

**OPERATION MANUAL**

**TX80**

**TARIFF CHARGER**

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## **FUNCTIONING OF THE TAXIMETER TARIFF CHARGER**

### PHYSICAL DESCRIPTION OF THE CHARGER

- Numerical keyboard
- Interconnection cable
- Alphanumeric display

### TARIFF FILE

It contains the basic data to program the taximeters.

The charger is able to have 9 files. To select one of them, once the charger is connected, press one of the numeric keys of the charger. The name of the selected file will be displayed. If the wrong file has been selected, press keys  $\Delta$  and  $\nabla$  simultaneously to restart.

### CONNECTION BETWEEN THE CHARGER AND THE TAXIMETER

To connect the charger, take out the tariff cover and connect the charger according to the connector polarization.

The transmission between the charger and the Taximeter starts by pressing the “O” key of the taximeter while in Vacant, shift closed or without tariff.

- During the communication between the charger and the taximeter, "Laod..." appear in the display and a progress bar until "MENU" appears in the display of the taximeter.
- If the charger has not a valid date, it goes automatically into the time setting sequence.

## OPERATIONS TO DO WITH THE TARIFF CHARGER

1. Constant "K" calculation through the charger.
2. Entering the "K" constant.
3. Calendar-clock programming.
4. Totalizers erasing.
5. Passwords programming.
6. Taxi identification data
7. Visualization of the number of recorded tariffs.
8. Visualization of the number of pending recordings.
9. Recording of the tariff to the taximeter and selection of the printer functioning mode.

### 1. CONSTANT "K" AND PERIPHERALS CONFIGURATION

The calculation method below is the most accurate calibration for constant "K" measurement.

- 1.1. After connecting the charger to the taximeter and having done the transmission pressing the "O" button of the taximeter, push button "K" on the charger
- 1.2. The taximeter displays the type of impulse generator. The options are:
  - AnA: Analogic impulses signal (normally used)
  - CAn: Can CIA 447 standard car BUS
- 1.3. Normally the Analogic type will be used. To change between the types press ∇. To go to the next step press Δ.
- 1.4. The signal levels are to be chosen now. Three dashes - - - are displayed
  - The dashes in the center are to be used normally. This is to be used when the signal is directly readable, and so no charge is applied by the taximeter.
  - The dashes on the top are to be used when the signal does not have a correct positive level. In this case a charge will be applied which corrects the positive level.
  - The dashes at the bottom mean that a charge to ground is applied to correct an incorrect zero level
  - Dashes at the top and at the bottom mean that a charge is applied to positive and another is applied to ground, fixing the mean signal level to 2,5V.

Normally no charge will be applied, unless necessary. To change between the different types, press ∇. To go to the next step, press Δ.
- 1.5. The Taximeter displays "tr" (Trigger) and a numeric value. The value indicates the difference in voltage levels that will be used to detect the car signal. The value must be established between 200 and 2000.

The theoretical value would be the voltage of the signal given by the car, multiplied by 250. For example if the car signal is 4V, a trigger value of 1000 is to be programmed. The signal levels are to be chosen now. Three dashes - - - are displayed

Press Δ to go to next step.

- 1.6. The TAXIMETER displays “Lu”, and a digit between 0 and 2. This indicates the type of external light to be used
- 0 is a parallel external light
  - 1 is a serial protocol external light without verification
  - 2 is a serial protocol external light with verification
  - 3 is a specific French rooflight
  - TL70 is a Taxitronic TL70 rooflight
  - CAN is an external board interface that has 8 power lights

Press ▽ to change the type of external light. To go to the next step press Δ.

- 1.7. The TAXIMETER displays “Prn” to select the printer type
- No: No printer
  - SKY: Internal printer
  - IR32: External printer

Press ▽ to change the printer type. To go to the next step press Δ.

- 1.8. The TAXIMETER displays “Td” to select the type of data terminal connected to it.
- No: No printer
  - SKY: Connected through the skyglass Bluetooth module
  - TL70: Connected to a data terminal through the TL70 rooflight
  - BT40: Connected to a BT40

Press ▽ to change the connexion type. To go to the next step press Δ.

