

INSTALLATION GUIDE

Version: 4.3 (UCAST)

STEP SUMMARY		PAGE
1	Install SIMs (IF APPLICABLE)	5
2	Fit mounting bracket	5
3	Mount Screen	6
4	Connect Loom to vehicle	6
5	Connecting the meter (OPTIONAL)	8
5a	Schmidt Gx meter	8
5b	Schmidt Gx meter with EFTPOS terminal	9
5c	Martin Mxx meter	10
5d	Martin Mxx meter with EFTPOS terminal	11
5e	Novax Leda meter	12
5f	Novax Leda meter with EFTPOS terminal	12
5g	Cabcharge meter with EFTPOS terminal	13
6	Fit GPRS (mobile phone) antenna	14
7	Connect Screen to Loom	15
8	Configure SmartMove	16
9	Test SmartMove	17

Fleet Download Key _____

Driver Login (for testing) _____

Schematic

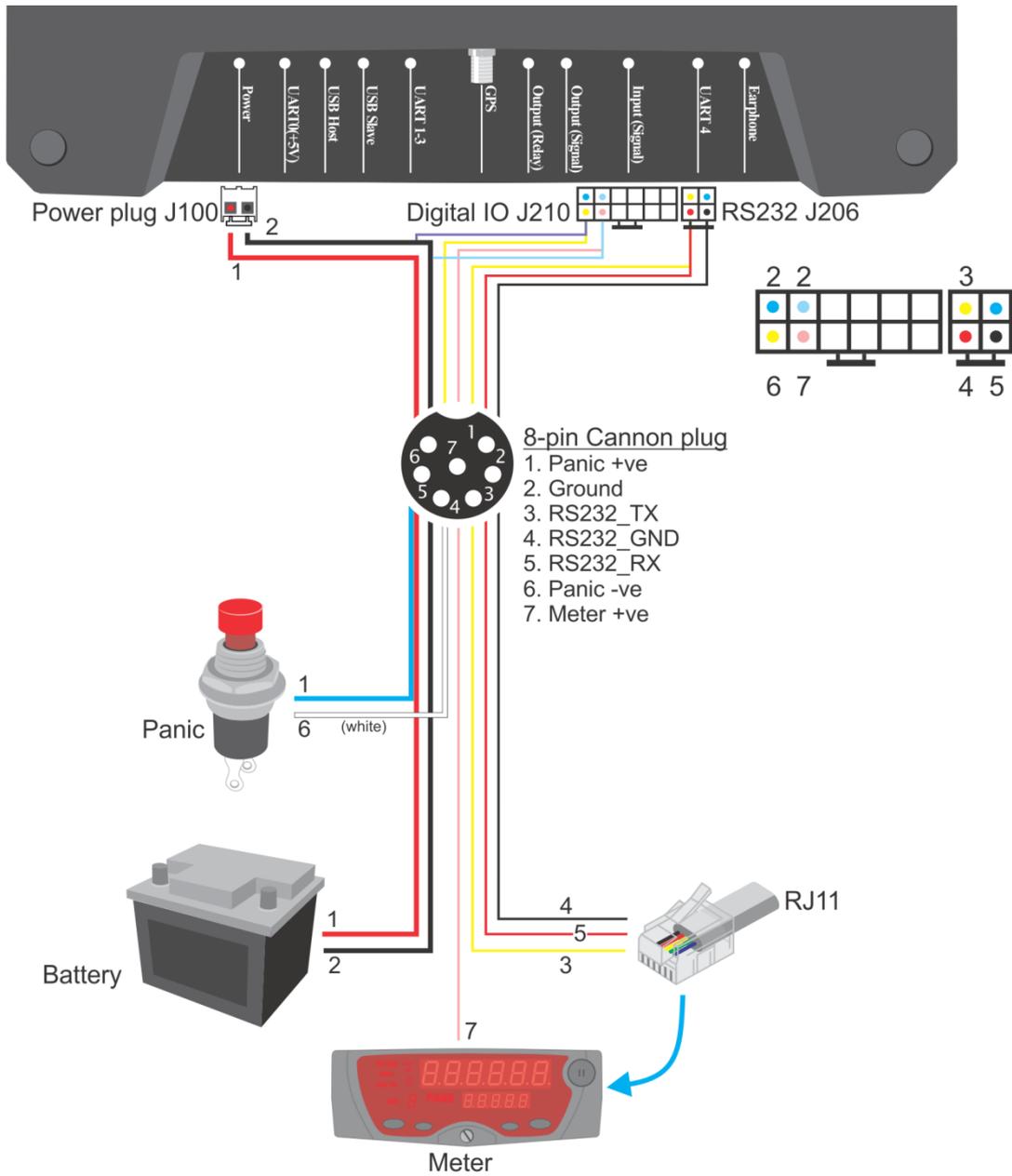
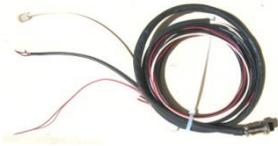


