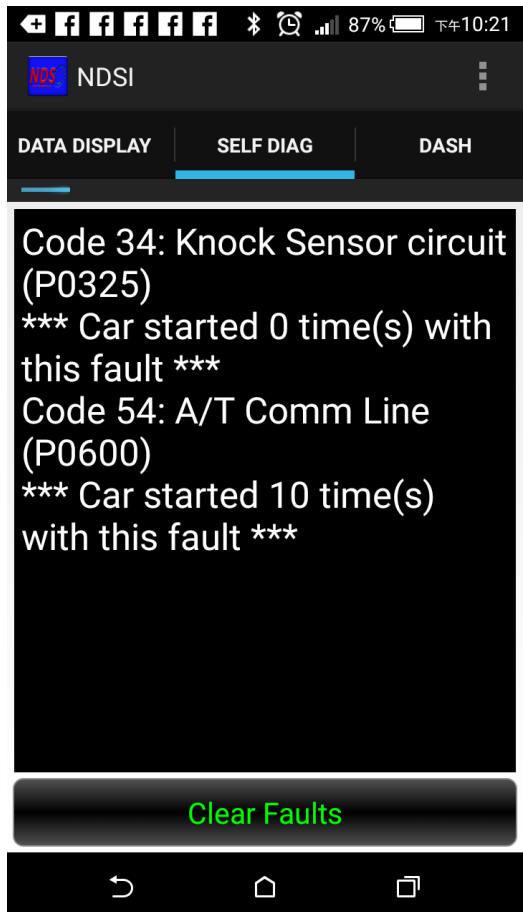
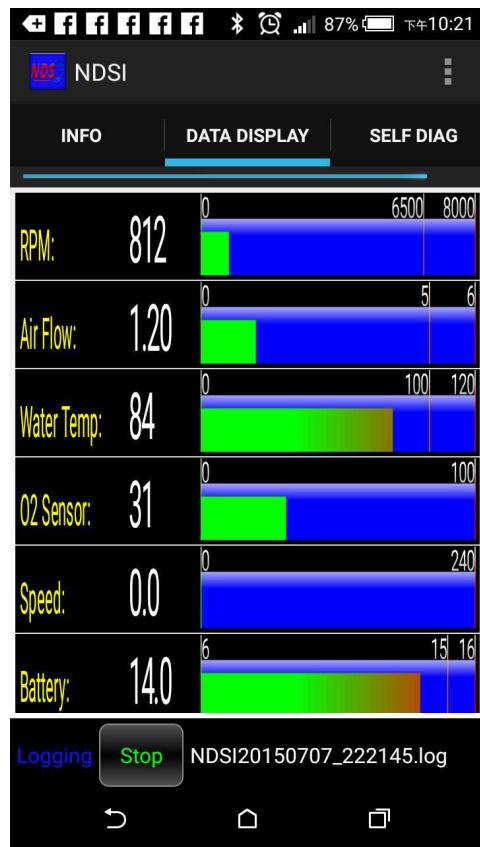
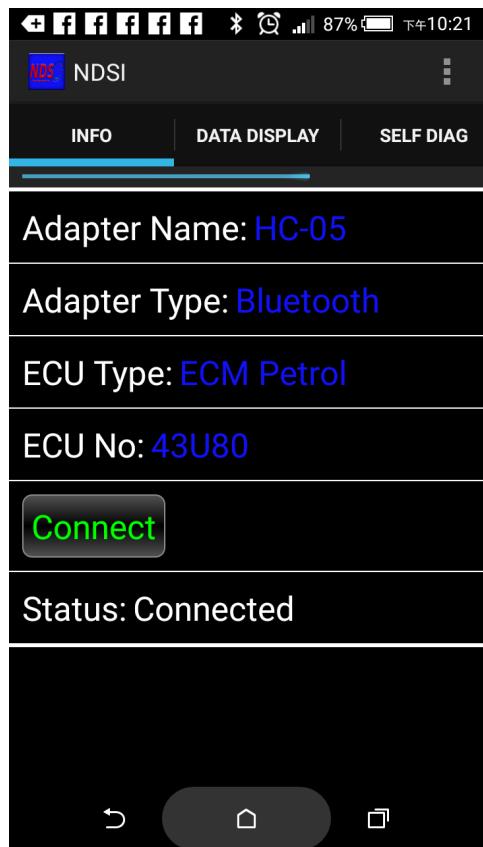
## Nissan data scan I (NDSI for Android Ver 1.51):

- > go to upper right menu (the 3 grey dots)
- > select [Preferences]
- > enable [Use Bluetooth adapter] if you use Nisbie Bluetooth to link
- > back to main menu > click [Connect]

