SEMITRON®

TECHNOLOGIES

# TAXIMETER

# P7S-T



## OPERATION MANUAL

**English v1.00**

Conformed with quality management systems standards.

In accordance with 2014/32/EU

Conformed with the requirements of the applicable EC directives.

Conformed with directive 2002/96/EC on waste electrical and electronic equipment (WEEE).

IEC 61140 protection class II.

# *OPERATION MANUAL*

# *For P7S-T (TFT Taximeter)*

**English v1.00**

SEMITRON TAXI


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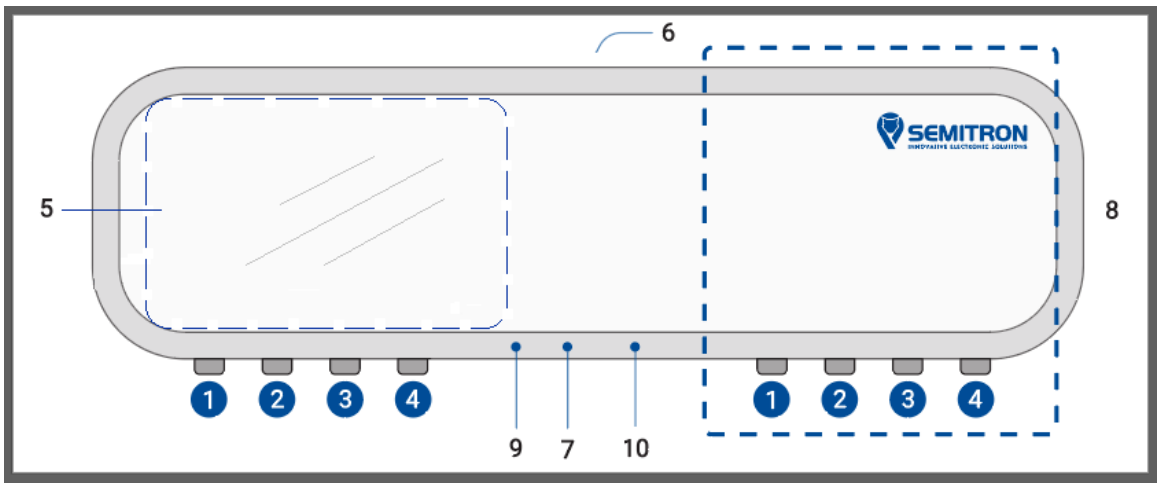
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Greece

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# 1. Description




*Taximeter P7S-T – User Interfaces marked*

The previous image shows the taximeter P7S-T with two sets of **buttons**. The final position of the button set (either on the *left* or *right* in relation to the taximeter mirror*)* depends on the customer's choice or the country in which the device operates.

| | |
|---|---|
| **1** | Open/Close, Start hire |
| **2** | End hire |
| **3** | Control |
| **4** | Extra, Auxiliary menu |

← 10

*Table 2. Buttons Manual*

Buttons function changes according to the country that taximeter operates.

| | |
|---|---|
| **5** | Operational state or Tariff |
| **6** | Fare and Auxiliary operations |
| **7** | Extra, supplements and other info |

The marked area with number ⑤ represents the TFT 3.5" display which is used to show the current state of the taximeter along with the necessary information. **The TFT 3.5" is driven by a (second) microcontroller fully independent of the taximeter controller.**

The graphical interface is indicative and can be changed and customized according to client's requirements, provided that the OIML R 21 regulations related to font size, allowed abbreviations, etc. are enforced.

| | |
|---|---|
| **FOR HIRE**<br>**HIRED**<br>**STOPPED** | Operation modes |
| **KM**<br>€ | Distance and currency measurement units |
| | Charge based on Time value |
| **Tariff** | Charging Tariff |
| | Night Tariff |
| | Payment symbol – Stopped mode |
| **SUPPLEMENTS** | Extra charges |
| TAXI | Roof sign activated/deactivated |

*Table 3. Display manual*

**Distance** and **Currency** measurement units (km, miles, Euro, $, etc.) vary depending on the country in which the taximeter operates.

| | |
|---|---|
| **8** | Power connector |
| **9** | Programming port |
| **10*** | Expansion Board |

