



# Fitting Instructions for SGI-100BT Universal Signal Interface to suit Toyota & Nissan Vehicles Specific instructions for VDJ7#, Hilux 05-15 & Nissan Patrol

## Important Information

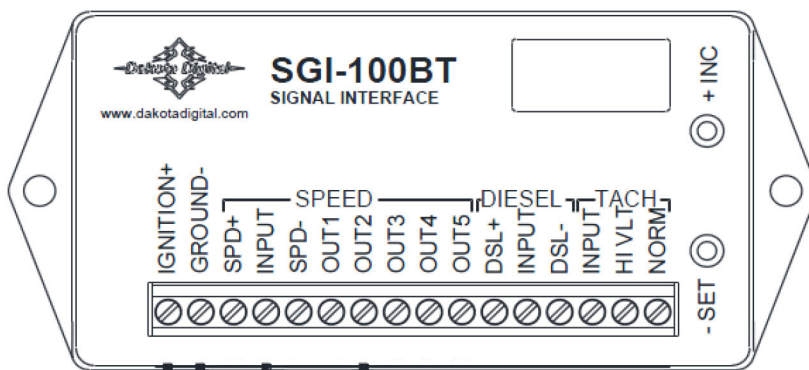
This instruction booklet can be used standalone for the above stated conversion but we would also recommend having a workshop manual for your vehicle and for the engine/transmission you are installing to cover any factory torque / installation settings to complete the installation.

The instruction booklet describes the required modifications (if any) and installation process in order for our kit to fit and work properly. These instructions **make no assumption** on whether additional changes need to be considered or made. It is highly possible that other aspects of your vehicle and/or third party products, eg. Engine, transmission etc. will have an impact on all that is required for you to achieve your desired outcome.

Marks 4WD Adaptors do not and cannot take responsibility for knowing everything that may impact on your conversion. Before beginning any work, thoroughly work through the sequence of changes, work and potential impact of your conversion. You must ensure you completely understand all the factors that may impact on achieving your desired results.



## Fitting instructions for VDJ7#



ppm values listed below are only valid after calibration is complete



### Step 1 Power wiring

You will need to find an ignition power and earth supply for the unit. The power can be found under the dash or from the power distribution box under the bonnet.

Use the supplied multi core wire. We use **red** for ignition + and white for earth -

### Step 2 Signal wiring

The signal is taken from the back of the instrument cluster.

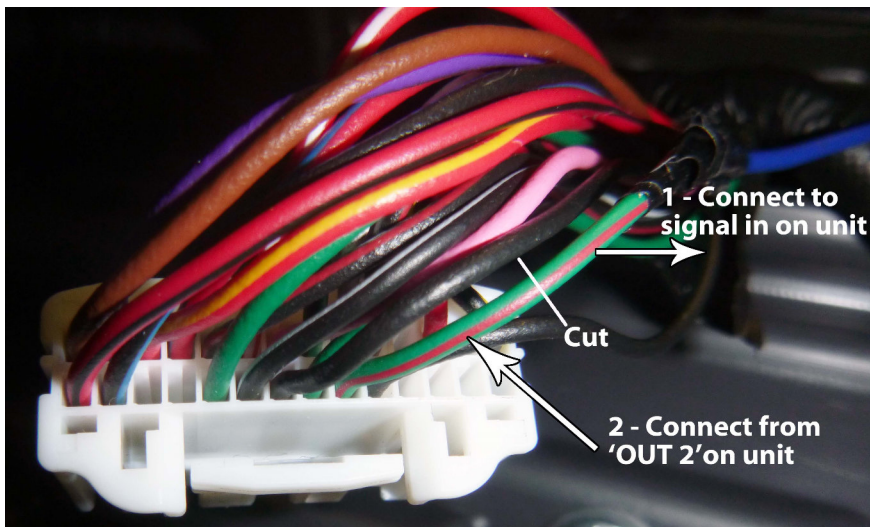
Remove the instrument cluster by unclipping the surround and removing the 4 x 10mm headed bolts.

The signal wire is located on the left hand plug. The wire is **green** with **red** trace.

See image 2.1



**Image 2.1** Left hand white plug



**Image 2.2** Left hand white plug

**Note:** The unit should be connected on the cluster (plug) side of a cruise control sense wire if fitted (in the photo (image 2.2) this is the blue wire on the top right)

The **green** with **red** trace wire will need to be cut as per image 2.2.