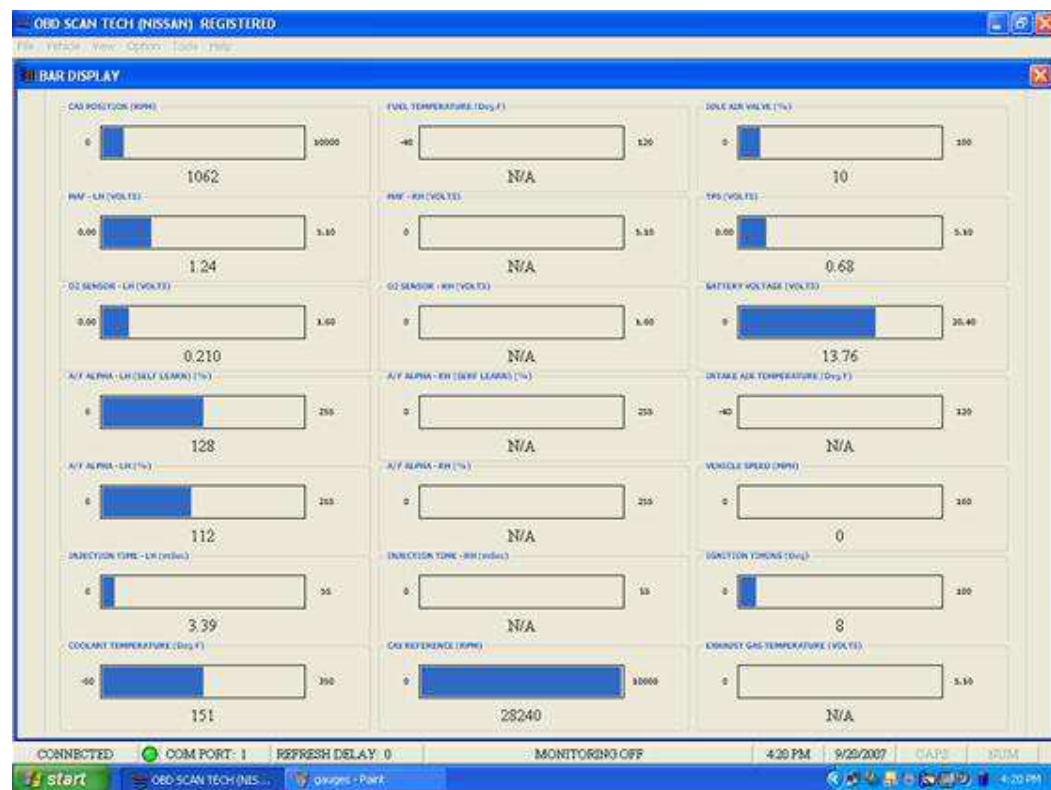
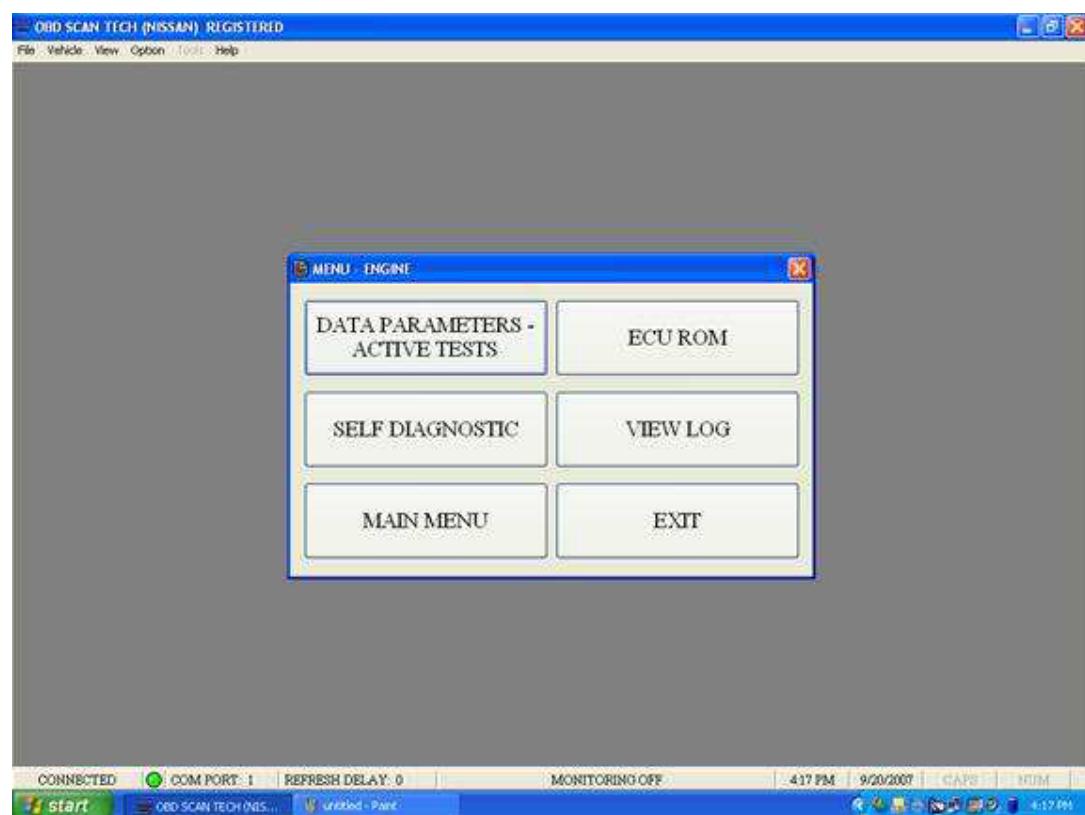
The debug files are saved in the Download\DebugLog folder.