Figure 1: Wiring diagram

See Step 5 for detailed notes on connecting a meter to SmartMove.

Equipment Checklist

The SmartMove system consists of:

Components:	
1x UCAST screen and cabling	
1 x Cable Installation Loom	
1x Meter listen adapter. Allows SmartMove to connect to the meter OR share the meter with EFTPOS terminal (in listen mode).	
1x GPS (Global Positioning System) Antenna	
1x GPRS Antenna	
1x Panic Switch	

1 x Fuse (not supplied)	
1 x Power diode (not supplied)	
1x Mounting Bracket Kit	

Step 1 Install SIMs (IF APPLICABLE)

<p>Remove the cover at the back of the screen, the one that is beneath the GPRS (mobile phone) antenna connector.</p>	
<p>Insert the SIM cards as shown, with the metal contacts facing down.</p>	
<p>Screw the cover back on.</p>	

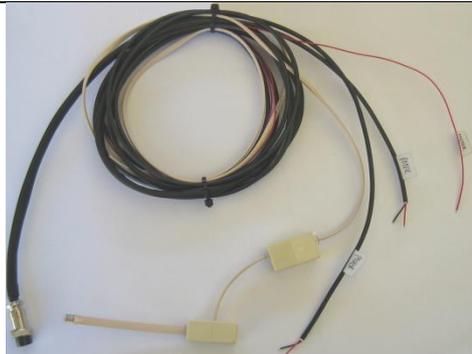
Step 2 Fit Mounting Bracket

<p>Assemble the Mounting Bracket</p>	
<p>Attach the mounting bracket to the rear of the screen</p>	

Step 3 Mount Screen

<p>Holding the screen in an appropriate position, loosen the joints and adjust the arm to find a suitable location to attach the mounting pad. Ensure it doesn't interfere with the driver controls.</p>	
<p>Peel back the protective layer on the base of the mounting pad to reveal the 3M sticker pad, use this to adhere in the desired mounting position (generally on the dash to the right of the steering wheel). Use a couple of small screws to fix the mount permanently.</p>	

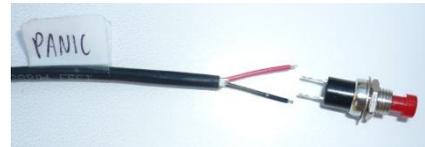
Step 4 Connect Loom to Vehicle

<p>Prepare the loom by removing the securing cable ties. The end with the silver cannon plug should be positioned near the screen mount so they can be easily connected once complete. Run the other cables through the dash so they are available in the foot well.</p>	
<p>Fit the GPS antenna. Normally this is fitted on the dashboard or on the windscreen using a sticky pad.</p>	
<p>The parts of the loom are labeled and should be connected as described in the Schematic.</p>	
<p>Connect the wires labeled 'Power' to a constant 12v power source; ideally directly to the battery. Connect using a fuse and diode (the recommended diode has part no. 1N5408) to protect the system.</p>	

Connect the red wire to a meter output which measures 12v when engaged, and 0v when vacant. Normally this is the output that turns the dome light on and off. SmartMove uses this to determine the availability of the taxi.