Connect the **green** wire from the multi core cable to the cut wire **1**

Connect the **yellow** wire from the multi core cable to the cut wire **2**

# Fitting instructions for Hilux 2005 - 2015

## Step 1 Power wiring

You will need to find an ignition power and earth supply for the unit.

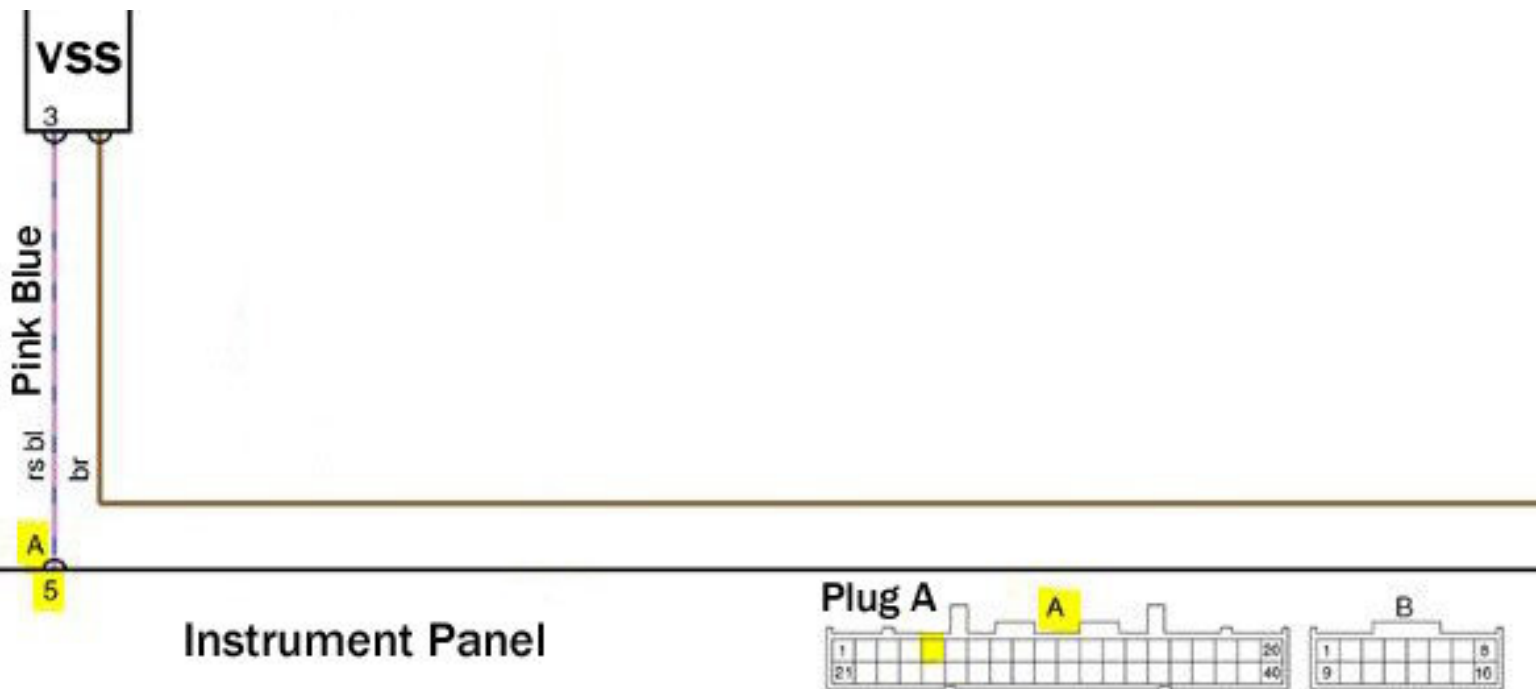
Use the supplied multi core wire. We use **red** for ignition + and white for earth -

## Step 2 Signal wiring

The signal is taken from the back of the instrument cluster.

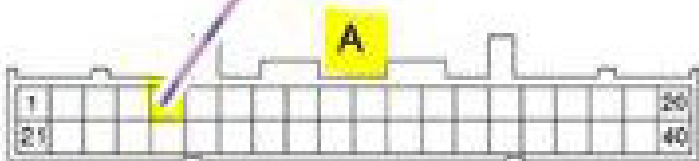
Remove the instrument cluster.