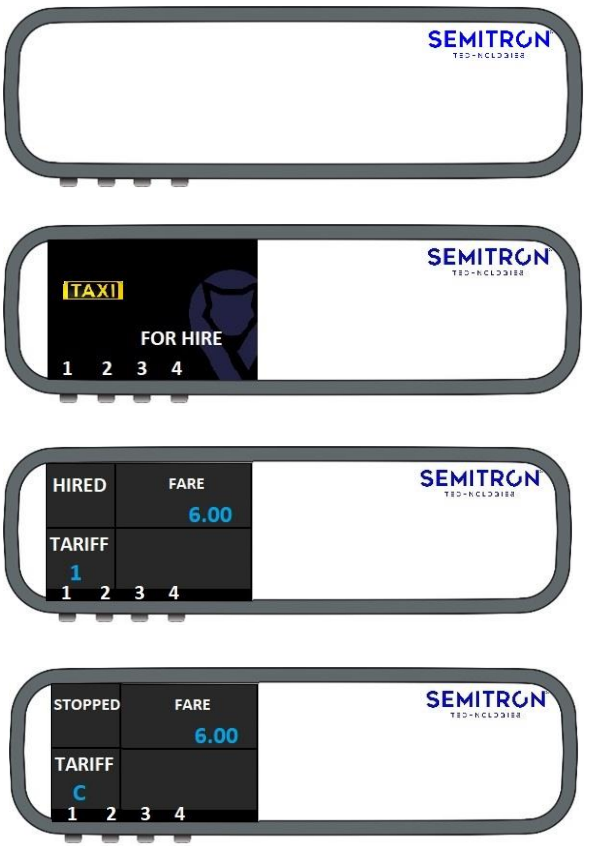
*Table 5. P7S-T Connectors*

Where the Expansion Board is connected to taximeter.

| | |
|---|---|
| **11** | LED |
| **12** | USB |

*Table 6. Extra Interfaces*

# 2. Basic Operating Modes




**CLOSED (Low Consumption)**

Taximeter is closed (displays only the Semitron logo). If the vehicle moves, the taximeter will record this distance to the appropriate register.

**FOR HIRE**

Taxi is available for hire and the roof lamp is ON. During this operational mode, the taximeter does not calculate any charges. Information about distance traveled without passenger is registered. The sign "**FREI**", **date, time** and an indication that **roof lamp** is on, are displayed.

**HIRED**

The taximeter displays the total fare charged for the current trip and the sum of supplements (if extra charge has been applied). The clock sign will be displayed when taximeter charges waiting time. Signs "**BESETZT**", "**FAHRPREIS**", "**€**" and "**TARIF**" are displayed.

**STOPPED**

Charging by time stops. During this mode, the taximeter displays the total amount, fare + supplements. Signs "**KASSE**", "**FAHRPREIS**", "**€**" and an indication for **payment** are displayed.

# 3. Basic Operations

## 3.1 Start new shift




- During CLOSED mode, press the button ① to turn on the device.

A new shift starts.

## 3.2 Start New Hire




- During FOR HIRE mode, press the button ② once.
- A new hire has started.

## 3.3 Stop time-charge during “HIRED” mode

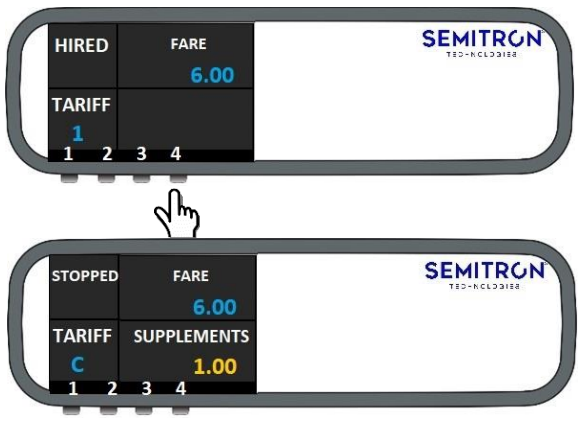
- A During “HIRED” mode hold button 3 and press button 1 to enable or disable the time - charge. If the time – charge is enabled the “Clock” sign will be on.




## 3.4 Add Supplements during HIRED mode

- During HIRED mode, press the button ④ consecutively to add the desired supplement amount.

Supplement charge has been added and displayed to the relative position of the TFT.




## 3.5 Remove Supplements during HIRED mode (Optional)

- During HIRED mode, hold the button ③ and press the button ④ to delete the added supplement charge.

Supplements have been deleted.




## 3.6 From HIRED to STOPPED mode

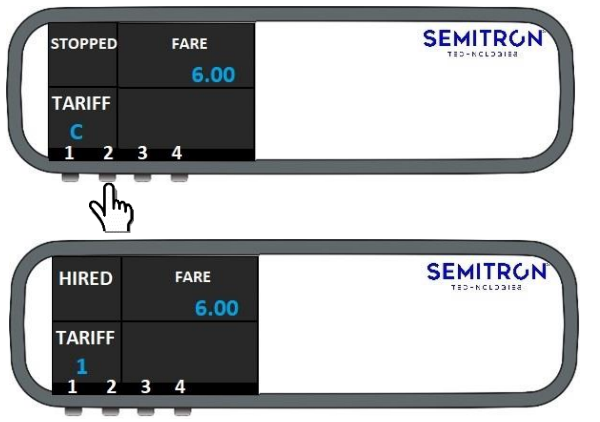
- During HIRED mode, press the button ②.