The panic switch can be mounted in any convenient, accessible location, generally in or near the steering column. Attach the switch to the cable labeled 'Panic' on the loom.



The final cable look like a phone cable, and is used for collecting information from the meter. Please see Step 5 for information on this depending on the meter installed.



Step 5 – Connecting the meter (OPTIONAL)

If fare details are to be transferred from the meter to SmartMove then the meter must be connected in the way described below. The method varies slightly depending on the type of meter.

a) Schmidt Gx meter without EFTPOS Terminal

Schematic



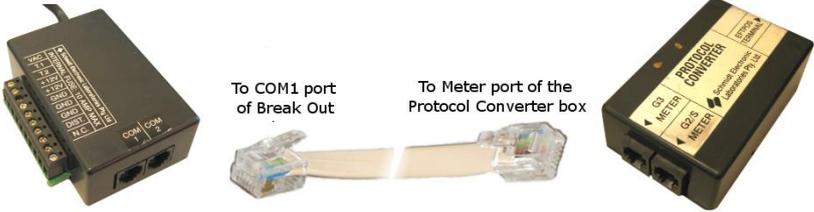
Note: black lines represent existing cables

To connect SmartMove to a Schmidt meter you will need a Protocol Converter box . This will need to be purchased from Schmidt Meters at the fleet’s expense.

Using the RJ12-RJ12 modular line cable, connect one end to the COM1 port of the Break Out box.

Connect the other end to either the G2/S meter or G3 meter port of the Protocol Converter box (depending on what series meter is used as noted below).

Note1: If the meter is a G2 series then use the G2/S meter port of the Protocol Converter box. If the meter is a G3 or G4 series then use the G3 meter port of the Protocol Converter box.



<p>Connect the RJ12 SmartMove lead on the loom to the EFTPOS TERMINAL port of the Protocol Converter box.</p>		
<p>Set the following vehicle properties on the fleet management website.</p>	<p>Meter Listen Meter Protocol Requires Fare Details (Account) Requires Fare Details (Non-account)</p>	<p>1 – Listen interactively (No EFTPOS) 0 – VTD compatible (COM5) 1 – Show fare screen (cannot cancel) 2 – Show fare screen (can cancel)</p>

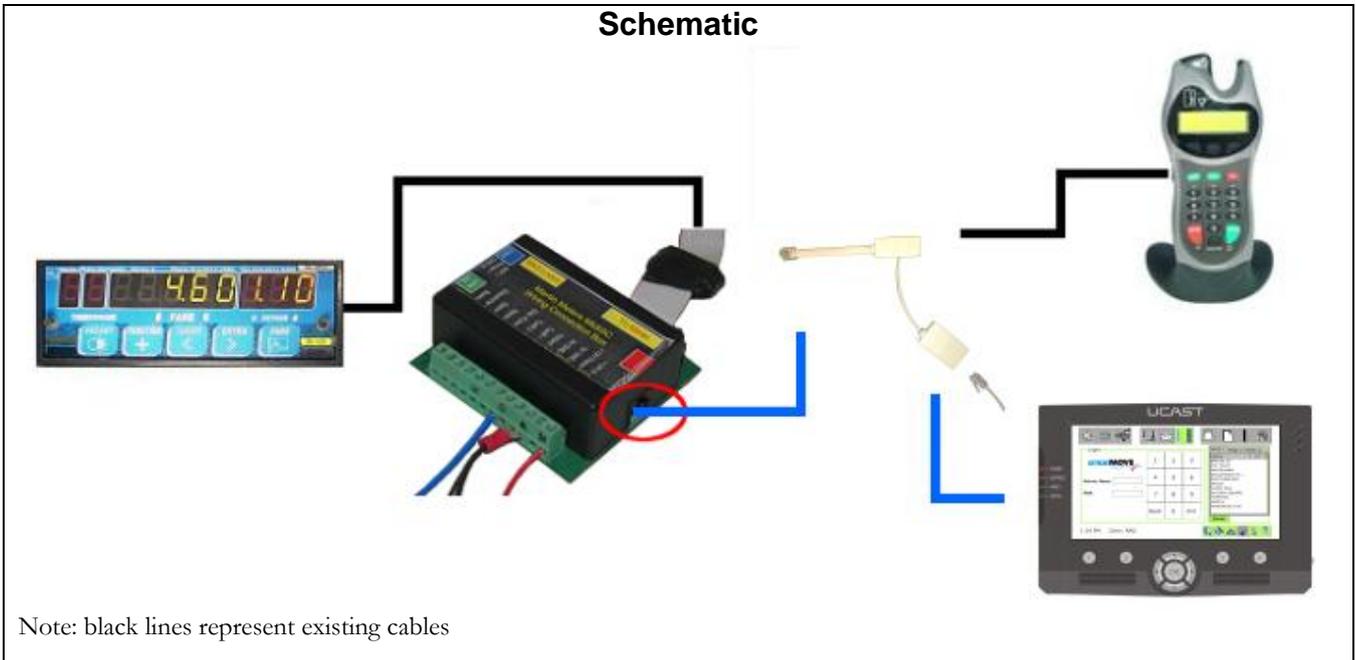
b) Schmidt Gx meter with EFTPOS Terminal