The unit will be fitted to the **Pink/Blue** wire located on plug A in position 5—Please see below



1 -  
Connect to 'Signal In' on unit

2 - Connect to 'Out 2' on unit



**Note:** The unit should be connected on the cluster (plug) side of an aftermarket cruise control sense wire if fitted.

The **Pink/Blue** wire will need to be cut  
Connect the **green** wire from the multi core cable to the cut wire 1

Connect the **yellow** wire from the multi core cable to the cut wire 2



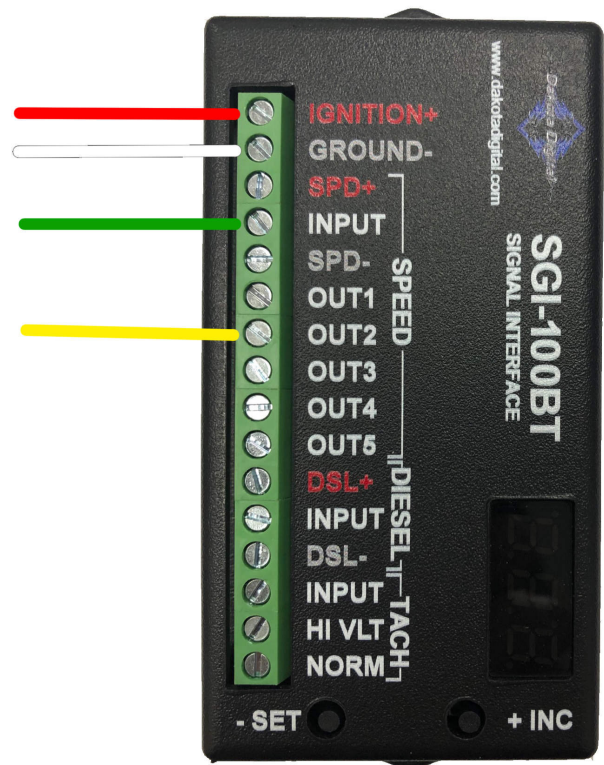
### Step 3 Speed Interface wiring

Connect the **red** wire to the power terminal.

Connect the white wire to the ground terminal

Connect the **green** wire to the Signal In terminal

Connect the **yellow** wire to the Out 2 terminal



### Step 4 Programming Unit

Hold the 'SET' button down and turn the ignition on

Release "SET" - Spd is displayed - press 'SET'

Release 'SET' - out is displayed - press 'SET'

Press 'INC' until 'H-H' is displayed - Press 'SET'

'CAL' is displayed - press 'INC' -

'In' is displayed - press 'SET'

'519' is displayed - press 'SET'

'Hi' is displayed - press 'INC' until 'lo' is displayed - Press 'SET'

'P-U' is displayed - press 'SET'

Press 'INC' until 'on' is displayed - press 'SET'

'end' is displayed - turn ignition off

### Step 5 Road test

Start the vehicle and go for a road test. Compare your speedo with a GPS.

To adjust while driving:

1. Press and hold both switches until "Set" is displayed.
2. Release the switches.
3. Tap the INC switch until "Spd" is displayed.
4. Press and hold the SET switch until "Adj" is displayed.
5. Release the switch. The display will show the current speed cal value.
6. To increase the speedometer reading, press and hold the + push button switch. To decrease the speedometer reading, press and hold the - push button switch. The calibration will only change when the vehicle is in motion and a speed signal is present.
7. To exit the speed adjust, press and hold both switches until "End" is displayed.

We recommend having the speedo on the dash read 2-3 km/h faster than the GPS speed to give you a slight safety margin.