Taximeter enters in STOPPED mode.



## 3.7 From STOPPED to HIRED mode (Optional)

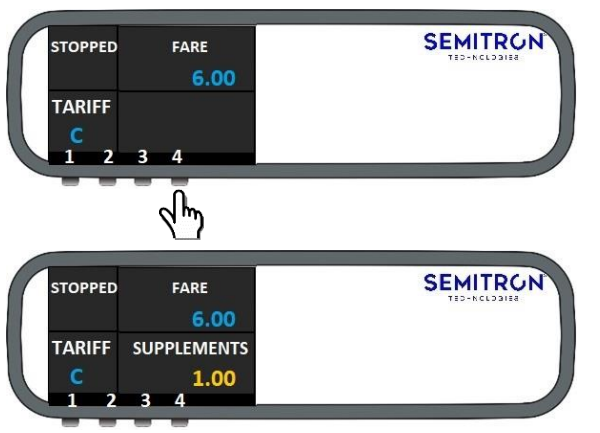
- During STOPPED mode, press the button ② to return to HIRED mode.




## 3.8 Add Supplements during STOPPED mode (Optional)

- During STOPPED mode, press the button ④ consecutively to add supplements.

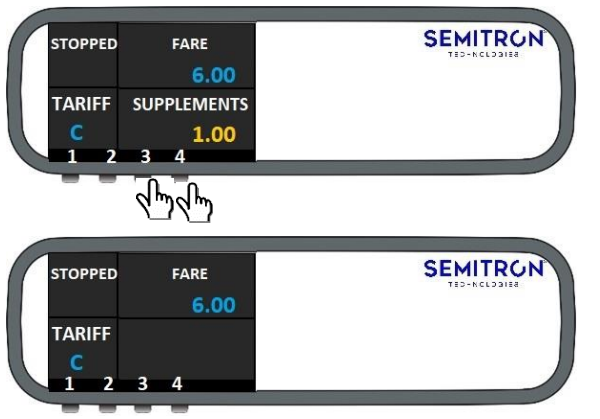
Supplements will be added to the relative display position.




## 3.9 Remove Supplements during STOPPED mode (Optional)

- During STOPPED mode hold the button ③ and press the button ④.

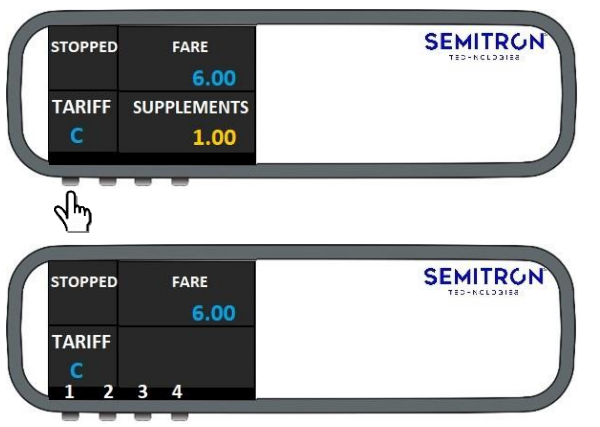
Supplements will be deleted.




## 3.10 Fare plus Supplements (Optional)

- During STOPPED mode, press the button ① once

Taximeter displays Fare + Supplements for 30 seconds.



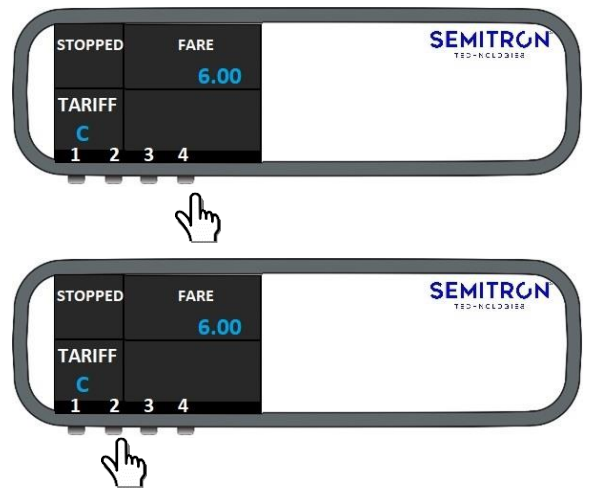
## 3.11 End current Hire

**No report printing**

- During STOPPED mode, press the button ④.

**Printing of trip report**

- During STOPPED mode, press the button ②.




Taximeter enters in FOR HIRE mode.




## 3.12 End current shift

- During FOR HIRE mode, press the button ①.

- Press button 2 to select yes/no.

- Press button 1 to end current shift.

The message “Goodbye/Auf wiedersehen” appears and the shift is closed.



