to a clean non-fused terminal with a consistent voltage within the range of 8 to 28 volts by a professional. **BEFORE INSTALL PLEASE READ** 

Check all parts are supplied (refer to full installation tr. guide for reference) before commencing installation.

Refer to the full-installation guide before using this quick installation guide. The full installation guide can be downloaded from our website www.internationaltelematics.com. Always refer to the Vehicle's 'Owner's Manual' before starting installation of ibright'" units. The position of the ibright'" unit. connections and cords must not obstruct the driver or any moving parts of the vehicle. Wiring must be connected Before a SIM Card is installed or removed from the ibright" X- Series Unit, the 'POWER' must be disconnected otherwi it may cause damage to the device or SIM.

3 Amp Fuse

Protection Diode

Half-Duplex RS485 Device

Switch

ID Holder

Analogue Sensor

Battery (+)

Registration and Provisioning ibright™ Wiring Diagram **Pre-Installation** Installation

# **Quick Installation Guide**



www.internationaltelematics.com International Telematics Product Quick Install Guide Version 1 Version Date 06 July 2007



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### **D-Series Installation**

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### $ibright^{\text{\tiny{TM}}} into\ OBD\ II\ Connection.$

Connect the ibright<sup>TM</sup> D- Series to the vehicles OBD II Port. Check LED's, then secure into place with easy access to the



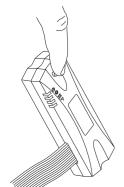


## ibright™ Synchronising with OBD

Press ibright<sup>™</sup> X- Series and D- Series Sync Buttons for a minimum of 5 seconds each within 15 seconds of each other.



After pressing both Sync buttons on both the X and D- Series, the units will create a secure wireless connection within 40 seconds.



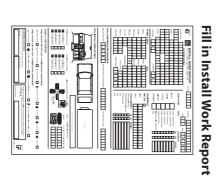
### <u>\$</u> + 12Vdc / 24 Vdc Battery ibright™ Wiring Diagram AGND (pin10) - 5.25V Supply Out (pin1) -■ DGND (pin14) — — Third Party RS232 Rx In (pin9) RS232 Tx2 Out(pin18) =

RS485+(pin19) ----

RS485-(pin20)

## **Registration and Provisioning**

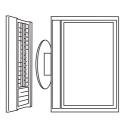
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## Provisioning On-Line or via Bluetooth PDA

Provisioning of the ibright<sup>™</sup> X– Series can be completed on-line utilising the information captured on the 'Install Work Report'. Alternatively a Bluetooth / Hand-held device that is Windows Mobile 5 based Pocket PC / Pocket PC Phone with the ibright<sup>™</sup> 'Provisioning software' can be used. For security reasons, ibright™ on-line registration access and ibright Provisioning Windows Mobile 5 Software is available from your nearest International Telematics office.







### Pre-Installation:

### **Scoping and Checking Steps**



### Tamper Sticker After SIM Install

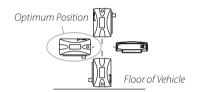
Lock the lid of the X– Series back in place after SIM Card has been installed and use the allocated 'Tamper Proof' sticker to seal the lid before commencing installation.



### Scope ibright™ X– Series Position

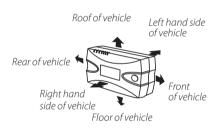
The positioning of the ibright<sup>™</sup> X– Series unit is imperative to ensure the unit works correctly.

Install the unit in the vehicle, orientated as per one of these four options;



### Identify and Document Orientation and where Unit is Installed.

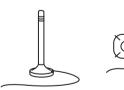
Document on the 'INSTALL WORK REPORT'.



### ibright™ X- Series Antennas

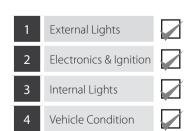
ibright<sup>™</sup> X– Series has internal GPS and GPRS antennas. Should placement of the ibright<sup>™</sup> X– Series hinder the reception of the internal antennas, external antennas should be fitted. Please refer to ibright<sup>™</sup> training guide for specific antennas and installation requirements.

NOTE: Antennas should not be connected or disconnected whilst 'POWER' is on.



### **Pre Vehicle Checks**

International Telematics recommend that all installation companies and installers perform thorough pre and post vehicle electronic checks. This ensures installation has not effected the working condition of the vehicle.



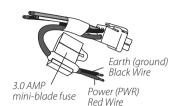
### **Installation:**

### **Quick Guide Steps**



### 6 Power & Earth Wires

Ensure you have the correct Power and Earth (Ground) wires



### **7** Connect Dedicated Earth

The 'Earth Wire' should always be connected before the power wire. Securely connect the earth wire to a 'Dedicated Earth Chassis Point' as illustrated here.



### Connect 4 Circuit Plug

Connect the 'Power/Earth' 4 circuit plug into the allocated port. Ensure the connection 'clicks' into place and is a locked connection.

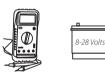


### Test for Continuous Voltage

Using a multi-meter test all power supplies before connecting ibright™ equipment.

Check that the power wire can connect directly to a power bar or common terminal.

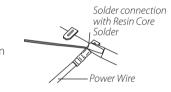
ibright $^{\text{m}}$  has an internal battery voltage meter and a connection to a source that feeds directly from the battery is required.



### Connect Power Wire to Source

Connect to a continuous +12 to +24 volt DC battery. The nominated power source should not have a drop of more than 0.5 volts between the mounting point & the battery.

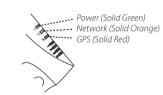
Connect the wires securely (ideally solder).



### Check LEDs for Unit Status

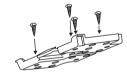
Check that the 'Power',' Network connection', and 'GPS Connection' are solid lights.

A 'flashing' light indicates the unit is trying to obtain a connection.



### Connect Mounting Bracket

Screw on the bracket at an angle of 90° as illustrated in Fig. 2 before attaching ibright™ X– Series unit.



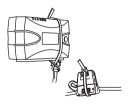
### Attach ibright Securely

Attach the ibright™ unit to the mounting bracket.
Use a cable-tie around the ibright™ unit and bracket for additional security.



### Tamper Proof if required

Should there be a requirement to tamper proof the ibright  $\ ^{\mathtt{m}}$  unit, use cables ties.



### Post Vehicle Checks

International Telematics recommend that all installation companies and installers perform thorough pre and post vehicle electronic checks. This ensures installation has not effected the working condition of the vehicle.



### **Federal Communications Commission Statement**

### DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Ingenitech (NZ) Limited, of 3A, 125 The Strand, Parnell, Auckland 1010, New Zealand, declare under our sole responsibility that the product, TMU1000 (ibright™ X-Series unit), to which this declaration relates, complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

### **Caution: Exposure to Radio Frequency Radiation**

The radiated output power of the TMU1000 is well below the Federal Communications Commission (FCC) radio frequency exposure limits. Nevertheless, it is important that the TMU1000 is installed and used in such a manner that the potential for human contact during normal operation is minimized.

When connecting an external antenna to the TMU1000, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. To avoid the possibility of exceeding the FCC Radio frequency exposure limits, human proximity to the antenna must not be less than 20 cm (8 inches) during normal operation.

### **Federal Communications Commission Notice**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a typical fleet asset installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio or television communications. There is no guarantee that interference will not occur at any particular installation. If the TMU1000 does cause harmful interference to radio or television communications, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Re-orient or relocate the radio or television device's receiving antenna.
- Increase the distance between the TMU1000 and the radio or television device.
- Connect the TMU1000 to a power supply on a circuit different to the circuit to which the radio or television device is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **Modifications**

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Ingenitech (NZ) Limited may void the user's authority to operate the equipment.