

SCHMIDT MODEL G4 TAXIMETER

INSTALLATION INSTRUCTIONS

Version 7, July 2013

1. Wiring

Vehicle wiring on the G4 is connected to the G4 relay box, not directly to the meter. The meter plugs into a lead that extends from the relay box. The relay box protects the meter from most wiring faults in the vehicle.



(Fig 1. The G4 Relay Harness)

Power

Connect a twisted two wire pair (with a 5 AMP fuse in line on the positive wire) from the battery to +12v and **GND** on the relay box. *Note: The G4 Relay Box provides two common* +12V *terminals and 3 common GND terminals*

Vacant light

The Vacant light (otherwise known as the dome light, roof light or hail light) connects to the terminal on the relay box marked **VAC**.

Tariff lights

Tariff lights connect to terminals **T1** and **T2** on the relay box. (where applicable)

Ground

The ground wire from the roof light connects to a GND terminal on the relay box.

Distance Wire

The distance pulse wire connects to the **DIST** terminal on the relay box.

Computer dispatcher system

The output to the computer dispatcher system should be connected to the **N.C.** terminal on the relay box. (*The NC output is high when the meter is engaged*)

Communications Ports.

The G4 provides two communication ports **COM 1** & **COM 2**to allow easy interface with accessory equipment.

COM1 is used for interfacing to Schmidt Protocol Converters & other accessory equipment.

COM2 is used for connecting remote displays.

Internal Fuse

Inside the relay box is a 10 AMP 3AG fuse. This fuse is a final safeguard in case the fuse under the bonnet is bypassed.

It is suggested that the relay box be placed in position that is accessible without breaking the seal on the meter.

\downarrow Meter Relay Box \leftarrow To G4 Meter Phone Cable \downarrow \uparrow Com Ports. G3 and G4 Meters \rightarrow Protocol G3/G4 Converter EFTPOS **G2/S** G2 Meters ONLY \rightarrow 12v SUPPLY \leftarrow Phone Cable EFTPOS Modem, (Silver box, usually \leftarrow under dash board or seat) ↑ 1 ↑ ↑ To Protocol Converter **EFTPOS Equipment**

Interfacing Schmidt G4 Meter to EFTPOS Terminal

- 1/ Locate the relay box on the far end of the cable from the meter (small black box). This can be located by switching the vacant light on and off with the G4 Yellow button, while listening for the clicking of the relay. The relay box is usually located under the dash.
- 2/ Locate the Modem for the EFTPOS (Silver box, usually under dash board or seat).
- 3/ Use one phone cable to connect the Com1 socket on the meter relay box to the G3/G4 socket on the Protocol Converter (as shown above).
- 4/ Use another phone cable to connect the Protocol Converter EFTPOS socket to the RJ12 socket, 2nd from the green power connector, (as shown above) on the EFTPOS modem.
- 5/ Configure the EFTPOS terminal and test the interface.
- **Note** Do not place the Protocol Converter under the ventilation outlet near the driver's left foot (as in the Ford Falcon). Condensation from this vent can enter the Protocol Converter and cause it to fail.

2. Clearing the G4's Memory

The memory on the G4 Taximeter can only be cleared with the Dealer Test Cable assembly. To clear the G4's memory;

- Remove the G4 meter's front cover.
- Connect the Dealer Test Cable assembly to the harness connector on the G4 meter (refer to fig. 2 for Harness connector location.)
- Hold down the "Mem Clr" and the "Power" buttons on the Dealer Test Cable simultaneously. Release the "Power" button *before* releasing the "Mem Clr" button.

This procedure will clear all the running totals. The meter's calibration constant, current time and current date will not be affected.

3. Calibrating the G4 meter

Calibration consists of two parts:

- 1. Determining the correct calibration constant for the particular vehicle
- 2. Setting the meter calibration to the correct value for that particular vehicle.

1. Determining the correct calibration setting for the particular vehicle

Memory register 18 shows the speedometer cable revolution counter.

- At the start of a marked out 1km circuit use the green button to select memory register 18. The meter will initially show 0.
- Drive the vehicle over the 1km circuit. The meter reading will increment for each speedometer pulse count.
- At the completion of the 1km circuit read the figure displayed on the meter. This number shows the number of speedometer pulses generated by that vehicle over a 1km circuit. This is the vehicle's calibration constant, which is particular to that vehicle.

2. Setting the calibration constant in the meter for the particular vehicle.

- 1. Remove the front cover from the G4.
- 2. With the G4 in Idle Mode, locate the programming socket (*refer to fig. 2*) and bridge the calibration pins using a small screwdriver or similar object. (*refer to fig. 3*). Alternatively, the G4 Programming Module can be connected to the programming socket.
- 3. The G4 will display "PrESS CLr". Press the yellow **Ext.Clr** switch.
- 4. The G4 will initially display "read" in the green **FARE** display and "- -" in the amber **EXTRA** display after a few seconds the green **FARE** display will change to "pass". Press the yellow **Ext.Clr** switch.
- 5. The G4 will display "00000 Sn". Press the yellow **Ext.Clr** switch.
- 6. The G4 will display the current calibration setting in the green **FARE** display and "CAL" in the amber **EXTRA** display. The rightmost digit of the calibration setting will be flashing.

- 7. Use the blue **Tariff** and the green **Mem.Tot** buttons to adjust the digit down or up as required.
- 8. Once the desired number is reached, step along to the next digit by pressing the red **Fare** button.
- 9. Repeat steps 6 & 7 for each digit until the desired calibration is set.
- 10. The desired calibration is stored in the meter's memory when the programming module is disconnected.
- 11. On removal of the Programming module, the G4 will revert to the time setting mode. Press the yellow **Ext.Cir** switch to return to Idle Mode.
- 12. The G4's front cover can now be refitted and the meter sealed.

4. Socket Locations.

Programming Socket. The G4

Programming Module connects to this socket. The socket is "keyed" so that the connecter can only be inserted in the correct manner. If the connecter will not fit, check the orientation and try again. <u>DO NOT</u> force the connector. Harness Connector. The plug on the relay harness connects directly to this socket. Make sure that the coloured markings on both the plug and socket are aligned and take care not to bend any of the connector pins.



(Fig. 2. Cut away View of G4 Taximeter)

Calibration Pins. Bridge the two pins carefully using a screw driver or similar object being very careful not to damage any of the other pins.



(Fig. 3. G4 Calibration Pins)

5. G4 Mounting Kit.

The G4 is supplied with a universal mounting kit that will allow it to be mounted in a variety of locations. With each kit you will receive the following (see diagram below)

- a. 2 x Identical U Shaped Metal Brackets.
- b. 2 x 6mm x 10mm Pozidrive screws.
- c. 4 x 6mm Flat washers.
- d. 2 x 6mm External tooth lock washers.
- e. 2 x 6mm Hex nuts.

Step 1. Assembly of the Mounting Kit.

Assemble the G4 Mounting Kit as shown below.



Step 2. Attaching the Meter to the Mounting Kit.

Attach to a suitable

Attach the mounting kit to the Meter using the double sided tape provided. Attach the entire assembly to the desired location in the vehicle. Ensure that all surfaces are clean and free of loose material. Clean all surfaces with methylated spirits or a similar substance. Allow adhesive to set for approximately 10 minutes before adjusting the bracket so that the meter is in the optimum viewing position before tightening the screws.



5. Technical Assistance.

If you have any questions regarding installation of the G4 Taximeter please contact our Technical Department on: Phone: (03) 9546 6990 or 1300 132 422. Fax: (03) 9546 3993 Email: info@schmidt.com.au