# 4. Additional Operations

## 4.1 Show last hire Trip Cost (Optional)

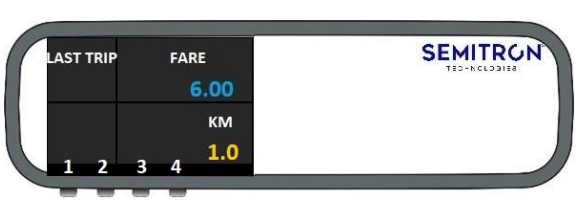
➢ During FOR HIRE mode, press the button ③.




**Fare and Extra** of the last hire will be displayed and after three seconds, the **distance** (km).




*If the current shift has no hire yet, then nothing will be displayed.*



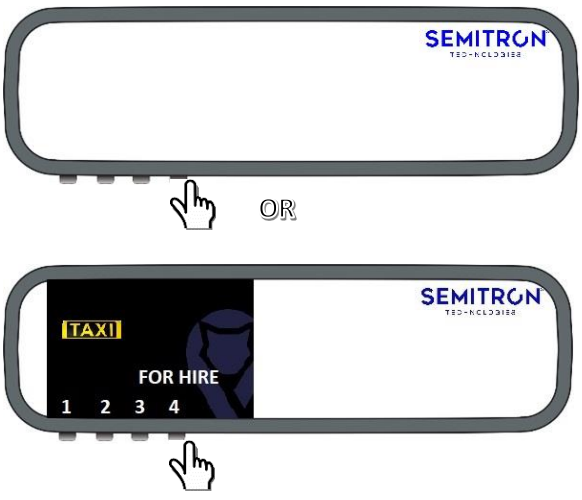

## 4.2 Change Brightness (Optional)

➢ During FOR HIRE mode hold the button ③ and press the button ① to change the brightness.




## 4.3 Auxiliary Menu

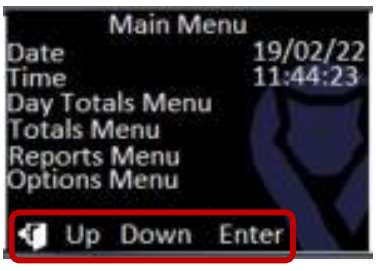
➢ During FOR HIRE or CLOSED mode, press the button ④ to enter in Auxiliary menu.




The Auxiliary menu comprises of the next options:

1. **Date**
2. **Time**
3. **Daytotals**
4. **Totals**
5. **Report**
6. **Option**
7. **Calendar**
8. **Info**
9. **Boot Logger**

- Press the button ② or ③ to scroll up ↑ and down ↓ the menu, respectively
- Press the button ④ to enter a selected option
- Press the button ① anytime, to exit the submenu you may be or return to the initial mode of taximeter (CLOSED or FOR HIRE)
- If no button is pressed for more than 10 seconds, the taximeter automatically returns to its initial mode



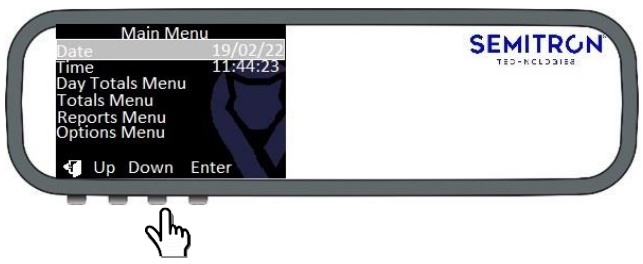
## *Date*

- **Date** is the first displayed (and selected) option when entering the menu.




## *Time*

- Press the button ③ *once* to appear the current **Time**.




## *Daytotals*

- Press the button ③ *twice* to select "**Daytotals**"




- Press the button ④ to enter the Daytotals sub-menu.




'Daytot' includes information related to the *current shift*:

- Distance traveled
- Initial fees
- Shift duration
- Number of trips

**DayTotals are displayed with 8 digits.**

Specifically, the data of Daytotals in the order of their appearance:

| | |
|---|---|
| **Driver ID (optional)** | Driver id |
| **Shift Number** | Shift number |
| **Total km in shift** | Total distance traveled in shift (For Hire, Hired and Stopped mode) |
| **Total km occupied** | Distance traveled (Hired and Stopped mode) |
| **Total km unregistered trip** | Distance traveled with passenger (For Hire) |
| **Shift duration** | Time period from the start of the shift (hh:mm) |
| **Trips of shift** | Number of trips in current shift |
| **Total cash** | Total cash income in shift |
| **Total cash tax** | Total tax from cash income in shift |
| **Total credit** | Total credit income in shift |
| **Total credit tax** | Total tax from credit income in shift |
| **Total fare** | Total income in shift without extra (cash + credit) |
| **Total extra** | Total extra (cash + credit) |
| **Total income** | Total income (fare + extra) |
| **Total tax** | Total tax in shift (cash + credit) |