Schematic									
<p>Note: black lines represent existing cables</p>									
<p>With the RJ12-RJ12 modular line cable connecting the Protocol Converter box to the EFTPOS terminal, disconnect the Protocol Converter box end and connect it to the free RJ12 port of the Inline Coupler of the meter Listening cable.</p>									
<p>With the short RJ12-RJ12 modular line cable connected to the other end of the Inline Coupler, connect it to the EFTPOS TERMINAL port of the Protocol Converter box.</p>									
<p>Connect the SmartMove terminal's RJ12 plug to the meter listen adapter.</p>									
<p>Set the following vehicle properties on the fleet management website.</p>	<table border="0"> <tr> <td>Meter Listen</td> <td>2 – Listen passively (EFTPOS)</td> </tr> <tr> <td>Meter Protocol</td> <td>0 – VTD compatible (COM5)</td> </tr> <tr> <td>Requires Fare Details (Account)</td> <td>1 – Show fare screen (cannot cancel)</td> </tr> <tr> <td>Requires Fare Details (Non-account)</td> <td>2 – Show fare screen (can cancel)</td> </tr> </table>	Meter Listen	2 – Listen passively (EFTPOS)	Meter Protocol	0 – VTD compatible (COM5)	Requires Fare Details (Account)	1 – Show fare screen (cannot cancel)	Requires Fare Details (Non-account)	2 – Show fare screen (can cancel)
Meter Listen	2 – Listen passively (EFTPOS)								
Meter Protocol	0 – VTD compatible (COM5)								
Requires Fare Details (Account)	1 – Show fare screen (cannot cancel)								
Requires Fare Details (Non-account)	2 – Show fare screen (can cancel)								

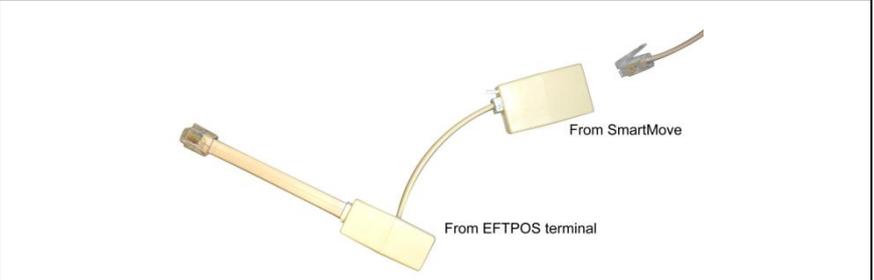
c) Martin Mlx meter without EFTPOS Terminal