- 1.9. The Taximeter displays “C I” and a 0 in the amount display

- 1.10. Now an exact known distance must be driven (minimum 500 m)

- 1.11. At the arrival to the fixed distance, the vehicle must be stopped and pushbutton Δ from the charger must be pressed. In the state display of the taximeter will appear “dl” and in the amount display will appear “0”.

- 1.12. In this moment the exact meters of the running must be introduced through the numerical keyboard of the charger.

- 1.13. If a wrong quantity is introduced, it can be erased pressing ▽ pushbutton and can be introduced again.

- 1.14. Press Δ and the charger calculates the constant “K” value and it appears on the amount “To Pay” display of the taximeter. In the state display will appear “CO” and in the amount “To Pay” display the constant “K”.

- 1.15. If the value is not correct, fixed hyphens appear on the amount “To Pay” display and the process must be started again from point 1.1.

- 1.16. In order to change the constant “K” in the taximeter, the tariff must be programmed to the taximeter according point 10 of this document.

## 2. INTRODUCTION OF THE CONSTANT "K" INTO THE CHARGER

In case that the constant "K" value is known, this value can be introduced into the charger through the numerical keyboard following the next steps:

- 2.1. After doing the transmission to the charger pressing the "O" pushbutton of the taximeter, press pushbutton "K" of the charger and then press  $\Delta$  pushbutton also of the charger. "CO" appears intermittently on the state display of the taximeter and "0" appears on the amount "To Pay" display.
- 2.2. Enter the "K" value through the numerical pushbuttons of the charger. (The value should be comprised between 500 and 80000).
- 2.3. If a wrong value is introduced, press  $\nabla$  and the quantity disappears. Then the new value can be introduced.
- 2.4. To introduce definitively the value into the charger, press again  $\Delta$  pushbutton of the charger.
- 2.5. If the value is not correct, fixed hyphens appear on the amount "To Pay" display of the taximeter and the process must be started from point 2.1.
- 2.6. In order to change the constant "K" in the taximeter the tariff must be programmed in the taximeter according to point 10 of this document.

## 3. CALENDAR-CLOCK PROGRAMMING

The charger incorporates a calendar-clock with its own battery. This clock enables to update the time-date in the taximeter automatically at the moment when the tariff is recorded, without having to repeat the introduction of the time-date at each tariff recording.

The following sequence is used to program the calendar-clock of the charger. Since this moment, the calendar-clock of all the taximeters where the tariff is charged are automatically up-dated.

- 3.1. This process begins by pressing pushbutton "C" of the charger. At this moment the abbreviations to indicate the year "XX" appear in the state display and an intermittent hyphen followed by the year appears in the amount "To Pay" display.

The intermittent number can be modified through the numerical pushbuttons of the charger. After being modified, the next number becomes automatically intermittent and it can be modified following the same process.

- 3.2. When the year is correct, the  $\Delta$  pushbutton of the charger must be pressed and the abbreviation to indicate the date "XX" appear in the state display and the day and the month (Month-Day depending on the countries) appear on the amount "To Pay" display. Automatically the first number of the month appears intermittently in order to be modified if necessary.

After changing it, it becomes fixed and the next number of the month becomes intermittent to be changed.

- 3.3. Characters indicating the week day appear in the extras display. Following the same process the numbers configuring the day can be changed.
- 3.4. After modifying these parameters, press again  $\Delta$  pushbutton of the charger and the abbreviations to indicate the hour "XX" appear in the state display and the hour and the minutes in the amount "To Pay" display, with this format.

The way to modify these parameters is the same as before, taking into account that the introduction must be made in 24 hours format.

- 3.5. To leave this sequence, press again  $\Delta$  pushbutton of the charger and the taximeter comes back to the initial state of the constant "K" visualization.

