



# Schmidt Electronic Laboratories Pty. Ltd.

153 Osborne Ave, Clayton South, Victoria 3169, Australia

Telephone: + 61 3 9546 6990 Fax: +61 3 9546 3993

Website: www.schmidt.com.au Email: info@schmidt.com.au

A.C.N. 005 631 710  
A.B.N. 20 005 631 710

## SCHMIDT MODEL G4 TAXIMETER PROGRAMMING MODULE OPERATORS INSTRUCTIONS.

Version 5, 1<sup>st</sup> February 2011



*The Model G4 Programming Module*

The Schmidt Model G4 Taximeter Programming Module is a multifunction device which can be used to program a number of features on the G4 Taximeter. It can upgrade the operating software as well as perform rate changes and allow calibration of the taximeter. The Programming Module will be preset from the factory with the number of rate changes that have been ordered. If all rate changes are used the unit must be returned to the factory for recharging. The Programming Module connects to the G4 Taximeter via a 10 way ribbon cable that plugs into the programming socket on the meter. There are two sockets on the Module, a 9 pin serial socket and a DC power socket. These sockets are only used by the factory for configuring the Module. Under no circumstances should any device be connected to the module via either of these connectors. There are three light emitting diodes (LED's) on the Module. These LED's indicate the following:

LED Colour	ON / Flashing
Green	Operation Complete
Yellow	Busy
Red	Error*

*The Green, Yellow and Red LED's on the module will illuminate simultaneously when the Programming Module is first connected to the Taximeter.*

*\* If the Red LED illuminates during programming, try repeating procedure. If error persists, contact Schmidt Electronics for assistance.*

## 1. Rate Changing the G4 Meter.

1. Remove the front cover from the G4 Taximeter and plug the G4 Programming module into the programming socket. The taximeter can remain connected to its 12 Volt supply in which case the programming module will draw its power from the meter. Alternatively, if the meter is not connected to its 12 Volt Supply both the Programming Module and the Meter can be powered by connecting a 12 Volt Plug Pack to the DC socket on the module.

(See G4 Installation Instructions for programming socket location.)

2. The taximeter will display “PrESS Clr”

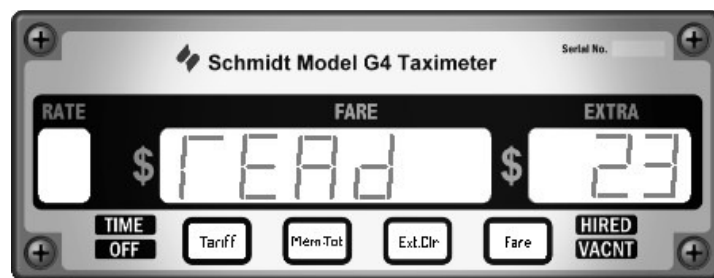


*\*\*Note: For illustration purposes the diagrams that appear in this manual will show the front panel fitted to the G4 Taximeter. However, when using the G4 Programming Module the front panel of the G4 Taximeter will need to be removed.*

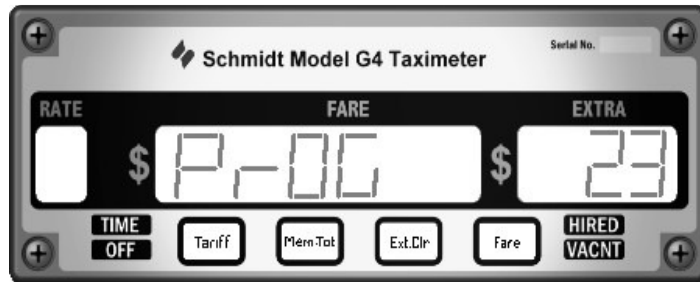
3. Press the yellow **Ext.Clr** switch.
4. The Programming module will automatically determine whether the Taximeter requires an upgrade of the operating software. At this point the Programming module will perform either of the following two procedures:

### 1.1 If no firmware upgrade is required:

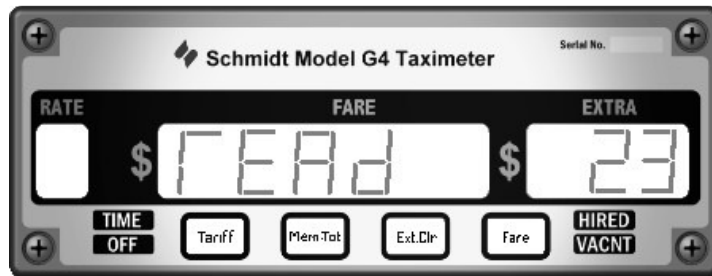
- i. The meter will, very briefly, show “REAd” in the green **FARE** display and the number of rate changes remaining in the module (eg. 23) in the amber **EXTRA** display. At this point the Programming Module is comparing the rates stored in the meter with the new rates to be programmed.



