

I'm sorry i didn't write user manual for season 3/4 dash.

Please download season 1/2 user manual.

Connection points to car are the same.

Tacho

[http://www.ideegeniali.it/shop/attachment.php?id\\_attachment=100](http://www.ideegeniali.it/shop/attachment.php?id_attachment=100)

Speedo

[http://www.ideegeniali.it/shop/attachment.php?id\\_attachment=94](http://www.ideegeniali.it/shop/attachment.php?id_attachment=94)

Voicebox

[http://www.ideegeniali.it/shop/attachment.php?id\\_attachment=37](http://www.ideegeniali.it/shop/attachment.php?id_attachment=37)

Look at videos to integrate information for season 3/4.

Attached pdf with video links.

Dash S34 - Video.pdf

Some user prefer to connect to original wires with the "military splice" method, instead of connecting onto point on car plant.

Attached some info courtesy of Anthony Giannakis for connection points on car directly on wires (with the military splice method).

Kitt dash wire guide.pdf

Speed sensor connection has its own story. On some cars there is a sensor and a signal conditioning unit (the yellow buffer box). On some cars there is only mechanical speed sensor, but no electronic speed sensor, and you can't read vehicle speed electronically unless purchasing after market speed sensor.

Attached some info courtesy of Anthony Giannakis for speed sensor.

vss document-SANITIZED.pdf

Attached a picture of aftermarket speed sensor if your car hasn't got any electronic speed sensor already.

2504153-large.jpg

Please contact me again on email if you have any doubts on any wire.

I think i'll list here what each screw terminal is on each board.

## **COMPASS**

+12V: Power supply 12VDC or 13.8VDC (1)

GND: Power supply GND (Vehicle Ground) (1)

COM: Reserved for future inter-board and car pc single wire communication

DEMO: Leave unconnected for normal operations, connect to GND (e.g. use a switch to gnd) for demo

## **TACHO**

+12V: Power supply 12VDC or 13.8VDC (1)

GND: Power supply GND (Vehicle Ground) (1)

COM: Reserved for future inter-board and car pc single wire communication

TACH: Rpm sensor input (accepts a square wave)

OIL: Resistive to gnd input oil pressure

EGT: Resistive to gnd input coolant temperature

FUEL: Resistive to gnd input fuel remaining in tank

## **SPEEDO**

+12V: Power supply 12VDC or 13.8VDC **(1)**

GND: Power supply GND (Vehicle Ground) **(1)**

COM: Reserved for future inter-board and car pc single wire communication

SPEED: Vehicle speed sensor input (accepts a square wave)

PB: Pushbutton input: connect a pushbutton between PB and GND, will navigate through this board menu system for partial odometer and total odometer setting

LO, HI, VHF, UHF: Accept and shows status of a +12V signal, people usually connect:

LO: left turn indicator

HI: right turn indicator

VHF: high beam indicator

UHF: engine check indicator

## **VOICEBOX**

+12V: Power supply 12VDC or 13.8VDC **(1)**

GND: Power supply GND (Vehicle Ground) **(1)**

COM: Reserved for future inter-board and car pc single wire communication

DTMF: Momentary to ground to have voicebox play a random dtmf tone

e.g. a pushbutton to gnd

e.g. another board npn open collector output

suggested connection: to POWER board DTMF output. **(2)**

AUDIO, AUDIO: Connect audio input, speaker or line level.

suggested connection: line out of a car audio or car pc

or in parallel with left speaker amplified signal

NORMAL, AUTO, PURSUIT: Connect to GND to light up corresponding light

suggested connection: to POWER board **(2)**

S1, S2, S3, S4, S10: open collector npn output will light up an external lamp connected between +12V and these outputs

can only absorb a maximum of 200mA per channel. Don't connect bigger loads!

suggested connection: S1 to S4: to countdown

## **POWER**

+12V: Power supply 12VDC or 13.8VDC **(1)**

GND: Power supply GND (Vehicle Ground) **(1)**

COM: Reserved for future inter-board and car pc single wire communication

REM: Connect to +12V for normal operations. Leave unconnected for all led blank (off).

P, A, N, PWR, DTMF: npn open collector outputs (connect to GND when asserted)

P A N: will output a steady connection to GND when corresponding light is on.

Suggested connection: three wires to voicebox PURSUIT, AUTO, NORMAL **(2)**

PWR: will output a pulse to gnd when using power button. Can be used with anthony's power distribution module. **(3)**

DTMF: will output a pulse when changing between auto-normal-pursuit

Suggested connection: a wire to voicebox DTMF **(2)**

PB1, PB2, PB3, PB4 : If you use internal touch sensing with plastic overlay, leave unconnected.

If you use aluminium overlay, please remove the back daughter board with capacitive sensing and connect four external pushbuttons between PBx and GND.

Long story short:

- (1)** Connect 12VDC or 13.8VDC power supply into +12V and GND on all boards
  - (2)** Four wires between voicebox and power board: AUTO, NORMAL, PURSUIT, DTMF.
  - (3)** If you have anthony's power distribution module, ask him how to connect S10, REM, PWR.  
If you don't have: connect REM to +12V. Leave S10 unconnected. Leave PWR unconnected.
- Remainder is either pushbuttons to GND, or car sensors to car wires.