#### 4. TOTALIZERS ERASING

If all accumulated totalizers in the taximeter have to be erased, make the following:

- 4.1. After visualizing the constant "K" in the taximeter, press pushbutton "T" of the charger. The message that appears on the state display is "to" and the amount "To Pay" display is off.
- 4.2. Then press  $\Delta$  pushbutton of the charger to confirm the operation. If you don't want to confirm the operation, press pushbutton  $\nabla$  of the charger and you come back to the initial state of visualization of constant "K" without having erased the totalizers.

#### 5. PASSWORDS PROGRAMMING

- 5.1. Setting a password to erase the totalizers group 2: Press "S" pushbutton of the charger; the digit dot of the tens of thousands from the amount "To Pay" display lights up if this function is authorized by tariff. Then introduce the password chosen for this function through the numeric charger's keypad and confirm this password by pressing the  $\Delta$  charger pushbutton. If you don't want to activate it, this function is canceled pressing directly  $\Delta$  of the charger. In both cases you pass to password programming from the following special function that the tariff authorizes.
- 5.2. Setting a password for totalizers options group 1: If it is authorized by tariff, it is indicated with the digit dot of the thousand units of the amount "To Pay" display. The introduction sequence is the same than the sequence described in point 5.1.
- 5.3. Setting a password to modify the clock: If it is authorized by tariff, it is indicated with the digit dot of the hundreds of the amount "To Pay" display. The introduction sequence is the same than the sequence described in point 5.1.
- 5.4. Setting a password to modify the stop date: If it is authorized by tariff, it is indicated with the digit dot of the tens of the amount "To Pay" display. The introduction sequence is the same than the sequence described in point 5.1.
- 5.5. Setting a password to visualization control blocks: If it is authorized by tariff, it is indicated with the digit dot of the units of the amount "To Pay" display. The introduction sequence is the same than the sequence described in point 5.1.

- 5.6. Setting a password of passage OFF-FOR HIRE: If it is authorized by tariff, it is indicated with the second digit of the state display. The introduction sequence is the same than the sequence described in point 5.1.

## 6. LICENSE/TAXI IDENTIFICATION DATA

- 6.1. To enter the license/taxi identification data, during the "K" constant visualization in the taximeter, press "L" pushbutton of the charger and "L.1" appears in the state display of the taximeter and the Taxi identification data are displayed.
- 6.2. Use the keypad of the charger to enter the data. Alphanumeric characters are used to a keypad like in mobile phones. The text is displayed on the alphanumeric display of the charger. To go to the next field, press  $\Delta$  on the charger. To erase the last entered character press  $\nabla$  on the charger.
- 6.3. The data which can be entered are:
  - Name (L.1), Length 24 characters
  - VAT number (L.2), 16 characters
  - License (L.3) 12 chars
  - Plate number (L.4). 12 chars

## 8. VISUALIZATION OF THE NUMBER OF RECORDED TARIFFS

- 8.1. The charger has a totalizer which accumulates the number of tariffs recorded. This number will increase every time a recording is done, without exception.
- 8.2. The visualization is possible pressing "7" pushbutton of the charger during the visualization of the "K".  
  
Format = NU. XXXXX
- 8.3. This visualization ends pressing the  $\Delta$  pushbutton of the charger.



## 9. VISUALIZATION OF THE NUMBER OF PENDING RECORDINGS

- 9.1. The number of pending recordings can be displayed by pressing "8" pushbutton of the charger, when the constant "K" is displayed.

Format = N. XXXXX

- 9.2. This visualization finishes by pressing the  $\Delta$  pushbutton of the charger.

## 10.RECORDING OF THE TARIFF TO THE TAXIMETER

When the charger has the correct constant "K", the tariff can be recorded to the taximeter.

- 10.1. Press button "GR" of the charger. In this moment the taximeter shows "PROG..." and a progress bar.

Ended the recording, the taximeter stay in "For Hire" position or in closed shift, with the parameters of the new tariff, the constant "K" and the time-date of the charger up-dated.

- 10.4. For a change of tariffs, after connecting the charger to the taximeter and after having done the transmission pressing the "O" pushbutton of the taximeter, press pushbutton "GR" of the charger to record the new tariff.

After doing all the operations, the charger can be disconnected from the taximeter and the tariff cover can be sealed back.