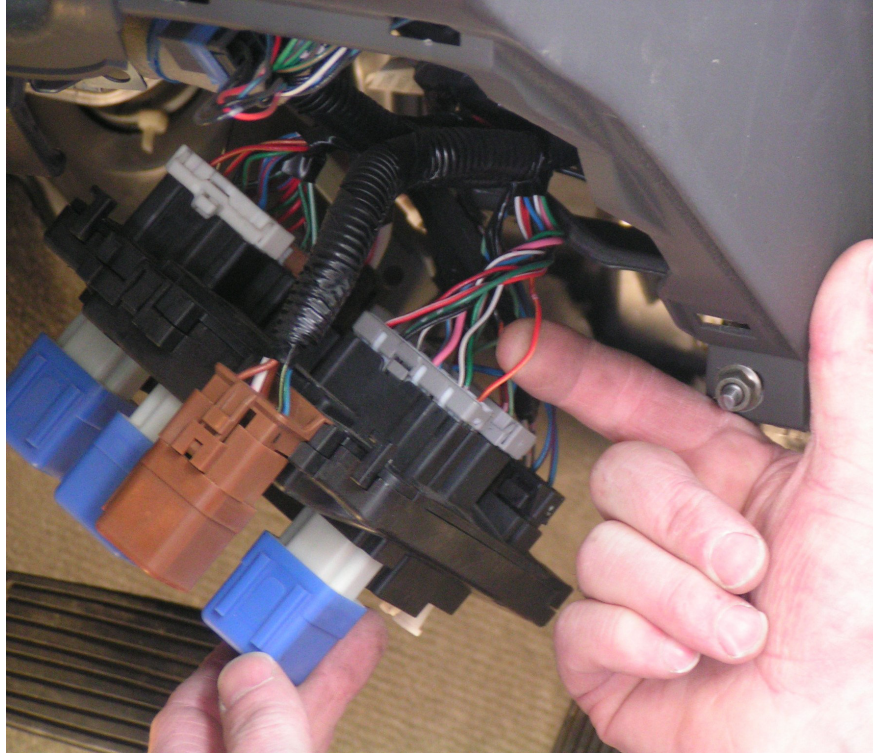
# Fitting instructions for Nissan Patrol

## **Step 1 Power wiring**

You will need to find an ignition power and earth supply for the unit. The power can be found under the dash at the bottom of the drivers side A pillar.

Use the supplied multi core wire. We use **red** for ignition + and white for earth -

On the Nissan GU Patrol you can find ignition power behind the fuse/relay block in the dash—see image 11



**Image 1.1** Ignition + wire



**Image 2.1** Wires/connector plug

## **Step 2 Signal wiring**

The signal can be taken from a few locations, the easiest is on the fuse/relay box located between the battery and the brake master cylinder or from the sensor on the transfer case.

The connector is grey and has a grey and blue wire located together—as per the image 2.1

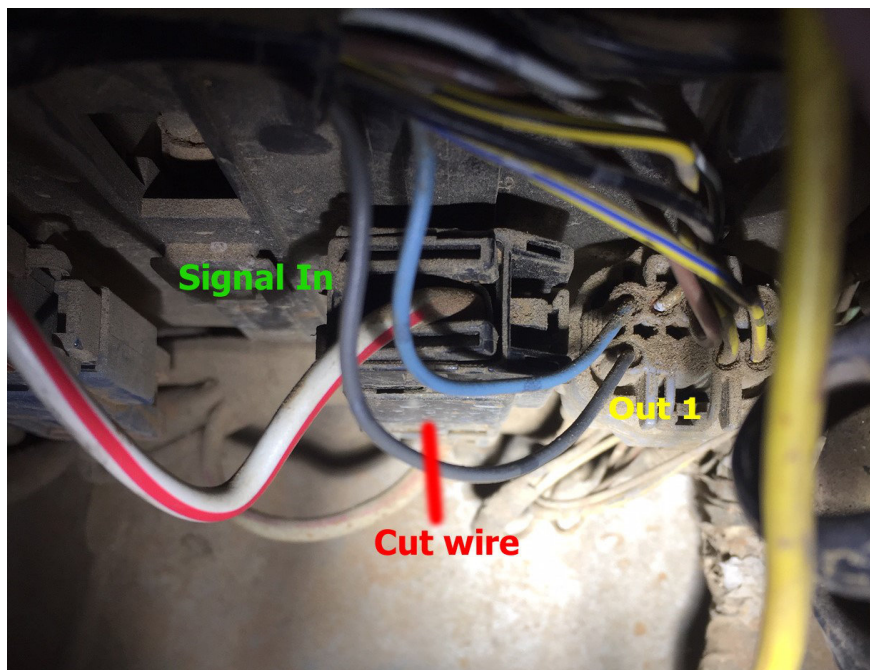


The grey wire needs to be cut and soldered onto, you can use the supplied multi core wire or another wire of similar gauge.