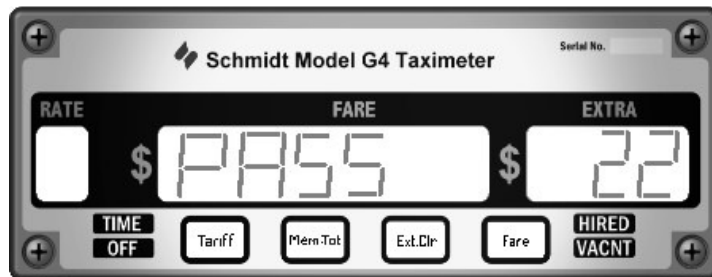
- ii. Once it confirms that the rates are different, the message in the green **FARE** display will change to “ProG” and the new rates will transferred to the meter’s memory.



- iii. The Programming Module will then verify that the rates have been programmed correctly at which point the message in the green **FARE** display will revert back to “READ”



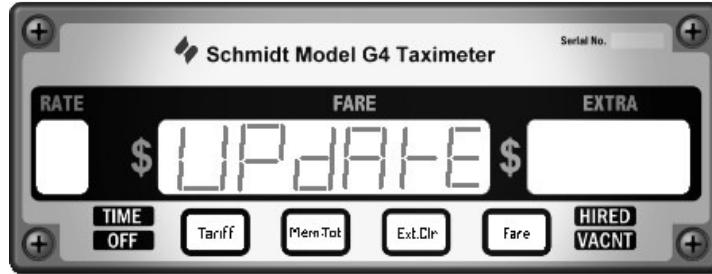
- iv. Once it has confirmed that the rates are correct the meter will show “PASS” in the green **FARE** display and the number in the amber **EXTRA** display will decrement by 1 (eg. 22)



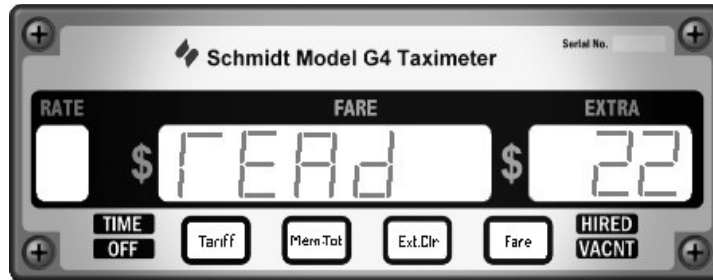
The Taximeter is now ready to have the calibration set. Press the yellow **Ext.Clr** switch twice to enter the calibration mode. (For detailed directions on calibrating the G4 taximeter, refer to Page 6 of this manual.)

## 1.2 If firmware upgrade is required:

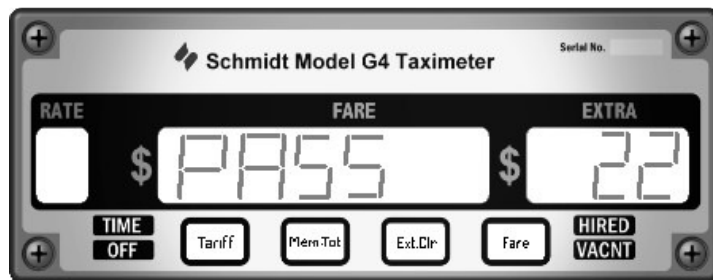
- i. The taximeter display will briefly show “UpdAtE” in the green **FARE** display. The display will then go blank and the yellow busy LED on the programming module will flash whilst the green LED will extinguish. The firmware upgrade will take approximately 30 seconds. While the module is upgrading the firmware it will program the updated rates into the meter’s memory and decrement the number of rate changes remaining in the Programming Module by 1 automatically. *(Occasionally the display will flicker during this process. This is normal)*



- ii. Once the procedure is complete the meter will show “REAd” in the green **FARE** display and the number of rate changes remaining in the module in the amber “EXTRA” display.