Forum: <http://home.exetel.com.au/nds/phpBB3/viewforum.php?f=1>





### 7.3.4 Nissan Scan Tech





OBD SCAN TECH (NISSAN) REGISTERED

File Window Help Options Tools Help

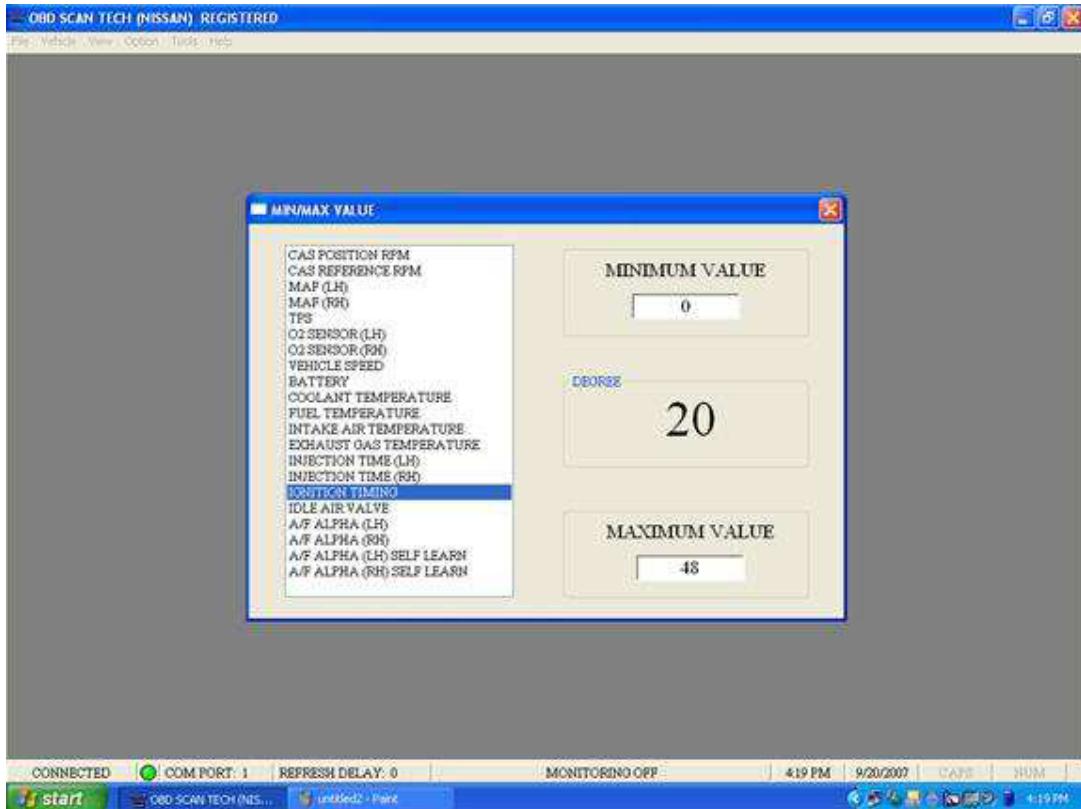
■ ENGINE

DATA PARAMETER		INPUT / OUTPUT (REGISTER 13, 1E, 1F)	
ACTIVE TEST	CAS POSITION (RPM)	975	RPM
CUSTOM DATA	CAS REFERENCE (RPM)	30624	RPM
RECORDER	MAP - LH	1.18	Volt
MIN/MAX	MAP - RH	N/A	Volt
GAUGES 1	TPS	0.68	Volt
GAUGES 2	O2 SENSOR - LH	0.310	Volt
LARGE DISPLAY	O2 SENSOR - RH	N/A	Volt
BAR DISPLAY	VEHICLE SPEED	0	RPM
DIGITAL DISPLAY	BATTERY	14.00	Volt
SPEED TRIAL	COOLANT TEMPERATURE	140	Deg C
MONITOR CENTER	FUEL TEMPERATURE	N/A	Deg C
SKIN MODE	INTAKE AIR TEMPERATURE	N/A	Deg C
SCOPE	EXHAUST GAS TEMPERATURE	N/A	Volt
	INJECTION TIME - LH	3.22	mS
	INJECTION TIME - RH	N/A	mS
	IGNITION TIMING	15	BTDC
	IDLE AIR VALVE	10	%
	A/F ALPHA - LH	111	%
	A/F ALPHA - RH	N/A	%
	A/F ALPHA - LH (SELF LEARN)	128	%
	A/F ALPHA - RH (SELF LEARN)	N/A	%
	M/R/F/C MNT (LEAN / RICH)		
	BANK 1 - LH	N/A	
	BANK 1 - RH	N/A	

NOT USED / INACTIVE SUPPORTED - DISABLED SUPPORTED - ENABLED ACTIVE

CONNECTED COM PORT - 1 REFRESH DELAY: 0 MONITORING OFF 4:18 PM 9/29/2007 CARB NUM 4:10 PM

Start OBD SCAN TECH (NS... USB-1 Port



### 7.3.5 EconTool for Nissan ELM327

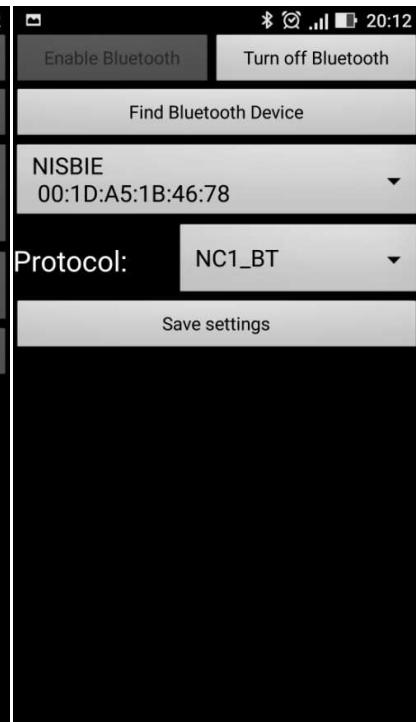
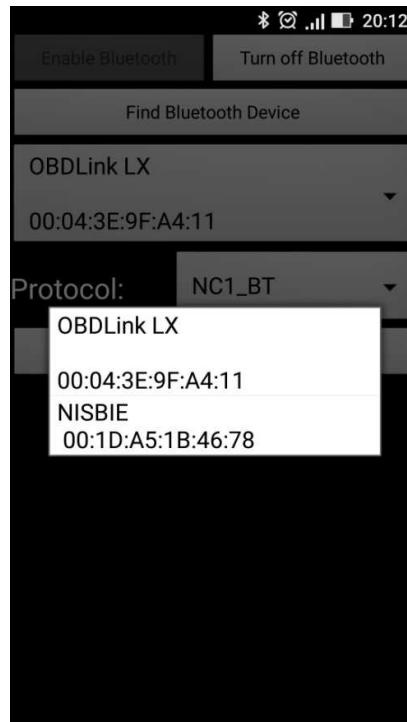
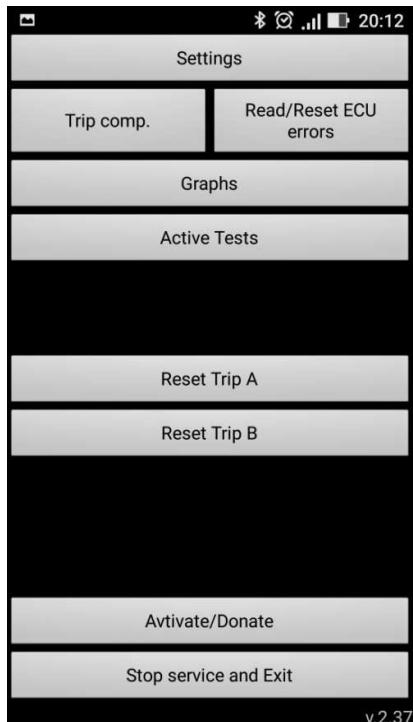
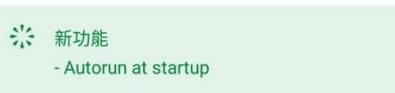
If you have installed older version, uninstall it first. Then download the latest version.