Schematic		
<p>Note: black lines represent existing cables</p>		
<p>Connect the RJ12 Meter Cable to COM1 of the meter breakout box..</p>		
<p>Set the following vehicle properties on the fleet management website.</p>	<p>Meter Listen Meter Protocol Requires Fare Details (Account) Requires Fare Details (Non-account)</p>	<p>1 – Listen interactively (No EFTPOS) 0 – VTD compatible (COM5) 1 – Show fare screen (cannot cancel) 2 – Show fare screen (can cancel)</p>

d) Martin Mlx meter with EFTPOS Terminal



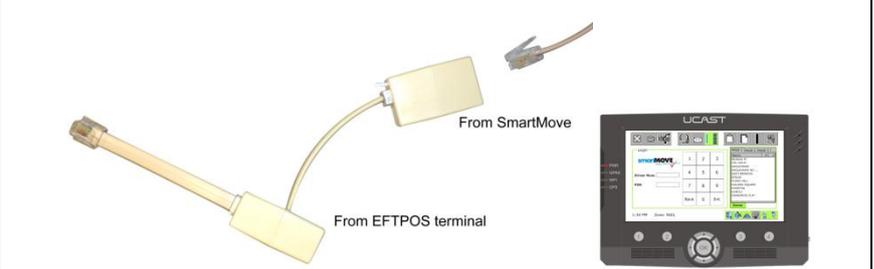
With the RJ12-RJ12 modular line cable connecting the Break Out box to the EFTPOS terminal, disconnect the Break Out box end and connect it to the free RJ12 port of the Inline Coupler of the Meter Listening cable.



With the short RJ12-RJ12 modular line cable connected to the other end of the Inline Coupler, connect it to the COM1 port of the Break Out box.



Connect the SmartMove terminal's RJ12 meter connection to the joiner on the Meter Listen Adapter

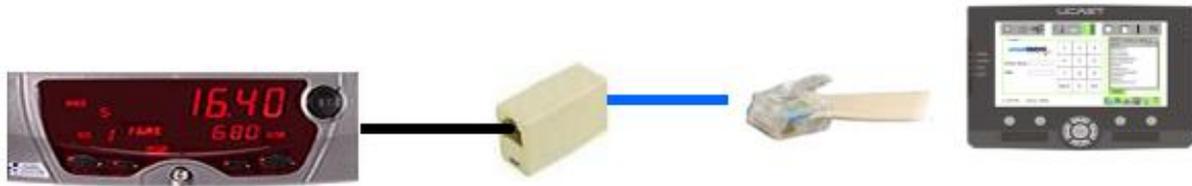


Set the following vehicle properties on the fleet management website

Meter Listen	2 – Listen passively (EFTPOS)
Meter Protocol	0 – VTD compatible (COM5)
Requires Fare Details (Account)	1 – Show fare screen (cannot cancel)
Requires Fare Details (Non-account)	2 – Show fare screen (can cancel)

e) Novax Leda meter without EFTPOS Terminal

Schematic



Note: black lines represent existing cables

Connect the RJ12 Meter Cable to one port of the Inline Coupler. Connect the RJ12 cable from the meter to the other port of the Inline Coupler.