## *Totals*

- Press the button ③ *three times* to select **"Totals"**

- Press the button ④ to enter the Totals submenu




"Totals" option includes information related to <u>all shifts</u> of the taximeter:

- Total distance traveled
- Total income
- Total number of trips

**<u>Totalizers are displayed with 8 digits.</u>**

Specifically, the data of Totals in the order of their appearance:

| | |
|---|---|
| **Total km** | Total distance travelled (Closed + For Hire + Hired + Stopped) |
| **Total km in shift** | Total distance travelled (For Hire + Hired + Stopped) |
| **Total km hired** | Total distance traveled (Hired) |
| **Total km occupied** | Total distance travelled with passenger (Hired + Stopped) |
| **Total km unregistered trip** | Total distance travelled with passenger in Closed or For Hire mode |
| **Total trips** | Total trips number |
| **Total cash** | Total cash income (fare + extra) |
| **Total cash tax** | Total tax from cash income |
| **Total credit** | Total credit income (fare + extra) |
| **Total credit tax** | Total tax from credit income |
| **Total fare** | Total fare (cash + credit) |
| **Total extra** | Total extra (cash + credit) |
| **Total income** | Total income (cash + credit + extra) |
| **Total tax** | Total tax (cash + credit) |

## *Report*

- Press the button ③ *four times* to select "**Reports"**




- Press the button ④ to enter the Reports submenu

"Report" provides the capability of printing one of the following reports.

| | |
|---|---|
| **Info Report** | Report description |
| **Current Shift** | Partial Shift report |
| **Last 48h Shifts** | Shifts at last 48 hours |
| **Last 2 Shifts** | Last two shifts |
| **Totals Report** | General totals |
| **Last 6 Receipts** | Last six receipts |
| **Last Receipt** | Last receipt |
| **Control Report** | Taximeter control |
| **Owner Report** | i-button |
| **Last n Shifts** | Last x shifts |
| **Report 10** | Reserved |
| **Report 11** | Reserved |
| **Report 12** | Reserved |
| **Report 13** | Reserved |
| **Report 14** | Reserved |
| **Report 15** | Reserved |
| **Report 16** | Reserved |

## *Options*

- Press the button ③ *five times* to select "**Options**"

- Press the button ④ to enter the Options submenu






"Option" provides the capabilities:

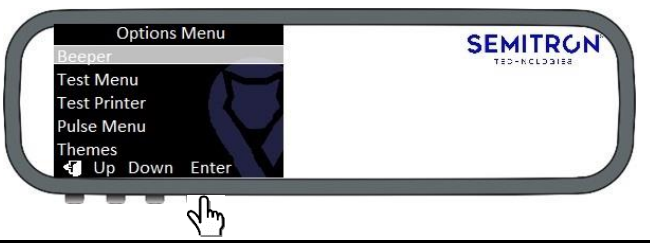
- Beeper activation/deactivation
- Test procedure for taximeter
- Test procedure for printer
- Pulse counter
- Theme selection

| | |
|---|---|
| **Beep** | Enable/Disable beeper |
| **Test** | Taximeter test |
| **Test printer** | Printer test |
| **Pulse** | Displays the incoming pulses |
| **Themes** | Displays the themes options |

## *Beeper*

**Beeper"** option appears first when entering the Options submenu.

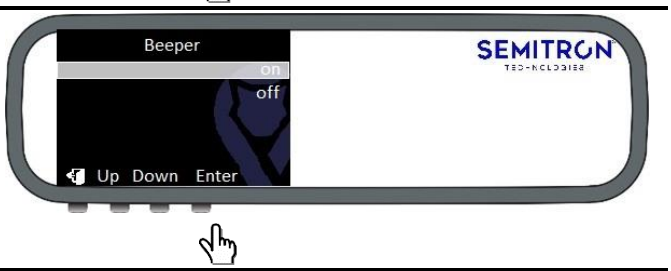
➢ While the '**Beeper'** is selected, press the button ④.




**Activate beeper**

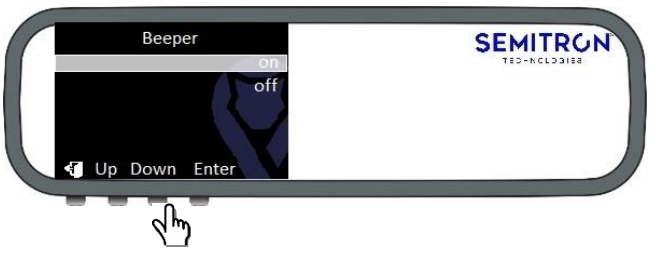
Message "**ON**" is preselected.