- iii. If no errors are detected “PASS” will be displayed in the Green **FARE** display



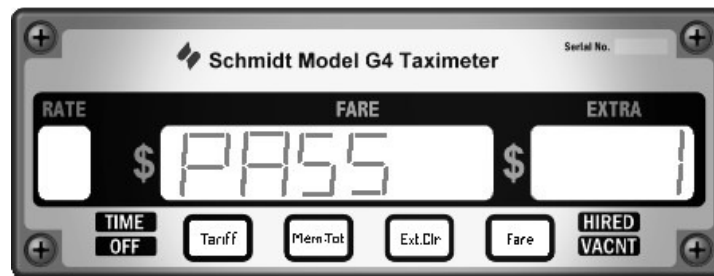
The Taximeter has now had its firmware upgraded and its rates changed. It is now ready to have the calibration set. Press the yellow **Ext.Clr** switch twice to enter the calibration mode. *(For detailed directions on calibrating the G4 taximeter, refer to Page 6 of this manual.)*

## 2. If a firmware upgrade only is required.

The taximeter display will briefly show “UpdAtE” in the green FARE display. The display will then go blank and the yellow busy LED on the programming module will flash whilst the green LED will extinguish. The software upgrade will take approximately 30 seconds. *(Occasionally the display will flicker during this process. This is normal)*



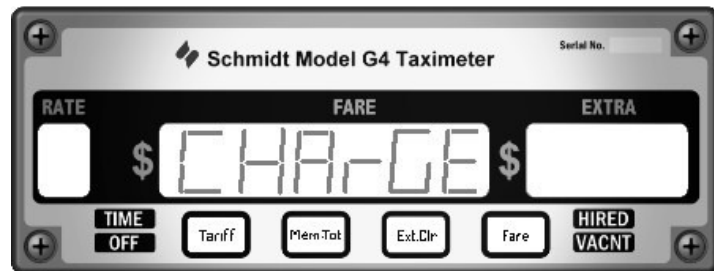
If no errors are detected “PASS” will be displayed in the Green FARE display



The Taximeter is now ready to have the calibration set. Press the yellow **Ext.Clr** switch twice to enter the calibration mode. *(For detailed directions on calibrating the G4 taximeter, refer to Page 6 of this manual.)*

## 3. Recharging the G4 Programming Module.

Once all the preset rate changes have been used “CHArGE 0” will be displayed.



When this occurs the Programming Module can only be recharged by returning it to the factory. However, it can still be used to upgrade the firmware or alter the calibration.

## 4. 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 pulse/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.

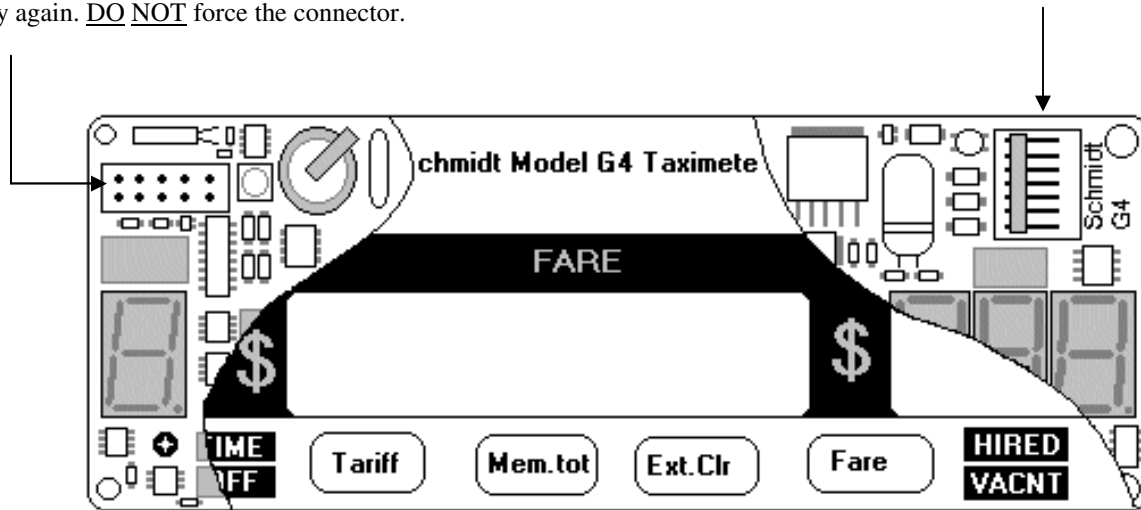
### 2. Setting the calibration constant in the meter for the particular vehicle.

1. Remove the front cover from the G4.
2. Connect the G4 Programming Module to the meter's 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 "###" (the number of charges remaining in the Module) 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. Adjust the time and date if needed then press the yellow **Ext.Clr** switch to return to Idle Mode.
12. The G4's front cover can now be refitted and the meter sealed.

## 5. Socket Locations.

**Programming Socket.** The G4 Programming Module connects to this socket. The socket is “keyed” so that the connector can only be inserted in the correct manner. If the connector will not fit, check the orientation and try again. DO NOT 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)

## 4. Technical Assistance.

If you have any questions regarding installation of the G4 Taximeter please contact us:

Phone: (03) 9546 6990 or 1300 132 422

Fax: (03) 9546 3993

Email: [info@schmidt.com.au](mailto:info@schmidt.com.au)

Website: [www.schmidt.com.au](http://www.schmidt.com.au)