

## AT200 Installation Guide

### 1. Check that the back-up battery is fitted and plugged-in

- a. insert a SIM, the device should power-up, as indicated by the LEDs on each side of the connector:



← push SIM all the way in  
noting the position of the cut-out corner



...and check that LEDs light

### 2. If LEDs do not light-up, unclip the AT200 enclosure, remove the PCB assembly and check that the battery is plugged into the PCB connector:



← check that battery is plugged in here

- a. Do not attempt to remove the battery from the cover, once it has been stuck down, as prising or bending could lead to explosion/fire and smoke.

### 3. Fit the Cable

- a. The AT200 is supplied with a 3-way power / ignition cable (basic kit) or a 9-way cable (standard kit). Connect the supplied cable to the device 16-way connector.



3-way basic cable



9-way standard cable

### 4. Hook up the electrical connections

- a. Connect the RED and BLACK wires to a PERMANENT +12V/+24V vehicle power source via a 3A fuse. Connect the ignition sense input (Digital 1) to an ignition switched 12/24V signal (i.e. something that only goes live when the vehicle ignition is ON) via a 3A fuse

i. RED	+12 / +24V	1A FUSED
ii. BLACK	GROUND	1A FUSED
iii. WHITE	IGNITION	1A FUSED

- b. We recommend that all connections should be soldered to ensure reliable terminations. Crimps and IDC type terminations can be unreliable if used with the wrong tooling and/or wires sizes.
- c. All unused wires should be insulated to avoid undesired behaviour.

## 5. Connect the iButton Probe (if required)

- a. Fit the IB001 iButton probe in the desired position on the vehicle dashboard (requires drilling a hole) and then connect to the matching connector on the CB203 standard cable (accessories are not supported using the basic 3-way cable).



- b. Please refer to the Driver ID Application Note for more information regarding the use and configuration of iButton options and recommended iButton accessories.

## 6. Check status LEDs

- a. By now, the AT200 should have obtained a GPS fix and registered with GPRS service. Check the status LEDs to confirm. During normal operation the LEDs should:

- |              |       |                              |
|--------------|-------|------------------------------|
| i. GREEN LED | (GPS) | double flash once per second |
| ii. BLUE LED | (GSM) | single flash every 3 seconds |

- b. LED TROUBLE-SHOOTING:

- |                               |   |
|-------------------------------|---|
| i. GREEN LED SOLID (no flash) | no GPS fix  |
| ii. GREEN LED SLOW FLASH      | lost GPS fix  |
| iii. BLUE LED SOLID           | no GSM service  |
| iv. BOTH LEDs OFF             | device OFF, check SIM is inserted and power connected |

## 7. Mount the AT200 under the vehicle dashboard

- a. Choose a position towards the top of the dashboard and as far forwards as possible to give the optimum *view* of the sky through the vehicle windscreen
- b. There must be no conductive objects between the AT200 and the windscreen (i.e. nothing metallic, foil or carbon based)
- c. Secure the AT200 to a flat surface with double sided foam adhesive tape, being sure to degrease the vehicle side with an alcohol wipe. Alternatively, the AT200 can be secured with a tie wrap.
- d. Make a note the device orientation with respect to the vehicle (e.g. connector facing rear of vehicle) as this may be required later to set ORTN parameter for correct interpretation of accelerometer data for driver behaviour. Refer to the AT200 User Guide and the Driver Behaviour Application Note for more details.

## 8. Check Status and Commission Device

- a. Before replacing panels and leaving the vehicle, we STRONGLY recommend that you confirm normal operation and good communication, using either method below:
  - i. Calling the service provider to check that the device is online, confirming external power, GPS, GPRS and driver ID status.
  - ii. Send \$TEST to the device by SMS and confirm the response.
    1. Confirm device IMEI is as expected
    2. Confirm power connection and availability (should be near 100%)
    3. Confirm GPS status and availability (should be near 100%)
    4. Confirm GSM status and availability (should be near 100%)
    5. Confirm all other status checks are "OK"
    6. Confirm correct reporting of IGNITION state
    7. Confirm correct operation of immobiliser (if fitted)
  - iii. Any exceptions to the above should be addressed before leaving the vehicle
  - iv. Please refer to the OTA Device Test application note for further details and examples of \$TEST command responses and advice on interpretation / handling of errors.

Example \$TEST command response:

```
TEST:AT240
6.0.9.0
357322042745742
02 UK
PWR:12.5V (100%)
BAT:100%
GPS:OK (95%)
GPRS:OK (98%)
APN:OK
SKT:OK
ACK:OK
IGN:OK (OFF)
IMOB:OFF
```