➢ Press the button ④ to activate the beeper




**Deactivate beeper**

➢ Press the button ③ to select *"**OFF**"*




➢ Press the button ④ to register your choice and deactivate the beeper

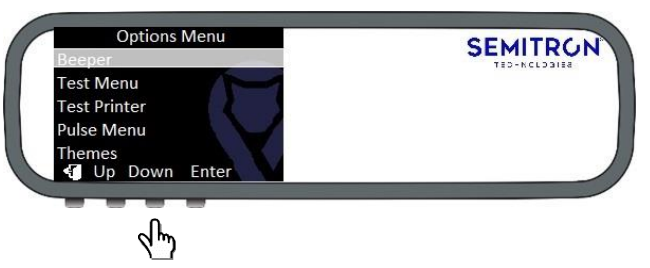



## *Test*

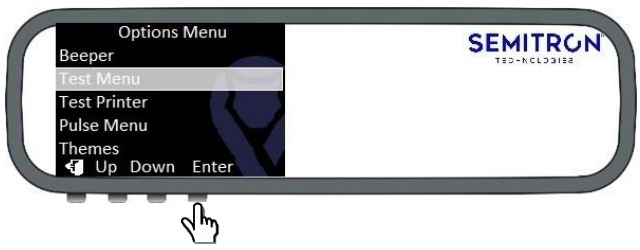
The **TEST** operation allows testing the taximeter's P7S-T time charge, using the Test connector to determine the time and distance measurement from an external source.

To enable the Test function the next steps have to be completed:

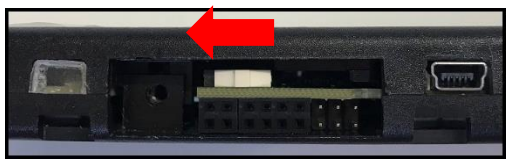
➢ Press the button ③ to select "**Test**" option



➢ Press the button ④ to enter the Test submenu

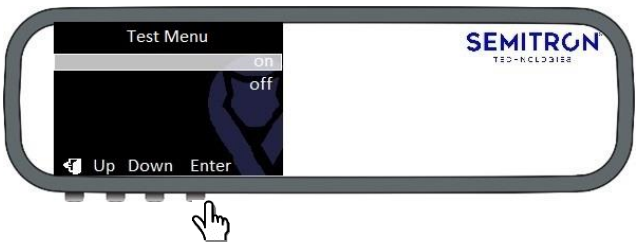



➢ Unseal the programming port of the taximeter and **set the programming switch to Program Position.** *(Left position)*

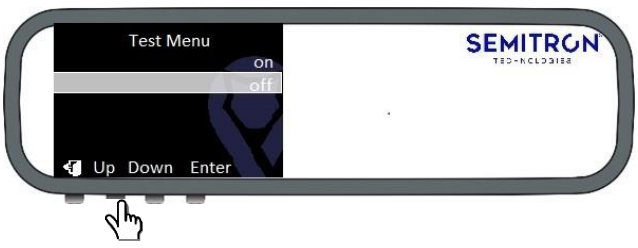


Message "**ON**" is preselected.

➢ Press the button ④ to register the choice and activate the Test process.



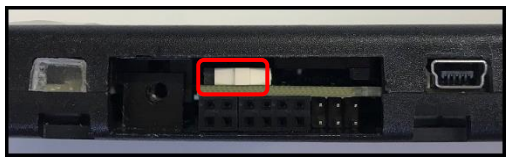

*If the message "**OFF**" is preselected, press the button ② to select message "ON".*




⚠ If the programming switch is not set to **Program position**, the device returns to the initial display of Auxiliary menu. *(Options selected)*




➢ Set the switch to normal position and press the button ① to return the taximeter to its initial mode, **FOR HIRE or CLOSED in Test mode.**



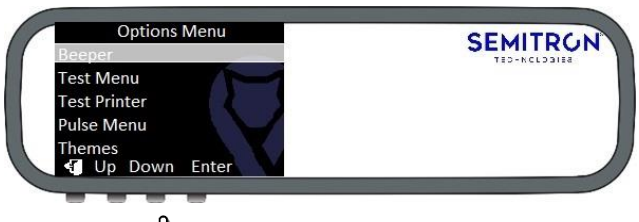
⚠ **Taximeter can exit the test operation only after a trip has been completed.**

## *Test printer*

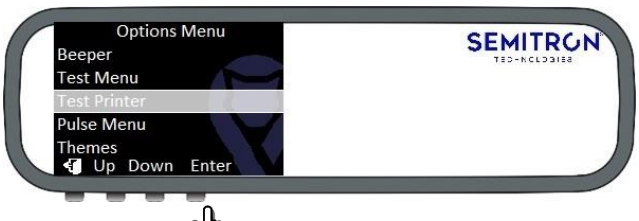
**Test Printer** allows testing the printer operation.