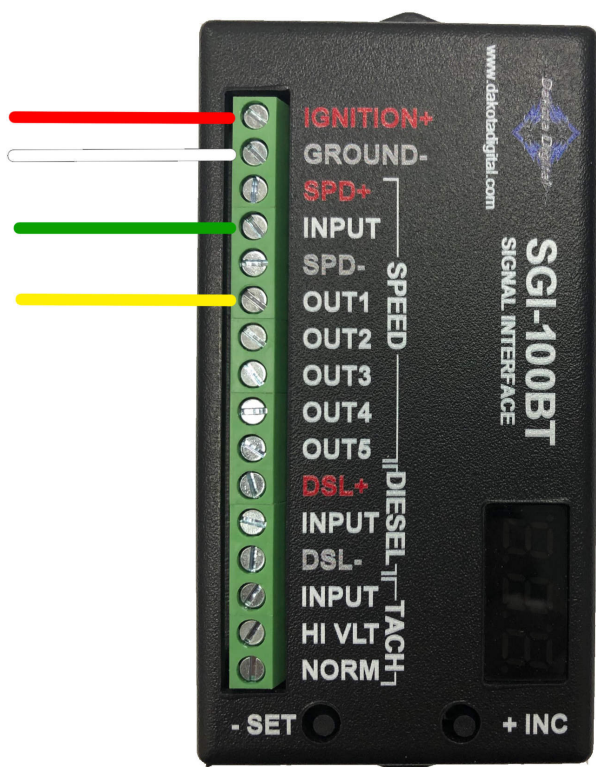
We used the green wire and yellow wire in the multi core cable.

Once you have joined onto the grey wire use heatshrink or tape to insulate the joins.

Run the cable inside the cabin.



**Image 2.2** Wiring



### **Step 3 Speed Interface wiring**

Connect the **red** wire to the power terminal.

Connect the white wire to the ground terminal

Connect the **green** wire to the Signal In terminal

Connect the **yellow** wire to the Out 1 terminal

### **Step 4 Programming Unit**

Hold the 'SET' button down and turn the ignition on '519' is displayed - press 'SET'  
Release "SET" - Spd is displayed - press 'SET' 'Hi' is displayed - press 'INC' until 'lo' is displayed - Press 'SET'  
Release 'SET' - out is displayed - press 'SET' 'P-U' is displayed - press 'SET'  
Press 'INC' until 'L-L' is displayed - Press 'SET' Press 'INC' until 'off' is displayed - press 'SET'  
'CAL' is displayed - press 'INC' - 'end' is displayed - turn ignition off  
'In' is displayed - press 'SET'

### **Step 5 Road test**

Start the vehicle and go for a road test. Compare your speedo with a GPS.

To adjust while driving:

1. Press and hold both switches until "Set" is displayed.
2. Release the switches.
3. Tap the INC switch until "Spd" is displayed.
4. Press and hold the SET switch until "Adj" is displayed.
5. Release the switch. The display will show the current speed cal value.
6. To increase the speedometer reading, press and hold the + push button switch. To decrease the speedometer reading, press and hold the - push button switch. The calibration will only change when the vehicle is in motion and a speed signal is present.
7. To exit the speed adjust, press and hold both switches until "End" is displayed.

We recommend having the speedo on the dash read 2-3 km/h faster than the GPS speed to give you a slight safety margin.

#### Terms and Conditions

Thank you for purchasing this product manufactured by Marks 4WD Adaptors. Components supplied in this kit are designed and machined for a specific conversion only as outlined in this guide. Modifications to or substitution for any of the components without the written consent of Marks 4WD Adaptors will void any possible warranty or return privileges.

The following instructions are intended as a guide and only for Marks 4WD Adaptors kits. If you do not fully understand the steps, modifications or changes required to complete the conversion, contact our sales department for more information. We recommend that you purchase a service manual pertaining to your vehicle for specific torque values, wiring diagrams and other related information.

## **Contact Information**

**Web:** <http://www.marks4wd.com/>  
**Email:** [sales@marks4wd.com](mailto:sales@marks4wd.com)  
**Phone:** + 61 3 9552 6555  
**Address:** 385-393 Lower Dandenong Rd  
Dingley Victoria 3172  
Australia