<https://4pda.ru/forum/index.php?showtopic=554297&st=100>



- > click [Settings]
- > click [Adapter settings]
- > click [Enable Bluetooth] >
- > click [Find Bluetooth Device]
- > select [NISBIE]
- > Protocol: select [NC1\_BT]
- > click [Save settings]

程序與汽油日產ECU通信。





Voltage,V	Upd. time,s	Engine RPM	Speed,KPH
13.8	0.05	825	0
Temp,C	MAF,G/s	Inj. time,ms	Inj. Load,%
88	0.00	2.91	2
Ign. timing,°	STFT,%	LTFT,%	IAC position
8	2	23	20
Throttle	Throttle	Throttle	Thr.ped.,V
0.52	0.00	0	0.00
MAF	A/C SW	PS SW	P/N SW
0.96	Off	Off	On
TPS SW	A/C R	Fuel Pump R	VTC Sol
On	Off	On	Off
VTC Sol In	VTC Sol Ex	Fan R	P/Reg Val
Off	Off	Off	Off
Wastegate	IACV/FICD	EGR Sol	0-100kph
Off	Off	On	-
O2#1,V	O2#2,V	O2#3,V	O2#4,V
0.21	0.00	0.00	0.00
Fuel,C	Int.Temp,C	EGT,V	Boost
1	2	3	4
5			

## **8. Resources**

### 8.1 Blog/Forum/Web

- <http://www.maxima.org/>
- <http://www.ecutalk.com/> (Software ECUTalk)
- <http://alflash.com.ua/index.htm>
- <https://car-service-manuals.com/> (free service manual download)
- <http://mypaper.pchome.com.tw/eddieyu80/post/1313715905> (in Chinese)
- <http://www.npoc.co.uk/> Nissan Primera Owners Club
- <http://www.patrol4x4.com/forum/> Nissan Patrol forum
- <http://www.diagwiki.com/nissan-ddl-diagnostics> Nissan DDL pin definition
- [http://pinoutguide.com/CarElectronics/nissan\\_obd2\\_diag\\_pinout.shtml](http://pinoutguide.com/CarElectronics/nissan_obd2_diag_pinout.shtml) Nissan pin out
- <https://nmanzi.com/nissan-navara-d22-service-manual/> Navara D22 Service Manual
- <https://manuals.co/workshop/nissan/navara/nissan-navara-2005-workshop-manual/5529432> 2005 Navara D40

### 8.2 Similar products

- <https://www.plmsdevelopments.com/index.php/plms-shop/software> CONSULT USB
- <http://www.ecutalk.com.au/> CONSULT USB

### 8.3 scantool and car model

Car Socket	Nisbie USB	Nisbie Bluetooth
DDL	✓	✓
DLC	✗	✓ +adaptor
DLC	✗	✗

	A32			A33			A34		
model	Cefiro Maxima			Cefiro Maxima					
engine	VQ20DE VQ30DE			VQ20DE VQ30DE VQ35DE					
	DDL	GST	DLC	DDL	GST	DLC			
1989									
1990									
1991									
1992									
1993									
1994	v	v							
1995	v	v							
1996	v	v							
1997	v	v							
1998	v	v							
1999	v	v			v				
2000					v				
2001					v				
2002					v				
2003					v				
2004									
2005									
2006									
2007									
2008									
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2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
Read from:	ECM					TCM			

	B13		B14		B15		
model	100NX NX1600 NX2000 Sentra Sunny		Sentra Sunny 200SX		Sentra		
engine	CD17, GA16DE GA16DS GA14DS GA13DS E10S SR20DE		GA14DE GA15DE GA16DE SR20DE		QG18DE SR20DE QR25DE		
	DDL	GST	DLC	DDL	GST	DLC	DDL
1989							
1990	v						
1991	v						
1992	v						
1993	v						
1994	v						
1995	v		v	v			
1996			v	v			
1997			v	v			
1998			v	v			
1999			v	v			
2000							v
2001							v
2002							v
2003							v
2004							v
2005							v
2006							v
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
Read from:	ECM		ECM				TCM

	C23			C24			D22		
Model	Serena QRV			Serena QRV			Frontier		
Engine	GA16DE, SR20DE			I4, SR20DE, QR20DE, QR25DE, YD25DDTi			KA24DE		
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989									
1990									
1991	v								
1992	v								
1993	v								
1994	v								
1995	v								
1996	v								
1997	v								
1998	v					v	v		
1999	v				v	v	v		
2000	v				v	v	v		
2001	v				v			v	
2002	v				v			v	
2003					v			v	
2004								v	
2005									
2006									
2007									
2008									
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
from:	ECM					ECM		ECM	

	E25		G10		J31		
model	Caravan		Bluebird Sylphy Japan, Russia, New Zealand, Africa		Teana		
engine	KA24DE		QG15DE QG18DE QR20DE		QR20DE VQ23DE VQ35DE		
	DDL	GST	DLC	DDL	GST	DLC	DDL
1989							
1990							
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000				v			
2001		v		v			
2002		v					
2003		v					v
2004		v					v
2005		v					v
2006		v					v
2007		v					v
2008		v					v
2009		v					
2010		v					
2011		v					
2012		v					
2013							
2014							
2015							
2016							
2017							
Read from:			ECM		ECM		ECM