Set the following vehicle properties

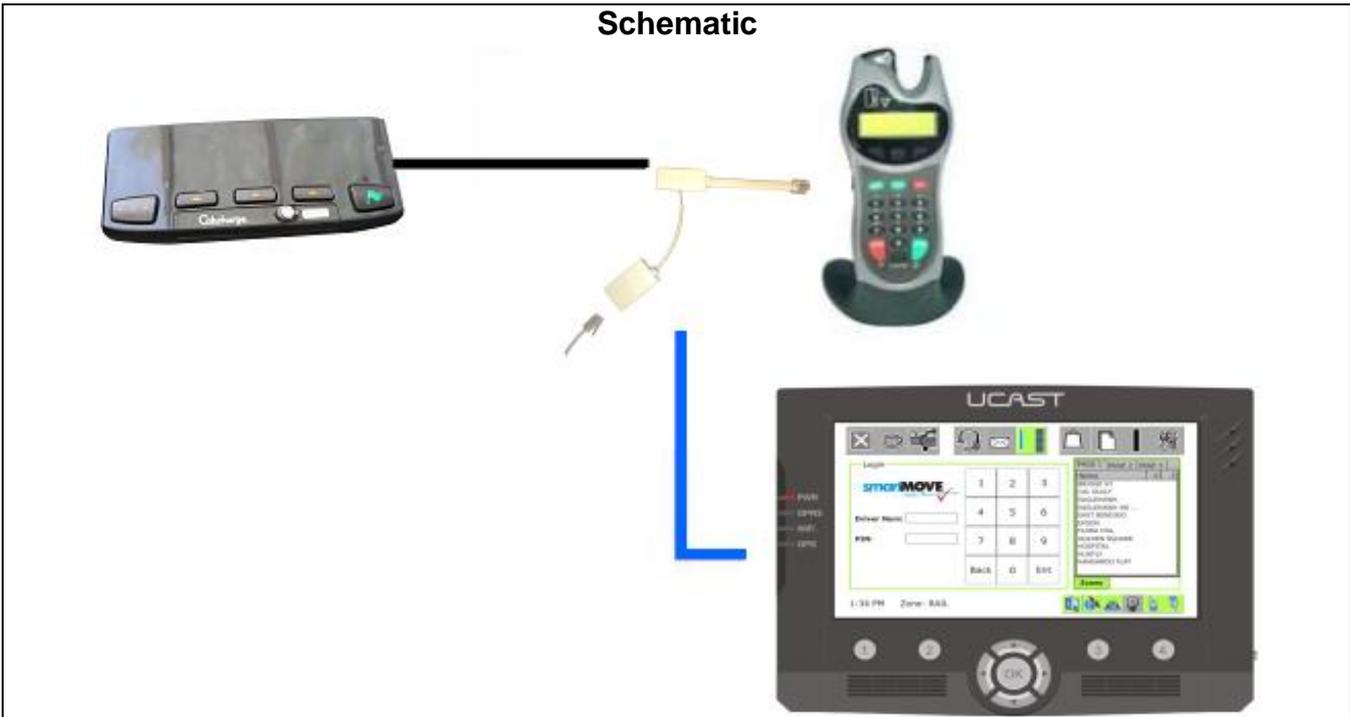
Meter Listen	1 – Listen actively (EFTPOS)
Meter Protocol	0 – VTD compatible (COM5)
Requires Fare Details (Account)	1 – Show fare screen (cannot cancel)
Requires Fare Details (Non-account)	2 – Show fare screen (can cancel)

f) Novax Leda meter with EFTPOS Terminal

Schematic	
<p>Note: black lines represent existing cables</p>	
<p>With the RJ12-RJ12 modular line cable connecting the meter to the EFTPOS terminal, disconnect the EFTPOS terminal end and connect it to the free RJ12 port of the Inline Coupler of the Meter Listening cable.</p>	<p>From SmartMove</p> <p>From meter</p>
<p>With the short RJ12-RJ12 modular line cable connected to the other end of the Inline Coupler, connect it to the EFTPOS terminal.</p>	<p>EFTPOS terminal</p> <p>From SmartMove</p> <p>From meter</p>
<p>Connect the SmartMove terminal's RJ12 meter connection to the joiner on the Meter Listen Adapter</p>	<p>From SmartMove</p>