To enable the function the next steps have to be completed:

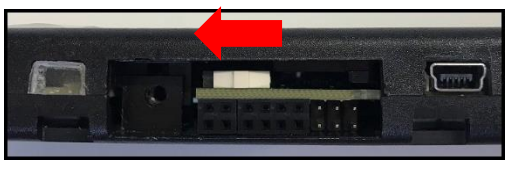
➢ Press the button ③ twice to select "**Test Printer**" option




➢ Press the button ④ to enter the Test Printer submenu

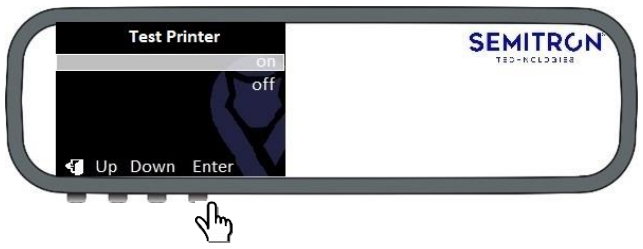



➢ Unseal the programming port of the taximeter and **set the programming switch to Program Position.** *(Left position)*



Message "**ON**" is preselected.

- Press the button ④ to register the choice and activate the Test Printer process.



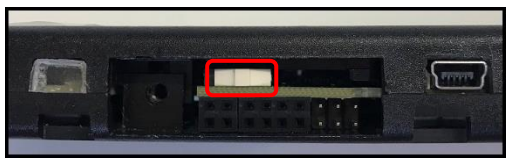

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⚠ If the programming switch is not set to **Program position**, the device returns to the initial display of Auxiliary menu. *(Options selected)*




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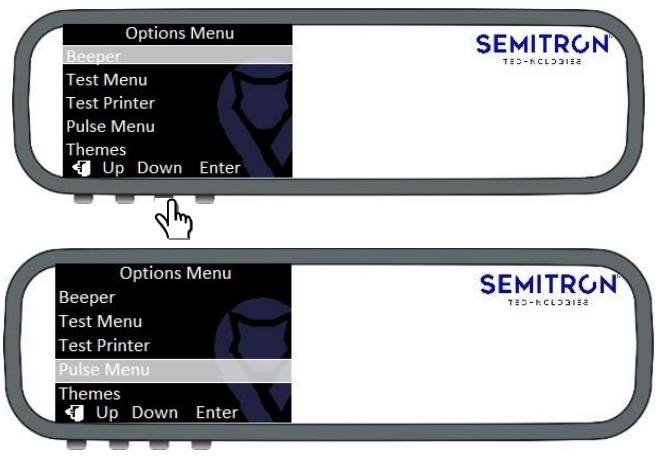


⚠ **Taximeter can exit the printer test operation only after a trip has been completed.**

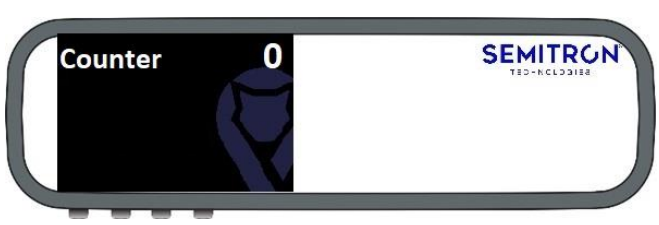
## *Pulse (pulse distance sensor/can bus)*

*The taximeter must receive pulses in order to have the pulse operation activated.*

- Press the button ③ *three times* to select "**Pulses**" option.




- Press the button ④ to enter the Pulses submenu.







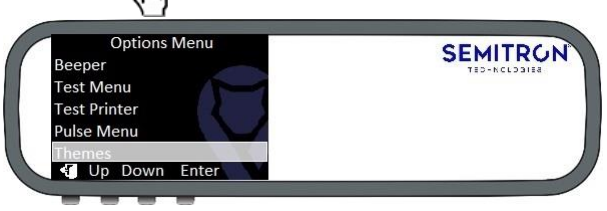
## *Themes Menu*

Themes menu allows the user to choose from a variety of themes that define the appearance of the user interface, including background, text color, button text and logos.

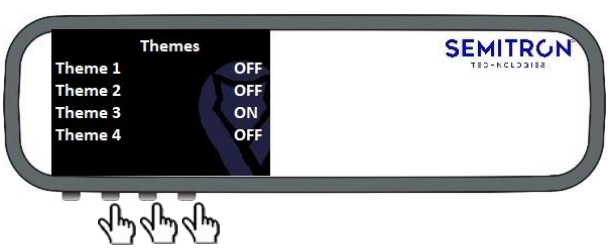
- Press the button ③ *four times* to select "**Themes Menu**" option




- Press the button ④ to enter the Themes Menu.




Explore the menu using the buttons ② & ③ and apply the selected theme by pressing the button ④ .