	K11			K12			L30			L31		
Model	Micra, March			Micra, March			Altima			Altima		
Engine	CG10DE CG13DE			CR10DE, CR12DE, CR14DE, HR15DE, HR16DE			KA24DE			QR25DE VQ35DE		
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989												
1990												
1991												
1992	v											
1993	v											
1994	v											
1995	v											
1996	v											
1997	v											
1998	v					v	v					
1999	v					v	v					
2000	v						v	v				
2001	v							v				
2002	v			v	v						v	
2003	v			v	v						v	
2004				v	v						v	
2005				v	v						v	
2006				v	v						v	
2007				v	v							
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015												
2016												
2017												
from:	ECM			ECM	ECM	ECM	TCM	ECM			TCM	

	N14			N15			N16		
Model	Pulsar			Pulsar			Almera Pulsar		
Engine	CD20, GA14DS, GA16DS, GA16DE, SR20DE, SR20DET,			GA15DE GA16DE SR16VE SR18DE SR20DE			QG13DE, QG15DE, QG16DE, QG18DE, YD22DDT		
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989									
1990	v								
1991	v								
1992	v								
1993	v								
1994	v								
1995	v			v					
1996				v					
1997				v					
1998				v					
1999				v					
2000				v				v	
2001								v	
2002								v	
2003								v	
2004								v	
2005								v	
2006									
2007									
2008									
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
from:	ECM			ECM				ECM	

	P10		
Model	Primera, Infiniti G20		
Engine	SR20DE		
	DDL	GST	DLC
1989			
1990	v	v	
1991	v	v	
1992	v	v	
1993	v	v	
1994	v	v	
1995	v	v	
1996			
1997			
1998			
1999			
2000			
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
from:	ECM	ECM	

	R32			R33			R34			R50			R51		
Model	Skyline			Skyline			Skyline			Pathfinder, Terrano, Infiniti QX4			Pathfinder, Terrano, Infiniti QX4		
Engine	CA18i, RB20E, RB20DE, RB20DET, RB25DE, RB26DE, RB26DETT			RB20E, RB25DE, RB25DET, RB26DETT, RB28DET			RB20DE, RB20E, RB25DE, RB25DET, RB28DET			VG33E, VQ35DE			VG33E, VQ40DE		
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989	v														
1990	v														
1991	v														
1992	v														
1993	v			v											
1994	v			v											
1995				v											
1996				v						v	v				
1997				v						v	v				
1998				v						v	v				
1999						v				v	v				
2000						v				v	v				
2001						v						v			
2002						v						v			
2003												v			
2004												v			
2005													v		
2006													v		
2007													v		
2008													v		
2009													v		
2010													v		
2011													v		
2012													v		
2013															
2014															
2015															
2016															
2017															
from:	ECM			ECM			ECM			ECM	ECM	TCM			ECM

	S13		S14		S15		T30		
Model	180SX, Silvia		200SX, 240SX, Silvia		200SX, 240SX, Silvia		X-TRAIL		
Engine	SR20DE		KA24DE, SR20DE, SR20DET		SR20DE, SR20DET		QR20DE, QR25DE, SR20VET, YD22DDTi		
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989									
1990									
1991	v								
1992	v								
1993	v								
1994									
1995			v	v					
1996			v	v					
1997			v	v					
1998			v	v					
1999			v	v		v			
2000			v	v		v			v
2001						v			v
2002						v			v
2003									v
2004									v
2005									v
2006									v
2007									v
2008									
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
from:	ECM			ECM	ECM		ECM		ECM

	U12			U13			V40			V41		
model	Stanza			Stanza Altima			Quest			Quest		
engine	KA24E			KA24DE			VG30E			VG33E		
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989												
1990	v											
1991	v											
1992	v											
1993			v			v						
1994			v			v						
1995			v	v		v						
1996			v	v		v						
1997			v	v		v						
1998					v	v		v	v			
1999								v	v			
2000									v			
2001										v		
2002										v		
2003										v		
2004										v		
2005												
2006												
2007												
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2009												
2010												
2011												
2012												
2013												
2014												
2015												
2016												
2017												
from:	ECM			ECM	ECM		ECM	ECM		ECM	ECM	ECM

	WD22			WD22		
model	Xterra Paladin			Paladin Xterra		
engine	KA24DE			VG33E		
	DDL	GST	DLC	DDL	GST	DLC
1989						
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						
1999	v	v		v	v	
2000	v	v		v	v	
2001	v	v		v	v	
2002	v	v		v	v	
2003	v	v		v	v	
2004	v	v		v	v	
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
from:	ECM	ECM	ECM	ECM	TCM	ECM

	Y32		Y61		Y61		Y61		Y61		Y61		Y61		
model	Cedric Gloria		Patrol		Patrol		Patrol		Patrol		Patrol				
engine	VG20E VG30E VG30DE VG30DET RD28		RD28ETi		TB45E		TD42 TD42Ti		ZD30DDTi						
	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC	DDL	GST	DLC
1989															
1990															
1991	v														
1992	v														
1993	v														
1994	v														
1995	v														
1996															
1997			v			v									
1998			v			v									
1999			v			v									
2000						v					v	v			
2001						v						v			
2002						v						v			
2003						v						v			
2004								v	v			v			
2005												v			
2006															
2007															
2008															
2009															
2010															
2011															
2012															
2013															
2014															
2015															
2016															
2017															
from:			ECM		ECM			TCM			ECM	ECM			

	Z32			Z50		
model	300ZX			Murano		
engine	VG30DE			QR25DE VQ35DE		
	DDL	GST	DLC	DDL	GST	DLC
1989	v	v				
1990	v	v				
1991	v	v				
1992	v	v				
1993	v	v				
1994	v	v				
1995	v	v				
1996	v	v				
1997	v	v				
1998	v	v				
1999	v	v				
2000	v	v				
2001						
2002						
2003				v	v	
2004				v	v	
2005				v	v	
2006				v	v	
2007				v	v	
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
from:	ECM			ECM	ECM	