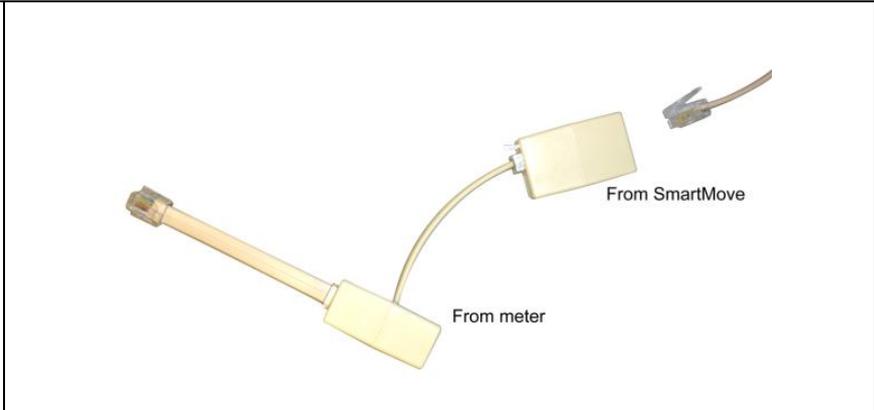
Set the following vehicle properties on the fleet management website	Meter Listen	2 – Listen passively (EFTPOS)
	Meter Protocol	0 – VTD compatible (COM5)
	Requires Fare Details (Account)	1 – Show fare screen (cannot cancel)
	Requires Fare Details (Non-account)	2 – Show fare screen (can cancel)

g) Cabcharge meter with EFTPOS Terminal

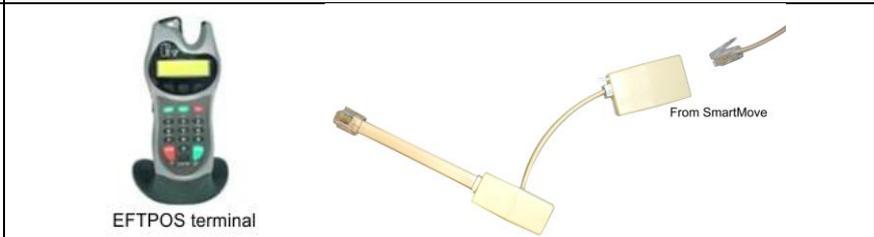


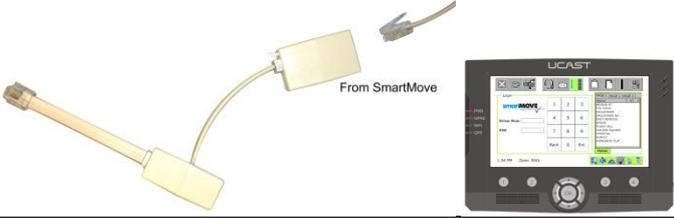
Note: black lines represent existing cables

With the RJ12-RJ12 modular line cable connecting the meter to the EFTPOS terminal, disconnect the EFTPOS terminal end and connect it to the free RJ12 port of the Inline Coupler of the Meter Listening cable.



With the short RJ12-RJ12 modular line cable connected to the other end of the Inline Coupler, connect it to the EFTPOS terminal.



<p>Connect the SmartMove terminal's RJ12 meter connection to the joiner on the Meter Listen Adapter</p>									
<p>Set the following vehicle properties</p>	<table border="0"> <tr> <td>Meter Listen</td> <td>2 – Listen passively (EFTPOS)</td> </tr> <tr> <td>Meter Protocol</td> <td>0 – VTD compatible (COM5)</td> </tr> <tr> <td>Requires Fare Details (Account)</td> <td>1 – Show fare screen (cannot cancel)</td> </tr> <tr> <td>Requires Fare Details (Non-account)</td> <td>2 – Show fare screen (can cancel)</td> </tr> </table>	Meter Listen	2 – Listen passively (EFTPOS)	Meter Protocol	0 – VTD compatible (COM5)	Requires Fare Details (Account)	1 – Show fare screen (cannot cancel)	Requires Fare Details (Non-account)	2 – Show fare screen (can cancel)
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Step 6 Fit GPRS (mobile phone) antenna