## *Calendar*

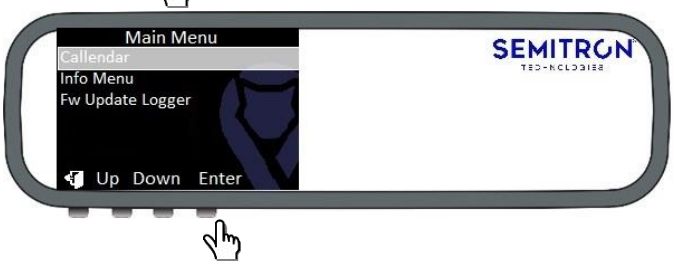
"**Calendar**" provides the capability of adjusting the current time ±2 minutes per week.

⚠ Time can be adjusted only **ONCE** per week.

- Press the button ③ *six times* to select "**Calendar**" option



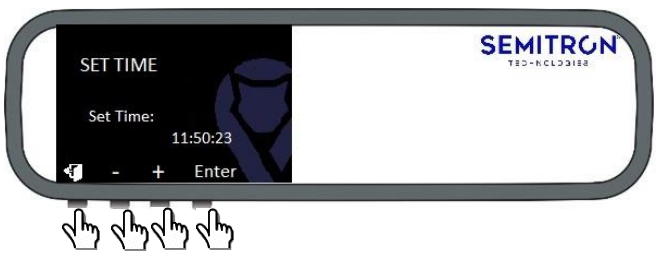

- Press the button ④ to enter the Calendar submenu




*Taximeter displays the time (hh:mm:ss)*

- Press the button ③ to increase the digit value
- Press the button ② to decrease the digit value
- Press the button ① to cancel the process
- Press the button ④ to save the adjustment

A new adjustment is available the next week.




*In case of an attempt to adjust the time within seven days since the last setting, the message "**Abort**" appears.*

## *Info*

- Press the button ③ *seven times* to select "**Info**" option

- Press the button ④ to enter the Info submenu




The contents of "**Info**" in the order of their appearance:

| | |
|---|---|
| **Firmware Version** | Taximeter's firmware version |
| **Serial number** | Taximeter's serial number |
| **Tariff tCRC1** | Tariffs CRC |
| **Date-02** | Activation date of the future Tariffs (if it is programmed) |
| **Tariff tCRC2** | Tariffs CRC of the future tariffs (if it is programmed) |
| **Firmware fCRC** | Firmware CRC (manufacturer) |
| **Firmware cCRC** | Firmware CRC (NMI approved) |
| **Printer rCRC** | Printer CRC |
| **Graphics gCRC** | TFT Display Graphics CRC |
| **TFT ID** | Identification of TFT Graphics Engine |
| **Power Disconnections** | Power supply disconnections |
| **Leasing date** | Leasing expired date |
| **Programming date** | Last programming date |
| **Programming counter** | Programming counter (number of times that parameters have been changed) |
| **Change K** | Change K ( Counts the number of times that constant K has been changed) |
| **Constant K** | Taxi's constant K (pulses/km or pulses/Mile) |
| **Extra** | Step of Extra |
| **Max Extra** | Maximum Extra |
| **Y - Tx** | In "**y**" position can be any charge parameter.<br>The "**x**" indicates the number of tariff. |

The following table contains the charge parameters (*in "**y**" position*) analytically for the tariffs in the way they are presented:

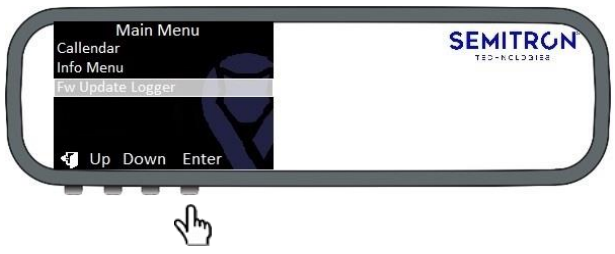
| |
|---|
| **Initial fee** |
| **Initial fee 1** |
| **Distance value** |
| **Distance per distance value** |
| **Time value** |
| **Initial distance** |
| **Initial distance 1** |
| **Initial time** |
| **Monetary step** |
| **Maximum extra per tariff** |
| **Extra step per tariff** |

## *Boot Logger (Event Logger)*

- Press the button ③ eight *times* to select "**Fw Update Logger**" option.




- Press the buttons ② and ③ to navigate into the records of logger (list of firmware versions).
- Press the button ④ to enter and see the details of the selected record.




The Items shown for each Firmware version record are:

| | |
|---|---|
| **01** | Date Time |
| **02** | Fw version |
| **03** | cCRC |
| **04** | fCRC |
| **05** | Attempts |
| **06** | HASP ID |




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*"Attempts" is the number of tries until a firmware update process succeeds.*

# 5. Notes

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