	QX4					
model	Infinity QX4 Terrano regulus					
engine	VG33E					
	DDL	GST	DLC	DDL	GST	DLC
1989						
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997	v	v				
1998	v	v				
1999	v	v				
2000	v	v				
2001						
2002						
2003						
2004						
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2006						
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2009						
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2011						
2012						
2013						
2014						
2015						
2016						
2017						
from:	ECM			ECM	ECM	

#### 8.4 Nissan Vehicle diagnostic socket pin definition

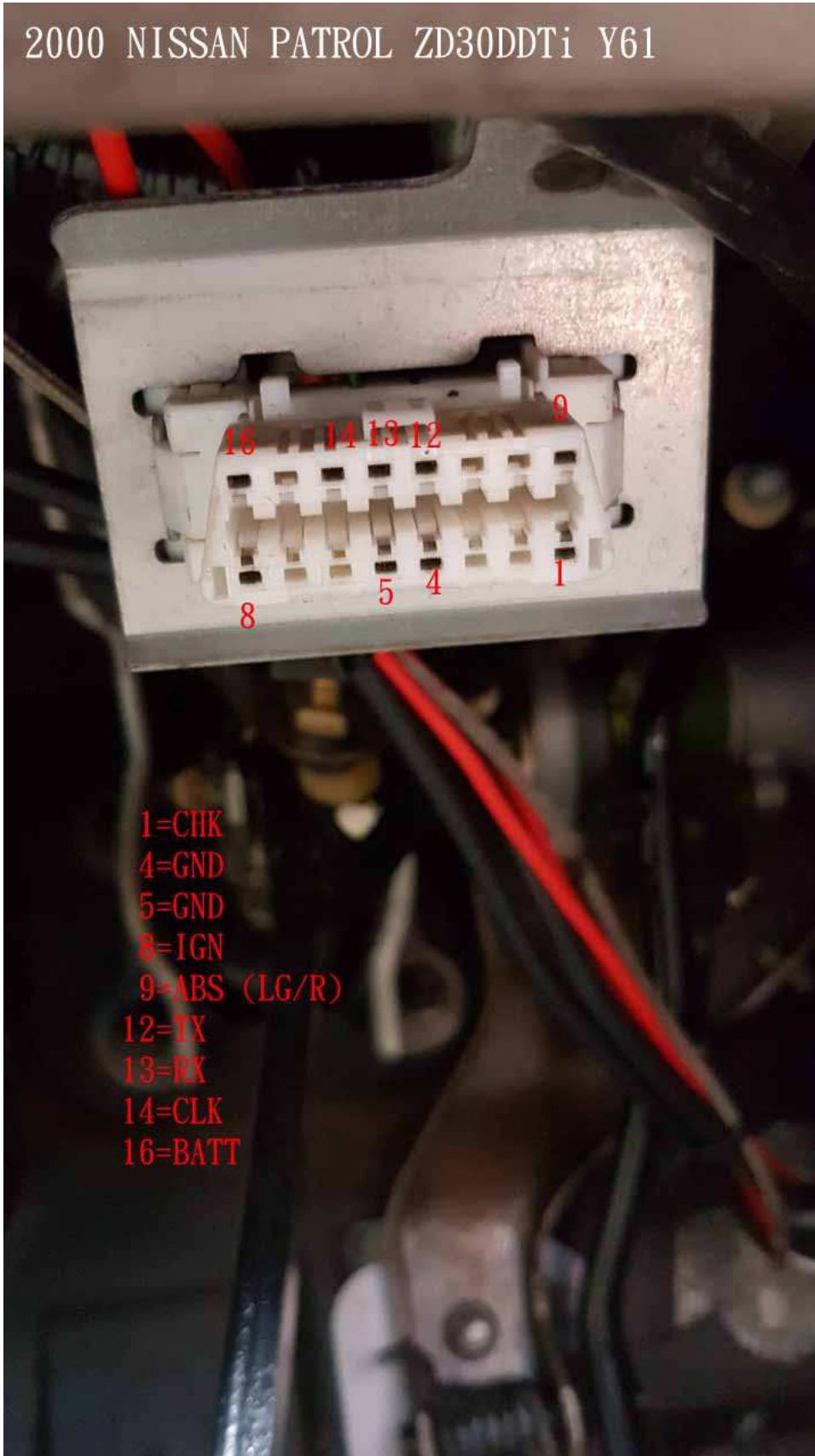
PIN	DIRECTION	DESCRIPTION
ABS		Anti-Lock Brake System Diag-L, connect to ground for self-diagnostic
Clock		Automatic speed control device (ASCD) clock
Batt		Battery voltage
CHK	ECU<CONSULT	CHK=Diagnosis activation/start, short CHK and IGN for self-Diagnosis only
CLK	ECU<CONSULT	Clock, synchronization signal
IGN		Ignition switch, Key switch
RX	ECU<CONSULT	Receive, data input to control unit
TX	ECU>CONSULT	Transmit, data output from control unit
CDCV	ECU>CONSULT	evaporative canister vent control valve voltage
K		OBD2 protocol K-line (ISO 9141-2)
GND		Ground
SSS		Airbag & Safety seatbelt self diagnostic
W/L flash		ABS Warning lamo flashing
EVAP		EVAPORATIVE EMISSION (EVAP) CANISTER VENT CONTROL VALVE

Wire Code	Wire color
B	Black
W	White
R	Red
G	Green
L	Blue
LG	Light Green
BR	Brown
OR	Orange
P	Pink
PU	Purple
GY	Gray
SB	Sky Blue
CH	Dark Brown
DG	Dark Green

## 8.5 Example of DLC pin definition

You can find the definition from the **EC.pdf** in the service manual.