<p>If supplied with a windscreen type antenna, stick the antenna to the top of the windscreen (driver's side) and run the cable down the A-Pillar.</p>	
<p>If supplied with larger roof type antenna, mount it to the center of the roof and run the cable down the pillar to the Screen. This installation will achieve maximum gain. Alternatively, the antenna can be mounted to the roof rack.</p> <p>If supplied with the smaller roof type antenna, mount it under the dome and run the cable down the pillar to the screen.</p>	

Step 7 Connect screen to loom

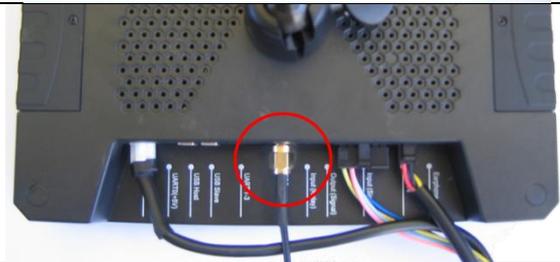
Once the loom is wired up, it is simply a matter of attaching the loom, GPS Antenna, and GPRS Antenna to the screen



Start by attaching the screen to the main loom; you will notice a couple of lights on the screen, but it will take a few moments before you get an image on the screen.



Attach the GPS antenna to the bottom of the screen

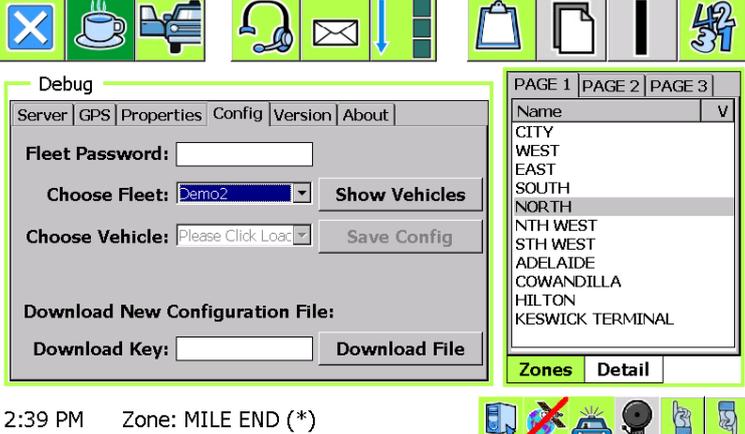


Attach the GPRS (Mobile) antenna to the top of the screen.



Use cable ties (or alternative method) to tidy up the cables and keep them out of the way. Often they are tied to the mounting bracket to secure the position.

Step 8 Configure SmartMove

<p>If the system is not already on the configuration page (shown in next box); press the GPS button (pictured right) to enter the debug.</p>	
<p>Select the 'Config' page, choose the fleet then press the <i>Show Vehicles</i> button. If the fleet you are setting up is not shown, or the box displays '<need config>'; enter the fleets download key into the 'Download Key' box and hit <i>Download File</i></p>	
<p>Select the vehicle and press the <i>Save Config</i> button. Shortly afterwards the unit should show that it is connected to the server.</p>	

Step 9 Test SmartMove

<p>This step is not required for vehicles without meters.</p> <p>With the meter switched on but not running, the car symbol at the bottom right should show one person in the car. With the meter running the symbol should show three people in the car</p> <p>If the symbols are inverted the car needs to be reconfigured in the system. Set the vehicle property <i>Vehicle Inverted Meter</i> to Y or N.</p> <p>If the symbol doesn't change then check that the dome light goes on and off with the meter – a new bulb might be needed. If the light is working then check that the digital input line has been wired correctly.</p>	
<p>When the car is connected to the server, hold the panic button in for a second. The panic symbol should appear at the bottom right hand corner of the screen.</p> <p>The panic must be cleared by the base operator or call centre.</p>	
<p>Check that a GPS fix is obtained within 12 minutes. If no fix is obtained, move the car into the open, then check GPS connection and that the cables are connected the right way around (ie. GPS to bottom).</p>	