



## FM AT4G Wiring & LED Codes

| PIN  | COLOUR        | Description      | COMMENT                          |
|--|---------------|------------------|----------------------------------|
| 1  | Orange        | ADC Vin          |                                  |
| <b>*2</b>  | <b>White</b>  | <b>Ignition</b>  | <b>Ignition input 9~36v</b>      |
| 3  | Blue/Brown    | TTL (TxD)        | TTL                              |
| 4  | Orange/Brown  | Vout1            | 3.3v DC 250mA                    |
| 5  | Pink          | Input 1 Analogue | 0~36v                            |
| 6  | Blue/Yellow   | RS232 (TXD)      |                                  |
| 7  | Blue          | Input 1 Digital  | Low Level                        |
| 8  | Purple        | Input 3 Digital  | Low Level                        |
| 9  | Grey          | Input 4 Digital  | Low Level                        |
| 10   | Brown         | Output 2 Digital | Ground Out 200mA to relay Pin 86 |
| 11   | Brown/Blue    | Power Out        | 5V or 12V Output DC 2A           |
| 12   | Black         | Ground           |                                  |
| <b>*13</b>   | <b>Red</b>    | <b>Battery</b>   | <b>9~32v DC</b>                  |
| <b>*14</b>   | <b>Black</b>  | <b>Ground</b>    | <b>Chassis Ground</b>            |
| 15   | Green/Brown   | TTL (RxD)        | TTL                              |
| 16   | Orange/Yellow | Vout2            | 3.3v DC 250mA                    |
| 17   | Brown/Black   | Input 2 Analogue |                                  |
| 18   | Green/Yellow  | RS232 (RXD)      |                                  |
| 19   | Black/Green   | 1-WIRE           |                                  |
| 20   | Blue/Brown    | Input 2 Digital  | Low Level                        |
| 21   | Green         | Output 1 Digital | Ground Out 200mA to relay Pin 86 |
| 22   | Yellow        | Output 3 Digital | Ground Out 200mA to relay Pin 86 |
| 23   | Blue/Yellow   | CAN Low          | Low Level                        |
| 24   | Green/Yellow  | CAN High         | High Level                       |
| <b>Do NOT</b> attempt to disable the starter on a push button start vehicle        |               |                  |                                  |
| <b>NEVER</b> disable ignition circuits or circuits that will stop a moving vehicle |               |                  |                                  |

The minimum requirement for accurate tracking requires connection of pins 2, 13 & 14.

|    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

|        |       |          |
|--------|-------|----------|
| Pin 2  | White | Ignition |
| Pin 13 | Red   | Battery  |
| Pin 14 | Black | Ground   |



◇ The definition of the prints on the front of the shell

G: GPS Signal

C: COMMS (SIM Signal)

B: External power

◇ GPS indicator status

| Status                   | Indicator             |
|--------------------------|-----------------------|
| GPS off                  | Light off             |
| GPS signal is weak       | Light flashes         |
| GPS time synchronization | Light flashes quickly |
| <b>GPS positioning</b>   | <b>Light stays ON</b> |

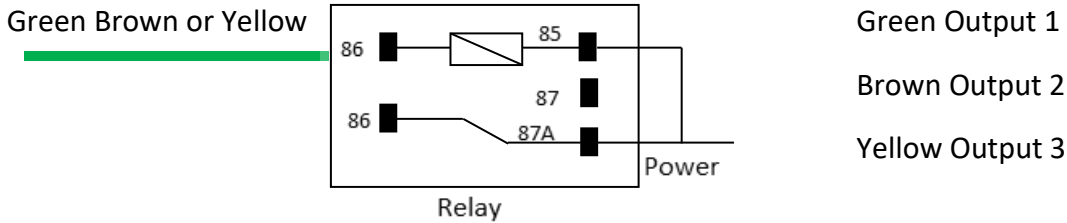
◇ COMM indicator status

| Status   | Indicator                                |
|--|--|
| Module closed                                    | Light off                                |
| Communication turned on for searching            | Light flashes slowly                     |
| Network signal available                         | Light flashes quickly                    |
| Registration completed, no access to Network     | Fixed flash changed to quick flash 1 sec |
| <b>Registration completed, access to Network</b> | <b>Light stays ON</b>                    |

◇ External power indicator status

| Status                            | Indicator             |
|-----------------------------------|-----------------------|
| No external power supply          | Light flashes         |
| <b>With external power supply</b> | <b>Light stays ON</b> |

### Digital output relay wiring



The relay can be used to disable the starter motor on key start vehicles. Do not attempt to disable a moving vehicle or a push button start vehicle. In this case we recommend a siren on the output instead.

Care should be taken when wiring relays on 24 volt vehicles that the relay is suited.

**Device Orientation** The 3D sensor of device can monitor accident and events of harsh driving behavior.

The accuracy of 3D sensor is limited by the installation direction and mounting stability.

Note: The upside of the shell must be facing upwards as shown in the picture below.

It is recommended to orientate the device in the same direction as the vehicle with the loom at the front or rear for best results.



### Wiring Notes

**Pin 2** (White) ignition should be wired to a source that stays live under crank conditions to avoid multiple ignition event logs. If Pin 2 is not connected the device may be configured to go into sleep mode to preserve the battery.

**Pin 13** (Red) should be wired to a source that remains live under crank conditions when starting to avoid volt drop alerts. When power is removed from Pin 13 the device battery will take over, then recharge when power is restored. This is ideal for vehicles with battery isolators.

**Pin 14** (Black) should be taken to the vehicle chassis. We do not recommend a ground source provided by another wire as it may change state under certain conditions.

**Testing and Support** – 08 93837833 or tech@neltronics.com.au

Once the device is installed you should have 3 green LED's. Cycle the key a few times to generate some data events and login to the account to check for these events. You want to see an accurate location, and at least 1 key on and off event. This may take a few minutes to come through in the 1<sup>st</sup> instance.

On the mobile apps you will have trips generated, which require a key on and off.