(2000 Patrol ZD30DDTi Y61, seen from terminal side):



## 8.6 Vehicle with 14-pin DDL (pin function definition with wire code):

From	To	chasis	Model	Engine	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1994	1999	A32	Cefiro Maxima	VQ20DE VQ30DE	RX BR/Y	TX P		ABS P/B		CHK W/R	IGN R/Y	GND B	CLK LG	GND B	SSS G/R			
1997		A32	Maxima	VQ30DE	RX BR/Y	TX P	Clock LG	ABS P/B			IGN R/Y	GND B	CLK LG					
1998		A32	Maxima		RX BR/Y	TX P					IGN R/Y	GND B	CLK LG					
1990	1995	B13	100NX NX1600 NX2000 Sentra Sunny	CD17 GA16DE GA16DS GA14DS GA13DS E10S SR20DE	RX Y/B	TX Y/R				CHK W/G	IGN W/G	GND B	CLK Y					
1994		B13	Sentra	SR20DE	RX	TX					IGN	GND B	CLK					
1995	1996	B14	Sentra 200SX	SR20DE	RX G/B	TX GY/L					IGN G	GND B	CLK G/W					
1995	1999	B14	Sentra	GA14DE GA15DE GA16DE	RX G/B	TX GY/L				CHK G/R	IGN G	GND B	CLK G/W					
1997	1999	B14	Sentra 200SX	GA16DE SR20DE	RX G/B	TX GY/L					IGN G	GND B	CLK G/W					
1979	1993	C23	Serena	GA16DE SR20DE LD20	RX	TX				CHK	IGN	GND	CLK					
1991	2002	C23	Serena	GA16DE SR20DE LD20														
1998	D22	Frontier Navara	KA24DE	RX Y/R	TX GY/L						IGN W/B	GND B/Y						
1999	D22	Frontier Navara	KA24DE VG33E	RX Y/R	TX GY/L						IGN W/B	GND B/Y						
2000	D22	Frontier Navara	VG33E	RX Y/R	TX GY/L		ABS CR				IGN W/B	GND B/Y						
1992	2003	K11	March Micra	CG10DE CG13DE														
1998		L30	Altima	KA24DE	RX G/B	TX GY/L					IGN G/N	GND B	CLK G/W					
1999		L30	Altima	KA24DE	RX G/B	TX GY/L					IGN W/B	GND B	CLK G/W					

Fro m	To	chasis	Model	Engine	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1990	1995	N14	Pulsar	CD20 GA14DS GA16DS SR20DE SR20DET	RX Y/B	TX Y/R				CHK W/G	GND B	IGN W/G	CLK Y					
1995	2000	N15	Pulsar	GA15DE SR16VE SR18DE SR20DE	RX G/B	TX G/Y/L				CHK G/R	GND B	IGN G	CLK G/W					
1990	1995	P10	Primera Infiniti G20	SR20DE	RX Y/B	TX Y/R				IGN Y	GND B	IGN Y	CLK Y/W					
1997		P11	Primera															
1989	1994	R32	Skyline	CA18i RB20E RB20DE RB20DET RB25DE RB26DE RB26DET	RX	TX				CHK	GND	IGN	CLK					
1993	1998	R33	Skyline	RB20E RB25DE RB25DETT RB26DETT RB28DET	RX	TX				IGN RY	GND B	IGN RY	CLK LG					
1999	2002	R34	Skyline	RB20DE RB25DE RB25DET	RX	TX				CHK	GND	IGN	SP speed					
1996	2000	R50	Pathfinder	VG33E	RX W	TX L				IGN B/W	GND B	CLK OR						
1997	1998	R50	Infinity QX4															
1998	2000	R50	Pathfinder	VG33E	RX W	TX L				IGN B/W	GND B	IGN B/W						
1991	1993	S13	180SX Silvia	SR20DET	RX G/B	TX G				IGN B/W	GND B	CLK G/W						
1995	1999	S14	240SX	KA24DE	RX G/B	TX G				IGN G	GND B	CLK G/W						
1995	1999	S14	200SX Silvia	SR20DET	RX G/B	TX G				CHK G/R	GND B	CLK G/W						

From	To	chasis	Model	Engine	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	2003	S15	240SX Silvia	SR20DET	RX BR/Y	TX SB			CK G/R	IGN G	GND B							
1990	1992	U12	Stanza altima	KA24E	RX Y/B	TX Y/R			CK W/G	IGN W/G	GND B							
1994	2000	U13	Altima	KA24DE	RX	TX			CK G/R	IGN G/R	GND B							
1995	1997	U13	Altima	KA24DE	RX Y/B	TX Y/R					IGN BR							
1992	1997	V40	Quest	VG30E	RX	TX					IGN GND							
1998	V40	Quest	VG30E	RX Y/R	TX Y/B					IGN L								
1999	V41	Quest	VG33E	RX Y/R	TX Y/B					CK L/W								
1992	Y32	Cima Infiniti Q45	VG30DET VH41DE															
1995	2001	Y33	Cima Infiniti Q45	VQ30DET VH41DE														
1997	2010	Y61	Patrol Safari	TB42S TB45E TD	RX Y/G	TX Y/R			CK Y/B	IGN W/B	GND B							
1998	Y61	Patrol	RD28ETi ZD30DDTi	RX Y/G	TX Y/R			ABS LG/R		CK L/G	IGN W/B	GND B						
1999	Y61	Patrol	RD28ETi ZD30DDTi	RX Y/G	TX Y/R			ABS LG/R		CK L/G	IGN W/B	GND B						
1989	2000	Z32	300ZX Fairlady Z	VG30DE VG30DETT	RX L	TX W					IGN G		GND B					
1997	2003	Y61	Patrol	TB42S TB45E RD28ETi TD42	RX L	TX W					CK L/G	IGN G	GND B					
1998	Y61	Patrol	RD28ETi	RX Y/G	TX Y/R					CK L/G	IGN W/B	GND B						
1999	Y61	Patrol	TB45E TB45S	RX Y/G	TX Y/R							GND B						
2000	Y61	Patrol	ZD30DDTT	RX Y/G	TX Y/R													
2001	Y61	Patrol	TB45E	RX Y/G	TX Y/R													
2004	Y61	Patrol	TD42Ti	RX Y/G	TX Y/R								IGN G	GND B				

**8.7 Vehicles with 16-PIN DLC, DDL compatible (TX and RX pins, function definition with wire color):**  
**D22 2000 (VIN from 343314) has different DLC pin definition in service manual.**

From	To	Base	Model	Engine	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	2003	A33	Cefiro	VQ20DE VQ30DE	CHK BR		GND B	GND B	K/SRS OR	IGN G			ADJ GY	TX P	RX BR/Y			Batt Y/OR		
2002		A33	Maxima	VQ30DE VQ35DE	CHK BR		GND B	GND B	K OR	IGN G				TX P	RX BR/Y			Batt Y/R		
2003		A34	Maxima	VQ35DE																
2000	2006	B15	Sentra	QG18DE SR20DE			GND B	GND B	K LG	IGN G				TX GY/L	RX G/B			Batt R/B		
2004	2012	C11	Latio Tiida Versa Dodge Trazo	HR16DE			GND B	GND B	CAN-H L					TX BR	RX R			Batt V		
1999	2002	C23	Serena QRV Vanette	SR20DE	CHK		GND	GND	K	IGN				TX	RX			Batt		
1999	2005	C24	Serena	SR20DE QR20DE QR25DE	CHK		GND	GND	K	IGN				TX	RX			Batt		
2000		D22	Frontier	KA24DE			GND B	GND BY	K LG/R					TX GY/L	RX Y/R			Batt R/G		
2000		D22	Frontier VIN from 343314	KA24DE			GND B	GND BY	K LG/R					TX GY/L	RX Y/R			Batt R/G		
2000		D22	Frontier	VG33E			GND B	GND BY	K LG/R					TX GY/L	RX Y/R			Batt R/G		
2000		D22	Frontier VIN from 343314	VG33E			GND B	GND BY	K LG/R					TX GY/L	RX Y/R			Batt R/G		
2001	2004	D22	Navara NP-300 Terrano	KA24DE Z24S	CHK G/R		GND B	GND BW		IGN GY				TX GY/L	RX G/B			Batt R/G		
2006		D22	Navara	KA24DE TD27 YD25DDTi ZD30DDT	CHK G/R		GND B	GND BW		IGN GY				TX GY/L	RX G/B			Batt R/G		

From	To	Base	Model	Engine	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Batt W
																					Batt R/W/R
2001	2012	E25	Caravan Urvan Isuzu Como	KA24DE	CHK GY/R	GND B	IGN V/L	IGN V/L	TX SB	TX R	Batt W										
2000	G10	Bluebird Sylphy	QG15DE QG18DE	CHK O/R	GND B/W	GND B	K LG	IGN Y/G	TX GY/L	TX GY/L	Batt R/B										
2000	L30	Altima														K L/B	IGN ABS OR/B	TX GY/L	TX GY/L		
2001	L30	Altima	KA24DE													K L/B	IGN ABS OR/B	TX GY/L	TX GY/L		
2002	L31	Altima	QR25DE VQ35DE	CHK G/R	GND B/W	GND B	K OR	IGN G	TX LG	TX BR/Y	Batt Y/R										
2001	2004	R50	Pathfinder Infiniti QX4	VG33E VQ35DE	CHK R/Y	GND B	K LG/R	IGN BMW	ADJ GW	TX L	TX W	BATT Y/L									
2001	V41	Quest	VG33E	CHK L/W	EV/AP LG/B	GND B/R	K Y/G	IGN L	TX Y/B	TX Y/R	IGN L/Y	Batt R									
2002	V41	Quest	VG33E	CHK L/W	CDCV LG/B	GND B/R	K Y/G	IGN L	TX Y/B	TX Y/R	IGN L/Y	Batt R									
2000	WD22	Xterra Paladin Roniz	KA24DE													K/ABS LG/R	IGN W/B	ABS W/L flash Y/R	TX GY/L	TX GY/L	Batt R/G
2002	WD22	Xterra	VG33E													K/ABS LG/R	IGN W/B	ABS W/L flash Y/R	TX GY/L	TX GY/L	Batt R/G
2000	Y61	Patrol	ZD30DDT1	CHK L/G		GND B	IGN W/B	IGN W/B	ABS LG/R	TX Y/R	TX Y/G	Batt W/R									
2001	Y61	Patrol	TB45E	CHK Y/B															TX Y/R	TX Y/G	Batt W/R

## 9. Hardware Compatibility

### 9.0 Smartphone compatibility

Update	Hardware	Compatible	Smart phone	Android platform	Syndrome
2016.08.25	NISBIE_BT2_V10	X	Asus ZenFone 2 Z00AD	5.0	App init fail
2016.08.25	NISBIE_BT2_V10	V	Benq B506_TW	5.1	
2016.08.25	NISBIE_BT3_V20	V	Sony Z5		
2017.05.19	NISBIE_BT3_V20	X	Sony Z2		
2017.05.31	NISBIE_USB	V	Sony Xperia SP C5303	7.1.2	
2017.09.11	NISBIE_BT3_V21	V	Sony C7		
			Sony Z3		
2017.10.18	NISBIE_BT3_V22A	V	HTC Desire 816	6.xx	
2017.10.18	NISBIE_BT3_V22A	V	HTC Desire 826	6.xx	
2017.10.18	NISBIE_BT3_V22B	X	Samsung Galaxy S6	7.0	cannot find Nisbie bluetooth.
2017.12.04	NISBIE_BT3_V22B	X	Sony Z3		
2017.12.04	NISBIE_BT3_V22B	X	Sony Xperia X F5122	7.1.1	
2017.12.04	NISBIE_BT3_V22B	X	Infocus M210	4.2	Init fail
2018.03.15	NISBIE_BT3_V22C	V	Asus Nexus 7	6.01	
2018.03.15	NISBIE_BT3_V22C	V	Asus Zefone 5 T00F	4.2	
2018.03.15	NISBIE_BT3_V22C	V	Infocus M210	4.2	
2018.03.15	NISBIE_BT3_V22C	V	LG V20	7.0	
2018.03.15	NISBIE_BT3_V22C	V	Samsung Galaxy S8	7.1.1	
2018.03.15	NISBIE_BT3_V22C	V	Sony Z5	6.2	

## 9.1 Nisbie vs ELM327

